B.S.ABDUR RAHMAN UNIVERSITY

B.S.ABDUR RAHMAN INSTITUTE OF SCIENCE & TECHNOLOGY
(Estd.u/s 3 of the UGC Act, 1956)

Self Study Report

Evaluative Report of the Schools & Departments

Submitted to
National Assessment and Accreditation Council
January 2014

B.S.ABDUR RAHMAN
U N I V E R S I T Y

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Content

SECTION - E

Evaluative Report
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SCHOOL OF COMPUTER, INFORMATION AND MATHEMATICAL SCIENCES

Department of Computer Science & Engineering

Department of Information Technology

Department of Computer Applications

Department of Mathematics

Department of Computer Science & Engineering

1.   Name of the Department   **: Computer Science and Engineering**

   The Department of Computer Science and Engineering was established in the year 1990 as one of the Engineering Department of Crescent Engineering College which started during the year 1984. The department is offering B.Tech(CSE), M.Tech(CSE), M.Tech(SE), M.Tech(NS) and Ph.D. programmes. Over the past few years, the department has acquired national and international importance. This has been achieved by the collective and responsive effort of the faculty, the supporting staff and the students. The department is equipped with sophisticated laboratories with latest hardwares and softwares to impart quality education and encourage research activities.

   The department has 95% placement record from well reputed IT Corporates such as TCS, WIPRO, Infosys, Cognizant, HP, Inautics, Polaris and so on. Now, the deparment Computer Science and Engineering is one of the departments of School of Computer and Information Science which was formed after the formation of B.S. Abdur Rahman University.

2.   Year of establishment   :   1990

3.   *Is the Department part of a School/Faculty of the university?*

                                    Yes

   The department is part of School of Computer, Information and Mathematical Science

4.   *Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)*
   ➢   Under Graduate   : B.Tech(Computer science and Engineering)
    ➢   Post Graduate   : M.Tech (Computer science and Engineering)
                               : M.Tech(Software Engineering)
                               : M.Tech(Network Security)
   ➢   Research program   : Ph.D

5.   *Interdisciplinary programmes and departments involved*
                                    Nil

6.   *Courses in collaboration with other universities, industries, foreign institutions, etc.*
                                    Nil

7.   *Details of programmes discontinued, if any, with reasons*
                                    Nil

8.   *Examination System: Annual/Semester/Trimester/Choice Based Credit System*
                    Semester and choice based credit System

9. *Participation of the department in the courses offered by other departments*

The Department of CSE offers a common course GEB1103 – Computer Programming and Applications to all the students of first year B.Tech Engineering Degree in the first semester.

The courses in the table below are offered to the other Departments.

Sl.No.	Department	Semester	Course Code	Course Name
	ECE	III	CS281	Data Structures & Algorithms
	Poly Engg	V	CS382	Computer Programming
	Electronics & Instrumn. Engg.	III	CS285	Data Structures
		III	CSB 2183	Object Oriented Programming
		III	CSB 2184	Object Oriented Programming Lab
		V	EI 401	Computer Networks
	Electrical & Electronics Engineering	Elective	CSBX 53	Computer hardware & Interfacing
		Elective	CSBX 47	Cyber Security
		Elective	CSBX 08	Cloud Computing
		Elective	CSBX 51	Operating Systems

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)*

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	6	6	5
Asso. Prof.	3	3	3
Asst. Prof.	26	26	26

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Name	Qualification	Designation	Specialization	Yrs of Experience	No. of Ph.D./ M.Phil. Students guided
Dr.K.M.Mehata	Ph.D	Professor & Dean	Software Engineering	34	PhD- 15 (completed) PhD - 11 (guiding)

Dr.Angelina Geetha	Ph.D.	Professor and Head of the Dept	Data Mining, Web Mining, Information Retrieval, Knowledge Engg	19	PhD -7 (guiding) M.Phil – 2 (completed)
Dr.R.Shriram	Ph.D	Professor	Information Retrieval, Data Mining, Cloud computing, Big Data	17	PhD - 7 (guiding) M.Phil – 2 (completed)
Dr.Sharmila Sankar	Ph.D	Professor	Wireless Networks, Algorithms	20	PhD – 4 (guiding)
Dr.W.Aisha Banu	Ph.D	Professor	Information Retrieval, Data Mining, Cloud computing, Big Data	17	PhD – 3 (guiding)
Dr.M.Sandhya	Ph.D	Professor	Wireless Security, Databases, RFID	15	PhD – 3 (guiding)
Mrs.T.Nagamalar	M.E.	Associate Professor	Wireless Sensors Networks	12.9	Nil
Mrs.X.Arputha Rathina	M.E.	Associate Professor	Image Processing	18	Nil
Mrs.S.Revathi	M.E.	Associate Professor	Mobile Adhoc networks, Network Security, Data structures	11	Nil

Mrs. S.P.Valli	M.E.	Assistant Professor (Sr.grade)	Adhoc Networks, Operating Systems, Data structures, Algorithms	13	Nil
Mr.T.Senthil Kumaran	M.E.	Assistant Professor (Sr.grade)	Adhoc Networks	12	Nil
Mrs.N.Sabiyath Fathima	M.E.	Assistant Professor (Sr.grade)	Adhoc Networks	11	Nil
Mrs.V.Muthu Priya	M.E.	Assistant Professor (Sr.grade)	Mobile Adhoc networks, Network Security, Data structures Network Security	10	Nil
Dr.S.Aranganathan	M.E, Ph.D	Assistant Professor (Sr.grade)	Grid Comuting, Cloud Computing	14	Nil
Mr.E.SyedMohamed	M.E.	Assistant Professor (Sr.grade)	Mathematic Modelling, Image Processing, Information Security	8	Nil
Mrs. Saira Banu	M.E.	Assistant Professor (Sr.grade)	Voice over Internet Protocol	9.5	Nil
Mrs.R.Akila	M.E	Assistant Professor (Sr.grade)	Image Processing	11.5	Nil

Mr.S.Syed Abdul Syed	M.Tech.	Assistant Professor	Adhoc Network Security, Programming concepts,Image processing	8	Nil
Mrs.S.Bagirathi	M.Tech.	Assistant Professor	RFID, Zigbee Networks	5	Nil
Ms.S.Subhashini	M.E	Assistant Professor	Image Processing, Medical Imaging	5.3	Nil
Mrs.R.Narayani	M.E.	Assistant Professor	Cloud Computing	5	Nil
Mrs.S.Sharon Priya	M.E.	Assistant Professor	Grid Computing, Image Processing	4.5	Nil
Mrs.P.Pamela Anusha	M.E.	Assistant Professor	Grid Computing, Data Structures	4.5	Nil
Mr.A. Sarfaraz Ahmed	M.E	Assistant Professor	Cloud Computing	3	Nil
Mrs.C. Hema	M.E.	Assistant Professor	RFID	3	Nil

Mrs. J. Gayathri	M.Tech.	Assistant Professor	Distributed Computing System, Algorithms	3	Nil
Mrs. Madhina Banu	M.C.A, M.E	Assistant Professor	Data Structures, Networks	3	Nil
Mrs. Brindha Merin	M.Tech	Assistant Professor	Data Mining, Networks	2	Nil
Mrs. Chandra Kala	M.E.	Assistant Professor	Data Mining	2	Nil
Mrs. T.R. Akila Devi	M.E	Assistant Professor	Data Structures	1	Nil
Mr. C.Imthyaz Sheriff	M.Tech.	Assistant Professor	Data mining, Web Technologies, Software Metrics	1	Nil
Mr.M. Haris Muhamed	M.E	Assistant Professor	Microprocessor, C programming, Distributed systems, Java programming	1	Nil
Mr. S.Raja Shaik	M.Tech	Assistant Professor	Computer Architecture	1	Nil

Mr.L.Arun Raj	M.E.	Assistant Professor	Mobile Computing, Multimedia Application, Wireless Networks,	4 months	Nil
Mrs. Radhika	M.Tech	Assistant Professor	Data Mining, System Software	4 months	Nil

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors*

Nil

13. *Percentage of classes taken by temporary faculty – programme-wise information*

Nil

14. *Programme-wise Student Teacher Ratio*

Programme Offered	Teacher Student Ratio
B.Tech(CSE)	16:1
M.Tech(CSE)	12:1
M.Tech(SE)	12:1
M.Tech(NS)	10:1

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

	Sanctioned	Filled	Actual (incl. CAS & MPS)
Support Staff (Technical)	8	8	8
Administrative Staff	4	4	4

16. *Research thrust areas as recognized by major funding agencies.*
   - Knowledge Engineering and Information retrieval
   - Wireless Networks, Grid Computing,Image Processing
   - Software Modelling and Metrics

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

S. No.	Principal and Co-Principal Investigators	Funding Agencies	Project Title	Amount (Rs)	Status
	Dr.R.Shriram Dr.W.Aisha Banu	Tamil Virtual Academy	Content based information retrieval for Tamil	2.94 Lakhs	On going

18. *Inter-institutional collaborative projects and associated grants received*

   ➢ The Department has created a centre for mobile application development in collaboration with Apple Corporation - India, as a central facility, open for all branches of Engineering. The centre helps students to develop mobile applications and also carry out research in related areas.

   ➢ The Department of Computer Science and Engineering has collaboration with Deakin University, Australia towards offering a Dual degree programme in Network Security. As a result of the partnership, an International Conference on Software Engineering and Mobile Applications Development was organized on December 19-21, 2012.

   ➢ Two Professors of the Department have an active research collaboration with a Professor Vijayan Sugumaran from Oakland University of USA (a top 20 B-School in USA) leading to joint research paper publications and a USIEF funded visit to the University in July 2012. Prof Vijayan Sugumaran also delivered a Guest Lecture to the Faculty members of the Department on the occasion.

   ➢ The Department hosted and trained one faculty member Mr.Kamarulzaman from Malaysia and trained him on fundamentals of the various topics in Computer Science and Engineering during August 2013.

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

   ➢ A funded project titled "Autonomic Power and Performance Management of Virtualized Data Centres" was carried out by the department and completed, with the financial support of Rs.25,000/- received from Computer Society of India.

   ➢ Support for the conduct of the International Conference on Software Engineering (ICSEMA 12) was received from DRDO and CSI in the form of funded grants, DRDO – Rs.50, 000 and CSI – Rs.50, 000.

20. *Research facility / centre with State Recognition*

  ➢ Dr V. Krishna Moorthy was coordinating a consultancy (Learn fun systems) for OCR Software which offers solutions for optical character recognition solutions for evaluation of technical aptitude tests.

21. *Special research laboratories sponsored by / created by industry or corporate bodies.*

  ➢ The university has created a centre for Mobile Application Development in collaboration with Apple Corporation – India, as a central facility which is open to all branches of engineering. BSAU. The main objective of the centre is to motivate the students to gain knowledge and experience by developing Mobile Applications in iOS and Android platform.

22. *Publications:*

Full details of International and National journals publications are given in **Annexure D - 3.2 and 3.3 (Criterion III)**

Academic Year	National Conference	International Conference	National Journal	International Journal	Total
2009-2010	4	5	0	2	11
2010-2011	2	16	0	9	27
2011-2012	2	16	0	18	36
2012-2013	2	7	0	19	28
2013-2014	0	2	0	2	4
Total	10	46	0	50	106

❖ **Chapter in Books:**

S. No.	Authors	Books	Year	Page No	Publisher
1.	Dr.R.Shriram	Innovations in Mobile Multimedia Communications and Applications: New Technologies.	2011	329-343	IGI Global, USA
2.	Dr.R.Shriram	Computational Linguistics and Intelligent Text Processing	2012	274-285	Springer
3.	Dr. Sharmila Sankar	Recent Trends in Network Communication	2010	447-456	Springer
4	Mrs. X. Arputha Rathina	Advances in Computer Science, Engineering and applications	2012	41-50	Springer

❖ **Edited Books / Proceedings of Conference**

Dr. K.M. Mehata, Dean/SCIMS, Jingyu Hou, Deakin University, Australia, School of Information Technology Proceedings of International **Conference on Software Engineering and Mobile Application Modeling and Development,** ICSEMA, Dec 19 -21, 2012, Chennai, India.

❖ Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

S.No	International Databases	Counts
1	Scopus	36
2	EBSCO	4
3	DAOJ	8
4	arVIX	7
4	IGI Global	1
Total		56

❖ **Citation index – range / average**

Citation index: 0.687

SNIP - (Source Normal Impact per Paper):

- SJR(SCImago Journal Rank): 0.24
- Impact Factor: 0.93
- H - index: 6.65

23. Details of patents and income generated

Patents applied :

➢ D. Venkata Subramanian, Angelina Geetha, "Hybrid Method for evaluating Effectiveness of Knowledge Management", Application # 4612/CHE/2012, Intellectual property of India.

➢ D. Venkata Subramanian, Angelina Geetha, "Multi-Dimensional Model for Evaluating the Effectiveness of Knowledge Sharing", Application#: 4611/CHE/2012, Intellectual Property India.

24. Areas of consultancy and income generated

Period	Project	Areas of consultancy services	Agency/Nature of Funding	Amount (Rs.)	Status

2008-2011	Optical Character Recognition	Developing character recognition software	Learn fun Systems	3 Lakhs	Completed

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad.

S. No.	Name of the faculty Member	Participation in International/National events
1.	Dr.K.M.Mehata	☐ Chair Person - International Conference - ICMLC2011-Singapore - Feb 26-28, 2011.
3.	Dr.R.Shriram	☐ Visited Daffodil International University, Dhaka, Bangladesh ☐ Resource person - International Conference - Daffodil International University, Dhaka, Bangladesh, 19-21.1.2013
5.	Mrs. Arputha Rathna	☐ Hiroshima University visit, Apr 20th to May 22nd, 2010 in Prof Akira Asano's Laboratory for the study on Kansel Engineering and Energy Detection

26. *Faculty serving in a) National committees b) International committees c) Editorial Boards d) any other (please specify)*

S. No.	Name of faculty Member	Role
1.	Dr. K.M.Mehata	• Expert Committee Member for the DRDO, AICTE, JNTU, Assessment Board for scientists, Bangalore.
2.	Dr.Angelina Geetha	• Member of Reviewers Panel for the IEEE International Conference on Human Computer Interactions (ICHCI'13) held on 23 – 24 August 2013, Chennai.
3.	Dr.R.Shriram	• Invited member, Tamil Nadu State Planning Commission • Expert committee, Tamil Software Development Lab-Tamil Virtual Academy 2012.
4.	Dr. Sharmila Sankar	• Officiated as reviewer in four peer reviewed journals. • Officiated as reviewer in three international Conferences
5.	Dr.M.Sandhya	• Officiated as reviewer in four peer reviewed journals. • Officiated as reviewer in four international Conferences

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

Faculties are encouraged to go for industry sponsored FDPs and workshops. They also participate in orientation programs conducted by various educational and research institutes.

Year	Workshops Staff Attended	Seminars Staff Attended	GuestLectures Staff Attended	FDP/FEP No. of Staff Attended	Training Prog. No. of Staff Attended
2010	12	31	-	-	5
2011	30	-	-	-	4
2012	22	-	24	5	10
2013	14	-	-	5	6

28. *Student projects*

➢ Percentage of students who have done in-house projects including inter-departmental projects

U.G   B.Tech. (Computer Science and Engineering)

S.No.	Year	No. of Projects	Percentage of students
1	2010	54	100 %
2	2011	50	100 %
3	2012	49	100 %
4	2013	36	100 %

P.G. M.Tech. (Computer Science and Engineering)

S.No	Year	No. of Projects	Percentage of students
1	2010	23	82%
2	2011	28	100 %
3	2012	23	100 %
4	2013	28	100%

P.G. M.Tech. (Software Engineering)

S.No	Year	No. of Projects	Percentage of students
1	2010	16	100 %
2	2011	19	100 %
3	2012	22	100 %
4	2013	28	100 %

Percentage of students doing projects in collaboration with other universities / industry / institute

P.G. M.Tech. (Computer Science and Engineering)

S.No.	Year	No.of Projects	Percentage of students
1.	2010	5	18%

29. *Awards / recognitions received at the national and international level by Faculty:*

International –Level Awards and Recognition:

➢ Dr.K.M.Mehata is invited to be the session chair of the 3ʳᵈ International conference on machine learning and computing (ICMLC2011) in Singapore during Feb26-28, 2011.

➢ Dr.R.Shriram paper was chosen to be one among the best six papers out of 195 papers at the 25th AAOU Annual Conference, 28-30 September 2011, Penang, Malaysia.

National-Level Awards And Recognition:

➢ Dr.K.M.Mehata
- Member of academic council of Jawaharlal Nehru University, New Delhi.
- Member in the panel of National Board of Accreditation AICTE New Delhi.
- Member for staff selection of DRDO.
- Member for the staff selection at SRM, School of Computing, 2013.

➢ Dr.R.Shriram
- Member for ICT Academy of Tamilnadu, 2010-2011.
- Member of board of studies in Karpagam University, 2010-2011.
- Who's Who in Science and Engineering 2011-2012 -1¹ᵗʰ Edition.

Awards and Recognition for Student

➢ Mohammed Tariq and Zoheb Hafiz Khan
- won first prize in the variety show event at VIT University on 2ⁿᵈ-5ᵗʰ Feb' 2012.
- won second prize in the variety show at Anna University, February 2012.
- won first prize in the variety show event at Metafest conducted by MIT, 2012.

➢ Jyolsna Joseph and Juno Bella Gracia.S.V,
- won best paper award in the National Conference –ETICT'12, 2012, at the Saveetha Engineering College.

➢ Mehran Khan won first prize in the block and tackle event at the State level symposium conducted by Eswari Engineering College on 6ᵗʰ January 2012.

➢ R. Divya selected as the "Cognizant Campus Ambassador", 2012.

➢ Raheema Shameem.B won II Prize in Creative writing conducted by AICE, 2011.

➢ M.Mohammed Ibrahim, Madhivannan, Ariesh, Mohammed Mufeeth, Benneth Johnson and Arshad Basha won first prize for the event Adzap conducted at National level technical symposium Vernissage'12 at Asan College of

Engineering, 2012.

➤ M.Mohammed Ibrahim won first prize in Mock Interview conducted at National level technical symposium Ubiquitous'12, Andal Alagar College of Engineering.

➤ Ayub Khan won first prize in Gaming conducted at National level technical symposium Ubiquitous'12 at Aandal Alagar College of Engineering, 2012.

30. *Seminars/ Conferences/Workshops organized and the source of funding (national/ international) with details of outstanding participants, if any.*

Seminars Organized

S. No.	Resource Person	Workshop Topic	Duration / Date	Sponsoring Agency
1	1.Mr.E.P.Subhash,Head, Springboard Competency Development Centre, India 2.Mr.Vinod.V.Kumar,IBM India Pvt.Ltd 3.Mr.Irfan Ahmed,INTEL. 4.Mr.Karthik.R. and Mr.Sureshkumar, VMware Pvt.Ltd.	Virtualization Technologies	1 day Jan 8th,2010	VMWare Red Hat Linux Precision Infotech
2	Mr.R.Ramamurthy, Cyber Society Of India	Security of Insecurity in Cyber Space-Challenges of Today and Tomorrow	2days 26th-27th, April 2010	IEEE Madras Chapter
3	1.Dr.C.Chellapan, Dr.Kannan, Dr.Ranjani Partahasarathy, Anna Univ. 2.Mr.Pathmanaban, 3G NXT	Recent Trends in Mobile Ad Hoc Networks	3 days May 13th-15th,2010	AICTE
4	Resource Person from BRANDI COOTS, Bangalore	Gaming and PC Assembly	1 day Sep 14th,2011	BRANDI COOTS Ltd.
5	Resource person from CPRO IT service	Information Security and Ethical Hacking	1 day Sep 20th,2011	CPRO IT Service

Workshop Organized

S. No	Resource Person	Workshop Topic	Duration/ Date	Sponsoring Agency
1	Mr.Praveen Kumar Gond,Cranes Software, Bangalore	IBM Rational Software, Bangalore	4 days July 13th-16th,2009	In co-ordination with IBM for procuring the software

S. No	Resource Person	Workshop Topic	Duration/ Date	Sponsoring Agency
2	Mr.Sridhar M/s Indiss Infotech, Chennai	eContent Development Skills for Teachers	1 day Aug 19th,2010	M/s Indiss Infotech, Chennai
3	Mr.Mohit Yadhav,	Information Security and Ethical hacking	2 days March 23-24th,2010	Organised in association with BITS Pilani
4	Mr.Ashfaq Ibrahim Senior Vice President Cranes Software Int.Ltd.	IBM Rational Tester	4 days Sep 6th-9th,2011	Workshop provided for procuring the software.
5	Dr.Venkatesh Raman-IMSC Dr.Saketh Saurab-IMSC Dr.Narayan Kumar-CMI	Three Day School on Algorithms and Techniques	3 days Sep 22nd-24th,2011	Indian Association For Research in Computing Science (IARCS)
6	Prof.V.Rama Chandran, Anna University Mr.Shivkumar, Principal Architect from CTS	Cloud Computing and its Prospects	20, 21.10.11	In collaboration with CTS and CDAC, Chennai
7.	Mr.Iniya Nehru, INFITT	Tamil Computing	25, 26.3.13	In association with INFITT

Conferences Conducted

S. No.	Title	Chief Guest	Year
1.	International Conference on **"Engineering & Mobile Application Modeling & Development (ICSEMA)"**, Chennai, India. Partially funded by CSIR and DRDO	Mr. David Holly – Australian Consul-General Dr. P. Kanniappan – Vice Chancellor, Kalasalingam University. Mr. V. Natarajan – Chairman, Pavai Educational Institutions.	Dec 19 - 21, 2012.
2.	National Conference on "Theoretical Computer Science and Applications", Chennai, India.	Dr. S. V. Raghavan, Scientific Secretary to Principal Scientific Advisor, Govt. of India. Dr. R. K. Shyamasundar, Senior Professor, School of Technology & Computer Science, Tata Institute of Fundamental Research.	Nov 25– 26, 2010.

31. Code of ethics for research followed by the departments

Given in Annexure D - 3.1 in Criterion III

32.   *Student profile programme-wise:*

Name of the Programme	% of students from the same university	% of students from other univ. within state	% of students from universities outside the state	% of students from other countries
M.Tech(CSE)(2009)	2%	86%	12%	-
M.Tech(CSE) (2010)	2%	90%	7%	-
M.Tech(SE)(2010)	-	95%	5%	-
M.Tech(CSE)(2011)	-	93%	7%	-
M.Tech(SE)(2011)	-	100%	-	-
M.Tech(CSE)(2012)	-	97%	3%	-
M.Tech(SE)(2012)	7%	93%	-	-

33.   *Diversity of students*

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B.Tech(2009 admitted)	246	65	31	93	100
B.Tech(2010 admitted)	234	60	35	-	-
B.Tech(2011 admitted)	289	84	38	-	-
B.Tech(2012 admitted)	323	73	55	-	-
B.Tech(2013 admitted)	220	57	41	-	-
M.Tech(CSE)(2009 admitted)	42	22	10	100	100
M.Tech(CSE)(2010 admitted)	44	7	16	100	100
M.Tech(SE)((2010 admitted)	32	11	9	100	100
M.Tech(CSE)((2011 admitted)	35	8	20	100	100
M.Tech(SE)((2011 admitted)	27	8	14	100	92.9
M.Tech(CSE)((2012 admitted)	32	13	16	-	-
M.Tech(SE)((2012 admitted)	30	12	16	-	-
M.Tech(CSE)(2013 admitted)	37	6	18	-	-
M.Tech(SE)(2013 admitted)	22	10	8	-	-
M.Tech(NSE)(2013 admitted)	14	7	6	-	-

34.   *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

Name of the Exam	No. of students
Atomic Energy Dept. entrance test	1

Common Admission Test - CAT	2
Graduate Record Examination(GRE)	9
TOEFL	4
Other competitive Exams	16

35. *Student progression*

Student progression	Percentage against enrolled
UG to PG	17%
PG to M.Phil.	Nil
PG to Ph.D.	1%
Ph.D. to Post-Doctoral	Nil
Employed	
Campus selection	28%(2013 batch)
Other than campus recruitment	70%(2013 batch)
Entrepreneurs	1%

36. *Diversity of staff*

Percentage of faculty who are graduates	
of the same university	2%
from other universities within the State	98%
from other universities from other States	Nil
From universities outside the country	Nil

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*

S.No.	Teaching Staff Name	Year of awarding Ph.D Degree
1	Dr.R.Shriram	2009
2	Dr.Sharmila Sankar	2013
3	Dr.W.Aisha Banu	2013
4	Dr.M.Sandhya	2013
5.	Dr. Aranganathan	2013

38. *Present details of departmental infrastructural facilities with regard to*

a) *Library*

Department Library Collections	
Text Books - B.E.	592
M.E.	89

28

Lab Manuals	28
Lecture Notes	130
Lecture Notes (CDs)	12
IBM	11
Infosys	08
CISCO	03

b) *Internet facilities for staff and students*

> **Staff -** Internet facility is provided to all Staff members.

> **Students -** Campus wide Wi-Fi connectivity

c) *Total number of class rooms*

M.Tech   -   6

B.Tech   -   6

Total Class Rooms: 12

d) *Class rooms with ICT facility*

1. Dept Seminar hall equipped with Digital Board & Projector facility
2. Department Conference hall equipped with Projector Facility
3. All Student Class rooms have provision of Projector Facility

e) *Students' laboratories*

> Advanced Networking Lab, programming Lab, Operating Systems Lab, RDBMS Lab, Graphics Lab, PG project Lab, UG project Lab, Web Technology Lab, Open Source Lab. Microprocessor Lab

39. *List of doctoral, post-doctoral students and Research Associates*

a) *from the host institution/university*

S. No	Name of the Research Scholars	Research Title
1.	Ms. S. P. Valli	Perform. Enhancement of TCP in Mobile Adhoc Networks.
2.	Ms. Saira Banu	VOIP
3.	MS.P. Pamela Anusha	Security Challenges in Grid Computing
4.	Ms.V.Muthupriya	Multipath Routing in Adhoc Networks
5.	Ms.S. Sharon Priya	Resource Management in Grid Computing
6.	Mr. E. Syed Mohamed	Propagation Model of Tsunami Waves

7.	Mrs. A. Chandrakala	Design and Implementation of Visualization Techniques for Knowledge Representation
8.	Mr. ImthyazSherif	DATA Mining and Analysis of Complex Events (Data Mining & CEP)
9.	Mr. S. Bagirathi	Monitoring missed RFID tags
10.	Mrs. C. Hema	RFID Reader Collision
11.	Mrs. Narayani R.	Load Balancing in Cloud Computing

c)   *Staff Pursuing in other Universities*

S. No	Name	Other Institution	Research Title
1.	Mrs.T.Nagamalar	Anna University	Energy Efficient Routing Protocol for Wireless Sensor Networks
2.	Mrs.X.Arputha Rathina	Bharathidasan University	Fusion of facial expressions and speech to detect Emotions
3.	Mrs.S.Revathi	Anna Univ.	Secure Route Optimization In Manet
4.	Mr.T.Senthil Kumaran	Anna Univ.	Cross Layer Design Approach For Congestion Control Over Mobile Ad Hoc Networks
5.	Mrs.N.Sabiyath Fathima	Anna Univ.	Efficient Data Dissemination And Accessibility In Mobile Ad Hoc Networks
6.	Mr.S.Aranganathan	Anna Univ.	Data Management in High Performance Data Grid
7.	Mr.L.Arun Raj	Anna Univ.	Cross Layer Design for Improvement of Medical Video Wireless Networks

d)   *from other institutions/universities*

S. No	Name of the Research Scholars	Research Title
1.	Ms. N. Sumathy	Fault Tolerant Computing Algorithms
2.	Mr. Govindarajalu B	Computer Architecture Embedded
3.	Ms. M. P. Sujatha	A Metric based Information Security Model
4.	Mr. S. Venkatesh	Fault Tolerant Location Tracking Technique with Data Reliability in Wireless Sensor Networks
5.	K. Regin Bose	Fast Handoff in Wireless Network
6.	Ms. R. Radha	Query Processing using forms
7.	Ms. FouzulHidhaya	Challenges in Web Application Security – Overcoming the SQL and XSS Attacks

S. No	Name of the Research Scholars	Research Title
8.	Mr. D. Venkatasubramanian	Knowledge Mgnt / Reliable method & Metrics for Evaluating Knowledge Mgnt Infrastructure
9.	Mrs. A. Chandrakala	Design and Implementation of Visualization Techniques for Knowledge Representation
10.	Ms. ShriBharathi S.V	Web Content Mining – Search Engine Optimization
11.	Mr. P. Kumaran	Adaptable service Composition Models for Mobile Environments
12.	Mr. B. Manikandan	Cross Lingual Information Retrieval Systems
13.	Mr. V.K. Mohan Raj	Power Aware Models for Cloud Computing
14.	Nadana RavishankarT	Data Management in Mobile computing
15.	Mr. M.M. Vijay Sargunar	Bayesian Systems for Multi Agent Systems
16.	Mr. S. Udhaya Kumar	Adaptive Trust and Privacy Model in Pervasive Environment
17.	Ms. P. Veeralakshmi	Security Issues in Cloud Computing
18.	Mr.P.G. Om Prakash	Analyzing and improving User Navigation From Weblogs
19.	Mrs. R. Mervin	WEB SPIDER:A Search Engine For Multimedia Question Answering
20.	Mrs. Sunitha.C	An automated system for summarizing a document in a specific domain using Natural Language Techniques
21.	Mr. V.Vignesh	Data Mining (Regression method for Kernel Discriminate learning)
22.	Mr. Amalganesh	Natural Language Processing
23.	Mr.Selvendran.R	To contemplate the shortest route mobility assisted packet delivery with soft maximum delay guarantees in mobile Ad hoc networks

40. *Number of post graduate students getting financial assistance from the university.*

➢ Mr.Jawahar Ali of M.Tech/CSE,RRN 0926007 has got the financial assistant of Rs.20,000 through B.S.Abdur Rahman University, Seethakathi Trust Scholarship for the year 2009-2010 and 2010-2011.

➢ Ms.Shanjeetha Sanofer of M.Tech/SE,RRN 12262601019 has got the financial assistant of Rs.30,000 through B.S.Abdur Rahman University Seethakathi Trust Scholarship for the year 2011-2012 and 2012-2013.

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

   ➢ Whenever the new program is launched the justification for a new program in the assessment of the need is always considered.

   ➢ Based on the needs of the industries, the technology and the direction in which the current technologies are going collected through various magazines and personal discuss through the industry professionals. The new programs are conceded.

   ➢ The structure of the curriculum which includes the fundamental courses and elective courses to be introduced for the new program are discussed in the staff meeting conducted by H.O.D.

   ➢ The feedbacks from the staff are taken in to consideration before finalizing structure of the new program.

   ➢ The curriculum and detail syllabi are placed before the BOS (Board of Study) of the department consisting of following members.

   ➢ Before placing the Item to the BOS enough into is gathered on the employment potential and scope for higher studies have been analyzed.

   ➢ The following this process need assessment has been done for the new programs.

      • M.Tech (Network security) ;

      • M.Tech(Computer predictive analysis)

   ➢ The additional requirement in terms of infrastructure, Books, Journals and additional faculty and class room requirements will be assessed and communicate to respective officials to the university.

42. *Does the department obtain feedback from*

i. *Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?*

   ➢ The initial feedback for the new programs will be obtained from the BOS members and Academic council members before conducting programs.

   ➢ After launching the program, the department collects feed from the stake holders periodically through class committee meeting, parent teacher meeting and staff meeting.

ii. *Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

   Yes. After verifying the students' feedback, appropriate teaching Techniques are adopted.

   ➢ As per regulation the class committee consists of teachers over handling the course and student representatives, Ex-office of members.

   ➢ This is the form where the chairman/chairperson gets an opinion of the teacher

and students on the perspective performance and coverage of the syllabus.

➤ The students and staff respectively give their feedback about the contact of the course, coverage syllabus and content delivery.

➤ Furthermore, student feedback can be collected using on line feedback system, by distributing these questionnaires in-class to students. This method provides the benefit of having a captive audience and could increase response rates. Student feedback could also be collected within an electronic system by making the questionnaires available on University Website. Lecturers using this method are therefore urged to continuously remind students to complete the electronic questionnaires.

iii. *Alumni and employers on the programmes offered and how does the department utilize the feedback?*

Yes. Feedback from alumni is got through the annual alumni meet and other alumni interactions. Feedback from employers is received through the centralized placement Cell Office.

43. *List the distinguished alumni of the department.(Maximum 10)*
   ➤ Mr. Atheequr Rahman, 1998, Project Manager, HCL, Chennai
   ➤ Mr. Satya Palaniyappan, 2001, Software Engineer, USA
   ➤ Mr. Mubarak Ali Bin Abdul Hameed, 2001, Senior System Analyst,
   ➤ Transit Link Pvt. Ltd, Singapore.
   ➤ Mr. Gayathri Ramamoorthy, 2002, Project Manager, Infosys, Australia
   ➤ Mr.Suhumar Thangavelu, 2003, Software consultant, Reed business, London, U.K.
   ➤ Mr. Deepak VP, 2004, Senior Software Engineer, USA
   ➤ Mr. Wasim Raja, 2005, CEO & Founder, Laswa Technologies Pvt. Ltd, India.
   ➤ Mohammed Ibrahim, (PG)2006, Director in Mecsons Consulting, Chennai.
   ➤ Mr.Arul vozhi, 2006, Head at Oli Consulting Group, Oli Consulting Service, India
   ➤ Mr. Syed Shabbar Safiullah, 2006, Consultant, IBM Ltd., India.
   ➤ Ramakrishnan Veeraragavan, 2006, Director, Vira-Builders-Evergreen-Building-Products, India.

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

Seminars Organized

S. No	Resource Person	Workshop Topic	Date
1	Mr.E.P.Subhash,Head, Springboard Competency Dev.India Mr.Vinod.V.Kumar, IBM Mr.Irfan Ahmed,INTEL. Mr.Karthik.R. & Mr.Sureshkumar VMware Pvt.Ltd.	Virtualization Technologies	8.1.2010
2	Mr.ArulOli Esberi Technologies, Chennai	Adobe Certified Expert Training Prog.	26, 27.4.2010
3	Mr.R.Ramamurthy, Cyber Society Of India	Security of Insecurity in Cyber Space-Challenges of Today and Tomorrow	April 26th-27th,2010
4	Dr.C.Chellapan , Dr.Kannan, Dr.Ranjani Partahasarathy,Anna University Mr.Pathmanaban Ramaswamy,3G NXT,	Recent Trends in Mobile Ad Hoc Networks	May 13th-15th,2010
5	Dr.Kannan, Anna University	Soft Computing, Algorithms	Dec6-7th,2010
6	Mrs.Nalini, BRANDI COOTS	Gaming and PC Assembly	Sep 14th,2011
7	Mr.Sathyamoorthy, CPRO IT Service	Information Security and Ethical Hacking	Sep 20th,2011
8	Resource persons,Gatix Solutions,Ch.	Requirements Engineering	Nov 9th,2012
9	Mr.Dhian Singh, Mr.Murali Kumaraswamy, Purna Career Solutions Pvt. Ltd.	ESE (Empowering Software Engineer – in You) Jump Start	Jan 22-23,2013
10	Mr.S.Kannan, Application Architect, Wisen Technologies Pvt.Ltd. Chennai	NoSQL	Oct 22nd, 2013
11	Mr.Jainaressh, Image Infotainment Pvt.Ltd.Chennai	Game Technologies	Oct 29th , 2013

Workshop Organized

S. No	Resource Person	Workshop Topic	Date
1	Dr.Kannan , Dr.R.Bhaskaran, AU Dr.C.Daisy, TCE, Madurai Ms.Minnie,MCC,Chennai	Research Trends and Tools in Data Mining and Warehousing	Aug 18-19,2010
2	Mr.Mohit Yadhav, InnoBuzz Knowledge Solutions	Information Security and ethical hacking	March 23-24th,2010
3	Mr.Murugesh, Mr.Mohamed –Hades Infotech Pvt.Ltd,Chennai	Network Simulator	Sep 14th-15th,2011

S. No	Resource Person	Workshop Topic	Date
4	Dr.Venkatesh Raman-IMSC Dr.Saketh Saurab-IMSC Dr.Narayan Kumar-CMI	Three Day School on Algorithms and Techniques	Sep 22nd-24th,2011
5	Mr.Somasundaram Cognizant Technology Solutions	Software Testing	Oct 3rd-4th,2011
6	Prof.V.RamaChandran-Anna Univ. Mr.Shivkumar, CTS Ltd.	Cloud Computing and its Prospects	Oct 20th-21st,2011
7	Mr.Subhash –Tech V Solutions	Interactive Workshop on Mobile Computing Technologies	Nov 11th,2011
8	Mr.Yogananda Prasad, Cranes Software Solutions, Bangalore	Software Testing	Feb 22nd-23rd,2012
9	Mr.Jagan Jothivel & Mr.B.S.Ananth, Social Innovation group,CISCO.	Cisco Academy Meet on Recent Networking Technology &Trends	March 29th-30th, 2012.
10	Mr.Godfrey J.Lawrence, CODEART,Bangalore	One Day Hands-on Workshop on LINUX	Sep 1st,2012
11	Dr.Iniya Nehru, Dr.Raman, NIC Dr.Bose, Dr.Chellappan Anna University, Chennai	Challenges and Solutions in Network Security	October 17th -18th 2012
12	Dr.Iniya Nehru, NIC In association with INFITT.	Tamil Computing	March 25th-26th 2013
13	Dr.S.Arunachalam, University of East London,United Kingdom	How to do Ph.D and publish articles in peer-viewed journals.	August 5th,2013

Guest Lectures Organized

S. No	Resource Persons	Topic	Date
1	Mr.Karthikeyan Pandurangan, Wipro Ltd.	Pervasive Computing and its Applications	Feb 2nd,2012
2	Mr. Mohamed Hussain, UNIQ Technologies, Ch.	Advanced Web Development	February 28, 2012
3	Mr.Pradeep Krishna, CTS,Siruseri, Chennai	Software Project Management	March 26th,2012
4	Ms.Begi Margate Infosys, Chennai	Soft Sills Development	March 22nd,2012
5	Mr.RadhaKrishnan Man Machine Systems.	Testing On Object Oriented Software	August 29th,2012
6	Mr.Prabhu, Career Edn Corporation, Illinois, USA	Understanding Customers thr' Complex Event Processing	Oct 4th 2012

S. No	Resource Persons	Topic	Date
7	Dr.Jeremy Sunderraj, Breakthrough Heights Mgmt. Solutions, Ch.	Pursuit of Excellence	6th March 2013
8	Dr.Peter Jimack, Dean, University of Leeds	Reliable Numerical Tools for simulation of Multiscale Phase Change Problems	15th March 2013
9	Mr.Mahesh Babu, University of Texas,USA	Gesture Oriented Computing	Sep 10th,2013
10	Mr.Sakkaravarthi, Capgemini India Pvt.Ltd	Industrial Insights in Software Engineering	Oct 29th,2013
11	Ms.Vidhya, VistaMind, Chennai	Importance of Higher Education	Oct 30th,2013

45. *List the teaching methods adopted by the faculty for different programmes.*
   ➢ Group discussions moderated by staff member
   ➢ Software Demonstrations
   ➢ Case studies
   ➢ PPT's including animations and use of block board

46. *How does the department ensure that programme objectives are constantly met and learning outcomes monitored?*

   Course allocation based on faculty expertise
   ➢ Lesson plan and the assessment scheme
   ➢ Class Committee meetings conducted periodically
   ➢ By obtaining feedback from faculty and students.
   ➢ Involvement of academia and industry in Board of studies meetings
   ➢ Result analysis
   ➢ Upgrading the syllabus according to the current needs
   ➢ Academic Progress monitoring at department level and University level

47. *Highlight the participation of students and faculty in extension activities.*

   Encourage by Workshop/ symposium/seminar utilize by the Social Activities
   ➢ The department, the students visit orphanages and cater to the needs of under Privileged and the needy
   ➢ Students are encouraged to participate in various social activities by joining
   ➢ University level NSS programme, Rotary Club

48. *Give details of "beyond syllabus scholarly activities" of the department.*
   ➢ Conducts periodic guest lectures on cutting edge technologies by inviting

academicians and industry persons

➢ Conducts Workshops both for faculty and students to help in acquiring the necessary skills for using modern tools and techniques

➢ Term paper

➢ Encourage students to actively participate professional society activities ACM/ IEEE/CSI

➢ Conducts various activities such as

- ARCANE – A national level annual technical symposium
- Talent Hunt – an intra department technical competition on various skills
- EC meet – an intra department Extra Curricular meet to help in all round development of the students which includes sports and cultural activities
- Technical paper presentation outside college

49. *State whether the programme/ department is accredited/ graded by other agencies. Give details.*

➢ **B.Tech(CSE) and M.Tech(CSE) were accredited earlier by the NBA**

➢ **Certified to ISO 9001:2008 from DNV, Netherlands**

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

➢ By encouraging faculty to do in thrust areas of research

➢ By means of attending workshops, conferences and other FDPs

➢ To rebuild sponsor project in new area and technology

➢ To do industry collaborative project

51. *Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths:

➢ Excellent faculty support with dedication and team work

➢ Lab facilities with required software and hardware

➢ Faculty with high retention, proper mix of experienced and young hands

➢ Students with good curricular and co curricular competency

➢ Highly systematic academic process in place

Weakness:

➢ Limited research funding and scope for participation in international seminar

➢ Lack of International collaboration on teaching and learning

➢ Lack of Consultancy and extension activities in international level

➢ Lack of focusing in research in specialized area

Opportunities:

➢ International collaborative research and staff exchange programmes for faculty in foreign universities

➢ To tap current industry requirements, focus on better placements for students

➢ To strengthen industry-academia interaction

➢ Good scope for establishing centre of excellence

Challenges:

➢ To cater to the growing needs and expectations of industry

➢ To rise up to the standards of international teaching – learning process

➢ To have international collaborations and venture into joint research projects

➢ To promote specialization and research among students

➢ To centralize resources to carry out collaborative research

52. Future plans of the department.

➢ ➢ To establish centring excellence

➢ ➢ To go for international accreditation of the program

➢ ➢ To incorporate quality assurance standard in teaching and learning process

➢ ➢ To undertake work on the socially relevant funding projects

Department of Information Technology

1. Name of the Department   :   **Information Technology**

    The Department of Information Technology was started in the year 1999. The main focus of the department is to provide quality education in the field of Information Technology which would enable the students to meet the industry requirements with greater confidence. To enhance the scope of the department, M. Tech (Information Technology) programme was started in the year 2010. The department imparts comprehensive knowledge coupled with practical exposure which is essential for software design, development and testing in IT industry. The department is actively involved in academic research and published high quality research papers in refereed journals in areas like Adhoc Networks, Grid Computing, Data Mining and Cloud Computing.

2. Year of establishment   :   **1999**

3. *Is the Department part of a School/Faculty of the university?   :*

    Yes.

    Department is a part of School of Computer, Information and Mathematical sciences.

4. *Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)*

Name of the Programme	Specialization
B.Tech.	Information Technology
M.Tech.	Information Technology
Ph.D.	Ph.D – Full-time / Part-time

5. *Interdisciplinary programmes and departments involved:*

    NIL

6. *Courses in collaboration with other universities, industries, foreign institutions, etc.*

    NIL

7. *Details of programmes discontinued, if any, with reasons :*

    NIL

8. *Examination System:*

    Semester and Choice Based Credit System

9. *Participation of the department in the courses offered by other departments*

    MBA- Enterprise Resource Planning (IV semester)

    CSE- Computer Architecture, Multimedia Systems (M.Tech)

EEE- Computer Networks (M.Tech)

Fundamentals of Computing- all branches of B.Tech Programmes.

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors / Assistant Professors / others)*

Name of the Post	Sanctioned	Filled	Actual (Incl. CAS & MPS)
Professor	2	2	2
Associate Professor	3	2	2
Assistant Professor	18	18	18
Others	-	-	-

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Name	Qualifica-tion	Designa-tion	Specialization	No of yrs experience	No of M.Phil /Ph.D guided
Dr.Latha Tamilselvan	B.E., M.E., Ph.D.,	Professor and Head/ IT	Mobile Adhoc Networks, Cloud Computing	2 yrs industry, 18 yrs teaching	Guiding 8 Ph.D Scholars
Dr.V.Sankara narayanan	B.E.,M.Sc.. (Engg.) Ph.D.	Professor of Eminence & Director (University Projects)	Network Security, Computer Architecture Grid Computing	45 years of teaching	Guided 16 Ph.D Scholars. Guiding 2 Scholars
S.Subburam	B.E., M.E., (Ph.D.)	Associate Professor	Mobile adhoc networks	2 yrs industry, 18 yrs teaching	NIL
P.Usha	B.E., M.E., (Ph.D.)	Associate Professor	Data mining, database management system	17 yrs teaching	NIL

Name	Qualification	Designation	Specialization	No of yrs experience	No of M.Phil /Ph.D guided
Kabeer M.	B.E., M.E., (Ph.D.)	Assistant Professor (Sel. Grade)	Optical communication, computer networks	5 yrs industry 10 yrs Sys. Engr. 8 yrs teaching	NIL
P. Latchoumy	B.E., M.E., (Ph.D.)	Assistant Professor (Sel. Grade)	Distributed computing, Grid computing	16 yrs teaching	NIL
N. Prakash	B.E., M.E., (Ph.D.)	Assistant Professor (Sel. Grade)	Software engineering, Software testing	15 yrs teaching	NIL
Dr. G.Kavitha	B.E., M.E., Ph.D	Assistant Professor (Sr.Gr.)	Distributed computing, Grid computing	11 yrs teaching	NIL
Ms.L.Shakkeera	B.Tech., M.E.	Assistant Professor (Sr.Gr)	Cloud computing, MANET	8 yrs & 2 mnths teaching	NIL
E.K.Subramanian	B.Tech., M.E.	Assistant Professor (Sr.Gr)	Cloud computing, big data	13 yrs industry 8 yrs teaching	NIL
Priyadarshini.R	B.E., M.Tech.,	Assistant Professor (Sr.Gr)	Cloud Computing, Big Data , Semantic Web	1 yr industry 7 yrs teaching	NIL

Name	Qualifica-tion	Designa-tion	Specialization	No of yrs experience	No of M.Phil /Ph.D guided
N. Rajendran	B.E., M.E.	Assistant Professor (Sr.Gr)	MANET	5 months industry 7.5 yrs teaching	NIL
C.Vijayalakshmi	B.E., M.E.	Assistant Professor (Sr.Gr)	Visualisation	9 yrs & 3 mnths teaching	NIL
M.Alamelu	B.E., M.E.	Assistant Professor (Sr.Gr)	Service Oriented Architecture	9 yrs & 3 mnths teaching	NIL
Nabeena Ameen	B.E., M.E.	Assistant Professor	Cloud computing, data mining	13 yrs teaching	NIL
T.Anusuya	B.E., M.E.	Assistant Professor	Digital Forensics, Cyber Crime	2 yrs industry 4 yrs & 4 mths teaching	NIL
A.Raihana	B.E., M.E.	Assistant Professor	Soft computing	5 yrs teaching	NIL
R.Mythily	B.E., M.E.	Assistant Professor	DBMS,web technology,Data Mining	4.5 yrs teaching	NIL
S.Fathimuthu Shaniya	B.E., M.Tech.	Assistant Professor	Wireless sensor networks	1.3 yrs teaching	NIL

Name	Qualifica-tion	Designa-tion	Specialization	No of yrs experience	No of M.Phil /Ph.D guided
Evangilin Arputham .E	B.E., M.Tech.	Assistant Professor	DBMS, Network Security	1.3 yrs teaching	NIL
P.Gnanasekaran	M.Sc., M.E.	Assistant Professor	MANET	1 yr teaching 12 yrs Sys. Engr	NIL
A.Sonya	B.E., M.E.	Assistant Professor	Cloud Computing	2.5 months	NIL

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors:*

Emeritus Professor – Dr.V.Sankaranarayanan

13. *Percentage of classes taken by temporary faculty – programme-wise information :*

NIL

14. *Programme-wise Student Teacher Ratio*

B.Tech. IT   -   12:1

M.Tech. IT   -   8:1

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual.*

Academic Support Staff	Sanctioned	Filled	Actual
Admin Staff	2	2	2
Technical Staff	4	4	4

16. *Research thrust areas as recognized by major funding agencies*

The major thrust areas identified in the department are **Cloud Computing, Network security and Data Analytics.**

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise*

NIL

18. *Inter-institutional collaborative projects and associated grants received.*

NIL

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

11 funded project proposals were submitted to various funding agencies like Ministry of Science and Technology, DST, DIT, Ministry of Communications & Information Technology, Tamil Nadu State Council for Science and Technology, Science & Engg. Research Scheme of DST and Ministry of Communication and Information technology. For some projects we received review comments. Based on the review comments, we are revising our reports. Some more projects awaiting results.

Completed Projects

Sl. No	Faculty	Project Title	Status of Completion	Funding Agency	Total grants Received
1.	Dr.V.Sankara narayanan	Comprehensive plan for enhancing the existing IT infrastructure to a web based system	Completed	The Tamilnadu Handloom weavers' Co-op. Soc. Ltd., Chennai	Rs.1.00 Lakh

20. *Research facility / centre with*
   ➢ *state recognition*   -   NIL
   ➢ *national recognition*   -   NIL
   ➢ *international recognition*   -   NIL

21. *Special research laboratories sponsored by / created by industry or corporate bodies.*
   ➢ A special research Private Cloud Lab was set up by the faculty of Information Technology with the help of Data Techniques, Chennai.
   ➢ The faculty of the department are involved in the setup of Mobile iOS Apple Lab.

22. *Publications:*
   ➢ *Number of papers published in peer reviewed journals (national / international)*

45

International Journals /Nat. Journals / Conferences (2008 -2013)

Sl. No	Conference/Journal	2009	2010	2011	2012	Till sep'13	Total
1.	International Conference	05	07	05	13	06	36
2.	International Journal	01	05	11	14	17	48
3.	National Conference	03	03	01	`6	03	16
4.	National Journal	01	--	--	--	--	01
Total		**10**	**15**	**17**	**33**	**26**	**101**

Details of Publication in International and National Journals are provided in Annexure D - 3.2 and 3.3 (Criterion III)

Number listed in International Database	Average Citation Index	Range of Citation index	SNIP	SJR	Range of Impact Factor	Average Impact Factor	Average h-index	Cumulative h-index
10	6.5	1-17	11.12	2.529	0.21-1.22	0.813	12	39

23. *Details of patents and income generated :*

NIL

24. *Areas of consultancy and income generated :*

Consultancy	Income Generated
TAHDCO (2010-2011)	Rs. 40,000/-

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad*

Year	Faculty	Visited Institutions/ Industry	Purpose of visit
2011-2012	Dr.Latha Tamilselvan	Periyar Maniammai University (PMU), India	Acad.Coun. Member
2012-2013		Periyar Maniammai University, India	Acad. Coun. Member, Staff Sel. Com. member
2012-2013	Dr. V. Sankaranarayanan	1. NIT, Nagaland 2. National Informatics Center. 3. Anna University 4. PSG, Coimbatore 5. Kongu Engg College, Erode 6. Pondicherry Engg College. 7. Pondicherry University. 8. Committee member of AICTE	Academic Council Member, Staff Selection Committee member, Resource person for various events organized by the institutions.

26. *Faculty serving in*

    a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Year	Faculty	National / International Committee
2011-2012	Dr.Latha Tamilselvan	Academic Council Member , PMU
2012-2013		Staff Selection Committee Member, PMU
2011-2012	Dr.V.Sankaranarayanan	Staff Selection Committee Member, National Institute of Technology,Nagaland
2012-2013		Member of AICTE committee of approved universities and colleges in Tamilnadu, Karnataka and Andhra Pradesh.

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

Sl. No	Year	No. of programmes attended	No. of faculty attended
1	2013	14	20
2	2012	29	16
3	2011	14	12
4	2010	12	22

28. *Student projects*

Year	Programme	Percentage of In-house projects	Percentage of Collaboration projects
2006-2010	B.Tech (I.T)	100	__
2007-2011	B.Tech (I.T)	100	__
2008-2012	B.Tech (I.T)	100	__
2009-2013	B.Tech (I.T)	100	__
2010-2012	M.Tech (I.T)	100	__
2011-2013	M.Tech (I.T)	95	5

29. *Awards / recognitions received at the national and international level by*

    ➢ *Faculty ; Doctoral / post doctoral fellows ; Students*

Awards Received by the Faculty

S. No	Name of the Staff	Name of the Activity	Organized by	Recognition/ Awards if any	Date
1.	Ms.Nabeena Ameen	International Conference	Sathyabama University, Ch.	Best paper Award	Dec.,2007
2.	Ms.Angelina Geetha	MISSION 10X-Workshop WIPRO	Vellammal Engg College,	Best Performer Award	July, 2008

Recognition of Faculty Members in various International Conferences and Editorial Boards

Sl. No	Year	Name of the Faculty	Name of the Activity	Organized by	Recognized as
1.	2013	Dr.Latha Tamilselvan	Journal of Discrete Mathematics	Elseiver publications	Reviewer
2.	2012	Dr.Latha Tamilselvan	ICSEMA'12	BSAU with Deakin Univ.	Reviewer
3.	2012	Dr.V.Sankaranarayanan	ICSEMA'12	BSAU with Deakin Univ.	Reviewer
4.	2011	Dr.Latha Tamilselvan	Intl Conf. - IET SEISCON	M.G.R. University	Reviewer
5.	2010	Dr.Latha Tamilselvan	COMCOM-Computer Commn	Elseiver publications	Reviewer

Students- Special Achievements

Sl. No.	Event	Participants
1	IBM Academic Initiative-2006	Nicky Anto – VI I.T 'B'
2	Diversity at Infosys – 2007	Deepasaranya- III I.T 'A'
3	iTalent 2008-2009	Deepasaranya.S, Indu J Saranya, Janani .V- VIII IT 'A'- 2009
4	IBM Academic Initiative-2008 "The Great Mind Challenge-2008"	Gokul V R Md Usloob Ahmed –VIII I.T, 2008
5	International Conference on Recent Trends in Business Administration and Information Processing (BAIP 2010) (Second Place)	B.Raman, S.Kamal, Mohammed Azhaurudeen, B.Faizal – VIII I.T,2010
6	IBM Academic Initiative-2010 "The Great Mind Challenge-2010"	Keerthi Vasan, Aejaz Ahmed of Team rockers-VII I.T, 2011

S. No	Year	Best NSS Volunteer
1.	2008-2009	Mr. Madhiyazhagan (IT)
2.	2007-2008	Ms. Rahmath Fathima, B.Tech (I.T)

30. *Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.*

Seminar/Conf./ Workshop	Name of Event	Source of funding	List of outstanding participants
National Conference	NCRTIT'07	IEEE Madras chapter, TNSCST, CSI.	• Manoj Kumar Sarma, IIT, Guwahati. • Dr.Ramaraj, Alagappa Univ.
National Conference	NCRTIT'10	Computer Society of India, IEEE madras chapter.	• Dr.M.K.Sharma,Amrapali Institute, Uttarakhand. • K.S.Sabitha, Manonmaniam Sundaranar University, Tirunelveli.

31. *Code of ethics for research followed by the departments :*

The guidelines and code of ethics for responsible conduct of research followed at B.S. Abdur Rahman University is given in **Annexure D - 3.1 (Criterion III)**

32. *Student profile programme-wise:*

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B. Tech (2009-2013)	70	39	13	74	92
B. Tech (2010-2014)	65	25	19	42	90
B. Tech (2011-2015)	87	39	26	33	73
B. Tech (2012-2016)	85	29	34	24	65
B. Tech (2013-2017)	48	22	7	NA	
M.Tech.(2010-2012)	40	13	15	100	100
M.Tech.(2011-2013)	45	11	11	91	91

33. *Diversity of students*

Name of the Programme (refer to question no. 4)	% of students from same university	% from other univ.within State	% from univ. outside the State	% from other countries
M.Tech (2010-12)	1(AU)	27	1	0
M.Tech (2011-13)	1(AU)	21	0	0
M.Tech (2012-14)	2(AU)	29	1	0
M.Tech (2013-15)	1(AU)	14	0	0

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

Year	Civil services, Defense Services, NET, SET, GATE	Percentage of students cleared Exams (%)
2007-2011	GATE	3
	GRE/TOEFL/IELTS	8
	Civil Services(Group II)	1
2008-2012	GATE	1
	IBPS	1

35. *Student progression*

Student progression	Percentage against enrolled
UG to PG	**5%**
PG to M.Phil.	**Nil**
PG to Ph.D.	**7%**
Ph.D. to Post-Doctoral	**Nil**
Employed - Campus Selection	B.Tech: **91%** (2007-2011 batch) , **86%** (2008-2012), **50** % (2009-2013). M.Tech : **55** %(2010-2012), **14%** (2011-2013).
Other than campus recruitment	The remaining students have been placed through off-campus.
Entrepreneurs	15% (From 2003 onwards)

36. *Diversity of staff*

Year	Percentage of Faculty- Same University	Other universities within state	From other state universities	Universities outside the country
2010	9	87	4	Nil
2011	9	86	5	Nil
2012	9	87	4	Nil
2013	9	86	5	Nil

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period -*

Sl.No	Name of the Faculty	M.Tech(by Research)/ Ph.D
1.	Mr.S. Hariharan	Ph.D (2010)
2.	Ms.G.Kavitha	Ph.D (2013)
3.	Mr.Ziaul Haque Choudhary	M.Tech (by research)

38. *Present details of departmental infrastructural facilities with regard to*

a) *Library*

	Total
Books Transferred from central library & CSE Department	269
Complimentary Books	352
Project Reports	397
Lab Manuals	36
CD's (Prepared by Staff)	26
Question Answer Book	3
Project Abstract (Batch wise)	3
Rational Rose Suit (Excluding CD)	1
CSI Communications	2

b) *Internet facilities for staff and students*

Wi-Fi Campus & Campus LAN with 1 GB fibre cable

Staff : All 22 faculties are allotted with individual system with internet facility.

Students: UG and PG Project lab is provided with Internet facility

c) *Class rooms*

UG   : 3 Class Rooms

PG   : 2 Class Rooms

d) *Class rooms with ICT facility*

All the class rooms are equipped with System (Laptop) and Projector facilities

e) *Students Laboratories*

Multimedia Lab

Item	Quantity
Intel Core2Duo @2.2 GHz (HCL)	39
Auto desk MAYA 2012 software (10 user license)	10 user lic
Web camera	38

Item	Quantity
Adobe CS3 Master Collection software	15 user Lic
Epson LQ1150 Printer	2
HP Scan Jet Scanner	1
HP LaserJet 2055 DN n/w printer	1
24 port Gigabit Switch	7

Case Tools Lab

Item	Quantity
Intel core i5/3.1Gb/500 GB HDD	30
P-IV @ 2.93 Ghz computer (Wipro)	3
HP LaserJet 2055 DN n/w printer	1
HP Inkjet Printer	1
IBM Rational Enterprise	30 user Lic.
IBM Software Architect	30+30 Lic.
D-Link 24 port Switch	5

UG Project Lab & Data Structure Lab

Item	Quantity
Intel Core2Duo 2GB/320 GB (Acer)	25
Intel Core2Duo @2.2 GHz (HCL)	8
Intel Core2Duo @2.93 GHz (DELL)	9
Epson LQ1150 Printer	2
HP Laser Jet Printer	1
HP LaserJet Monochrome n/w printer	1
D link 24 Port Switch	2

Browsing Lab

Item	Quantity
Intel Core2Duo @2.2 GHz (DELL)	42
Epson Ex330 printer	2
HP LaserJet Monochrome n/w printer	1

PG Project Lab

Item	Quantity
HP LaserJet Monochrome n/w printer	1

Server Room

Item	Quantity
COMPAQ Dual Xeon Processor Server	1
DELL power Edge 2950 servers	3

f) Research Laboratories

Item	Quantity
IBMX3650 m4 server/2u	1
Cloud open Software - Eucalyptus	1

39. *List of doctoral, post-doctoral students and Research Associates*

a)   *Doctoral students from the host institution/university*

Sl. No	Name of the Faculty	Research Area
1.	Mr.A.Sultan Saleem	A real time simulation for Virtual Smart Grid
2.	Ms. P. Usha	Privacy Preserving Data Mining for Pervasive Computing
3.	Ms. P. Latchoumy	Fault Tolerant Strategies in Grid Computing Systems
4.	Ms. L. Shakkeera	Design and Implementation of Efficient Job scheduler for Dynamic Service and Data Migration in Cloud Computing Environment
5.	Mr.E.K.Subramanian	Improving QoS for Data Management in Cloud Computing
6.	Mr. P. Gnanasekaran	QoS Based on Demand Routing Protocol in Mobile Adhoc Networks
7.	Ms.R.Priyadarshini	Document based semantic content Management system on cloud
8.	Mr.N.Rajendran	Secured communication in Mobile Ad hoc networks.
9.	Ms.C.Vijayalakshmi	Visualization Models.
10.	Ms.T.Anusuya	A digital Forensic Investigation and Security Analysis in Cloud environment.
11.	Ms.R.Mythily	Big Data Analytics
12.	Ms.Nabeena Ameen	Analysis of data fusion algorithms for wireless sensor networks
13.	Ms.A.Raihana	An intelligent adaptive optimal and secured network and control management for the stability of power generating system.
14	Ms.Fathimuthu Shaniya	Secured stable adaptive routing methodology for wireless sensor networks
15.	Mrs. Ruby Annette J. (JRF)	Selective Scheduling of Tasks in Multi Queue using Backfilling in a Hybrid Cloud

b) *Doctoral students from other institutions/universities*

Sl. No	Name	Title
1	Ms.R.Latha	Prevention Methodology for Cyber Crime.
2	Mr.Y.Sharmasth Vali	Efficient Defensive Measures for hacking in Wireless Networks
3	Ms.S.Kavitha	Power –Efficient and Optimal Multicast Routing in MANET
4	Ms.D.Umanandhini	Client Aware Cloudlet Framework in a Service cloud Environment
5	Ms.Radhika	Quality of Service (QoS) Aware Routing , Resource Utilization and Security for Mobile Adhoc Network (MANETs)
6	Mr.M.Ramamoorthy	Intelligent video surveillance system.

40. *Number of post graduate students getting financial assistance from the university.*

NIL

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

The need assessment exercise is always undertaken before offering a new programme.

➢ A committee would be constituted, to study the need of the programme, which would comprise of representatives from industries, premier universities, internal faculty, Alumni etc.,

➢ The proposal for M.Tech (Information Security and Digital Forencics) was started in year 2012 and the recommendations of the expert members from the leading software organizations and Institutions like National Institute of Technology were obtained and analyzed.

➢ Based on the current job opportunities and research directions in Information security, cyber crime and forensics, the curriculum and syllabi for the programme has been developed by the faculty of the department in association with the professors of National Institute of Technology, Nagaland.

➢ The senior faculty members visited Department of Criminology, University of Madras and Forensics Department, Chennai on account of developing new laboratories for the proposed programme.

➢ The committee constituted comprised of the following expert members to make recommendations for M.Tech. (ISDF),

• ▪ Mr.Sivakumar Soundarapandian, Senior Software Architect/ At Road Software India Pvt Ltd.

- Dr. V.Ramachandran – Director, NIT, Nagaland.
- Dr. K. M. Mehata – Dean (SCIMS), BSAU
- Dr.V.Sankaranarayanan – Professor of Eminence, BSAU
- Mr. Mr.Sriram Kumar V.H. – Alumni & co-founder Watchy Solutions, Bangalore

The committee has discussed about the recruitment of new faculty with the expertise in the domain, infrastructure, Laboratory and Library facilities offered by the University and have made the recommendation for starting M.Tech (ISDF) from the academic year 2014.

➢ Then, a draft curriculum and course contents would be prepared by one another committee constituted for the said purpose.

➢ Once the draft is ready, the same will be discussed in detail, in the department all faculty meeting.

➢ After the approval of department meeting, the draft will be presented in the meeting of the "Board of Studies".

➢ Based on the approval of Board of Studies, the academic advisory committee will discuss the viability of the programme and forward the same to finance committee.

➢ With the finance committee approval, the same will be presented in the "Board of Management" for the final approval.

➢ After the approval of Board of Management and Vice Chancellor, the programme will be offered by the department.

42. *Does the department obtain feedback from*

a. *Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?*

The suggestions given by the faculty regarding the curriculum and syllabi are presented in the meeting of Board of Studies. The suggestions are incorporated after the approval in the meeting of Board of Studies.

b. *Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

Two feedbacks are obtained from the students each semester for each course. Corrective actions are taken by the head of the department.

c. *Alumni and employers on the programmes offered and how does the department utilize the feedback?*

The suggestions given by the alumni and employers regarding the programmes are represented in the meeting of Board of Studies. The suggestions are incorporated after the approval in the meeting of Board of Studies.

43. *List the distinguished alumni of the department (maximum 10)*

Distinguished Alumni	Batch	Place of Work
Mr.Sheik Raja	U.G.(1999-03)	Brand Sales Manager, IBM, Chennai.
Mr.Sriram Kumar V.H.	U.G.(2000-04)	Entrepreneur – Watchy Solns, Bangalore
Ms.Nancy Jane	U.G.(2001-05)	Anna University
Mr.Mohammed Azarudeen	U.G.(2002-06)	Entrepreneur-EMO 2 Solutions, Bangalore
Mr.C.S. Narendra Kumar	U.G.(2004-08)	TCS
Mr.Ralston Ratin Kumar N.V.	U.G.(2007-11)	Infosys Technologies, Chennai
Ms.Sharanya	U.G.(2006-12)	Bank of Baroda, Chennai
Ms.A.R. Rohini	P.G.(2010-12)	CTS, Chennai
Mr.K.Suresh	P.G.(2010-12)	Wipro Technologies, Bangalore
Ms.Lakshmi S.V.V	P.G.(2011-13)	Madras Institute of Technology, Chennai

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

Sl. No	Enrichment Programme	Topic	Speaker
1.	Seminar (2009)	Software Testing	Mr.Dhanasekaran,CEO, Qassure Technologies, Ch
2.		Self Management	Dr.C.S.Ramachandran, Senior Surgeon, Mercury Hospital, Ch.
3.		Animation Technology	Mr.Umasankar, Country Manager, Aditya InfoTech Ltd, Ch.
4.		Recent Trends in IT	Mr. Mohamed Shahul Hameed Practice Director, TCS, Ch.
5.	Seminar (2010)	Rich Internet Applications	Mr.Anantharaman Mani, RIA & Mr.K.Vinod, Group Head, Griffin, Ch.
6.		Global IT Trends	Mr.R.Rajasekar, Insurance Practice Head, Mphasis Fin Solns Pvt Ltd, Ch.
7.		Recent Trends in IT	Dr.R.K.Subramanian, Professor, Comp. Sci., Univ.of Mauritius.
8.		Machine Learning	Mr.Yerur Siraj Ahmed, Scientific Officer, NIC, New Delhi.
9.		Quality of work	Mr.Mahesh Subramanian,Asst.VP, iNautix compensation Management Solutions, Chennai
10.		How to Sell Yourself Successfully	Mr.R.Sundararajan, Consultant Legal corporate Services, William Hare Group of Companies, Chennai.

Sl. No	Enrichment Programme	Topic	Speaker
11.	Seminar (2011)	Cyber Crime	Dr.G.Deepak Raj Rao Prof.(Criminology), Univ. of Madras
12.		Latest Trends in IT	Mr.Anand Mahanram(Delikey Manager),Infosys Chennai.
13.	Seminar (2012)	Philosophy of Open Sources	Mr.Shanu Sukhooor Project leader, TCS , Ch.
14.		Oracle Database	Mr.M.Gurunathan, Senio Oracle Specialist, Techno Soft Corporation, Taramani, Chennai
15.		Mobile Application Development in iOS	Mr.Subhash E.P Founder & Head-Technical Training TechV, Chennai
16.	Seminar (2013)	Cyber Security Threats	Recorded session of Mr.Ankit Fadia "Computer Security guru and Cyber terrorism expert" conducted by India Can Pvt Ltd, Pearson Company on 29th July 2013.
17.	Workshop (2009)	Key attributes for solutions providers	Dr.K.Kesavasamy, Global Head for Academic Interface Program, TCS, Chennai
18.	Workshop (2011)	How to build skills	Rev.Dr.C.Joe Arun SJ, Secretary & Correspondent of Loyola College, Chennai
19.		.Net Framework	Mr.Mahesh Subramanian, Vice President, Sniper Systems, Chennai
20.	Workshop (2012)	Maya Software	Mr.Lenin Christopher,Technical Head,M/s. Snipper Sys.& Solns Pvt Ltd, Ch
21.		Cloud Computing	1.Dr.R.Vijayarajeswaran, Managing Director, 2.Mr.B.Thirupathi,Manager M/s.Vi Microsystems Pvt Ltd, Chennai
22.		Maya Software	Mr.Lenin,Project Manager,Sniper Sys., Ch
23.		IOS & Android Application	Mr.Balamurugan, Senior Consultant & Mr.Renu Karthi, Consultant, Kaavian Systems, Chennai.
24.	Workshop (2013)	Open Source Cloud Computing Platform	1.Mr.Senthil Kumar Arumugam Associate-GTO, CTS,Chennai. 2.Dr.Saswati Mukherjee Professor, Anna University, Chennai. 3.Dr.D.Manjula, Associate Professor, Anna University, Chennai. 4.Mr.Jeyanthan Hariharan, Head, IT Data-Technics IT Services Pvt. Ltd, Chennai.
25.	Special Lecture'09	How to succeed in IT Career	Dr.Sundar Victor, Global Delivery Head, Verizone Business Information Technology

Sl. No	Enrichment Programme	Topic	Speaker
26.	Special Lecture (2010)	How To Prepare High Quality Res. Papers	Dr.Vijayan Sugumaran, Professor, Information Science, Oakland University, USA.
27.		Distributed Service Model	Dr.V.Ramachandran, Professor, CSE Department, Anna University, Chennai.
28.		E-governance Initiatives in TN	Mr.E.Iniya Nehru, Senior Technical Director, National Informatics Center, Chennai.
29.		NKN	S.Gopinath, Principal System Engineer, National Informatics center, Chennai.
30.		IT Project Management	Mr.T.Subramanian, Associate Professor, Crescent Business School, Chennai.
31.	Special Lecture'13	Personal Transformation	Dr.Arasu Chellaiah,Adjunct Associate Professor,University of Maryland,U.S.A

45. *List the teaching methods adopted by the faculty for different programmes.*

The faculty have adopted various teaching methods such as seminars on latest technology trends, hands-on training in different softwares like MAYA software, Rational Software Architect, Robotics, Hadoop, open-nebula and Eucalyptus to satisfy the programme outcomes.

The course objectives are met through assignments and seminars delivered on subject beyond syllabus using the facilities like LCD, NPTEL and Wi-Fi available in the campus. Models are developed for various courses like computer networks, Grid computing, Multimedia technology for better understanding of the core topics in the relevant subjects.

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*

The programme objectives are met through assessment tools which include two continuous assessment test, assignment, technical quiz, seminar, group discussion, mini project and one end semester examination. The process of continuous assessment includes continuous assessment test (CAT) and one or two components pertaining to assignment, technical quiz, seminar, group discussion and mini project decided by the course in-charge in the class committee meeting.

To ensure the quality of the question papers for CAT and end semester examinations and fair valuation of answer scripts for the CAT and end semester examinations, the department has formed a Department Academic Audit Committee (DAAC) consisting of HOD and members of senior faculty. The DAAC approved question papers will be sent to COE. This process assesses the course knowledge acquired by the student. This has enabled the students to get placements in esteemed industry and institutions both

in campus placements and off campus placements. In addition the department ensures the attainment of programme outcomes by obtaining feedback from stakeholders.

47. *Highlight the participation of students and faculty in extension activities.*

The students and faculty of the department are active participants of Rotaract Club of BSAU (RCBSAU) and NSS.

Sl. No	Year	Activities organized by RCBSAU	Name of Faculty	Students attended
1	2011	Blood Donation Camp, Donation of Computers, Personality Development Prog., Fund Raising Prog. for "END POLIO"	Dr.LathaTamilselvan Ms.P.Usha Mr.N.Rajendran Ms.R.Priyadarshini	50
2	2012	Blood Donation Camp, Fund Raising Prog. for "Thaai Thondu", Orphanage Visits	-do-	70
3	2013	Blood Donation Camp, Hi-Five – Guinness record event.	-do-	75

48. *Give details of "beyond syllabus scholarly activities" of the department.*

Additional enrichment and certificate courses like CISCO, ORACLE are offered along with regular programs.

Value added courses, Seminars on Skill development, Personal Transformation seminar for Personality development programme, Seminars by distinguished Alumni for Entrepreneurship development courses etc.

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

Yes – B.Tech.(IT) under Anna University was NBA accredited.

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

The department has organised National conferences on Recent Technology Trends, workshops and seminars on iOS Application Development for Mobile Devices, Mobile Application Development for Android OS and Open Source Cloud Computing Platforms to enrich the new knowledge of the students in information technology.

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strength:

- ➢ Qualified, Experienced and dedicated staff members.
- ➢ Knowledge in diversified areas including Process Modelling and Simulation, Multimedia, Software Testing, Soft computing, Cloud computing, Grid computing and Network Security.
- ➢ Encouragement for self growth of the staff members.
- ➢ Satisfactory Campus placement of the IT students.
- ➢ Transparent administration.

Weakness:

- ➢ All the staff members are staying outside the campus. So it is difficult for doing research in the evening.
- ➢ Faculty Training in industry is needed to know the advanced technology.
- ➢ Lack of consultancy work and funded project.
- ➢ Poor industry interaction.

Opportunities:

- ➢ To carryout research and developments activities.
- ➢ To provide IT enabled services
- ➢ To simulate in students a habit of undergoing on-site/off-shore project works to improve team spirit and work culture.
- ➢ To provide academicians an environment for upgradation of knowledge.

Challenges:

- ➢ Need to update knowledge on par with the industry standards.
- ➢ To handle the high impact change taking place in the work environment.
- ➢ Provide solutions to societal problems through innovative research and consultancy.

52. *Future plans of the department.*
- ➢ To offer value added program on Multimedia
- ➢ To submit Funded Projects on the Thrust Areas – Every year
- ➢ To organize National Conference **-** Once in two years on Recent Trends in Information Technology
- ➢ To arrange job training for faculty members by deputing them to the Industry – At least one Faculty member every year
- ➢ To increase research publications in journals
- ➢ Skill up gradation training for Non-teaching staff – Once in a year

Department of Computer Applications

1. *Name of the Department :* **Computer Applications**

The Department of Computer Applications was established in 1994 as separate department in Crescent Engineering College. Since then it has been offering Master of Computer Applications. In order to enhance the scope of the department, the department has started Ph.D. programme. Besides these academic activities the department takes care of setting up, maintenance and internet facility for the entire University. The department has also created a high end Data Centre for the University.

2. *Year of establishment   :* **1994**

3. *Is the Department part of a School/Faculty of the university?*

   Yes. School of Computer, Information and Mathematical Sciences.

4. *Names of programmes offered*

Degree	Name of the Programme
Master Degree	MCA (Computer Applications)
Doctor of Philosophy	Ph.D (Computer Applications) Full-time & Part-time

5. *Interdisciplinary programmes and departments involved :*

   Nil

6. *Courses in collaboration with other universities, industries, foreign institutions, etc.*

S. No.	Name of the Course	Industry/University
1	Oracle Certification	Oracle University (Oracle Corporation India Ltd.)
2	CCNA Certification	CISCO

7. *Details of programmes discontinued, if any, with reasons*

   M.Phil (Computer Science)

It is temporarily suspended, since 2012 for,

➢ M.Phil (Computer Science) is not a compulsory requirement for teaching job as per the new government policy/UGC regulations.

8. *Examination System: Annual / Semester / Trimester / Choice Based Credit System*
   Semester and Choice Based Credit System

9. *Participation of the department in the courses offered by other departments*

S. No.	Department	Semester	Course Code	Course Name
1	Crescent Business School	IV (Trimester)	MSY065	Project Management
2	Crescent Business School	V (Trimester)	MSY062	Data Mining for Business Applications
3	Computer Science and Engineering	VII	CSB3102	Object Oriented Software Engineering

➢ Offering Computer Practical Courses for all branches of B.Tech (I Year)

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/Others)*

Designation	Sanctioned	Filled	Actual (Incl. CAS & MPS)
Professor	2	2	3
Associate Professors	2	2	2
Assistant Professors	14	14	14
Others			Nil

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

S. No.	Name of the Faculty	Qualifi cat-ion	Designa-tion	Area of Special-ization	Exp. (in yrs)	Res. Guide.
1	Dr.P.Sheik Abdul Khader	M.Sc, M.Phil, Ph.D.,	Professor and Head	Routing Algo-rithms, Networks, MA-NET, Data Min-ing	28	Ph.D: Comp3 Guid: 8 M.Phil: Comp.:5

S. No.	Name of the Faculty	Qualifi cation	Designation	Area of Specialization	Exp. (in yrs)	Res. Guide.
2	Dr.Munir Ahamed Rabbani	M.Sc., M.Phil., MCA., Ph.D.,	Professor	Image Processing, Bioinformatics, Graphics	22	Ph.D: Guiding: 3 M.Phil: Completed : 1
3	Dr.A. Jaya	MCA., M.E., Ph.D.,	Professor	NLP, Web Mining, Data Mining	16	Ph.D: Guiding: 8 M.Phil: Completed : 2
4	Mr.I.Sathik Ali	MCA., M.E., Ph.D.	Associate Professor	Computer Networks	20	-
5	Mr.S.Pakkir Mohideen	M.Sc., M.Ed, M.Phil., MCA.,M.E	Associate Professor	Data Mining	20	-
6	Mr.M.Syed Masood	MCA., M.E.,	Assistant Professor (Sel.Gr)	Networks	18	-
7	Mrs.S.Shahar Banu	MCA, M.Phil.,	Assistant Professor (Sl.Gr)	Data Mining	16	-
8	Mr.A.Mohamed Abbas	MCA., M.Phil., PGDBA., M.Tech.,	Assistant Professor (Sr.Gr)	Networks	13	-

S. No.	Name of the Faculty	Qualifi cation	Designation	Area of Specialization	Exp. (in yrs)	Res. Guide.
9	Dr .M.Kahteeja Parveen	M.Sc., M.Phil., Ph.D.,	Assistant Professor (Sr.Gr)	RFID (Wireless Identification Techniques)	7	-
10	Dr.A.Anny Leema	MCA., M.Phil., Ph.D.	Assistant Professor (Sr.Gr)	RFID	16	-
11	Mrs.G.Shree Devi	MCA.,	Assistant Professor (Sr.Gr)	Image Processing	9.5	-
12	Ms.P.Padmavathy	MCA.,	Assistant Professor	Data Mining	8	-
13	Ms.S.Prathiba	MCA., M.E.,	Assistant Professor	Grid Computing	2.5	-
14	Mr.K.Javubar Sathick	MCA.,	Assistant Professor	Knowledge Management	4	-
15	Mr. Abdul Azeez Khan	M.Sc., M.Phil.,	Assistant Professor	Knowledge Management	7.5	-

S. No.	Name of the Faculty	Qualifi cation	Designation	Area of Specialization	Exp. (in yrs)	Res. Guide.
16	Mr.A.Salman Ayaz	MCA., M.Phil., MBA.,	Assistant Professor	Software Engg, JAVA, Operating Sys.	12	-
17	Ms.P.K.Nizar Banu	M.Sc., M.Phil., MCA.,	Assistant Professor	Data Mining	5	-
18	Mr.P.SivaKumar	M.Sc., MCA.,	Assistant Professor	Computer Hardware, Networking	20	-
19	Mr.R. Venkateswaran	B.E., M.E.,	Assistant Professor	Computer Hardware, Networking	20	-

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors*

Nil

13. *Percentage of classes taken by temporary faculty – programme-wise information*

Nil

However, value added programmes, Guest lectures and Special lectures etc., are offered by eminent persons from Industries, reputed Institutions like, IIT, Anna University, etc.

14. *Programme-wise Student Teacher Ratio*

MCA – Full Time   **1 : 12**

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

Non-Teaching Staff	Sanctioned	Filled	Actual
Academic Support staff (Technical)	5	5	5
Administrative	2	2	2

16. *Research thrust areas as recognized by major funding agencies*

S. No.	Name of the Funding Agency	Identified Research Thrust Area	Faculty Involved
1	Indian National Science Academy, New Delhi	Web Technology	Dr. P. Sheik Abdul Khader Dr. A. Jaya
2	Tamil Virtual University, Chennai	Natural Language Processing	Dr. A. Jaya

Other major thrust areas of research:

➢ Image Processing and Multimedia

➢ Data and Knowledge Mining

➢ Networking and Mobile Computing

➢ Software Engineering

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

None

18. *Inter-institutional collaborative projects and associated grants received*

a) *National collaboration:*

Collaboration with Oracle India in Work force development programme (WDP).

Oracle Corporation launched WDP to address the continued global information technology (IT) worker shortage and need for accessible and low cost IT skills training. WDP enables participating educational institutions to deliver Oracle training in full-time and part-time programs for students in their local communities.

WDP training will prepare students for Oracle certification testing. With the widely-acclaimed credential of Oracle certification, WDP students are readied for a variety of entry-level Oracle job-roles as well as career advancement.

Collaboration with Cisco Systems, Inc.

Cisco Certified Network Associate (CCNA) Routing and Switching is a certification program for entry-level network engineers that helps maximize your investment in foundational networking knowledge and increase the value of your employer's network. CCNA Routing and Switching is for Network Specialists, Network Administrators, and Network Support Engineers with 1-3 years of experience. The CCNA Routing and

Switching validates the ability to install, configure, operate, and troubleshoot medium-size routed and switched networks.

Collaboration with Hibris Technologies :
- ➢ Selected students of our department are given job and corporate training during the course of study
- ➢ Real time academic projects

Collaboration with QEEE (Quality Enhancement in Engg. Education):
- ➢ Virtual classrooms
- ➢ e-Tutorial
- ➢ e-Labs
- ➢ Live classes by highly rated IIT professors
- ➢ MOOC (Massive Open Online Course)

b) International collaboration

None

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

Nil

20. *Research facility / centre with*
  - ➢ *National recognition*
    - • BSA University is one of the few recognised universities connected with National Knowledge Network (NKN) under National Mission on Education through Information and Communication Technology (NMEICT) scheme through National Informatics Centre (NIC).
    - • *International Recognition –* **Nil**

21. *Special research laboratories sponsored by / created by industry or corporate bodies*
  - ➢ Apple iOS Research Lab
  - ➢ Data Centre

22. *Publications:*

  Number of Papers published in peer reviewed journals (national/international)

Year	International Journal	National Journal	International Conference	National Conference	Total
2009	5	-	7	3	15
2010	7	-	9	3	19

Year	International Journal	National Journal	International Conference	National Conference	Total
2011	16	-	13	3	32
2012	10	-	13	5	28
2013 (upto Oct)	13	-	1	39	53
Total	**51**	**-**	**43**	**53**	**147**

Detailed information is given in Annexure D - 3.2 and 3.3 (Criterion III)

Average Citation Index of the department **: 6.0**

h-Index of the department **: 9.1**

23. *Details of patents and income generated*

None

24. *Areas of consultancy and income generated*

Details of Consultancy/Workshop and Online Exams

S. No	Exam Date	Exam Details	Amount(Rs.)
1	22-09-2013	TNPSC Exam	35,000
2	09-06-2013	TNPSC Exam	35,000
3	02-06-2013	TNPSC Exam	32,000
4	30-04-2013	BARC Exam	5,000
5	26-04-13 to 30-04-13	BARC Exam	1,15,000
6	07-04-2013	TNPSC Exam	32,000
7	24-02-2013	TNPSC Exam	29,850
8	10-02-2013	TNPSC Exam	32,000
9	02-02-2013	TNPSC Exam	15,000
10	20-01-2013	IIT GATE2013	50,000
11	06-01-2013	TNPSC Exam	17,500
12	23-12-2012	TNPSC Exam	15,250
13	16-12-2012	TNPSC Exam	18,750
14	09-12-2012	TNPSC Exam	11,150
15	29-01-2012	IIT GATE2012	39,240
16	22-11-10 to 26-11-10	AAZP Training Program	33,500
17	28-11-09 to 09-12-09	CAT2009	1,34,025
Total			**6,50,265**

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad*

International:

S. No.	Name of the Faculty	Purpose of the Visit	University / IndustryVisited
1	Dr. P. Sheik Abdul Khader	International Conf.	Austria
2	Dr. P. Sheik Abdul Khader	Educational Fair	Singapore, Malaysia, Indonesia, Sri Lanka
3	Dr.M.Munir Ahamed Rabbani	Teaching Assignment	Qassim University, Saudi Arabia
4	Dr. A. Anny Leema	Teaching Assignment	East Africa

National:

S. No.	Name of the Faculty	Purpose of the Visit	University / Industry Visited
1	Dr. P. Sheik Abdul Khader	National Knowledge Network (NKN) Meet'2012	IIT, Mumbai
2	Mr.A.Abdul Azeez Khan		
3	Mr. R. Venkateshwaran		
4	Dr. P. Sheik Abdul Khader	NPTEL	IIT, Chennai
5	Dr. P. Sheik Abdul Khader	National Knowledge Network (NKN) Meet'2013	Indian Institute of Science (IISc), Bangalore
6	Mr.A.Abdul Azeez Khan		
7	Dr. M. Munir Ahamed Rabbani	Oracle Training	Oracle University, Hyderabad
8	Mr. M. Syed Masood	CCNA Training	Bangalore
9	Mr. K. Javubar Sathick	Oracle Training	Oracle Univ., New Delhi
10	Mr. A. Salman Ayaz		
11	Mr.A.Abdul Azeez Khan	Apple iOS Training	Bangalore

26. *Faculty serving in*

a) *National committees b) International committees c) Editorial Boards d) any other (please specify)*

National Committee:

S. No.	Name of the Faculty	Name of the Committee
1	Dr. P. Sheik Abdul Khader	National Knowledge Network (NKN)
2	Dr. P. Sheik Abdul Khader	Oracle Training

Editorial Boards

S. No.	Name of the Faculty	Name of the Editorial Board
1	Dr. M. Munir Ahamed Rabbani	Journal of Current Research in Computer Science
		Computer Science Journals -IJIP - International Journal of Image Processing
		Scientific Committee and Editorial Board - World Academy of Science, Engineering and Technology

Journal Reviewers

S. No.	Name of the Faculty	Name of the Journal
1	Dr. M. Munir Ahamed Rabbani	Intl Journal of Comp. Science & Information Security
		Signal and Image Processing – An Intl Journal
		Intl Journal of Comp. Networks & Communications
		Intl Journal of Computer Graphics and Animation
		The International Arab Journal of Information Tech
		The Science and Information Organization

Any Other Committees

Almost all the senior faculty members of the Department serve in various committees including Academic Council of other universities, Board of Studies of other universities, Research Supervisor for other Universities, Technical Advisory committee member for many conferences in the State of Tamilnadu, Board of Management of other institutes, Interview Panel members for other universities, Doctoral committee member for the other university research scholars, Ph.D thesis evaluation expert for other universities, etc.

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

Faculty Recharging Strategies	No. of Programmes (Attended)
Higher Studies	13
Workshops	31
Faculty Development Training	16
National / International Conferences	81
Seminars	10

28. *Student projects*

Inhouse / Industry Projects	2009-12	2010-13	2011-14
Percentage of students who have done in-house projects including inter-departmental projects	69.84%	89%	100%
Percentage of students doing projects in collaboration with other univ. /industry / instt.	30.16%	11%	Nil

29. *Awards / recognitions received at the national and international level*

➢ Dr. A. Jaya, Professor received best paper award, paper titled "An Intelligent approach for reasoning the stories using Case based reasoning and Rule based reasoning", IEEE International Conference on Intelligent Agent and Multi Agent, July 2009.

➢ Dr. M. Katheeja Parveen received best paper award, paper titled "Least and Most Significant Bit Arbitration Algorithm in Uniform Distributed Passive RFID Tags", IEEE International Conference on Signal and Image Processing, December 2010.

30. *Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.*

Resource Person	Background Ind / Academic / R&D	Topics covered
Dr.V.Ramachandran	VC, Anna Univ., Tiruchy	Web Technology'09
Dr.C.R.Muthukrishnan	Former Dy Dir., IIT, Adv., TCS	Role of Univ., Industry & Govt in overcoming the Global Economic Meltdown'2009
Dr.Qudsia Gandhi, I.A.S,	Chairman & Managing Director, Overseas Manpower Corp. Ltd.,	
Mr.V.Damodaran	Dir, CUIC, Anna Univ. Tiruchy	
Ms.Anu Parthasarthy	CEO, Global Executive Talent.	
Ms. Rhonda Basette, Mr. Raj Das Gupta Mr. Kalyana Chakravarthy	General Manager, Technology & Siebel delivery, Oracle India	Oracle DBA – Knocks'2010
B. Keerthivasan	Senior Project anager,CSS, Chennai	Striving towards Excellence'2011
Mr. Avudaiayappan Subramanian	Director Projects Cognizant Technologies Solutions, Chennai.	Interactive Placement & Training Session & other rocketing technologies'2011
Mr. Ram Chintha	Sr. Vice President Polaris, Chennai	Mobile Business Intelligence'2011
Mr. Damodaran Venkatesan	CEO ,Ameex Technologies, chennai	Globalization and its Phases'2011
Mr. Parthasarathy	Senior Manager,CTS	Bridge IT Employability Program'2011
Mr. Syed Niaz	Associate Director - Projects, Cognizant Technology Solutions,	Mobile Computing'2012
Mr. Lokesh Gnanasekar and Mr. Sridhar Bandi	CoDe IT, Chennai	Android and its Applications'2012
Dr.Swaminathan,	Associate Professor, Anna University, Chennai	Advances in Data and Web Mining
Dr. Junzo Watada,	Professor and Dean, Waseda University, Japan.	Advances in Data & Web Mining'12
Jointly organized with BSAU Data Center	SAN Administrator from IBM India Pvt Ltd, Chennai	SAN Storage'2012
Mr. Tameem Saied	Director, Fotran Cirkit, Chennai	soft skill'2012
Dr. V. Ramachandran	Dir., NIT, Nagaland	Web Technologies

Resource Person	Background Ind / Academic / R&D	Topics covered
Mr. S. Ramanathan	Honorary Secretary, CSI	Recent Trends in Web Technologies'2013
Dr.Mangal Sunder	Professor/IIT	
Dr.N.Swaminathan	Professor/Anna University	
Mr.Ismail Mohammed Yusuf	Sr Software Developer McAfee Software India Pvt.Ltd	
Ms.Uma Selvam Ms.Suba Surianarayanan	CACTES Software Pvt Ltd.	
Mr. Iniya Nehru	Senior Technical Director, NIC	

31. *Code of ethics for research followed by the departments*

Code of ethics for research of University is enclosed in **Annexure D - 3.1 (Criterion III)**

32. *Student profile programme-wise*

Name of the Programme	Applications Received	Selected		Pass Percentage	
		Male	Female	Male	Female
MCA (2009 – 12)	95	48	15	100	100
MCA (2010 – 13)	150	75	34	98.66	100
MCA (2011 – 14)	156	82	35	NA	NA
MCA (2012 – 15)	135	58	28	NA	NA
MCA (2013 – 16)	124	19	12	NA	NA

33. *Diversity of students*

Name of the Programme	% of students from the same university	% of students from other univ. within state	% of students from universities outside the state	% of stu. from other countries
MCA (2009 – 12)	NIL	97	3	NIL
MCA (2010 – 13)	NIL	98.2	1.8	NIL
MCA (2011 – 14)	NIL	92	8	NIL
MCA (2012 – 15)	NIL	96.5	3.5	NIL
MCA (2013 – 16)	NIL	96.7	3	NIL

34. *How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

Most of MCA Degree students are placed in IT industries through on-campus/off-campus clearing competitive examinations conducted by them. Therefore a very few MCA students take-up other competitive examinations though they are eligible to appear for NET, SET, etc., after successful completion of MCA degree programme. Mr. Pankaj Mishra (2009-12) was placed in Baba Atomic Research Centre (BARC). Students joined industry come to our university for Ph.D.

35. *Student progression*

Student Progression	Percentage against enrolled
UG to PG	Not Applicable
PG to M.Phil	NIL
PG to Ph.D	2 Students
Ph.D to Post Doctoral	NIL
Employed • On Campus • Other than campus recruitment	2009-2010 - 35 (83.3 %) 2010-2011 - 34 (83 %) 2011-2012 - 28 (70 %) 2012-2013 - 29 (40%) 2013-2014 - 11 (Still the process going on) Almost all students

36. *Diversity of staff*

Percentage of faculty who are graduates

    i.   of the same university   :   NIL

    ii.   from other universities within the State   :   100%

    iii.   from universities from other States from   :   NIL

    iv.   universities outside the country   :   NIL

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*

S. No.	Name of the Faculty	University	Year of Awarded Ph.D
1	Dr. M. Munir Ahamed Rabbani	Anna University, Chennai	2009
2	Dr. A. Jaya	Anna University, Chennai	2010
3	Dr. M. Katheeja Parveen	Mother Theresa Univ., Kodaikanal	2013
4	Dr. A. Anny Leema	Karpakam Univ., Coimbatore	2013

38. *Present details of departmental infrastructural facilities with regard to*

a) *Library*

    Total number of Books :   294

    Project Reports   :   222

    No. of Proceedings   :   2

    No. of Compact Disks :   182

    No. of Lecture Notes :   17

    No. of Lab Manuals   :   9

b) *Internet facilities for staff and students*

- ➤ • The campus is connected through National Knowledge Network (1 Gbps) leased line.
- ➤ The campus is connected through fibre optics intranet connection.
- ➤ All the Department faculty members are provided individual computers with internet facility.
- ➤ Wi-Fi facility also available for students and staff within the campus.
- ➤ Individual computers are allotted for the students in the Department Computer Lab with internet connectivity.
- ➤ The computer labs are kept open beyond office hours

c) *Total number of class rooms* : *5*

d) *Class rooms with ICT facility* **:** *5*

- ➤ A hi-end data centre with blade and rack servers are made available

e) *Student Laboratories*

Lab Name	Applications
CA LAB I	Project Middleware Technologies ; Graphics and Multi-media; RDBMS
CA LAB II	XML & Web Services ; Internet Programming Visual Programming
CA LAB III	Unix & Network Programming Data Structures ; Mobile Computing (**Android**)
CA LAB IV	Object Oriented Programming Programming in "C"
CA LAB V (B.Tech 1ˢᵗYear Lab)	C & C++ ; MS Office ; RDBMS

39. *List of doctoral, post-doctoral students and Research Associates*

a) *from the host institution/university*

S. No.	Name of the Candidate	Research Supervisor	Title / Topic Research
1	Mr. M. Syed Masood	Dr.P.Sheik Abdul Khader	Mobile Ad Hoc Networks
2	Mr. A. Abdul Azeez Khan	Dr.P.Sheik Abdul Khader	Knowledge Management
3	Ms. Latchomy	Dr.P.Sheik Abdul Khader	Fault Tolerance in Grid Computing
4	Ms. Vidya Sathish (Research Associate)	Dr. P. Sheik Abdul Khader	Security in Cloud Computing
5	Mr. K. Javubar Sathick	Dr. A. Jaya	Knowledge Management
6	Mr. A. Salman Ayaz	Dr. A. Jaya	Software Engineering
7	Ms. G. Shree Devi	Dr.M.Munir Ahamed Rabbani	Image Processing
8	Ms. Rashetha	Dr. M. Munir Ahamed Rabbani	Image Processing
9	Mr. Vijay Sargunar	Dr. M. Munir Ahamed Rabbani	Agent based System
10	Mr. Murugesh	Dr. A. Jaya	Software Requirement and Facilitation
11	Mr. Mervin	Dr. A. Jaya	Question and Answering System
12	Mr. Omprakash	Dr. A. Jaya	Web navigation pattern
13	Ms. Maheswari	Dr. A. Jaya	Digital Library
14	Mr. Sunitha	Dr. A. Jaya	Web document summarisation
15	Mr. France (Research Associate)	Dr. A. Jaya	Content Based Image Retrieval

b) *from other Institutions / Universities*

S. No.	Name of the Candidate	Research Supervisor	Title / Topic Research	University
1	Mr. I. Sathik Ali	Dr. P. Sheik Abdul Khader	Computer Networks	Anna Univ.
2	Mr. S. Pakkir Mohideen	Dr. P. Sheik Abdul Khader	Data Mining	Anna Univ.
3	Mr. S. Subburam	Dr. P. Sheik Abdul Khader	Mobile Ad Hoc Networks	Sathyabama University
4	Ms. Sabiyath Fathima	Dr. P. Sheik Abdul Khader	Mobile Ad Hoc Networks	Anna University

40. *Number of post graduate students getting financial assistance from the university.*

> Free education is provided to four post graduate students under sports quota

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

Yes

Demand survey and market study was done and with the IT boom, MCA was in great demand by the industry

42. *Does the department obtain feedback from*

a. *faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?*

Feedback from faculty on curriculum is obtained once in a year. These feedbacks and recommendations are brought to the BOS which is usually held once in a year for necessary updations / upgradations of curriculum and syllabus. These suggestions are used to improve the curriculum and teaching style and technology

b. *Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

Feedback obtained from students is used to strengthen the areas identified by them and improve the curriculum and teaching-learning

c. *Alumni and employers on the programmes offered and how does the department utilize the feedback?*

The Board of Studies (BoS) consists of employers from industry, alumni, and other experts from the same and other institutions/industries. Some of the alumni are invited as special invitees for BoS meeting. This committee reviews the MCA programme and suggests changes in existing curriculum as well as new courses to be added.

43. *List the distinguished alumni of the department (maximum 10)*

(i)   Mr. Vijay Sargunar (1998-01), Tech. Specialist, HCL Technologies

(ii)   Mr. A. Mathan (2002-05), Team Lead, Accenture

(iii)   Mr. N. Babu (2006-09), Senior Developer, CTS

(iv)   Ms. T. R. Dargelin Shiny (2007-10), Asso. SE, IBM India Pvt. Ltd.

(v)   Mr. S.Razeeth (2002-05), Technology Lead, Infosys, Bangalore

(vi)   Mr. H. Muthuswamy(2003-06), Infosys, Bangalore

(vii)   Mr. K. Javubar Sathick (2005-08), Asst Prof., B.S.A.U.

(viii) Ms. S. Prathipa (2005-08), Asst Prof., B.S.A.U.

(ix)   Ms. P. Padmavathy (2003-06), Asst Prof., B.S.A.U.

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

  - ➢ CYBERCREST - a national level technical symposium org. by the dept every year.
  - ➢ Seminars by experts from various industries and renowned institutions across the globe
  - ➢ Industrial Visits
  - ➢ All students are compulsorily made members of CSI (Computer Society of India) and participate in all its activities

External experts involved in Special Lectures/Workshops / Seminars

Name of the Expert	Industry/Academic/R&D	Topic
Dr.V.Ramachandran	VC, Anna Univ., Tiruchy	Role of University, Industry and Government in overcoming the Global Economic Meltdown (Panel Discussion)'2009
Dr.C.R.Muthukrishnan	Former Dy Dir., IIT, Advisor TCS	
Dr.Qudsia Gandhi, I.A.S,	Chairman & Managing Dir., Overseas Manpower Corporation Ltd.	
Dr.P.Kanniappan	VC, B.S.A. University	
Mr.V.Damodaran	Dir., CUIC, AU, Tiruchy	
Ms.Anu Parthasarthy	CEO, Global Exe Talent.	
Ms. Rhonda Basette Mr. Raj Das Gupta Mr.Kalyana Chakravarthy	General Manager, Tech. & Siebel delivery, Oracle India	Oracle DBA – Knocks'2010
B. Keerthivasan	Senior Project Manager,CSS, Chennai	Striving towards Excellence'2011
Mr. Avudaiayappan Subramanian	Director Projects Cognizant Technologies Solutions, Chennai.	Interactive Placement & Training Session & other rocketing technologies'11
Mr. Ram Chintha	Sr. Vice President Polaris, Chennai	Mobile Business Intelligence'2011
Mr. Damodaran Venkatesan	CEO ,Ameex Technologies, chennai	Globalization and its Phases'2011
Mr. Parthasarathy	Senior Manager,CTS	Bridge IT Employability Program'2011
Mr. SYED NIAZ	Associate Director - Projects, Cognizant Technology Solutions,	Mobile Computing'2012
Mr. Lokesh Gnanasekar and Mr. Sridhar Bandi	CoDe IT, Chennai	Android and its Applications'2012
Dr.Swaminathan,	Associate Professor, Anna University, Chennai	Advances in Data and Web Mining'2012

Name of the Expert	Industry/Academic/R&D	Topic
Dr. Junzo Watada,	Professor and Dean, Waseda University, Japan.	Advances in Data and Web Mining'2012
Jointly organized with BSAU Data Center	SAN Administrator from IBM India Pvt Ltd, Ch	SAN Storage'2012
Mr. Tameem Saied,	Director, Fotran Cirkit, Ch	soft skill'2012
Dr. V. Ramachandran	Director, NIT, Nagaland	Recent Trends in Web Technologies'2013
Mr. S. Ramanathan	Honorary Secretary, CSI	
Dr.Mangal Sunder	**Professor/IIT**	
Dr.N.Swaminathan	Professor/Anna University	
Mr.Ismail Mohammed Yusuf	Senior Software Devoper McAfee Software India Pvt. Ltd	
Ms.Uma Selvam Ms.Suba Surianarayanan	CACTES Software Pvt Ltd.	
Mr. Iniya Nehru	Sr Tech. Director, NIC	

45. *List the teaching methods adopted by the faculty for different programmes.*
   ➢ Student centric courses (State of art technology, case study)
   ➢ Industry visit
   ➢ Special theme based programmes
   ➢ Courses on communication skill
   ➢ Resume writing
   ➢ Preparing for interview
   ➢ Work life skills
   ➢ Modular teaching
   ➢ Mini projects
   ➢ Online training
   ➢ Special skill development programme
   ➢ E-Journals and project (Phase-I and Phase-II)

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*
   ➢ Through feedback from students, parents, employers & other stack holders.
   ➢ Through Class room quiz, seminars and assignments.
   ➢ Through placement.

47.   Highlight the participation of students and faculty in extension activities.

Students:

➤   YRC, NSS, Blood donation camps and Rotary club membership.

Faculty:

➤   The department has entered into an MoU with Oracle India Pvt. Ltd.

➤   Faculty members of this department conduct training classes for Oracle and CCNA certification programme.

➤   Online entrance examination for Railway Recruitment Board, IIM-CAT, TNPSC, Baba Atomic Research Centre, IIT-GATE, Anna University distance mode online entrance examination are being conducted by the Department of Computer Applications.

➤   Computer training programme to newly recruited sub-inspector of police, Government of Tamilnadu.

➤   Computer training programme to Treasury dept. of Govt. of TN.

➤   The Department of Computer Applications regularly conducts online examinations for various industries (TCS, Infosys, CTS, etc.) for campus recruitment process for our students and other university/college students.

➤   Some of the faculty members are involved in Youth Red Cross, NSS, Blood donation camps and Rotary club.

48. Give details of "beyond syllabus scholarly activities" of the department.

•   A professional society in the name of "Computer Society of India (CSI), B.S.Abdur Rahman University" is functioning efficiently for more than 5 years.

•   Students of our department participate in co-curricular activities organized by other colleges and won prizes.

•   The society of Computer Applications organizes various technical events in National Level including Paper presentation, Quiz, Debugging, Project Display, Web Designing, Adzap, Poster presentation, etc., in the name of CYBERCREST.

•   Students/Faculty members actively participate in national/international seminars, Workshops, technical meets and class room seminars.

•   The individual course teachers are encouraged to involve in the curriculum revision, subject to the approval of Chairman, Board of Studies.

•   Students are doing projects in various prestigious IT Industries

•   Students/faculty members present papers in various conferences, workshops and seminars.

•   In all the lab courses, two additional value added experiments are added by respective course teachers.

•   Industrial visits and educational tours are arranged

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

   ➢ The MCA programme was accredited thrice by NBA Agency from 2001 to 2009.

   ➢ The department is certified by ISO 9001 : 2008.

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied*.

   ➢ The department focuses mainly on modern technology centric programmes / courses.

   ➢ The Faculty, Research Associates and PG students of our dept. are presenting their research works in conferences/publishing in blind peer reviewed journals on various emerging issues in computing technology.

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department*

Strengths:

   ➢ Highly qualified, experienced and dedicated faculty members.

   ➢ Good Industrial and research projects.

   ➢ Labs working even beyond office hours.

   ➢ The department has produced many University Ranks, when it was an affiliated College.

   ➢ Good personnel relationship between the faculty and students.

   ➢ 24x7 content availability of NPTEL teaching materials through internet/ intranet.

Weaknesses:

   ➢ More research is going on inside the department but funds from external agency and Research towards obtaining Patents are lacking.

   ➢ Unable to fully harness the power of alumni.

   ➢ Foreign students are very less in the Department.

   ➢ No additional space for expansion.

Opportunities:

   ➢ Collaborative research opportunities with premier Indian/Foreign Universities.

   ➢ Availability of good research environment.

   ➢ Tie-up with well known industries and universities to conduct certificate/ diploma/PG diploma programmes.

   ➢ Full utilization of Digital library and e-content.

Challenges:

> Recession in the IT market decline Job opportunities especially for PG and UG Engineering students in IT industries

> Bringing new innovative programmes among the existing popular branded programmes that are considered for employment by the government/private sector.

> To enhance Demographic diversity.

> Establishing a brand name for the emerging B.S. Abdur Rahman University.

> Aptitude changes of present young generation.

52.   Future plans of the department.

The Department aims to strengthen teaching, research in various areas and plans to provide state-of-the-art computing facilities to all the students, faculty members and researchers so that they can remain at the forefront of technology.

The department plans to introduce e-learning, virtual class environment to the nearby schools through the National Knowledge Network (NKN).

The department intends to keep pace with the emerging technology by pursuing research work in the contemporary challenging domains such as

> Image/Voice Processing Applications

> Distributed, Cloud and Grid Computing

> Soft Computing

> Web Technology

> Bioinformatics Applications besides other areas

Department of Mathematics

1.   Department of Mathematics

The Department of Mathematics was established in 1984 and caters to the educational requirements of the undergraduate and postgraduate degree programmes in engineering and technology. The objective of the department is to impart quality education to the students and motivate them to apply the various mathematical techniques in their respective fields. The department offers MSc Actuarial Science from the academic year 2011-12.

The department has 21 well-qualified faculty members with rich academic and research experience. Eight of the faculty members are doctorates and **13** others are pursuing their research towards obtaining Ph.D degrees in various fields of mathematics. The faculties have published papers in National and International Journals with good impact factor. Average Teaching Experience of faculty is 11.4 Years and Retention rate is 85%.

2.   Established in **1984**

3.   Is the Department part of a School/Faculty of the university?

Yes

The Department of Mathematics is a part of the "School of Computer, Information and Mathematical Sciences".

4.   Names of programmes offered other than Engineering programmes:

	Name of the Programmes
Master Degree	☐ M.Sc. (Actuarial Science)-Full Time.
Ph.D.	☐ Ph.D. - Full Time / Part Time

5.   Interdisciplinary programmes and departments involved :

NIL

6.   Courses in collaboration with other universities, industries, foreign institutions, etc. :

NIL

7.   Details of programmes discontinued, if any, with reasons **:**

NIL

8.   Examination System:

Semester and Choice Based Credit System

9.   Participation of the department in the courses offered by other departments

The Department offers "***Research Methodology***" for the M.Tech. programmes in the departments of IT, CSE and CA.

Mathematics for various B.Tech (I to VI semester) and Advanced Mathematics for various M.Tech. Programmes.

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors /Assistant Professors/Others)*

	Sanctioned	Filled	Actual (including CAS & MPS)
Professors	3	3	3
Associate Professors	2	2	2
Assistant Professors	16	16	16
Others	-	-	-

11. *Faculty profile with name, qualification, designation, area specialization experience and,research guidance*

Name	Qualification	Designation	Speciali-zation	No. of Years of Experi-ence	No. of Ph.D. / M.Phil. stu. guided
Dr.S.Srinivasan	M. Sc., M. Phil., MCA.,B.Ed., PGDCA., Ph. D	Professor and Head	Inventory Control	23	1 guided 5 guiding
Dr.S.Rajasekaran	M.Sc., Ph.D	Professor	Mathematical modeling	27	4 guided 2 guiding
Dr.P.S.Sheik Uduman	M. Sc., M. Phil (Maths & Comp. Sci)., Ph. D	Professor	Inventory Control	19	8 guiding
Ms.P.Taj Begum	M. Sc., M. Phil	Associate Professor	Wavelets Statistics	28	NO
Dr.Sindhu J Kumaar	M. Sc., M. Phil., Ph. D	Associate Professor	Formal Language & Automata	19	NO

Name	Qualification	Designation	Speciali-zation	No. of Years of Experi-ence	No. of Ph.D. / M.Phil. stu. guided
Mr.T.R.Ramesh Rao	M. Sc.,M.Phil (submitted Ph.D. thesis)	Assistant Professor (Selection Grade)	Bio-Statistics	17	NO
Mr. C. D. Nanda Kumar	M. Sc., M. Phil.,	Assistant Professor (Sel. Gr)	Inventory Control	18	NO
Mr.A.Bernick Raj	M. Sc., M. Phil.,	Assistant Professor (Sr Gr)	Stochastic models	15	NO
Mr.A.Saibulla	M. Sc., M. Phil.,	Assistant Professor (Sr Gr)	Graph Theory	8	NO
Dr.A.S.Prasanna Venkatesan	M. Sc., M. Phil., Ph. D	Assistant Professor (Sr Gr)	Formal Language & Automata	11.5	NO
Mr.M.G.Fajlul Kareem	M. Sc., M. Phil.,	Assistant Professor (Sr Gr)	Inventory Control	12.5	NO
Dr. C. Uma Maheshwari	M. Sc., M. Phil., Ph. D	Assistant Professor	Discrete Integrable systems	4.6	NO

Name	Qualification	Designation	Speciali-zation	No. of Years of Experi-ence	No. of Ph.D. / M.Phil. stu. guided
Dr. K.Raja Chandrasekar	M. Sc., M. Phil., Ph. D	Assistant Professor	Graph theory	1.6	1 guiding
Ms.M.Haj Meeral	M. Sc., M. Phil., PGDCA.	Assistant Professor	Domination in Graph Theory	11	NO
Mr.M.Raj Kumar	M. Sc., M. Phil.,	Assistant Professor	Fractral Analysis	9	NO
Dr.P.Arathi	M. Sc., Ph. D	Assistant Professor	Numerical Linear Algebra	1.3	NO
Mr.Mahadev Ota	M.A.(Maths), M.Sc. (Actuarial Science),	Assistant Professor	Stochastic Modelling in Ruin Theory	4	NO
Ms. A.Sagaya Suganya	M. Sc., M. Phil.,	Assistant Professor	Graph Theory	7	NO
Mr.J.Ravindar	M.Sc., M.Phil.,	Assistant Professor	A Study on a Fixed point theory in Fuzzy Matrix	1.5	NO

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. / M.Phil. stu. guided
Mr. G.Kalaiarasan	B.E., MBA., M.Sc. (Actuarial Science),	Assistant Professor	Stochastic Modelling in Actuarial Science	0.4	NO
Ms.A.K.Abidha	B.Sc. (Mathematics) M. Sc. (Actuarial Science),	Assistant Professor	Stochastic Modelling in Actuarial Science	0.4	NO

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors* - **NIL**

13. *Percentage of classes taken by temporary faculty –*   **NIL**
    Programme-wise information

14. *Programme-wise Student Teacher Ratio:*

    For the programme M.Sc.(Actuarial Science) student teacher ratio is 5:1

15. *Number of academic support staff (technical) & administrative staff:*
    sanctioned, filled and actual

	Sanctioned	Filled	Actual
Academic support staff(Technical)	1	1	1
Administrative staff	1	1	1

16. *Research thrust areas as recognized by major funding agencies.*
    - Mathematical modeling
    - Operations research
    - Graph Theory
    - Formal language and Automata Theory

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

    NIL

18. *Inter-institutional collaborative projects and associated grants received.*

a) International collaboration   b) National collaboration

NIL

19. *Departmental projects funded by DST-FIST; UGC- SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

NIL

20. *Research facility / centre with*

State recognition   NIL

National recognition   NIL

International recognition   NIL

21. *Special research laboratories sponsored by / created by industry or corporate bodies:*

NIL

22. *Publications:*

Number of papers published in peer reviewed journals (national / international)

The consolidated statistics of the research publications made by the faculty members of this department is furnished below.

Details of the journal publications are enclosed in Annexure D - 3.2 and 3.3 (Criterion III)

Year	International Journal	National Journal	International Conference	National Conference	Total
2009	1	1	1	3	6
2010	2	0	11	4	17
2011	7	1	7	7	22
2012	26	6	6	7	45
2013	14	1	2	3	20
Total	50	09	27	24	110

➢ Monographs: **Nil**

➢ Chapters in Books**:   Nil**

➢ Edited Books: N**il**

➢ Books with ISBN with details of publishers

S. No	Name of the Author	Name of the Book	Publishers	ISBN Number	Year
With ISBN Number					
1	Dr. S. Rajasekaran	Mathematics I	Dhanam Pub., Ch.	818984300-1	2009
2	Dr. S. Rajasekaran	Mathematics II	Dhanam Pub., Ch.	978-81-89843-38-0	2009
3	Ms.M.Haj Meeral	Statistical Methods and their Applications - I	University Science Press	978-93-81159-0	2013
Without ISBN Number					
4	Dr. S. Rajasekaran	Mathematics III	Dhanam Pub., Ch.	Nil	2010
5	Ms. P.Taj Begum	Probability & Queueing Theory	Charaulatha Publications, Chennai	Nil	2006
6	Mr.A.Bernick Raj	Engineering Mathematics for First Year	Sri Krishna Publications, Chennai	Nil	2006

Publications listed in International Database:

Name of the International Database	No. of paper Indexed	Average Citation index	Average SNIP / II	Average SJR / CHL	Average Impact Factor
SCOPUS	2	1	0.55	0.27	0.428
Google scholar	2	1.3	-	-	-

Database of Reference (SCOPUS):

The SCOPUS h-Index of the department for the period 2009-2013 is furnished below:

Year	h-Index
2011	1
2012	**1.5**

23. *Details of patents and income generated:*

Nil

24. *Areas of consultancy and income generated:*

Nil

25. *Faculty selected nationally / internationally to visit other laboratories / Institutions / industries in India and abroad*

S.No	Name of the faculty	Purpose of the visit	Institution/Industry visited
1.	Dr.S. Rajasekaran	Res. Person	Velammal Engg Col, Ch.
2.	Mr.C.D.NandaKumar& Dr.P.S.Sheik Uduman	Handling Classes	ETA training programme
3.	Mr.C.D.Nanda Kumar & Mr.A.Bernick Raj	Handling Classes	FORD training programme
4.	Dr.P.S.Sheik Uduman	Handling Classes	IGNOU programme
5.	Mr.C.D.Nanda Kumar	Handling Classes	Wipro training programme
6.	Dr.Prasanna Venkatesan & Mr.A.Bernick Raj	Handling Classes	Apollo Tyres Part Time B.Tech Programme
7.	Mr.Mahadev Ota	Resource person	Univ. of Madras & Pondicherry Univ. JBAS College for Women, SIET, Chennai.

26. *Faculty serving in*

    (a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Any Other Committees:

The senior faculty members of the Department serve in various committees. The details are given below.

S. No	Name of the Faculty	Faculty Serving as	Name of the College/University
1	Dr.S.Rajasekaran	Board of Studies	Hindustan Univ, Ch.
2	Dr.P.S. Sheik Uduman	Board of Studies	SIET College, Ch.
3	Mr.Mahadev Ota	Board of Studies	SIET College of Arts & Science, Chennai
			Pondicherry University
4	Dr.Arathi	Board of Studies	M.O.P. Vaishnav College of Arts & Science, Chennai
5	Dr.S.Srinivasan	Res. Supervisor	Satyabama Univ. Ch.
6	Dr.S.Rajasekaran	Res. Supervisor	Satyabama Univ. Ch
			Mother Theresa University, Kodaikanal
			Bharathiar University, Coimbatore
7	Dr.S.Rajasekaran	DC Member	Satyabama Univ. Ch
			SRM Univ., Chennai
8	Dr.S.Rajasekaran	Interview panel member	Velammal College of Engineering,Chennai
			Bharathidasan University,Trichy
			Satyabama Univ. Ch
			SRM Univ., Chennai

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation Programs, workshops, training programs and similar programs).*

Faculty induction training programme is regularly organized once in a year for the new comers, through Faculty training academy of our University. The consolidated statistics is furnished below:

S. No	Year	Number of Programme (Workshop/FDP/Seminar)	Number of Faculty attended
1	2009	2	4
2	2010	7	11
3	2011	5	5
4	2012	11	16
5	2013	11	18

28. *Student projects percentage of students who have done in-house projects including inter-departmental projects / percentage of students doing projects in collaboration with other universities industry /institute.*

The project reports of the students (both softcopy and hardcopy) are made available in the Department Library and soft copy is available in the Central Library.

Year	Degree	In-house Project	Univ./Instt/ Ind. Project
2011-13	M.Sc. Actuarial Science	-	100%

29. *Awards / recognitions received at the national and international level by Faculty and Students:*

<center>**NIL**</center>

Doctoral / Post Doctoral Fellow:

Ms. Dowlath Fathima, a full time research scholar of this department is awarded UGC – Moulana Azad Research Fellowship

30. *Seminars/ Conferences/Workshops organized and the source of funding (national international) with details of outstanding participants, if any   .*

S. No	Date /Month /Year	Name of the Seminar Workshop / Conference / Workshops	Source of funding/ National/ International	Details of outstanding participants
1.	29th & 30th January 2010	National Conference on Applied Mathematics (NCAM '10)	Our University	Dr.B.N.Murthy, ICMR, Chennai Dr. D.S. Sankar, University Science Malaysia

S. No	Date /Month /Year	Name of the Seminar Workshop / Conference / Workshops	Source of funding/ National/ International	Details of outstanding participants
5.	17th August 2011.	A Workshop on "Actuarial Science"	Our University	Mrs.Niranjana Rangarajan, Mr.Sathyanarayanan, LIC, Chennai, , Manager ,LIC, Chennai, Mr.Vijayankanakaraj, Vice principal, Bishop Heber college. Dr. Gopal, Professor and Head, Department of statistics, Madras University
6.	18th February 2012	Seminar on Probabilistic Terrorism Modelling & Live Portfolio Analysis	Our University	Mr.Akaash Mukherjee, RR Donnelley, Chennai.
7.	5th November 2012	Seminar on "FRONTIER OF ACTUARIAL SCIENCE "	Our University	Mr.Taikaa Shiek Omer, AGM, Star health insurance, Chennai
8.	26th and 27th April-2013.	National workshop on Mathematical Modelling using MATLAB"	Our University	Dr.V.Sundara Pandian, VEL Tech University, Chennai

31. *Code of ethics for research followed by the departments*

Code of ethics for research for the University is enclosed in **Annexure D - 3.1 (Criterion III)**

32. *Student profile programme-wise:*

M.Sc (Actuarial Science)	Applications Received	Selected		Pass Percentage	
		Male	Female	Male	Female
2012 -14	18	8	3	100%	100%
2011 - 13	24	14	8	100%	100%

*M.Sc. Actuarial Science was introduced in the year 2011.

33. *Diversity of Students*

Name of the Programme M.Sc Actuarial Science	% of the students from same University	% of students from other Universities within the State	% of students from Universities outside the State	% of students from other Countries
2011 - 13	4.5%	95.5%	Nil	Nil
2012 - 14	Nil	100%	Nil	Nil

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

Specialized examinations conducted by Institute of Actuary of India and Insurance Institute of India have been passed by our students.

Year	GATE	Civil Services	Defence Services	Other Competitive Examinations
2012 - 14	--	--	--	08
2011 - 13	--	--	--	19

35. *Student progression*

Student progression	Percentage against enrolled
UG to PG	Nil
PG to M.Phil.	Nil
PG to Ph.D.	9.5%
Ph.D. to Post-Doctoral	Nil
Employed Campus selection Other than campus recruitment	Nil 90.5%
Entrepreneurs	Nil

36. *Diversity of staff*

Percentage of Faculty, who are graduates

(i) Of the same University : 9.5%

(ii) From other Universities within the State : 81%

(iii) From Universities in the other States : 9.5%

(iv) From Universities outside the Country : Nil

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*

S.No	Name of the Faculty	University	Year of awarded Ph.D.
01.	Dr.S.Srinivasan	Bharathidasan University	2009
02.	Dr.P.S.Shiek Uduman	Bharathidasan University	2009
03.	Dr.K.Raja Chandrasekar	Kalasalingam University	2012
04.	Dr.P.Arathi	Anna University	2013
05.	Dr.A.S.PrasannaVenkatesan	Madras University	2013
06.	Dr.Sindhu.J.Kumaar	Madras University	2013

38. *Present details of departmental infrastructural facilities with regard to*

(a) *Library*

No. of. books   : 167

No. of PG Project Reports   : 22

No. of M.Phil. Thesis Reports   : 01

No. of our University Ph.D. thesis : 01

(b) *Internet facilities for staff and students*

➢ The campus is connected through national knowledge network (1Gbps) with 100 Mbps band width

➢ The campus is also connected through fiber optics intranet connection (1 Gbps).

➢ A hi-end data center with blade and rack servers are made available.

➢ All the Faculty members are provided with individual system with internet connection. The entire campus is Wi-fi enabled.

(c) *Total number of class rooms*

S.No	Name of the Programme	No.of Class Rooms
01.	M.Sc. Actuarial Science	2
02.	Staff Room	6
03.	HOD Room	1
04.	Computer Lab	1

d) *Class rooms with ICT facility*

All the above classrooms have ICT facility and Wi-Fi enabled.

e)   *Students' laboratories*

S.No	Name of the Laboratory	Total Amount (Rs.)
01.	Computer Lab with SPSS software	2,60,000 (Shared with MBA Department)

f)   *Research laboratories*

Access to e-journals and MATLAB software is available in the department computer laboratory.

39.   *List of doctoral, post-doctoral students and Research Associates*

a)   *from the host institution/university (B.S.Abdur Rahman University)*

S.No	Name of the Candidate	Full Time/ Part Time	Research Supervisor
1.	Mr.C.D.Nanda Kumar	Part Time	Dr.S.Srinivasan
2.	M.Fajlul Kareem	Part Time	Dr.P.S.Shiek Uduman
3.	Mr.E.Syed Mohammed	Part Time	Dr.S.Rajasekaran
4.	Ms.Dowlath Fathima	Full Time	Dr.P.S.Shiek Uduman
5.	Mr.Pervaiz Iqbal	Full Time	Dr.P.S.Shiek Uduman
6.	Mr.Sandeep Singhal	Full Time	Dr.P.S.Shiek Uduman
7.	Mr.A.Mohammed Abid	Full Time	Dr.K.Raja Chandrasekar
8.	Mr.G.Kalaiarasan	Part Time	Dr.S.Srinivasan
9.	Mr.Mahadev Ota	Part Time	Dr.S.Srinivasan
10.	Mr.P.Vignesh	Full Time	Dr.S.Srinivasan
11.	Mr.J.Ravinder	Part Time	Dr.S.Srinivasan
12.	Ms.A.K.Abidha	Part Time	Dr.P.S.Shiek Uduman
13	Mr.M.Asick Ali	Part Time	Dr.P.S.Shiek Uduman
14	Ms.Jayanthi	Part Time	Dr.P.S.Shiek Uduman
15	Ms.A.Divya	Full Time	Dr.P.S.Shiek Uduman
16	Ms.Indumathy	Part Time	Dr.S.Rajasekaran

b)   *from other institutions/universities*

S.No	Name of the Candidate	Name of the Institution/ University	Title/Topic Research
1.	Mr.Ramesh Rao	Madras University	Bio – Statistics
2.	Mr.Bernick Raj	Madras University	Stochastic Models
3.	Mr.A.Saibulla	Madras University	Graph Theory
4.	Mr.Rajkumar	Gandhigram Univ.	Fractal Analysis
5.	Ms.Haj Meeral	Gandhigram Univ.	Graph Theory
6.	Ms.A.Sagaya Suganya	Madras University	Graph Theory

c)   from other institutions/universities(Degree Awarded)

S. No	Name of the Candidate	Research Supervisor	Title/Topic Research
1.	S.Balamuralidaran	Dr.S.Rajasekaran	Delay Differential Equations Modelling for the analysis of hematological diseases by alternative
2.	M.P.Sivaramakumar	Dr.S.Rajasekaran	Grid Based path planning algorithms for extinguishing forest fires

40. *Number of post graduate students getting financial assistance from the university.*

3 PG Students are getting Sports Scholarship from our University

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

➢   Organized workshop on "Actuarial Science" to assess the requirement of the graduates in Actuarial Science in insurance and banking industries by inviting experts from above industries.

➢   Inputs from experts working in Star Health Insurance Company were obtained for need assessment and curriculum development.

➢   Then, a draft curriculum and course contents would be prepared by one another committee constituted for the said purpose.

➢   Once the draft curriculum was ready, the same was discussed in detail, in the department all faculty meeting.

➢   After the approval of department meeting, the draft was presented in the meeting and got approved by Board of Studies" and Academic Council

42. *Does the department obtain feedback from*

a. *faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?*

➢   From the feedback obtained from the faculty the curriculum and syllabi were periodically refined.

➢   Departmental Academic Audit Committee (DAAC) (Internal and External) suggests specific ideas to improve the teaching, learning and evaluation which are as follows:

•   DAAC committee scrutinizes the question paper before the tests.

•   After evaluation of every continuous assessment test, the internal DAAC committee will randomly audit the papers.

•   After the end semester, the external DAAC committee members will randomly examine the papers.

b.   *students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

➢   Whenever a course is offered by the department, the students would be required to give the feedback at the following intervals.

➢   First feedback after the first class committee meeting but before

➢   the first continuous assessment test.

➢   Second feedback during the middle of the semester and third feedback just before the end semester examination.

➢   When the feedback of a staff is not encouraging, he/she will be counselled by the senior faculty, Head of the Department and the top management.

c.   *alumni and employers on the programmes offered and how does the department utilize the feedback?*

Nil

43. *List the distinguished alumni of the department (maximum 10)*

Nil

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

S. No	Name of the Expert	Affiliation	Topic
01.	Dr. B.N.Murthy Dr. D.S. Sankar Dr.V. Swaminathan Dr. V. Rajkumar Dare	1.Deputy Director, ICMR 2. University Science, Malaysia 3. Ramanujan Research Center Madurai. 4. MCC, Chennai.	National Conference on Applied Mathematics during 8th & 29th January 2010
02.	Mrs.Niranjana Rangarajan, Mr.Sathyanarayanan Mr.Vijayankanakaraj Dr. Gopal	1. Regional Manager LIC, Chennai 2. Manager, LIC, Chennai 3. Manager, LIC, Chennai 4. Madras University, Ch.	Workshop on Actuarial Science17th August 2011.
03.	Mr. Akaash Mukherjee	Senior Actuarial Associate, RR Donnelley, Chennai	Seminar on Probabilistic Terrorism Modelling and Live Portfolio Analysis, Feb 2012.
04.	Mr. Taikaa Shiek Omer	AGM, Star Health Insurance, Chennai	Seminar on Frontier of actuarial science 5th Nov'12

S. No	Name of the Expert	Affiliation	Topic
05.	Dr.V.Sundara Pandian	Professor and Dean, Research and Development Centre VEL Tech University, Chennai.	Workshop on Mathematical Modeling using MATLAB26th & 27th April 2013
06.	1. Dr.Ranganath Muthu 2. Dr.C.Aravindan	1. Department of EEE, 2.Department of Computer Science, SSN College of Engineering	Seminar on Soft Computing Algorithms, 6th & 7th December 2010.

45. *List the teaching methods adopted by the faculty for different programmes.*
 - OHP/Power Point/ICT tools
 - Guest Lecture
 - Industrial Internship
 - Student seminar
 - Edusat Programmes
 - Physical Models in Math Museum

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*
 - Preparation of lesson plan for the courses by all course teachers
 - Monitoring of the teaching learning process as per lesson plans
 - Monitoring of the conduct of theory and practical courses as per the objectives.
 - Checking of various assessment components in line with the program outcomes.
 - Overall analysis of the teaching learning process for further refining.

47. *Highlight the participation of students and faculty in extension activities. Faculty:*
 Mrs. Sindhu J Kumaar was appointed as one of the judges for the selection of the most empowered woman of the year 2010 conducted by Intimate Fashions.

48. *Give details of "beyond syllabus scholarly activities" of the department.*
 - "Natl. Conf. on Applied Mathematics" was conducted on 29, 30.1.2010.
 - Every year the "National Math Symposium – Infinity" is conducted for students to enhance Mathematical Skills.
 - Students of M.Sc. Actuarial Sciences are being trained to take up the exam "*Actuarial Society of India*".
 - In April-2013 a workshop on "National workshop on Mathematical Modelling using MALAB" was conducted.

49. *State whether the programme/ department is accredited / graded by other agencies? If yes, give details*.

Nil

50. *Briefly highlight the contributions of the department in generating new Knowledge, basic or applied.*
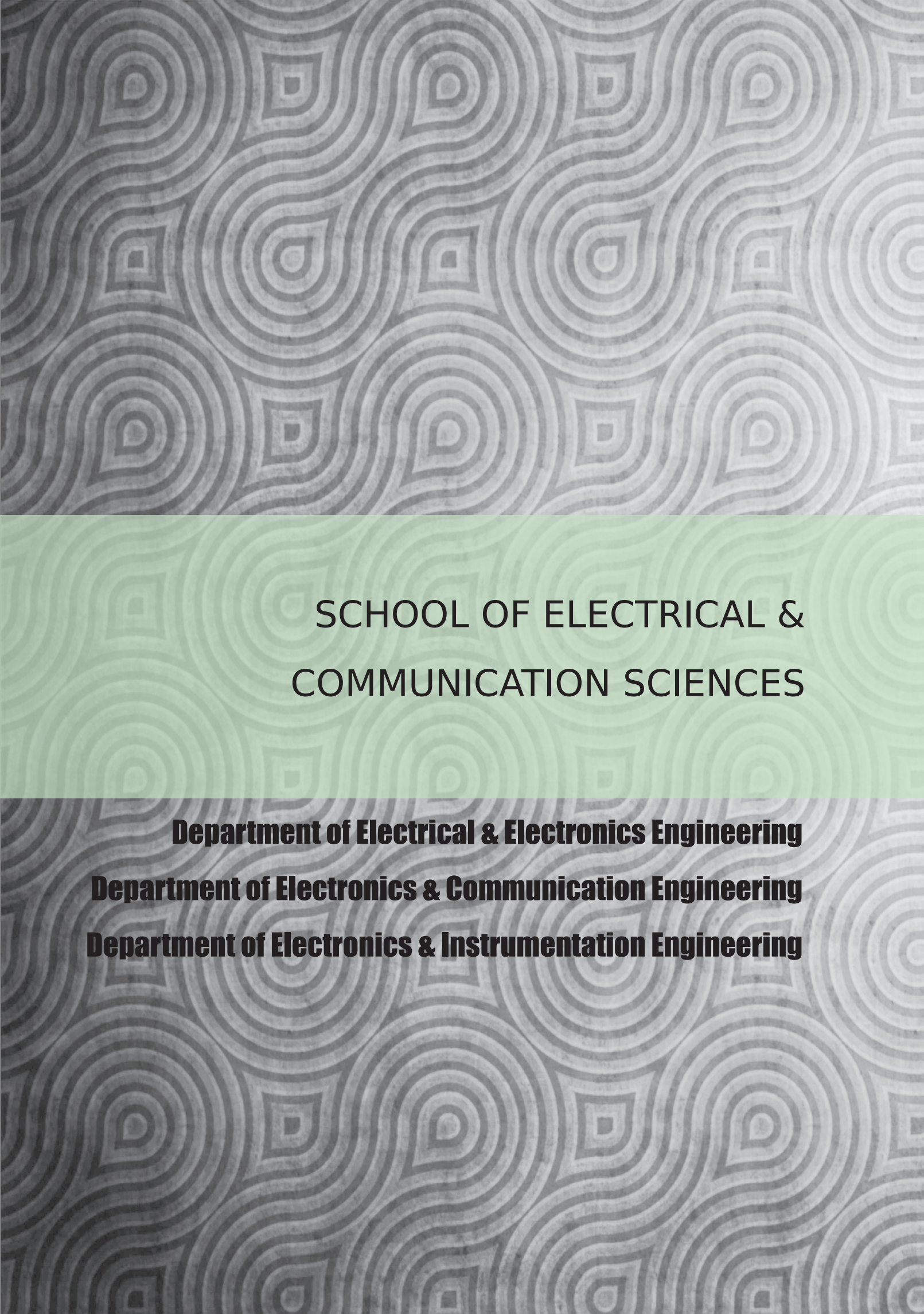   - The curriculum is designed with more application oriented topic.
    - The department has arranged a workshop on educating the faculties and fellow researches in using MATLAB.
    - M.Sc. Actuarial Science students take up industrial projects.

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*
    - *Strengths:*
      - The Department has well qualified and experienced faculty
      - Good number of publications with interdisciplinary topics.
    - *Weaknesses:*
      - Shortage of spacious rooms for Professors and Full time Research Scholars.
      - To obtain more funding from the funding agencies.
    - *Opportunities:*
      - To promote interdisciplinary research and increase the number of publications.
      - To submit and take up funded projects.
      - Enhancement of employment for M. Sc. Actuarial Science students.
      - To explain Mathematical concepts through Mathematical Models to school and college students.
    - *Challenges:*
      - We compete with the other Universities to excel the standard of teaching learning process.
      - Teaching the mathematical concepts and its applications to weak learners.

52. *Future plans of the department*
    - To introduce PG Diploma programme in Actuarial Science in the academic year 2015 – 16
    - To increase the number of research publications by motivating the Faculty members and Research scholars.
    - To obtain funds through sponsored projects by motivating the Faculty members and Research scholars.

SCHOOL OF ELECTRICAL & COMMUNICATION SCIENCES

Department of Electrical & Electronics Engineering

Department of Electronics & Communication Engineering

Department of Electronics & Instrumentation Engineering

Department of Electrical & Electronics Engineering

1. **Department of Electrical and Electronics Engineering**

Even before attaining University status, the Department of EEE was a recognized Research Centre under Anna University. The faculty members are either Ph.D qualified or pursuing Ph.D. The faculty members are with diversed specializations in Power Systems Engineering, High Voltage Engineering, Electric Machines, Power Electronics, Control System, Applied Electronics, Embedded Systems etc. The faculty : student ratio of the department is 1 : 11. The average experience of the faulty members is 12.75 years.

This Department has produced more than 115 University Ranks, so far, out of which 16 are Gold medalists. Some of the alumni occupy enviable positions both in India and abroad. The department has produced 9 Ph.Ds and 19 research scholars are currently pursuing research in the department. Consultancy works worth of Rs. 61 Lakhs have been completed. Training programmes worth of Rs. 72 Lakhs have been successfully completed. There are more than 100 Journal / Conference publications in the last 5 years and the Scopus h-index of the department is 4. Six faculty members of the department are recognized research supervisors of this university and in other universities. The department has conducted international conferences / national conferences / workshops / summer and winter schools / FDPs.

2. *Year of Establishment :*   **1984**

3. *Is the Department part of a School/Faculty of the university?*

Yes. The Department of Electrical and Electronics Engineering is a part of the "School of Electrical and Communication Sciences".

4. *Names of programmes offered :*

	Name of the Programmes
Bachelor Degree	☐ B.Tech. (Electrical and Electronics Engineering) – Full Time ☐ B.Tech. (Electrical and Electronics Engineering) – Part Time(Exclusively for the employees of M/s. Apollo Tyres)
Master Degree	☐ M.Tech. (Power System Engineering) – Full Time ☐ M.Tech. Power Electronics & Drives) – Full Time
Ph.D.	☐ Ph. D. – Full Time / Part Time

5. *Interdisciplinary programmes and departments involved   -   NIL*

6. *Courses in collaboration with other univ., industries, foreign institutions, etc. With Industry:*

The B.Tech Programme in Electrical and Electronics Engineering is an exclusive programme designed and offered to the employees of M/s. Apollo Tyres, under an MoU for the past two years. The elective courses and project work will be offered jointly by B.S. Abdur Rahman Univ. & M/s. Apollo Tyres.

Collaborative Ph.D. Programme with other institutions / industry		
S. No.	**Name of the Course**	**Institute offered the course**
1.	Automotive Infotainment systems	M/s. Visteon Industries
2.	Insulation Technology	Division of High Voltage Engg, AU
3.	Basic Food Chemistry & Micro Biology	Division of Food Technology, AU
4.	Cancer Biology	SRM University
5.	Biological cells and Tissues in Electrical Technology	Frontier Lifeline Hospital & Res. Pvt. Ltd., TICEL BIO Park
6.	High Voltage Technology	Department of Electrical Engg, IITM
7.	Introduction to D S P	Department of Electrical Engg, IITM
8.	Instrumentation Engineering	Department of Electrical Engg, IIT M

7.   Details of programmes discontinued, if any, with reasons

Nil

8.   Examination System:

Semester and Choice Based Credit System

9.   Participation of the department in the courses offered by other departments

The department of EEE offers a common course viz., GEB1102 – Basic Engineering Practices Lab to all the students of first year B.Tech Engineering Degree.

In addition, the following courses are offered to the other departments and the same is furnished below:

Sl. No	Department	Sem	Course code	Course name
01	Information Technology	II	EE183	Electrical & Electronics Tech.
02		II	EE184	Electrical & Electronics Lab
03	Aerospace Engineering	II	EE185	Basic Electrical Engineering
04		II	EE186	Electrical Engineering Lab
05	Automobile Engineering	II	EE185	Basic Electrical Engineering
06		II	EE186	Electrical Engineering Lab
07	Mechanical Engineering	II	EE185	Basic Electrical Engineering
08		II	EE186	Electrical Engineering Lab
09	Polymer Engineering	III	EE284	Electrical & Electronics Engg
10		III	EE285	Electrical & Electronics Engg Lab
11	Civil Engineering	II	GE111	Basic Engineering
12	Computer Science & Engineering	III	EE282	Electrical Engg & Control system
13		III	EE283	Electrical Engg & Control sys. Lab
14	Electronics & Instrumentation Engg	III	EE281	Electrical Machines
15		III	EE286	Electrical Machines Lab

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)*

	Sanctioned	**Filled**	**Actual (including CAS & MPS)**
Professor	05	05	05
Associate Professors	02	02	02
Asst. Professors	17	17	17
Others	--	--	--

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research guidance*

S. No	Name of the Faculty	Qualifi-cation	Designa-tion	Area of Spe-cialization	Experi-ence (in yrs)	Research guidance
1.	Dr. R. Raja Prabu	B.E., M.E., Ph.D., PGDBA	Professor & Head	Bio Electrics Outdoor Insulators Micro Grid	23	2 +7* * guiding
2.	Dr. M. Abdullah Khan	M.E., Ph.D.	Professor Emeritus	Deregulation &Restructuring of PS	46	12 + 1* * guiding
3.	Dr.I.Mohamed Rafeequdin	M.E., Ph.D.	Professor	Power System Engineering		0+2* * guiding
4.	Dr. K. N. Srinivas	AMIE, M.E., Ph.D.	Professor	Switched Reluctance Motor	23	1+ 4* * guiding
5.	Dr. R. Jayashree	B.E., M.E., Ph.D.	Professor	ATC Congestion Management	21.3	0+4* * guiding

S. No	Name of the Faculty	Qualifi-cation	Designa-tion	Area of Spe-cialization	Experi-ence (in yrs)	Research guidance
6.	Mr.A.Sultan Saleem	B.E., M.E.,	Assoc. Professor	Smart Grid	24	Nil
7.	Dr. K. Boopathy	B.E., M.E., Ph.D.	Assoc. Professor	Power Electronics and Drives	13	0+1* * guiding
8.	Mr.Y.Mohamed Shuaib	B.E., M.E.,	Assistant. Professor (S.G)	Power System Engineering	13	Nil
9.	Mrs. Belwin J. Brearley	B.E., M.E.,	Assistant. Professor.	Power Electronics	8	Nil
10.	Ms. R. Agatha	B.E., M.E.,	Assistant. Professor	Applied Electronics	6	Nil
11.	Mrs. G. Kavitha	B.E., M.E.,	Assistant. Professor	Applied Electronics	11	Nil
12.	Ms. V. Selvi	B.E., M.E.,	Assistant. Professor	Power System Engineering	4	Nil
13.	Mrs. R.Ramya	B.E., M.E.,	Assistant Professor	Modelling and simulation of RF devices. HV Engg.	7.3	Nil

S. No	Name of the Faculty	Qualifi-cation	Designa-tion	Area of Spe-cialization	Experi-ence (in yrs)	Research guidance
14.	Mr M. Ramkumar	B.E., M.E.,	Assistant Professor	Power electronics and Drives.	19	Nil
15.	Mrs. J. Rekha	B.E., M.E.,	Assistant. Professor	Power electronics and Drives.	2.6	Nil
16.	Ms. K. Sarmila Har Beagam	B.E. M.E.,	Assistant. Professor	Power systems.	11	Nil
17.	Mrs. Divya Vijay	B.E., M.E.	Assistant. Professor	Control Systems.	2	Nil
18.	Ms. S. Jennathu Beevi	B.E., M.E.,	Assistant. Professor	Power systems.	9	Nil
19.	Mrs. K.G Shanmugapriya	B.E., M.E.,	Assistant. Professor	High Voltage Engineering.	2	Nil
20.	Mr S. Suresh	B.E., M.E.	Assistant. Professor	Power systems.	1	Nil

S. No	Name of the Faculty	Qualifi-cation	Designa-tion	Area of Spe-cialization	Experi-ence (in yrs)	Research guidance
21.	Ms.S.Kavitha	B.E., M.E.,	Assistant. Professor	Power systems.	1	Nil
22.	Ms. V.Bharanigha	B.E., M.E.,	Assistant. Professor	Power electronics and Drives.	1	Nil
23	Ms. A. Kalirathinam	B.E., M.E.	Assistant. Professor	Assistant. Professor	6 mths	Nil
24	Mr C. Athbel Joe	B.E., M.E.	Assistant. Professor	Assistant. Professor	5	

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors*

S. No.	Name of the Professor	Designation	Year
01.	Dr. Raji Sundararajan, Professor, Purdue University, USA	Senior Visiting Fellow	Since 2009
02.	Dr. S. Kavitha Senior Scientist, AUKBC Center	Adjunct Faculty	2011-'12

13. *Percentage of classes taken by temporary faculty – programme-wise information*

Nil

14. *Programme-wise Student Teacher Ratio*

Programme Offered	Student Teacher Ratio
B.Tech. (EEE) – Full Time	1 : 12.9
B.Tech. (EEE) – Part Time	1 : 5
M.Tech. (PSE)	1 : 10
M.Tech. (PED)	1 : 10

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

Non-Teaching Staff	Sanctioned	Filled	Actual
Academic Support Staff (Technical)	14	14	14
Administrative	02	02	02

16. *Research thrust areas as recognized by major funding agencies.*

S. No	Name of the Funding Agency	Identified Research thrust Area
01	DRDO	Low Magnetic Field Sensors
02.	AICTE (R&D) & M/s. Oblum Industries	Outdoor Polymeric Insulators
03.	UP State Electricity Board & M/s. Esquire Engineers	Deregulation and Restructuring of Power Sys.
04.	M/s. AUKBC Centre & M/s. Frontier Lifeline Hospital	Bio-Electrics
05.	M/s. Garuda Vaayu Sakthi Wind mills	Wind Farms
06	M/s. TVS Industries	Switched Reluctance Motors

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

National:

Sponsoring agency	Duration	Financial outlay	Investigator & Co-investigators	Project title
DRDO	2 years	Rs. 20.5 Lakhs	Dr. K. N. Srinivas Dr.R.Raja Prabu	Miniaturized and Highly Sensitive Magnetic Field sensors for Defence Applns

18. *Inter-institutional collaborative projects and associated grants received.*

(a) *International collaboration:*

The Department of EEE has undertaken a Collaborative Research Work with Purdue University (a top 10 US University) in the area of "Electro Chemotherapy for Effective Cancer Treatment". This joint research work has yielded six Research publications / presentations and one research book.

➢ This research work is considered to be one of the thrust areas of our Government and steps are being taken to implement this technique for the cancer patients of our country.

➢ Accordingly, a two day International workshop was organized in collaboration with Purdue University, USA, Cork Cancer Research Institute, Ireland, and Sri Ramachandra Medical University, India, 2011.

➢ For effective implementation of this technique in India, Electroporator and Electrodes were indigenously designed and developed by B.S. A.U.

Other International Collaborations:

Name of the University	Major Area
Curtin University, Australia	Collaborative Research Work
UiTM, Malaysia	Joint Book Publications, Student Exchange Prog & Faculty Exchange Programme
PPKS, Sarawak, Malaysia	Training Programme for PPKS Faculty
UNIMAS, Malaysia	Staff – Student Exchange Programme
National Instruments, USA	Centre of Excellence for Green Energy Mgnt

(b) National collaboration:

S. No.	Name of the Organization	MoU Signed & Validity	Scope of Collaboration
01	M/s. Hibrise Technologies	2013 3 years	Student Project Work, Consultancy, Industrial Placement & Internship
02	M/s. Apollo Tyres, Ltd., Chennai	14th July 2011 5 years	Exclusive Part Time B.Tech. Programs for the employees of Apollo Tyres Training for Apollo tyres Personnel Inplant Training & Project works for the students Guest Lectures by Experts Faculty Training for Industrial Exposure Collaborative Research & Consultancy Work (Induction Heating) Campus Recruitment for Students
03.	M/s. Frontier Lifeline Pvt. Ltd., Chennai	20.11.2009 3 years	Collaborative Research Work. To develop a Bio Compatible Electric Gadget for specific applications

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

Sponsoring agency	Duration	Financial outlay	Investigator &Co-investigators	Project title
AICTE	2 years	6 Lakh	Dr. R. Raja Prabu & Dr. M. Abdullah Khan	"Performance study of outdoor polymeric insulators"
AICTE	2 years	9 Lakh	Dr.T. Thyagarajan & Mrs. S. Jennathu Beevi	"Investigation on Dev. of Cost Effective Fiber Glass Distributive Support Structure"
AICTE	2 years	3.75 Lakh	Dr. T.R. Rangasamy & Mrs. D.Saleha Saiqa	Cascaded Fuzzy Logic Controller for Combustion Control of Utility Boiler
AICTE	2 years	2 Lakh	Dr. T. Thyagarajan	Induction Training Programme
AICTE	6 months	8 Lakhs	Mr. V. Viswanathan & Dr. R. Raja Prabu,	Project Oriented Power Electronics Lab

20.   Research facility / centre with State recognition

AUPOWER Lab, A Power System engineering software tool was jointly developed by Faculty of our Department and Faculty of Anna University. This software is used by almost all the engineering colleges of Tamil Nadu and it was a prescribed software tool by Anna University for a specific period.

National recognition

Tracking resistance measurement setup was established in the department as per IEC 60587 standards, with funding assistance from AICTE. The facility is used by some of the industries like   M/s. Oblum Industries, Hyderabad, M/s. Alstom, Puducherry,   M/s. LAMCO Industries, Hyderabad

International recognition

The department is working closely with **Purdue University** on a collaborative research work, viz., Electro-Chemo-Therapy for Effective Cancer Treatment. For the same, an Electroporator was imported and the same was used for the research work as well as for other research

works by AUKBC center, Sri Ramachandra Medical University, Frontier Lifeline Pvt., Ltd., Anna University, Purdue University, USA, Cork Cancer Research Institute, Ireland etc.

21. *Special research laboratories sponsored by / created by industry or corporate bodies*

A Centre of Excellence for Green Energy Management is proposed to be established in the campus in partnership with M/s. National Instruments Inc., USA involving the following departments.

(i) Department of Electrical and Electronics Engineering

(ii) Department of Electronics & Instrumentation Engineering

(iii) Department of Mechanical Engineering

It is proposed to establish the centre in a phased manner, spanning over a period of 3 years. The total budget estimated for the project is 1.25 Crores which would comprise a contribution of Rs. 37,50,000/- from M/s. National Instruments and the remaining amount from B.S. Abdur Rahman University.

22. *Publications:*

The research publications made by the faculty members of this department is given in **Annexure D - 3.2 & 3.3 (Criterion III).** The consolidated statistics is furnished below:

Year	Intl. Journal	Nat. Journal	Intl. Conf.	Natl. Conf.	Total
2009	01	0	05	10	16
2010	06	0	15	02	23
2011	08	0	03	24	35
2012	07	03	03	23	36
2013	03	04	03	38	48
Total	25	07	29	97	158

Chapters in Books : Book – (Contributed a Chapter):

S. No	Author	Name of the Book	Publishers	ISBN No.
01	Dr. R. Raja Prabu	Electroporation based therapies for Cancer : From Basics to Clinical Applications	Woodhead Publishing Ltd. 2012	ISBN 13 : 9781907568152 ISBN 10: 1907568158

Books with ISBN:

(i) Dr. K. N. Srinivas, Prof./EEE,"Basic Electrical Engineering", I.K. International Publishing House, New Delhi, 2007, Reprint 2010, ISBN : 978-81-89866-34-1

Books without ISBN:

(i)   Dr. K. N. Srinivas, Prof./EEE, "Basic Electrical Engineering", Manthrayam Publication, Chennai 1995., Reprint 2009

Edited Proceedings:

➢   of the Third National Conference on "Modelling, Simulation, Design and Experimental Study of Electrical Systems MOSDES 2013"

Editors : Dr. R. Raja Prabu, Prof. & Head / EEED,r. K. Boopathy, Assoc. Prof./EEE,Ms. K. Sarmila Har Beagam, AP/EEE, Ms. V. Bharanigha, AP/EEE,Mrs. J. Rekha, AP/EEE

➢   Proceedings of the Second National Conference on "Modelling, Simulation, Design and Experimental Study of Electrical Systems MOSDES 2011"

Editors : Dr. R. Raja Prabu, Prof. & Head / EEE,,Dr. R. Jayashree, Prof./EEE, Dr. N. Senthil Kumar, AP/EEE, Dr. Y. Mohamed Shuaib, AP/EEE

➢   Proceedings of the First National Conference on "Modelling, Simulation, Design and Experimental Study of Electrical Systems MOSDES 2009"

Editors : Dr. R. Raja Prabu, Prof. & Head / EEE; Dr. K. N. Srinivas, Prof./EEE

➢   Proceedings for the International Workshop on "Electro Chemo Therapy for Effective Cancer Treatment" during July 2011

Editors : Dr. R. Raja Prabu, Prof. & Head / EEE; Dr. Raji Sundararajan, Professor, Purdue University, USA

Publications listed in International Database :

Name of the International Database	No. of paper indexed	Average Citation index	Average SNIP / II	Average SJR / CHL	Average Impact Factor
SCOPUS	12	8.92	1.66	0.074	0.841
Web of Science	12	4.42	0.1083	5.73	-
Google Scholar	12	9.0	-	-	-
IEEE	06	3.34	-	-	-

No of Citations as per SCOPUS

2008	-	14
2009	-	17
2010	-	21
2011	-	35
2012	-	36
2013	-	36

The SCOPUS h-Index of the department for the period 2008 - 2013 is 4

23.   *Details of patents and income generated*   NIL

24.   *Areas of consultancy and income generated*

S. No.	Title of the Consultancy	Income Generated (in Rupees)	Client
1.	Load flow and short circuit analysis of the proposed new Chennai network (for 2007 & 2012)	1,72,800	M/s. Esquire Engineers Ltd.,
2.	Study of L.T System proposed with 5 Nos of 1048 kW, 415V generators to operate in parallel with U.P. electricity board grid for power evacuation	10,000	M/s.Esquire Engineers Ltd.,
3.	Tracking resistance measurement of non ceramic insulators as per IEC standards	-	M/s Oblum Industries Hyderabad
4.	Simple ways to cut your Energy bill (Energy Conservation)	5,000	M/s. TANSTIA – FNF Service centre
5.	Training Programme for supervisors (Electrical, Elevators, Power projects) - 7 Batches	68.4 Lakhs	ETA- ASCON , Dubai.
11	Vocational Training Programme on "Business Communication"	0.58	ETA-STAR-ASCON, Dubai
12.	Vocational Training Programme on "Quantity Surveying" – 2 batches	9.0 Lakhs	ETA-STAR-ASCON, Dubai
14.	Part time B.Tech. (EEE) programme - I Batch	Rs. 25,000 / student/ semester	Apollo tyres, Chennai
15.	Part time B.Tech. (EEE) programme - II Batch	Rs. 32,500 / student	Apollo tyres, Chennai
16.	Enhancing the efficiency of converter circuit	--	Garuda Vaayu Sakthi
17	To use the induction technology for heating the platen and mould of the 100 ton lab press.	--	Apollo tyres, Chennai
18.	Study abroad Programme for Purdue University Students, USA	Rs. 1,44,638/-	Purdue University USA
19.	Student Training Programme for UiTM, Malaysia	Rs.1,60,000/-	UiTM, Malaysia
20.	Staff Training Programme for PPKS, Malaysia	Rs.92,470/-	PPKS, Malaysia

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad*

International:

S. No.	Name of the faculty	Purpose of the visit	University visited
1.	Dr. R. Raja Prabu	Collaborative Research work on Electrochemo-therapy for effective cancer treatment	Purdue University, USA
		Guest Lecture on Outdoor Polymeric Insulators	Kobe university, Japan
		Guest Lecture on Polymeric Insulators	Chongquing Univ, China
		Collaboration between two universities (offered students training programme)	(UiTM), Malaysia
		To finalize the collaboration (offering staff exchange programme at BSAU)	PPKS, Malaysia
		To finalize the collaboration (to offer student exchange programme at BSAU)	UNIMAS Malaysia
		Training program for the employees of ETA-ASCON-STAR group of Companies	Dubai
2	Dr. K. N. Srinivas	IEEE Conference	Japan
		Session Chair - International Conference	Singapore
		International Conference	USA
3	Mr. A. Sultan Saleem	Training program for the employees of ETA-ASCON-STAR group of Companies	Dubai
4	Dr. N. Senthil Kumar	Practical Training on EUOSTAG Software	Brussels Belgium

National:

S.no	Name of the faculty	Purpose of the visit	University visited
1.	Dr. K. N. Srinivas	Guest Lecture	NIT Nagaland
2.	Dr. R. Raja Prabu	Workshop on NBA Accreditation	IIT Delhi
		International Conference on BIOASIA	Genome valley
		Consultancy	M/s. Apollo tyres
		Consultancy	M/s. Garuda Vayuu Sakthi

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26. *Faculty serving in*

a) National committees b) International committees c) Editorial Boards d) any other (please specify)

National Committee :

S.No	Name of the faculty	Name of the Committee
1.	Dr. M. Abdullah Khan	State Electricity Regulatory Commission
		Central Electricity Regulatory Commission

Editorial Board:

S.No	Name of the faculty	Name of the Editorial Board
1.	Dr. R. Raja Prabu	Indian Journal of Science & Technology (2009)
		Journal of Nuclear Engineering & Design (Elsevier)
2.	Dr. K. N. Srinivas	IEEE Transaction on Magnetics (2007)

Any Other Committees:

Almost all the senior faculty members of the Department serve in various committees including Academic Council of other universities, Board of Studies of other universities, research supervisor for other universities, Technical Advisory Committee member for very many conferences organized in the State of Tamil Nadu, Board of Management of other institutes, Interview Panel member for other universities, Doctoral Committee member for other university research scholars, Ph.D. thesis evaluation expert for other universities etc.

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

➤ Induction Training is regularly organized once in a year for the new comers, through Faculty training academy of our University.

➤ A training programme on CYME Software for the benefits of student and faculty members of the department of EEE is conducted during 2011

➤ A Workshop on LABVIEW Software is organized during May 2013 by the Department of Mechanical Engineering, in which many of the department faculties have participated.

➤ Workshop on the Preparation of Project Proposals for Funding Assistance for R&D Project was organized during April 2009

➤ A one day workshop on "How to do Research" for the benefit of Research Scholar and Research Supervisor was organized by Dr. R. Raja Prabu, Dean (Academic Research) during the year 2012

➤ An International Workshop on Electro-Chemo-Therapy for Effective Cancer Treatment was organized during the year 2011

➢ One day workshop on "How to prepare funded proposals for research" was organized by the Faculty Training Academy of our Univ. during Sept' 2013

28. *Student projects*

The statistics showing the percentage of projects done both inhouse and with support of the industry is furnished below.

UG

Year	In-house Project	Industrial Project
2005-2009	86%	14%
2006-2010	89%	11%
2007-2011	82%	18%
2008-2012	78%	22%
2009-2013	80%	20%

PG

Year	In-house Project		Industrial Project	
	PSE[#1]	PED[#2]	PSE	PED
2009-2011	95%	-*	5%	-*
2010-2012	95%	94%	5%	6%
2011-2013	90%	95%	10%	5%

*M.Tech. (PED) was introduced in 2010-'11

#1 - PSE - Power System Engineering

#2 - PED - Power Electronics and Drives

29. *Awards / recognitions received at the national and international level by Faculty:*

(i) Mrs. R. Ramya, AP/EEE won the Software Simulation Award Sponsored by CSC, North America 2009)

(ii) Dr. R. Raja Prabu, Professor / EEE is awarded "Electrical Competency Certificate" by the Government of Tamil Nadu.

(iii) Dr. R. Raja Prabu, Professor / EEE is recognized as a Member by the Professional bodies – IEEE, USA and CIGRE, France

(iv) Dr. R. Raja Prabu, Professor / EEE is recognized as Chartered Engineer by the Institution of Engineers, India

(v) Dr. R. Raja Prabu, Professor / EEE is awarded Travel fellowships by DST, CSIR, AICTE and TNSCST for his visits to Japan, China etc.

Doctoral / Post Doctoral Fellow:

(i) Ms. M. Ummu Salma, a full time research scholar of this department is awarded UGC – Moulana Azad Research Fellowship in the year 2012

Students:

➢ Vishnu received the NSS best co-ordinator award from Anna University in 2010

➢ Deepan Prakash presented a paper on "Hydrogen as the Next Generation Cell-Effective Fuel Source" at a national level tech fest at SRM university and won prize.

- G.G. Kathiravan, B.E. (EEE) was selected for a Summer Research Fellowship in Theoretical Physics at the Institute of Mathematical Sciences, under the Department of Atomic Energy, Government of India. He is currently working in Quantum Statistics under Dr. Rajesh Ravindran of IMSc.

- R.Suganya & K.H.Tazunisa from B.E. (EEE) won the second place in the 'My Idea Program' held jointly by IIT-Madras and VIT Vellore for presenting a paper titled "Generating Electricity from Speed Breakers".

- Suganya, has also secured the third place in Ball Badminton in the Anna University Zonal meet.

- R. Karthik Ragavan, B.E. (EEE) have won many national and international cultural events in colleges like VIT, Anna University, MIT, SRM, Kilpauk Medical College, Chengalpet Medical College and Stanley Medical College. He had been elected as the "Cultural Secretary" of our college for the academic year 2010-11.

- A.Aysha, B.E. (EEE) was Selected as One of the Finalists of Chennai's Fresh face Contest Conducted by Times of India.

- Arun. K, Vijay Balu. B, Anwar, Siva Kumar. A.T, Sridhar.R and Mohammed Ali Mujeeb have presented technical papers in events in our college and Sridhar. R won the first place for his paper on Biomass.

- Mohamed Ali Mujeeb also won the 3rd place in circuit debugging in ELACT-09' at Veltech.

- Ramchandran and G. Arthi from B.Tech. (EEE) won 1st prize for paper presentation in National Level Symposium – GENESIS organized by Pondicherry Engineering College during Feb 2012.

- Mohammed Rizvan .S and V.Arthi have won prize at the oratorical competition organized by the Millipore Academic Chennai during March 2012.

- Shameer and Nirmal Raj won the second prize at the technical symposium in St. Joseph College of engineering.

- V. Ramachandran and Sana Khalid Baig won 3rd place in paper presentation on the topic "Railway Track Crack Detection System" at the INNO Contest conducted by BSAU.

- S. Mohammed Rizvan won the 3rd prize in the inter college state level debate conducted by the Tamil Nadu Muslim Graduates Association (TAMGRADS).
- V.Mohammed Hassan Javith has won prizes in the team dramatics at various institutions like VIT, MIT, Anna University and various medical college.

30. *Seminars/ Conferences/Workshops organized and the source of funding (national international) with details of outstanding participants, if any.*

S. No.	Month / Year	Name of the Seminar / Conference / Workshops	Source of Funding (National / Intl)	Details of outstanding participants (Details of invited speakers)
01	February 2009	MOSDES 2009	Our University	Er. A. Sardar Mahaboob Jan (Retd) C.E., TNEB
02.	October 2009	CYGNUS 2009	Our University, Infosys	Dr. R. Balakrishnan Head, L&T, Chennai
03.	November 2010	"Recent trends in Evolutionary Computing Techniques in Electrical Engineering	Our University	100 participants from various institutions
04	November 2010	CYGNUS 2010	Our University, CTS	Dr. R. Sarathi Professor, IITM
05.	April 2011	MOSDES 2011	Our University	Mrs. R. Nachammai Sr. Scientist / MAPS
06	July 2011	International Workshop on Electro-Chemo-Therapy for Effective Cancer Treatment ECT for ECT	Purdue Univ, USA, Cork Cancer Research Instt, Ireland, Sri Ramachandra Medical Univ, Ch. Cognizant, ETA	Dr. Declan Soden, Dr. Slawomir Salwa Ireland Dr. Mira Sadadcharam
7.	July 2011	International Workshop on Electro-Chemo-Therapy for Effective Cancer Treatment ECT for ECT	Purdue Univ, USA, Cork Cancer Research Institute, Ireland, Sri Ramachandra Medical Univ, Chennai Cognizant , ETA	Dr. Declan Soden, Dr. Slawomir Salwa Ireland Dr. Mira Sadadcharam
8.	October 2011	CYGNUS 2011	Our University, WIPRO	Mr. K. Surya Narayana Rao, CEO, S&S Ltd.,

S. No.	Month / Year	Name of the Seminar / Conference / Workshops	Source of Funding (National / Intl)	Details of outstanding participants (Details of invited speakers)
9.	September 2012	CYGNUS 2012	Our University,	Dr. Solaikutty Dhanabal National Instruments

31. *Code of ethics for research followed by the departments*

Enclosed as **Annexure D - 3.1 (Criterion III).**

32. *Student profile programme-wise:*

B.Tech. (EEE)	Applications Received	Students Admitted	Selected		Pass Percentage	
			Male	Female	Male	Female
2009- 13	200	82	70	12	92%	100%
2008-12	240	66	58	8	96%	100%
2007-11	260	66	55	11	97%	100%
2006-10	275	66	56	10	96%	100%
2005-09	250	66	57	09	94%	100%
M.Tech. (PSE)						
2011-13	50	20	12	08	100%	100%
2010-12	60	20	11	09	100%	100%
2009-11	65	20	10	10	100%	100%
2008-10	62	20	13	07	100%	100%
2007-09	64	20	12	08	100%	100%
M.Tech. (PED) – (*The prog. was introduced only in the year 2010*)						
2011-13	22	12	09	03	100%	100%
2010-12	20	06	06	--	100%	--

33. *Diversity of Students*

Name of the Programme (refer to question No. 4)	% of students from the Same University	% from other Univ. within State	% from outside State	% from other Countries
M.Tech. (PSE)				
2009-11	Nil	53%	47%	0
2010-12	Nil	90%	10%	0
2011-13	Nil	67%	33%	0
M.Tech. (PED)				

2010-12	Nil	67%	33%	0
2011-13	Nil	92%	8%	0

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

- ➢ Ms.Supraja.V (2009) has secured AIR 95th Rank in the Indian Civil Service (IAS) Examination and serving as a District Collector
- ➢ Mr. Sriram Kumar, has secured highest score in the TOEFL exams in 2010
- ➢ Mr. Udaya Kumar another student of this department has secured all India Second Rank in the GATE Examination

Year	GATE	Civil Services	Defence Services	Other competitive Exams
2009-13	03	--	01	48
2008-12	05	--	03	52
2007-11	04	--	02	54
2006-10	06	--	03	54
2005-09	04	01	02	53

35. *Student progression*

Student Progression	Percentage against enrolled
UG to PG	17%
PG to M.Phil	Nil
PG to Ph.D.	18%
Ph.D. to Post-Doctoral	Nil

Employed
  Campus Selection
  Other than campus recruitment
	
	72%
	8%

Entrepreneurs	3%

36. *Diversity of staff*

Percentage of Faculty, who are graduates

(i) Of the same University   :   8.3%   (SJB, GK)

(ii) From other Univ. within State :   66.4%

(iii) Univ. From other States   :   20.8%   (MAK, IMR, JR, DV, AK)

(iv) Univ. outside the country :   4.5 %   (RR)

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*

S. No.	Name of the Faculty	University	Ph.D. awarded
01.	Dr. K. Boopathy	Anna University	2013
02.	Dr. T.D. Sudakar	Anna University	2012
03.	Dr. N. Senthil Kumar	Anna University	2010
04.	Dr. A. Mahabuba	Anna University	2009
05.	Dr. R. Jayashree	Anna University	2008
06.	Dr. A. Peer Fathima	Anna University	2008
07.	Dr. D. Saleha Saiqa	Anna University	2009

38. *Present details of departmental infrastructural facilities with regard to*

a) *Library*

No. of books : 845

No. of UG Project Reports : 415

No. of PG Project Reports : 253

No. of Ph.D. Thesis Reports : 06

No. of Lab Manuals : 68

No. of Company Catalogues : 38

No. of other Technical Magazines : 117

b) *Internet facilities for staff and students*

➢ The campus is connected through National Knowledge Network (1Gbps)

➢ The band width is 100 Mbps

➢ The campus is also connected through fibre optics intranet connection (1Gbps)

➢ The entire campus is Wi-fi enabled.

c) *Total number of class rooms*

S. No.	Name of the Programme	No. Of Class Rooms
01	B.Tech. (EEE)	04
02.	M.Tech. (PSE)	02
03.	M.Tech. (PED)	02
04	Part Time B.Tech. (EEE)	02
05.	Seminar Hall	01
06.	Department Library	01
07.	Laboratory	11

| 08. | HOD Room | 01 |
| 09. | HOD Office | 01 |

d) *Class rooms with ICT facility*

> All the classrooms are ICT enabled

> NPTEL and OCW study materials are available in the central library.

> e-Journals facility

e) *Students' laboratories*

S. No.	Name of the Laboratory	Total Amount (Rs.)
01	Department Computer Lab (UG) (Power System Simulation Lab)	51,15,368.00
02	Department Computer Lab - PG	43,25,791.00
03	Special Machines Lab	67,79,201.00
04.	R&D Lab	42,64,440.00
05.	Mini High Voltage Lab	5,45,754.00
06.	Control System Lab	8,24,795.00
07.	Electrical Machines Lab – I	25,87,226.00
08.	Power Electronics Lab	25,37,793.00
09.	Measurements & Instrumentation Lab	3,89,494.00
10.	Electric Circuits Lab	5,69,845.00
11.	Engg. Practice Lab	1,88,580.00
GRAND TOTAL		*2,81,28,287.00*

f) *Research laboratories*

S. No.	Name of the Laboratory	Total Amount (Rs.)
01	Department Computer Lab (UG) (Power System Simulation Lab)	51,15,368.00
02	Department Computer Lab - PG	43,25,791.00
03.	R&D Lab	42,64,440.00
04.	Mini High Voltage Lab	5,45,754.00

39. *List of doctoral, post-doctoral students and Research Associates*

a) *from the host institution/university (B.S. Abdur Rahman University)*

Sl. No.	Name of the Candidate	Research Supervisor	Title/Topic Research
1	Mr. P. Sadasivam	Dr. R. Raja Prabu	Enhanced Drug Delivery using HV Pulse
2	Mr. P. Balamurugan	Dr. K. N. Srinivas	DSP based PWM Hybrid DC to DC convertor
3	Ms. T. Anila	Dr. R. Raja Prabu	Intelligent Power Management System for Automotive Infotainment Systems
4	Ms. D. Buvana	Dr. R. Jayashree	Investigations on Non-isolated type bidirectional DC – DC Converter
5	Ms.Sarmila Har Beagam K.	Dr. R. Jayashree	Optimal Supply of Reactive Power and Pricing in Deregulated Power Systems
6	Ms.Ramya R	Dr. R. Raja Prabu	Pulsed Electric Field Technology in Food Preservation
7	Ms.G.Kavitha	Dr. I. Md. Rafeequdin	Power Quality Improvement in LCI fed Synchronous Motor drives
8	Mrs. M. Ummu Salma	Dr. R. Raja Prabu	Micro Power Grid Protection
9	Mr. M. Mahendran	Dr. R. Raja Prabu	Outdoor High Voltage insulators
10	Mr. R. Soundara Pandian	Dr. R. Jayashree	Optimization of pump storage capacity in a grid connected power system
11	Mr. D. J. Taniguevelane	Dr. K. N. Srinivas	Deduction of pilferage of energy using PLC signals
12	Ms. B. Vidhya	Dr. K. N. Srinivas	Analysis of Reluctance Machines
13	Ms. R. Lavanya	Dr. K. N. Srinivas	Matrix Converter Based Induction Motor Drive with Power Conditioning
14	Ms. Belwin J.Brearley	Dr. R. Raja Prabu	Outdoor Polymeric Insulators
15	Mrs. K. G. Shanmugapriya	Dr. R. Raja Prabu	Understanding the Partial Discharge Activity in Transformer Insulation Using SHF Technique
16	Mrs. S. Jennathu Beevi	Dr. R. Jayashree	Automatic Generation Control (AGC) in Deregulated Environment
17	Mr. Ram Kumar M	Dr. K. N. Srinivas	PV Generation System using a Grid Connected Quasi Z Source Inverter
18	Ms. Bharanigha V	Dr. K. Boopathy	Implementation of Voltage Lift Technique in Power Converters
19	Ms. Kavitha S	Dr. I. Mohamed Rafeequdin	Expansion Planning of Power System

b)   from other institutions/universities

S. No.	Name of the Doctoral Student	Name of the Supervisor	Name of the Other University
01.	Mr. S. Arunachalam	Dr. M. Abdullah Khan	Anna University
02	Mr. A. Kalaimurugan	Dr. R. Raja Prabu	Satyabama University
03.	Mr. T. J. Pradeep Surendarnath	Dr. R. Raja Prabu	Satyabama University

40.   Number of post graduate students getting financial assistance from the university.

➢   Two Post graduate students are getting financial assistance through Zakaath fund organized by B.S. Abdur Rahman University

41.   Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

➢   The department of EEE proposed to offer an M.Tech. programme in "Power Electronics & Drives" in the year 2009, a committee with the following experts have been constituted.

➢   Based on the recommendations of the committee, the programme was introduced by the department in the year 2010.

➢   The committee constituted comprised of the following expert members to make recommendations for M.Tech. (PED),

•   Mr. Shibu George – Head -Electrical, Apollo Tyres

•   Dr. G. Uma – Professor, CEG, Anna University

•   Dr. K.N. Srinivas – Professor, BSAU

•   Mr. K. Bhaskar – Alumni & Ex-employee of M/s. Alstom

•   Dr. R. Raja Prabu - HOD/EEE

➢   The committee has gone into the following details, before it has made the recommendation.

•   Whether the program title is an approved nomenclature of AICTE / UGC

•   Employment potential for the graduates, once they complete the programme

•   Industries available in the respective area, as well as the proximity, with respect to the University

•   Department's expertise availability to offer the programme

•   Infrastructure to be added to the department (Class room etc.,)

•   Central Library facilities

•   Department Library facilities

•   Lab facilities to be added

•   Additional faculty to be recruited by the department

- Possible research and extension activities, which could be added into the curriculum
- Additional budget requirement, to offer the programme

➢ Then, a draft curriculum and course contents would be prepared by one another committee constituted for the said purpose.

➢ Once the draft is ready, the same will be discussed in detail, in the department all faculty meeting.

➢ After the approval of department meeting, the draft will be presented in the meeting of the "Board of Studies".

➢ After the approval of Academic Council and Board of Management the programme offered by the department.

42. *Does the department obtain feedback from*

a. *faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?*

➢ The department has been practising a 360^0 feed back for the teaching learning process accommodating all the stake holders including staff, students, alumni , employers and parents.

➢ The department has a practice of conducting all faculty meeting once in a month. In the department meetings, the ways and means of enhancing the curriculum is discussed. During such meetings the individual faculty members express their honest opinion on the curriculum, teaching –learning process etc and the same would be debated and discussed.

➢ In addition, a class committee is constituted with all the course teachers and student representative. The chairman of the class committee would be a senior faculty and who does not offer any course to the students during that semester.

➢ The very purpose of conducting class committee meeting is to collect the feedback and comments from both staff and students and taking measures to improve the teaching learning process.

➢ Moreover, the faculty members also get representation in the board of studies, Academic advisory committee and academic council. In all these forums the staff members are given opportunity to give the feedback on both curriculum and teaching learning process.

➢ Dept faculty meeting conducted before a meeting of the board of studies always focus on the feedback of staff members on curriculum and teaching learning.

b. *Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

➢ As a part of the 360^0 feedback on curriculum and teaching - learning – evaluation process, the students are required to give feedback at various stages of study.

➢ Whenever a course is offered by the department, the students would be required to give the feedback at the following intervals.

- First feedback after the first class committee meeting but before the first continuous assessment test.
- Second feedback during the middle of the semester
- Third feedback just before the end semester examination

➢ The student's feedback on the staff will find a place in the performance appraisal scoring system (PASS) of the individual faculty member and the same is evaluated for the sanction of increments and additional increments.

➢ When the feedback of a staff is not encouraging, he will be counselled by the senior faculty, Head of the Department and the top management.

➢ When the faculty performance index "FPI" is below a prescribed value, either the increment will not be sanctioned or the faculty will be required to give an explanation for the poor performance.

➢ The students feedback on Curriculum, Teaching, Learning and Evaluation will be discussed in the appropriate forums like Department all Faculty meeting, Board of Studies, Academic Advisory committee and Academic Council.

➢ Based on the student feedback, the curriculum, leaning process and evaluation system will be revised and revamped.

c. *alumni and employers on the programmes offered and how does the department utilize the feedback?*

➢ A school level advisory committee is in place which would discuss the various features of the programs offered by the individual department and schools.

➢ The board of studies of the Department of EEE is represented by one senior academician from IIT Madras and another senior Industrial expert from M/s. Apollo Tyres. Their feedback on the programs offered are given due significance and accordingly the contents of the program are modified / revised.

➢ For example , in the B.Tech. (EEE) curriculum, the modalities of the offering of the self-learning program was revised thoroughly.

➢ Similarly, a lab course on PLC, SCADA and DCS is introduced into the B.Tech. (EEE) curriculum.

➢ Both the Board of studies and the academic council of our university have greater representation of the industry and hence their suggestions are well received by the respective bodies.

➢ As an innovative measure, one of the EEE Alumni Mr. K. Baskar, was made as a member of the academic council of B.S. Abdur Rahman University

43. *List the distinguished alumni of the department (maximum 10)*

(i) Ms. Srividya Balaji (1986-1990) Received Global Computer Laureate Award, Design and development manager, Addison Avenue Federal Credit Union, California – USA.

(ii)   Ms.Supraja.V (2003-2007 batch) has secured AIR 95th Rank in the Indian Civil Service (IAS) Examination in the year 2008 and serving as a District Collector

(iii)   Ms. Rajashree, 1985-1989 Graduate, Senior Vice President, CTS

(iv)   Dr. B.Venkatesh, Academic Director, Centre for Urban Energy, Ryerson University, Ontario - Canada.

(v)   Mrs. R.M.Nachammai, (1986-1990) Sr. Scientist / Sr. Technical Engineer (Nuclear Systems), Madras Atomic Power Station, Kalpakkam

(vi)   Mr. K.S. Kannan (1991-1995 Batch – Gold Medalist), Sr. Section Manager Power train Embedded Systems, Renault Nissan

(vii)   Srikantan Nagarajan, Ph.D., Professor, Radiology & Bio Medical Imaging, University of California – San Francisco

(viii)   Mrs. S. Vaijayanthi (1988-1992), Project Executive, IBM Global Services

(ix)   Mr. Sathish Chetty, Chief Technology Officer, Red Hat, USA

(x)   Mr. Sarav Periasamy, CEO, PERI Software Solutions Inc., U.S.A

(xi)   Mr. Udaya Kumar, CEO, Numeric Power Systems & Solact Systems, India

44.   *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

S. No.	Name of the Expert	Affiliation	Nature of Program	Topic
01.	Dr. Raji Sundararajan	Purdue University, USA	Guest Lecture	Pulsed Electric Field and its Applications
02.	Dr. Arutselvan Natarajan	Stanford University USA	One Day Seminar	Bio Markers in Bio electrics
03.	Dr. Syed Islam	Curtin University Australia	Special Lecture	Restructuring of Power Systems
4.	Dr. Declan Soden	Cork Cancer Research Centre, Ireland	Intl Workshop	Electro Chemo Therapy
05.	Dr. Slawomir Salwa	Cork Cancer Research Centre, Ireland	Intl Workshop	Effective Cancer Treatment
06	Dr. Mira Sadadcharam, MD	Waterford Regional Hospital, Ireland	Intl Workshop	Bio electrics
07.	Dr. Maben Rabi	Chalmiers University, Sweden	Seminar	Fluctuating Wind Supplies
08.	Dr. R. Sarathi	Professor IIT Madras, Chennai	Seminar	Online Condition Monitoring
09.	Dr. R. Balasubramanian	NTPC Chair Professor, IIT Delhi, Delhi	Symposium	Energy Studies at IIT Delhi

S. No.	Name of the Expert	Affiliation	Nature of Program	Topic
10.	Dr. R.Balakrishnan	Chief Engineering Manager, L&T	Symposium	
11.	Mr. Biju Balendran	Vice President, Renault-Nissan, India	Symposium	
12.	Padmashree Dr. S. Raja Ram	General Secretary Sivananda Sevashram	Special Lecture	Emotional Stability
13.	Mr. K. Surya Narayana Rao,	CEO, S&S Power switchgear Ltd.,	Symposium	Recent Trends in Switch Gear
14.	Dr. Arun Dharmarajan	Deakin University Australia	Special Lecture	South Asia Research Initiatives
15.	Dr. Solai Kutty Dhanabal	Academic Manager National Instruments	Seminar	Modelling, Design & Experimental Study
16.	Mr. Suresh Narayanan	Country Manager Balani Infotech	Special Lecture	Plagiarism
17.	Er. Sardar Mahaboob Jan	Chief Engineer TNEB	Seminar	Recent Grid Collapse in Northern India
18.	Mr. Shibu George	Head- Apollo Tyres Chennai	Seminar	Impact of Harmonics in Automobile Industry
19.	Mr. C. Nallasivan	Deputy Senior Manager TEDA	Seminar	Power Crisis in Tamil Nadu
20.	Dr. V. Raju	VC, VIT Univ.	Conference	Electronic Packaging

45. *List the teaching methods adopted by the faculty for different programmes.*

Based on the previous experience and expert guidance available, different teaching methods including, Black board teaching, OHP, Power Point Presentation, ICT tools, Industrial visits, Field trips, Guest Lectures, Self learning, industrial internship, student seminar, library reading, assignments, quiz, Predict - Observe - Explain Concept Formation, Design, mathematical modelling, Simulation, fabrication, prototype, OCW, NPTEL materials, e-Journals and project (mini & major) are adopted for various programs offered by the University.

Case 1: B.Tech. (EEE) Programme

➢ A "mini project" and "comprehension study" is introduced in the 7th semester

➢ "Industrial internship" is a mandatory requirement during 3rd year summer vacation

➢ A "self learning course" related to the project work is offered in the sixth semester

Case 2 : M.Tech. (PSE & PED) Programmes

➢ A course on "Design / fabrication project" is introduced in the Second Semester.

➢ Hands on experience on various simulation software viz., EUROSTAG, CYME, PSSIM, VISSIM, MAGNET, ETAP, EMTP are included through various laboratory experiments, which would help the students to get intl. placements.

➢ Project work / thesis work is spread over two semesters and the same will be evaluated by six periodical reviews and two external reviews.

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*

➢ While designing the curriculum for a programme, it is ensured that, various theory, lab and project courses of the respective programme are aligned, with the programme objectives and outcomes.

➢ To ensure the alignment of course objectives and outcomes with respect to the programme objective s and outcomes, a mapping of these two are done.

➢ The administrative system including, Continuous Assessment Test (CAT), End Semester Examination, Department Academic Audit (DAAC), External Academic Audit Committee (EAAC) and Internal Quality Assurance Cell (IQAC) ensure the programme objectives and outcomes are met through periodical reviews.

➢ In addition, a school level advisory committee comprising of all the stake holders including, students, staff, employers, parents, alumni and industries review the system of ensuring programme objectives and outcomes through the teaching leaning process and evaluation methods.

➢ Class committee meetings are conducted at regular intervals. It is the responsibility of the class committee chairman to monitor the teaching learning process and ensuring the programme objectives and outcomes are constantly met.

47. *Highlight the participation of students and faculty in extension activities.*

Faculty:

➢ Dr. M. Abdullah Khan, PoE/EEE is a member in Tamil Nadu State Electricity Regulatory Commission (SERC)

➢ Dr. R. Raja Prabu, Professor, organized a Study Abroad Program during March 2012 for the students of Purdue University, USA. The programme includes, education, knowledge transfer, industrial visit, community service, cultural exchange etc. 13 students and 4 faculty members from Purdue University attended the programme.

➢ Dr. R. Raja Prabu, Professor initiated the collaboration between Malaysian Universities like PPKS, Sarawak, Universiti Teknolgi, MARA UiTM, UNIMAS etc. As a result, a MoU was signed with PPKS, Sarawak Malaysia and Universiti Teknologi, MARA during the year 2012.

- ➢ Dr. R. Raja Prabu, Professor and Head, serves as an expert member for the Campus Electrical Maintenance Cell. He is involved in the LT to HT conversion, transformer testing and Sub-station extension related activities.

- ➢ Dr. R. Raja Prabu is also a core team member in establishing a 150kW Solar Power Plant (Roof top) for BSAU Campus.

- ➢ Dr. R. Raja Prabu is the Chief Co-ordinator, ETA-ASCON-STAR Industrial Training Programs through which many training programs for the employees were organized. It includes, Elevator Technology, Power Projects, Electrical Engineering, Heating, Ventilation & Air-Conditioning (HVAC), Plumbing, Construction Management, Quantity Surveying, Building Management System etc.,

- ➢ The department has entered into an MoU with M/s. Frotier Lifeline Research Centre, for a Bio-compatible product development.

- ➢ Faculty members of this department conduct industrial training program for Ford India,

- ➢ Classes for AMIE and IGNOU are being offered by the Department Staff Members.

- ➢ Consultancy to companies like, TNEB, UPSEB, Esquire Consultants, Oblum Industries are successfully undertaken.

- ➢ Some of the faculty members take part in Social Service Activities through NSS, YRC and Rotaract Club.

48. *Give details of "beyond syllabus scholarly activities" of the department.*

- ➢ A professional society in the name of "Society of Electrical and Electronics Engineers (SEEE) organizes various technical events / contests including, technical paper presentation, technical quiz, circuit de bugging, circuit assembly, Model making, Robot race, project display, technical treasure hunt, Seminar presentation by eminent personalities from industries and premier academic institutes etc.,

- ➢ SEEE organizes a national level technical symposium "CYGNUS" every year.

- ➢ Concepts of self learning and term paper study are introduced by the course teachers as and when deemed fit.

- ➢ "Peer group study" is also encouraged by the department for enhancing the performance of weaker students.

- ➢ The third year B.Tech. (EEE) students and First year M.Tech. Students are enrolled Professional members in IEEE.

- ➢ Through IEEE student branch, many technical events are organized.

- ➢ The IEEE student branch of our institute was awarded the best student branch for the year 2004 and 2006

- ➢ The department students are encouraged to participate in various regional level and national level technical events. Recently, one of our students, Mr. Naveed has

➤ participated and won the First Prize in the IEEE Solar Lamp design contest.

➤ In all the lab courses, two additional value added experiments are added by the respective course teachers.

➤ The evaluation methods include Seminar presentation, Quiz, mini projects, report writing, term paper study, simulation model making, apart from the written test.

➤ The students are taken to industrial visits and they would be required to submit a report on the industrial visit

49. *State whether the programme/ department is accredited / graded by other agencies? If yes, give details.*

➤ The department of EEE and the programs offered have applied for Accreditation by NBA, as soon as, the accreditation process is announced.

➤ The B.Tech. (EEE) Programme was accredited **thrice** by NBA Accreditation agency.

➤ The M.Tech. (PSE) programme was accredited **twice** by NBA Accreditation agency with highest grade **"A5"** for Five years

➤ In addition, the department is accredited & certified by ISO for 9001:2008.

➤ Moreover, the department is also accredited by Institution of Engineers (IE)

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

➤ By serving as a member in the Electricity Regulatory commission, Dr. M. Abdullah Khan, brought in changes by introducing the concepts of deregulation and restructuring of power system.

➤ Dr. M. Abdullah Khan and his team have developed a new Power System Simulation Software "AU POWER LAB" which is being used by almost all the engineering colleges in the State of Tamil Nadu.

➤ Dr. R. Raja Prabu, has contributed in the field of outdoor polymeric insulators. His research investigation has resulted in the finding that the increasing proportion of silicone in polymeric blends enhances the electrical insulation properties whereas increasing weight percentage of ethylene propylene diene monomer (EPDM) improves the mechanical strength of the blends, and the same is published as three IEEE papers. It is referred by many polymeric insulator companies.

➤ Research by Dr. R. Raja Prabu, on electroporation of adult human mesenchymal stem cells for proliferation control using chemo drug bleomycin is first of its kind and the results show that pulses as low as 200 V/cm and millisecond durations can be used to trigger cell death in hMSCs and also deliver external drug molecules like Bleomycin into them, thereby increasing the rate of cell death. Similarly, chemo drug doses, as small as 0.1 μM and 1 μM are sufficient to elicit notable response. The promising results indicate that electrical pulses

could be effectively used to treat chemo-resistant cancers.

➢ Currently Dr. R. Raja Prabu and his research scholars are doing research on "pulsed electric field for food preservation".

➢ Dr. K.N. Srinivas, Professor in the Department of Electrical Engineering, has developed 3D magnetic field sensor in fluxgate field using Hall Effect sensor for low magnetic fields.

➢ Dr. I. Mohamed Rafeequdin, Professor in the department of electrical engineering is working along with M/s. Apollo Tyres, Chennai for technology migration from steam heating to induction heating and offering solutions for the challenges in the process.

➢ Mr. Y. Mohamed Shuaib, Assistant Professor (Section Grade) is currently pursuing research on loss minimization in radial distribution systems using artificial intelligence techniques.

51.   *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths:

➢ Positive reputation of the department, among the public.

➢ Well qualified, experienced, dedicated and proactive faculty.

➢ Research expertise in the areas of Bio-electrics and Restructured power system.

➢ High faculty retention rate.

➢ Well managed learning resources which include various advanced software tools like CYME, ETAP, MAGNET, CASPOC, FEADMOS, EUROSTAG, MATHCAD, PSPICE, EMTP, PSCAD, PSIM, VISSIM, PSAT, Power System Tool Box, Power System Simulator, AU-POWERLAB, GAMS, ANSYS, FEA, AutoCAD, Code Composer Studio, MATLAB and LabView

➢ The department has produced more than 115 university ranks including 17 gold medallists, when it was an affiliated college.

➢ Good personal relationship between the faculty and students.

Weaknesses:

➢ Unable to fully harness the power of alumni.

➢ Efforts to get foreign students in the Department have not materialized yet.

➢ More number of faculties with PhD qualification in power electronics is needed.

➢ Research expectations and outcome are yet to be reached.

➢ Additional space for expansion

Opportunities:
- ➢ Collaboration with industries
- ➢ Collaborative research work with premier / foreign universities.
- ➢ Development of web based learning resources.
- ➢ Growing demand for renewable and sustainable energy.
- ➢ Strategic partnerships with other reputed national and international institutions of higher learning for credit transfer.

Challenges:
- ➢ Societal and student perception of education as solely a means of job.
- ➢ Establishing a brand equity for B.S. Abdur Rahman University (Crescent is very popular)
- ➢ Downtrend in the campus recruitment due to industry ups and downs
- ➢ Competition from premier institutions including, nationally renowned institutions.
- ➢ Change in attitude by generation - Y students.

52. *Future plans of the department.*
- ➢ The self learning and industrial internship process already existing in the department will be augmented by an exposure to industry via attachments, industrially supervised and sponsored projects, guest lectures, seminars, and active and vibrant professional society activities.
- ➢ All the faculty members of the department will be PhD holders and also, every year each faculty member would be publishing their research findings in at least one refereed journal with scopus index.
- ➢ A new M.Tech Programme in "Bioelectrics" and "Power Engineering", would be started.
- ➢ Proposed to offer certificate/diploma courses in Elevator Engineering, Power Project Engineering, Electrical Engineering etc for the people from Industry.
- ➢ Improve the quantum of funds obtained through sponsored projects, consultancy, training program etc.
- ➢ The department will attract engineering students from top universities in US, Australia and elsewhere to do part of their studies here and hence 20% of the students of the department will be those belonging to the "Students Exchange Programme".
- ➢ We will also enhance learning opportunities by developing additional remote instruction and learning capabilities to complement our existing curricula.

Department of Electronics & Communication Engineering

1.   Name of the Department   **: Electronics and Communication Engineering**

The Department was established in the year 1994. It offers under graduate program B. Tech-Electronics and Communication Engineering and 2 Post Graduate programmes - M. Tech Communication Systems and M. Tech –VLSI & Embedded Systems. The department has an optimum blend of staff members with Research & Development, Industrial and Academic experience. The department has excellent infrastructure with 13 labs all with industry standard hardware & software tools. The department has 41 faculty members of which 4 faculty members are with Ph.D qualification and further 14 faculty members are pursuing Ph.D research.

2.   Year of establishment   : 1994.

*3.   Is the Department part of a School/Faculty of the university***?**

Yes

ECE Department is a part of the School of Electrical and Communication Science.

4.   Names of programmes offered :

	PROGRAMME
Bachelor Degree	☐ B.Tech. (Electronics and Communication Engineering)
Master Degree	☐ M.Tech. (Communication Systems)
	☐ M.Tech. (VLSI and Embedded Systems)
Doctoral Degree	☐ Ph.D

5.   Interdisciplinary programmes and departments involved :

The Department of ECE offers the following interdisciplinary programmes

Sl.No	UG/PG	Degree	Programme	Dept Involved
1	PG	M.Tech.	Optoelectronics & Laser Technology	Physics

6.   Courses in collaboration with other universities, industries, foreign institutions, etc.

NIL

7.   Details of programmes discontinued, if any, with reasons :

The following PG program is discontinued from the year 2013

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Sl.No	UG/PG	Degree	Programme	Reason
1	PG	M.Tech	Optoelectronics & Laser Technology	Insufficient Student Strength

8. *Examination System: Annual/Semester/Trimester/Choice Based Credit System*

Semester pattern with Choice Based Credit System.

9. *Participation of the department in the courses offered by other departments*

Department of ECE participates in the courses offered by the following departments:

Sl.No	Degree	Dept	Course Code / Name
1	B.Tech.	Mechanical Engg	☐ EC288 Electronics for Mechanical Systems ☐ EC289 Electronics and Microprocessor Lab
2	B.Tech.	Automobile Engineering	☐ EC288 Electronics for Mechanical Systems ☐ EC289 Electronics and Microprocessor
3	B.Tech.	Information Technology	☐ EI404 Embedded Systems And its applications
4	B.Tech.	Comp. Science & Engg.	☐ EC182 Electron devices and Circuits Lab ☐ EC284 Analog and Digital Communication
5	B.Tech.	Electronics & Instrumentation Engineering	☐ EI401 Embedded Systems ☐ EC396 Communication Engineering ☐ EI407 Embedded Systems Lab
6	MCA	Comp. Applns	☐ CA703 Microprocessor and its Applications
7	M.Tech.	Opto Electronics and Laser Technology	☐ EC641 Optoelectronics ☐ EC642 Electromagnetic Theory & Applications ☐ EC643 Optical Communication ☐ EC644 Digital Signal Processing

10. *Number of teaching posts sanctioned, filled and actual :*

	Sanctioned	Filled	Actual (incl. CAS & MPS)
Professor	6	6	6
Associate Professors	3	3	3
Assistant Professors	32	32	32

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Sl. No	Name	Quali-fica-tion	Designa-tion	Specialization	Yrs of Exp.	No. of Ph.D/ M.Phil students guided
1	Dr.P.K.Jawahar	Ph.D	Professor and Head	VLSI, Embedded system and Networking	23	7 guiding
2	Dr.S.Kaja Mohideen	Ph.D	Dean	VLSI and Embedded system	23	8 guiding
3	Dr.N.Nithyanandam	Ph.D	Professor	Digital signal processing	48	4 guiding
4	Mr.Pragash N. Nagaiyan	M.S.	Professor	Wireless Communication	21	-
5	Dr.C.Tharini	Ph.D	Professor	Wireless Networking	15	5 guiding
6	Dr.B.Vijayalakshmi	Ph.D	Professor	Digital Image Processing	13	-
7	Ms.A.Sumathi	M.S.	Associate Professor	MIMO, Wireless Communication	24.8	-
8	Mr.M.Mohammed Ismail	M.S.	Associate Professor	Electronics and Control	23	-

Sl. No	Name	Quali-fica-tion	Designa-tion	Specialization	Yrs of Exp.	No. of Ph.D/ M.Phil students guided
9	Ms.D.Egfin Nirmala	M.E.	Associate Professor	Communica-tion Systems	18	-
10	Mr.H.Hasan Babu	M.E	Assistant Professor (Sr.Gr)	Optical Com-muni-cation	11	-
11	Ms.Parnasree Chakraborty	M.E.	Assistant Professor	Communica-tion Systems	9	-
12	Ms.A.Ambika	M.E.	Assistant Professor	Communica-tion Systems	4 years 5 months	-
13	Ms.M. Padma Usha	M.E	Assistant Professor	Communica-tion Systems	5	-
14	Ms. A. Ayshathul Fouzia	M.E	Assistant Professor	Communica-tion Systems	7	-
15	Ms.A. Latha Maheswari	M.E	Assistant Professor	Communica-tion Systems	10	-

Sl. No	Name	Quali-fica-tion	Designa-tion	Specialization	Yrs of Exp.	No. of Ph.D/ M.Phil students guided
16	Ms.B. Aruna Jeeva Bharathi	M.E.,	Assistant Professor	Communication Systems	6	-
17	Ms.M. Vanmathi	M.E	Assistant Professor	Communication Systems	4.5	-
18	Mr.S. Bibin Sam Paul	M.E	Assistant Professor	Applied Electronics	4.5	-
19	Mr.V. Senthil Rajan	M.E	Assistant Professor	Applied Electronics	4.5	-
20	Mr.R. Iniyavan	M. Tech	Assistant Professor	Communication Engineering	4.5	-
21	Ms.S. Kalaivani	M.E.	Assistant Professor	Applied Electronics	6	-
22	Ms.K. Indra Gandhi	M.E	Assistant Professor	Embedded Systems	4.5	-
23	Mr.A. Ramesh Kumar	M.Tech	Assistant Professor	ECE	3	-

Sl. No	Name	Quali-fica-tion	Designa-tion	Specialization	Yrs of Exp.	No. of Ph.D/ M.Phil students guided
24	Mr.G. Kannan	M. Tech.	Assistant Professor	Embedded Systems	8	-
25	Mr.J. Anand	M.E	Assistant Professor	Embedded Systems	3	-
26	Ms.G. Anuradha	M.E	Assistant Professor	Embedded Systems	10	-
27	Mr.S. Sadhish Prabhu	M.E.	Assistant Professor	Communication systems	10.2	-
28	Ms.V. Kavitha	M.E.	Assistant Professor	Embedded Systems	8.5	-
29	Ms.V. Jean Shilpa	M.E.	Assistant Professor	VLSI Design	4.5	-
30	Ms.S. Anusooya	M.E	Assistant Professor	Applied Electronics	5.5	-
31	Ms.C. Ancy Gloria	M.E	Assistant Professor	Communication Systems	8	-

Sl. No	Name	Quali-fica-tion	Designa-tion	Specialization	Yrs of Exp.	No. of Ph.D/ M.Phil students guided
32	Ms.R. Mahalakshmi @ Issakki	M.E	Assistant Professor	Communica-tion systems	5	-
33	Ms.A. Priya	M.E.	Assistant Professor	Communica-tion systems	9.3	-
34	Ms.B. Sivashanmuga valli	M.E	Assistant Professor	Applied Elec-tronics	9	-
35	Ms.M. Arulvani	M.E	Assistant Professor	Microelectron-ics and VLSI	7	-
36	Ms.P. Maya	M.Tech	Assistant Professor	ECE	1	-
37	Ms.R. Anitha	M.E.	Assistant Professor	Communica-tion systems	8	-
38	Ms.S. Syed Rafiammal	M.E	Assistant Professor	Applied Electronics	8	-

Sl. No	Name	Quali- fica- tion	Designa- tion	Specialization	Yrs of Exp.	No. of Ph.D/ M.Phil students guided
39	Ms.Pradnya B. Patil	M.E.	Assistant Professor	Applied Electronics	4.5	-
40	M.Selvakumar	M.E	Assistant Professor	Electronics Design and Technology	11.5	-
41	Ms.K.Divya	M.E	Assistant Professor	Digital Electronics & Communication systems	2.5	-

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors*

NIL

13. *Percentage of classes taken by temporary faculty – programme-wise information*

NIL

14. *Programme-wise Student Teacher Ratio :*

Sl.No	Programme	Student Teacher Ratio
1	B.Tech(ECE)	15:1
2	M.Tech (Communication Systems)	10:1
3	M.Tech (VLSI and Embedded Systems)	10:1

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

	Sanctioned	Filled	Actual (including CAS & MPS)
Academic Staff	3	3	3
Technical Staff	10	10	10

16. Research thrust areas as recognized by major funding agencies

The following are the list of research thrust areas focused by the Department of ECE, which are recognized by major funding agencies

- ➢ VLSI & Embedded Systems
- ➢ Wireless Communication & Networks
- ➢ Digital Signal Processing
- ➢ Antennas

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

a) National   –   1

b) International   –   0

c) Total Grants received   –   NIL

d) Details of the ongoing Projects

Funding Agency		Project Title	Principal Investigator	Grants Received
International	-	-	-	-
National	DRDO	Anti Jamming techniques for GPS C/A Code Approved for grant of Rs.25.78 Lakhs/- DARM/20/20004/M/15	Prof. PragashN. Nagaiyan	NIL

18. Inter-institutional collaborative projects and associated grants received :

a) National collaboration   b) International collaboration

NIL

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received :

Funding Agency		Project Title	Principal Investigator	Grants Received
International	-	-	-	-
National	AICTE	MODROBS- Antennas for Communication Satellite Space Segment	Dr.K.Natarajan	Rs. 7 Lakhs
	AICTE	MODROBS- Performance Evaluation of fiber optic modulation multiplexing and transmission characteristic	Mr. S. Malarkkan	Rs.10 lakhs

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Funding Agency		Project Title	Principal Investigator	Grants Received
National	AICTE	Multichannel ECG Analysis using Neural Networks	Ms.A.Sumathi	Rs.10 Lakhs

20. Research facility/centre with State Recognition : National Recognition ; International Recognition

<div align="center">NIL</div>

21. Special research laboratories sponsored by / created by industry or corporate bodies

Altera SOPC LAB:

➢ ECE department of B.S.Abdur Rahman University has signed an MoU with M/s Altera Corporation which is a leading IC fabrication Industry in USA.

➢ Under this MoU, a "Center for Excellence in VLSI and Embedded systems - SOPC Altera Lab" is established on 1st March 2010 with industry standard VLSI design software and hardware tools to enable the faculty members and student to carryout advanced research, Consultancy and funded projects.

Embedded Systems Lab

➢ An MoU had been signed in the year 2011 with Gill Instruments, Bangalore.

➢ Under this MoU, an embedded systems lab was setup with MSP430 microcontroller and interface boards to enable faculty and students to carry out advanced research in the design of embedded systems for wireless applications.

22. Publications

Year	National Conference	International Conference	Journals	Total
2009-10	3	-	5	8
2010-11	25	4	1	30
2011-12	19	33	3	52
2012-13	39	16	3	58

Publication details are given in Annexure D - 3.2 and 3.3 (Criterion III)

<div align="center">

Publications Listed In International Database

</div>

Sl.No	Database	No. of Papers
1	Scopus	6
2	IEEE Xplore	8

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Sl.No	Database	No. of Papers
3	Google Scholar	31
4	DOAJ	4
5	Dblp	2

Books with ISBN details of publishers:

1. S.Poornachandra and B.Sasikala, "Digital Signal Processing", *Vijay Nocole Imprints*, 2009,ISBN:81-8209-114-4

2. S.Poornachandra and B.Sasikala, "Signals and Systems", *Tata McGraw Hill*,2010,ISBN:978-0-07-067285-7

Edited Books:

Sl. No:	Proceedings	Year Published
1	1st National Conference on Recent Trends in VLSI Information and Communication(NCRVIC-2009)	2009
2	2nd National Conference on Recent Trends in VLSI Information and Communication(NCRVIC-2010)	2010
3	3rd National Conference on Recent Trends in VLSI Information and Communication(NCRVIC-2011)	2011
4	4th National Conference on Recent Trends in VLSI Information and Communication(NCRVIC-2012)	2012
5	5th National Conference on Recent Trends in VLSI Information and Communication(NCRVIC-2012)	2013

23. *Details of patents and income generated :*

The following students of ECE department have applied for patents.

S. No	Author	Title of the Invention	Organization	Publication/Submitted Date &Journal No
1	Siddharth. B & Seema Farheen	System and method to controlling a robot using parallel port data transmission.	Indian Patent Information Retrieval System	21.01.2011 No:03/2011
2	Siddharth. B	Zigbee based remote controllable and energy saving room Architecture	Patent Office-Government of India	24.11.09

24. *Areas of consultancy and income generated*

NIL

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad :*

1. Dr. S.Kaja Mohideen, Professsor, ECE Department, has visited the following universities during January 2012 in connection with laboratory/institutional visit:

   ❖ Swinburne University, Malaysia

   ❖ University of Malaysia(UNIMAS), Malaysia

   ❖ UNITECH MARA, Malaysia.

   ❖ Pusat Pembangunan Kemahiran Sarawak(PPKS)

During the visit, an MoU has been signed between PPKS and B.S.Abdur Rahman University.

2. Dr. S. Kaja Mohideen, Dr. P.K. Jawahar, Mr. Pragash N. Nagaiyan has visited Mahindra Sathyam Ltd., to initiate the industrial consultancy.

26. *Faculty serving in*

a) *National committees b) International committees c) Editorial Boards d) any other (please specify)*

S. No	Name of the Faculty	Program	Committee	Year	National/ International
1.	Dr. P.K. Jawahar	International Conference on VLSI, Embedded Systems, Signal Processing & Commun. Tech., Ch.	Technical Advisory Committee	2012	National
		Intl Conference on Communication and Signal Processing, Ch.	Advisory Committee	2012	International
		Intl Conference on Next Generation Computing and Communication Technologies, Dubai	Technical Program Committee	2014	International
		2nd National Conf. on Recent Trends in VLSI, Information and Communication, Ch.	Advisory Committee	2010	National
		International Journal of Wireless Personal Communication	Reviewer Springer Publications	2011	International
2.	Dr.S.Kaja Mohideen	National Conf. on Recent Trends in VLSI, Info. & Commun., Ch.	Advisory Committee	2010	National

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs) :*

Sl.No	Year	No. of faculty attended		
		Workshop	Seminar	FDP
1	2013-2014	2	-	4
2	2012-2013	19	1	4
3	2011-2012	12	1	16
4	2010-2011	15	10	2
5	2009-2010	11	5	-

28. *Student projects :*

   ➢ *percentage of students who have done in-house projects including inter-departmental projects*

   ➢ *percentage of students doing projects in collaboration with other universities industry / institute*

Sl. No	Degree & Programme	Batch	% of in-house Projects	% of collaborative projects
1	BE(ECE)	2006-10	100	0
2	BE(ECE)	2007-11	97.83	2.17
3	BE(ECE)	2008-12	91.43	8.57
4	B.Tech(ECE)	2009-13	84	16
5	M.Tech(COS)	2008-10	92.86	7.14
6	M.Tech(COS)	2009-11	92.80	7.40
7	M.Tech(COS)	2010-12	89	11
8.	M.Tech(COS)	2011-13	85.18	14.81
9	M.Tech(VLSI & ES)	2010-12	100	0
10	M.Tech(VLSI & ES)	2011-13	92.86	7.14

29. *Awards / recognitions received at the national and international level by*

   ➢ *Faculty*
   ➢ *Doctoral / post doctoral fellows*
   ➢ *Students*

❖ **Faculty**

Sl.No	Year	Faculty awarded Ph.D.	Faculty Awarded PDF
1	2013-14	-	-
2	2012-13	-	-
3	2011-12	2	-
4	2010-11	1	-
5	2009-10	1	-

❖ **Students**

Sl.No	Name	Awards/Recognitions	Year
1	Ashwin Kumar M.E	40th Rank Anna University- 2012	2012
2	Sangeetha.	Best student award-2012	2012
3	Sirajudeen	University First- Gold medalist in M.Tech(COS)	2013
4	Sangeetha.M	University First- Gold medalist in M.Tech(VLSI & ES)	2012
5	S.Amudha	University First- Gold medalist in M.Tech(VLSI & ES)	2013
6	Mohammed Tajudeen	Best student award	2013
7	T.V.Niveditha	University First-Gold Medalist, B.Tech(ECE)	2013
8	P.Hari Preetha	Best Student Award, Anna University Rank holder-27th Rank	2011

30. Seminars/ Conferences/Workshops organized and the source of funding (national international) with details of outstanding participants, if any.

S. No	Title of the Program	Year			Major Resource Persons	Sponsoring Agency
1.	National Conference on Recent trends in VLSI, Inform & Communication	2010			1.Mr.S.Sundararamam, GM, Airport authority of India, Chennai. 2.Dr.T.Thyagarajan, IEEE chairman, Ch.	IEEE
2.	Symposium -Cresonance'10	2010			Mr.A.Ganesan, Former Chairman, IETE, Ch.	IE & IETE
3.	Workshop on Servicing of Electronics Lab Equipment	2009			1.Mr.Muralikannan, M/S Best Mach. 2.Mr.Nagaraju, M/S Whintech. 3.Mr.Sundar, M/S Aplab Ltd.	IE & IETE
4.	Adv. Commun Systems	2009			Mr.Senthil, Engr, Agilent Technology.	SECE
5.	National Conf. NCRVIC'11	2011			Dr.K.M.Sivakholundu, Project Director, NIOT	SECE, IE & IETE
6.	Workshop on "Embedded System design using MSP 430"	2011			Mr.Gurjeet Singh, Director, Gill Instruments, Bangalore	SECE
7.	Workshop on networks	2011			Mr.Selvaraj, Director, SS Technologies	

S. No	Title of the Program	Year			Major Resource Persons	Sponsoring Agency
8.	Workshop on application of MSP 430"	2011			Mr.Gurjeet Singh, Director, Gill Instruments, Bangalore)	SECE
9.	Workshop on Quartus II Software	7 Jan 2011			Mr. RavindraBabu, Enixs Technologies, Bangalore	SECE
10.	Workshop on application of MSP 430"	6Dec 2010			Mr.Gurjeet Singh, Director, Gill Instru. Bangalore	SECE
11.	Workshop on Full-custom design & FGPA design flow	2010			Resource persons from CoreEL Technologies, Bangalore.	IETE
12.	Symposium -IMPULSE'10	2010			Mrs.S. LeelaSankari GM, South Chennai Telephones.	SECE
13.	Workshop on Wireless sensor networks	2010			1.Dr.P.Swaminathan, IGCAR. 2.Mr.K.Bhaskar, , EmbedUR systems.	IE & IETE
14.	National Conference (NCRVIC'11	2011			Dr.K.M.Sivakholundu, Project Director, NIOT	SECE, IE & IETE
15.	National Conference NCRVIC'12	2012			Mr.T.S.Rangarajan, Chairman, IEEE Madras Section, TCS	SECE,IE & IETE
16.	Workshop on "Matlab"	2012			Dr.Vidyacharan Bhaskar, Professor, SRM University	SECE
17.	Workshop on "VLSI design using Quartus tools"	2012			Enix's Technologies, Trichy	Enixs
18.	Training on Embedded Sys.	2012			Embedded System Solutions, Bangalore	
19.	Workshop on "Embedded System Design"	2011			Electronic Control system, Chennai	IE &IETE
20.	Symposium -IMPULSE '11	2011			Dr.R.Suresh, Director Aerodrome office, Indian Meteorological Dept, Chennai	SECE
21.	National Conference (NCRVIC'13)	2013			Mr. Mohammed Ashraf Khan Chief General Manager, BSNL	SECE, IE & IETE

S. No	Title of the Program	Year			Major Resource Persons	Sponsoring Agency
22.	Workshop on "Embedded System design using Keil Tools"	2013			Embedded System Solutions, Bangalore.	IETE
23.	Workshop on "VLSI design using cadence tools"	2013	41		Cadence Design Solutions, Bangalore	SECE
24.	Workshop on "Wireless Sensor Networks"	2012	45		Eminent Professors from IITM, Anna Univ., Chennai.	SECE, IE, IETE
25.	Workshop on "RF and Antenna Design and Analysis Using Ansoft HFSS Package"	2012	33	14	Entuple Technologies, Bangalore.	SECE
26.	Symposium -IMPULSE'12	2012	250	200	Mr. K. Rajasekar, BSNL, Chennai	SECE
27.	Interdisciplinary workshop on "Electronics Measurements & Instrumentation"	2012	120		Elmack Engg., Services &Scientech Solutions	SECE
28.	Seminar - Engineer's Day	2012	60		Dr. G. B. Jaiprakash Narain, Former Director, NITTTR, Chennai	SECE, IE
29.	Seminar on "Broadband Communication "	2012	240		Mr. V. Venkatesan, DGM, BSNL	SECE, IE & IETE
30.	Symposium - Impulse'2013	2013	200	150	Lt. Col. K.S. Chakravarthi, IETE Chairman, Chennai.	SECE,IE, IETE
31.	Workshop" Advanced RF Measurements for Engineering and Research	2013	20	10	Dr.P.H.Rao, SAMEER, Chennai Mr.Swaminathan, Agilent Technologies	Agilent Technolo-gies
32.	Workshop on "Embedded System Design using MSP430 Processor"	2013	30	-	Mr.G.Kannan, Gill Instruments, Bangalore	IE,IETE

31. *Code of ethics for research followed by the departments*

Code of ethics for research in our University is given in **Annexure D - 3.1 (Criterion III)**

32.   Student profile programme-wise:

B.Tech.(E.C.E)	Appln. Recv	Selected		Pass Percentage	
		Male	Female	Male	Female
2009-13	300	109	37	83.50	100
2008-12	250	102	38	73.53	86.84
2007-11	265	100	33	90.00	90.91
2006-10	280	102	30	85.29	93.33
2005-09	269	104	27	91.34	92.59
M.Tech.(COS)					
2011-13	54	12	15	100%	100%
2010-12	55	12	16	100%	100%
2009-11	75	21	7	95%	100%
2008-10	39	6	8	100 %	100%
2007-09	45	9	9	100%	100%
M.Tech.(VLSI)					
2011-13	28	18	11	100%	100%
2010-12	30	12	8	100%	100%

33.   Diversity of Students :

M.Tech.(COS)	Percentage of the students from the same University	Percentage of students from other Universities within state	Percentage of students from Universities outside the state	Percentage of students from universities in other countries
2013-15	08 %	92 %	0 %	0 %
2012-14	0%	93 %	7%	0 %
2011-13	0 %	4 %	96 %	0 %
2010-12	0%	96.5%	3.5%	0 %
2009-11	4%	92 %	4%	0 %
M.Tech.(VLSI)				
2013-15	3.7%	77.8%	18.5%	0 %
2012-14	0%	100%	0%	0 %
2011-13	0 %	100 %	0 %	0 %
2010-12	0%	95%	5%	0 %

34.   How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Sl.No	Name of the Student	Exam Cleared
1	Mir Mohammed Ali (2010 passed out)	IAS 2012 (AIR:57)

35. *Student progression*

Student Progression		Percentage against enrolled				
		2008-09	2009-10	2010-11	2011-12	2012-13
UG to PG		4.32	3.03	4.69	9.28	4.8
PG to M.Phil.		NA	NA	NA	NA	NA
PG to Ph.D.		NA	NA	3.70	NIL	NIL
Ph.D. to Post-Doctoral		NA	NA	NA	NA	NA
Employed	*Campus Selection*	UG-65	UG-77.5	UG-77 PG-COS-40.7	UG-70 PG-VLSI-60 COS-64.28	UG-56.25 PG-VLSI-14 COS-22.2
	Other than Campus selection	UG-30.68	UG-19.47	UG-18.41 PG-COS-25.9	UG-20.82 PG-VLSI-40 COS-34.72	UG-38.95 PG-VLSI-86 COS-33.3
Entrepreneurs		-	-	-	-	-

36. *Diversity of Staffs :*

Percentage of Staff who are graduate	Academic Year wise			
	2009-10	2010-11	2011-12	2012-13
of the same University	29.03	18.91	18.42	15.0
from other university within state	60.63	75.03	73.47	73.89
from universities from other state	6.89	3.03	5.41	8.33
Universities outside country	3.45	3.03	2.70	2.78

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*

Sl.No	Name of the faculty	Ph.D awarded year	University
1	Dr.S.KajaMohideen	2009	Anna University
2	Dr.P.K.Jawahar	2010	Anna University
3	Dr. C. Tharini	2011	Anna University
4	Dr. S. Selvakumar Raja	2011	Anna University

38.   Present details of departmental infrastructural facilities with regard to

a)   Library

The department has well established department library having

➢   701 text books

➢   115 technical CD's,

➢   25 Lab manuals,

➢   706 student project reports,

➢   7 data books and

➢   121 product catalogue

b)   Internet facilities for staff and students

➢   Our department has a separate computer center with 30 systems fully connected with the internet. Individual personal computers with LAN connections were given to all the faculty members of the department.

➢   Computers were available in all the labs. Students and staffs can access internet from both the computer center as well as from the labs. The university has 1Gbps internet connectivity.

➢   Our University campus has WiFi connectivity, so that staffs and students can access the internet anywhere within the campus.

c) & d) Total number of class rooms with ICT facility

The department has excellent infrastructure facilities. It has 11 UG class rooms and 4 PG class rooms equipped with LCD projector and optional OHP facilities. An air conditioned seminar hall to accommodate about 80 students wherein seminars, guest lectures, and department meetings are organized.

e)   Students' laboratories

The department has the following 13 laboratories with an investment of Rupees 2.5 Crores.

➢   Electronic Devices laboratory

➢   Electronic Circuits laboratory

➢   Communication Systems laboratory

➢   Optical Communication Laboratory

➢   Microwave Laboratory

➢   Microprocessor Laboratory

➢   Linear Integrated circuits laboratory

➢   Digital Electronics Laboratory

➢   System Design Laboratory

➢   Digital Signal Processing Laboratory

- ➢ VLSI Laboratory
- ➢ Advanced Communication & Networks Laboratory
- ➢ Computer Centre.

39. *List of doctoral, post-doctoral students and Research Associates*

a) *from the host institution/university*

Sl.No.	Name of the Research Scholar	Guided By	University
1.	Pragash N. Nagaiyan	Dr.N.Nithyanandham	B.S.Abdur Rahman University
2.	A.Sumathi	Dr.S.KajaMohideen	B.S.Abdur Rahman University
3.	M.Mohammed Ismail	Dr.Paradesi Rao	JNTU, Hyderabad
4.	D.EgfinNirmala	Dr.V.Vaidehi	Anna University,trichy
5	ParnasreeChakraborty	Dr.C.Tharini	B.S.Abdur Rahman University
6	A.Ambika	Dr.C.Tharini	B.S.Abdur Rahman University
7	B. Aruna Jeeva Bharathi	Dr.P.K.Jawahar	B.S.Abdur Rahman University
8	S.Kalaivani	Dr.C.Tharini	B.S.Abdur Rahman University
9.	S.SadhishPrabhu	Dr.N.Nithyanandam	B.S.Abdur Rahman University
10	G.Kannan	Dr.T.Sree Rangarajan	Anna University
11	V.Kavitha	Dr.P.K.Jawahar	B.S.Abdur Rahman University
12	V.JeanShilpa	Dr.P.K.Jawahar	B.S.Abdur Rahman University
13	A.Priya	Dr.S.KajaMohideen	B.S.Abdur Rahman University

b) *from other institutions/universities*

Sl. No.	Name of the Research Scholar	Guided By	Full Time/ Part Time
1	S.Murugeswari	Dr.S.Kaja Mohideen	Part time
2	Vinoth Kumar	Dr.S.Kaja Mohideen	Part time
3	V. Thyagarajan	Dr.S.Kaja Mohideen	Part time
4	P.Nallathai	Dr.N.Nithyanandam	Part time
5	Chandravadana	Dr.N.Nithyanandam	Part time
6	S. Muthukumar	Dr.P.K.Jawahar	Part time
7	J. Salai Thillai Thilagam	Dr.P.K.Jawahar	Part time
8	Bharathi	Dr.P.K.Jawahar	Part time
9	C. Joy Merlin	Dr.C.Tharini	Part time
10	Subhasree	Dr.C.Tharini	Full Time

Sl. No.	Name of the Research Scholar	Guided By	Full Time/ Part Time
11	Kaleeswari	Dr.S.Kaja Mohideen	Part time
12	N.Parthiban	Dr.P.K.Jawahar	Part time
13	Thareeqa Hussain	Dr.N.Nithyanandam	Part time
14	Annie Grace Vimala	Dr.S.Kaja Mohideen	Part time
15	Nazeer Ahamed	Dr.S.Kaja Mohideen	Full Time

40. *Number of post graduate students getting financial assistance from the university.*

Nazeer Ahamed, Full Time Ph.D Scholar is getting JRF Scholarship.

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

Yes

Before starting a new program, several exercise were done as mentioned below :

M.Tech (VLSI & Embedded systems) started in the year 2010:

➢ A comprehensive Study was carried out with regard to the PG programme on VLSI and embedded systems offered by other universities of state and other institutions all over the nation.

➢ The study revealed that most of the state universities offered separate PG programmes in VLSI and Embedded systems.

➢ It was also found that there is a need for engineers with combined knowledge of VLSI and Embedded system

➢ Hence it was decided to offer a new programme on M.Tech VLSI & Embedded system from the academic year 2010-11 onwards

42. *Does the department obtain feedback from*

a. *faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?*

➢ The curriculum and syllabus formulation is carried out by the faculty members of the department collectively

➢ The faculty members also do have representation in the Board of Studies which formally approves the syllabus

➢ The faculty member handling a particular course shall modify certain part of the syllabus based on the need subject to the approval by the Chairman, BOS.

➢ Minor revisions on the syllabus are carried out almost every six months and major revisions once in every four years based primarily on faculty feedback

b. *students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

➢ Student feedback for each course faculty member is obtained twice every semester.

➢ A comprehensive feedback is received from the students and the feedback is presented to the respective faculty to indicate their strengths and weaknesses

➢ The Head of the department will provide appropriate suggestions/guidance to the faculty member based on the feedback received.

➢ The graduating students give a comprehensive feedback about the overall curriculum

c. *Alumni and employers on the programmes offered and how does the department utilize the feedback?*

➢ Curriculum and Syllabus are continuously reviewed and modified every academic year by Board of Studies based on the feedback and comments received from alumni and industrial experts.

➢ New courses are introduced upon comments from employers & industrial experts.

43. *List the distinguished alumni of the department (maximum 10)*

Sl.No.	Name of the Alumni
1.	R.Hari Priya
2.	M.Mohideen
3.	Suhail Ameer Manappat
4.	Guntur Asha Jothi
5	Ashwin Kumar, M.E
6	Mir Mohamed Ali
7	K.Prasanth
8	Siddarth Bhaskar
9.	Hari Preetha.P
10	D.B.Niyoma Reddy

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

Guest lectures and Seminars arranged during 2012-2013

Sl. No	Date	Name of Resource Person	Designation (Ind. / Acad. / R&D)	Topics covered
1	14.08.12	Mr.V.Venkatesan	DGM(BSNL), Chennai	Broadband Communication
2	24.08.12	V.Menaka R.Gayathridevi	FABMAX, Chennai	South India Robo Championship League
3	15.09.12	Dr.G.B.Jaiprakash Narain	Former Director, NITTTR, Chennai	Appropriate Climate Responsive Technologies
4	26.09.12	Mr.K.Rajasekar	DGM, BSNL	Mobile Networks
5	13.12.12	Dr. Krishna M. Sivalingam	Professor,IIT	Internet of Things
6	13.12.12	Dr.P.Vanaja Ranjan	Professor(EEE), CEG, Anna University	WSN-An overview
7	13.12.12	Dr.V.Vaidehi	Prof., MIT, Anna Univ.	Applications of WSN
8	13.12.12	Mr.Md Azad	Director, Reach Information and Commn, Coimbatore	Semiconductors in WSN
9	14.12.12	Dr.Sabitha Ramakrishnan	Professor, MIT, Anna University	Energy Efficiency in MAC Protocols
10	04.02.13	Dr.S.S.Karthikeyan	Asst. Professor IIITDM, Kanchipuram	Microwave Integrated Circuits
11	07.02.13	Mr.Gurjeet Singh	Gill Instruments, Bangalore	Embedded System Application with MSP430 Processor
12	13.02.13	Mr.Paul Dayanadhi	Deputy Director, Shalom Global Academy	VOIP
13	19.02.13	Dr.V.Prithiviraj	Former Principal, PEC	Green Mobile Communication

Guest lectures arrange during 2011-2012

Sl. No	Date	Name of Resource Person	Background Ind / Acad / R&D	Topics covered
1.	19.08.11	Dr.T.G.Vengatesh	Professor, Dept Of Electrical Engg, IIT Madras	Trends In Computer Architecture.
2.	25.08.11	Mr.A.Sugumaran	Divisional Engineer, BSNL(Retd)	Telecom Revolution.
3.	15.09.11	Dr.D.Thirunakkarasu	Chairman,IE(India), Tamil Nadu State Center.	Engineering Preparedness for Disaster Mitigation.

Sl. No	Date	Name of Resource Person	Background Ind / Acad / R&D	Topics covered
4	1.10.11	Dr.R.Suresh	Director, Aerodrome Office,IMD,Chennai	Aviation Meterological Telecommunication
5	4.11.11	Mr.Raja Ananthakrishnan	Professional Trainer	Eternal Life Program
6	11.11.11	Dr.M.Ponnavaikko	VC, SRM University	Natl Education Day
7	15.11.11	Mr.Selvaradji	Director SS.Technologies	Microcontroller and its Real Time Applns
8	06.03.12	Dr. Swarna Ravindra Babu,	Senior Consultant, Wipro Technologies	Sensors Integrator Tech. on Modern day application
9	15.03.12	Dr.Vidhya Charan Bhaskar	Professor, Department of ECE, SRM university.	MATLAB simulation in Digital commn & MIMO systems
10	04.04.12	T.S. Rangarajan	Principal Consultant, TCS & Chairman, IEEE Madras section	Enterprise Computing, Mobile, Cloud and beyond
11	14.08.12	Mr.V.Venkatesan	DGM, BSNL Chennai	Broadband Commns
12	24.08.12	V.Menaka R.Gayathridevi	FABMAX	South India Robo Championship League
14.	26.09.12	Mr.K.Rajasekar	DGM, BSNL	Mobile Networks

Guest lectures arranged during 2010-2011

Sl. No	Date	Name of Resource Person	Background Ind / Academic / R&D	Topics covered
1.	27.07.10	Dr.Swarna Ravindra Babu	Senior Consultant, Wipro Tech., Ch..	GPS Receivers.
2.	30.07.10	Mr.V.Appakutty	Former Chairman, IETE Stu Chapter, Ch.	Enchanting World Of Broadcasting.
3.	04.08.10	Dr .P Swaminathan	Director, E&I Group, IGCAR, Ch.	Sensors & Sensor Network at Fast Breeder Nuclear Reactor.
4.	04.08.10	Dr P.Vanajaranjan	Professor, DEEE, Anna Univ., Ch.	Design Of Embedded Processors for Wireless Sensor Networks.
5.	04.08.10	Dr.T.G.Venkatesh	Professor, Dept Of EEE, IIT, Chennai.	Energy Management Medium Access Layer and Routing in Wireless Sensor Networks.

Sl. No	Date	Name of Resource Person	Background Ind / Academic / R&D	Topics covered
6	05.08.10	Mr.K.Bhaskar	Technical Manager, EMBED-UR Technologies.	Security for Wireless Sensor Networks.
7	05.08.10	Mr.Gurjeet Singh	GILL Instruments, Bangalore.	Wireless Sensor Network & Applns using MSP430.
8	10.08.10	Mr.A.P.Sundar	Project Manager, SANDS, Chennai.	Embedded Systems and its Applications
9.	02.09.10	Mr.S.Selvaradji	Director, SS Technologies.	Design of Electronic Application using Microcontroller
10.	15.09.10	Dr.G.B.Jaiprakash Narain	Former Director NITTTR, Principal, MNM Jain Engineering College, Chennai.	Impending Paradigm shift in Engineering Sciences and future challenges.
11.	30.09.10	Mrs.Leela Shankari	General Manager Ch. Telephones, BSNL.	Telephone Scenario-Past, Present and Future.
12.	11.03.11	Dr.Vidhya Charan Bhaskar	Professor, ECE Dept., SRM Univ., Chennai.	MIMO Wireless Communication.
13.	22.03.11	Dr.K.Murali	Professor, Physics Dept., Anna University, Ch.	MIMO - Chaotic Communication.
14.	20.04.11	Dr.K.M. Sivakholundhu	Project Director, NIOT, Chennai.	GPS Receivers.

Guest Lectures arranged during 2009-2010

Sl. No	Date	Name of Resource Person	Background Ind / Academic / R&D	Topics covered
1.	01.09.09	Dr.Mala John	Professor, ECE Dept, MIT, Chennai.	Design aspects and features of ANUSAT Satellite.
2.	24.09.09	Dr.V.Vaidehi	Professor, ECE Dept, MIT, Chennai.	Advancement in Wireless technology.
3.	06.10.09	1.Mr.Ramkumar 2.Mr.Rajkumar	1.Senior Faculty (Animation), 2.Senior Faculty (Audio Engineering) Sch. of Audio Engg.	1.Animation Development. 2.Audio Engineering
4.	08.10.09	Mr.Chandrasekar	Chief Consultant Pashin Consultancy & Training Pvt Ltd.	Presentation on project design, development and project competency.

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Sl. No	Date	Name of Resource Person	Background Ind / Academic / R&D	Topics covered
5.	18.11.09	Mr.Senthil	Engineer, Agilent Technology.	Advanced Communication systems.
6.	3.02.10	Dr.S.Muttan	Professor, ECEDepartment, Anna Univ, Ch	Recent trends on Bio-medical Instrumentation.
7.	17.02.10	Dr.A.Ganesan	DGM,BSNL(Retd) Ex Chairman, IETE.	Wireless broadband Access
8.	31.03.10	Mr.S.Sundararaman	General Manager Airport Authority of India, Chennai.	Recent Equipment Used in airport Authority of india.

45. List the teaching methods adopted by the faculty for different programmes.

➢ Our faculty uses some of the modern teaching methodologies to improve the quality of the students. They include the use of LCD projector. Using PPT's the technical concepts were explained clearly.

➢ To enhance comprehension animated and simulation videos were shown to the students, so that they can easily understand the concepts. Using web resources, lectures and demonstrations of leading global universities like MIT, Stanford etc, are shown and discussed with the students during seminar sessions.

➢ For theory courses without associated practical sessions, working models, actual components and circuit boards are taken to the class room for demonstration.

➢ Web based learning also practiced among the faculty members.

➢ A website has been created for each course and the content regarding to that course will be available in the website.

➢ The students can able to ask doubts to a faculty through the website with the use of a forum. They also submit their assignment online and faculty can evaluate it and grade the assignment.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

Lesson Plan

The faculty prepares a lesson plan for each course at the beginning of every semester, which are audited for compliance with the programme and course objectives

Evaluation

Student evaluation is based on the performance in Continuous Assessment Tests, Assignments, mini-projects, and the End Semester examination for each course. The evaluations are later audited by DAAC.

DAAC

Department Academic Audit Committee meets for each assessment period to audit the syllabus coverage, setting of the question paper and evaluation scheme of the answer scripts of each Continuous Assessment Test.

47. *Highlight the participation of students and faculty in extension activities.*

Sl.No.	Name of the Staff/ Student	Extenstion Activity
Faculty:		
1.	M.Mohamed Ismail	AMIE department coordinator
2.	A.Ramesh kumar	Handled IGNOU classes
3.	M.Mohamed Ismail	Handled classes for Ford employees
4.	M.Mohamed Ismail	Handled classes for IES coaching Academy
5	P.K.Jawahar	----do------
6	D.Egfin Nirmala	----do------
7	A.Ayshathul Fouzia	----do------
8	R.Iniyavan	----do------
9.	S.Bibin Sam Paul	----do------
10	H.Hasan Babu	Youth Red Cross Asst. Coordinator
11	A.Ramesh Kumar	Rotaract Club member
12	S.Sadhish Pradbhu	NSS officer
13	S.Hemalatha	Gave training to Crescent School students on Electronics
Students:		
14	T.Ahilan	Rotaract Club secretary
15	Ashwin.M.E	ISTD secretary
16	Mohamed Arshad	Best NSS volunteer

48. *Give details of "beyond syllabus scholarly activities" of the department.*
   ➢ Impulse – Annual National level technical Symposium
   ➢ Cresonance – Annual Intra CollegeTechnical Symposium
   ➢ Electronics Quiz Club by Department of ECE.
   ➢ Hobby Electronics Club by Department of ECE.

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

   B.E programme was accredited by NBA twice 2001-04, 2006-09
   M.E/M.Tech programme was accredited by NBA during 2008-11

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

   ➢ Well established VLSI, Embedded systems and communication systems lab to cater to the needs of industry.

   ➢ Guest lectures on recent technological developments on Electronics & Communication Engineering are conducted periodically.

   ➢ Hands on training and seminar to faculty and students on latest hardware and software tools.

   ➢ Industrial visit are arranged to learn the latest trends in ECE.

   ➢ Sessions on knowledge sharing among technical teams on fundamental and recent developments of ECE.

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

   Strengths : i) Qualified and Experienced teachers with research motivation

   ii) Enhanced infrastructure

   iii) Updated curriculum to match industry standards

   iv) Continuous training on latest areas of Electronics & Communication

   v) Good placement records

   Weakness : i) Less number of faculty members with doctoral degree.

   ii) Consultancy activities are to be improved

   Opportunities : i) Improvement of student teachers ratio.

   ii) Number of Research publications and patents .

   iii) Development of research centre.

   iv) Collaborative research should be motivated.

   Challenges : Attitude of students towards technical knowledge.

52. *Future plans of the department.*

   ➢ Interdisciplinary research in the emerging areas of electronics and communication, automotive electronics, industrial engineering and others

   ➢ Introduction of professional development programs for faculty members like post-doctoral and exchange programs

   ➢ Faculty and students exchange programme with national and international universities and institutes.

   ➢ Development of in-house publications to highlight the ongoing research activities and contribution made by the department for further growth of the discipline.

   ➢ Establish centre of excellence in thrust areas of the research in the department namely VLSI Design, Wireless Sensor Network, Image processing, Robotics.

   ➢ to successfully complete sponsored project from various funding agencies

   ➢ Provide consultancy services for related industries.

Department of Electronics & Instrumentation Engineering

1.   Department of Electronics and Instrumentation Engineering Department

The department was started as the department of Instrumentation and Control Engineering in 1995 and renamed as the department of Electronics and Instrumentation Engineering in 2009. The department is offering B.Tech., M.Tech and Ph.D. programmes.   Our graduates enter the workforce with excellent knowledge, analytical and communication skills that employers seek. The department offers several major areas of study, including Control systems, Process control, Digital Electronics, VLSI, Microcontroller and its interfacing, Embedded systems, Fault tolerant control, Optimal control, Industrial instrumentation and Biomedical Engineering and has a sophisticated process control laboratory which is in par with the industry.

2.   Year of establishment

Established in 1995 as Instrumentation and Control Engineering and renamed as Electronics and Instrumentation Engineering in 2009

3.   Is the Department part of a School/Faculty of the university?

Yes

The Department of Electronics and Instrumentation Engineering is a part of the "**School of Electrical and Communication Sciences**".

4.   Names of programmes offered

Degree	Name of the Programme
Bachelors Degree	☐ B.Tech (Electronics and Instrumentation Engg) - Full time
Masters Degree	☐ M.Tech (Electronics & Instrumentation Engg) - Full time
Ph.D	☐ Ph.D – Full time / Part time

5.   Interdisciplinary programmes and departments involved: NIL

6.   Courses in collaboration with other universities, industries, foreign institutions, etc.

Two weeks internship for M.Tech. Programmes with industries.

7.   Details of programmes discontinued, if any, with reasons

NIL

*8.   Examination System***:**

Semester and Choice Based Credit System

9. *Participation of the department in the courses offered by other departments*

The department of EIE offers the following courses to the other departments is furnished below:

Sl. No.	Course Name	UG / PG	Semester	Dept
1	Applied Soft Computing	PG	Elective	ECE
2	Control system	UG	VI	ECE
3	Electronics Measurements & Instrumentation	UG	V	ECE
4	Process Control Instrumentation	UG	V	Polymer
5	Electronics and Control system	UG	V	Aerospace

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)*

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	3	3	3
Asso. Professors	1	1	1
Asst. Professors	8	8	8

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Name	Qualification	Designation	Area of Specialization	Experience (in years)	Research Guidance
Dr. D.Najumnissa Jamal	B.E. M.E. Ph.D.	Professor & Head	EEE C&I Medical Electronics	23	3 (guiding)
Dr.T.R.Rangaswamy	B.E. M.E. Ph.D.	Professor & Dean Academic	EEE Applied Electronics Process control	42	3 (completed) 8 (guiding)
Dr. U. Sabura Banu	B.E. M.S. Ph.D.	Professor	ICE Electrical Engg. Process Control	12	5 (guiding)

Name	Qualification	Designation	Area of Specialization	Experience (in years)	Research Guidance
Mr. S. Shahul Hamid	B.Sc. D.M.I.T M.Sc. (Engg.)	Assoc. Professor	Physics Instrument Technology Control System	34	NA
Ms. M.S. Murshitha Shajahan	B.E. M.E.	Assistant Professor (S.G)	EIE Applied Electonics Power Plant Instrumentation	11	NA
Ms. G. Anidha	B.E. M.E.	Assistant Professor	EIE IE	7½	NA
Ms. P.R. Hemavathy	B.E. M.E.	Assistant Professor	ICE C&I	6	NA
Ms. P. Anbumalar	B.E. M.E.	Assistant Professor	ICE IE	2½	NA
Ms. M.P. Nageswari	B.E. M.E.	Assistant Professor	ECE C&I	2	NA
Ms.B.Pushpa	B.E. M.Tech	Assistant Professor	E&C E&I	3	NA

Name	Qualification	Designation	Area of Specialization	Experience (in years)	Research Guidance
Mr.N.Sivaramakrishnan	B.E. M.E.	Assistant Professor	E&I Power Electronics	1	NA
Mr. M. Yuvarajan	B.E. M.E.	Assistant Professor	EEE High Voltage	5	NA

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors*

NIL

13. *Percentage of classes taken by temporary faculty – programme-wise information*

NIL

14. *Programme-wise Student Teacher Ratio :*

B.Tech. (EIE)   -   14 : 1

M.Tech. (EIE)   -   7 : 1

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

	Sanctioned	Filled	Actual
Technical	5	5	5
Administrative	2	2	2

16. *Research thrust areas as recognized by major funding agencies*

The key areas of research identified in the department by major funding agencies are:

➢ Thermal Power Plant

➢ Process Control

➢ Intelligent and Optimization Techniques

➢ Biomedical Engineering

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

NIL

18. *Inter-institutional collaborative projects and associated grants received*

a) *National collaboration:*

National Institute of Ocean Technology, (project without grants)

b) *International collaboration :*   NIL

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received:*

Sponsoring agency	Duration	Financial outlay (Rs in Lakhs)	Investigator & Co-investigators	Project title
AICTE	6 months	8.00	Dr. I. Mohamed Rafeequdin	Project Oriented Power Electronics Lab
AICTE	2 years	3.70	Dr.T.R.Rangasamy	Cascaded Fuzzy Logic Controller for Combustion Control of Utility Boiler
AICTE	2years	2.00	Dr. T. Thyagarajan Dr. S. Nagarajan	Fuzzy Logic based Split Range pH Control
Total		**13.70**		

20. *Research facility / centre with*
    a. *State recognition*   **:**   **Nil**
    b. *National recognition*   **:**   **Nil**
    c. *International recognition* **:**   **Nil**

21. *Special research laboratories sponsored by / created by industry or corporate bodies*

    A Centre of Excellence for Green Energy Management is proposed to be established in the campus in partnership with M/s. National Instruments Inc., USA involving the following departments.
    (i)   Department of Electrical and Electronics Engineering
    (ii) Department of Electronics & Instrumentation Engineering
    (iii) Department of Mechanical Engineering

    It is proposed to establish the centre in a phased manner, spanning over a period of 3 years which amounts to Rs.1.25 Crores out of which Rs.37,50,000/- will be sponsored from National Instruments

22. *Publications:*
    Number of papers published in peer reviewed journals (national / international)

The research publications made by the faculty members of this department is presented as an **Annexure D - 3.2 (Int. Journal) & 3.3 (Natl. Journal) (Criterion III).** However, the consolidated statistics is furnished below:

Year	Int. Journal	Nat. Journal	Int. Conference	Nat. Conference	Total
2013 – '14	7	-	-	-	7
2012 – '13	1	-	9	10	20
2011- '12	2	2	6	2	12
2010 – '11	6	-	4	5	15
2009 – '10	2	-	-	2	4
2008 – '09	5	-	4	1	9
Total	**18**	**2**	**23**	**20**	**62**

Edited Books:

Rangaswamy T R, Najumnissa Jamal. D., Sabura Banu U., "Proceedings of the National Conference on Modelling, Control and Optimization of processes NCMCOP 2013", Dept. of Electronics & Instrumentation Engg., B.S. Abdur Rahaman University, Chennai 2nd April 2013.

Books with ISBN with details of publishers:

S. No	Name of the Author	Name of the Book	Publishers	ISBN No.	Year
1	Dr. T.R. Rangaswamy	Engineering Basics: Electrical, Electronics and Computer Engineering 3/ED	New Age International (P) Ltd., Publishers, New Delhi	ISBN No. 978-81-224-1274-1	Aug, 2010
2	Dr. U. Sabura Banu	Proceedings of International conference on System dynamic & control	I.K. International Publishing House Pvt. Ltd.	ISBN, 978-93-80578-58-3.	2010
3	Dr. U. Sabura Banu	Basic Electrical Engineering	I.K. International Publishing House Pvt. Ltd.	ISBN No. 978-81-89866-34-1,	2007
4	Dr. U. Sabura Banu	Lecture Notes in Computer Science	Springer Verilog Berlin Heidelberg publications	ISSN 0302-9743, ISBN-10 3-642-17562-7, ISBN-13 978-3-642-17562-6	2010

H-index: 3

Publications listed in International Data base

Name of the International Database	No. of paper indexed	Average Citation index	Range of Citation Index		Average Impact Factor	Range of Impact Factor	
			Min	Max		Min	Max
SCOPUS	3	4	-	-	0.9	0.41	2.61
Google Search	6	4	2	21	0.9	0.41	2.61

23. *Details of patents and income generated :* **Nil**

24. *Areas of consultancy and income generated :*

Year	Area of consultancy	Income generated
2013 - 14	Seminar on Modern Trends in Controls and Instrumentation for Thermal Power Station held on 8.10.13	Rs. 7,400/-
	Workshop on digital Image processing using Matlab and Lab view held during 3.9.13 and 4.9.13	Rs.16,000/-
	Workshop on Fractional order modelling and control held during 27.8.13	Rs. 5,500/-
2011 - 12	ICMR sponsored Workshop on Application of Mat lab and Lab view for biomedical applications held during 14.12.11 and 15.12.11	Rs.17,400/-

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad*

International:

Sl. No	Name of the Faculty	Name of the Institution visited	Purpose of visit
1	Dr. U. Sabura Banu, Prof/ EIE	Planetary Scientific Research Centre, Deira Dubai, UAE	Keynote speech on "Swarm Intelligence based Optimal Process Automation"
2	Dr.T.R.Rangaswamy Prof/EIE	Houston, U.S.A	International Conference & Guest Lecture

National:

Date	Name of the Faculty	Name of the Institution visited	Purpose of visit
12/9/13	Dr. D.Najumnissa Jamal, Prof./EIE	SRM University, Kattankulathur	Chair person for National conference on Emerging innovations in electronic instrumentation and automation
28/2/13	Dr. D.Najumnissa Jamal, Prof./EIE	Sri Sairam Engineering College	Chair person for National conference on Intelligent control system and automation techniques.
22/2/13	Dr. D.Najumnissa Jamal, Prof./EIE	Yokogawa Technical School's Meet	Talk on "How DCS is used at B.S.Abdur Rahman University for the student community and Research"
6/10/12 & 7/10/12	Dr. U. Sabura Banu, Prof/EIE	Planetary Scientific Research Centre, Deira Dubai, UAE	Keynote speech on "Swarm Intelligence based Optimal Process Automation"
20/9/12	Dr. D. Najumnissa Jamal, Prof/EIE	SRM University, Kattankulathur	Lecture and hands on session on Classification of EEG signal using Matlab
13/8/12	Dr. U. Sabura Banu, Prof./EIE	Bharath University, Chennai	Lecture on 'Evolutionary optimization for process control applications in EEFA',
21/3/12	Dr. D.Najumnissa Jamal, Prof./EIE	SRM Easwari Engg. College, Chennai	Lecture on Characterisation of Epileptic EEG using PCA, and wavelet transform at the ICMR sponsored Workshop on "Medical Imaging Techniques & Telemedicine'
25/8/11	Dr. U. Sabura Banu, Assoc. Prof./EIE	Easwari Engg. College, Chennai	Lecture on "Fuzzy logic control using MATLAB"
7/2/11	Mrs. D. Najumnissa Jamal, Assoc. Prof., EIE	Easwari Engg. College, Chennai	Lecture on "Electro Encephalogram"
26/11/10	Dr. U. Sabura Banu, Assoc. Prof./EIE	Anna University	Lecture on "Particle Swarm Optimization, Bee Colony Optimization & Fuzzy clustering"

Date	Name of the Faculty	Name of the Institution visited	Purpose of visit
22/8/10	Dr. U. Sabura Banu, Assoc. Prof./EIE	MIT, Manipal	Chaired a session on "Control System" in an International conference on System Dynamic & Control, "ICSDC – 2010"
18/12/09	Dr. U. Sabura Banu, Assoc. Prof./EIE	Easwari Engg. college	Lecture on 'Fuzzy clustering for CSTR'

26. *Faculty serving in*

   a) National committees b) International committees c) Editorial Boards d) any other (please specify)

c) *Editorial Board:*

Year	Name of the Faculty	Name of the Editorial Board
2012-13	Dr. D. Najumnissa Jamal, HOD/EIE	International Journal of Computer Science
,,	Dr. D. Najumnissa Jamal, HOD/EIE	International Journal of Medical Imaging and Health informatics
2012-13	Dr. U. Sabura Banu, Prof/EIE	Applied soft computing
2011-12	Dr. U. Sabura Banu, Prof/EIE	International Journal of Petroleum & Gas Engineering
		Applied soft computing
		Journal of Engineering and Applied Science
,,	Dr. D. Najumnissa Jamal, HOD/EIE	International Journal of Medical Imaging and Health informatics
	Dr.T.R.Rangaswamy	AMSC (France) International Journal

d) *Any Other Committees:*

   Almost all the senior faculty members of the Department serve in various committees including Academic Council of other universities, Board of Studies of other universities, research supervisor for other universities, Technical Advisory Committee member for very many conferences organized in the State of Tamil Nadu, Board of Management of other institutes, Interview Panel member for other universities, Doctoral Committee member for other university research scholars, Ph.D. thesis evaluation expert for other universities etc.

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

   Almost all the faculty members (100%) have attended orientation programs, workshops, training programmes in the university and at other organisations

S. No.	Name & Designation	No. of Programme Attended			
		2013-14	2012-13	2011-12	2010-11
1.	Dr. D. Najumnissa Jamal, Professor and HOD	3	6	2	3
2.	Dr. T.R. Rangaswamy, Professor and Dean (Academic)	1	3	-	
3.	Dr. U. Sabura Banu, Professor	3	14	6	8
4.	Mr. S. Shahul Hamid, Associate Professor	-	3	-	-
5.	Ms. M.S. Murshitha Shajahan, Assistant Professor (S.G)	1	7	3	2
6.	Ms. G. Anidha, Assistant Professor	1	5	2	4
7.	Ms. P.R. Hemavathy, Assistant Professor	1	4	2	1
8.	Ms. P. Anbumalar, Assistant Professor	1	2	3	2
9.	Ms. M.P. Nageswari, Assistant Professor	1	6	1	-
10.	Ms.B.Pushpa, Assistant Professor	3	6	-	-
11.	Mr.N.Sivaramakrishnan, Assistant Professor	2	2	-	-
12.	Mr. M. Yuvarajan, Assistant Professor	1	-	-	-

28. *Student projects*

Percentage of students who have done in-house projects including inter-departmental projects

The statistics showing the percentage of projects done both in house and with support of the industry is furnished below.

B.Tech

Year	In-house Project	Industry / University / Institute Project
2009 - 13	100%	-
2008 - 12	77%	23%
2007 - 11	77%	23%
2006 - 10	90%	10%
2005 - 09	67%	33%

M.Tech

Year	In-house Project	Industry / University / Institute Project
2011 - 13	75%	25%
2010 - 12	88%	12%

29. *Awards / recognitions received at the national and international level by*

Faculty:

➢ Dr. U. Sabura Banu, Assoc. Prof. /EIE received "Shiksha Rattan Purashkar" award by India International Friendship society, New Delhi on 12th October2011, at Speaker Hall, Constitution Club Rafi Marg, New Delhi for service to research and teaching.

➢ Dr. U. Sabura Banu, Assoc. Prof / EIE selected for inclusion in "2000 outstanding intellectuals of the 21st Century, 2011" by the International Biographical Centre, Cambridge, England.

➢ Dr. U. Sabura Banu, Assoc. Prof / EIE selected for inclusion in "Who's Who in the World 2012 issue" by Marquis Who's Who Biographical Centre.

Students:

Sl. No.	Name & Year	Event / Organized by	Prize won
1.	S. Yasmin, II E&I	Representing the Tamilnadu State Ball Badminton team and for winning the Junior National Championship 2013-14, held at Bhilai, Chhattisgarh from 19th to 23rd October 2013.	First prize
2.	Vigneswar and Ajheem Khan, III year students	Project display at RMK, St Josephs and Hindustan University.	First prize
3.	Sriram Sukumar, Final year ICE student	Awarded the best student award for the 2007-11 batch	
4.	Syed Yaseen, II year EIE	Creshunt (Intra college photography contest)	First prize
5.	P. Moses Jeba Chandran, II year EIE	5th junior National Ball Badminton conducted by Ball Badminton federation of India on 12-05-2011 & 15-05-2011	First place
6.	Praveen J, II year EIE	Photography Contest at IIT Madras on 25-1-2011 & 29-1-2011	First place

7.	Vignesh. M, III EIE	Robot Race at Sai Ram Engineering College on 02-03-2012	First prize
8.	Vignesh. M, III EIE	Hell Bots at Sri manakula vinayagar Engineering College on 24-02-2012 & 25-02-2012	Second prize
9.	Vignesh . M, III EIE	BOTCAR, at Coimbatore Institute of Technology on 27-01 2012 & 28-01-2012	First place
10.	Vignesh . M, III EIE	Treasure Hunt at Coimbatore Institute of Technology on 27-01 2012 & 28-01-2012	Second place
11.	Vignesh . M, III EIE	All Terrain (Robotic) at Madras Institute of technology on 27-01-2012 & 28-01-2012	Second place
12.	Ajeem Khan R. Vigneshwar .K.G II EIE	Won1st place with cash award of 2500/-, Hindustan university Aug 2012.	First place
13.	Ajeem Khan R. Vigneshwar .K.G II EIE	Won 2nd Place with cash award of 1500/-, RMK College of Engg, July 2012.	Second place
14.	Fathima Rizwana A.S, II EIE,	Rangoli at BSA University on 4-3-2011 & 5-3-2011	Second place

30. *Seminars/ Conferences/Workshops organized and the source of funding (national International) with details of outstanding participants, if any.*

Year	Name of the Programme	Outstanding Participants	Fund Received	Source of Funding
2013-14	Workshop on "Controls and Instrumentation for Thermal Power Stations" held on 8.10.13	Mr. Vijayaraghavan, Mr. Venkata Subramaniam, Akarshana Tech Pvt. Ltd., Chennai	20000	BSAU
2013-14	National Level students technical symposium Precision plus 2013	Mr.M.Sivarama krishna, Scientist, IGCAR	25000	BSAU
2013-14	Workshop on digital Image processing using MATLAB and LABVIEW		27,000	BSAU
2013-14	Workshop on Fractional order modelling and control	Dr. J. Prakash, Prof & HOD, MIT Ms.K.Sundaravadivu St. Joseph College of Engg., Chennai	15,000	BSAU

2012-13	National Conference on "Modelling, Control and Optimization of Processes" on 2/4/13	Mr. D. Sundarasekaran Madras Fertilizer Ltd., Chennai	30,000	BSAU
2011-12	Two days workshop on "Application of Matlab and LabVIEW for Biomedical Applications on 14/12/11 and 15/12/11	Dr. T.S. Kanaka, Neuro Surgeon, Sri Santhanakrishna Padmavathi Health Care & Res. Foundation, Ch	25,000/-	Indian Council of Medical Research (ICMR)
2011-12	National Level students technical symposium Precision plus 2011	Mr. Karthikeyan Nagarajan, CTS	25000	BSAU
2010-11	National Level students technical symposium Precision plus 2010	Dr.V.Ramanathan, Principal , ACT College, Nelvoy.	25000	BSAU
2009-10	National Level students technical symposium Precision plus 2009	Mr.Debasish Majumdher, Director, Invensys India Pvt Ltd, Ch	25000	BSAU

31   Code of ethics for research followed by the departments

The guidelines and code of ethics for responsible conduct of research followed in our University is enclosed as **Annexure D - 3.1 (Criterion III).**

32.   Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG 2009 -13	68	45	13	65%	100%
UG 2008 -12	34	25	9	100%	100%
UG 2007 -11	34	18	16	67%	100%
UG 2006 -10	30	23	7	82%	100%

33.   Diversity of students

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
PG 2013-15	Nil	100%	Nil	Nil

PG 2012-14	Nil	90%	10%	Nil
PG 2011-13	Nil	100%	Nil	Nil
PG 2010-12	Nil	87.5%	12.5%	Nil

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

Year	GATE	Civil Services	Defense Services	Other competitive Examinations*
2009-13	1	-	-	30
2008-12	-	-	-	26
2007-11	-	-	-	21
2006-10	-	-	-	20
2005-09	-	-	-	24

35. *Student progression*

Student Progression	Percentage against enrolled
UG to PG	8%
PG to M.Phil.	Nil
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	Nil

Employed
    Campus selection
    Other than campus recruitment
	
	65%
	17%

Entrepreneurs	Nil

36. *Diversity of staff*

Percentage of faculty who are graduates	Percentage
of the same university	--
from other universities within the State	100%
from universities from other States from	--
universities outside the country	--

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*

Sl. No	Name of Faculty	University	Year of PhD degree awarded
1	Dr. D. Najumnissa Jamal	Anna University	2012
2	Dr. U. Sabura Banu	Anna University	2009

38. *Present details of departmental infrastructural facilities with regard to*

a) *Department Library*

SI.NO	PARTICULARS	QUANTITY
1	Text Books	434
2	Student Projects	178
3	Conference Proceedings	115
4	Lab Manuals	16
5	College Magazine	55
6	Course Materials	21
7	Souvenir	17
8	Journals	70
9	Seminar Materials	11

b) *Internet facilities for staff and students*
- The campus is connected through national knowledge network (1Gbps)
- The band width is 100 Mbps
- All the Department faculty members are provided with individual computers and wired internet connection.
- The entire campus is Wi-fi enabled.

c) *Total number of class rooms:* **6**

d) *Class rooms with ICT facility*

All the classrooms are provided with ICT facility

e) *Students' laboratories*

S. No.	Name of the Laboratory	Total Amount (Rs.)
1.	Process Control lab	68,35,000.00
2.	Measurements and Instruments lab - I	7,55,000.00
3.	Measurements and Instruments lab - II	4,10,000.00

S. No.	Name of the Laboratory	Total Amount (Rs.)
4.	Circuits and Devices and Instrumentation lab	6,25,000.00
5.	Control lab	9,40,000.00
6.	Computing Centre	20,00,000.00
Grand Total		**1,15,65,000.00**

Process Control lab is well equipped with sophisticated instruments in par with the automation industries with dedicated computers. Apart from the dedicated computers the lab has 15 additional systems.

Measurements and Instruments lab I & II is equipped with industrial transducers

Measuring and testing equipments.

Computing Centre is equipped with 15 systems for the PG students and research scholars with internet facility

f)   *Research laboratories:*

Sophisticated Process control equipments in the laboratory are also used for Research purpose. The experimental setup is fabricated by the department faculty members. The basic experimental research work is carried out in the process control lab.

39.   *List of doctoral, post-doctoral students and Research Associates*

a)   *from the host institution/university : 6*

Sl. No.	Name of the Candidate	Name of the Supervisor	Title / Topic Research
1.	Ms. B. Pushpa	Dr. D. Najumnissa Jamal	Epileptic Seizure Prediction
2.	Ms. M.S. Murshitha Shajahan	Dr. T.R. Rangaswamy	Performance based Thermal Power Plant Process
3.	Mr. N. Sivaramakrishnan	Dr. U. Sabura Banu	Modeling and Control of Hybrid System
4.	Ms. P.R. Hemavathy	Dr. U. Sabura Banu	Fractional order modeling and control for dynamic system using swarm intelligent techniques
5.	Ms. G. Anidha	Dr. U. Sabura Banu	Industrial automation using digital image processing
6.	Mr. S.K. Lakshmana Prabhu (JRF)	Dr.U.Sabura Banu	Optimal control of MIMO process using swarm intelligence

b) *from other institutions/universities :* **3**

Sl. No.	Name of the Candidate	Name of the Supervisor	Title / Topic Research
	Mr. K. Mathan Kumar	Dr.D.Najumnissa Jamal	Speech Therapy Methodology using Phonetic analysis of various lang.
	Mr. V. Saravanan	Dr.U.Sabura Banu	Analysis of the leather texture for defects, nesting of patterns & inspection in shoe making process
	Mr. M. Ramamoorthy	Dr.U.Sabura Banu	Intelligent Video Surveillance System

40. *Number of post graduate students getting financial assistance from the university.*

  ➢ Lakshamana Prabhu who is a full time research scholar is getting Junior Research Fellow Scholarship (Rs 12,000/-) since September, 2013.

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

  ➢ Whenever a new programme is offered by the Department, the need assessment exercise is always undertaken.

  ➢ To study the need of the programme, representatives from industries, premier universities, internal faculty, Alumni etc., consulted.

  ➢ Based on the recommendations the programme was introduced by the department in the year 2010.

  ➢ The committee constituted comprised of the following expert members to make recommendations for M.Tech. (EIE)

    • Mr. Vijayarajeshwaran – M.D., Vi Microsystems, Chennai
    • Dr. T.Thyagarajan – Professor & Head, EIE, MIT, Anna University
    • Dr.T.R.Rangaswamy - Professor & Dean Academic
    • Dr. I.Mohamed Rafeequdeen - HOD/EIE
    • Ms.D.Najumnissa Jamal – Assoc Professor / EIE, BSAU
    • Dr. U.Sabura banu – Assoc Professor/ EIE, BSAU
    • Mr. Mujeebur Rahman – Alumni & Employee of Yokogawa Limited

  ➢ A draft curriculum and course contents was prepared

  ➢ The draft presented in the meeting of the "Board of Studies".

  ➢ After approval from Board of Studies, the academic council and Board of Management the programme was started.

42. *Does the department obtain feedback from*

a. *Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?*

The department has been practicing a feedback for the teaching learning process

➢ During department meetings the individual faculty members express their opinion on the curriculum; teaching – learning process etc

➢ A class committee is constituted with all the course teachers and student representative. The purpose of conducting class committee meeting is to collect the feedback and comments from both staff and students and taking measures to improve the teaching learning process.

➢ The feedback on teaching, learning and evaluation strategies of the department are obtained and utilized in such a way that they help the students in the achievement of intended learning outcomes.

b. *Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

➢ As a part of the feedback on curriculum and teaching - learning – evaluation process, the students will give feedback one at the beginning of the semester, one at mid semester and one at the end of the semester.

➢ The students' feedback will be assessed by the faculty members to improve them as per the first feedback during the course of the semester.

➢ The students' feedback on the staff will be assessed in the performance appraisal scoring system (PASS) of the individual faculty member and the same is evaluated for the sanction of increments and additional increments.

c. *Alumni and employers on the programmes offered and how does the department utilize the feedback?*

➢ A school level advisory committee is in place which would discuss the various features of the programs offered by the individual department and schools.

➢ The board of studies of the Department of EIE is represented by one senior academician from MIT, Anna University and another senior Industrial expert from M/s. Vi Microsystems. Their feedback on the programs offered are given due significance and accordingly the contents of the program are modified / revised.

43. *List the distinguished alumni of the department (maximum 10)*

1. M.Guruprasad (1997-2001) Senior Program Officer at National Academy of Sciences Biomedical Engineer, National Academies , Washington

2. Saleema Syed (1995- 1999) Manager, Marketing Operations. at McAfee Dallas/ Fort Worth Area.

3. Syed. M . Kadarsha (1995-1999) Arabian International Company for Steel Structure, Golf scaffolding factory, Saudi Arabia

4. Yacoob Sadiq (1995-1999) Tech lead at Manthan Systems, Bengaluru.

5. Harikrishnan Baskaran (2004) Manager - Projects (Measurements Control) Cognizant Technology Solutions, Kerala

6. Brindhaa Gopalakrishnan(1997-2001) Development Engineer at Bosch Rexroth Corp, Germany

7. S.A.Venkateswaran (1997-2001) Control System specialist at Bantrel

8. Noor -ul – Eman (1997-2001) Lead Design Engineer at ABB, Canada

9. Jan Mohamed (1997-2001) DCS Engineer Control Systems Engineer, Almeer Technnical Services Corporation , Quwait

10. Wassim Raja (2001 – 2004) Senior Instrument Engineer, Rosenberg Worley Parsons AS Stavanger Area, Norway

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

S. No.	Date	Resource Person with affiliation	Nature of Programme	Topic
1.	8/10/13	Mr.Vijaya raghavan, Consultant	Seminar	Overview of boilers
2.	8/10/13	Mr.Venkatasubramaniam Akarshana Techpro, Ch.	Seminar	Gas Turbines
3.	7/10/13	Mr.M.Sivaramakrishna, Scientist G, PPCD, IGCAR	Symposium	"Things behind & beyond - electronics - Instrumentation -nuclear industry, a perspective"
4.	23/07/13	Dr. Vijayarajeswaran , Managing Director of VI Micro System Ltd., Ch.	SEIE Inauguration	Wireless sensor networks
5.	26/7/13	Mr. Girish Gopalan, Faculty, Vistamind	Guest Lecture	Higher Education in India and abroad
6.	2/4/13	Mr. D. Sundara sekaran, GM, Plants, Madras Fertilizers Limited	National conference	Instrumentation Projects available in Industries
7.	18/9/12	Mr. M. Sivakumar, Benchmark Electronics Pvt. Ltd., Chennai	Guest lecture	Software Defined Radio
8.	8/2/12	Mr. Ajay Zener, Executive – Student Relations, Career Launcher, Chennai	Guest lecture	Career Opportunities Empowering Minds

S. No.	Date	Resource Person with affiliation	Nature of Programme	Topic
9.	4/11/11	Mr. Shaik Kaliludeen, Graduate Engineer Trainee, SHREE SIDHABALI ISPAT Ltd, Operational Energy Group India Pvt. Ltd. (Alumni - 2007-2010 batch)	Guest lecture	Basic Instrumentation and automation for Circulating Fluidizing Bed Combustion in Thermal Power Plant
10.	31/10/11	Mr. S. Siva Kumar, Application Engineer, Cranes software International limited	Guest lecture	Heart rate monitor and blood pressure measurement
11.	12/10/11	Mr. Mark North, Senior Manager, Business development, TIME	Guest lecture	Higher Studies in Management
12.	5/8/11	Mr. A. Karthikeyan, Technocrat Automation, Chennai	Guest lecture	Industrial Automation
13.	26/7/11	Mr. M. Loganathan (2011 batch ICE) Graduate Engineer Trainee, Wabag VA tech	Guest lecture	How to prepare for Placement for Software and Core companies
14.	19/7/11	Mr. Mohamed Yusuf (2011 batch ICE)	Guest lecture	Industrial Automation Training at Honeywell
15.	12/7/11	Mr. Shaik Mohideen Rawoof (2001 batch ICE)	Guest lecture	Job opportunities in Instrumentation Industries
16.	1/7/10	Mr. Sheik Mohideen Rawoof, Design Engineer, L&T India Ltd., Chennai	Guest lecture	Role of Instrumentation Engineers in EPC companies
17.	29/7/10	Mr. S. Selvaraj, Senior Executive, SS Technologies, Chennai	Guest lecture	Microprocessors & Microcontrollers
18.	4/8/09	Mr. S. Jagan, TIME, Chennai	Guest lecture	Awareness and opportunities for higher education

45. *List the teaching methods adopted by the faculty for different programmes.*

Based on the previous experience and expert guidance available, different teaching methods including, Black board teaching, OHP, Power Point Presentation, ICT tools, Industrial visits, Field trips, Guest Lectures, Self learning, industrial internship, student seminar, library reading, assignments, quiz, Predict - Observe - Explain Concept Formation, Design, mathematical modeling, Simulation, fabrication, prototype, OCW, NPTEL materials, e-Journals and project (mini & major) are adopted for various programs offered by the University.

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*

   ➢ While designing the curriculum for a programme, it is ensured that, various theory, laboratory and project courses of the respective programme are aligned, with the programme objectives and outcomes.

   ➢ To ensure the alignment of course objectives and outcomes with respect to the programme objectives and outcomes, a mapping of these two are done.

   ➢ The Continuous Assessment Test (CAT), End Semester Examination, Department Academic Audit (DAAC) , External Academic Audit Committee (EAAC) and Internal Quality Assurance Cell (IQAC) ensure the programme objectives and outcomes are met through periodical reviews.

   ➢ In addition, a school level advisory committee comprising of all the stake holders including, students, staff, employers, parents, alumni and industries review the system of ensuring programme objectives and outcomes through the teaching leaning process and evaluation methods.

47. *Highlight the participation of students and faculty in extension activities.*

   ➢ Faculty members of this department conduct industrial training program for Ford India.

   ➢ The students of the department are actively involved in different cells like NCC, NSS, YRC etc. and contribute to the extension activities undertaken by the institution.

48. *Give details of "beyond syllabus scholarly activities" of the department.*

No. of Students	YRC	NSS	Rotaract
2009 -13	3	15	8
2008 - 12	2	20	6
2007 - 11	4	20	-
2008 – 10	4	20	-

   ➢ A professional society in the name of "Society of Electrical and Electronics Engineers (SEIE), B.S. Abdur Rahman University" is functioning actively, for more than 13 years.

   ➢ This society of SEIE organizes various technical events / contests including, technical paper presentation, technical quiz, circuit de bugging, instrumania, Robot race, project display, technical treasure hunt, Seminar presentation by eminent personalities from industries and premier academic institutes etc.

   ➢ SEIE organizes a national level technical symposium "PRECISION PLUS" every year. In which more than 150 participants from various institutes across India are participating.

   ➢ The third year B.Tech. (EIE) students are enrolled Professional members in ISA.

Through ISA student branch, many technical events are organized.

> The ISA student branch of our institute was awarded the best student branch for the year 2008

> The department students are encouraged to participate in various regional level and national level technical events.

> The evaluation methods include Seminar presentation, Quiz, mini projects, report writing, simulation, apart from the written test.

> The students are taken to industrial visits and they will give a presentation about their visit to the industry

> Some of the Value Added Courses conducted are:

Sl. No.	Name of the Programme	Resource Person	Period
1.	Workshop on Tuning of controllers for Level process	EIE Dept., B.S. Abdur Rahman university, Chennai – 48.	6.10.12
2.	Workshop on "Electronic Measurement & Instrumn"	Bestmach and Scientech Electronics Pvt. Ltd.	24.9.12.
3.	Workshop on "Electronic Measurement and Instrumentation"	Leading Instrumentation and Measurement Companies like Whintek and Elmack India Pvt. Ltd demonstrated various equipments like Spectrum analyser, Wave Analyser, multimeter etc.	20.9.12.
4.	Workshop on "Control valves, actuators & their industrial applications"	EIE Dept., B.S. Abdur Rahman university, Chennai – 48.	22.08.12
5.	Training programme on MATLAB and its applns	EIE Dept., B.S. Abdur Rahman university, Chennai – 48.	29/3/12 & 30/3/12
6.	Training programme on "LABVIEW & its applns"	EIE Dept., B.S. Abdur Rahman university, Chennai – 48.	26/3/12
7.	Workshop on "Robotics"	S.S. Technologies Chennai	19/9/11 & 20/9/11
8.	Workshop on 'SCADA – Fast tools'	Mr. Naoki Yoshima, Global SCADA Centre, Yokogawa Electric Corporation, Japan	24.8.11
9.	Workshop on 'Calibration Techniques for Process Instruments'	Mr. V.B. Venakteswaran, Executive Director, Nagman Instruments & Electronics (P) Ltd., Chennai	12/1/11
10.	Training programme on "PLC & SCADA"	Prolific Systems Ltd, Chennai.	31/1/11 & 1/2/11

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

   ➤ Accredited for five years by NBA in the year 2006

   ➤ In addition, the department is accredited & certified by ISO for 9001:2008.

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

   ➤ Value addition and lab development projects, Fabricated and developed industry standard experimental setup in the Processes control lab for the Dept of Instrumentation & Control.

   ➤ The department has contributed in the field of thermal, chemical, bio-medical and the power plants and currently research scholars are pursuing research in the performance based analysis and control using intelligent techniques and optimal wireless sensor networks.

   ➤ Industry standard projects undertaken.

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

   Strength:

   ➤ A strong focus on quality teaching with a faculty that excels in teaching students at all levels.

   ➤ Qualified, experienced and innovative faculties.

   ➤ Research expertise in the areas of Process control, intelligent techniques, Thermal power station and Bio medical Engineering.

   ➤ Process Control Lab in par with the Industry used to give practical exposure to students

   ➤ Regular workshop/seminars/Guest Lecture.

   ➤ All faculties concentrate on their up gradation continuously by attending seminar/ workshop/conferences etc.

   Weakness:

   ➤ Percentage of student progression from UG to PG, PG to Ph.D.

   ➤ According to the surveys conducted a constant fall of student's interest at school level in the field of instrumentation is the biggest weakness

   ➤ Efforts to get foreign students in the Department have not materialized yet.

   ➤ Consultancy expectations and outcome are yet to be reached.

   ➤ Additional space for expansion

Opportunities:

➢ Maximum utilization of available resources.

➢ Staff development programme.

➢ High level placement training.

➢ Exposure and participation of students to the national and state level programs, Conference, Seminars and workshops.

➢ Full support to participate in the extracurricular activities and blossoming the ever aspects of life.

Challenges:

➢ To put constant efforts to nourish under privileged students and to help them grow and go up the ladder of success gradually.

➢ It is important to nurture the below average students and bring them to the standard of the university outcome.

➢ Downtrend in the campus recruitment due to industry ups and downs

➢ Competition from premier institutions including, nationally renowned institutions.

➢ Change in attitude by generation

52. *Future plans of the department.*

➢ All the faculty members of the department to be PhD holders to enhance the research output of the department.

➢ Plan to lead and transform engineering education and research to meet the needs of the innovation economy.

➢ The industrial internship process already existing in the department will be augmented by an exposure to industry via consultancy, industrially supervised and sponsored projects, guest lectures, seminars, and active and vibrant professional society activities.

➢ To start new **M.Tech Programme** in "**Biomedical Instrumentation", "Computational Neuroscience"**.

➢ To strengthen collaboration with the industries

➢ To offer certificate / diploma courses in Powerplant Instrumentation , Process Automation etc for the people from Industry.

➢ Improve the quantum of funds obtained through sponsored projects, consultancy, training program etc.

➢ Develop Centre of Excellence for Instrumentation Facilities including calibration and servicing laboratory

SCHOOL OF INFRASTRUCTURE

Department of Civil Engineering

Department of Civil Engineering

1.   Department of Civil Engineering

Department of Civil Engineering, is a part of School of Infrastructure was established in the year 1984 offers B.Tech. in Civil Engineering, M.Tech. in Construction Engineering & Project Management; and Structural Engineering. The department has 27 faculty members (seven with Ph.D. qualification) from various disciplines of Civil Engineering and equipped with nine laboratories with necessary infrastructure facilities.

At present 510 U.G. students and 100 P.G. students are enrolled besides 19 Ph.D. scholars. The department is active in research, consultancy and extension activities. Two funded projects worth 41 lakhs; 136 technical publications, 170 testing / consultancy reports, conduct of 4 National conferences and 3 workshops was achieved in the last four years. The department is striving hard to become a leading school to provide quality education, training and research in Civil Engineering.

2.   *Year of establishment :*   **1984**

3.   *Is the Department part of a School / Faculty of the university?*

Yes

The Department of Civil Engineering is a part of **School of Infrastructure**

4.   *Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D. Sc., D.Litt. etc.)*

Name of the Programmes	
Bachelor Degree	B.Tech. (Civil Engineering)
Master Degree	M.Tech. (Structural Engineering) M.Tech. (Construction Engineering & Project Management)
Doctoral Degree	Ph.D. – Full Time/Part time

5.   *Interdisciplinary programmes and departments involved :* **NIL**

6.   *Courses in collaboration with other universities, industries, etc.:* **N**IL

7.   *Details of programmes discontinued, if any, with reasons:* **NIL**

8.   *Examination System: Annual/Semester/Trimester/Choice Based Credit System:*
Semester and Choice Based Credit System

9. *Participation of the department in the courses offered by other departments:*

The following courses are offered to the other departments:

Sl. No.	Department	Semester	Course Code	Course Name
1.	I year(Mixed group)	I	GEB1101	Engineering Graphics
2.	Electrical & Electronics Engineering	III	MEB2181	Fluid Mechanics & Thermodynamics
3.	Mechanical Engineering (Part Time)	III	PTME 206	Materials & Metallurgy Laboratory

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)*

Teaching Posts	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	5	5	5
Associate Professors	1	1	1
Asst. Professors	21	21	21
Others	-	-	-

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Sl. No.	Name & Qualification	Designa-tion	Specializa-tion	Work Exp. (Years)	Research Guidance Ph.D./M.Tech. (by Research)
1.	Dr. M.S. Haji Sheik Mohammed B.E., M.S., Ph.D.	Professor & Head	Structural Engineering	20	5 (guiding) + 2 (M.Tech. by Research) guiding
2.	Dr. M.V. Molykutty B.Tech., M.Tech., Ph.D.	Professor & Dean	Hydraulics & Water resources Engineering	26	3(guiding)
3.	Dr. E. Rasool Mohideen M.Sc., Ph.D.	Professor	Applied Geology	28	3(guiding)

Sl. No.	Name & Qualification	Designa-tion	Specializa-tion	Work Exp. (Years)	Research Guidance Ph.D./M.Tech. (by Research)
4.	Dr. P. Vasanthi, B.Tech.,M. Tech.,Ph.D.	Professor	Geo Technical Engineering	24	4(guiding)
5.	Dr. J. Revathy, B.E., M.E., Ph.D.	Professor	Structural Engineering	13	4(guiding)
6.	Dr. P.Gajalakshmi B.E., M. Tech., Ph.D	Associate Professor	Structural Engineering	11	1(guiding)
7.	Ms. M. Jothilakshmi B.E., M.E.	Asst. Prof. (Sl. G)	Water Resources Engg. and Management	16	-
8.	Mr. S. Akbar Basha B.E., M. Tech.	Asst. Prof. (SG)	Environmen-tal Engineer-ing	9	-
9.	Ms.V.Vandhana Devi B.E.,M.E.	Asst. Prof. (SG)	Environmen-tal Manage-ment	10	-
10.	Dr. S. Suriya, B.E., M.E., Ph.D	Asst. Prof.	Civil Engineering	1	-

Sl. No.	Name & Qualification	Designa-tion	Specializa-tion	Work Exp. (Years)	Research Guidance Ph.D./M.Tech. (by Research)
11.	Ms. Nisha Khanam B.E., M.E.	Asst. Prof.	Integrated Water Resources Management	5	-
12.	Mr. D. Mohamed Shanavaz B.Tech., M.E., M.S.	Asst. Prof.	Geo informatics	3	-
13.	Ms. S. Mahalakshmi B.E., M.E.	Asst. Prof.	Transporta-tion Engi-neering	7	-
14.	Mr. .A. K. Kaliluthin B.E.,M.E.	Asst. Prof.	Structural Engineering	11	-
15.	Ms. S. Booma, B.E., M.T.P.	Asst. Prof.	Town Country Planning	2	-
16.	Mr. S. Shafeer Ahamed, B.E., M.Tech.	Asst. Prof.	Structural Engineering	2	-
17.	Mr. Binil Sundar, B.E., M.S., M.B.A.	Asst. Prof.	Construction Management	2	-

Sl. No.	Name & Qualification	Designa-tion	Specializa-tion	Work Exp. (Years)	Research Guidance Ph.D./M.Tech. (by Research)
18.	Ms. T. N. Brinda, B.E., M.Tech.	Asst. Prof.	Construction Engineering and Management	2	-
19.	Mr. A. Mohamed Ishak Howth B.E., M.E.	Asst. Prof.	Construction Engineering and Management	1	-
20.	Mr. N. Maharajan, B.E., M.E.	Asst. Prof.	Microwave Remote sensing	6	-
21.	Ms. M. Hazeen Fathima, B.E., M.E.	Asst. Prof.	Construction Engineering and Management	1	-
22.	Mr. M. A. Ajmal Hasan B.E., M.Tech.	Asst. Prof.	Structural Engineering	2	-
23.	Mr. G. Sudhakaran B.E., M.E.	Asst. Prof.	Geo informatics	5	-
24.	Ms. V. Roopa, B.E., M.E.	Asst. Prof.	Construction Engineering and Management	2	-

Sl. No.	Name & Qualification	Designa-tion	Specializa-tion	Work Exp. (Years)	Research Guidance Ph.D./M.Tech. (by Research)
25.	Ms. K. Kanmani, B.E., M.E.	Asst. Prof.	Geomatics	10	-
26.	Mr. D. Manohar, B. E., M.Tech.	Asst. Prof.	Structural Engineering	-	-
27.	Mr. K. Jagadeesh B. E., M.E.	Asst. Prof.	Construction Engineering and Management	-	-

12. *List of senior visiting fellows, adjunct faculty, emeritus professors :*

NIL

13. *Percentage of classes taken by temporary faculty – programme-wise information :*

NIL

14. *Programme-wise Student Teacher Ratio:*

Programme	Student Teacher Ratio
B.Tech. Civil Engg.	18:1
M.Tech. StructuralEngg.	12:1
M.Tech. CEPM	12:1

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

Non-Teaching Staff	Sanctioned	Filled	Actual (Including CAS & MPS)
Academic Support Staff	8	8	8
Administrative Staff	3	3	3

16. *Research thrust areas as recognized by major funding agencies*
   - ➢ Sustainable Construction Materials & Techniques

➤ Rehabilitation & Retrofitting of RCC Elements

➤ Seismic Performance of Composite Materials

➤ Application of Geographical Information Systems

➤ Corrosion Protection Materials and Techniques.

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

Sponsoring Agency	Duration	Financial Outlay (Lakhs)	Investigators	Project Title
DST - SERB	2 years	17.04	Dr. J. Revathy	Seismic Retrofitting of Prestressed Concrete Beams Externally Bonded with Fibre Reinforced Polymer Composites
Ministry of Earth Sciences	2 years	24.00	Dr. P. Gajalakshmi(P.I.) Dr. J. Revathy (Co. P.I.)	Seismic Performance of FRP Confined Steel tube in-filled Concrete Columns **(Recommended)**

18. *Inter-institutional collaborative projects and associated grants received :*

a) National collaboration   b) International collaboration

➤ Dr. M.S. Haji Sheik Mohammed visited University of Malaysia, Sarawak on 12.07.13 to explore collaborative activities between UNIMAS and B.S. Abdur Rahman University. Accordingly three proposals are submitted to University Malaysia, Sarawak (UNIMAS) for possible collaboration.

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received :*

NIL

20. *Research facility / centre with*

➤ *State recognition*   (i) Structural Engineering Laboratory
                                 (ii) Strength of Materials Laboratory

➤ *National recognition*   NIL

➤ *International recognition*   NIL

21. *Special research laboratories sponsored by / created by industry or corporate bodies*

NIL

22.   *Publications:*

Abstract of Publication (2009 - 2013)

Year	International Journal	National Journal	International Conference	National Conference
2009	3	-	1	22
2010	-	1	2	20
2011	2	1	6	19
2012	11	4	7	7
2013 (upto Nov)	5	-	3	14
Total	21	6	19	82

Detailed Journal publication is enclosed in **Annexure D - 3.2 and 3.3 (Criterion III)**

Publication Trend during 2009 – 2013

No. of Journals with I.F	No. of Journals with SJR	No. of Journals/ Mono-graph with CI	Average I.F	Average SJR	Average CI	H index of Department
6	7	2	0.372	0.46	2	1.00

Chapter in Edited Books:

➢ M.S. Haji Sheik Mohammed and G.M. Samuel Knight, "Performance Evaluation of Inhibited Cement Slurry Coating on Steel Rebars", In Baldevraj, U. Kamachi Mudali and S. Rangarajan,eds. *Corrosion Prevention and Control*, pp.106 – 117, Oxford, U.K. : Alpha Science International & Narosa Publishing House, 2009. (CI : 2)

➢ P. Vasanthi, R. Srinivasa Raghvan and P. Prasad, "Ground Water Contamination due to Solid waste Disposal: A solute Transport Model based on Perungudi Dumpyard, Chennai, India.",In Muthu Vairavasamy Ramkumar, eds. Sustainable Future of the Earth's Natural Resources, pp.425-434, Springer-Verlag, Heidelberg, 2013.

Edited Books:

1.   R. Srinivasa Raghavan, E. Chandrasekaran and M. V. Molykutty, "Proceedings of the National Conference on Innovations in Civil Engineering (ICE'09)", B.S. Abdur Rahman University, 19 – 20, March, 2009.

2.   R. Srinivasa Raghavan, M. S. Haji Sheik Mohammed, J. Revathy and P. Gajalakshmi, "Proceedings of the National Conference on Trends and Advances in Civil Engineering (TRACE 2010)", B.S. Abdur Rahman University, 21 – 22, April, 2010.

3. R. Srinivasa Raghavan, J. Revathy, P. Gajalakshmi, and V. Vandhana Devi, "Proceedings of Workshop on Protective Planning and Design of Structures", B.S. Abdur Rahman University, 29 April, 2010.

4. R. Srinivasa Raghavan and P. Vasanthi, "Proceedings of the National Conference on Technological Advances in Civil Engineering (TACE 2011)", B.S. Abdur Rahman University, 3 – 4, May, 2011.

5. R. Srinivasa Raghavan, M. V. Moly Kutty, M. Jothilakshmi and V. Vandhana Devi,

   "Proceedings of the National Conference on Sustainable and Emerging Technologies in Civil Engineering (SETCE'12)", B.S. Abdur Rahman University, 3 – 4, May, 2012.

6. M. V. Moly Kutty, E. Rasool Mohideen, S. Akbar Basha and D. Mohamed Shanavaz, "Proceedings of Workshop on Application of GIS in Civil Engineering", B.S. Abdur Rahman University, 4 – 24, June, 2012.

7. J. Revathy, P. Gajalakshmi. and A.K. Kaliluthin, "Proceedings of National Workshop on Aspects of Earthquake Disaster Mitigation and Management, (AEDM'13)", B.S. Abdur Rahman University, 17 – 19, April, 2013.

8. P. Vasanthi, S. Shafeer Ahamed, T.N. Brinda and V. Roopa, "Proceedings of the National Conference on Innovative Solutions for Sustainable Construction (ISSC'13)", B.S. Abdur Rahman University, 2 – 3, May, 2013.

23. *Details of patents and income generated: NIL*

24. *Areas of consultancy and income generated :*

Abstract of Income Generated (January 2009 – November 2013)

Sl.No.	Details	Amount (Rs.)
1.	Amount generated through Testing & Consultancy • Testing of Construction Materials. • Strength of concrete Cubes, Hollow blocks, Solid blocks, Slab panels and Beam Members. • Testing of Steel Columns & Composite Columns. • Mix Design of Concrete. • NDT test on RCC elements. • Soil Investigation	6,18,452.00
2.	Amount generated through conduct of Training Programmes / Workshop • ETA ASCON STAR, Dubai • Chennai School of Ship Management, Chennai • M/S. ECCI Pvt. Limited, Chennai • Workshop sponsored by NRDMS - DST	14,81,600.00
Total		**21,00,052.00**

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad :*

(a) International:

Sl. No.	Name of Faculty	Purpose of Visit	University / Country Visited
1.	Dr. M. S. Haji Sheik Mohammed Dr. J. Revathy Mr. Mohammed Shanavaz	To Experience the high end lab Facilities and Research Culture To explore the collaborative activities	National University of Singapore(NUS) Nanyang Technological University(NTU) Singapore
2.	Dr. M. S. Haji Sheik Mohammed	To explore the collaborative activities between BSAU & UNIMAS (Joint Research work, Conduct of Intl. workshop etc.)	Universiti Malaysia Sarawak (UNIMAS), Kuching, Malaysia
3.	Dr. M. S. Haji Sheik Mohammed	To explore the collaborative activities	Peoples Skill Centre (PPKS), Sarwak, Malaysia.
4.	Mr. Mohamed Shanavaz	International Workshop	Chinese University, Hongkong

(b) National:

Sl. No.	Name of Faculty	Purpose of Visit	University / Industry Visited
1.	Dr. M.V. Molykutty, Dr. P. Vasanthi, Dr. M. S. Haji Sheik Mohammed Dr. J. Revathy Ms. K. Yogeswari	• To observe the various construction activities & Techniques • To explore the possibility of Testing / Consultancy Work	M/S. Muthiara Thermal Power Plant, Tuticorin

26. *Faculty serving in*

a) National committees b) International committees c) Editorial Boards d) any other (please specify)

a) National committees b) International committees c) Editorial Boards   - NIL

d) Any Other Committee:

Sl. No.	Name	Activity	University
1.	Dr. M. S. Haji Sheik Mohammed Professor & Head	DC Member Expert Member	Anna University Sathyabama University Hindustan University SRM University
2.	Dr. M.V. Molykutty Professor & Dean	DC Member	Sathyabama University
3.	Dr. P. Vasanthi Professor	Expert Member DC member BOS member	Sankara University, SRM University Sathyabama University Vels University

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs). :*

Abstract of FDP/STP/Workshop/Conf. Attended by Faculty (2009 - 2013)

Sl.No.	Year	Nature of Recharging Programme attended by Faculty						Total
		FDP	Workshop	STP	International conference	National Conference	CEP	
1.	2009	5	3	-	1	-	1	10
2.	2010	1	5	5	2	-	-	13
3.	2011	2	2	9	6	2	5	26
4.	2012	1	8	4	4	2	-	19
5.	2013	-	2	2	2	-	-	6
Total Programmes attended								74

28. *Student Projects: Percentage of students who have done in-house projects including interdepartmental projects / percentage of students doing projects in collaboration with other universities / industry / institutes.*

U.G. (B.Tech. Civil Engg.)

Year	In-house Project	Industrial Project
2005 – 2009	100%	-
2006 – 2010	100%	-
2007 – 2011	100%	-
2008 – 2012	100%	-
2009 – 2013	100%	-

**P.G. - M.Tech. Structural Engg. (SE)   and
Construction Engg. & Project Management (CEPM)**

Year	In-house Project		Industrial Project	
	SE	CEPM	SE	CEPM
2008 - 2010	72.22	*	27.78	
2009 – 2011	100%	*	-	-
2010 – 2012	100%	100%	-	-
2011 – 2013	91.30%	100%	8.70	-

* CEPM is introduced during the Academic year 2010 - 11.

29. *Awards / recognitions received at the national and international level by*

   ➢ Faculty

   ❖ Dr. J. Revathy is conferred with 'VISHWAKARMA AWARD' by Construction Industry Development Council, New Delhi on 7 March 2013.

   ❖ Dr. M. S. Haji Sheik Mohammed received Best Poster Presentation Award in the International Conference on Corrosion (CORCON 2005), Chennai on 30 Nov. 2005.

   ❖ Biography of Dr. M. V. Molykutty, Dr. P. Vasanthi and Dr. M.S. Haji Sheik Mohammed was published in Marquis Who's Who in the World (USA) 2010, 2011, 2012 and 2013 Editions.

   ➢ *Doctoral / Post doctoral fellows:*   NIL

   ➢ *Students*

   ❖ Final year B.E. Students (2007-11 Batch) selected (after several preliminary rounds) to participate in the prestigious finals of "Dynamic Design Contest" organized by University of Bristol, U.K. at IIT, Roorkee during October 2010. (Mentor : Dr. M.S. Haji Sheik Mohammed)

   ❖ Mr. C. Ramprasad, B.Tech. (2006–10 Batch) student published a research article "Experimental study on Waste Water treatment using lab scale reed bed system using Phragitis australis" in the International Journal of Environmental Science' during 2012. (Mentor: Dr. M. V. Moly Kutty)

   ❖ K. Suganya Devi, M.Tech. Structural Engineering student (2010-12 Batch) received a project grant of Rs.6,000/- from Tamil Nadu State Council for Science and Technology. (Mentor : Dr. J. Revathy)

   ❖ N. Viswanathan, M.Tech. Structural Engineering student (2011-13 Batch) received a project grant of Rs.10,000/- from Tamil Nadu State Council for Science and Technology. (Mentor : Dr. J. Revathy)

   ❖ Construction of 16 foot long and 2 foot width Ferrocement Boat (Concrete Canoe) by B.Tech. Civil Engineering Students (2009-13 Batch) during November 2011. (Mentor : Dr. M.S. Haji Sheik Mohammed)

- ❖ Mr. Thufile Ariful Mohamed (2009 - 13 Batch) won the best Best Paper Award in the National Conference on "Green Engineering and Technologies" (NCGET – 2011) held at VSB Engineering College, Karur during 23rd and 24th September 2011.

- ❖ Mr. Mohamed Iqbal (2009 - 13 Batch) won the First Prize in Concrete Canoe Competition in the - ANOKHA 2011, organized by Amirtha School Engineering, Amirtha University, Coimbatore during 8-10 Feb.2011.

- ❖ A.Mohammed Shahul Hameed (2009 - 13 Batch) won first prize in paper presentation in the National Level Technical Seminar on Advanced composite Materials at Mohamed sathak Engineering College, Kilakarai , during 3-4 March 2012

- ❖ M. Mohammed Rasiq Mohideen (2005 - 2009 Batch), Student participated in the Basket Ball Zonal Tournament on September 2009, and got the Zonal Winners 2009 award.

- ❖ Mr. Mohammed Raja and Mr. Mohamed Sulaiman (2007-11 Batch) participated in the Foot Ball Zonals conducted by V.R.S.Engineering College, Villupuram and got the Zonal Winners.

- ❖ S. Thariq Ahamed (2011-15 Batch) won First prize in the event Discus Throw in "Chemsports" held at Chengalpattu Medical College during July 2013.

- ❖ G.K. Arul Sujanesh (2009 - 13 Batch) Participated in Inter District Junior Basket Ball Tournament (under 18) & Camp held at Kalpakkam, Chengalpet during 21.09.10 to 01.10.10.

- ❖ B. Abdul Rahman (2009 - 13 Batch) Participated in Chemfest-2010 Basket Ball Tournament held at Chengalpet during 7-8, September, 2010.

- ❖ J. Habeeb Rahman (2009 - 13 Batch) Participated in State level Founder's Trophy Foot Ball Tournament organized by B.S. Abdur Rahman University, Chennai during 25.02.13 - 07.03.13.

- ❖ Mr. B. Rahul (2007-11 Batch) participated in various musical events in TECHOFES, Anna University and SARANG, IIT, Madras and won many prizes.

❖ M.Tech. students presented their research work in various national level conferences.

❖ B.Tech. students also exhibited their presentation skills, model making ability and analytical skills in various national level technical symposiums.

30. *Seminars/ Conferences/Workshops organized and the source of funding (National / International) with details of outstanding participants, if any*

Sl. No.	Month & Year	Name of the Seminar/ Conference/ Workshop	Source of Funding	Details of Outstanding Participants
1.	May 2013	National Conference on "Innovative Solutions for Sustainable Constructions"	B.S. Abdur Rahman Univ	Dr. P. Paramasivam, Professional Fellow National University of Singapore (NUS).
2.	April 2013	National Workshop on **"Aspects of Earthquake Disaster Mitigation and Management"**	B.S. Abdur Rahman Univ	Dr. K. Muthumani, Chief Scientist, CSIR-SERC Dr. S. Kothandaraman, Professor, Pondicherry Engineering College
3.	September 2012.	Workshop on **"Project Financing"**	B.S.A.U	Mr. Gopalakrishnan, Sr. Business Consultant, CTS
4.	June 2012	Training program on "Applications of GIS in Civil Engineering"	DST (NRDMS)	Dr. M.V.M. Ramasamy, Vice Chancellor, Gandhigram University Dr. T.V. Ramachandra, IISc. Bangalore
5.	May 2012	National Conference on "Sustainable and Emerging Technologies in Civil Engineering"	CSIR & B.S. Abdur Rahman University	Dr. M.S. Mathews, Professor, Department of Civil Engineering, IIT Madras.
6.	May 2011	National Conference on "Technological Advances in Civil Engineering"	B.S. Abdur Rahman University	Dr. K. Illamparuthi, Professor & Head, Department of Civil, Anna University.
7	April 2010	Workshop on "Protective Planning and design of Structures".	DST	Dr. N. Lakshmanan, Former Director, SERC Dr. P.N. Raghunath, Professor, Annamalai University

Sl. No.	Month & Year	Name of the Seminar/ Conference/ Workshop	Source of Funding	Details of Outstanding Participants
8	April 2010	National conference on "Trends and Advances in Civil Engg".	B.S. Abdur Rahman University	Dr. A.R. Santhakumar, Emeritus Professor of Civil Engineering, IIT Madras
9	March 2009	National conference on "Innovations in Civil Engineering" ICE '2009'	B.S. Abdur Rahman University	Dr. K. Karunakaran, AICTE Professor, Department of Civil Engineering, Anna University

31. Code of ethics for research followed by the departments :

Code of ethics for research of our University is enclosed in **Annexure D - 3.1 (Criterion III)**

32. Student profile programme-wise:

B.TECH. Civil Engg.

Sl. No.	Batch	Applications Received	Selected		Pass Percentage	
			Male	Female	Male	Female
1	2009- 2013	245	94	2	86	100
2.	2008 - 2012	100	60	10	75	70
3.	2007 - 2011	70	26	5	88.50	100
4.	2006 - 2010	65	27	3	93.75	
5.	2005 - 2009	62	28	2	96.67	

M.TECH. (Structural Engineering)

Sl. No.	Batch	Applications Received	Selected		Pass Percentage	
			Male	Female	Male	Female
1	2011- 2013	25	17	6	100	100
2.	2010 - 2012	18	7	4	100	100
3.	2009 - 2011	20	16	1	81.25	0
4.	2008 - 2010	17	8	3	88.23	
5.	2007 - 2009	17	14	1	100	

M.TECH. (Construction Engineering & Project Management)

Sl.No	Batch	Applications Received	Selected		Pass Percentage	
			Male	Female	Male	Female
1.	2011- 2013	20	15	1	100	100
2.	2010 - 2012	5	4	0	100	-

33   *Diversity of students :*

Name of the Programme (refer to question no.4)	% of students from the same university	% of students from other universities within the state	% of students from other universities outside the state	% of students from other countries
M.Tech (Structural Engineering)				
2009 - 11	6	94	Nil	Nil
2010-12	Nil	91	9	Nil
2011-13	Nil	96	4	Nil
M.Tech (Construction Engineering and Project Management)				
2010-12	Nil	75	25	Nil
2011-13	Nil	87.5	12.5	Nil

34.   *How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

Year	GATE	Civil Services	Other Competitive Examinations
2009-2013	-	-	38
2008-2012	1	2	40
2007-2011	1	-	30
2006-2010	-	-	20
2005-2009	-	-	20

35.   *Student Progression:*

Student Progression	Percentage against enrolled
UG to PG	8%
PG to M. Phil	-
PG to Ph.D	1.14%
Ph.D to Post Doctoral	-
Employed • Campus Selection • Other than Campus Recruitment	35% 41%

36. *Diversity of Staff*

Sl. No.	Faculty Graduation Details	Percentage
1.	From same University / Institution	15
2.	From other Universities within the State	67
3.	From Universities from other States	11
4.	From Universities outside the Country	07

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period:*

Sl. No.	Name of the Faculty	Month & Year of Ph.D. completion
1.	Dr. P. Vasanthi	February 2010
2.	Dr. J. Revathy	February 2010
3.	Dr. P. Gajalakshmi	September 2012

38. *Present details of departmental infrastructural facilities with regard to*

a) *Library*

Name of Teaching Tool	Availability Details
No. of books	1825
CD's, VCD's	110
Student Project reports	For the past 5 years
Facilities also available to access e-journals like ASCE, Elsevier, Springer, etc.	

b) *Internet facilities for Staff and Students*

➢ The campus is connected through National Knowledge Network   (1 Gbps) with band width 100 Mbps.

➢ The campus is Wi-Fi enabled.

➢ U.G. and P.G. Computer laboratory with internet facilities.

c) *Total number of class rooms :*

Sl. No.	Programme	Class Rooms (No.)
1.	B.Tech. (Civil)	9
2.	M.Tech. (Stru. Engg.)	2
3.	M.Tech. (CEPM)	2
4.	Seminar Hall	1
5.	Department Library	1
6.	Laboratory	9
7.	HOD Room	1
8.	HOD Office	1

d)   Class rooms with ICT facility :

➢   All the class room are provided with ICT facility.

e)   Student Laboratories :

Sl. No.	Name of the Laboratory
1.	Strength of Materials Laboratory
2.	Concrete and Highway Laboratory
3.	Survey Laboratory
4.	Soil Engineering Laboratory
5.	Environmental Engineering Laboratory
6.	Computer Laboratory
7.	GIS & Remote Sensing Laboratory

f)   Research Laboratories:

Sl. No.	Name of the Laboratory
1.	Structural Engineering Laboratory
2.	Construction Materials and Technology Lab

39.   List of doctoral, post-doctoral students and Research Associates

(a) From the host Institution / University (BSAU)

Sl.No.	Name of the Scholar	Research Supervisor
1.	Mrs. M. Jothi Lakshmi	Dr. M.S. Haji Sheik Mohammed
2.	Mrs. K. Yogeswari	Dr. E. Rasool Mohideen
3.	Mr. S. Binil Sundar	Dr. M. V. Molykutty
4.	Mr. S. Shafeer Ahamed	Dr. M.S. Haji Sheik Mohammed
5.	Mrs. S. Mahalakshmi	Dr. J. Revathy
6.	Mr. Mohamed Ishak Howth	Dr. M.S. Haji Sheik Mohammed
7.	Mr. N. Maharajan	Dr. M. V. Molykutty
8.	Mr. R. Karunakaran	Dr. M. V. Molykutty
9.	Ms. S. Booma	Dr. P. Vasanthi
10.	Mr. S. Akbar Basha	Dr. J. Revathy
11.	Ms. M. Hazeen Fathima	Dr. M.S. Haji Sheik Mohammed
12.	Ms. V. Roopa	Dr. M.S. Haji Sheik Mohammed
13.	Mr. M. Mohamed Iburahim M.Tech. (By Research)	Dr. M.S. Haji Sheik Mohammed
14.	Mr. Elias A Latiff M.Tech (By Research)	Dr. M.S. Haji Sheik Mohammed

b) From other Institutions / Universities

Sl. No.	Name of the Scholar	Research Supervisor	Name of Other University
1.	Mrs. D. Catherine	Dr. M. V. Molykutty	Anna University
2.	Mrs. Pamila Ramesh	Dr. P. Vasanthi	Anna University
3.	Mr. S. K. Subhani Shareef	Dr. E. Rasool Mohideen	JNTU, Hyderabad
4.	Mr. Mahmed Rafiyoddin Shaphiyoddin Malik	Dr. E. Rasool Mohideen	EGIS (India) Pvt. Ltd, Secunderabad.
5.	Mr. S. T. M Anandam	Dr. P. Vasanthi	Anna University
6.	Mr. R. Ganesh Shankar	Dr. P. Gajalakshmi	Anna University

40. *Number of post graduate students getting financial assistance from the university:*

NIL

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology*

➢ The idea is presented in the department faculty meeting and opinion of the faculty members based on their previous academic and industrial experience are sought. Exclusive senior faculty meeting is also conducted for mind blogging discussions in this regard.

➢ Then departmental committee is constituted to ascertain the need and scope of the programme considering the market demand, status of the programme in the institutions already offering (both reputed institutions & private institutions), opinion from distinguished industry personalities, alumni etc.

➢ Based on the recommendation of the committee and further analysis by HOD, detailed study on strength of the department to offer this programme conducted.

➢ Then, a draft curriculum and syllabus is prepared by a committee comprising of faculty members with specialization in the subject programme.

➢ The draft curriculum is subjected to elaborate discussions in the faculty meeting for fine tuning and subsequent finalization.

➢ After approval from department, the draft is presented in the "Board of Studies".

➢ After the approval from the Academic Council and the Board of Management the programme offered in the Department.

42. *Does the department obtain feedback from*

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

➢ Faculty are directly involved in the preparation of syllabus, teaching learning process and evaluation.

> ➢ In the regular class committee meetings chaired by a senior faculty, feedback from staffs and students is obtained to further improve the curriculum and teaching learning process.

> ➢ Faculty members also got representation in Board of studies, Academic Advisory Committee and Academic council to express their feedback on both curriculum and teaching-learning process.

> ➢ Department level faculty meeting is conducted prior to Board of studies to get a feedback from faculty on curriculum, syllabus and teaching – learning process.

> ➢ Any modifications suggested by the faculty are scrutinized and accordingly appraised in the board of studies for its approval.

> ➢ Department academic audit committee reviews the question paper setting process and evaluation of answer scripts. Any discrepancies found in audit report are appraised to the concerned faculty through Dean / HOD.

b)   *Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

> ➢ The students are given opportunity to express their views on curriculum, syllabus and teaching-learning process.

> ➢ The students are required to give their feed back at regular intervals about the course content, teaching method and evaluation process.

> ➢ The student's feedback is considered in the performance appraisal scoring system (PASS) of the individual faculty and the same is evaluated for the sanction of increments.

> ➢ Online Feedback is taken on various teaching criteria on a 1-5 scale and finally an overall average point is calculated. Based on the average point, the performance is categorized as excellent, very good, good and poor.

> ➢ If the feedback of a faculty is not encouraging, he/she is counselled by the senior faculty, HOD and Dean.

> ➢ The student feedback has an impact on the Faculty Performance Index calculation.

> ➢ The students feedback on Curriculum, Teaching learning and Evaluation are also discussed in the appropriate forums like Department faculty meeting, Board of Studies, Academic advisory committee and Academic council.

> ➢ Based on the students feedback, the curriculum and learning process can be revised and revamped.

c)   *Alumni and employers on the programmes offered and how does the department utilize the feedback?*

> ➢ A school advisory committee consisting of the stakeholders like staff, students, alumni, parents, employers, look into these matters. Yearly two meetings of the stakeholders are conducted to get their inputs. The suggestions are incorporated

as improvement / modification in the curriculum.

➢ Informal discussions are also made with alumni who completed their higher studies to get the input for the improvement of curriculum.

43. *List the distinguished alumni of the department (maximum 10)*

1.	Mr. Elias A Latif,1984 – 1988 Batch, Sr. Vice President M/S. East Coast Construction & Industries Ltd., Chennai, India.
2.	Mr. P. Venkatesan, 1984 – 1988 Batch, Principal Scientist, Central Electrochemical Research Institute, Karaikudi, India.
3.	Mr. Ali Akbar, 1986 – 1990 Batch, Regional Construction Manager, Agility Logistics, Kuwait
4.	Ms. Suma Mohan, 1987 – 1991 Batch, Managing Partner, M/S. VOX PATNAM, Santhome, Chennai, India
5.	Mr. K. Sadasivam, 1988 – 1992 Batch, Product Manager – Global Desalination, M/S. Siemens, South Wales, Australia.
6.	Dr. M. Ramachandiran, 1989 – 1993 Batch, Executive Engineer, Engineering Unit, Indian Institute of Technology Madras, Chennai.
7.	Mr. Jensen Prithvi, 1996 – 2000 Batch, Senior Project Manager, M/S. Terracon Consultants, Austin, Texas, USA.
8.	Mr. Mohamed Shafiq,1997 – 2001 Batch, Senior Waste Management Officer,Glenorchy City Council, Australia
9.	Dr. Mahmoodul Haq, 1998 – 2002, Assistant Professor, Michigan State University, USA.
10.	Sherif Azmath, 2004 – 2008 Batch, Enviornmental Engineer, M/S. National Petroleum Service Company, Kuwait.

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

Sl. No.	Year	Special Lectures	Workshops	Training Programmes
1	2009-10	4	-	-
2	2010-11	4	4	-
3	2011-12	3	-	6
4	2012-13	2	-	-
5	2013-14	1	6	-

45. *List the teaching methods adopted by the faculty for different programmes.*

➢ Based on the previous experience and available expert guidance, various teaching methods such as, Black board, OHP presentation, LCD presentation, Smart board presentation, Software demos, illustration with physical models, Quiz /

puzzle based play learning process, e-learning, industrial visit, online resources utilization, students seminars presentation and distribution of soft/hard copy of handouts/PPT are used for various programmes offered by the department.

➢ Holistically, innovative teaching methods are included in the curriculum of various programmes which includes:

B.Tech. (Civil Engineering)

➢ Soil investigation camp is introduced to get exposure in real time soil studies.

M.Tech. (Structural Engg. & CEPM)

➢ To improve critical thinking and innovation skills, the course "Design / Fabrication Project" and "Planning & Scheduling Project" is introduced in the second semester of M.Tech. SE and M.Tech. CEPM respectively.

➢ Consultancy type of work is given as experiment for P.G. students (M.Tech. Structural Engg. - Material Testing Laboratory) to inculcate real time industry exposure. (Ex. : Concrete Mix Design and validation)

➢ Students are exposed to site conditions to perform experiment in real time prototype members. (M.Tech. Structural Engg. - Material Testing Laboratory) Ex. Rebound Hammer Test.

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*

➢ The administrative system including, Continuous Assessment Test (CAT), End Semester Examination, Department Academic Audit (DAAC), External Academic Audit Committee (EAAC) and Internal Quality Assurance Cell (IQAC) ensure that the programme objectives and outcomes are met through periodical reviews.

➢ Class committee meetings are conducted at regular intervals to monitor the teaching learning process and ensure that the programme objectives and outcomes are constantly met.

➢ In addition, a school level advisory committee comprising of all the stake holders including, students, faculty, employers, parents, alumni and industries review the system of ensuring programme objectives and outcomes through the teaching leaning process and evaluation methods.

47. *Highlight the participation of students and faculty in extension activities.*

➢ To insist positive and caring attitude for the environment amongst the students, faculty as well as the local communities, a semester long environmental awareness programme "Clean Chennai - Green Chennai" was organized by Department of Civil Engineering during 10.03.2011 to 21.01.2012. The events conducted includes, Environmental awareness seminar on "Clean Chennai - Green Chennai"

on 10.03.2011 at BSAU campus, Environmental awareness programme at Vinayagapuram village, Chennai on 01.10.2011 and Environmental awareness rally at Elliots Beach, Chennai on 21.01.2012. This Programme was organized by Dr. M. V. Moly Kutty & Dr. Vasanthi Padmanabhan and University sponsored Rs. 50,000/- to conduct the events.

➢ To get exposure to international academic and research culture, a team comprising of Dr. M.S. Haji Sheik Mohammed, Dr. J. Revathy and Mr. Mohammed Shanawaz and 6 B.Tech. Students (2009 - 13 Batch) visited National University of Singapore & Nanyong Technological University, Singapore during 28 - 31, October 2012.

➢ Dr. M.V. Molykutty, Professor, Dr P. Vasanthi, Dr. M.S. Haji Sheik Mohammed, Dr. J. Revathy and Ms. K. Yogeswari visited Muthiara Thermal Power Plant construction, **Tuticorin** during 19&20, April, 2011 as a part of industrial knowledge up gradation.

➢ Solid Waste Audit for the University Campus was carried out by U.G. students (2009 - 2013 Batch) Mr. A. Shafeeq Rahman, T. Syed Mustafa and S. Prashiel as their project work. (Guide : Mr. S. Akbar Basha)

➢ Mr. N. Maharajan & Mr. Mohammed Shanawaz applied for industry oriented consultancy project "Application of GIS in Urban Slump Development" at Damman & Diu for M/S. Mahindra Consultancy Engineers (January 2013). Dr. M.S. Haji Sheik Mohammed sent a proposal for "Development of super plasticizer based on Malic acid" to M/S. Tirumalai Chemicals, Ranipet, 2013.

➢ Faculty members conducted industrial training programme for marine cadets of M/S. Chennai School of Ship Mgnt and Ford India in S.M. Lab.

➢ Classes for AMIE and IGNOU are being offered by the Department Staff Members.

➢ Department faculty members executed more than 170 testing / consultancy work in various laboratories.

48. *Give details of "beyond syllabus scholarly activities" of the department.*

➢ Professional societies such as "Society of Civil Engineers" & Student Chapter of "American Society of Civil Engineers" is functioning effectively and organizes National level technical symposium, guest lectures, technical events such as model contest, poster presentation, design contest etc.

➢ The students are encouraged to participate in various regional level and national level technical events organized by other Institutions.

➢ Students also organize cultural fest and literary fest every year.

➢ In order to apply the concepts learned, activities like model making contest, paper/poster /design contests are conducted regularly in the intra dept level.

➢ Students also encouraged to participate in sports activities within the University and conducted by other Institutions.

➢ Students have membership in societies like Youth Red Cross, NSS etc. and involve in social activities like Promotion of computer literacy among rural folks etc.

➢ Students have an editorial committee as part of ISTD (Indian Society for technical Education) students' chapter. The campus activities and other relevant articles are published yearly as bulletin. Apart from this students can contribute articles to the BSAU University News Bulletin.

➢ Students are encouraged to participate in Value added programs. For example department organized Building Information Modeling course for B.Tech. students' (2009 - 13 Batch) during January - May, 2013.

➢ Industrial visits are arranged regularly and in-plant training is also encouraged.

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

Before it became university, the U.G. Programme B.E. Civil and P.G. Programme M.E. Structural Engineering were accredited by AICTE and NBA.

➢ B.E. Civil Engg. was accredited for three years w.e.f. 30.3.2006.

➢ M.E. Structural Engg. was accredited for three years w.e.f. 19.7.2008.

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

➢ Dr. Vasanthi Padmanabhan conducted a societal important research study on "Soil - leachate interaction in Perungudi dumpyard on ground water characteristics". The study report was quoted in one of the legal judgement related to enhance ground water quality.

➢ Dr. M.S. Haji Sheik Mohammed developed a cost-effective "Cement Polymer Anticorrosive Coating system" for corrosion protection of steel rebars used in concrete. This method is currently adopted in various projects in Chennai and other parts of Tamil Nadu.

➢ Dr. M.S. Haji Sheik Mohammed recently developed a "Nitrite based Corrosion Inhibitor" for protection of steel rebars in concrete environment. This product offers excellent corrosion resistance properties and appreciable improvement in concrete strength.

> Dr. J. Revathy conducted studies on techniques for seismic retrofitting of reinforced concrete elements. Dr. P. Gajalakshmi studied the performance of steel - concrete composite for structural applications.

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strength:
> 29 years old department with highly placed alumini in various organizations and institutions across globe.
> Highly qualified, experienced and dedicated faculty are the pillar of support of the department
> A significant number (7) of faculty with Ph.D. qualification.
> A major part of faculty are pursuing Ph.D. (50%)
> High faculty retention rate.
> Well equipped laboratories with latest software's.
> Research expertise in the areas such as Concrete composites, Construction materials & Technology, Geo-environmental engineering and GIS.
> Well experienced non-teaching staff.

Weakness:
> Improvement in industry - institution tie up for collaborative research.
> Materialising international collaboration with reputed academic institutions.
> Only appreciable sponsored research and consultancy work.
> Unable to fully harness the expertise of alumni.
> Research expectations and outcomes are yet to be reached.
> Additional space for expansion.

Opportunities:
- Collaboration with industry for joint research and consultancy.
> Collaborative research work with premier research institutions / foreign universities.
> A bunch of highly qualified faculty in water/Environment/Remote Sensing & GIS specializations to start a new P.G. programme in the area.
> Ample opportunities for getting consultancy in Remote Sensing and GIS field.
> Patent of developed products / concepts / technologies.

Challenges:

➢ To transform the weakness into challenges.

➢ Societal & student perception of viewing degree as licence for getting job.

➢ To increase the number of external funded projects and consultancy works by competing with premier institutions.

➢ To bring quality students to the department by way of imparting exemplary teaching and training skills.

➢ Changing the attitude of students towards focussed learning and research.

52.   Future plans of the department

➢ To create Construction materials and Technology Laboratory for high end Research (2014), Separate Structural Engineering division (2015) and Centre for Sustainable Development (2016).

➢ To start new P.G programme in M.Tech. Water and Environmental Engineering (2015) and M.Tech. Geoinformatics (2016).

➢ All the faculty members of the department will be Ph.D. holders and every year each faculty would be publishing at least one technical publication in refereed journal with impact factor.

➢ To improve the quantum of funding through sponsored research projects, consultancy and training programmes.

➢ To motivate the existing research groups towards more focussed research and conduct of thematic workshops / conferences.

SCHOOL OF MECHANICAL SCIENCES

Department of Aerospace Engineering

Department of Automobile Engineering

Department of Mechanical Engineering

Department of Polymer Engineering

Department of Aerospace Engineering

1.   Department of Aerospace Engineering

Department of Aerospace Engineering was started in the year 2010. The department offers a 4 years full-time programme in Aeronautical Engineering and it has a team of well-qualified faculty member with industrial and academic experience.   The vision of the department is in line with vision of the university and the department aspires to be the source for excellence in Aerospace education, training, research and contribute for the department of aerospace technology and industry in our country.

The Department has already established /in the process of establishing well-equipped laboratories to meet the curriculum requirements of the undergraduate programme. In addition, CFD research laboratories also being established. The targeted area of strength and growth for this new department will include research related to flight vehicles including Unmanned Aerial Vehicles, Low Reynolds number Aerodynamics, Aerodynamics of Blended wing-body configurations, Micro Gas turbine engine technology, Composite materials & Structures, Bio-Materials and Bio-Fluid Dynamics. New Programmes including M.Tech in Aeronautical Engineering, M.Tech in Aerospace Computational Mechanics and B.Tech in Aerospace Engineering are planned to be offered and are included in the roadmap for the department up to 2020. Building adequate capabilities to tackle funded research projects and collaborative research projects are also the goals set for the department of Aerospace Engineering.

2.   Established in **2010**

3.   Is the Department part of a School / Faculty of the university?

Yes

The Department of Aerospace Engineering is a part of the "School of Mechanical Sciences"

4.   Names of Programmes offered

B.Tech. (Aeronautical Engineering)

5.   Interdisciplinary Programmes and departments involved

NIL

6.   Courses in collaboration with other universities, industries, foreign institutions, etc.

NIL

7.   Details of Programmes discontinued (if any) with reasons

NIL

8. *Examination System*

    Semester, choice based credit system

9. *Participation of the department in the courses offered by other departments*

Course	Department
1. Fluid Mechanics	Automobile Engineering
2. Fluid Mechanics	Mechanical Engineering

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/ Asst. Professors/ others)*

	Sanctioned	Filled	Actual
Professors	1	1	1
Associate Professor	1	1	1
Asst. Professor	8	8	8
Others – Visiting Faculty	-	-	1

11. *Faculty profile with name, qualification, designation, specialization*

Name	Qualifica-tion	Designation	Specialization	No. of Years of Exp.	No. of Ph.D. Students guided
Dr .E. Rajakuperan	PhD	Professor	Aerodynamics, CFD, Aero-Acoustics	36	1 (Guiding)
Wg. Cdr (Retd.) K. Showkat Ali	M. Tech	Associate Professor	Aircraft Maintenance	40	-
Mr. S.V. Karthikeyan	M.E	Assistant Professor	Propulsion	3	-

Name	Qualifica-tion	Designation	Specialization	No. of Years of Exp.	No. of Ph.D. Students guided
Mr. S. Karthikeyan	M.E	Assistant Professor	Aerodynamics	9	-
Ms. G.S. Divya	M.E	Assistant Professor	Aircraft Structures	2	-
Ms. T. Sandhya	M.E	Assistant Professor	Propulsion	2	-
Mr. M. Magesh	M.E	Assistant Professor	Avionics	7	-
Mr. Mohammed Fazlur Rahman	M. Tech	Assistant Professor	Aerodynamics	11	-
Mr. Sri Nithya Mohattamananda	M.E	Assistant Professor	Propulsion	1	-
Mr. D.Roshan	M.S	Assistant Professor	Aerodynamics, CFD	2	-

12. *List of Senior Visiting Faculty*

Name	Designation	Organization	Subject handled
Mr. R. Arunachalam	Visiting Faculty	Scientist (Retd.) ISRO	Aircraft Structures, Composite Structures

13. *Percentage of classes taken by temporary faculty – programme-wise information.*

NIL

14. *Programme-wise Student Teacher Ratio*

Programme Offered	Student Teacher Ratio
B. Tech. (Aeronautical Engineering) – Full time	8.5 :1

15. *Number of academic support staff (technical) and administrative staff; sanctioned and filled*

	Sanctioned	Filled	Actual
Technical Staff	3	3	3
Administrative Staff	2	2	2

16. *Research thrust areas as recognized by major funding agencies*

Aero-acoustics, Aerodynamics

17. *Number of faculty with ongoing projects from*

a) National funding agencies	NIL
b) International funding agencies	NIL
Total grants received	**NIL**

18. *Inter-institutional collaborative projects and associated grants received*

a)National Collaboration	NIL
b)International Collaboration	NIL

19. *Departmental projects funded by DST; UGC, DBT, ICSSR, etc. and total grants received*

Project Name	Funded by	Total Grants`
NA	NA	NIL

20. *Research Facility/Centre with State/ National/International recognition:*

NIL

21. *Special research laboratories sponsored by / created by industry or corporate bodies:*

NIL

22. *Publications:*

a) Number of papers published	03
b) Number listed in International Database (For eg.: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)	NIL
c) Citation Index, Impact Factor ,SNIP, h-index	NIL
d) Books with ISBN/ISSN numbers with details of publishers	NIL

1. Arumugam, Karthikeyan.S.V, Joseph Stanley. A, Sridhar. B.T.N, "Acoustic Emission Characterization of Failure modes in Composite laminates using STFFT Analysis", Arabian Journal of Science and Engineering, 2011.

2. T.Sandhya, R. Muruganantham, Dr.S.Thanigaiarsu, "Design and fabrication of a shock tube", Journal of Engineering Today, Vol 14 (2), pp67- 72, 2012.

3. Sandhya.T, Muruganantham.R, Thanigaiarasu .S, "Design and Experimental Analysis of a Shock Tube with Different Driver Gases", International conference on Engineering Materials and Processes (ICEMAP 2013), Vol 1 (1), pp110 & 111, 2013.

23. *Details of patents and income generated:* **NIL**

24. *Areas of consultancy and income generated:* **NIL**

25. *Faculty selected Nationally / Internationally to visit other laboratories / institutions / industries in India and abroad:* **NIL**

26. *Faculty members in National, International committees, Editorial Board:* **NIL**

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

Faculty Name	Topic of Program	Organization & Year
Seminars		
1.Mr K Showkat Ali	Recent development in ceramic raw materials	Indian Ceramic Association, Chennai (June 2011)
2. Mr. K. Showkat Ali	Failure analysis & accident investigation of Aerospace vehicles	Society for Failure Analysis, Bangalore (Nov.2011)
3.Mr S Karthikeyan	Emerging trends in Aircraft Maintenance	Rajalakshmi Engineering College, Chennai (August 2012)
Conferences		
4. Ms.T Sandhya	Engineering Materials and processes "ICEMAP 2013"	Tagore engineering College, Chennai (May 2013)
5.Ms.T Sandhya	Mental & Physical health for Working Professionals: A Holistic Approach	B.S.Abdur Rahman University (April 2013)
Workshops		
6.Mr. S V Karthikeyan	Soft-skills training programme	B S Abdur Rahman University (Jan 2012)
7.Mr S Karthikeyan	Teaching and learning processes in 21st century	B.S.Abdur Rahman University (March 2013)
Refresher/Orientation Programmes		
8.Mr. R Arunachalam	e-content development	B S Abdur Rahman University (Jan. 2012)
9.Mr S Karthikeyan, Ms T Sandya & Ms G S Divya	Induction Training Programme-2012	B S Abdur Rahman University (July 2012)
10.Mr.M.Magesh	Induction Training Programme-2013	B S Abdur Rahman University (July 2013)

28. Students' projects

a) Percentage of students who have done in-house projects including interdepartmental/ programme	NA (being The First Batch)
b) Percentage of students placed for projects in organizations outside the Institution	NA (being The First Batch)
c) Details of facilitating other university students to execute their projects	NA (being The First Batch)

29.	*Awards/ Recognitions received by faculty and students*

Awards	Faculty/Students	Organization
Doctoral Committee Member	Dr. E. Rajakuperan	M.I.T, Anna University, Chennai
Executive Committee Member	Dr. E. Rajakuperan	Aeronautical Society of India, Chennai Branch
Guest Lectures by Faculty:		
1. Satellite Technology	Mr. R. Arunachalam	M.I.T, Anna University, Chennai
2. Aero-Acoustics	Dr. E. Rajakuperan	Institution of Engineers, Chennai

30.	*Seminars/ Conferences/Workshops organized & the source of funding*

		National	International	Source of Funds
Seminars	1. National level student seminar-Aug 2012	-	University
	2. National level student seminar-Aug 2013	-	University
Conferences	NIL			
Workshops	NIL			

31.	*Code of ethics for research followed by the department:*

Code of ethics for research of our University is given in **Annexure D - 3.1 (Criterion III)**

32.	*Student profile Programme-wise*

UG:

Year	Name of the Program	Applications received	Selected	Men	Women	Pass percentage
2010-11	B. Tech (Aero)	43	28	25	03	First batch of students will be passing out in May 2014
2011-12		57	33	28	05	
2012-13		65	31	28	03	
2013-14		48	20	17	03	

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33. *Diversity of Students*

	Name of the Programme	% of students from within state	% of students from other States	% of students From abroad
2010-11		93	07	-
2011-12	B. Tech(Aero)	94	06	-
2012-13		90	10	-
2013-14		90	10	-

34. *How many students have cleared NET, SLET and GATE?*

a) NET	NIL
b) SLET	NIL
c) GATE	NIL
d) Civil services	NIL
e) Defense services	NIL

35. *Student progression*

UG to PG	NA
PG to M. Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed • Campus selection (First batch 2010-14)	4 (so far)
• Other than campus recruitment	NA
Entrepreneurship/Self-employment	NA

36. *Diversity of staff*

Percentage of faculty who are graduates

of the same university	NIL
from other universities within the State	7
from universities from other States	3
from universities outside the country	1

37. *Number of faculty who were awarded M. Phil., Ph.D., D.Sc. and D.Litt. during the assessment period:* *NIL*

38. *Present details of departmental infrastructural facilities with regard to*

a) Library

No. of books: 10

No. of UG Project Reports: NIL

No. of PG Project Reports: NIL

No. of Ph.D. Thesis Reports: NIL

No. of Lab Manuals: 09

No. of Company Catalogues: 07

No. of other Technical Magazines: 09

b) Internet facilities for staff and students

➢ The campus is connected through National Knowledge Network (1Gbps)

  • The band width is 100 Mbps

  • The campus is also connected through fibre optics intranet connection (1Gbps)

➢ All the Department faculty members are provided with wired internet connection.

➢ The entire campus is Wi-Fi enabled.

c) Total number of class rooms

Name of the Programme	Number of class rooms
B. Tech- Aeronautical Engg.	4

d) Class rooms with ICT facility

➢ NPTEL and OCW study materials worth of Rs. 3 Lakhs is available in the central library

➢ The Department is connected to 12Mbps 1:1 internet connectivity

➢ 1Gbps Intranet Campus wide Network is available

➢ e-Journals facility can be accessed

➢ The campus is connected through national knowledge network (1Gbps); the band width is 100 Mbps

➢ The campus is also connected through fibre optics intranet connection (1Gbps)

➢ A hi-end data centre with blade and rack servers are made available

➢ Individual Computers to the Students at the simulation Lab

➢ CATIA and ANSYS Licensed Software Packages are made available for the use of students & staff

e) Students' Aerospace core Laboratories

1. Aerodynamics Lab

2. Aircraft Structures – I Lab

3. Aircraft Structures – II Lab

4. Propulsion Lab

5. Aircraft Systems Lab

6. Avionics Lab

7. Aircraft Structures Repair Lab

8. Aero Engine Maintenance Lab

9. CFD and structural simulation Lab

f) Research Laboratory : CFD Research

600mm x 600mm Subsonic Wind|
(Aerodynamics Lab)

Beechcraft Aircraft
(Aircraft Systems Lab)

Wagner Beam Setup
(Aircraft Structures – II Lab)

Orpheus 701 Jet Engine
(Aero Engine Maintenance Lab)

39. *List of doctoral, post-doctoral students and Research Associates*

a) from the host institution/ university	1
b) from other institutions/ universities	NIL

40. *Number of post graduate students getting financial assistance from the university:*

NIL

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology*

Prior to start of this programme the department has organized workshops with the participation of invited expert members from industries, alumni and academic institutions. In these workshops detailed discussions and brain storming sessions about the need, curriculum and current trends in the education were analyzed. Based on the recommendation of the committee the programme was started.

42. *Does the department obtain feedback from*

a) *Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?*

Yes. Based on the feedback the curriculum revision is taken up.

b) *Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

Yes. Feedback is used to improve the teaching – learning process.

c) *Alumni and employers on the programmes offered and how does the department utilize the feedback?*

NA

43. *List the distinguished alumni of the department (maximum 10):* **NA**

44. *Details on student enrichment programmers (special lectures / workshops /seminar) with external experts*

Special Lectures	05	1. Dr. S. Panneerselvam, Former Associate Director, DRDL, Hyderabad 2. Mr. R. Arunachalam, Former Senior Scientist, ISRO, Bangalore 3. Dr. R. Dhanaraj, Professor, Dept. of Aerospace Engineering, MIT, Anna University, Chennai

		4. Mr. Shikar Chaturvedi, Taneja Aerospace and Aviation Ltd. Hosur 5. Dr. Santhakumar, Professor, Dept. of Aerospace Engineering, IIT-Madras
Workshops	02	1. Dr. P. Baskaran, Formerly HOD, Dept. of Aerospace Engineering, M.I.T, Anna University, Chennai 2. Commandant(Air) A.K.Mohile, Indian Coast Guard Air station, Chennai.
Seminars	-	

45. *List the teaching methods adopted by the faculty for different programmes*
    i)   Interactive Lecture session
    ii) Tutorial Session
    iii) Hands on training on Aircraft Design

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*
    i)   Continuous assessment
    ii) End Semester examination and training on aircraft design
    iii) End semester project on Industrial relevant topics

47. *Highlight the participation of students and faculty in extension activities*
    Aero modelling training to school students

48. *Give details of "beyond syllabus scholarly activities" of the department*
    i)   Seminar presentation by students and faculty members
    ii) Organizing technical contest for college students
    iii) Participating in intercollegiate contest

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*
    New Department

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied*
    Teaching and learning based on cut sections of Aero jet and piston engines

51. *SWOC analysis of the department*

❖ **Strengths**

➢ Setup well equipped laboratories to meet the curriculum requirements of B.Tech program.

➢ CFD research lab and some of the other labs including aerodynamics lab, simulation lab, structures lab & propulsion lab are equipped with resources to carry out research work.

➢ 55% of the faculty members are well experienced and are either with industrial research exposure or teaching experience or both.

❖ **Weakness**

➢ Minimal Industrial Interaction.

❖ **Opportunities**

➢ Looking for an earliest opportunity to attract funded research projects from industries.

➢ Placement training and campus placement are provided to students.

➢ PG Courses is planned to be started to provide higher education opportunities for our B. Tech Students.

❖ **Challenges**

➢ Along with the rigorous academic schedule, plan to take up industrial consultancy.

➢ Department has taken up the challenge of establishing itself as a top ranking Aerospace department.

52. *Future plans of the department*

➢ Department of Aerospace Engineering has plans to start offering the following new programmes,

- M. Tech in Aeronautical Engineering in 2015-16
- M. Tech in Computational Mechanics in 2018-19
- B. Tech in Aerospace Engineering in 2020 -2021

➢ Plan to develop research Laboratories in the areas of CFD, High Speed flows, CSM, Composite Structures and Advanced Propulsion.

➢ Major research thrust on unmanned Aerial Vehicle and Bio-Fluid mechanics will be given

➢ With the available research strength, Infrastructures & publication, dept will be in a position to attract funded project in the coming years.

➢ Faculties are encouraged to have collaborative research with Industries.

➢ Department will be in a position to offer consulting service in selected areas in the next 5 years.

Department of Automobile Engineering

1.   *Name of the Department*   : **Department of Automobile Engineering**

The department of Automobile Engineering was started in the year 2011. Chennai had evolved in to an automobile and auto ancillary manufacturing centre and many Design and Product Development centres are also establishing their presence. This has created an objective need for quality engineers, with adequate knowledge and skill in the broad area of Automobile Design, Manufacturing and Maintenance.

The department of Automobile Engineering aspires to address these needs by ensuring high quality in teaching and research, in the broad area of Automobile Engineering.

2.   *Year of establishment*   : **2011**

3.   *Is the Department part of a School/Faculty of the university?*

Yes, School of Mechanical Sciences

4.   *Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)*

B. Tech in Automobile Engineering

Ph.D.

5.   *Interdisciplinary programmes and departments involved*   : **Nil**

6.   *Courses in collaboration with other universities, industries, foreign institutions, etc.*

Nil

7.   *Details of programmes discontinued, if any, with reasons*   : **Nil**

8.   *Examination System: Annual/Semester/Trimester/Choice Based Credit System*

Semester and Choice Based Credit System

9.   *Participation of the department in the courses offered by other departments* **: Nil**

10.   *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)*

	Sanctioned	Filled	Actual (incl. CAS & MPS)
Professor	1	1	1
Asso. Professors	0	0	0
Asst. Professors	4	4	4
Others	0	0	0

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Name	Qualifica-tion	Designation	Specialization	Yrs of Experi-ence	No. of Ph.D. students guided
Dr. M. Murugan	B.E., M.E., Ph.D.	Prof & HoD	Design and Manufacturing	25	3 (guided) 3 (guiding)
Mr. M. Satthiyaraju	B.E., M.E.	Asst. Prof.	Mechanical Design Engg.	1.3	Nil
Mr. V. Deepan	B.E., M.E.	Asst. Prof.	Automobile Engg.	2.9	Nil
Mr. R. Manikandan	B.E., M.E.	Asst. Prof.	Mechanical IC Engines	0.5	Nil
Mr. C.K. Arvinda Pandian	B.E., M.E	Asst. Pof.	Mechanical IC Engines	2.6	Nil

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors :*   **Nil**

13. *Percentage of classes taken by temporary faculty – programme-wise information*

Nil

14. *Programme-wise Student Teacher Ratio :*

B. Tech Automobile Engineering (actual strength)   : 20:1
(Additional Faculty members are being recruited)

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

Staff	Sanctioned	Filled
Support Staff (Technical)	2	2
Administrative Staff	2	2
Total	4	4

16. *Research thrust areas as recognized by major funding agencies*
   - ➢ Automotive Design and Analysis
   - ➢ Alternative Fuels and Emission

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

Nil

18. *Inter-institutional collaborative projects and associated grants received*
   a) National collaboration   **Nil**
   b) International collaboration   **Nil**

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

Nil

20. *Research facility / centre with*
   - ➢ *state recognition*   **Nil**
   - ➢ *national recognition*   **Nil**
   - ➢ *international recognition*   **Nil**

21. *Special research laboratories sponsored by / created by industry or corporate bodies*

Nil

22. *Publications:*
   - ➢ Number of papers published in peer reviewed journals (national / international*)*
     Eight

Year	International Journal	National Journal	International Conference	National Conference	Total
2009	1	-	-	1	2
2010	-	-	-	-	-

Year	International Journal	National Journal	International Conference	National Conference	Total
2011	2		1	2	5
2012	3	1	2	-	6
2013	1	-	2	4	7
Total	7	1	5	7	20

Detailed publication list enclosed in Annexure D - 3.2 and 3.3 of Criterion III

- Monographs **Nil**
- Chapters in Books **Nil**
- Edited Books **Nil**
- Books with ISBN with details of publishers **Nil**
- Number listed in International Database (For *e.g.* Web of Science, Scopus,
- Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) – **7**
- Citation Index – range – 0-42 / average **10.7**
- SNIP Provided in the Annexure along with the list of Papers
- SJR : Provided in the Annexure along with the list of Papers
- Impact Factor – range : 0 to 1.205 / average : 0.6
- h-index - 3

23. *Details of patents and income generated*

    "A cutting tool insert with built-in provision for detecting flank wear of a predetermined value" Indian Patent No 201014 dated 24.07.2009

24. *Areas of consultancy and income generated* : **Nil**

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad* : **Nil**

26. *Faculty serving in*

    a) National committees b) International committees c) Editorial Boards d) any other (please specify)

    Dr. M. Murugan Professor and Head of the Department is a reviewer for the journal Tribology Transactions

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

    - Mr. M. Satthiyaraju, Asst. Professor has attended the National Level Technical Workshop on Engine Emission & Control Technologies at Velammal Engg. College, Chennai.

➢ Mr. V. Deepan and M. Satthiyaraju, Asst.Professors have attended the 5 day Faculty Developement Program on Engineering Mechanics at B.S Abdur Rahman University during December 2012.

➢ Mr. R. Manikandan Asst.Professor has attended the Soft Skill Training Workshop at B.S. Abdur Rahman University on Nov 19th 2013

28. *Student projects*

➢ *percentage of students who have done in-house projects including inter-departmental projects* **Not Applicable**

➢ *percentage of students doing projects in collaboration with other universities / industry / institute* **Not Applicable**

29. *Awards / recognitions received at the national and international level by*

➢ *Faculty* **Nil**

➢ *Doctoral / post doctoral fellows* **Nil**

➢ *Students* **Nil**

30. *Seminars/ Conferences/Workshops organized and the source of funding (national international) with details of outstanding participants, if any.*

➢ The department of Automobile engineering organised a national level student technical symposium Auto Hunt 2012 Mr. John Devadasan, Manager, Apollo tyres and Mr. Gauri Shankar, Manager of Renault Nissan were the guests of honour. Over 180 students from engineering institutions from all over the state participated.

➢ The department also organised the national level student technical symposium Auto Hunt 2013 on October 1st 2013. Mr. P. Arjun Raj, Deputy Manager, Mahindra and Mahindra and Mr. K. Aravind, Bosch India ltd were the chief guests of honour. Over 240 students from engineering institutions from all over the state participated.

31. *Code of ethics for research followed by the departments*
Code of ethics is enclosed in **Annexure D - 3.1 (Criterion III)**

32. *Student profile programme-wise:*

Name of the Programme (refer to Question No.4)	Applications received	Selected		Pass Percentage	
		Male	**Female**	**Male**	**Female**
B.Tech Automobile 2011	68	27	Nil	Not Applicable as the first batch will graduate only in June 2014	
B.Tech Automobile 2012	143	62	1		
B. Tech Automobile 2013	76	35	Nil		

33. *Diversity of Students:*

Name of the Programme	% of students from the same university	% of students from other university	% of students from universities outside state	% of students from other countries
N/A	Nil	Nil	Nil	Nil

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

NIL

35. *Student progression*

UG to PG	
PG to M. Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	Not Applicable as the first batch will graduate only in June 2014
Employed • Campus selection (First batch 2010-14)	
• Other than campus recruitment	
Entrepreneurship/Self-employment	

36. *Diversity of staff*

Percentage of faculty who arte graduates

Of the same university	**Nil**
From other universities within the state	**100%**
From universities from other States from	**Nil**
Universities outside the country	**Nil**

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*

NIL

38. *Present details of departmental infrastructural facilities with regard to*

a) Library	**Nil**
b) Internet facilities for staff and students	**Yes**
c) Total number of class rooms	**3 Nos.**
d) Class rooms with ICT facility	**3 Nos.**
e) Students' laboratories	**2 Nos**

S.No	Lab	Major Equipment	Area sq.m
1.	Four Wheelers Lab	2 Nos of Hatch backs car(Ford Figo) 2 Nos of Sedan car Bus Chassis Wheel balancing machine Car chassis Four cylinder diesel engine with fuel and exhaust system 2 Nos of Constant mesh gear Box 2 Nos of Four cylinder diesel engine Automotive Clutch & steering systems Rear and final drive system	343
2.	Engine Components Lab	Single Cylinder '2' Stoke engines Single Cylinder '4' Stoke engines Four Cylinder diesel engines Carburettor Fuel feed pump diesel Engine cooling system (Radiator) Turbo Charger Exhaust gas system with catalytic convertor.	292
3	Engine Testing laboratory (shared with Mechanical Engg Dept)	Various types of engines with dynamometers and other measuring facilities	300

Over and above these Fuel Lab, Auto Electronics Lab and 2 and 3 wheelers laboratories are being established.

f)   *Research laboratories*   **Nil**

39.   *List of doctoral, post-doctoral students and Research Associates*
       a) from the host institution/university   **NIL**
       a) from other institutions/universities   **NIL**

40.   *Number of post graduate students getting financial assistance from the university.*
                              Not Applicable

41.   *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*
       ➢   Before commencing any new program, a detailed study of the technical need for the program and financial commitments involved are carried out

➢ For instance before introducing new B.Tech programs in Automobile Engineering, broad consultative meetings was held with representatives from Academic Institutions and leading automobile industries like M/s. Ford India, M/s. Mahindra & Mahindra and M/s. India Piston Rings on 12.03.2011 to discuss the potential and the curricular aspects of the new program

➢ Over and above this the Board of studies meetings also help in fine-tuning the curriculum and syllabus

42. *Does the department obtain feedback from*

a. *faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?*

Yes

➢ Faculty members play the key role in formulating and updating the curriculum of the program and the syllabi for various courses

➢ Faculty provide inputs for enhancing the curriculum and also contribute towards modifying the syllabus of individual course

➢ The inputs by faculty members are used to effect minor modifications in the curriculum and syllabus during the Board of Studies meetings

b. *Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

Yes

➢ Student feedback is obtained twice a semester for every course covering all aspects of teaching, learning and evaluation

➢ Recently the feedback is modified to include students feedback on the course also

➢ The first feedback primarily focuses on the faculty members approach and is used by faculty member to make minor corrections in his approach

➢ The final feedback is obtained in the last week of the semester and comprehensively covers all aspects of teaching - learning and evaluation.

c. *Alumni and employers on the programmes offered and how does the department utilize the feedback?*

Not Applicable

43. *List the distinguished alumni of the department (maximum 10)*

Not Applicable

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

Guest lectures are being arranged periodically to provide students the real life requirements of Engineering Profession. Some of the guest lectures' organised include:

- ➢ Lecture on "The Science and Technology of Fuel Cells" by Mr. P. Ashwin, Curtin University, Australia, during Aug 2012
- ➢ Lecture on "Diesel Engines" Mr. Thangapalam, Manager, M/s Daimler Benz, during March 2013
- ➢ Lecture on "Getting Industrial Exposure" by Mr.Sudhir Natarajan, organiser of Australian race car championship, April 2013

45. *List the teaching methods adopted by the faculty for different programmes.*

The various teaching methods adopted include
- ➢ Regular Blackboard teaching primarily used for handling analytical courses
- ➢ Lectures using power point presentations
- ➢ Lectures assisted by Videos and Demonstrations
- ➢ Activity based teaching – learning
- ➢ Student seminars
- ➢ Self study assignments

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*
- ➢ The class committee meeting provide valuable input in assessing the level of attainment of program objectives
- ➢ The department level academic audit and annual external academic audit does provide additional inputs
- ➢ The Board of studies meetings facilitate taking stock of the attainment level of objectives and initiating course correction

47. *Highlight the participation of students and faculty in extension activities.*
- ➢ The department is having the Society of Automotive Engineers, which is the Professional Body facilitating staff student interaction with industry and professional practitioners
- ➢ The society periodically organises industrial visits to neighbouring industries like Ford India, Chennai, Ashok Leyland, Ennore, K.P. Diesel Centre, Bosch Ltd. Chennai, Gear box assembly workshop and Wheel alignment workshop, Tambaram, Chennai

48. *Give details of "beyond syllabus scholarly activities" of the department.*
- ➢ The professional society activities, industrial visits and guest lectures provide learning experience beyond the syllabus
- ➢ The value added programs like Modelling and Analysis softwares provide valuable additional skill development

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

Not Applicable as the department is just 3 years old

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

As a young department of the University the department is more focused on establishing its fundamentals strong

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths
➢ Committed faculty members
➢ Well established Department of Mechanical Engineering
➢ Excellent support facility
➢ Good rapport with automobile industries
➢ Good infrastructure

Weaknesses
➢ Department is new
➢ Lack of Specific Research Thrust
➢ Independent laboratories in nascent stage
➢ Lack of senior faculty members

Opportunities
➢ Chennai emerging as an international automobile manufacturing centre
➢ Need for quality automobile engineers is bound to increase
➢ Need for quality education provider is increasing

Challenges
➢ Providing right mix of theory and practice
➢ Establishing strong laboratory and research infrastructure
➢ Enhancing student motivation

52. *Future plans of the department.*

The immediate priorities of the department can be summarised as below:
➢ Establishing a strong infrastructure for learning and research
➢ Attracting and nurturing the presence of strong team of faculty members
➢ Motivating all faculty members to pursue doctoral research
➢ Establishing a firmly established learning ambiance
➢ Establishing a strong research culture

Department of Mechanical Engineering

1.   Department of Mechanical Engineering

The department of Mechanical Engineering started in 1984, right from the inception of the institute, is one of the oldest departments of this University. 25 batches of U.G. students have passed out, with many university ranks and gold medals.

A high degree of professionalism is inducted to the students through the students' chapters of professional associations such as American Society of Mechanical Engineers (ASME), Society of Automotive Engineers (SAE), Indian Society for Heating Refrigeration and Air-conditioning (ISHRAE) and Society of Mechanical Engineers. These bodies organize seminars for students on topics of current importance and global relevance to industry.

The department organizes programmes to provide the students with industrial and practical experience through training and project work in industries to meet the industrial requirements and face real life situations boldly.

Modern multimedia teaching technologies are used to supplement lectures and enhance the quality of teaching. Computer aided learning packages on different subjects are available for self-learning. Industrial visits are arranged for students to gain practical exposure. In addition, guest lectures and panel discussions are arranged by inviting eminent persons from organizations of repute in the industry.

*2.   Established in the year **1984***

3.   Is the Department part of a School/Faculty of the university?

Yes

School of Mechanical Sciences

4.   Names of programmes offered

	Name of the Programmes
Bachelor Degree	• B Tech Mechanical Engineering (Full time / Part time) (Excl. for the employees of M/s. Apollo Tyres Ltd.)
Master Degree	• M.Tech. Manufacturing Engineering – Full time • M.Tech. CAD/CAM – Full Time
Ph.D.	• Ph. D. – Full Time/ Part Time

5.   Interdisciplinary programmes and departments involved

NIL

6.   Courses in collaboration with other universities, industries, foreign institutions, etc.

With Industry:

The B.Tech Programme in Mechanical Engineering is an exclusive programme designed and offered to the employees of M/s. Apollo Tyres Ltd. under exclusive MoU. The elective courses and project work will be offered jointly by B.S.Abdur Rahman University and M/s. Apollo Tyres.

7. *Details of programmes discontinued, if any, with reasons*

<div align="center">NIL</div>

8. *Examination System:*

<div align="center">Semester and Choice Based Credit System</div>

9. *Participation of the department in the courses offered by other departments.*

The following courses offered by the other departments have been handled by the faculty of Mechanical Engineering.

Sl.No	Department	Semester	Course code	Course name
1	Electrical and Electronics Engineering	3	ME 281	Applied Thermodynamics
2	Electrical and Electronics Engineering	3	ME 283	Fluid Mechanics and Thermal Lab
3	Polymer Technology	3	PT 201	Strength of Materials
4	Polymer Technology	3	PT 205	Chemical Processing Lab
5	Polymer Technology	3	PT 206	Mould Manufacturing Process
6	Polymer Technology	8	PT 401	Total Quality Management
7	Aeronautical Engineering	2	ME 106	Computational Lab
8	Aeronautical Engineering	3	AE 201	Mechanics of Machines
9	Automobile Engineering	2	ME 106	Computational Lab
10	Automobile Engineering	3	ME 202	Fluid Mechanics and Machinery
11	Automobile Engineering	3	AU 202	Applied Thermodynamics

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)*

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	8	8	8
Associate Professor	4	4	4
Assistant Professor	33	33	33

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Details of faculty designation and specialization

Sl. No.	Name of the Faculty	Qualifi-cation	Design-ation	Special-ization	No. of yrs of Experience		No. of Ph.D. /M.Phil. guiding
					Teach-ing	Indus-trial	
1	Dr. R. Rajendran	B.E., M.E., Ph.D.,	Prof. & Head	Surface Engg.	19	1.5	5 guiding
2	Dr. M. Murugan	B.E., M.E., Ph.D.,	Dean (SMS)	Manufac-turing	25	1	3 guided + 2 guiding
3	Dr. K. Suresh Kumar	B.E., M.E., Ph.D.,	Profes-sor	Energy Genera-tion Man-agement	23.5	1	2 guiding
4	Dr. R. Rajaraman	B.E., M.E., Ph.D.,	Profes-sor	Heat Transfer & PCM	21.5	1	5 guiding
5	Dr. S. Prince Arockia Doss	B.E., M.E., Ph.D.,	Profes-sor	Manufac-turing/ Auto. Engg.	28	3	3 guiding
6	Dr. S. Rasool Mo-hideen	B.E., M.E., Ph.D.,	Profes-sor	Design of materials	2.5	-	7 guiding

Sl. No.	Name of the Faculty	Qualifi-cation	Design-ation	Special-ization	No. of yrs of Experience		No. of Ph.D. /M.Phil. guiding
					Teach-ing	Indus-trial	
7	Dr. K. Venkateswaran	M.Tech., Ph.D.,	Profes-sor	Materi-als Engg. Metallur-gy Nano Tech. Tribology, Biomateri-als, Pow-der Metal-lurgy	14.11	11.1	5 guiding
8	Dr. S. Beer Mohammed	M.Sc., M.E. Ph.D.,	Profes-sor	Nano Ma-terials, So-lar Cell	-	-	2 guiding
9	Dr. A.S. Selvakumar	B.E., M.E., Ph.D.,	Assoc. Prof.	Manu-facturing Subjects, OR, TQM	22	-	-
10	Dr. H. Siddhi Jailani	B.E., M.E., Ph.D.,	Profes-sor	Production	13.5	5	2 guiding
11	Dr. S. Sundaravalli	B.E., M.E., Ph.D.,	Assoc. Prof.	Energy Technol-ogy	15	-	1 guiding
12	Ms. Nasreen Kaleem	B.E., M.S.,	Assoc. Prof.	Manu-facturing Technol-ogy	22	-	-
13	Mr. T. Venkatesan	B.E., M.E.	AP (Sel. Gr.)	Design of jigs and fixtures	15	1	-

Sl. No.	Name of the Faculty	Qualifi-cation	Design-ation	Special-ization	No. of yrs of Experience		No. of Ph.D. /M.Phil. guiding
					Teach-ing	Indus-trial	
14	Mr. P.D. Jeyakumar	B.E., M.E .	AP (Sel. Gr.)	Computer Aided Design	13	-	-
15	Ms. Mahboob E Afshan	B.E., M.Tech	AP (Sr. Gr.)	Energy Technology	14	-	-
16	Ms. L. Anna Gowsalya	B.E., M.E.,	AP (Sr. Gr.)	Refrigeration & Air Condition	13	-	-
17	Mr. S. Mohamed Illyas	B.E., M.E.,	AP (Sr. Gr.)	Thermal Engineering	11	-	-
18	Mr. J. Mahashar Ali	B.E., M.E.,	AP (Sr. Gr.)	Manufacturing Technology	13	-	-
19	Mr. A. Arockia Julias	B.E., M.E.,	AP (Sr. Gr.)	Materials CAD/ CAM, FEA	7	-	-
20	Mr. R. Sathish Kumar	B.E., M.E.,	AP (Sr. Gr.)	Energy Engineering	8.5	1	-
21	Mr. S. Jeavudeen	B.E., M.E.	Assist. Prof.	Computer Aided Design	10.5	3.5	-

Sl. No.	Name of the Faculty	Qualifi-cation	Design-ation	Special-ization	No. of yrs of Experience		No. of Ph.D. /M.Phil. guiding
					Teach-ing	Indus-trial	
22	Mr. A. Mohd Raffiq	B.E., M.Tech	Assist. Prof.	Automo-bile Engi-neering	5	-	-
23	Mr. D. Pradeep Kumar	B.E., M.E.,	Assist. Prof.	Manufac-turing En-gineering	3	-	-
24	Mr. T.R. Tamilarasan	B. Tech., M.E.,	Assist. Prof.	Manu-facturing & Metal-lurgy	5	-	-
25	Mr. S. Rajarajan	B.E., M.E.,	Assist. Prof.	Manufac-turing En-gineering	2	1	-
26	Mr. V. Gunasegaran	B.Tech. M. Tech.,	Assist. Prof.	Product Design and Manu-facturing	2	5	-
27	Mr. Md. Javeed Ahamed	B.E., M.E.,	Assist. Prof.	Thermal Engineer-ing	2	-	-
28	Mr. A. Varun Kumar	B.E., M.Tech.,	Assist. Prof.	Advanced Manu-facturing Technol-ogy	2	-	-
29	Mr. M. Balasrinivasan	B.E., M.E.,	Assist. Prof.	Manufac-turing En-gineering	2	-	-

Sl. No.	Name of the Faculty	Qualifi-cation	Design-ation	Special-ization	No. of yrs of Experience		No. of Ph.D. /M.Phil. guiding
					Teach-ing	Indus-trial	
30	Mr. N. Ravikumar	B.E., M.E.,	Assist. Prof.	Engineer-ing Design	-	-	-
31	Mr. C. Sivakumar	B.E., M.E.,	Assist. Prof.	Automo-bile Engi-neering	2	-	-
32	Mr. S. Arun Kumar	B.E., M.E.,	Assist. Prof.	Materials Science & Engg,	2	-	-
33	Mr. K. Kiran Kumar	B.E., M.E.,	Assist. Prof.	Engineer-ing Design	2.5	-	-
34	Mr. K. Asrar Ahmed	B.E., M.E.,	Assist. Prof.	Refrigera-tion & Air Condition	1.5	-	-
35	Mr. G. Ramanjaneyulu	B.E., M.E.,	Assist. Prof.	Materials Technol-ogy	3	-	-
36	Mr. I. John Solomon	B.E., M.E.,	Assist. Prof.	Manufac-turing	3	-	-
37	Mr. M. Ahmed Zainul	B.E., M.E.,	Assist. Prof.	Manufac-turing	1	-	-

Sl. No.	Name of the Faculty	Qualifi-cation	Design-ation	Special-ization	No. of yrs of Experience		No. of Ph.D. /M.Phil. guiding
					Teach-ing	Indus-trial	
38	Mr. D. Sathyanarayan-	B.E., M.E.,	Assist. Prof.	Manufac-turing	1	24	-
39	Mr. P. Dinesh	B.E., M.E.,	Assist. Prof.	Computer Aided De-sign	6	6	-
40	Mr. K. Krishna Kumar	B.E., M.E.,	Assist. Prof.	Refrigera-tion & Air Condition	1	-	-
41	Mr. K. Sathick Basha	B.E., M.E.,	Assist. Prof.	Engineer-ing Design	1	-	-
42	Mr. N. Sirajudeen	B.E., M.E.,	Assist. Prof.	Computer Integrated Manufac-turing	4	-	-
43	Mr. S. Loganathan	B.E., M.E.,	Assist. Prof.	Engineer-ing Design	1	-	-
44	Mr. Derrick Abraham	B.E., M.E.,	Assist. Prof.	Refrigera-tion & Air Condition	-	-	-
45	Mr. Syed Shahul	B.E., M.E.,	Assist. Prof.	Engineer-ing Design	-	-	-

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professor Emeritus Professor:*

S. No.	Name of the Professor	Designation	Year
1	Prof. S.Modi	Emeritus Professor	Since 1995

13. *Percentage of classes taken by temporary faculty – programme-wise information*

NIL

14. *Programme-wise Student Teacher Ratio*

Programme Offered	Student Teacher Ratio (based on sanctioned intake
B.Tech.(Mech) – Full time	14.6:1
M.Tech. (CAD)	7.2:1
M.Tech.(MFG)	7.2:1

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

Non-Teaching Staff	Sanctioned	Filled	Actual
Academic Support staff (Technical)	20	20	20
Administrative	03	03	03

16. *Research thrust areas as recognized by major funding agencies.*

S. No.	Name of the Funding Agency	Identified Research thrust Area
1	AICTE	Cryogenic Treatment of materials
2	UGC Royal Society, UK	Surface Engineering
3	MNRE	Renewable Energy

17 *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

International:

Sponsoring agency	Duration	Financial outlay (Lakhs)	Investigator & Co-investigators	Project title
Royal Society London UK/	January-March 2010	4 Lakhs	Dr.R.Rajendran	Abrasive wear studies of electroless nickel coated Aluminium for cylinder liner application

National :

Sponsoring agency	Duration	Financial outlay (Lakhs)	Investigator & Co-investigators	Project title
UGC-DAE CSR Indore Centre	3 years	Rs.2.53 Lakhs per year	Dr.R.Rajendran	Wear behaviour of duplex coated steels

18. *Inter-institutional collaborative projects and associated grants received*

a) International collaboration

The Department of Mechanical engineering involved in the collaborative research work with WABCO in the following areas

➢ Surface engineering

➢ Microstructure analysis

➢ Development of wear test rig for various applications

Dr. Rajendran, Professor and Head visited the General Motor Company, USA for collaborative research work.

Dr. S. Rasool Mohideen received Rs.4.5 lakhs under Fundamental Research Grant Scheme (FRGS) by Ministry of higher education, Malaysia titled "Machining using deep cryogenic treated cutting tools on TI alloy Aerospace alloy for high speed machining in the year 2010-2012

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

Sponsoring agency	Duration	Financial outlay (Lakhs)	Investigator & Co-investigators	Project title
AICTE–R & D	2 years	Rs. 3 lakhs	Dr.S.Rasool Mohideen and Dr.R.Rajendran	Optimisation of Cryogenic Treatment on Engg. Materials
FRGS scheme(ministry of Higher Education Malasyia)	2 years	Rs 1.5 Lakhs	Dr.S.Rasool Mohideen Dr.Tamil Mani Siva Prakasam (UTHM– Malaysia)	Micro Machining using Deep Cryogenically treated cutting tools on Titanium Alloy.

20. *Research facility / centre with National Recognition:*

   ➤ The research facility available in metrology and other laboratories are used by the medical students for their research work.

21. *Special research laboratories sponsored by / created by industry or corporate bodies*

   A Centre of Excellence for Green Energy Management is proposed to be established in the campus in partnership with M/s. National Instruments Inc., USA involving the following departments.

   ➤ Department of Mechanical Engineering

   ➤ Department of Electrical and Electronics Engineering

   ➤ Department of Electronics & Instrumentation Engineering

   It is proposed to establish the centre in a phased manner, spanning over a period of 3 years.

   The total budget estimated for the project is 1.25 Crores which would comprise a contribution of Rs. 37,50,000/- from M/s. National Instruments and the remaining amount from B.S. Abdur Rahman University.

22. *Publications:*

Number of papers published in peer reviewed journals (national/ international)

Year	International Journal	National Journal	International Conference	National Conference	Total
2009	06	04	07	06	23
2010	09	01	01	01	12
2011	07	-	01	02	10
2012	09	-	07	01	17
2013 (upto Sep)	04	-	04	-	08
Total	**35**	**05**	**20**	**10**	**70**

   Detailed information is given in Annexure D - 3.2 and 3.3 (Criterion III) Chapters in Books

   ➤ A part of a proposal submitted to the Royal Society, London jointly by Professor Sha of Queen's University Belfast and Professor R. Rajendran of B.S. Abdur Rahman University, is used in the book: W. Sha, X. Wu and K.G. Keong Electroless copper and nickel-phosphorus plating: Processing, characterisation and modeling, Woodhead Publishing, Cambridge, UK, 2011, 304 pages specifically, in section 15.4 Electroless nickel-phosphorus–silicon carbide (Ni–P–SiC) coated aluminium cylinder liner: a research case study.

Books with ISBN with details of publishers

S.No.	Title	Authors	Publisher/ISBN	Edition/year
1.	Analysis of Delaminations in GRP Pipes Using Infrared Thermography	G.K. Vijayaraghavan and Dr.S.Sundaravalli	LAMBERT Academic Publishing, Saarbrücken, Germany/978-3-659-16199-5	First Edition/ 2012
2	Design of Jigs, Fixtures, Press Tools and Moulds	G.K. Vijayaraghavan and Dr.S.Sundaravalli	A.R.S. Publications, Chennai, India	Second Edition /2012.
3	Manufacturing Technology - Vol. 2	G.K. Vijayaraghavan and Dr.S.Sundaravalli	A.R.S. Publications, Chennai, India -ISBN 978-81-920301-9-7.	First Edition 2012
4	Fluid Mechanics & Machinery	G.K. Vijayaraghavan and Dr.S.Sundaravalli	Lakshmi Publications, Chennai, India	Sixth Edition/2012
5	Mechanics of Fluids	G.K. Vijayaraghavan and Dr.S.Sundaravalli	A.R.S. Publications, Chennai, India,	Third Edition/2012
6	Engineering Thermodynamics	G.K. Vijayaraghavan & Dr.S.Sundaravalli	Lakshmi Publications, Chennai, India	Fifth Edition/2012
7	Automobile Engineering	G.K. Vijayaraghavan and Dr.S.Sundaravalli	A.R.S. Publications, Chennai, India	First Edition/2008
8	Renewable sources of energy	Dr.G.K. Vijayaraghavan, Dr.R.Rajappan and Dr.S.Sundaravalli	A.R.S. Publications, Chennai, India	Fourth Edition/2012
9	Production Technology	Dr.G.K. Vijayaraghavan, Dr.R.Rajappan and Dr.S.Sundaravalli	A.R.S. Publications, Chennai, India	First Edition/2012

Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

Citation index – range / average
Range : 0 to 103; Average : 10.8571
SNIP : Refer Annexure : 3.2 and 3.3 in Criterion III
SJR : Refer Annexure : 3.2 and 3.3 in Criterion III
impact Factor – range / average 0 to 2.735 / 1.63
Department H index : 6

23.   *Details of patents and income generated*

S.No.	Inventor Name	Title	Patent Number
1	Mariappan Murugan	A cutting tool insert with built in provision for detecting flank wear of a predetermined value	201014
2	V.Geethaguru	Hip Joint Simulator	198349

24.   *Areas of consultancy and income generated*

S.No.	Title of the Consultancy	Income Generated (in Rupees)	Client
1	Training Programme for the Employees of Ford India Ltd.	51 Lakhs	M/s. Ford India Ltd.
2	ASOP programme for B.Tech (From 3rd Semester onwards)	7 Lakhs	M/s. WABCO TVS

25.   *Faculty selected nationally / internationally to visit other laboratories / institutions/ Industries in India and abroad*

a) International

S. No.	Name of the faculty	Purpose of the visit	Industries/Institution visited
1	Dr.R.Rajendran	Wear characteristics of electroless Ni-P coated aluminium for cylinder liner application	Queen's University, UK
2	Dr.R.Rajendran	Part of SAE Award	General Motors R&D technical centre, USA

b) National

S. No.	Name of the faculty	Purpose of the visit	Industries/Institution visited
1	Dr.R.Rajendran	Wear studies of duplex coated piston rings	IP Rings Ltd., Chennai
2	Dr.R.Rajendran	Faculty Industry Education Residential program by SAE INDIA	John Deere, PTC, ARAI, EATON, JCB and Cummins at Pune
3	Dr. M. Murugan	Consultancy activity	M/s. Garuda Vaayu Shakthi Ltd., Chennai

26. *Faculty serving in a) National committees b) International committees c) Editorial Boards d) any other (please specify)*

S. No	Name of the faculty	Name of the committee
1	Dr.R.Rajendran	Member and Vice chair -Student Activities, Executive Council Member, SAEINDIA Southern Section
		Organising Committee member for SAEINDIA AWIM National Olympics 2009 held in Pune
		Co-convenor for FORMULA SAEINDIA Design Challenge held at Anna University
		Member in Institute Interface Committee of International SAE Mobility Congress held in Chennai
		Reviewer in Surface and Coatings Technology – International Journal Elsevier
		Reviewer in Advances in Tribology- Journal- Hindawi Publishing Corporation
		Reviewer in Intl. Conf. on Mechanical & Manufac. Engg org. by Universiti Tun Hussein Onn Malaysia, 2012
		Reviewer in WTC 2013 5th World Tribology Congress 2013 organized by the Italian Tribology Association
		Organizing committee member in INTERFINISH-SERIA 2013, Asia Pacific Intl. conf. on Surface Engg. For Research & Industrial Applns at REC, Ch.
2	Dr. M. Murugan	Reviewer in Tribology Transaction
3.	Dr.R.Rasool Mohideen	Reviewer of the papers in the Intl. Conf. of Mechanical and Manufacturing Engineering, UTHM, Malaysia
4.	Dr. K.Suresh Kumar	Reviewer -International journal of Ambient Energy- Taylor and Francis
		Reviewer -The Journal of Energy Institute
		Reviewer -The Journal of Green Energy

27. *Faculty recharging strategies (UGC, ASC, Refresher /orientation programs, workshops, training programs and similar programs).*

S.No	Year	No. of Programmes conducted	No. of Faculty attended
1	2013 - 2014	2	13
2	2012 - 2013	4	10
3	2011- 2012	4	32
4	2010- 2011	2	14
5	2009- 2010	2	12

28. *Percentage of Students doing projects*

B.Tech

Year	In-house Project	Industry
2006-2010	94%	6%
2007-2011	72%	28%
2008-2012	70%	30%
2009-2013	68%	32%

M.Tech

Year	In-house Project		Industry	
	Manufacturing	CAD CAM	Manufacturing	CAD CAM
2010-2012	67%	--	33%	--
2011-2013	45%	40%	55%	60%

29. *Awards / recognitions received at the national and international level by*

Faculty

➢ Dr. R. Rajendran, Professor, Department of Mechanical Engineering received the SAE International Ralph Teetor Educational Award for outstanding contribution to Teaching, Research and Student Development on April 12, 2011 at SAE Awards Ceremony held at Detroit USA.

➢ Dr. R. Rajendran Professor was a VISITING RESEARCHER at Queen's University during January to March 2010 funded by The Royal Society London UK Under International Travel Grant Guided by Professor Wei Sha School of Planning, Architecture and Civil Engineering Queen's University, Belfast UK to carry out the project titled Wear characteristics of electroless Ni-P coated aluminium for cylinder liner application

➢ Mr.G.Dan Sathiaraj received the **Best Supporting SAEISS Faculty Advisor Award** for the year 2009-10 at SAEINDIA Student Convention held at Jeppiar Engg College on Sep 18, 2010

Doctoral Post Doctoral Fellows:

➢ Mr. Parvez Ahamed, a full time research scholar of this department is awarded UGC – Moulana Azad Research Fellowship

30. *Seminars/ Conferences/Workshops organized and the source of funding (national / International) with details of outstanding participants, if any*

S. No.	Month / Year	Name of the Seminar / Conference / Workshops	Source of Funding (Natl/ Intl)	Details of outstanding participants
1	January 2008	National Conference on advances in product design, Materials & Manuf. Engg	BSA University	Dr. Radhakrishnan, Prof, IIT, Ch.
2	April 2013	National Conference on advances in Materials, Design and Manufacturing Engineering	BSA University	Dr. Jebaraj, Director, AUFRG, Anna University

31. *Code of ethics for research followed by the departments*

Code of ethics for research is enclosed as **Annexure D - 3.1 (Criterion III)**

32. *Student profile programme-wise:*

B.Tech	Total Applications Received	Selected		Pass Percentage	
		Male	Female	Male	Female
2009 -2013	2784	180	1	85	100
2008-2012	2280	71	--	91.5	--
2007-2011	2378	69	--	84	--
2006-2010	2546	63	--	85.7	--
M.Tech (CAD/CAM)					
2011-2013	20	10	---	90	---
2010-2012	---	---	---	---	---
2009-2011	10	5	---	100	---
2008-2010	---	---	--	---	---
M.Tech (Manufacturing)					
2011-2013	15	11	---	100	---
2010-2012	7	3	---	100	----

33. *Diversity of students*

Name of the Programme	% of students from the same Univ	% of students from other Univ. within state	% of students from Univ. outside state	% of students from other countries
M.Tech (2011-2013)	--	100	--	--
M.Tech (2010-2012)	--	100	--	--
M.Tech (2009-2011)	--	100	--	--
M.Tech (2008-2010)	--	100	--	--

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Batch	GATE (Appeared)	IES(Appeared)	TANCET (Appeared)
2009 -2013	30	--	40
2008-2012	15	2	14
2007-2011	12	--	16
2006-2010	10	--	21

35. Student progression

Student progression	Numbers of students
UG to PG	11
PG to M.Phil.	----
PG to Ph.D.	2
Ph.D. to Post-Doctoral	------

Placement Details

S.No	Batch	Campus recruitment	Other than campus recruitment	Entrepreneurs
1	2005-09	20	25	-
2	2006-10	35	20	-
3	2007-11	42	12	-
4	2008-12	51	10	-
5	2009-13	92	37	-

36. Diversity of staff

Percentage of faculty who are	
Graduates of the same university	8.51
Graduates of the from other universities within the state	80.85
from universities other states	8.51
from universities outside the country	2.12

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period

S. No.	Name of the Faculty	University	Year of awarded Ph.D.
1	Bhaskaran.J	Anna University	July 2012
2	A.S.Selva Kumar	Anna University	March 2013
3	H.Siddhi Jailani	Anna University	March 2013

38. *Present details of departmental infrastructural facilities with regard to*
a) Library

Books Volumes	: 753
Books Titles	: 489
Project Reports (UG)	: 346
(PG)	: 158
CDs and Other Learning resources	: 89

b) Internet facilities for staff and students

The Department has

– 1 Sun Server, 10 Sun Work Stations and 117 Computers

– 6 OHPs and 4 LCD Projectors with laptop for lectures and seminars

– 100 Mbps Internet connectivity, WiFi enabled campus

➢ The CAD, CIM and Metrology Laboratories are interconnected through LAN and provided with internet connectivity

c) Total number of class rooms

➢ UG Class Rooms 100 sq.m each   9 Nos

➢ PG Class Rooms 50 sq.m each   4 Nos

➢ Drawing Halls

    • First Year   to seat 240

    • Senior   to seat 60

➢ Air-conditioned Seminar Hall 80 sq.m

➢ Department Library & Conference Hall

HOD office and Faculty rooms

d) Class rooms with ICT facility - 1

e) Students laboratories

❖ There are 12 Laboratories of total area 2,400 sq.m

➢ CAD Lab

➢ CIM Lab

➢ Dynamics Lab

➢ Fluid Mechanics & Machinery Lab

➢ Machine Shop

➢ Mechatronics Lab

➢   Metrology Lab

➢   Metallurgy Lab

➢   Surface Engineering Lab

➢   Thermal Engineering Lab

➢   Basic Workshop (Fitting, Carpentry, Welding & Plumbing)

➢   Design Appreciation Lab

f) Research laboratories   - 1. Surface Engineering Lab

                                    2. Advanced Metrology Lab

                                    3. CIM Lab

39.   *List of doctoral, post-doctoral students and Research Associates*

a) From the host institution /university

S. No.	Name of the Research scholar	Part time/ Full time
	From host University	
1.	R.Sathish Kumar	Part time
2.	Mahboob E Afshan	Part time
3.	L. Annagowsalya	Part time
4.	S. Jeavudeen	Part time
5.	Parvez Ahamed	Full time (JRF)
6.	T.R. Tamilarasan	Part time
7.	Nasreen Kaleem	Part time
8.	J. Mahasar Ali	Part time
9.	T.Venkatesan	Part time
10.	N.Ravikumar	Part time
11.	Sirajudeen	Part time
12.	Sathick Basha	Part time
13.	Purusothaman. J	Full time (Research Associate)
	From other University	
14.	Selvam.G	Part time
15.	Prakash	Part time
16.	Thangapazham	Part time
17.	Prabhakaran	Part time
18	K. Pitchai Mani	Part time
19.	K. Ram	Part time

S. No.	Name of the Research scholar	Part time/ Full time
20.	S.Baskar	Part time
21.	Lachhman Mohanta	Part time
22.	Ramalingam	Part time
23.	Radha Krishnan	Part time
24.	Sridhar	Part time
25.	Aravinda Pandian	Part time

40. *Number of post graduate students getting financial assistance from the university.*

NIL

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

- ➢ Senior faculty members are assigned to meet suitable organisation to take survey about the potential of new programme.

- ➢ Dr.K.Suresh Kumar went to CWET (Centre for Wind Energy Technology) to meet the officials to get a mini survey related to starting a new programme on M.Tech (Wind Energy). Also a team visited "Vestos Ltd" to know about the potential for such programme.

- ➢ The department of Mechanical Engineering has initiated to start the following two new courses
  - • Aeronautical Engineering
  - • Automobile Engineering

- ➢ Prior to start of these programmes the department has organized workshops and invited expert members from industries, alumni and academic institutions in and around Chennai. In these workshops detailed discussions and brain storming sessions about the need, curriculum and current trends in the education were analysed.

42. *Does the department obtain feedback from*

a. **Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?**

Based on the feedback, the necessary changes in the course structure, number of credits, curriculum, etc., are proposed in the board of studies for approval. Subsequently the changes are incorporated.

b. **Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?**

Feedbacks on staff, teaching learning evaluation from students are obtained twice in a semester. Based on the feedback the head of the department counsel, advice the faculty

on his/her strengths and weaknesses and motivate to make the necessary changes in his/her teaching methodology.

➢ Faculty members are motivated to adopt some best strategies in teaching learning (Appreciated by the students) for the benefit of students.

➢ Faculty development /orientation programme are organized in selected courses handled by many of the department faculty members to improve the faculty expertise.

c. **Alumni and employers on the programmes offered and how does the department utilize the feedback?**

➢ Based on the feedback, new programmes in UG/PG are proposed.

➢ Existing programmes are changed to suit the current requirement

➢ Accordingly the programmes M.Tech (CAD) and M.Tech (CIM) were changed to M.Tech (CAD – CAM) and M.Tech (Manufacturing) respectively.

➢ Changes in the curriculum and course structure to suit the industry requirements.

43. *List the distinguished alumni of the department (maximum 10)*

Sl.No	Name	Year of passing	Current position
1	M.Sanjay Kumar	1989	Director, Litaski Electricals Pvt Ltd.
2	R.Sheshadrimohan	1989	Litaski ElectricalsPvt Ltd.
3.	Gopal Kido	1989	Director Kido labs
4.	Ali Asgar	1989	Director Madras Glass and Plywoods
5	P. M. Irfan Ahmed	1989	Entreprneur
6.	S.Dilip Kumar	1993	Director, Springfel Polyurethane trans(p) Ltd.
7.	G .Einstin	2004(CAD)	Director, Einnel technogies

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

Sl. No.	Expert Name	Designation	Topic/Purpose	Date
1	Prof. Wei Sha	Queens University UK	A Model Approach to Metals	11th January 2011
2	Mr. John Devadasan	Chief Operations, M/s Apollo Tyres Ltd.,	What is Mechanical Engineering all about	11th August 2011

Sl. No.	Expert Name	Designation	Topic/Purpose	Date
3	Mr. Narayanan	R&D Division, WABCO TVS	New Product Development in India	30th September 2011
4	Mr. Clayne A Woodbury	National Sales Manager, Real Time Technologies, USA and Viswire Simulation and Training Pvt. Ltd.,	"Modelling Softwares" and Technical lead	9th November 2011
5	Mr. S. Shanmugam	Director, Design Desk India Pvt. Ltd.,	New product design and development	14th February 2012
6	Dr. Nikolai V. Kharchenko	Visiting Professor, School of Mech. Engg. SRM University	Solar thermal systems	11th April 2012
7	Mr. P. Chandramouli	Director M/s. Garuda Vaayu Shakthi Ltd.,	Inaugural function of the societies activities	19th July 2012
8	Mr. P. Velsamy	General Manager, M/s Mersen India Pvt.Ltd.	Symposium CONFLUENCE	28th July 2012
9	Dr. S. Aravindan	Associate Professor, IIT, New Delhi	Patterned Surfaces	6th August 2012
10	Mr. Mohammed Sadiul Rahman	General Manager, Turbo Machinery,Hyd	Trouble shooting of steam turbine	14th Nov' 2012
11	Prof. J. Banhert	Professor, Technical University Germany	Light metal foams- scientific challenges	17th December 2012
12	Dr. R. Ramaseshan	SO/F Assistant	Nano Mechanical Characterization	1st February 2013
13	Mr. K. Aravind	Regional Trainer – South Bosch, Chennai	Diesel Fuel Injection System	1st October 2013

45. *List the teaching methods adopted by the faculty for different programmes.*

➢ Video lectures of selected courses are uploaded in the internet for the benefit of students of BSAU and others. The complete course is video-graphed and uploaded then and there in the net. Some of the slow learning students/absentees can download the same and learn it at any time. The available courses are:

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- Engineering Mechanics (GE-107) -Dr.Rasool Mohideen, Prof./Mech
- Engineering design Concepts (ME-105) - Dr.M.Murugan, Prof./Mech
- Engineering Graphics (GE-101) - Mr.J.Mahashar Ali, AP/Mech.

➢ Developed e-training module on "Corrosion" for the subject ME 204 Material Technology by Dr.R.Rajendran, Prof./Mech. for the third Semester Mechanical Engineering students using Adobe presenter.

➢ Video lectures in various subjects

➢ Activity based learning by carrying out small project work using the combined skills in labs like Manufacturing Technology, Metrology and CAD Lab.

➢ Seminars by the students in various subjects.

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*

➢ To ensure the alignment of course objectives and outcomes with respect to the programme objectives and outcomes, a mapping of these two are done.

➢ The Continuous Assessment Test and Semester End Examination question papers are set to meet the objectives.

➢ To meet the outcomes of each course application oriented questions are ordered.

➢ To monitor the quality of question paper and system evaluation a team of members constituted for the following committees

- Department Academic Audit (DAAC) ,
- External Academic Audit Committee (EAAC)

In addition, a school level advisory committee comprising of all the stake holders including, students, staff, employers, parents, alumni and industries review the system of ensuring programme objectives and outcomes through the teaching leaning process and evaluation methods.

47. *Highlight the participation of students and faculty in extension activities.*

➢ Every student is invariably a member of NSS/YRC/NSO/NCC.

➢ Students along with faculty members are doing social service to the society in the form of blood donation camp.

➢ Serving the nearby villages to meet the needs through annual camp.

➢ Helping the villages in getting skilled training in areas like machining, book binding, welding, smithy, motor mechanic etc.

➢ Helping the school students to learn basic subjects.

48. *Give details of "beyond syllabus scholarly activities" of the department.*

➢ A model developed in association with Society of Automotive Engineers SAE – **"aSOP (Automotive Student Orientation Program)"** to make the students industry ready (hands-on experience).

➢ Students in teams are motivated to participate in national contests like "CART Baga", organized by SAE India.

➢ P.G. students are motivated to do extra audited courses for knowledge gain.

➢ Software training is offered to needy students during evening time.

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

Already accredited by NBA. University is certified by ISO 9001-2008

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

➢ The department is conducting part time B.Tech. Programme for the employees of   M/s Apollo Tyres.

➢ The department has developed video lectures for the following courses and uploaded in the University website for the benefit of student community

• Engineering Graphics by Mr. J. Mahashar Ali

• Engineering Mechanics by Dr.S.Rasool Mohideen

• Engineering Design concepts by Dr. M.Murugan

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths:

➢ Faculty with more number of Ph.D Qualification.

➢ Well experienced and dedicated faculty with attractive student staff ratio

➢ Well equipped laboratories with research facilities

➢ Well managed learning resources which include various advanced software tools like ANSYS, Pro E, FEA, AutoCAD, MATLAB, Vision system and Lab View

Weaknesses:

➢ Limited funded projects

➢ Less consultancy works

Opportunities:

➢ Possible collaborative research through available MOUs

➢ Available good ambience for research activities

➢ Incentives for research related activities.

Challenges:

➢ To improve the placement record and to attract creamy layer students

➢ To compete with the competitors

➢ To get National/International recognition through research, placements and higher education.

52. *Future plans of the department.*

➢ To incorporate innovations in teaching and learning process through additional facilities for e-learning, smart class rooms etc.

➢ To start new P.G. programme - M.Tech (Renewable Energy)

➢ To establish a centre for excellence to promote quality education and research

➢ To promote consultancy activities through tie up with nearby industries.

➢ To promote semester abroad/ Joint program with leading foreign universities.

Department of Polymer Engineering

1.   Department of Polymer Engineering

Department of Polymer Engineering was established in 1996 with an aim to provide technical services and manpower to various polymer industries and academic research institutions and national laboratories. A four year undergraduate program, B.Tech. in Polymer Technology, first of its kind in Tamil Nadu was started. The department has adequate infrastructure and well-equipped laboratories and it is empowered with a team of highly qualified faculty members. The department acquired many funded projects from DST, NRB, and DRDO etc.

2.   Year of establishment   : 1996

3.   Is the Department part of a School/Faculty of the university?

The department is under the School of Mechanical Sciences.

4.   Names of programmes offered:

B.Tech. in Polymer Technology ;   Ph.D

5.   Interdisciplinary programmes and departments involved: Nil

6.   Courses in collaboration with other universities, industries, foreign institutions, etc:
Nil

7.   Details of programmes discontinued, if any, with reasons: Nil

8.   Examination System: Annual/Semester/Trimester/Choice Based Credit System:

Semester and choice based credit system

9.   Participation of the department in the courses offered by other departments: Nil

10.   Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors / Asst. Professors / Others)

	Sanctioned	**Filled**	**Actual (including CAS & MPS)**
Professor	2	2	2
Associate Professors	Nil	Nil	Nil
Assistant Professors	7	7	7

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Name	Qualifi-cation	Designa-tion	Specializa-tion	Yrs of Exp.	No. Of Students guided
Dr.S.S.M.Abdul Majeed	M.Sc, M.Phil., Ph.D.	Professor & Head of the Department	Industrial Chemistry Polymer Chemistry	25	4 Ph.D -guiding M.Tech (by Res.) guided -1 guiding -2
Dr.R.Vasantha kumari	M.Sc., MBA, Ph.D.	Professor	Chemistry Polymer Science	28	6 Ph.D - guiding M.Tech (by Res.) guided -2 guiding -2
Mr. Basanta Kumar Behera	AMIE, M.Tech.	Assistant Professor	Mechanical Engineering Polymer Science & Engineering	5	-
J. Shahitha Parveen	B.Tech. M.Tech.	Assistant Professor	Polymer Technology Polymer Science & Engineering	3	
Ms.S.Vijayarani	B.Tech. M.Tech.	Assistant Professor	Chemical Engineering Polymer Science & Engineering	4.5	-
Ms,S.Shamshath Begum	B.Tech, M.S.	Assistant Professor	Chemical Engineering	8	
Mr.D.Murali Manohar	B.Tech., M.Tech.	Assistant Professor	Polymer Technology Polymer Science & Engineering	7	-

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Name	Qualifi-cation	Designa-tion	Specializa-tion	Yrs of Exp.	No. Of Students guided
Ms. Sindhu. K.P	B.Tech., M.Tech	Assistant Professor	Rubber and Plastics Tech. Polymer Sci. & Tech.	6 Months	-
Mrs.R.Daulath Banu	B.Tech., M.Tech. (By Research)	Assistant Professor	Polymer Technology	6 Months	-

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors:* **Nil**

13. *Percentage of classes taken by temporary faculty – programme-wise information: NA*

14. *Programme-wise Student Teacher Ratio*

Programme offered	Student- Teacher Ratio
B.Tech - Polymer Technology	6:1

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

Non-Teaching Staff	Sanctioned	Filled	Actual
Technical Staff	3	3	3
Administrative Staff	2	2	2

16. *Research thrust areas as recognized by major funding agencies :*
   ➢ Polymer nanocomposites
   ➢ Polyelectrolytes for energy storage
   ➢ High performance polymers
   ➢ Heat resistant composites

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

(a) National Funding

S. No	Title of the Project	Investigators	Amount (In lakhs)	Funding Agency	Period
1	Low loss and High Shock absorbing potting materials for microwave applications	Dr.S.S.M. Abdul Majeed	8.15	DRDO	2010-2013
2	Polymer Nano Materials Research Centre to work on "Development of high temperature resistant polymeric nano fibre for flexible polymer electrode & membrane application"	Dr. R.Vasanthakumari	85.82	DST under Nano Mission	3 years (2009-2012) Extended Upto 2013
Total Grants			**93.97 Lakhs**		

18. *Inter-institutional collaborative projects and associated grants received*

Dr.R. Vasanthakumari is carried out collaborative research work with the following Institutions:

➢ M/s. Cabot Sanmar Ltd, Chennai

➢ M/s. Arudra Engineers Pvt Ltd, Chennai.

➢ M/s. SRF Limited, Chennai.

➢ M/s. Vasavi Polymers, Gundakkal, Andra Pradesh.

➢ M/s Aspin Wall, Pollachi

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

S. No	Title of the Project	Investigators	Amount (In Lakhs)	Funding Agency
1	Low loss and High Shock absorbing potting materials for microwave applications	Dr. S.S.M. Abdul Majeed	8.15	DRDO
2	Polymer Nano Materials Research Centre to work on "Development of high temperature resistant polymeric nano fibre for flexible polymer electrode and membrane application"	Dr. R. Vasanthakumari	85.82	DST under Nano Mission

S. No	Title of the Project	Investigators	Amount (In Lakhs)	Funding Agency
3	Development of oil absorbing polymer product for efficient removal of oil spills in sea water	Dr.R.Vasanthakumari	21.66	NRB (Navel Research Board)
4	Novel polymeric electrolytes from chemically modified polyvinylidene fluoride and polyethylene oxide for rechargeable lithium battery	Dr.S.S.M.Abdul Majeed	27.44	SERC, DST

20. *Research facility / centre with*

1. State Recognition -

➢ The facilities available in Polymer Research lab like DSC, TGA, DMA, XRD and Polymer Testing labs are utilised by various universities and industries.

➢ Many industries like SRF Polymers, Regen Powertech Pvt Ltd, Ashok Leyland, Futura Polyesters, Super fill India Ltd, Saint Gobain Glass India Pvt Ltd, Formulated polymers, IGP Engineers Pvt Ltd and TVS WABCO are also utilising the polymer testing and research lab facilities.

2. National Recognition

The Universal testing machine of polymer testing lab and optical microscope of research lab are utilised by Universities and colleges from other states.

3. International Recognition - **Nil**

21. *Special research laboratories sponsored by / created by industry or corporate bodies*

i. New Centres Created:

Polymer Nanotechnology Centre has been established with modern equipment worth of **Rs.1Crore** like X- ray Spectrophotometer, electro spinning unit and Dynamic Mechanical Analyser. It was sponsored by DST Nano Mission in the year 2009.

22. *Publications*

Year	No. of Publications in National Journals	No. of Publications in International National Journals
2009	1	-
2010	1	1
2011	1	1

Year	No. of Publications in National Journals	No. of Publications in International National Journals
2012	-	5
2013	-	3
TOTAL	3	10

Publication details are enclosed in **Annexure D - 3.2 and 3.3 (Criterion III)**

➢ Monographs : Nil
➢ Chapters in Books : Nil
➢ Edited Books : Nil
➢ Books with ISBN with details of publishers : Nil
➢ Number listed in International Database (For *e.g.* Web of Science, Scopus,

Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

➢ Citation Index – range / average : 3-6
➢ SNIP : 0.1 - 0.9
➢ SJR : 0.14 – 0.7
➢ Impact Factor – range / average : 0.3 to 1.4
➢ h-index : 5.85

23. *Details of patents and income generated* : *Nil*

24. *Areas of consultancy and income generated*

S.No	Consultancy Details	Industry /academic institutions	Period	Amount in Rs.
1.	Testing of samples for carbon content, DSC, TGA, FTIR, Mechanical Properties	SRF Polymers, Regen Powertech Pvt., Ltd, Ashok Leyland, Futura Polyesters, Super fill india ltd, Chennai, Regent Power Tech	2008-2010	1,63,450
2.	Testing for TGA/ DTA, DMA, Microscope, XRD, Tensile Tester	Formulated polymers, Superfill products Ltd, SRF limited, IGP Engineers pvt Ltd, TVS WABCO,	2010-2011	62,500
	Testing for TGA/ DTA, DMA, Microscope, XRD, Tensile Tester and analysis of their samples for product identification	Formulated polymers, Superfill products Ltd, SRF limited, IGP Engineers pvt Ltd, TVS WABCO, Saint Gobain Glass India Pvt Ltd Sankara Univ., Kalasalingam univ., Vels Univ, Dr MGR Univ, Anna Univ, PSG College, Coimbatore, SRC , Trichy, SRM Valliammai Coll. RV Coll. of Engg, Bangalore.	2011-2012	2,13,000

S.No	Consultancy Details	Industry /academic institutions	Period	Amount in Rs.
4.	Testing for TGA/ DTA, DMA, Microscope, XRD, Tensile Tester & analysis of their samples for product identification, Rebound resilience	Formulated polymers, Superfill products Ltd, SRF limited, IGP Engineers pvt Ltd, TVS WABCO, Saint Gobain Glass India Pvt Ltd, Sankara University, Kalasalingam university, Vels University, Dr MGR University, Anna University, PSG College , Coimbatore, SRC , Trichy, SRM Valliammai College,RV college of Engg, Bangalore.	2012-2013 Up to Sep 2013	2,30,600
			Total	6,69,550

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad :*

Dr.R. Vasanthakumari visited the laboratories of the following Institutes and Industries:

- ➢ Central Institute of Plastics Engineering and Technology , Chennai
- ➢ Central Leather Research Institute (CLRI), Chennai.
- ➢ Jawarharlal Nehru Centre for Advanced science and Technology, Bangalore.
- ➢ IIT, Madras.
- ➢ SRF Limited, Chennai.
- ➢ Cabot Sanmar Ltd, Chennai.
- ➢ Futura Polyesters, Chennai.
- ➢ Valqua products, Chennai
- ➢ Arudra Engineers Pvt Ltd, Chennai.
- ➢ LAMCO, Hyderabad.
- ➢ TEAM, Chennai.
- ➢ RRB Energy Ltd, Chennai.
- ➢ Ashok Leyland, Chennai.
- ➢ Superfill products, Chennai.
- ➢ Formulated Polymers, Chennai.
- ➢ X Mold Polymers, Chennai.

26. *Faculty serving in*

a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Dr. R. Vasanthakumari is the member of the following committees and boards

- ➢ Technical Advisory Research Committee of CIPET
- ➢ Member of Board of Studies, Anna University, Chennai.

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

(a) Workshops /Seminars/ Conferences/ Training Program attended by Faculty Members

S. No.	Year	No. of Faculty Attended Workshop / Seminars	No. of Faculty presented paper / attended Conference	No. of Faculty attended Training Prog
1	2010	7	7	3
2	2011	7	3	5
3	2012	7	2	7
4	2013	3	2	7

28. *Student projects*

➢ Percentage of students who have done in-house projects including inter-departmental projects : **100%**

29. *Awards / recognitions received at the national and international level*

➢ Mrs. J. Shahitha Parveen and Dr. S.S.M Abdul Majeed received Best Paper Award for the paper titled "Electrospun Poly(vinylidene fluoride –co-hexafluropropylene) Nanofiber as polymer electrolytes for lithium batteries" at International conference in "Advancements in polymeric materials 2013" (APM 2013) organized by CIPET, Lucknow, India during 1st to 3rd March, 2013.

➢ Dr. Vasanthakumari received the National award for Technology Innovation from Dept of chemicals and petrochemicals, Ministry of chemicals and fertilisers, Govt. of India, April 2012.

➢ Dr. Vasanthakumari, Prof & Head, Polymer Nanotechnology Centre has received Plasticon award- silver trophy in the category of "Outstanding public awareness" from Plastindia Foundation, Delhi, on Feb 2012.

➢ "2nd National Award for Innovation in Petrochemical & Plastic Processing Industry" was presented to Dr.Vasanthakumari & Team , (Director, Sponsored Research and Consultancy) by Shri.Srikant Kumar Jena, Minster for Statistics & Programme & Minister for Chemical and Fertilizers, Government of India for the development digitally controlled heating gloves and pads for soldiers in high mountain areas under DIPAS, DRDO project.

a. **Awards / recognitions received at the national and international level by Doctoral / post doctoral fellows:**

Mr.S.Vikram Ph.D student received "Second National Award for Innovation in Petrochemical & Plastic Processing Industry" from Shri. Srikant Kumar Jena, Minster for Statistics & Programme & Minister for Chemical and Fertilizers, Government of

India in the area of developing digitally controlled heating gloves and pads for soldiers in high mountain areas under DIPAS, DRDO project.

b. **Awards / recognitions received at the national and international level by Students**

➢ Ms. Afrin Roja Jahir Hussain of IInd year was awarded as the "Best young speaker of Cambridge English in Asia – 2011" among the top 100 performers in the Cambridge English Business Certificate (BEC) vantage exam during the period of July – November 2011 in the South India region.

➢ Following students received PLASTICON AWARD during 2012 which is given once in 3 years during Plast India exhibition cum International conference.

➢ Mrs. R.Daulath Banu, M.Tech. (By Research) has received Gold Trophy along with a cash award of Rs. 30,000/- under best PG student category.

➢ Mr. Balachandar, final year B.Tech student had received Silver Trophy along with a cash award of Rs. 20,000/- under the best UG student category.

30. Seminars / Conferences /Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

i. The department organised two days National Conf. on 'Frontiers in Polymer Nano Materials and Composites' during 18-19 Mar'2010.

Following experts from different field participated in the conference and delivered invited lectures:

a) Prof Dr Ajith Banthia, Dept of Materials Science, IIT Kharagpur on " Polymer nano Composites Yesterday, Today and Tomorrow"

b) Prof Dr SN Maiti, Dept of Polymer Engg, IIT , Delhi on "Polymer Nano materials / Composites: An overview"

c) Prof Dr T S Natarajan, Dept of Physics, IIT Madras on "Polymer Nano fibres and their applications using Electro-spinning"

d) Prof Dr D Mangalraj, Dept of Nano Science and Tech, Bharathiar University on "PVA nano composites for gas sensing applications"

e) Prof Dr S S Bhagawan, Dept of Chemical engg and Materials Science , Amrita Vishwa Vidyapeedam, Coimbatoare on " Elastomer based Nano composites : Trends and Challenges"

f) Dr Saraswathi, Professor and Head, Dept of Material Science ,Madurai Kamaraj University on "Multi functional nano structured Conducting polymers and their carbon nano composites"

g) Mr V K Sharma, Technical Director, Bhimrajka Impex Pvt Ltd on "Role of fillers and additives from micro to nano scale in Polymer Processing"

h) Mr V Sekar, Managing Director, Formulated Polymers Ltd, "Nano composites in Engineering Plastics"

i) Mr Sairam, Senior Manager (Business Development), Reliance Industries "Emerging opportunities in PP composites"

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j)   Mr Ramani Subramaniam, Associate Vice President, SRF Ltd , on "Application of nano technology in the field of technical textiles"

k)   Mr A Mathew, Senior Rubber Technologist, Cori Engineering Ltd on "Role of nano fillers in Rubbers."

l)   Mr G Sekar, CEO, Flytech Engineering on " Processing of Nano clay – wood - Polymer Composites using twin screw extruder"

ii.   Polymer Nano Technology Centre organised one day seminar on "Advanced Materials and Composites for Marine Applications – AMCMA 12" jointly with Naval Research Board, New Delhi on 18th July, 2012,. Following experts in the field from both academic institutions and industries visited the department and presented lectures.

- Dr.R.Venkatesan, Group Head, Ocean Observation Systems, NIOT, Chennai.

- Dr.B.S.Murthy, Head, Metallurgical and Material Engg., IIT, Chennai.

- Dr. Pradeep Kumar, Head, Marine Bio Technology, NMRL, Mumbai.

- Dr,G.A. Ramadass, Project Director, Instrumentation for underwater acoustics, NIOT, Chennai.

iii.   One-day workshop on "Motivation and Promotion of Faculty Members for Sponsored and Collaborative research" was organized during July, 2012.

iv.   The Polymer Nanotechnology Centre and Department of Polymer Engineering in association with School of Chemical and Physical Sciences organised an International Conference on 'Nanomaterials: Science, Technology and Applications' during -7 December, 2013. The conference was jointly organised by B.S.Abdur Rahman University, Deakin University, Australia and University Technology, MARA, Malaysia. Following eminent personalities working in the various areas of nanotechnology delivered lectures in the conference.

Following eminent personalities working in the various areas of nanotechnology delivered lectures in the International Conference.

➢   Dr. Jagat R. Kanwar, Head, Nano Medicine, Deakin University,Australia.

➢   Dr. Takuya Tsuzuki, Research School of Engineering, Australian National University (ANU), Australia.

➢   Dr .Abdul Hadi, Faculty of Chemical Engineering, Universiti Teknologi MARA, Malaysia.

➢   Dr.Brett Kirk, Associate Deputy Vice Chancellor, Curtin University, Australia.

➢   Dr. Norlida Kamarulzaman, Centre for Nano Materials Research Institute, Universiti Teknologi MARA, Malaysia.

➢   Dr. Rasaiah Ladchumanandasivam, Department of Textile Engineering, UFRN, Brazil.

➢   Dr. David F. Jenkins, School of Computing & Mathematics, Plymouth University, UK.

31. Code of ethics for research followed by the departments

The University guidelines and code of ethics for responsible conduct of research is followed in the department as shown in **Annexure D - 3.1 (Criterion III)**.

32. Student profile programme-wise:

Name of the Programme	Batch	Selected		Pass percentage	
		Male	Female	Male	Female
B.Tech. Polymer Technology	2009-2013	13	2	62%	100%
	2010-2014	10	5	--	--
	2011-2015	13	3	--	--
	2012-2016	15	7	--	--

33. Diversity of students

Name of the Programme	Batch	% of students from same state	% of students from other state
B.Tech. Polymer Technology	2009-2013	93	7
	2010-2014	93	7
	2011-2015	94	6
	2012-2016	100	0

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise:

Students attended and cleared Competitive examinations

CAT	GATE	GRE	TOFEL
-	4	2	2

35. Student progression

Student progression	Percentage against enrolled
UG to PG	Nil
PG to M.Phil.	NA
PG to Ph.D	NA
Ph.D. to Post-Doctoral	NA
Employed • Campus selection • Other than campus recruitment	90% 80% 10%
Entrepreneurs	10%

36. *Diversity of staff*

Percentage of faculty who are graduates	
Of the same university	11 %
From other university within the State	78 %
From universities from other states	11 %
Universities outside the country	Nil

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*: **Nil**

38. *Present details of departmental infrastructural facilities with regard to*

    a) Department Library

    Department library is equipped with Handbooks, Directories and project reports.

Nature of books	Nos.
Handbooks	14
Text Books	36
ASTM standards	2
UG project reports	134
Lab Manuals	5
Technical Directories	7

b) Internet facilities for staff and students

➢ Internet facilities are available for all for faculties and students

➢ WiFi enabled campus

c) Total number of class rooms

Number of classrooms: 3

Number of seminar hall: 2

d) Class rooms with ICT facility

Seminar hall of the department is provided with ICT facility.

e) Student's laboratories

Polymer Preparation Lab

Polymer Processing Lab

Polymer Testing Lab I

Polymer Testing Lab II

f) Research laboratories

Polymer Research Lab

Polymer Nanotechnology Centre

39. *List of doctoral, post-doctoral students and Research Associates*

a) From the host institution/university

S.No	Name of the Student	Name of the Supervisor
1.	Mrs. J. Shahitha Parveen	Dr. S.S.M Abdul Majeed
2.	Mr. Basanta Kumar Behera	Dr. R. Rajendran
3.	Mr. D. Muralimanohar	Dr.R.Vasanthakumari

b) From other institution / universities

S. No	Name of the Student	Name of the Supervisor
1.	Mr. M. Dhakshnamoorthy	Dr.R.Vasanthakumari
2.	Mrs. N.Jayachitra	Dr.R.Vasanthakumari
3.	Ms. D.Nandhitha	Dr. S.S.M Abdul Majeed
4.	Mr. D.Mukundhan	Dr.R.Vasanthakumari
5.	Mr. S. Vikram	Dr.R.Vasanthakumari
6.	Lalith Mohan Singh Negi	Dr.R.Vasanthakumari

40. *Number of post graduate students getting financial assistance from the university*

NA

41. *Was any need assessment exercise undertaken before the development of new programme(s) if so, highlight the methodology.*

Currently no new programme has been started.

42. *Does the department obtain feedback from*

a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes

The Department conducts meeting periodically to get the views from the faculty with respect to the content of the syllabus, mode of teaching, laboratory experiments etc. The feedbacks obtained from the faculty are assessed in the department meeting and are considered for the curriculum development and framing of syllabus.

b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes

The feedback is discussed and assessed in the department meeting and necessary corrections are carried out in order to enhance the learning, motivation process and clear understanding of the students.

c. Alumni and employers on the programmes offered and how does the department utilize the feedback?   **Yes**

The feedback obtained from the alumni is considered in restructuring the curriculum and syllabi and also for the introduction of new courses.

43. *List the distinguished alumni of the department (maximum 10)*

a)   Dr. Sriram .K, (2001 passed-out batch) Lead Scientist, GE India Technology Centre Pvt. Ltd., Bangalore. He has registered 5 patents.

b)   Dr. Anitha Ethirajan (2002 passed out student) has received an award 'First women scientist in Nanoscience' by Institute for Solid State Physics at the University of Ulm, Germany.

c)   Mr.Manoj Ganesh (2006 passed out student) received 'ACS award for Excellence in Polymer Graduate Research award', from American Chemical Society, San Francisco, USA.

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

a)   The Department organized In-house Exhibition on "Major applications of Polymers in domestic and industrial applications" during the Silver Jubilee Celebration (12 -13 February, 2011).

b)   Mr. V.Sekar, Managing Director, Formulated Polymers Ltd delivered a lecture on "Polymer Additives and Compounding", on 22nd April, 2011.

c)   Department of Polymer Engineering jointly with Indian Plastic Institute (Chennai Chapter) organized a guest lecture on "Opportunities for Polymeric Materials in Clean Tech industries" and Mr. Bhaskar Sompalli delivered a lecture under this topic on 3rd July, 2012 in our University.

d)   Polymer Nano Technology Centre, organized one day seminar titled "Advanced Materials and Composites for Marine Applications – AMCMA 12" Jointly with Naval Research Board, New Delhi in our University on 18th July, 2012.

45   *List the teaching methods adopted by the faculty for different programmes.*

➢   Seminars

➢   Lecture

➢   Power point presentation

➢   Group discussion

➢   Case study

➢   Demonstration using machines/models

> ➢ Video Lectures
> ➢ Lectures using Internet sources

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*

   a) Programme Objectives are ensured from

> i. Placement of students in core industries
> ii. Feedback from the employer

   b) Learning outcomes are assessed through

> iii. Continuous assessments
> iv. Comprehensive tests

47. *Highlight the participation of students and faculty in extension activities.*

   a) Faculty extension activities

> a. Coordinated with rotract club of university for various activities
> b. Several students are members of EDC

   b) Student Extension activities

> a. Members of University Rotract club, NSS unit, ISTD
> b. Blood donation camp

48. *Give details of "beyond syllabus scholarly activities" of the department.*

   a) Technical paper presentation competitions

   b) Participating in technical quiz / debate

   c) Inhouse seminar

   d) Organising technical symposium

   e) Writing articles in technical magazine "Polylinks"

   f) Miniprojects

   g) Inplant training

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details :*

   The Programme was accredited by NBA and secured 'A' Grade for 5 years from August, 2002 and re audited in January 2008 and accredited for 5 years again with effect from 19.07.2008.

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

> ➢ Students were encouraged to carryout interdisciplinary projects with other departments like Civil Engineering, Mechanical Engineering, EEE etc.

➢ For improving the knowledge on design and validation of the process, trainings were arranged for the students to learn software's like ProE, CATIA, Mold flow insight, Moldex3D.

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths:

➢ Faculty with expertise in diversified fields. E.g. Polymer Science & Engineering, Mechanical Engineering, Chemical Engineering, etc.

➢ Research potential of faculty in the advanced areas like nano-composites, polyelectrolyte, high performance polymers etc.

➢ Funded projects from various government agencies

➢ Good laboratory facility with imported instruments and equipment

➢ MoU with leading institutions and industries

➢ Faculty expertise to carryout consultancy work for industries

Weaknesses:

➢ Less popularity about the programme

➢ Insufficient student strength

➢ International collaboration in research

Opportunities:

➢ Growing demand for polymeric materials for advanced applications.

➢ Collaborative research work with foreign universities

➢ Advanced research in Nanomaterials and Technology

➢ Partnership with premier industries for new product development

Challenges:

➢ Popularising the programme among the students

➢ Achieving sufficient student strength

➢ Competing with other institutions

52. *Future plans of the department.*

➢ To increase the student enrolment by popularizing the programme

➢ To establish a centre of excellence in composite technology

➢ To establish centre of excellence in biodegradable plastics

➢ To create laboratories with world class facilities for the development of high performance polymers, conducting polymers, bio and biodegradable polymers and nanocomposites

SCHOOL OF ISLAMIC STUDIES

1.   Name of the Department: **School of Islamic Studies**

The School of Islamic Studies was started in the year 2010 to offer various academic programmes leading to the award of Certificates, Diploma, Under Graduates, Post Graduates and Research degrees in Islamic Studies.

2.   Year of establishment: **2010**

3.   Is the Department part of a School/Faculty of the university?

Yes

There is no department. Only School of Islamic Studies

4.   Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)

Degree	Name of the Programmes	Full time/ Part Time
Bachelor's Degree	• B.A. Islamic Studies (Arabic Medium) - Residential • B.A. Islamic Studies (English Medium)	Full Time Evening Programme
Ph.D	• Ph. D in Arabic and Islamic Studies	Full time/ Part time

Note : M.A. Islamic studies is proposed to conduct from 2014-15 onwards. Curriculum and Syllabus are approved by Board of Studies and Academic Council.

5.   Interdisciplinary programmes and departments involved:

NIL

6.   Courses in collaboration with other universities, industries, foreign institutions, etc:

NIL

7.   Details of programmes discontinued, if any, with reasons:

The M. Phil programme has been suspended since July 2013

8.   Examination System: Semester and choice based credit System

The department follows a semester and choice based credit system

9.   Participation of the department in the courses offered by other departments:

The under graduate programme offered in Islamic Studies is an inter disciplinary programme involving history, history of civilization, comparative religion and so on in addition to basic Islamic studies.

Under foreign language, the School of Islamic Studies is to handle the course on Arabic language for the first year B.Tech. students.

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)*

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	1	1	1
Asst. Professor	7	7	7

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Name	Qualifica-tion	Designa-tion	Specialization	Years of Experi-ence	No. of Ph.D./ M.Phil. guided
Dr. P.S. Syed Masood	M.A., Ph.D.	Professor and Dean	Tafseer, Usoo-lul Fiqh and Arabic Litera-ture	42	2 (guided) + 8 (Guiding)
Dr. P.M. Mohamed Yoosuf Jamali	M.A., M.Phil., Ph.D.	Asst. Pro-fessor	Hadith, His-tory of Islamic Thought	40	--
Mr. A. Jamaluddin	M.A., M.Phil., Ph. D Pur-suing	Asst. Pro-fessor	Fiqh, Aqeedah, Islamic Phi-losophy	40	--
Mr. A.M. Ali Ibrahim Jamali	M.A., M.B.A., M.Phil, Ph. D Pur-suing	Asst. Pro-fessor	Tafseer, Islam-ic History and Arabic Rheto-ric	14	--
Mr. A. Abdul Hai Nadwi	M.A., M.Phil., Ph. D Pur-suing	Asst. Pro-fessor	Fiqh, Arabic Literature and Grammar	16	--

Mr. S. Abdus Samad	M.A., M.Phil., Ph. D Pursuing	Asst. Professor	Hadith, law of inheritance	18	--
Mr. U.M. Mohamed Ilyas Al Bukhari	M.A., M.B.A., M.Phil, Ph. D Pursuing	Asst. Professor	Hadith and Islamic Finance	5	--
Mr. M. Ahamedullah Al Bukhari	M.A., M.Phil, Ph. D Pursuing	Asst. Professor	Tafseer and Uloomul Quran	7	--

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors:* **NIL**

13. *Percentage of classes taken by temporary faculty – programme-wise information:*

    No regular classes are engaged by temporary faculty.

    However, Value addition courses, Special lectures, Guest lectures etc., are offered by eminent persons from other institutes and institutions.

14. *Programme-wise Student Teacher Ratio:* **1:13**

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

    NIL

16. *Research thrust areas as recognized by major funding agencies:*

    Muslims in Plural Society – Common grounds and identities

    Islamic jurisprudence and its application in modern scenario

    Zakath (Charity) – A New approach for its collection and distribution

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

    NIL

18. *Inter-institutional collaborative projects and associated grants received*

a) National collaboration   b) International collaboration   **NIL**

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

<div align="center">

Nil

</div>

20. *Research facility / centre with*
    - state recognition: **Nil**
    - national recognition: **Nil**
    - international recognition: **Nil**

21. *Special research laboratories sponsored by / created by industry or corporate bodies*

<div align="center">

Nil

</div>

22. *Publications:*

The research publications made by the faculty members of this department is given in **Annexure D - 3.2 and 3.3 (Criterion III)** However, the consolidated statistics is furnished below.

Year	International Journal	National Journal	International Conference	National Conference	Total
2010	1	1	1	1	4
2011	0	0	0	0	0
2012	0	1	3	0	4
2013	1	0	1	6	8
Total	2	2	5	7	16

- Monographs: **Nil**
- Chapters in Books: **Nil**
- Books with ISBN with details of publishers: **Nil**

Books without ISBN with details of publishers:

S. No	Title of the Book	Author	Publisher	Year of Publication
1.	History of Arabic Literature (Text Book for M.A. (Arabic)	Dr.P.S.Syed Masood	Univ of Madras	2005
2.	History of Arabic Literature - Umayyad Period (Text Book for Afzal-Ul Ulama).	Dr.P.S.Syed Masood	Manonmaniam Sundaranar Univ. Tirunelveli	2006

S. No	Title of the Book	Author	Publisher	Year of Publication
3.	History of Arabic Literature - Abbasid Period (Text Book for Afzal-Ul Ulama).	Dr.P.S.Syed Masood	Manonmaniam Sundaranar Univ. Tirunelveli	2006
4.	History of Arabic Literature - Modern Period (Text Book for Afzal-Ul Ulama).	Dr.P.S.Syed Masood	Manonmaniam Sundaranar Univ, Tirunelveli	2007
5.	Arabic Language – X Std (Text book for under Samacheer Kalvi – Common scheme)	Dr.P.S.Syed Masood (Reviewer)	Dept of School Education, Govt. of TN	2011
6.	Arabic Language – VII Std (Text book for under Samacheer Kalvi – Common scheme)	Dr.P.S.Syed Masood (Chairperson – Text book team)	Dept of School Education, Govt of Tamilnadu	2011

➢ Number listed in International Database (For *e.g.* Web of Science, Scopus,

➢ Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): **Nil**

➢ Citation Index – range / average: **Nil**

➢ SNIP: **Nil**

➢ SJR: **Nil**

➢ Impact Factor – range / average: **Nil**

➢ h-index: **Nil**

➢ Edited Books: Nil

23. *Details of patents and income generated:* **Nil**

24. *Areas of consultancy and income generated:*

S.No	Title of the Consultancy	Client
1.	Translation for Arabic teaching project	M/s. MESCO Arabic language and English education foundation, Hyderabad.

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad*

International:

S. No.	Name of the faculty	Purpose of the visit	University visited
1.	Dr. P.S. Syed Masood Jamali	To explore the possibilities of tie up with the university	Arabic and Islamic Studies College, Dubai, U.A.E

National:

S. No.	Name of the faculty	Purpose of the visit	University visited
1.	Dr. P.S. Syed Masood Jamali	Guest Lecture	Darul Huda Islamic Academy, Chemmad, Kerala
2.	Dr. P.S. Syed Masood Jamali	Guest Lecture on Islamic Banking	Rowlathul Uloom Arabic College, Calicut, Kerala

26. *Faculty serving in*

a) National committees b) International committees c) Editorial Boards d) any other (please specify)

National Committee:

S. No	Name of the faculty	Name of the Committee
1.	Dr. P.S. Syed Masood Jamali	Member of Arabic Board of Studies, Jamal Mohammed College, Bharathidasan University Nominee.
2.	Dr. P.S. Syed Masood Jamali	Member, Shariah Advisory Board, Janseva Cooperative credit society ltd, Chennai.
3.	Dr. P.S. Syed Masood Jamali	Member in Advisory committee, BSA Zakath fund foundation, Chennai.
4.	Dr. P.S. Syed Masood Jamali	External Examiner to conduct Ph.D viva-voce examination in Arabic, University of Madras.

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

   ➢ Faculty induction training programme is regularly organized once in a year for the new comers, through Faculty training academy of our University.

   ➢ A one day workshop on "Modern techniques of teaching Arabic language" for the benefit of Arabic teachers was organized by the department in which all the faculty members participated. It was held in September 2012.

28. *Student projects*

   ➢ percentage of students who have done in-house projects including inter-departmental projects:

   All the students have to do a project in their final semester. The project reports of the students (both softcopy and hardcopy) are made available in the Department Library.

   ➢ percentage of students doing projects in collaboration with other universities/ industry / institute

   Nil

29. *Awards / recognitions received at the national and international level by*

   ❖   Faculty

S. No	Recipient	Award/ Recognition	Year
1.	Dr. P.S. Syed Masood Jamali	"Bharat Jyoti" Award for his meritorious services in bridging religious and secular education	2013

   ➢   Doctoral / post doctoral fellows: **Nil**

   ➢   Students**:**

S. No.	Name of the Students	Class & Section	Title of the Award, Issuing Institution or Organization , venue and date
1.	Mohammed Kalil Rahman	B.A.I.S. III year	Got first prize in Mono act in the "Students Festival – 2012" organized by SIO, Tamilnadu.
2.	Mohammed Arshad	B.A.I.S. II year	Got third prize in Extempore elocution in the "Students Festival – 2012" organized by SIO, Tamilnadu.
3.	Umar Faisal	B.A.I.S. II year	Got third prize in Holy Quran Memorization Competition organized by Ibnul Qayyum Research Centre, Chennai.
4.	Samdhu Kalesha	B.A.I.S. II Year	Got the second prize in essay writing completion in Arabic held at the New college, Chennai.
5.	Umar Faisal. M	B.A.I.S. III year	Got first prize in Arabic essay writing competition in the "SOUL - 2013" organized by Hindustan College of Arts and Science, Chennai on 30.08.13.
6.	Riyaz Ahmed	B.A.I.S. I year	Got third prize in Arabic essay writing competition in the "SOUL - 2013" organized by Hindustan College of Arts and Science, Chennai on 30.08.13.

30. *Seminars/ Conferences/Workshops organized and the source of funding (national/ International) with details of outstanding participants, if any.*

S. No	Name of the Seminar/ Conference/ Workshops	Organized by	Month & Year	Details of Participants
1.	One Day workshop on "Have we created God for our own purpose?"	School of Islamic Studies & Faculty Training Academy	July 2013	Dr. Yusuf Islam, Professor, Daffodil University, Bangladesh
2.	One Day workshop on "Modern Techniques of Teaching Arabic Language"	School of Islamic Studies	September 2013	Dr. V. Abdur Rahim, Director, Madina Univ, Saudi Arabia

31. *Code of ethics for research followed by the departments:*

Code of ethics for research is provided in **Annexure D - 3.1 (Criterion III)**

32. *Student profile programme-wise:*

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B.A. Islamic Studies (Arabic Medium)– Fully Residential	2010-11 - 39 2011-12 - 37 2012-13 - 33 2013-14 - 45	38 37 31 44	Nil	100% 98.67% 95.2% --	Nil
B.A. Islamic Studies (English Medium) –Evening Programme	2012-13 - 14 2013-14 - 11	5 3	9 8	100%	67%
M. Phil	2012-13 - 2	2	Nil	--	
Ph.D	12	8	Nil	--	

33. *Diversity of Students:*

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside State	% of students from other countries
M. Phil	0%	100%	0%	0%
Ph.D	12.5%	87.5%	12.5%	0%

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

NIL

35. *Student progression*

Student progression	Percentage against enrolled
UG to PG	81%
PG to M.Phil.	Nil
PG to Ph.D.	50%
Ph.D. to Post-Doctoral	Nil
Employed	
• Campus selection	Pursuing higher studies 81% Employed 19%
• Other than campus recruitment	
Entrepreneurs	NIL

36. *Diversity of staff*

Percentage of faculty who are	
Graduates of the same university	12.5%
From other universities within the state	75.0%
From universities from other states	12.5%
From universities outside the country	0%

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period:*

One faculty has received Ph.D and Five Faculty members have completed M. Phil as per the table below.

S. No	Name of the Faculty	University	Year of Awarded M.Phil/ Ph.D	
1.	Dr. P.M. Mohamed Yoosuf Jamali	University of Madras	2013	Ph.D
2.	Mr. A.M. Ali Ibrahim Jamali	University of Madras	2013	M.Phil
3.	Mr. A. Abdul Hai Nadwi	University of Madras	2009	M.Phil
4.	Mr. S. Abdus Samad Nadwi	University of Madras	2009	M.Phil
5.	Mr. M. Ahamdeullah Al Bukhari	University of Madras	2011	M.Phil
6.	Mr. U.M. Mohamed Ilyas Bukhari	B.S. Abdur Rahman University	2013	M.Phil

38. *Present details of departmental infrastructural facilities with regard to*

a) Library

No. of books : 10500

No. of UG Project Reports : 37

No. of Ph.D. Thesis Reports : 02

No. of Monthly Magazines : 9

b) Internet facilities for staff and students
- The Department has internet connection with bandwidth of 100 Mbps
- Every student has access to the internet in the Department Computer Lab
- Wi-Fi enabled campus

c) Total number of class rooms: 8

d) Class rooms with ICT facility: 1

e) Students' laboratories: One Computer Lab

f) Research laboratories: Nil

39. *List of doctoral, post-doctoral students and Research Associates*
a) from the host institution/university: 5 (Ph.D. scholars)
b) from other institutions/universities: 3 (Ph.D. scholars)

40. *Number of Under graduate/ post graduate students getting financial assistance from the university:*

12 % of students are getting financial assistance from Zakaath Fund.

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

NIL

42. *Does the department obtain feedback from*

a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes. In the latest updation of curriculum in June 2013, suggestions given by the faculty members were incorporated. A special course of Arabic – English skill was introduced.

b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes. On the basis of the feedback, the curriculum was updated. Suggestions were incorporated.

c. Alumni and employers on the programmes offered and how does the department utilize the feedback?

As the first batch was graduated only in the last may 2013, the feedback process is going on.

43. *List the distinguished alumni of the department (maximum 10)*

The first batch has graduated just recently.

44.	*Give details of student enrichment programmes (special lectures/ workshops / seminar) involving external experts.*

S. No	Special Lecture/ Seminar/ Workshops	Month / Year	Details of Participants
1.	Seminar on "Importance of Arabic Language"	July 2011	Dr. Abdul Jaleel Bin Mohammed Bin Abdullah Al Murshidh, Specialist in Modern Arabic Language, Oman Rabee Bin Khadeem Bin Rabee Al Jabiri, Specialist in Quranic language, Oman.
2.	Special Lecture on "The Modern media & involvement of the students"	Oct' 2011	Mr. Azeez Lutfullah, Sub editor, Samarasam – Bi monthly magazine.
3.	Special Lecture on "How to improve writing skills?"	Jan' 2012	Dr. Mohammed Ali, Editor, Iniya Thisaigal Monthy magazine.
4.	Seminar on "Quran and Muslim community"	Feb' 2012	Dr. K.V.S. Habeeb Mohammed, Vice – President, IFT. Moulavi Haneefa Manbayee, Secretary, JIH, Tamilnadu.
5.	Training Programme on "Importance of Islamic Studies in Today's scenario"	July 2012	Dr.Ahamed Abdul Lathiff, Professor in Islamic Doctrine, Ummul Qura University, Mecca. Dr. Hashim Ali Al Ahdal, Professor in Education, Ummul Qura University, Mecca.
6.	One day workshop on "Modern Techniques of teaching Arabic Lang."	Sep' 2012	Dr. V. Abdur Rahim, Director, Madina University, Saudi Arabia
7.	Special Lecture on "How to face the criticisms against Islam?"	Oct' 2012	Moulana Abul Hasan Fasy, Chief Imam, Masjid Ashraf, Mannady.
8.	Special Lecture on "Impact of Arabic Grammar in Arabic Litt "	Oct' 2012	Dr. Ali Imran, HOD of Arabic, University of Bahrain.
9.	Special Lecture on "Madrasas & Universities: How is Islam taught as a religion in different educational venues?"	Feb' 2013	Dr. Bruce Lawrence, Emeritus Professor in Islamic Studies, Duke University, USA.
10.	Special Lecture on "Role of youth in Community development "	Nov' 2013	Moulana Abu Bakr Usmani, Chief Imam, Jamia Masjid, Palavakkam.

S. No	Special Lecture/ Seminar/ Workshops	Month / Year	Details of Participants
11.	Workshop on "Modern methodology of teaching Quran meaning"	Dec' 2013	A. Sadam Hussain Hasani, Trainer in Understanding Quran Academy M. Ahmad Kabeer Manbayees, Chief trainer in Understanding Quran Academy, Chennai.

45. *List the teaching methods adopted by the faculty for different programmes.*

1. Lecture
2. Class room discussion
3. Power point presentation
4. Interaction
5. Group discussion
6. ICT Tools
7. Self / Library reading
8. Debate (informal) on current issues by students from class
9. Textbook assignments
10. Vocabulary drills
11. Video – Audio aided teaching
12. Smart board with internet facility

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*

The following steps are taken:
i) Two Continuous Assessment Test and one End Semester Examination are conducted.
ii) Three class committee meetings are held during each semester.
iii) Department Academic Audit (DAAC) and External Academic Audit (EAAC) are regularly meeting to ensure the quality and alignment of objectives with the outcomes.
iv) Attendance and delivery records are checked periodically, especially after each assessment and end semester examination.

47. *Highlight the participation of students and faculty in extension activities.*

A group consisting of thirty final year students has taken up the task of teaching Holy Quran and basic Islamic studies for the students of Crescent School. Classes are being conducted five days a week in the early morning hours.

48. *Give details of "beyond syllabus scholarly activities" of the department.*
a. Association activities, Weekly oratorical training in Arabic and English.
b. Monthly Wall magazines, Annual Magazines organized and published by the students with the help of staff.

    c.   Delivering Friday – Jumuah Sermons in different mosques by students and staff.

49.   *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

University is certified by ISO for 9001:2008.

50.   *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

A Special Business Arabic course developed for technical students.

51.   *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths:
1. Well qualified and Experienced Faculty
2. Residential system
3. Updated curriculum
4. Well equipped library
5. Effective evaluation system

Weaknesses:
1. Limited scope for jobs
2. Limited research publications
3. Unable to utilize services of native Arab teachers

Opportunities:
1. To become a leader in Islamic studies
2. To be accredited by international educational bodies.
3. To collaborate with foreign universities

Challenges:
1. To sustain the momentum
2. To create more job opportunities

52.   *Future plans of the department.*
1. To start distance education
2. Collaboration with foreign universities
3. Inviting foreign faculty
4. To have all the faculty members qualified with Ph.D
5. To publish research papers and books every year.
6. To start post graduate programme

SCHOOL OF LIFE SCIENCE

1.   Name of the Department: **School of Life Sciences**

The School of Life sciences has started from the growing realization by the Industry, Research Laboratories and Academic Institutions that the quality of Bio-Scientist produced should be able to cope with the gushing tornado of knowledge, diversity of issues, and expectations of the job. Life Science deals with the scientific basis of health and disease in humans, plants and animals and is currently the most rapidly developing area in basic biological science. It involves study of cellular, physical, biochemical, molecular structure and interaction of cells with special emphasis to health and diseases in living beings . It adapts a multidisciplinary approach, which allows to investigate normal life processes and to study its mechanism of transformation to diseased state using the most ultramodern methods involving molecular approaches in Biochemistry, Bioinformatics, Biotechnology, Immunology, Molecular Biology and Genetics. Biomedical Sciences in combination to various above said thrust areas have revolutionized research over the past decades, stimulating growth in a wide range of industries including agriculture, pharmaceuticals, veterinary science and medical research.

Programs in life science will provide a very sound theoretical and practical foundation in a range of subjects that would be used for the betterment of human mankind. Our aim is to produce highly trained and skilled bioscience scientists who have flexible career opportunities, and can make valuable contribution to continuing growth in medical knowledge and to the future of development of new diagnostic tools, understanding the underlying mechanism(s) of action of various drugs and modulating their action using molecular methods, computer designing and gene therapy. The students can also be absorbed as highly skilled technologist in several R & D Pharmaceutical companies, Genetics, Diagnostic laboratories, Biotechnology and Bioinformatics laboratories. The program offers the students the opportunity to get trained in the trust areas of the millennium in medical/agricultural/pharmaceutical field of Bioinformatics, Biotechnology & Genetics.

A strong broad comprehensive understanding of biomedical research, reinforced by a strong practical laboratory component create a pathway to doctorate degree which is available to those students who wish to go through the doctoral programme meeting the academic requirements for entry.

With the fusion of Biological Sciences with information technology, computer aided drug designing and completion of gene mapping of human DNA, there is an urgent need in India to prepare the Indian students with biological background to have a very a strong foundation in subjects like Biochemistry & Molecular Biology, Human Genetics, Bioinformatics and Biotechnology. This program is designed to ensure that it also provides the students a very strong foundation in mathematical, physical and chemical sciences with computer applications and even trains them in entrepreneurship. With this background the objective of this program is to train and prepare the students to become leaders in the field of biosciences.

The students who complete this program will be very highly skilled technologists and can be immediately absorbed into diagnostics laboratories in various fields of Medical

Genetics, Pathology, Microbiology, Bioinformatics, Biotechnology, Molecular Biology & Pharmaceutical laboratories and various research & development institutes across the globe. On completion, the students can join other Universities both in India and abroad to pursue higher studies. The students who complete the M.Sc program can pursue doctoral program of interdisciplinary doctoral degree offered by this University and other Universities i.e., Ph. D in Biochemistry, Microbiology, Biotechnology, Gene Technology, Immunology, Human Genetics, Bioinformatics, Nanotechnology, Computational Biology, Chemical Biology etc.

2. *Year of establishment:*   **2013**

3. *Is the Department part of a School/Faculty of the university?*
    Yes (No department)

4. *Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)*

Name of the Degree	Name of the Programmes
M.Sc	Full Time • Bio-Sciences • Genetics • Biochemistry and Molecular Biology • Biotechnology • Microbiology
M.Sc - Ph.D integrated	Full time • BioSciences • Genetics • Biochemistry and Molecular Biology • Biotechnology • Microbiology
Ph.D	Full time / Part time

5. *Interdisciplinary programmes and departments involved:*   *Nil*

6. *Courses in collaboration with other universities, industries, foreign institutions, etc.:*
    Nil

7. *Details of programmes discontinued, if any, with reasons:*   **Nil**

8. *Examination System: Annual/Semester/Trimester/Choice Based Credit System:*
    Semester and Choice Based Credit System

9. *Participation of the department in the courses offered by other department:*

Nil

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)*

	Sanctioned	Filled	Actual (incl. CAS & MPS)
Professor	2	2	2
Associate Professors	2	2	2
Asst. Professors	5	5	5
Scientific Assistant	1	1	1

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Name	Qualifi-cation	Designa-tion	Specialization	Yrs of Exp	No. of Ph.D/M. Philguid-ed
Dr. Syed Mohammad Ali	Ph.D	Professor	Photodynamic diagnosis and Photodynamic therapy (PDD & PDT) & Cancer (EGFR/Her2) & Diabetic Signaling.	15	2 guided
Dr. S. Hemalatha	Ph.D	Professor	Programmed Cell Death, Disease Resistance and Apoptosis, Molecular and Genetic basis of pathogenicity mechanisms Functional Genomics, Proteomics, Bio- informatics, Mycotoxins, Ribosome inactivating proteins, Diabetes mediated Neurodegeneration	14	3 guided 2 guiding
Dr. Karthikeyan Ramalingam	Ph.D	Associate Professor	Cancer drug development, antimicrobial drug designing, industrial and environmental biotechnology.	8	1guiding

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Name	Qualifi-cation	Designa-tion	Specialization	Yrs of Exp	No. of Ph.D/M.Philguid-ed
Dr. Soumen Bera	Ph.D	Assistant Professor	Cancer biology, mitochondrial biology, free radicals and antioxidant enzymes in cancer research, identification of novel therapeutic targets	5	-
Dr. MD Khurshid Alam Khan	Ph.D	Assistant Professor	Protein Biochemistry and Biophysics	4	-
Dr. Neesar Ahmed	Ph.D	Assistant Professor	Tumor immunology, Cancer Biology, Signal Transduction	3	1guiding
Dr. Shazia Jamal	Ph.D	Assistant Professor	Targeted Cancer Therapy, Cell cycle and Apoptosis	2	-
Ms. Kavitha Vijayaragavan	Ph.D	Assistant Professor	Wound healing by natural /alternative approach	-	-

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors* - **Nil**

13. *Percentage of classes taken by temporary faculty – programme-wise information –*
Nil

14. *Programme-wise Student Teacher Ratio*
No. of students : 4 No. of staff : 8
(School of Life Science started recently)

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

Non teaching Staff	Sanctioned	Filled	Actual
Technical	2	2	2
Administrative	2	2	2

16. *Research thrust areas as recognized by major funding agencies*

Name of the funding agency	Research Thrust areas
DBT	Cancer therapeutics; Pathogenesis; Mycotoxins; Vitamin B12; GM crops; bioenergy
DST	Neurodegeneration; Cancer biology; Alzheimers Diabetes; Plant diseases; Nutraceuticals
CSIR	Enzyme technology; Bioprocess; cancer
DAE	GM crops; Cancer;Diabetes; Bioenergy

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

Research proposals submitted to various national funding : 13 (worth 11 crores) (agencies including DBT, DST, ICMR etc.)

18. *Inter-institutional collaborative projects and associated grants received*

a) *National collaboration* **NIL** b) *International collaboration* **NIL**

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

Projects are submitted to DST, DBT ICMR etc.

20. *Research facility / centre with*

➢ state recognition

➢ national recognition

➢ international recognition

International standard State of Art laboratory facilities are available.

21. *Special research laboratories sponsored by / created by industry or corporate bodies*

Nil

22. *Publications:*

➢ Number of papers published in peer reviewed journals (national / international)

- ➢ Monographs
- ➢ Chapters in books
- ➢ Edited Books
- ➢ *Books with ISBN with details of publishers*
- ➢ *Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)*
- ➢ *Citation Index – range / average*
- ➢ *SNIP*
- ➢   *SJR*
- ➢ *Impact Factor – range / average*
- ➢ *h-index*

Papers published in International Journals	Papers published in National Journals	Papers published in International conferences	Papers published in National conferences	Impact Factor	Citation index	h-index
102	27	86	71	413.067	725.9	21

23. *Details of patents and income generated* **Nil**

24. *Areas of consultancy and income generated* **Nil**

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad*

International

Sl. No	Name of the faculty	Purpose of Visit	Name of the University/ Institution
1	Dr. Syed Mohamed Ali	Visiting Faculty	Faculty of Pharmacy, UKM, The National University of Malaysia, Kualalumpur, Malaysia
2	Dr. M. K. Sangeetha	Research collaboration	Technical University of Munich (TUM), Munich, Germany
3	Dr. S. Hemalatha	Collaborative research in life sciences and to sign MOU	Department of Molecular biology and Human Genetics, Tzu Chi University, Hualien, Taiwan

26. *Faculty serving in*

   a) National committees b) International committees c) Editorial Boards d) any other (please specify)

(b) International committee

S. No	Name of the Faculty	Name of the committee
1	Dr. S. Hemalatha	Advisor, Research Board, American Biographical Institute, USA

(c) Editorial Board

S. No	Name of the Faculty	Name of the Editorial Board
1	Dr. S. Hemalatha	International journal of Proteomics
		International Journal of Food, Agriculture and Veterinary Sciences ISSN: 2277-209X (Online).
		Indian Journal of Fundamental and Applied Life Sciences ISSN:2231– 6345 (Online)
		Indian Journal of Plant Sciences ISSN: 2319-3824 (Online)
		CIBTech Journal of Biotechnology ISSN: 2319 – 3859 (Online)
		CIBTech Journal of Bio-Protocols ISSN: 2319 – 3840 (Online)
		CIBTech Journal of Microbiology ISSN: 2319-3867 (Online)
		International journal of bio informatics
2	Dr. Karthikeyan Ramalingam	Clinical Microbiology: Open Access,

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

   ➢ Faculty induction training programme is regularly organized once in a year for the new comers, through Faculty training academy of our University (7 staff members attended the Induction Training Programme)

   ➢ Faculty Training Academy of our University is organizing regular programmes for faculty to improve research

28. *Student projects* **Nil**

29. *Awards / recognitions received at the national and international level by*

   ➢ Faculty

- ➢ Doctoral / post doctoral fellows
- ➢ Students

Faculty

International awards/recognitions

Sl. No	Name of the Faculty	Award/Recognition
1	Dr. Syed Mohamed Ali	Team Anderson Award, 2003, University of Texas MD Anderson Cancer Centre, USA
		Lee Foundation Award, 2001, 9th ESP Congress on Photobiology, Norway
		ESP Fellowship Award European Society for Photobiology, Norway - 2001
		Young Scientist award, 2001, by oncologic foundation, USA
2	Dr. S. Hemalatha	Selected for Who's Who in the World 31st Edition, USA (2013)
		Merit Award, Faculty Compensation, 2008 & 2009, Rutgers University, USA
		Best Research Presentation award, 2009, American Microbiological society, USA
		Post doctoral Research presentation award, 2006, Stadler Genetics Symposiu, University of Missouri, USA
		Post Doctoral Research Fellowship 2002-2005, Rutgers University, USA
		Post Doctoral Research Fellowship 2002, University of Wisconsin, USA
		Post Doctoral Fellowship award 2002, Spanish Ministry of Education, Spain
		Advisor in Research Board, 2001, American Biographical Institute, USA
		Woman of the year, 2001, American Biographical Institute, USA
		International Who's who, Professional and Business Women 2001, USA
3	Dr.Karthikeyan Ramalingam	Maria Yeung outstanding Postdoctoral Award with cash prize (2012) USA
		Achieved award for exceptional performance in dental symposium (2011) USA
		Post-Doctoral Fellow 2011-2013 Naval Medical Research Unit San Antonio (NAMRU-SA), San Antonio, USA
		Post-Doctoral Fellow 2008-2011University of Texas Health Science Center at San Antonio, USA
4	Dr. Soumen Bera	Postdoctoral Fellowship from American Institute of Cancer Research, USA - 2011-2012
		Post-doctoral Fellowship Department of Pathology, University, of Illinois at Chicago, USA

Sl. No	Name of the Faculty	Award/Recognition
	Dr. Soumen Bera	Post-doctoral Fellowship Department of Radiation Oncology, University of Iowa, USA
5	Dr. Khurshid Khan	Postdoctoral Research Fellowship, University of Iowa, USA - 2012-2013
		Postdoctoral Research fellowship 2009-2012, University of Montana, USA
6	Dr. Neesar Ahmed	Postdoctoral Research Fellowship Wayne State University, USA - 2012-2013
7	Dr. Shazia Jamal	Postdoctoral Research Fellow at Wayne State University, USA (2012-2013)

Faculty

National awards/recognitions

Sl. No	Name of the Faculty	Award/Recognition
1	Dr. Syed Mohamed Ali	Albert Einstein Achievement Award for Research, 2012IET (UK), network YPS (Chennai Chapter), Chennai
2	Dr. S. Hemalatha	Best presentation award, National conference on recent advances and current trends in bioscience, Chennai - 2013
		Best Teacher Award 2013, For Producing 100% Results In All Subjects Handled In U.G And P.G In University Of Madras, Chennai

30. *Seminars/ Conferences/Workshops organized and the source of funding (National/ International) with details of outstanding participants, if any.* **Nil**

31. *Code of ethics for research followed by the departments*

The guidelines and code of ethics for responsible conduct of research followed at B.S. Abdur Rahman University is enclosed in **Annexure D - 3.1 (Criterion III)**

32. *Student profile programme-wise:*

Name of the Programme (refer to question no.4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc	22	-	2	N/A	N/A
M.Sc Ph.D	14	2	-	N/A	N/A
Ph.D		4	-	N/A	N/A

33. *Diversity of students:*

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc	0	50	50	0
M.Sc Ph.D	0	50	50	0
Ph.D	9	25	25	25

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category wise.*

Nil

35. *Student progression*   **N/A**

Student progression		Percentage against enrolled
UG to PG		N/A
PG to M.Phil.		
PG to Ph.D.		
Ph.D. to Post-Doctoral		
Employed		
❖	Campus selection	N/A
❖	Other than campus recruitment	
Entrepreneurs		N/A

36. *Diversity of staff*

Percentage of faculty who are graduates	
Of the same University	0%
From other universities within the state	28.57%
From universities from other states	57.2%

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*   **Nil**

38. *Present details of departmental infrastructural facilities with regard to a) Library*

   ➢ International and National publications related to the courses are available.

➢ International journals – online access, pubmed, free PMC, free science direct, open access articles can be downloaded with internet (WiFi and LAN)

b) Internet facilities for staff and students

➢ The campus is connected through national knowledge network (1Gbps) and 100Mbps bandwidth.

➢ Desk Top computers are provided to faculty members and administrative persons and all computers are connected with LAN

➢ The entire campus is Wi-fi enabled and available for students

c) Total number of class rooms : **6**

d) Class rooms with ICT facility

➢ CSLST has individual computers to all faculty members and are connected with LAN and campus is wifi enabled and can be accessable by the students.

➢ In Bioinformatics lab individual computers are provided to the students.

e) Students' laboratories

All the labs are well furnished and safety measures are implemented including shower for acid spill, eye wash, fume hood etc. For M.Sc students the following labs are available to do their experiments.

➢ Microbiology

➢ Biochemistry

➢ Molecular biology

➢ Genetics

➢ Biotechnology

f) Research laboratories

CSLST has been visualized to emerge as a hub for state of the art research in all fields related to bio sciences. The following instruments are available.

Generic Name of Equipment	Model, Make & year of purchase
CO2 Incubator	Model 3111, (ThermoFisher Scientific, USA), 2013
Phase Contrast Inverted Microscope	Axio Vert A1 FL (Carl Zeiss, Germany), 2013
Western Blot Semi Dry	TE70X (Hoefer, USA), 2013
Gel Electrophoresis Horizontal	SE250-10A-75 mighty small II mini vertical electrophoresis (Hoefer, USA), 2013

Generic Name of Equipment	Model, Make & year of purchase
Gel Electrophoresis Vertical	SUB15 standard submarine gel system (Hoefer, USA), 2013
Gel Documentation Unit	GelDoc –IT imaging system (UVP LTD, UK), 2013
Phase Contrast Inverted Fluorescence Microscope	Axio Vert A1 FL (Carl Zeiss, Germany), 2013
Western Blot Semi Dry	Trans blot turbo (Biorad, USA), 2013
Western Blot wet	Standard transfer unit with cooling chamber (Hoefer, USA), 2013
Chemiluminiscent Gel Documentation Unit	ChemiDoc MP system with red module (Biorad,USA), 2013
Freeze Dryer	Alpha 2-4 Ldplus (Martin Christ, Germany), 2013
Real Time PCR	CFX96 (Biorad, USA), 2013
CO2 Incubator	Galaxy incubator 170R (Eppendorf, USA), 2013
Deep Freezer -80C	Premium upright freezer U410 (Eppendorf, USA), 2013
Deep Freezer -20C	Revco -20 (ThermoFisher Scientific, USA), 2013
High performance liquid chromatography (HPLC) With PDA & Fluorescence Detector	LC-2010CHT (Shimadzu, Japan), 2013
Gel Electrophoresis Horizontal	Mini Sub GT Cell (Biorad, USA), 2013
Gel Electrophoresis Vertical	Mini-PROTEAN Tetra (Biorad, USA), 2013
Manual Colony Counter	Scan 100 (Intersciences, France), 2013
Multiporator	Multiporator, for eukaryotics, bacteria and yeasts (Eppendorf,USA), 2013
Spectrophotometer	BioSpectrometer basic (Eppendorf, USA), 2013
Multimode Reader With Alpha Tech	Enspire multilabel plate reader with Alpha Tech (PerkinElmer, USA), 2013
PCR	Mastercycler nexus gradient (Eppendorf, USA), 2013

39.   *List of doctoral, post-doctoral students and Research Associates*
       a) from the host institution/university

S. No	Name of the candidate	Name of the research guide	Title/area of research
1	Mohamed Shahanbaj Khan	Dr. S. Hemalatha	Pathogenecity mechanisms
2	Saroj Kumar		Antimicrobial compounds

| 3 | Yogesh Kumar | Dr.Karthikeyan Ramalingam | Anticancer leads from marine sources |
| 4 | Mohamed Adil | Dr.Neesar Ahmad | Cancer biology |

b) from other institutions/universities   **Nil**

40. *Number of post graduate students getting financial assistance from the university.*
NIL

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

Since there is vast scope for research in the area of Life Science post graduate programmes and research programmes were designed by taking inputs from experts from industries and academia.

The following were considered :

➢ The importance and novelty in the surrounding area

➢ Job opportunities

➢ Experts availability

➢ Infrastructure including labs, library and classrooms etc.

42. *Does the department obtain feedback from* **N/A**

Since the programmes were started recently the process of taking feedback has been initiated.

43. *List the distinguished alumni of the department (maximum 10):*   **NA**

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*   **Nil**

45. *List the teaching methods adopted by the faculty for different programmes.*

Following teaching methods are adopted by the faculty of Life Sciences

➢ Black board teaching,

➢ Power Point Presentation,

➢ ICT tools,

➢ Self learning,

➢ student seminar,

➢ library reading,

➢ assignments,

➢ e-Journals

➢ online additional learning

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*

By continuous assessment system with various components like test, seminar, quiz, assignment, tutorial, etc.

47. *Highlight the participation of students and faculty in extension activities:* **Nil**

48. *Give details of "beyond syllabus scholarly activities" of the department:* **Nil**

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details:* **No**

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied:* **Nil**

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths

➢ All faculty members of CSLST are trained and worked in USA and published their research in high impact international journals and have international patents and secured grants from federal funding agencies of USA including National Science foundation (NSF), national Institute of Health (NIH), National Centre for complementary and Alternative Medicine (NCCAM), U.S. Department of Agriculture, Busch research foundation etc.

➢ Well equipped state of art research laboratories

➢ Positive attitude of students, research scholars and faculty members

➢ Good relationship among parents and faculty members

➢ Positive interaction between students and faculty members

Weakness

➢ Newly established school and have to get popularized

➢ Students number should be increased at P.G level

➢ Students have to be enrolled in B.Tech Course in 2014 academic year

➢ Adapt to the daily practice of the university since it is a newly established school

Opportunities

➢ Collaboration with industries, state universities, DBT research centers, CSIR labs, hospitals, cancer centers etc.

➢ Collaborative research work with universities and Institutes abroad

➢ Development of MOOC (Massive Open Online Courses) in life sciences

➢ Growing demand for molecular diagnostics and gene therapy

➢ Introducing new certificate courses in India which are not available in other institutions in India eg. Gene mapping

Challenges

➢ Getting admission in Life sciences is a challenging task since students and parents are seeing computer courses are having potential job opportunities than life sciences. Their perception on education means immediate earning after their graduation.

➢ Campus recruitment for the students

➢ Popularizing the SLS among the public

➢ Collaboration with industries and universities in India and abroad.

➢ Securing grants at national and international level

➢ to establish high caliber of research in Life sciences

52. *Future plans of the department.*

Future Prospects of SLS are to

➢ Initiate new teaching and research programmes in all interdisciplinary areas of life sciences

➢ Establish as a hub for state of the art research in all fields related to molecular biology, genomics, proteomics, bio informatics molecular diagnostics, immunology etc.

➢ Start training centre for scientists from government agencies, industries, faculty members.

➢ Our faculty members are with international research exposure and have the potential to collaborate with industries and universities in India and abroad.

➢ To establish innovative multidisciplinary research to meet the demands

➢ All the faculty members of the department are PhD holders and will publish in high impact research journals.

➢ Guest lectures, seminars, International and national conferences, workshops, trainings will be conducted

➢ With faculty members being trained and worked in USA the quality of research will meet the international standard. The number of research scholars will be increased and research output will also be enhanced.

➢ We have many significant research projects underway in the areas of bio energy, pharmaceuticals, nutraceuticals, bio warfare, cancer biology, diabetic care etc.

New B. Tech and M.Tech Programmes will be initiated

- Bio Electrical engineering- Interdisiplinary program lies at the interfaces of molecular biology, electrical engineering and computational biology.

- Bio corrosion Engineering- Interdisiplinary program lies at the interfaces of plant functional genomics, biology, civil engineering and computational biology.

- Gene mapping- Mapping of genomes

- Molecular cancer diagnostics and therapeutics-cancer gene therapy

We propose to offer certificate/diploma courses in

- molecular diagnostics and gene therapy etc.
- gene mapping,
- genomics,
- proteomics,
- bioinformatics,
- cancer biology,
- molecular biology,
- imaging techniques,
- analytical techniques,
- plant and animal tissue culture techniques,
- chemoinformatics,
- invitro pharmacological screening,
- regenerative medicine,
- To secure funds from National and international agencies
- By students and research exchange programs and semester abroad program SLS will attract more students from India and from abroad. Already we have established collaborations with universities in USA, Australia, Taiwan etc.
- Learning opportunities will be enhanced by developing MOOC
- To establish cancer research centre covering all aspects of cancer diagnostics, therapeutics and alternative medicinal approach.
- To establish UNESCO chair in molecular biology and functional genomics

SCHOOL OF PHYSICAL & CHEMICAL SCIENCES

Department of Physics

Department of Chemistry

Department of Physics

1. Department of Physics

The Department of Physics has good infrastructure facilities with excellent faculty members doing research in various field of science. The department offers research programme in major areas such as Laser Technology, Nonlinear Optics, Nanomaterials, Crystal Growth and Thin Film Technology, Nonlinear Dynamics and Computational Materials Science. The department offers Ph.D and M.Phil programmes. A unique interdisciplinary M.Tech program in Optoelectronics and Laser Technology is offered by the Physics department in coordination with Electronics and communication engineering. The department is equipped with sophisticated instruments such as Nd:YAG laser, PLD and Autoclave. Many students have registered for Ph.D programme under JRF & Non JRF schemes.

2. Established in **1984**

3. Is the Department part of a School/Faculty of the university?

Yes

The Department is a part of "School of Physical and Chemical Sciences".

4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)

➢ Ph.D - Full Time / Part Time

➢ M.Sc. Physics will be started from the academic year 2014-15 onwards. Curriculum and syllabus were framed and approved by Board of Studies and Academic Council.

5. Interdisciplinary programmes and departments involved :

Name of the Programme	Offering Departments
M.Tech (Optoelectronics and Laser Technology)	ECE and Physics

M.Sc. programmes in Materials Science and Electronics have been approved in the academic council meeting and the same will be conducted from the academic year 2014 -15.

6. Courses in collaboration with other universities, industries, foreign institutions, etc.

Nil

7. Details of programmes discontinued, if any, with reasons :

M.Tech (Optoelectronics and Laser Technology) programme is temporarily suspended from the academic year 2013-14 due to poor response from the students.

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System

Semester & Choice Based Credit System

9. Participation of the department in the courses offered by other departments

UG - Odd Semester		
S.No	Course Code & Course Title	Departments
1	PHB1181 & PHB1182 – Physics I & Physics Lab	All Branches

UG - Even Semester		
S.No	Course Code & Course Title	Departments
1	PHB1283, Physics of Engineering Materials and PHB1284 Lab	ECE, EEE, Aero, CSE and IT

PG (M.Tech (OELT)) – Both Odd And Even Semesters

Semester	Course Code & Course Title	Departments
1	PH 601, Radiation Sources and Detectors PH602, Modern Optics, PH603, Laser Technology & PH604 Lab	Interdisciplinary Programme
2	PH605, Photonic Materials and Devices PH606, Laser Applications PH607, Optics Laboratory	
3	PH701, Nonlinear Optics PH702, Industrial Training PH703, Project work – Phase I	
4	PH704, Project work,-Phase II & Viva	

10. Number of teaching posts sanctioned, filled and actual (Professors / Associate Professors / Asst. Professors / Others)

	Sanctioned	Filled	Actual (incl. CAS & MPS)
Professors	3	3	3 CAS
Asso. Prof.	–	–	–
Asst. Prof.	9	9	9
Others	Res. Scientist - 1	Res. Scientist - 1	1

11.   *Faculty Profile with name, qualification, designation, area of specialization, experience and research under guidance.*

Name	Qualifica-tion	Designa-tion	Specialization	Yrs of Exp.	Ph.D.
Dr.M.Basheer	M.Sc., M.Phil., Ph.D.	Professor & Head	Laser technology-Nano materials-synthesis and characterization	29 years	6 (guiding)
Dr.I.B.Shameem	M.Sc., M.Phil., Ph.D	Professor & Dean	Preparation of thin films by PLD & Charac-terization	29 years	1(guided) + 5(guiding)
Dr.I.Raja Mohamed	M.Sc., M.Phil., B.Ed., PGDCA., Ph.D	Professor	Non Linear Dy-namics	23 years	2(guiding)
Mr.S.Sathik Basha	M.Sc., M.Tech.	Assistant Professor (Sl. G)	Surface Engineering Techniques	13 years	–
Mr.G.V. Vijayaraghavan	M.Sc., M.Phil., B.Ed.	Assistant Professor (SG)	Dye Lasers	13 years	–
Ms.U.Majitha Parvin	M.Sc., M.Phil.	Assistant Professor (SG)	Laser Technology and Nonlinear Optics	10 years	–
Mr.M.Mohamed Sheik Sirajuddeen	M.Sc., M.Phil.	Assistant Professor (SG)	Material Char-acterization (Computa-tional)	12 years	–

Name	Qualifica-tion	Designa-tion	Specialization	Yrs of Exp.	Ph.D.
Dr.S.Krishnan	M.Sc., M.Phil., Ph.D	Assistant Professor (SG)	Crystal Growth ; Nanomaterials – Synthesis & Characterization	5 Years	1(guided) +5 (guiding)
Dr.S.Begam	M.Sc., Ph.D	Assistant Professor	Nuclear Magnetic Resonance	3 years	1 (guiding)
Dr.J.Thirumalai	M.Sc. M.Phil. Ph.D, Postdoc (POSTECH, S. Korea), FISCT, RSci (UK)	Assistant Professor	Nano Technology and Optoelectronics	2 years	1 (guiding)
Dr.R.Indirajith	M.Sc.,Ph.D.	Assistant Professor	Thin film Deposition by Physical methods	1 year	1 (guiding)
Dr.Jahir Abbas	M.Sc., Ph.D.	Assistant Professor	Soft condensed matter, Computational Physics	2 months	–
Dr.E.Manikandan	M.Sc., M.Phil., Ph.D. PGDST, MCA	Research Scientist Gr.II	Nanostructured Materials, Ion Beam analysis, Thin film coating, Photovoltaic material	1 year 10 months	–

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors*

S. No.	Name	Designation	Subject handled	Academic year
1	Dr.Rangarajan	Visiting Professor	Modern Optics	2010-11

13. *Percentage of classes taken by temporary faculty – programme-wise information*

Nil

14. *Programme-wise Student Teacher Ratio*

Interdisciplinary programme M.Tech (OELT)

Academic Year	No. of students admitted	Student Teacher Ratio
2010-11	3	3:1
2011-12	7	7:1
2012-13	3	3:1

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

Non-teaching Staff	Sanctioned	Filled	Actual
Technical Staff	3	3	3
Administrative Staff	2	2	2

16. *Research thrust areas as recognized by major funding agencies*

Condensed Matter Physics and Materials Science, Plasma Physics, High Energy Physics, Nuclear Physics, Astronomy & Astrophysics, Nonlinear Dynamics and Lasers, Optics and Atomic and Molecular Physics, Nanotechnology.

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

National Funding agencies

S. No.	Project Title	Name of the Principal Investigator	Funding Agency	Amount in Lakhs
1	Investigation of chaotic and strange nonchaotic and phenomena in coupled nonlinear circuit and systems	Dr.I.Raja Mohamed, Professor	DST	Rs. 32.46
2	Preparation of rare-earth doped molybdate nanostructures using soft chemical route for optoelectronic applications	Dr.J.Thirumalai Assistant Professor	DST,SERB	Rs. 23.64

18. *Inter-institutional collaborative projects and associated grants received*

    a) National collaboration   -   **Nil**

    b) International collaboration -   **Nil**

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

<div align="center">

NIL

</div>

20. *Research facility / centre with*

   ➤   *State recognition*   -

   1.   The department offers project and internship guidance for M.Sc. students of other colleges in and around Chennai.

   2.   The department also provides Nonlinear Testing facilities to students of other colleges/universities within the state.

   ➤   *national recognition*   -   **Nil**

   ➤   *international recognition*   -   **Nil**

21. *Special research laboratories sponsored by / created by industry or corporate bodies*

<div align="center">

Nil

</div>

22. *Publications:*

Number of papers published in peer reviewed journals (national /international)

The research publications made by the faculty members of this department is provided in Annexure D - 3.2 and 3.3 in Criterion III.

However, the consolidated statistics is furnished below

Year	National Journal	International Journal	National Conference	International Conference	Total
2009	–	4	6	4	**14**
2010	–	3	4	5	**12**
2011	–	10	8	2	**20**
2012	–	12	7	2	**21**
2013 (upto Nov'13)	–	29+8(accepted)	11	-	**48**
	0	**66**	**36**	**13**	**115**

   ➤   Monographs   :   **Nil**

➢ Chapters in Books:

S. No	Name of the Author	Name of the Book	Chapter of the book	Publishers	ISBN No.	Year
1	Dr. J. Thirumalai	MATERI-ALS SCI-ENCE	Synthesis and luminescence properties of $EuMoO_4$ octahedron-like microcrystals	InTech Open Access publisher	979-953-307-485-5	2010
2	Dr.J.Thirumalai	NANO-CRYSTALS	Chapter 2 & 3 - NANOCRYS-TALS, SCIYO Open Access Publisher , 2010, ISBN:978-953-307-126-8.	SCIYO Open Access Publisher	978-953-307-126-8	2010
3	Dr.J.Thirumalai	Materials Science – Advance Techniques	Growth and characterization of ZnO : Mn/ Fe ferro magnetic applications	Intech Open Access publisher	982-953 307-985-2	2013

❖ Edited Books:

S. No	Name of the Author	Name of the Book	Publishers	ISBN No.	Year
1	Dr.J.Thirumalai (e – book Editor)	Frontiers in Ceramics	Bentham Publishers, USA	--	2013

❖ Books with ISBN with details of publishers:

S. No	Name of the Author	Name of the Book	Publishers	ISBN No.	Year
1	Dr.M.Basheer Ahamed	Ultrashort Pulse Generation By Distributed Feedback Dye Lasers: Based On Energy Transfer Between Laser Dyes	LAP LAMBERT Academic Publishing GmbH & Co.KG, Germany	978-3-8454-0427-1	July 2011

➢ Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

Name of the International Base	Average Citation index	Average SNIP	Average SJR	Average Impact factor	h-index
SCOPUS	3.6	1.127	0.840	2.545	4

23. *Details of patents and income generated*

Nil

24. *Areas of consultancy and income generated*

Non Linear Optical Testing of Crystals samples	
Year	**Income Generated in Rs.**
2010	26,050.00
2011	23,500.00
2012	72,000.00
2013	62,350.00
Total	**1,83,900.00**

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad*

Dr.J.Thirumalai has visited Laser Photonics Lab of Pohang University of Science and Technology (POSTECH), Republic of Korea for his Post-doctoral research fellowship during May 2012 to April 2013.

26. *Faculty serving in*

    a)   National committees

    b)   International committees   NIL

    c)   Editorial Boards

    d)   Any other (please specify)

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

S. No.	Academic Year	No. of programme	No. of faculty attended
1	2013-14	1	1
2	2012-13	1	3
3	2011-12	4	5
4	2010-11	4	4
5	2009-10	4	3

28. *Student projects*
   ➢ *percentage of students who have done in-house projects including inter-departmental projects*
   ➢ *percentage of students doing projects in collaboration with other universities / industry / institute*

Non Linear Optical Testing of Crystals samples		
Year	% of In House project	% of other Institute
2011-12	67	33
2012-13	100	Nil

29. *Awards / recognitions received at the national and international level by*
   ➢ *Faculty* :

   Dr.J.Thirumalai has received a certificate from Science Council as Chartered Scientist.
   ➢ *Doctoral / post doctoral fellows* : Nil
   ➢ *Students* : Nil

30. *Seminars / Conferences / Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.*

Month/Year	Name of the Seminar/Conference/ Workshop	Source of funding (National/ International)
Apr 9-10, 2013	National Conference on Recent Advances in Materials	B.S.A.U
Feb 11, 2013	Workshop on Laser Technology and Applications	B.S.A.U
Jun 5-20, 2012	Experimental Physics with the Indian Academy of Sciences Kit	IAS, Bangalore, INAS, New Delhi & NAS, Allahabad
Mar 6, 2012	Workshop on Laser Technology and Applications	B.S.A.U
Mar 15, 2011		B.S.A.U
Feb 22, 2011	Workshop on The Applications of Nonlinear Circuits and Systems	B.S.A.U

31. *Code of ethics for research followed by the departments*
   Code of ethics for research is provided in **Annexure D - 3.1 (Criterion III)**

32. *Student profile programme-wise:*

		Selected		Pass percentage	
Name of the Programme: M.Tech (Optoelectronics and Laser Technology)					
Academic Year	**Applications Received**	**Male**	**Female**	**Male**	**Female**
2010-11	3	2	1	100	100
2011-12	7	3	4	100	100
2012-13	4	2	2	100	100

33. *Diversity of students*

Name of the Programme: M.Tech (Optoelectronics and Laser Technology)				
Academic Year	**% of Students from the Same University**	**% of Students from Other Universities within the State**	**% of Students from Universities outside the State**	**% of Students from Other Countries**
2010-11	–	100	–	–
2011-12	–	100	–	–
2012-13	–	100	–	–

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

Nil

35. *Student progression*

Student Progression	**Percentage against Enrolled**
UG to PG	–
PG to M.Phil.	–
PG to Ph.D.	–
Ph.D. to Post-Doctoral	–
Employed • Campus Selection • Other than Campus Recruitment	– 70%
Entrepreneurs	–

36. *Diversity of staff*

➢ *Percentage of faculty who are graduates of the same university* **: Nil**

➢ *From other universities within the state*   :   **92.3%**

➢ *From universities from other states*   :   **7.7%**

➢ *From universities outside the country*   :   **Nil**

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*

Nil

38. *Present details of departmental infrastructural facilities with regard to*

   a) Library

Total No. of volumes	:	*252*
Total No. of titles	:	*33*
Total No. of PG project reports	**:**	*10*

   b) Internet facilities for staff and students:

   High speed internet connectivity + Wi-Fi with 20 ports in the department

   c) Total number of class rooms

B.Tech	:	16
Seminar Hall	:	1

   d) Class rooms with ICT facility **:** *All classrooms have ICT Wi Fi enabled facility*

   e) Students' laboratories :

S. No.	Name of the Laboratory	Total Amount (Rs.)
1.	Physics Laboratory I	13,10,431.00
2.	Physics Laboratory II	12,22,300.00
Grand Total		**25,32,731.00**

   f) Research laboratories :

S. No.	Name of the Laboratory	Total Amount (Rs.)
1.	Laser Research Lab	40,27,640.00
2.	Computational Materials Science Lab	98,110.00
3.	Nonlinear Dynamics Lab	7,87,407.00
4.	Nanomaterials, Crystal Growth and Thin film Lab	22,80,624.00
Grand Total		**71,93,781.00**

39. *List of doctoral, post-doctoral students and Research Associates*
     a) from the host institution/university :

B.S.ABDUR RAHMAN UNIVERSITY

S. No.	Name of the candidate	Research Supervisor	Title/Topic Research
Full Time Students			
1	Ms. R. Rizwana	Dr. I. Raja Mohamed	Bifurcation, Chaos and Strange Non-chaos in Nonlinear circuits and systems
2	Mr. G. Shanmuganathan	Dr. I. B. Shameem Banu	Synthesis of undoped and doped ZnO thin films prepared by chemical bath deposition method.
3	Mr. R. Krishnan	Dr. J. Thirumalai	Synthesis of rare earth doped Molybdenum Oxide Micro/ Nano structures for optoelectronic applications
4	Mr. Ashaq Hussain shah	Dr. M. Basheer Ahamed	Investigations of noble/ transition metals doped ZnO nanostructures for antibacterial and photocatalytic applications.
5	Ms. A.Sathiya Priya	Dr. I. B. Shameem Banu	Synthesis, Electrical and magnetic characterization of multiferric materials
6	Mr. Fidah Mohamed	Dr. R. Indrajith	Synthesis and characterization of nanocomposite multiferroic materials for spintronics applications
7	Mr. K. Rackesh Jawahar	Dr. S. Krishnan	Synthesis and characterization of nanomaterials

S. No.	Name of the candidate	Research Supervisor	Title/Topic Research
	Part Time Students		
8	Mr. M. Thilak	Dr. M. Basheer Ahamed	Growth and characterization of nonlinear optical (NLO) crystals
9	Mr. S. Fathhoor Rabbani	Dr. I. B. Shameem Banu	Investigation on some compounds by ab initio method for spintronics applications
10	Mr. G. Marudhu	Dr. S. Krishnan	Growth of nonlinear optical crystals with the effect of pH values
11	Mr. A. John Peter	Dr. I. B. Shameem Banu	Crystal growth and comparative study of various properties of semiorganic NLO materials
12	Mr. G. Magavijayan	Dr. I. Raja Mohamed	Design, Analysis and applications of certain nonlinear electronic circuits and systems
13	Mr. R. Senthil	Dr. S. Krishnan	Growth and characterization of NLO crystals
14	Mr.M. Suresh Kumar	Dr. S. Krishnan	Crystal growth and its characterization
15	Ms. K. S. Vadivoo	Dr. S. Krishnan	Synthesis and characterization of Nanocomposites
16	Mrs. Thahirunnisa	Dr. S. Begam Elavarasi	Computational NMR of single walled carbon nanotubes

b)   *from other institutions/universities :*

S. No.	Name of the candidate	Research Supervisor	Name of the other University
1	Mr. S.Sathik Basha	Dr. V.M. Periasamy	Anna University, Chennai
2	Mr. G.V. Vijayaraghavan	Dr. M. Basheer Ahamed	Anna University, Chennai

S. No.	Name of the candidate	Research Supervisor	Name of the other University
3	Ms. U. Majitha Parvin	Dr. M. Basheer Ahamed	Anna University, Chennai
4	Mr. M. Mohamed Sheik Sirajuddeen	Dr. I. B. Shameem Banu	Anna University, Chennai
5	Mr. S. Kumaresan	Dr. M. Basheer Ahamed	Anna University, Chennai
6	Ms. R. G. Geethumani	Dr. M. Basheer Ahamed	Bharathiyar Univ, Coimbatore

40. *Number of post graduate students getting financial assistance from the university.*

   Senior Research Fellowships : 2 Nos. ; Junior Research Fellowships : 2 Nos.

   Mr. R. Krishnan, Mr. Ashaq Hussain Shah,

   Mr. G. Shanmuganathan, Mr. Fidah Mohamed

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

   The department meeting was convened to discuss the needs for starting new programmes and subsequently Board of studies meeting was conducted in which experts from IIT and Anna University approved the curriculum and syllabi. The same was passed in the academic council of University.

42. *Does the department obtain feedback from*

   a) faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

   Yes. The feedback helps to enhance the teaching and learning process.

   b) students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

   Yes. The feedback helps to enhance the teaching and learning process.

   c) alumni and employers on the programmes offered and how does the department utilize the feedback?

   Feedback given by the Alumni helps the students to get their placements.

43. *List the distinguished alumni of the department (maximum 10)*

S.No	Name of the Alumni	Passed out Year
1	Mr. Yoganand	2012
2	Mr. Abdul Kareem	2013

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

Event / Programme	Name of the Experts & Designation	Institution	Topics
Workshop on "The applications of Nonlinear circuits and systems, 2011"	Dr.K.Murali Associate Professor	Anna Univ. Chennai	Non linear Dynamics
	Dr.K.Ganesan Director	TIFAC, VIT, Vellore	Applications of non linear circuits
Workshop on "Laser Technology and its applications 2011"	Dr.P.K.Palanisamy Professor	Anna Univ. Chennai	Laser Technology
	Dr.S.Ganesan Director / Student Affairs	Anna Univ., Chennai	Medical applications of laser
	Mr.Sabarikanth Managing Director	Optilase Technik Pvt. Ltd.	Industrial Applications of laser
Workshop on "Laser Technology and its applications 2012"	Dr.C.Vijayan Professor	IIT, Madras	Nano Photonics
	Dr.P.Kuppusamy Scientific Officer	IGCAR, Kalpakkam	Pulsed laser deposition of nanostructured thin films and multilayers
	Mr.Sabarikanth Managing Director	Optilase Technik Pvt. Ltd.	Industrial Applications
Workshop on "Laser Technology and its applications 2013"	Dr.P.K.Palanisamy Professor	Anna Univ. Chennai	Photonics
	Mr.R.Sabarikanth Managing Director	Optilase Technik Pvt. Ltd.	Industrial Applications of Laser
	Dr.M.Joseph Head, MSS section	IGCAR Kalpakkam	Thin film preparation by Pulsed Laser Deposition
	Mr.S.Sarathy Krishnan Biomedical Engineer	Kilpauk Medical College	Medical Applications of Laser

45. *List the teaching methods adopted by the faculty for different programmes.*
   - Teaching through website, powerpoint presentation and models.
   - Using special software to teach the students about crystal structure (VESTA).
   - Helping students learn from invited talks given by experts
   - Arranging industrial visit
   - Encourage students to do e- learning.

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*
   - Continuous assessment tests are conducted monthly to monitor the students
   - The progress of the students after the tests is sent to the parents / guardians.
   - Weak students are identified and special coaching classes are conducted.

47. *Highlight the participation of students and faculty in extension activities.*
   - Students from various departments engaged in NSS, YRC, ISTD, and Rotoract activities.

48. *Give details of "beyond syllabus scholarly activities" of the department.*
   - Teaching through website
   - Using special software to teach the students about crystal structure.
   - Helping students to learn from invited talks given by experts
   - Arranging industrial visit
   - Encourage students to present the project works in conferences.

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

Not Applicable

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*
   To encourage e-learning practices among the students.
   To include innovative experiments.
   To impart knowledge with the help of teaching aids (models, powerpoints, charts)
   To conduct science based workshops, seminars and exhibition for the students.

   - To encourage students to visit other research institutions to impart research knowledge
   - To encourage students to participate in Intercollegiate Physics events

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths:
- Most of the faculty members are having Ph.D degree (With Ph.D - 9, Pursuing Ph.D - 4)
- The staff members are doing research in diverse areas (such as Nanomaterials, Laser Technology , Thin film fabrication, Crystal growth, Computational Physics and Nonlinear Dynamics)
- Qualified and well experienced faculty members
- Expertise in both theoretical and experimental physics
- The department has received funding from DST, SERB.
- Infrastructure – well equipped research facility available.
- All faculty members are well versed with latest technology
- Well equipped UG and PG labs for students
- 2 projects are sanctioned, 4 projects were submitted
- Publishing research findings in peer reviewed journals having high impact factor more than 2.0

Weakness:
- Inter disciplinary research activities may be initiated.
- The volumes of the books may be increased in the department library.
- The research labs have to be converted as research centres.
- To improve the quality of research to obtain more funding from the funding agencies.

Opportunities:
- To use Models as a mode of teaching – learning - evaluation methodology
- To design short courses for working professionals
- To have exchange programmes with universities abroad

Challenges:
- To make the department excel in all thrust areas.
- To establish more research centres to attract the students from overseas.
- To get more funded projects from the funding agencies.
- To organize conferences and workshops in international level.
- To become a world renowned centre for research and development.

52. *Future plans of the department.*
- To produce more doctorates in respective thrust areas
- To collaborate with various National and International Research Institutes.
- To get more funds from the funding agencies to establish more research labs.
- To establish centres of excellence in the cutting edge research areas.

Department of Chemistry

1.   Department of Chemistry

The **Department of Chemistry** caters to the needs of Engineering and Technology programs. The students are imparted knowledge in fundamental aspects of Applied Chemistry, Organic Chemistry, Analytical Instrumentation, Environmental Science & Engineering and are trained to acquire laboratory skills that will be useful for their further studies. This department was recognized as Research Centre to have interaction with Anna University for collaborative research programme from July 2006. After attaining the university status, the department offers Ph.D programme on Part-time and Full-time basis from the academic year 2009. Currently thirty five Research Scholars are ursuing their Ph.D Programme in this department. Thirteen faculty members of this department were recognized as Research Supervisors by our University. Five faculty members of this department had an international exposure and done post doctoral research work in abroad. Seven members are currently executing funded projects worth of Rs 2 crores. The department has started M.Sc Chemistry Programme from the academic year 2010-11. The department has necessary sophisticated instruments to carry out the Research work. The faculty members are publishing papers in journals of International repute. The department is regularly conducting seminars in the emerging field of chemistry.

2.   Established in **1984**

3.   Is the Department part of a School/Faculty of the university?

Yes

Part of School of Physical & Chemical Sciences

4.   Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc. D.Litt., etc.)

Programme	Name of the Course	Year
M.Sc	Chemistry	2010 onwards
Ph.D	Chemistry	2009 onwards

5.   Interdisciplinary programmes and departments involved

NIL

Planned to start M.Sc. Material Science.

Curriculum & Syllabi has been prepared and got approval from board of studies and will be started from the ensuing academic year

6.   *Courses in collaboration with other universities, industries, foreign institutions, etc.*

NIL

7.   *Details of programmes discontinued, if any, with reasons* - **NIL**

8.   *Examination System: Annual/Semester/Trimester/Choice Based Credit System*
Semester and Choice Based Credit System

9.   *Participation of the department in the courses offered to other departments*

Program	Course	Course Code	Department	Semester/year
B.Tech	Chemistry-I	CH101	All Engineering departments	First
	Chemistry-II	CH103 CH104 CH105 CH106	Civil Mechanical, Auto, Aero EEE,ECE,IT,CSE, PE	Second
	Chemistry Practicals	CH102	All Engineering departments	First
	Environmental science & Engg	GE201	All Engineering departments	Second year Third/fourth semester
	Analytical Instruments	EI309	Electrical and Instrumentation Engineering	5th semester

10.   *Number of teaching posts sanctioned, filled and actual (Professors/Associate* **Professors/Asst. Professors/Others)**

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	4	4	4
Associate Professors	2	2	2
Asst. Professors	8	8	8
Others	Nil	Nil	Nil

11.   *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Sl. No	Name	Qualifi- cation	Designa- tion	Specialization	No. of Years of Experience	No. of Ph.D/M. Phil stu- dents guided
1	Dr. D. Easwaramoorthy	MSc ., PhD	Professor and Head	Inorganic complexes synthesis and characterization and catalysis	18	1/15
2	Dr. I. Mohammed Bilal	MSc., PhD	Professor	Polymer synthesis	30	1/6
3	Dr. S. Kutti Rani	MSc., M.Phil., PhD., MBA	Professor	Catalysis	20	0/5
4	Dr.N. Hajara Beevi	MSc .,PhD	Professor	Corrosion and Environmental studies	19	0/1
5	Dr. S.Bhagavathy	MSc., PhD	Associate Professor	Organic synthesis	3.5	Nil
6	Dr.Revathi Purushothaman	Msc., M. Tech., PhD	Associate Professor	Polymer synthesis, and Polymer Composites	10	Nil

Sl. No	Name	Qualifi-cation	Designa-tion	Specialization	No. of Years of Experience	No. of Ph.D/M. Phil stu-dents guided
7	Mr. A. Shajahan	Msc., M. Phil	Assistant Professor (S. G)	Kinetics	11	Nil
8	Dr. J. Herbert	Msc., M.Phil., PhD	Assistant Professor	Catalysis	4.5	Nil
9	Dr. J. William John	Msc., PhD	Assistant Professor	Organic synthesis	3	Nil
10	Dr..Mahasampath	Msc., M.Phil., PhD	Assistant Professor	Organic Synthesis	10	Nil
11	Dr. M. Asha Jhonsi	Msc., PhD	Assistant Professor	Photophysics & photochemistry of nanoparticles and quantum dots with organic sensitizers.	2	Nil
12	Dr. Noor Aman Ahrar Mundari	Msc., PhD	Assistant Professor	Photocatalysis	1.5	Nil

Sl. No	Name	Qualifi-cation	Designa-tion	Specialization	No. of Years of Experience	No. of Ph.D/M. Phil students guided
13	Dr. Vajjiravel Murugesan	Msc., PhD	Assistant Professor	Catalysis	1.5	Nil
14	Dr.K.Kathikeyan	Msc., PhD	Assistant Professor	Organic Chemistry	1	Nil

12. *List of Senior visiting fellows, adjunct faculty, emeritus professors*

Dr.K.K.Balasubramanian, Retired professor IITM, Chennai - (2010-13)

13. *Percentage of classes taken by temporary faculty – programme-wise information :*

NIL

14. *Programme-wise Student Teacher Ratio*

Programme	Sanctioned In Take	Student Admitted	Student Teacher Ratio Based on the admission of Students	Student Teacher Ratio Based on the Sanctioned In Take
M.Sc Chemistry	20 Per Year	27	3:1	6:1

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

Non-teaching Staff	Sanctioned	Filled	Actual
Technical Staff	4	4	4
Administrative Staff	3	3	3

16. *Research thrust areas as recognized by major funding agencies*

- ➢ **Energy** - solar energy, solar cells, dye sensitized solar cells.
- ➢ **Environment** – wastewater treatment – advanced oxidation technique (photocatalysis)

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- ➢ **Development of new and novel materials -** Nano materials, semi conducting materials
- ➢ **Nanochemistry:** Nanomaterials and Devices

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

S.No	Title	Funding agency	Year	Investigators	Amount (Lakhs)
1.	Palladium catalyze Buchwald Hartwig coupling of 2-C hydroxymethyl D glycols and aryl halides: Synthesis of functionalized C-Aryl Glycosides	DST	2010-2012	Dr. S. Bhagavathy	42.6
2.	A non enzymatic enantioselective design in the Wittig reactions and its applications in the total synthesis of caprolactonis potential antineoplastic agents of marine origin	WOS A DST	2011-2013	Dr. Maha Sampath Gowri	6.24
3.	A novel access to indolizidine and quinolizidine alkaloids through stereoselective N-tethered intramolecular cyclopropantion of pyridone	DST SERB	2012-2015	Dr. Elangovan. J	48.7
4.	Zeozymes as biomimetic catalysts for the treatment of organic pollutants	CSIR	2012-2015	Dr.D.Easwaramoorthy Dr.S.Kutti Rani Dr. Mohd. Bilal	13.21
5.	Development of COF silica/polyimide composites with low dielectric constant for microelectronic applications	DST SERB	2013-2016	Dr.Revathi Purushotha-man	23.5
6	Diasteroselective Intramolecular Cyclopropanation of Enol Ethers Derived from Amino Acids: A Novel Access to Aza-C-Glycosides	CSIR	2013-2016	Dr. Elangovan. J	13.7

S.No	Title	Funding agency	Year	Investigators	Amount (Lakhs)
7	Bismuth Titanate Quantum Dots for Photovoltaic Application	WOS A DST	2013-2016	Dr.D.Easwaramoorthy	10.2
8	Applications Of Gold Catalysis For The Synthesis Of Bioactive Heterocyclic And Natural Product Mimic	DST- Fast Track (Recomd)	2013	Dr.K.Karthikeyan	25.2
9	Synthesis, characterization and optimization of Quantum Dots on TiO_2 surface for solar cells	DST Fast Track (Recomd)	2013	Dr. M. Asha Jhonsi	25.0

18. *Inter-institutional collaborative projects and associated grants received*

    a) National collaboration **Nil**

    b) International collaboration **Nil**

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

Nil

20. *Research facility / centre with*

    ➢ State recognition : Research Scholars from Affiliated colleges of Anna University, Madras University and other nearby colleges are utilizing our Instrumentation facility.

    ➢ National recognition : **Nil**

    ➢ International recognition : **Nil**

21. *Special research laboratories sponsored by / created by industry or corporate bodies* **:**

Nil

22. *Publications:*

Number of Papers published in peer reviewed journals (national / international)

Year	International Journal	National Journal	International conference	National Conference	Total
2009	5	0	0	8	13
2010	1	0	0	14	15
2011	2	0	0	15	17
2012	3	0	0	37	40
2013	6	0	0	29	35
Total	**17**	**0**	**0**	**103**	**120**

Details of publications is enclosed in Annexure D - 3.2 and 3.3 (Criterion III)

Chapters in Books: **Nil**

Edited Books   :   **Nil**

Publications listed in International Data base:

Name of the International Database	No. of paper indexed	Average Citation index	Average SNIP	Average SJR	Average Impact Factor
Google Scholar	08	6.25	1.101	0.742	2.288

H-Index

Database of Reference (Google Scholar)

H-Index - 2009 - 2013	
Year	h-Index
2009	4
2010	1
2011	1
2012	1

The Google scholar h-index of the department for the period of 2009 – 2013 is furnished below

23.   *Details of patents and income generated :* **Nil**

24.   *Areas of consultancy and income generated :*

1. Conducted correspondence courses for Madurai Kamaraj University (M.Sc. Chemistry)

Year	Income Generated (in Rupees)
2009-2010	1,32645
July 2010 to Dec.2010	73,554
2011 to Dec 2011	1,93,641

2.   Testing charges for analytical instrumentation

Year	Income Generated (in Rupees)
2011-2012	9,850
2012-2013	8,910

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad :* **Nil**

26. *Faculty serving in*

    a) National committees b) International committees c) Editorial Boards d) any other

    Dr.D.Easwaramoorthy served as a reviewer for the Journal of Industrial Engineering Chemistry and research(American Chemical Society)

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

No. of conference and workshop attended						
S.No	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	Total
1.	08	14	15	35	28	**100**

28. *Student projects*

    ➢ Percentage of students who have done in-house projects including inter-departmental projects

    ➢ Percentage of students doing projects in collaboration with other universities/ industry / institute

Programme	Year	Institute	% of Industrial Project	% of In-house Project
M.Sc	2010-11	Shasun pharmaceutical	100%(3/3)	Nil
M.Sc	2011-12	Anabond, Madras University	16%, (3/19)	84%, (16/19)
M.Sc	2012-13	Madras University	10%, 2/21	90%, (19/21)

29. *Awards / recognitions received at the national and international level by*

    Faculty, Doctoral / post doctoral fellows, Students : **Nil**

30. *Seminars/ Conferences/Workshops organized and the source of funding (national / international).*

Seminars/Work Shops/Conferences			
S. NO	Title	Month &Year	Sources of Funding
1	Instrumental techniques on chemical research	February 2012	BSAU
2	Crescience	April 2009	BSAU
3	Crescience	February 2012	BSAU

S. NO	Title	Month &Year	Sources of Funding
	Seminars/Work Shops/Conferences		
4	Refresher Programme for aspirants of CSIR-JRF/ SLET	June 2012	Jayaram Science foundation
5	Refresher programme for aspirants of CSIR-JRF/ SLET	May 2013	Jayaram Science foundation
6	Inter Collegiate quiz programme-	February 2013	BSAU
7	National Convention of Electrochemists by CECRI-karaikudi	September 2012	CECRI
8	ICNM-13 jointly with other departments	2013	BSAU
9	National Seminar on Emerging Trends in Solar Energy' 2013	2013	BSAU

31.   *Code of ethics for research followed by the departments*

Enclosed in Annexure D - 3.1 (Criterion III)

32.   *Student profile programme-wise:*

M.Sc Chemistry	Applications Received	Selected		Pass percentage	
		Male	Female	Male	Female
2010-2011	05	02	01	100	100
2011-2012	20	10	09	90	100
2012-2013	23	15	06	-	-
2013-2014	07	04	02	Undergoing	Undergoing

33.   *Diversity of students*

Name of the Programme (refer to question no. 4)	Year	% of students from the same Univ.	% of students from other universities within the State		% of students from other univ outside State	% of students from other countries
			Name of the University	%		
M.Sc	2010-12	NIL	Univ. of Madras	100	NIL	NIL
	2011-13	NIL	1. University of Madras	90	NIL	NIL
			2.Thiruvalluvar University	10		

M.Sc	2012-14	NIL	1. Univ.of Madras	62	NIL	NIL
			2.Thiruvalluvar University	33		
			3.Bharathidasn University	05		
	2013-15	NIL	1. Univ.of Madras	60	NIL	NIL
			2.Thiruvalluvar University	40		

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. :*

S.no	Student Name	RRN	Examination Passed	Rank Achieved
1.	Ms.Shylin	110522101013	GATE	3797th Rank out of 11768 Candidates

35. *Student progression*

Student progression	Percentage against enrolled
UG to PG	NIL
PG to M.Phil.	NIL
PG to Ph.D.	33% (2010)
Ph.D. to Post-Doctoral	NIL
Employed	
• Campus selection	NIL
• Off campus	75% (2011)
Entrepreneurs	NIL

36. *Diversity of staff*

Percentage of faculty who are graduates	
of the same university	Nil
from other universities within the State	79%
from universities from other States	21%
from universities outside the country	Nil

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37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*

Number of faculty who were awarded	
M.Phil.	Nil
Ph.D.	3
D.Sc.	Nil
D.Litt.	Nil

38. *Details of departmental infrastructural facilities with regard to*

a) Library   : 01

b) Internet facilities for staff and students:

All the staffs are having internet facility. Four computers with internet facility are provided to students.

c) Total number of class rooms   : 02

d) Class rooms with ICT facility   : 02

e) Students' laboratories   : 02

f) esearch laboratories   : 02

39. *List of doctoral, post-doctoral students and Research Associates*
    a) from the host institution/university

S.No	Name of the Candidate	Programme	Session
1.	Ms. Thirugnana Selvi S	Ph.D.	July 2009
2.	Mr. Selvam K	Ph.D.	July 2009
3.	Mr. Kannan P	Ph.D.	July 2009
4.	Mr. Jaya Prakash R	Ph.D.	July 2009
5.	Mr. Jabar Sathik B	Ph.D.	July 2009
6.	Mr. Devarajan K	Ph.D.	January 2010
7.	Mr. Saravanan M	Ph.D.	January 2010
8.	Mr. Dhivakar S	Ph.D.	January 2010
9.	Mr. Selvakumar V	Ph.D.	January 2010
10.	Ms. Lekha L	Ph.D.	January 2010
11.	Mr. Saminathan S	Ph.D.	January 2010
12.	Mr. Mohanraj R	BSAU J.R.F.	January 2010
13.	Ms. Sasikala M	Ph.D.	July 2010
14.	Mr. Senthilnathan G	Ph.D.	July 2010
15.	Mr. Devasenan S	Ph.D.	July 2010

S.No	Name of the Candidate	Programme	Session
16.	Ms. Kavitha A	Ph.D.	July 2010
17.	Ms. Preethi B	Ph.D.	July 2011
18.	Mr. Mukundan D	BSAU J.R.F.	July 2011
19.	Mr. Sathish Kumar S	Ph.D.	July 2011
20.	Mr. Somasundaram D	Ph.D.	July 2011
21.	Ms. Kiranmye T	Ph.D.	July 2011
22.	Mr. Sathiyanarayanan V	Ph.D.	July 2011
23.	Ms. Meenakshi R	Ph.D.	July 2011
24.	Mr. Venkatasubramanian H	Ph.D.	July 2011
25.	Mr.Lalit Mohan Singh Negi	Ph.D.	July 2012
26.	Mr. Sagubar Sadik S	Ph.D.	July 2012
27.	Ms. Sasikala R	BSAU J.R.F.	July 2012
28.	Mr. Sathish Kumar RV	Ph.D.	July 2012
29.	Mr. Sridhar G	Ph.D.	July 2012
30.	Ms. Saai Harini R	Ph.D.	July 2012
31.	Mr. Gangaprasad D	Ph.D.	January 2013
32	Mr. Kanniappan L	Ph.D.	January 2013
33.	Ms. Thilagavathy S	BSAU J.R.F.	January 2013
34.	Mr.Paulraj	CSIR-SRF	June 2013
35.	Mr. G. Sakthivel	DST-JRF	July 2013

b) from other institutions/universities

S. No.	University	Department	Name of the Candidate	Session
1.	Anna Univ, Ch.	Chemistry	Chithra	Pursuing from 2007
2.	Anna Univ, Ch.	Chemistry	Shanmugakani	Pursuing from 2007
3.	Anna Univ, Ch.	Chemistry	Sathish Kumar	Pursuing from 2008
4.	Anna Univ, Ch.	Chemistry	Crystal Y Wilson	Pursuing from 2008
5.	Bharathiar Univ, Coimbatore	Chemistry	Subha K	Pursuing from 2009
6.	Bharathiar Univ, Coimbatore	Chemistry	Udayappan V	Pursuing from 2009

40.   *Number of post graduate students getting financial assistance from the university.*

S. No	Post graduate chemistry students those who are getting Financial Assistance	Year
1.	Mrs. Thilagavathi	2010-12 (Fee waive)
2.	Miss Thulasi	2011-13

(Hostel accommodation free of cost) |
| 3. | Miss Krishnaveni | 2011-13(free Hostel facility) |
| 5. | Miss. Divya | 2013-15(Fee waive & free hostel accommodation) |

41.   *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

National Knowledge Commission, India revealed that, the number of students opting for science is getting declined. Further India is producing more number of Engineering graduates. It is felt that a strong foundation in science helps in building excellence in technology, propelling economic growth and prosperity, and consequently raising living standards. Moreover the challenges of the chemical industries demand for the potential science graduates to serve in various industries. Hence it is planned to start the M.Sc Chemistry programme. Since the college has established engineering departments, the chemistry students admitted in this university has the ample opportunity to gain knowledge in applied field and also do inter disciplinary project work. The curriculum and syllabi has been designed in consultation with academic and industrial experts and the 1st Board of Studies meeting was held on 21.04.2009. Suggestions proposed by the faculty members were incorporated in the Board of Studies meeting conducted on 23.03.2011. Due to the intake of the non-Mathematics students, a new two credit Mathematics course was introduced in the Board of Studies meeting conducted on 06.03.2012. Further modification of the curriculum and syllabi was done based on the feedback of Alumni and to suit the requirement of the Industries in the Board of Studies meeting conducted on 10.05.2013.

42.   *Does the department obtain feedback from*

a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Faculty members are requested to get the syllabus of established institution like IITS, IISC, central and state universities and also the syllabus prescribed for writing competitive exam like CSIR, GATE etc and the staff members are assigned the job of preparing the curriculum and then the detailed syllabi for the courses recommended by the members. Before preparing the curriculum feed-back from the industries and eminent persons of esteemed institutions were also collected.

b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

➢ Computerized Student Feed Back System followed

➢ Two feed backs per semester in all courses offered by all faculty members

➢ Reviewed by HoD along with the faculty concerned

➢ Feed back is a part of Faculty Performance Appraisal

➢ *c. Alumni and employers on the programmes offered and how does the department utilize the feedback?*

The department collected feedback from the passed out students who were employed in industries and their suggestions were incorporated in the revised curriculum

43. *List the distinguished alumni of the department (maximum 10)*

➢ Jayaprasad (2010 -2012) have been placed in Shasun Pharma after successfully completing their outhouse project there.

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

Guest lectures	Key note address	Topic	Month & Year
Alkemia association – Inauguration	1.Dr.S.Sankararaman, IITM	Sensors	Sep,2011
	2.Mr .Vijayakumar, M/s Anabond Pvt ltd	Adhesives	Feb 2012
	3. Dr.Radha V Jayaram, ICT Mumbai	Green catalyst	Feb 2013
	4.Dr.B.Gopalan, M/S Orchid Chemicals & Pharma Ltd	Drug Intermediates	Oct 2013
Alkemia association – Inauguration	5. Dr. P. Jayakumar, M/S Arbutus Consultants Pvt. Ltd., Pune	Solar Cells - The 21st Century Coal	Oct 2013
	6. Dr. Neppolian, SRM University, Chennai	Solar Cells- Ultimate Energy Conversion Devices	Oct 2013

Guest lectures	Key note address	Topic	Month & Year
Alkemia association – Inauguration	7. Dr. S. Sakthivel, Centre for Solar Energy Materials, International Advanced Research Centre for Powder Metallurgy and New Materials, Hyderabad	Importance of Solar Energy Conversion Technology	Oct 2013
	8.Dr.K.R Krishnamurthy, National Center for Catalysis Research, IITM	SOLAR CELLS - A PRESPECTIVE	Oct 2013
Seminars Instrumental techniques on chemical research	1. Dr.Venkat Manohar IICMS, Chennai	Mass Spectrometry	Feb, 2012
	2.Dr.Ramamoorthy, University of Madras	Ultra fast processes	Feb 2012
	3.Dr.K.Chandrasekara Pillai, National Taiwan University of Science &Technology, Taipei	Electrolysis	Feb 2012
	4.Dr.A.K.Mishra, IITM	Photochemistry	Feb 2012
	5. Dr.T.Pradeep, IITM	Nano materials	Feb 2012
National convention of Electro chemists (Conferences)	1.Prof .S.Sampath IISc, Bangalore	2D polymerization at air- water interface	Sep. 2012
	2.Dr. M.Jayachandran CECRI, Karaikudi	Charaterisation of nano materials	Sep.2012
	3. Dr.N. Kalaiselvi CECRI, Karaikudi	Synthesis,Structure and property relationship of Lithium intercalating materials	Sep 2012

45. *List the teaching methods adopted by the faculty for different programmes.*

    a. Power point presentation

    b. OHP presentation

    c. NPTEL Aid

    d. Models

    e. Special lectures and demonstration of the equipment

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*

   ➢ Advanced planning and organization

   ➢ Lesson plan and course material for various courses are prepared well in advance.

   ➢ Tests and end semester examination conducted centrally

   ➢ Answer scripts are given back to the students and the correct answers are discussed in the class

   ➢ Student's performance monitored by Class Advisors, Faculty Advisors and HOD

   ➢ Parents are informed about the progress periodically

   ➢ Parent -Teachers meetings conducted

   ➢ Slow learners are counseled suitably

   ➢ Remedial classes conducted

47. *Highlight the participation of students and faculty in extension activities.*

   Dr. N.Hajarabeevi serving as NSS Programme Officers from 2008 to till date takes the theme of NSS into their heart and works with zeal and motivates the students to effectively participate in the NSS activities.

48. *Give details of "beyond syllabus scholarly activities" of the department.*

   1. Industrial visit to pharmaceutical companies like Shasun Pharmaceutical,Orchid & Anabond companies

   2. Summer training for needy students in leading pharmaceutical companies in Chennai

   3. Student association "Alkemia" is organising two guest lecture programmes in every year by the department, given by experts from industries and academic institute of excellence.

   4. Students are encouraged to attend national and international workshops and guiding them to present papers.

   5. Participating in various intra and intercollegiate competitions like quiz, debate, poetry, etc.

   6. Acquiring leadership qualities in organizing various conferences and workshops of the department

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes*, *give details :* **No**

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

    1. Students got exposure in doing In-House Projects.

    2. Motivation Programmes were conducted for writing various competitive Exams.

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths

1. All the faculty members of this department are doctorates

2. Five of the faculty members have done Post Doctorate and three faculty members have industrial experience

3. Availability of sophisticated analytical instruments in the department facilitates research activities.

4. The department has diversified fields of Chemistry which allows Research networking within the research team.

5. This department has funded projects worth of about 2.0 crores.

Weaknesses

1. Publication of research papers is proportionately less with faculty's research strength.

2. More number of Seminars and Conferences can be conducted.

3. Most of the M.Sc students are from vernacular medium and rural areas.

4. Lack of National & International collaborative programmes with Academic Institutions and with Industries.

Opportunities

1. Improvement in infrastructure will enhance research activities further.

2. Faculty diversification may help National and International Collaboration.

3. Effective usage of sophisticated analytical instruments would enhance Research activities.

4. Faculty holding funding projects can conduct National and International Seminars and Conferences.

5. Consultancy with Industries could be enhanced with available sophisticated instruments.

Challenges

1. Inter-disciplinary Interdepartmental projects to be promoted

2. National and International Collaborative research works to be promoted.

3. To improve the quality and quantity of the intake in M.Sc students in competition with the other Universities.

4. To generate funds by utilizing sophisticated analytical instruments, training programmes, workshops etc.

5. To start new PG programmes on par with other Universities.

52. *Future plans of the department.*

   ➢ The department aims to become a leading Chemistry department in the city in the next 10 years.

   ➢ The department proposes to offer part time PG degree programme & Diploma in Instrumental methods of analysis in the next 5 years.

   ➢ The department proposes to offer extension programmes to the employees of industries in   relevant areas to suit the needs of the industry in the next 5 years.

   ➢ The department proposes to offer certificate programmes for village youths which may fetch job opportunities in laboratories in educational institutions, hospitals and R&D units in the next 3 years. The approximate budget is around Rs.20,000/-

   ➢ Workshop on 'safety training and laboratory skills' is to be conducted for village youth periodically The approximate budget is around Rs.20,000/-

   ➢ The department has identified 'Catalysis and Kinetics' as the thrust area to establish a centre of excellence. This will interlink the areas of organic synthesis, photo catalysis and polymerization with catalysis and kinetics, for which experts are already available in the department. The catalysts developed will be used for treating waste water from industries so that the community gains at large.

   ➢ To get more number of funded projects

SCHOOL OF SOCIAL SCIENCES & HUMANITIES

Department of English

Department of English

1.   **Department of English**

The Department of English has been in existence since 1984. It offers courses namely Technical English and Communication Skills at the UG and PG level. Besides this, it offers value added courses like BEC Preliminary and Vantage course consequent to signing an MoU with the University of Cambridge ESOl exams, Cambridge. This has resulted in enhancing the job prospects of the students. There are 10 faculty members, among whom five are research supervisers offering guidance in diverse fields like English Language Teaching and English Literature. The other five are pursuing Ph.D. The Department periodically organizes workshops and conferences on themes of relevance in order to equip English teaching fraternity with effective pedagogic strategies and its faculties write books and publish papers in refereed national and international journals.

2.   *Established in* **1984**

3.   *Is the Department part of a School/Faculty of the university?*

Yes. The Department of English is a part of the School of Social Sciences and Humanities.

4.   *Names of programmes offered :*   **M. Phil and Ph.D**

5.   *Interdisciplinary programmes and departments involved :* **Nil**

6.   *Courses in collaboration with other universities, industries, foreign institutions, etc.:*

Consequent to signing an MoU with Cambridge ESOL IN 2009, the Department of English has integrated the syllabi of Business English Certificate (BEC) course - Preliminary and Vantage levels – with the courses EN102 Communication Skills Laboratory I and EN201 Communication Skills Laboratory II respectively.

7.   *Details of programmes discontinued, if any, with reasons:* **Nil**

8.   *Examination System: Semester and Choice Based Credit System*

9.   *Participation of the department in the courses offered by other departments:*

UG: B.Tech All Branches I   semester - EN101 Technical English

II   semester - EN 102 Communication Skills

Laboratory- I   III semester - EN 201 Communication Skills Laboratory – II

B. Arch.   I   semester - EN121 Communicative English - I

II semester - EN122 Communicative   English – II

PG : MBA   I   Trimester - MS 605 Communication Skills – I

II   Trimester - MS 615 Communication Skills – II

MCA   II semester - EN611 Communication Skills Laboratory

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others):*

	Sanctioned	Filled	Actual (incl. CAS & MPS)
Professor	3	3	3
Associate Professors	1	1	1
Asst. Professors	6	6	6
Others	--	--	--

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Name	Qualifi-cation	Designation	Speciali-zation	No. of years of Exp	Research Guidance
Dr.P.M.Usha Rani	M.A,B. Ed M.Phil, PhD	Professor & Head	English Language Teaching	29 years & 1½ as PG assistant	Guiding 2 PhD
Dr.A. Shahin Sultana	M.A, B.Ed, M.Phil, PhD	Professor& Dean of School of Social Sciences& Humanities	English Language Teaching	29 years	Guiding 2 PhD & 1 M.Phil
Dr.Revathi Viswanathan	M.A,M. Ed, PhD, Cert. TESOL	Professor	English Language Teaching	20 years	Guiding 3 PhD
Dr.P.Rathna	M.A, M.Phil, PhD, Dip. TD	Associate professor	English Literature	16 years & 6 months	Guiding 1 PhD
Mrs. H.Sofia	M.A, M.Ed, M.Phil	Assistant Professor (SG)	English Language Teaching	7 Years (collegiate level) 13 years (school level)	-

Name	Qualifi-cation	Designation	Speciali-zation	No. of years of Exp	Research Guidance
Mrs. A. Catherine Anna Pushpam	M.A, B.Ed, M.Phil	Assistant Professor	English Language Teaching	7 years (Collegiate level) 5 years (School level)	-
Mr.S.Vijayakumar	M.A, B.Ed, M.Phil	Assistant Professor	English Language Teaching	7years	-
Mr.A.Sathikulameen	M.A, M.Phil	Assistant Professor	English Literature	5 years	-
Mrs. Grace Vinitha	M.A, M.Phil	Assistant Professor	English Literature	3 years	-
Dr. Mr.Md. Sahidul	M.A, B.Ed, PhD	Assistant Professor	English Literature	3 months	-

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors:* **Nil**

13. *Percentage of classes taken by temporary faculty – programme-wise information* : **Nil**

14. *Programme-wise Student Teacher Ratio:* **Not Applicable**

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

Non-teaching Staff	Sanctioned	Filled	Actual
Academic Support Staff (Technical)	2	2	2
Administrative	1	1	1

16. *Research thrust areas as recognized by major funding agencies:*

➢ English Language Teaching (TESL/TEFL/ESP/EAP)

➢ English Literature

➢ ICT for English as a Second Language

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

Nil

18. *Inter-institutional collaborative projects and associated grants received*

a) National collaboration-- NA b) International collaboration-- **Nil**

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

Nil

20. *Research facility / centre with*

➢ state recognition : **NA**

➢ national recognition : **NA**

➢ international recognition : **NA**

21. *Special research laboratories sponsored by / created by industry or corporate bodies:* **NA**

22. *Publications:*

Number of Articles Published at the National and International Level:

Year	International Journal	National Journal	International Conference	National Conference	Total
2009	1	3	3	0	7
2010	0	2	4	0	6
2011	5	3	2	3	13
2012	4	1	9	7	21
2013	3	6	5	3	17
Total	13	15	23	13	64

Details of publications are given in **Annexure D - 3.2 and 3.3 (Criterion III)**

Chapters in Books with ISBN:

S. No.	Name of the Author	Title of the Chapter	Publishers	ISBN No.
1	Dr.P.M.Usha Rani	A Fresh Look at Testing and Assessment Patterns in Emerging Issues in English Language Teaching	GNOSIS, Authors Press Global Network, New Delhi, 2013	978-93-81030-46-2
2	Dr. Revathi Viswanathan	1.Blended Learning in a Traditional Classroom'—in Frontiers of Language and Teaching. 2. 'Technology for Teachers'--in Models of Teaching 3. Challenges in Blending Online Instruction with Classroom Teaching- An Indian Experience' –in the Book Connecting Online for Instruction and Learning. International Perspective'	BrownWalker Press, Boca Raton. Florida. USA, 2011 cpraveen Publications. Kerala. India, 2012 Atlantic University Publications, USA, 2013	'ISBN-10: 1612335594. Listed in EBESCO ISBN No.978-81-923985-0-1 ISBN-13:978-1481034579
3	Mr.A. Sathikulameen	A Study of Patrick White's Voss and its Cultural Elements-- in a book "Juxtaposing Narrative and Fiction: Explorations in Postmodern Novels	GNOSIS Authors Press Global Network, New Delhi, 2013	ISBN 978-93-81030-38-7

Books with ISBN:

S. No.	Name of the Author	Title	Publishers	ISBN No.
1	Dr.P.M.Usha Rani	Technical Discourse Analysis–Written Technical Discourse Analysis	LAP Lambert Academic Publishing, GmbH & Co.KG Germany, 2013	978-3-659-35078-8

S. No.	Name of the Author	Title	Publishers	ISBN No.	Year
2	Dr.P.Rathna	Technical English I	VRB Publishers Pvt. Ltd. Chennai.	978- 9380-241-03-6	Revised edition of previous years
3		Technical English II	VRB Publishers Pvt. Ltd. Chennai.	978-93-80241-34-0	--do--
4		English Workbook I &II	VRB Publishers Pvt. Ltd. Chennai.	978-93-80241-33-3.	-do-

Books without ISBN:

S. No.	Name of the Author	Title	Publishers
1	Dr. Revathi Viswanathan	Skills for Career Communications'	Preesat Publications, 2012

Impact Factor:

S. No.	Name of the Author	Title	Name of the Journal	ISSN No./ Vol. No.	Impact factor
1	Mrs.H.Sofia	Employing Task-Based Approach to Teach Technical Writing for Students of Engineering Using Web 2.0 Tools'	International Journal of English and Literature (IJEL), 2013	2249-6912; ISSN(E): 2249-8028 Vol.3. Issue No.5	3.8526

Citation Index:

Dr.Revathi Viswanathan—Research chapter titled 'Using Mobile Technology and Podcasts to Teach Soft Skills' published in 'Handbook of Research in Web 2.0 and Second Language Learning'(2009). Work cited by 7.

23. *Details of patents and income generated* : **NA**

24. *Areas of consultancy and income generated* : **NA**

25. *Faculty selected nationally / internationally to visit other laboratories / institutions:* **Nil**

26. *Faculty serving in National committees b) International committees c) Editorial Boards d) any other (please specify)*

International Committee:

S. No	Name of the Faculty	Name of the Committee
1	Dr.Revathi Viswanathan	Served in Selection Committee for selecting Papers for WORLD CALL2013

Editorial Board:

S.No.	Name of the Faculty	Name of the Editorial Board
1	Dr.Mrs.Shahin Sultana	Academic Editor for the National Journal, 'The Asian ESP Journal'. Member of Editorial Board- 'Online International Peer Reviewed Periodical Journal'.
2.	Dr.Revathi Viswanathan	Editorial committee for IJCALLT (International Journal since 2010)

Any Other Committee:

➢ Dr.P.M.Usha Rani--- Doctoral Committee Expert member for Anna University and SRM University.

➢ Dr.Revathi Viswanathan – Doctoral Committee Expert member for Anna University and Hindustan university.

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

1	Training the Trainer	Since 2009
2	Induction Training Program	Since 2010
3	Workshop on 'Creativity in English Language Teaching'	11th October 2012

28. *Student projects* : **NA**

29. *Awards / recognitions received at the national and international level by*

❖ Faculty

1. Dr. P.M.Usha Rani- Recognized Supervisor for guiding Ph.D Scholar, Peter's University, Chennai.

2. Dr. Revathi Viswanathan- Recipient of Cambridge ESOL scholarship

➢ Doctoral / post doctoral fellows : **None**

➢   Students   : **NA**

30. *Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.*

S. No	Month/ Year	Name of the Seminar/ Conf./Workshops	Source of funding National/ International	Details of Outstanding Participants
1	March 2011	State level Seminar CRESCIENCE- 2011	BSAU	Dr.T.K. Arunachalam, Regional Manager, Cambridge ESOL, Chennai.
2	March 2012	National Seminar "Technology Integrated Language Teaching" TILT – 2012	BSAU	Mr.Paul Sellers, Director, British Conuncil, South India.
3	October 2012	Workshop on "Creativity in English Language Teaching"	BSAU	Ms.Angela Ffrench, Asst. Director, Assessment Advisor, University of Cambridge..
4	March 2013	National Conference – "A Paradigm Shift in English Language Teaching & Testing: A Literary/ Linguistic Approach	BSAU	Prof. Dr.K.N.Sivaraman, Senior Consultant (ELT, ESP & Soft Skills Training)
5.	October 2013	National Conference – "Instructional Methods and Materials for Outcome Based Education in ELT"	BSAU	Dr.S.Mohanraj, Professor, Training and Development, English and Foreign Languages University, Hyderabad Rev.Fr.Francis Peter. S.J., Professor, Managerial Communication, XLRI, Jamshedpur

31. *Code of ethics for research followed by the departments*
     Code of Ethics for Research is enclosed in **Annexure - D 3.1 (Criterion III)**

32. *Student profile programme-wise :* **Not Applicable**

33.   *Diversity of students   :* **Not Applicable**

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

Not Applicable

35. *Student progression*   : **Not Applicable**

36. *Diversity of staff*

Percentage of faculty who are graduates	
Of the same University	Nil
From other universities within the state	90% (University of Madras, Annamalai, Bharathidasan & Alagappa University)
From universities from other states	10% (Aligarh Muslim University)
from universities outside the country	Nil

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period :*

Faculty awarded Ph.D : 1 (Dr. P. Rathna)

38. *Present details of departmental infrastructural facilities with regard to*

a. Library   : 269 Books

b. Internet facilities for staff and students : All faculty members are provided with systems having internet connectivity

c. Total number of class rooms   : Not Applicable

d. Class rooms with ICT facility   : Not Applicable

e. Students' laboratories   : 2 language laboratories with 36 systems with internet facility and 1 server

f. Research laboratories   **:** Not Applicable

39. *List of doctoral, post-doctoral students and Research Associates Doctoral Research*

S. No	Name of the Candidate	Research Supervisor	Title/Topic Research
1	Mrs. Sofia Hadi	Dr.Revathi Viswanathan	Teaching Technical English Using Web 2.0 Tools- An Experimental Study
2	Mrs. Catherine Anna Pushpam	Dr.P.M.Usha Rani	Testing pattern in English : An Evaluation

S. No	Name of the Candidate	Research Supervisor	Title/Topic Research
3	Mr.S. Vijaya Kumar	Dr.Shahin Sultana	Enhancing Writing Skills of ESL Students Using Multimedia: An Experimental Study
4	Mrs. Grace Vinitha	Dr.P.Rathna	Reflection of Ethnic Consciousness in the Novels of Indo-Canadian Women Writers
5	Mr.Nazir Mir Ahmad	Dr. Shahin Sultana	Barriers of Learning English at Higher Secondary Level with Reference to Learners of Jammu & Kashmir
6	Mrs. Sadaffunisha	Dr.Revathi Viswanathan	Strategies of Developing Reading Skills at the Tertiary Level

Other Universities/Institutions:

S.No	Name of the Candidate	Research Supervisor	Title/Topic Research
1	Mr.Lakshmana Perumal	Dr. P.M.Usha Rani	Enhancing Communication Skills for Employability

40. *Number of post graduate students getting financial assistance from the university.*

One Junior Research Fellow

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

Not Applicable

42. *Does the department obtain feedback from*

a. *Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?*

Yes, the department external DAAC expert audits and writes his/her feedback in the form which is photocopied and distributed to the faculties for improving their teaching, paper setting and evaluation skill.

b. *Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

Uses the student feedback to improvise teaching methods.

c. *Alumni and employers on the programmes offered and how does the department utilize the feedback?* **Nil**

43. *List the distinguished alumni of the department (maximum 10) :* **Not Applicable**

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*
    - Mr.Joshua Gnanakkan, Workplace Consultant, Cambridge ESOL Examinations, gave a special lecture to the II year B.Tech. students on the significance of BEC Exams in September 2013.
    - Conducted Refresher course for new entrants and Bridge course for Lateral entry students.
    - Organising a one-day seminar "Crescience" to improve the speaking skills of the first year B.Tech students every year
    - The Literary Club was initiated in the year 2006 **Litrapture,** an annual inter-collegiate literary fest has been conducted every year
    - A newsletter called **Writers Inc.** is also published twice in a year.

45. *List the teaching methods adopted by the faculty for different programmes.*
    - Web resources used in the laboratory (for teaching B.Tech, B.Arch, MCA & MBA programmes)
    - Podcast for developing listening skill
    - Blog for developing writing skills

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*
    - By assessing the performance of the students in the continuous assessments, assignments and end semester exams. (Speaking & Listening and Writing skills)
    - By conducting discussions and brain storming sessions with faculties in order to revise Outcome-Based curriculum

47. *Highlight the participation of students and faculty in extension activities.*
    - Staff and Students participate in seminars /conferences and present papers.
    - Staff conduct sessions in teacher development programs as resource persons.

48. *Give details of "beyond syllabus scholarly activities" of the department.*
    Conduct of BEC exams at Preliminary and Vantage levels for the students of II semester and III semester B.Tech students respectively.

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.* **Does Not Arise**

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

> ➢   Revamped syllabus to make it outcome-based

> ➢   Provided hands-on experience through language laboratory and task-based curriculum.

> ➢   Prepared task-based modules- focusing on all 4 skills.

> ➢   Integrated BEC Preliminary and Vantage levels to offer language skills training in business contexts.

> ➢   Exposed students to advanced technological tools like Blog and Podcast for students to use them as resources and as tools.

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths	Weaknesses	Opportunities	Challenges
1. Highly qualified faculty. 2. Staff actively involved in professional development activities and well versed in using technology. 3. Adequate study materials. 4. Research activities 5. Offering hands on experience to students.	1. Mixed ability students	1. Scope for improving curriculum. 2. Initiate new courses. 3. Expand research activities.	1. Students' lack of interest towards learning language skills 2. Large number of students per class.

52. *Future plans of the department.*

> ➢   To offer M.A. in English
> ➢   To offer foreign languages like French, German, Japanese, Arabic, etc.

Other Courses (Economics and Sociology)

1.   Name of the Department : **School of Social Sciences and Humanities**

The School of Social Sciences has been established recently. The main objectives of the school is to give a holistic exposure to the students of engineering to the fundamentals of courses such as Introduction to Economics, Sociology, Ethics and Human Values, Law for Engineers, Management of Business Organizations. The School proposes to start new PG programmes in future.

2.   Year of establishment   : **2013**

3.   Is the Department part of a School/Faculty of the university?

No department in the School of Social of Sciences and Humanities

4.   Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) :

Nil

School at present offering the following courses for the students of B.Tech.
1. Introduction to Economics
2. Sociology, Ethics and Human Values
3. Law for Engineers
4. Management of Business Organizations

5.   Interdisciplinary programmes and departments involved :

Nil

6.   Courses in collaboration with other universities, industries, foreign institutions, etc.

Nil

7.   Details of programmes discontinued, if any, with reasons :

Nil

8.   Examination System: Annual/Semester/Trimester/Choice Based Credit System

Semester / Choice Based Credit System

9.   Participation of the department in the courses offered by other departments:

School at present offering the following courses for the students of B.Tech.
1. Introduction to Economics
2. Sociology, Ethics and Human Values
3. Law for Engineers
4. Management of Business Organizations

10. *Number of teaching posts sanctioned, filled and actual (Professors/AssociateProfessors/ Asst. Professors/others):*

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	1	1	1
Associate Professors	--	--	--
Asst. Professors	6	6	6
Others	--	--	--

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Name	Qualif- cation	Desig- nation	Specia- lization	Yrs of Exp	No. of Ph.D./M. Phil students guided
Dr. A. Shahin Sultana	M.A., B.Ed., M.Phil., Ph.D.	Professor and Dean	English Language Teaching	30	M.Phil (guided-1) Ph.D. (guiding-2)
Dr. Moon Moon Hussain	M.A., B.Ed., Ph.D.	Assistant Professor	Public Finance	4 years	-
Dr. Shahnaz Sultana	M.A., M.Phil., Ph.D.	Assistant Professor	Health Econom- ics	13 years	M.Phil (guided -1)
Dr. R. Kanaka Sudha	M.A., M.Phil., Ph.D., SET	Assistant Professor	Develop- ment Eco- nomics	2 years	-
Dr. P. Devi	M.A., M.Phil., Ph.D.	Assistant Professor	Sociology of Health	8 years of research & 1 year of teaching	-

Name	Qualif-cation	Desig-nation	Specia-lization	Yrs of Exp	No. of Ph.D./M. Phil students guided
Mr. C. Noushad	M.A., M.Phil.,	Assistant Professor	Gender and Development	-	-
Mr. M.D. Mainuddin	M.A., M.Phil.,	Assistant Professor	Sociology of Minorities	1 year (part time)	-

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors: None*

13. *Percentage of classes taken by temporary faculty – programme-wise information:*

None

14. *Programme-wise Student Teacher Ratio: Not Applicable*

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual :*

Administrative staff – 1

16. *Research thrust areas as recognized by major funding agencies*
   ➢ Public Finance
   ➢ Rural Development
   ➢ Unemployment and Human Capital
   ➢ Tourism and Development
   ➢ Poverty and Population
   ➢ Development Economics
   ➢ Money & Banking
   ➢ Human Resource Management
   ➢ Infrastructure Development
   ➢ International Trade
   ➢ Sociology of Health, Gender and Development and Sociology of Minorities

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.* **NIL**

18. *Inter-institutional collaborative projects and associated grants received*

    a) National collaboration   b) International collaboration

    Not Applicable

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. :* **None**

20. *Research facility / centre with:*   **Nil**
    ➢   state recognition   :
    ➢   national recognition   :
    ➢   international recognition :

21. *Special research laboratories sponsored by / created by industry or corporate bodies:* **NIL**

22. *Publications:*

    Number of paper publications:

National journals - 12	International journals - 11

    ➢   Monographs
    ➢   Chapters in Books:

    Number of Monographs, Chapters in Books and Edited books:

Name of the faculty	Monographs	Chapters in Books	Articles in Edited books
Dr. Shahnaz Sultana	--	--	6
Dr. R. Kanaka Sudha	--	--	7

    Books with ISBN and publisher details:

    Book – (Contributed a Chapter)

    1. Moon Moon Hussain (2013): Indian Economic Scenario, Kalyani Publishers, and ISBN: 978-83-272-2909-7
    2. Moon Moon Hussain (2013): Public Expenditure of Assam: An Empirical Analysis, EBH Publishers, and ISBN: 978 93   80261 850
    3. Shahnaz Sultana (2012): Repetitive Strain Injury among the Information Technology (IT) Workers, Lambert Academic Publishers, and ISBN: 978-3-659-12463-1

4. Shahnaz Sultana (2012): The Health Status of People Working on Computers: A Comparative Study, Lambert Academic Publishing, ISBN: 378-3-659-11083-2

5. Tabassum Jehan & Shahnaz Sultana (2012): A Study on Quality of Work Life of Employees: Work Life Balance and Quality of Work, Lambert Academic Publishing, ISBN: 978-3-659-11976-7

6. Aysha Begum A.J. & Shahnaz Sultana (2012): A Study on Job Stress at New India Assurance Company Limited, Lambert Academic Publishing, ISBN: 978-3-659-16172-8

7. Theivanayagam Janaki & Shahnaz Sultana (2012): A Study on Corporate Social Responsibility at Ashok Leyland Company, Lambert Academic Publishing, ISBN: 978-3-659-19374-3

8. Geetha Nanu & Shahnaz Sultana (2012): A Study on Performance Appraisal at New Delhi Assurance Company Ltd., Lambert Academic Publishing, ISBN: 978-3-659-24479-7

9. S. Chinnammai & R. Kanaka Sudha (2010): Financial Reforms and New Development in Banks, Serials Publications, ISBN: 978-81-8387-267-6

10. Md Mainuddin (2011). Understanding Muslim Situation in West Bengal: Some Reflections on Socio-Economic and Political Status, Germany: Lambert Academic Publishing, ISBN: 978-3-8454-7870-8

11. Mr. C Noushad , Book Energy Environment and Health, Alphonsa and Edision Victorious Publishers 978-1924744-1-0, 2013

12. Mr. C Noushad, FDI in India Issues & Challenges, Kalathachan Publications, 81-88023-11-6, 2012

23. *Details of patents and income generated* : **Nil**

24. *Areas of consultancy and income generated :* **Nil**

25. *Faculty selected nationally / internationally to visit other laboratories / institutions:* **Nil**

26. *Faculty serving in a) National committees b) International committees c) Editorial Boards d) any other (please specify):*

❖ *Faculty* :

1. Dr. A. Shahin Sultana,

➤ Editorial member of National Journal –Asian Journal of English for Specific Purposes

➤ Editorial member of International Journal -English for Specific Purposes World

➤ Coordinator of Business English Certificate courses offered by the University of Cambridge ESOL exams.

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs):*

A guest- lecture is being planned.

28. *Student projects* : **Not Applicable**

➢ *percentage of students who have done in-house projects including inter-departmental projects*

➢ *percentage of students doing projects in collaboration with other universities*

➢ *industry / institute*

29. *Awards / recognitions received at the national and international level by*

❖ Faculty : Dr. A. Shahin Sultana,

➢ Editorial member of National Journal –Asian Journal of English for Specific Purposes

➢ Editorial member of International Journal -English for Specific Purposes World

➢ Doctoral / post doctoral fellows : Mr. Nazeer Ahamed Mir – Ph.D. scholar JRF

➢ Students : NIL

30. *Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any. : Nil*

31. *Code of ethics for research followed by the departments:*
Code of Ethics for University is attached in **Annexure D - 3.1 (Criterion III)**

32. *Student profile programme-wise:* Not Applicable

33. *Diversity of Students:* Not Applicable

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. :* Not Applicable

35. *Student progression:* Not Applicable

36. *Diversity of staff*

Percentage of faculty who are graduates	
Of the same University	Nil
From other universities within the state	57%

Percentage of faculty who are graduates	
From universities from other states	43%
from universities outside the country	Nil

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period :* **Nil**

38. *Present details of departmental infrastructural facilities with regard to :* **Nil**

39. *List of doctoral, post-doctoral students and Research Associates :* **Nil**
    a. *from the host institution/university* : **Nil**
    b. *from other institutions/universities* : **Nil**

40. *Number of post graduate students getting financial assistance from the university:* **Nil**

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

    No

42. *Does the department obtain feedback from*

    a.   Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

    Yes, the DAAC committee members of the department verify the question paper & answer scripts & submit a report. The feedback is given to the faculties for improving their teaching, paper setting and evaluation skills.

    b. *Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?*

    Use the student feedback to improve the teaching & the learning process.

    c. *Alumni and employers on the programmes offered and how does the department utilize the feedback?* **NIL**

43. *List the distinguished alumni of the department (maximum 10) :*

    Not Applicable

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts:* **Nil**

45. *List the teaching methods adopted by the faculty for different programmes:*
Blackboard / Chalk / Lecture method / Language Lab

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*
By assessing the performance of the students in the assessment tests.
By holding discussions on the outcome based curricula and the syllabi with the faculties.

47. *Highlight the participation of students and faculty in extension activities:*
Staff have participated in seminar and conferences.

48. *Give details of "beyond syllabus scholarly activities" of the department:* **Nil**

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

Not Applicable

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*
   ➢ Course material is prepared by faculty members to generate new knowledge of the courses.
   ➢ Revamping of the syllabi of the courses being done.

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths	Weaknesses	Opportunities	Challenges
All the faculties possess doctoral degree. The faculty members are well experienced Most of the faculties have published books.	It is a new department established this year.	Inter-disciplinary course will be introduced in the future.	Large number of students per class. Mixed ability classes

52. *Future plans of the department.*
   ➢ To start a new PG programme
   ➢ To publish books on topics related to the course.

CRESCENT BUSINESS SCHOOL

1.   *Crescent Business School*

The School offers M.B.A. program.The M.B.A. programme offers courses with special focus on Marketing, Human Resources, Finance & Accounts, Production & Operation and Systems. Two special focuses are the Íslamic Banking and Finance and Written Analysis and Communication on the lines of IIM, Ahmadabad and Harvard Business School.

2.   *Year of establishment*   **2010**

3.   *Is the Department part of a School/Faculty of the university?*

<div align="center">

CBS is a School

</div>

4.   *Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)*

<div align="center">

M.B.A. and Ph.D.

</div>

5.   *Interdisciplinary programmes and departments involved*

<div align="center">

None

</div>

6.   *Courses in collaboration with other universities, industries, foreign institutions, etc.*

<div align="center">

None

</div>

7.   *Details of programmes discontinued, if any, with reasons*

<div align="center">

M.Phil. BSAU Policy decision

</div>

8.   *Examination System:*

Annual/Semester/Trimester/Choice Based Credit System
CBS follows Trimester and Choice Based Credit System

9.   *Participation of the department in the courses offered by other departments*

CBS faculty teaching Management Courses in other BSAU departments.

A list is given below:

Department	Course Code	Pg/Ug
ODD Semester 2013-2014		
Mechanical Engineering	Mgnt Concepts & Industrial Relations	UG
Electrical & Electronics Engg	Engg Economics & Mgnt Concepts	UG
Computer Applications	Organizational Behaviour	PG
Civil Engineering	Financial Accounting & Management	PG
Automobile	Engg Economics & Production Mgnt	UG
Polymer Technology	Engg Economics & Mgnt	UG

EVEN SEMESTER 2013 - 2014		
Information Technology	Engg Economics & Mgnt Concepts	UG
Computer Science & Engg	Engg Economics & Mgnt Concepts	UG
Mechanical Engineering	Engg Economics & Finance	UG
Computer Applications	Accounting & Financial Mgnt	PG
Electronics & Commn. Engg	Engg Economics & Mgnt Concepts	UG
Electronics & Instrumn. Engg	Engg Economics & Mgnt Concepts	UG

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)*

	Sanctioned	Filled	Actual (incl. CAS & MPS)
Professor	3	3	3
Associate Professors	1	1	1
Asst. Professors	15	15	15
Adjunct Professor	1	1	1

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Name	Quali-fication	Designa-tion	Specializa-tion	Yrs Exp	No. of Ph.D / M.Phil Guided
Dr.Mirza S.Saiyadain	Ph.D	Professor & Dean	Human Re-source	42	Ph.D – One guiding M.Phil- Three completed
Dr. S.K.G.Ganesh	Ph.D.	Professor	Marketing	25	Ph.D. – Six guiding
Dr.S.Krishna Kumar	Ph.D	Adjunct. Professor	Marketing	35	-
Dr.Haider Yasmeen	Ph.D.	Professor	HRM/ OB	18	Ph.D - guiding M.Phil – One

Name	Quali-fication	Designa-tion	Specializa-tion	Yrs Exp	No. of Ph.D / M.Phil Guided
Dr.Joe Christy	Ph.D	Associate Professor	Marketing	19	Ph.D. – Two guiding M.Phil - One
Mrs.S. Panboli	M.B.A.	Assistant Professor. (SLG)	Finance	21	-
Mr.L. Aravindh Kuma-	M.B.A.	Assistant Professor. (SLG)	Operations	15	-
Mrs.Chandrika Srinivas	M.Phil.	Assistant Prof (Sr.Gr.)	Marketing, General Mgnt	23	-
Mrs.J.C. Sharmila Devi	M.Phil.	Assistant Professor	General Man-agement	10	-
Mrs.N. Anuradha	M.B.A.	Assistant Professor	Finance	13	-
Mr.Charlie Thomas	M.B.A.	Assistant Professor	Operations	5	-
Mrs.J.Hemalatha	M.B.A.	Assistant Professor	Marketing	11	-

Name	Quali- fication	Designa- tion	Specializa- tion	Yrs Exp	No. of Ph.D / M.Phil Guided
Mrs.Kaleel Nisha	M. Phil.	Assistant Professor	Finance	4	-
Mr.Jamal Mohd Zubair	M.B.A.	Assistant Professor	Business Poli- cy, HR	10	-
Mrs.Nirmala Raghavan	M. Phil.	Assistant Professor	Finance	5	-
Mrs.N.Raja Priya	M.B.A.	Assistant Professor	OB/HR	5	-
Ms.T. Rocky Devi	M.B.A.	Assistant Professor	O B/ HR	5	-
Ms.T.G. Rajeswari	M.B.A.	Assistant Professor	Finance	4	-
Dr.Khalid Waheed	Ph.D.	Assistant Professor	Islamic Fi- nance, Bank- ing, Economics	24	Ph.D –Two guiding
Mrs.M.V.Anuradha	M.B.A.	Assistant Professor	Systems	1	-

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors*

    One   -   Prof. Krishna Kumar, Adjunct Faculty

13. *Percentage of classes taken by temporary faculty – programme-wise information*

    Nil

14. *Programme-wise Student Teacher Ratio*

    MBA 1:12

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

    1 – Technical   ;   5 - Administrative staff

16. *Research thrust areas as recognized by major funding agencies*

    1. Finance and Account

    2. Marketing

    3. Organizational Behaviour

    4. Islamic Finance and Banking

    5. Production and Operations Management

    6. Systems Management

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

    None

18. *Inter-institutional collaborative projects and associated grants received*

    a) National collaboration   *b) International collaboration*

    None   None

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

    The list of projects is presented below:

    1. Prof. S.K.G. Ganesh carried out a research project on "Higher Order Ability Testing in Management Education" under grant by National Testing Services - A Central Scheme MHRD in 2010 (Rs. 75,000/-).

    2. Prof. T. Subramanian was invited by Co-optex to be a Technical Member in their e-Governance Implementation Committee to select suitable Web based application Software for Co-optex in the month of March 2012 (Rs. 1,00,000/-).

3.   Prof. Mirza S. Saiyadain and Prof. Haider Yasmeen completed the consultancy assignment on Job Satisfaction of Employees at M/s. Haidelberg Pvt. Ltd., Chennai in the month of July 2012 (Rs. 50,000/-).

4.   Prof. N. Rajapriya has joined a consultancy project on "Ayurgenomics" in association with Mahendra Consulting Services for Institute of Genomics and Integrated Biotechnology (Ministry of Science and Technology), 2013. (On going).

20.   *Research facility / centre with*

  ➢   state recognition

  ➢   *national recognition*   **Not Applicable**

  ➢   international recognition

21.   *Special research laboratories sponsored by / created by industry or corporate bodies*

Not applicable

22.   *Publications:*

  ➢   Number of papers published in peer reviewed journals (national / international)

The detail of the publications in International and National Journals are enclosed in **Annexure D - 3.2 and 3.3 (Criterion III)**

International Journals	National Journals
13	12

Monographs   **None**

Chapters in books

Eighteen (in Essays in Management by Mirza S. Saiyadain

and S.K.G. Ganesh (Editors) New Delhi: Excel Books 2013

ISBN No.978-93-5062-122-6)

Edited Books

Essays in Management by Mirza S. Saiyadain & S.K.G. Ganesh (Editors)

New Delhi: Excel Books 2013 ISBN No.978-93-5062-122-6

Books with ISBN with details of publishers

Negotiation by Mirza S. Saiyadain, New Delhi, McMillan 2012,

ISBN No. 978-935-059-012-6

Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

➢ Citation Index – range average

➢ SNIP

➢ SJR

➢ Impact Factor – range / average

➢ h-index

Impact factor

Six Papers published in journals have impact factor

Number	Impact factor
2	0.32
5	0.26
7	0.15
9	2.99
12	2.99
13	3.20

Range = 0.15 – 3.20 Average = 1.65

23. *Details of patents and income generated :*

Not applicable

24. *Areas of consultancy and income generated*

List of consultancy projects is given below

1. Prof. S.K.G. Ganesh carried out a research project on "Higher Order Ability Testing in Management Education" under grant by National Testing Services - A Central Scheme MHRD in 2010 (Rs. 75,000/-).

2. Prof. T. Subramanian was invited by Co-optex to be a Technical Member in their e-Governance Implementation Committee to select suitable Web based application Software for Co-optex in the month of March 2012 (Rs. 1,00,000/-).

3. Prof. Mirza S. Saiyadain and Prof. Haider Yasmeen completed the consultancy assignment on Job Satisfaction of Employees at M/s. Haidelberg Pvt. Ltd., Chennai in the month of July 2012 (Rs. 50,000/-).

4. Prof. N. Rajapriya has joined a consultancy project on "Ayurgenomics" in association with Mahendra Consulting Services for Institute of Genomics and Integrated Biotechnology (Ministry of Science and Technology), 2013. (On going).

25. *Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India & abroad*

None

26. *Faculty serving in a) National committees b) International committees c) Editorial Boards d) any other (please specify)*

One in editorial board member - Crescent Journal of Business

27. *Faculty recharging strategies (UGC, ASC, Refresher/orientation programs, workshops, training programs and similar programs).*

List of recharge strategies is given below:

Programmes Held (Conference/ Seminar/FDP & MDP)

1. Workshop on "Business Simulation Games", during 30th November 2009 to 2nd December 2009.

2. Workshop on "Transition to Trimester System" on 6th March 2010.

3. Training programme on "Soft Skills" during 17th to 19th March 2010.

4. Workshop on "How to sell yourself in interviews" on 6th October 2010 for all final year post graduate students.

5. Workshop for students on "Art and science of Resume writing" on 7th October 2010.

6. Five day Business Skill Development Program jointly with MSME-DI Chennai for BSAU Students during 15th to 19th February 2011.

7. Workshop on "Work Life Balance for Working Professionals" on 1st October, 2011.

8. Programme on "Entrepreneurial Skills" in association with Micro, Small & Medium Enterprises (MSME) Development Institute, Government of India – Ministry of MSME, Chennai during 12th to 16th December 2011.

9. A training programme on "Prowess" which was conducted by CMIE, on 22nd December 2011.

10. Panel-cum-Interactive Discussion on "Research in Management – Getting Started, Overcoming Hurdles and Keeping Progress" on 25th January 2012.

11. Management Development Programme on "Human Resource at Small and Medium Scale Enterprises" in association with Micro, Small & Medium Enterprises (MSME) Development Institute, Government of India – Ministry of MSME at Chennai during 17th to 21st December 2012.

12. National Conference on "Physical & Mental Health for Working Professionals: An Holistic Approach", on April 19, 2013 in BSAU, Chennai.

28. *Student projects*

➢ percentage of students who have done in-house projects including inter-departmental projects

Nil

401

> ➤ percentage of students doing projects in collaboration with other universities / industry / institute

100%

29. *Awards / recognitions received at the national and international level by*
    - ➤ *Faculty* - **None**
    - ➤ *Doctoral*
    - ➤ Mr. Azam was awarded Maulana Azad National Fellowship for Minority Students
    - ➤ *Students* - **None**

30. *Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.*

    List of Conferences/Workshops etc. given below:

    1. Conducted a Workshop on "Business Simulation Games", during 30th November 2009 to 2nd December 2009.

    2. Organized a Seminar-Cum-Exhibition, as a mark of Tribute to Prof. Paul A. Samuelson in the Context of Global Economic Crisis on 1st March 2010. Dr. Vedagiri Shanmuga Sundaram, Former Vice chancellor, Manonmaniam Sundaranar University and Dr. Sambandhan, Dean, School of Social Sciences and International Studies addressed the participants from various institutions.

    3. Conducted a Workshop on "Transition to Trimester System" on 6.3.2010.

    4. Conducted a training programme on "Soft Skills" during 17th to 19.3.2010.

    5. Workshop on "How to sell yourself in interviews" on 6th October 2010 for all final year post graduate students.

    6. Organized a one day workshop for students on "Art and science of Resume writing" on 7th October 2010.

    7. Organized a five day Business Skill Development Program jointly with MSME-DI Chennai for BSAU Students during 15th to 19th February 2011.

    8. Organized a workshop on "Work Life Balance for Working Professionals*"* on 1st October, 2011.

    9. A certificate program on "Project Management for budding Managers and Engineers" in association with Project Management Institute, Chennai Chapter, during 18th to 20th November 2011, at B. S. A.U., Chennai.

    10. Organized a Management Development Programme on "Entrepreneurial Skills" in association with Micro, Small & Medium Enterprises (MSME) Development Institute, Government of India – Ministry of MSME, Chennai during 12th to 16th December 2011.

    11. A training session on "Online Trading System and Process" was organized on 13th December 2011.

12. Organized a training programme on "Prowess" which was conducted by CMIE, on 22nd December 2011.

13. Organized a Seminar and Panel-cum-Interactive Discussion on "Research in Management – Getting Started, Overcoming Hurdles and Keeping Progress" on 25th January 2012.

14. Organized a one day Natl. Conf. on "Balancing Work and Life" on 4.2.2012.

15. A three day Faculty Development Programme (FDP) on "Research Analysis using SPSS and AMOS" from 14th to 16th September, 2012.

16. A Workshop on "Financial Analytics" was organized on 21st September 2012.

17. A seminar on "Online Trading" was organized on 27th September 2012.

18. Organized a Management Development Programme on "Human Resource at Small and Medium Scale Enterprises" in association with Micro, Small & Medium Enterprises (MSME) Development Institute, Government of India – Ministry of MSME at Chennai during 17th to 21st December 2012.

19. Organized a National Conference on "Physical & Mental Health for Working Professionals: An Holistic Approach", on April 19, 2013 in BSAU, Chennai.

20. Organized a workshop on "Grooming and resume writing" for II year MBA students, 2013.

Intl conference attended	National conference attended
15	13

31. *Code of ethics for research followed by the departments*

Researchers Statement about the authenticity of

Research Project and Report (Code of Ethics for Research by BSAU is reported in **Annexure D - 3.1 (Criterion III))**

32. *Student profile programme-wise:*

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
MBA 2009-2011	190	134	46	100%	100%
MBA 2010-2012	347	96	14	100%	100%
MBA 2011-2013	192	100	20	100%	100%
MBA 2012-2013	277	105	15	100%	100%
MBA 2013-2015	227	60	20	-	-
M.Phil. - 2010	4	-	1	-	100%
M.Phil. - 2011	12	1	1	0	100%
M.Phil. - 2012	1	-	1	-	-
Ph.D. – 2009	1	1	-	-	-

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Ph.D. – 2010	27	4	3	-	-
Ph.D. – 2011	28	1	4	-	-
Ph.D. - 2012	26	1	2	-	-
Ph.D. - 2013	22	2	3	-	-

33. *Diversity of Students:*

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
MBA - 2009	-	95%	5%	-
MBA – 2010	-	92%	8%	-
MBA - 2011	1	89%	11%	-
MBA - 2012	2	86%	11%	-
MBA - 2013	-	80%	20%	-

34. *How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.*

None

35. *Student progression*

Student progression	Percentage against enrolled
UG to PG	--
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	
Employed	
Campus selection	*100% of eligible candidates*
Other than campus recruitment	*Some self employed*
Entrepreneurs	

36. *Diversity of staff*

Percentage of faculty who are graduates	
Of the same University	*10%*
From other universities within the state	*80%*
From universities from other states	*5%*
Universities outside the country	*5%*

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*

    3 M.Phil (Kaleel Nisha, Indushri N. and Rashida. N)

38. *Present details of departmental infrastructural facilities with regard to*

    a) Library **Yes**

    b) Internet facilities for staff and students **Yes**

    c) Total number of class rooms **Five**

    d) Class rooms with ICT facility **Five**

    e) Students' laboratories **Not Applicable**

    f) Research laboratories **One Computer lab**

39. *List of doctoral, post-doctoral students and Research Associates*

    List of doctoral students and RA is given below

Sl.No.	From host Institution (Ph.D.)	RRN
1	Mrs. M.V. Anuradha	130933704003
2	Mr. F. Abubacker	1293222
3	Mr. V. Charlie Thomas	1193215
4	Mrs. J. Hemalatha	1093209
5	Mrs. Kaleel Nisha	190933704001
6	Mrs. Nirmala Raghavan	1193219
7	Mrs. N. Rajapriya	1193218
8	Ms. T.G. Rajeswari	1193217
9	Ms. Takhellambam Rocky Devi	1193220
From other Institutions (Ph.D.)		
1	Mr. Somashekhar Krishnamani	1093210
2	Ms. Rosline	1093202
3	Mr. A. Nisar Ahmed	1093204
4	Mr. C.S. Narayanan	1393124
5	Ms. N. Madhumitha	130933704002
6	Mr. S. Hanumantha Rao	1093203
7	C. Sandhya (M.Phil)	1144204

    a) from the host institution/university **9**

    b) from other institutions/universities **7**

40. *Number of post graduate students getting financial assistance from the university.*

    Ms. S. Jainab Zareena, SRF

    Ms. G. Vaishnavi, SRF

    Ms. C. Revathy, JRF

    Mr. S. Wasiullah, JRF

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

Yes (Market Survey)

42. *Does the department obtain feedback from*

a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Faculty feedback on curriculum is taken informally after each trimester and formally after each year. Once in year a brain storming session is organized by CBS faculty to examine what we are doing and what we should be doing. These attempts are used to improve the curriculum and teaching style and technology

b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Students feedback is used to strengthen the areas identified by them and improve the curriculum and teaching-learning both qualitatively and quantitatively.

c. Alumni and employers on the programmes offered and how does the department utilize the feedback?

CBS has Curriculum Review Committee which consist of alumni and employers as well as faculty. This committee reviews the MBA programme in to and suggests changes in existing curriculum as well as new courses to be added.

43. *List the distinguished alumni of the department (maximum 10)*
  ➢ Hemalatha R., Rini Devanath, Monish Rajesh were awarded the B.S. Abdur Rahman University Gold Medals for outstanding performance.
  ➢ Madhumita N. and Ganesh Kumar R., got Ph.D. admission in Anna University with JRF.

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.*

11 Students enrichment programmes were organised.

45. *List the teaching methods adopted by the faculty for different programmes:*

Student centric courses (Current Affairs in Business, case method, ICW and WAC), Industry visit, special theme based programmes, courses on communication, resume writing, preparing for interview, work life skills, modular teaching, mini projects, online training and special skill development programme such as investor's awareness.

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*

Through students feedback, Employers feedback, assignments undertake in industry and programme placement.

47. *Highlight the participation of students and faculty in extension activities.*

Youth red cross, NSS, Blood donation camps and Rotary club membership.

48. *Give details of "beyond syllabus scholarly activities" of the department.*

Preparing business plan, ad zap, activities, conference paper presentation, audit of courses, summer internship, industrial visit, and experience sharing with corporate managers.

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

NBA Accreditation and ISO 9000: 2008 certification

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

Students centric courses, journal, papers presenting in conference and books on various emerging issues in management.

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strength

1. Faculty qualification and industry experience

2. Teaching through multiple pedagogy

3. All faculty members either Ph.D or registered for Ph.D.

4. Physical infrastructure

5. Partial autonomy and peer culture

Weaknesses

1. Low visibility

2. location disadvantage

3. lack of digital library

4. Not having a residential programme
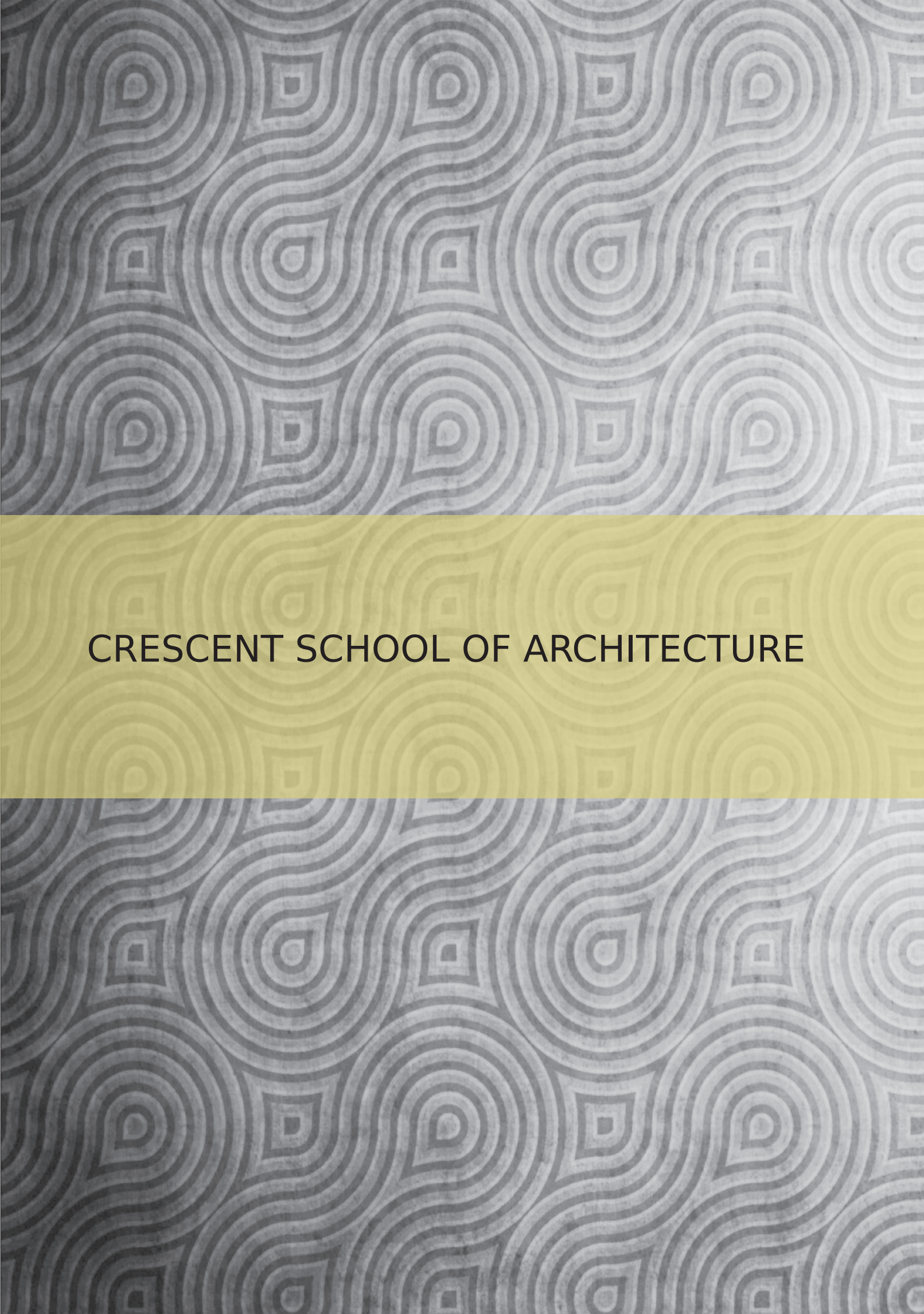
5. Power dependence

Opportunities

1. Functional Autonomy

2. Foreign exposure through faculty exchange

3. International collaborative research

4. Tie up with well-known business schools

5. Short duration programmes to bring visibility

Challanges

1. To ensure demographic diversity

2. To attract foreign students

3. To identify better quality of in - take students

4. To organize quality MDPs

5. To get more International placement for our students.

52. *Future plans of the department.*

➢ To offer short duration MDPs and FDPs, Executive MBA Programme, Part time MBA Programme and Integrated MBA Programme.

CRESCENT SCHOOL OF ARCHITECTURE

1. Name of the Department : **Crescent School of Architecture**

Crescent School of Architecture established during 2010-11 offers Bachelor of Architecture (B.Arch) of 10 Semester (5 years) with two semesters (1 year) practical training sandwiched during the fourth year. The programme is approved (a mandatory requirement under the Architects Act-1972) by the Council of Architecture, New Delhi. At present the B.Arch programme is offered in the department of Architecture with an intake of 80 students per year with 2 Batches of 40 students each.

Philosophy of the school:

Architectural Education in order to play a vital role in the socio-Economic progress of the country takes into consideration individual and the relationship to the society, its aims, expectations and aspirations. Simultaneously a consideration on Energy and Environment is to be given importance. The curriculum structure focuses on the relationship between the courses, their objectives, and their emphasis. Understanding of the individual and society and interpretation in the form of architectural skills, thereby contributing to a sustainable and qualitative living in our built environment is the main aim.

2. Year of establishment : **2010**

3. Is the Department part of a School/Faculty of the university?

Crescent School of Architecture_

4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)

UG – B.Arch

5. Interdisciplinary programmes and departments involved

Nil

6. Courses in collaboration with other universities, industries, foreign institutions, etc.

Nil

7. Details of programmes discontinued, if any, with reasons

Nil

410

8. *Examination System: Annual/Semester/Trimester/Choice Based Credit System*

   Semester / Choice Based Credit System

9. *Participation of the department in the courses offered by other departments*

   ➢ Dept. of Civil Engineering – Offering Structural Engineering

   ➢ Dept of English

10. *Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)*

    For intake of Eighty student (80) :

	Sanctioned	Filled	Actual (incl. CAS & MPS)
Professor	2	2	2
Associate Professors	1	1	1
Asst. Professors	6	6	6
Others (Visiting faculty)	9	9	9

Note : One additional Professor Dr.Deepa Saniyal from USA will be joining as Visiting Faculty from January 2014 onwards.

11. *Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance*

Sl. No.	Name	Qualifica-tion	Designa-tion	Specialization	Yrs of Exp	No. of Ph.D, M.Phil, guided
	S.Ravi	B.Arch M.Arch &M.Plan	Professor	Architecture / traditional	32	Guided -1 (CEPT Univ., Ahamedabad) Guiding-3
	R.Karunakaran	B.Arch M.B.E&M	Professor	Architectural programming Project Mgnt BIM	24	
	A.Devadayalan	B.Arch M.Arch	Associate Professor	Digital Architecture	15	
	K.Yogeswari	B.E M.Tp	Asst. Professor (S.G)	Planning	12	

B.Kannan	BFA	Asst. Professor			
Sona.S	B.Arch., M.Arch.	Asst. Professor			
Ummulkhair Shabana MD	B.Arch., M.E.	Asst. Professor		3	
Lavanya.k	B.Arch M.Plan	Asst. Professor	Urban Planning Interior Disaster Management	10	
Shanthini. M	B.Arch., M.Arch.	Asst. Professor	Advanced Design	6	

12. *List of senior Visiting Fellows, adjunct faculty, emeritus professors*

Visiting faculty - 9

➤ There are nine Visiting Faculty in the rolls

- Ar. S. Satish Kumar, Asst. Prof., Crescent School of Architecture
- Ar. Saranya Kannappan, Asst. Prof., Crescent School of Architecture
- Ar. Madhusudhanan, Asst. Prof., Crescent School of Architecture
- Ar. Parvathi Ramesh, Asst. Prof., Crescent School of Architecture
- Ar. Sevvel Thirupura Sundari, Asst. Prof., Crescent School of Architecture
- Ar. Pon Ezhil Siddhan. Asst. Prof., Crescent School of Architecture
- Ar. Prathyaksha, Asst. Prof., Crescent School of Architecture
- Ar. Divya Chakravarthi, Asst. Prof., Crescent School of Architecture
- Ar. Zareen Taj, Asst. Prof., Crescent School of Architecture

13. *Percentage of classes taken by temporary faculty – programme-wise information*

20%

14. *Programme-wise Student Teacher Ratio* **B.Arch - 13 : 1**

15. *Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual*

Supporting staff	Sanctioned	Filled	Actual (incl. CAS & MPS)
Technical staff	1	1	1
Administrative staff	3	3	3

16. *Research thrust areas as recognized by major funding agencies*

    Cognitive Mapping of Design process

    VDC – Virtual Design & Construction

17. *Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.*

    NIL

18. *Inter-institutional collaborative projects and associated grants received*

    a) *National collaboration*   **NIL**

    b) *International collaboration*   **NIL**

19. *Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.*

    NIL

20. *Research facility / centre with*

    ➢   *state recognition*   **NIL**

    ➢   *national recognit ion*   **NIL**

    ➢   *international recognition*   **NIL**

21. *Special research laboratories sponsored by / created by industry or corporate bodies*

    Autodesk Lab – KKM soft , computer lab based training on BIM

22. *Publications:*

    ➢   *Number of papers published in peer reviewed journals (national / international) ; ➢ Monographs ; ➢ Chapters in Books ➢ Edited Books ; ➢ Books with ISBN with details of publishers*

    ➢   *Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) ; ➢ Citation Index – range / average ➢ SNIP ; ➢SJR ;*

    ➢   *Impact Factor – range / average ➢ h-index*

S. No	Authors as appeared in the publication	Publication Title	Journal Title	Volume No	Issue No	Page Nos	Month & Year of Publication	Impact Factor of the Journal	No. of Citations
International Journal									
1	Ar.K.Lavanya	Urban Flood Management - A case study of Chennai City	Architecture Research	Vol. 2	No.6		Dec-12		
National Journal									
1	Ar.Ummul khair Shabana MD	"Permaculture for Sustainable Development"	The Journal of Architecture, Chandigarh College of Architecture, Chandigarh	Vol. 1	No.1		Aug-12		
National Conference									
1	Ar.Ummul khair Shabana MD	"Water Conservation using Xeriscaping- an approach to Sustainable Architecture"	"Climate change- A challenge to Sustainable Development"				29th and 30th November 2012		

2	Ar.Ummul khair Shabana MD	"Eco-efficient infra-structure-Rajiv Gandhi Interna-tional airport, Hydera-bad"	Innova-tive solu-tions for Sustain-able con-struction				2 and 3 May 2013		
3	ER. K. Yo-geswari	Sustain-able transpor-tation using ITS	"ITS"				2012		
4	ER. K. Yo-geswari	Study of hetero-geneous traffic using Image process-ing Tech-niques	Sustain-able & Emerg-ing Tech-nology in Civil En-gineering				2012		
5	Ar. S. Sona	Archi-tectural idiom through the ages - a case study of living heritage in chen-nai & its conser-vation	Archi-tecture & Built enviorn-ment				Sep-13		

23. *Details of patents and income generated*

NIL

24. *Areas of consultancy and income generated*

NIL

25. *Faculty selected nationally / internationally to visit other laboratories / institutions/ industries in India and abroad*

NIL

26. *Faculty serving in*

a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Prof. S.RAVI	Inspection committee	1. COA – Council of architecture, New delhi
		2. N.B.A (AICTE), New delhi
		3. N.A.A.C, New Delhi
	Selection committee	4. TN legislative complex for govt of T.Nadu

27. *Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).*

Sl. No	Name of Staff	Conference/Workshop	Topic of paper	Year
1	S. RAVI	Integrated Coastal management Plan, Dept. of Environment, Tamil nadu	Settlement planning & rehabilitation	Mar. 2012
		Eco-restoration of P.P lake, salem corporation.	Tourism planning	June 2012
		Eco- restoration of water bodies of Ramnad collectorate	Recreational & tourism planning	Aug.2012
2	R.Karunakaran	National Conference MEDICALL 2012, Chennai	Hospital projects	August 2012
		National Jury for student competition- BIM, Chennai	Campus innovation centre	Sep.12
		Autodesk LAB inauguration at BS. Abdur rahman university	CRN architects key note lecture	Dec. 12
		Autodesk BUILD SUITE launch Chennai	BIM – Building Information modeling	Jan.13
		National conference on at BSAR university	HEALTH for professionals ; holistic approach	Apr.13

Sl. No	Name of Staff	Conference/Workshop	Topic of paper	Year
	R.Karunakaran	International conference at Chennai	BUILDING FACADES" – sustainable glass & aluminium works	Jun.13
		IIID national conference at Chennai	Residential interiors	Jun.13
		AUTODESK Workshop for architectural institutions at chennai	student design challenges	Jul.13
		International conference by ISLE – Indian society of lighting engineers at Chennai	Lighting exhibition	Sep.13
3	Devadayalan.A	Autodesk LAB inauguration at BS. Abdur rahman university	CRN architects key note lecture	Dec. 12
		Autodesk BUILD SUITE launch Chennai	BIM – Building Information modeling	Jan.13
		National conference on at BSAR university	HEALTH for professionals ; holistic approach	Apr.13
		IIID national conference at Chennai	Residential interiors	Jun.13
		International conference at chennai	Lighting exhibition	Sep.13
4.	K.Yogeswari	IISc, Bangalore, organized for infrastructure, Sustainable Transportation and Urban Planning	Recent trends in Sustainable Transportation Planning",	December 2009
		IISc, Bangalore org. for infra-structure, Sustainable Transportation & Urban Planning	"Computer Aided Transportation planning and Traffic Engineering"	December 2009
		IISc, Bangalore	STTP On Recent Trends in Geoinformatics	Nov' 2010

Sl. No	Name of Staff	Conference/Workshop	Topic of paper	Year
		Workshop on Puzzle based Learning Paradigms At B.S.Abdur Rahman University,	-	July 2011
		SSTP – QIP by IIT-M	STTP – QIP on Recent trends In Intelligent Transportation System	Sep. 2011
		Seminar on "The City – Becoming and Decaying" At Kamala Raheja Vidyanidhi Institute of Architecture & Mancini Enterprises	-	November 2011
		Seminar on "The Women in You"at Women Empowerment Cell, B.S.Abdur Rahman University	-	November 2011
		ITS@ St.Peters Engg college Avadi,	"Role of ITS in Sustainable Transportation"	February 2012
		SET at department of civil engineering BSAU,	"Study of Heterogeneous traffic using Image processing Techniques"	May 2012
		Conference on "Carbon Neutral Chennai"at MCCI, @ GRT Sothern Grands	-	June , 2012
		International Conference on green building at IGBC, Hyderabad	-	October 2012
5	Sona.S	One day seminar on "Chennai - Past, Present & Future" at `School of Architecture and Planning	-	August 2011
		Balancing Work and Life" Seminar by Women Empowerment Cell at Crescent Business School	-	September 2011

Sl. No	Name of Staff	Conference/Workshop	Topic of paper	Year
		Seminar on "The Women in You"at Women Empowerment Cell, B.S.Abdur Rahman University	-	November 2011
		Seminar on "The City – Becoming and Decaying" At Kamala Raheja Vidyanidhi Institute of Architecture & Mancini Enterprises	-	November 2011
		International Workshop on "Teaching and Learning in 21st Century"at B.S.A University	-	December 2011.
		FAB FEST 2012 a conference on Progressive Architecture At SRM University	-	February 2012
6.	Ummulkhair-Shabana	Workshop on Puzzle based Learning Paradigms At B.S.Abdur Rahman University.	-	July 2011
		International conference on "Regenerative Townships of Tomorrow" at Auroville	Sustainable Technologies used in Shamshabad Airport, Hyderabad	September 2011
		Balancing Work and Life" Seminar by Women Empowerment Cell at Crescent Business School	-	September 2011
		International Workshop on "Teaching and Learning in 21st Century"at B.S.A University	-	December 2011.
		FAB FEST 2012 a conference on Progressive Architecture At SRM University	Sustainable Design Technologies for Green Buildings: Green roof	February 2012

Sl. No	Name of Staff	Conference/Workshop	Topic of paper	Year
		National seminar on "Regional planning and resource management" at Osmania University, Hyderabad	Climate proofing concepts for Sustainable development: Passive cooling	March 2012
		Journal of Architecture, Research cell, Chandigarh College of Architecture, Chandigarh	Permaculture for Sustainable Development	
		International Conference on Advances in Architecture and Civil Engineering at MSRIT, Bangalore	Sustainable Concrete with waste materials and the Economics Involved	June 2012
		National seminar on "Climate change- A challenge to Sustainable development"	Water conservation using Xeriscape: an approach in Sustainable Architecture	November 2012
7	Lavanya.K	Workshop on Puzzle based Learning Paradigms at B.S.Abdur Rahman University.	-	July 2011
		Training Program - Energy Simulation Software - Design Builder & Eco-Nirman at Hindustan University		July 2011
		One day seminar on "Chennai- Past, Present & Future" at School of Architecture and Planning	-	August 2011
		Seminar on "The City – Becoming and Decaying" At Kamala Raheja Vidyanidhi Institute of Architecture & Mancini Enterprises	-	November 2011

Sl. No	Name of Staff	Conference/Workshop	Topic of paper	Year
		Seminar on "The Women in You"at Women Empowerment Cell, B.S.Abdur Rahman University	-	November 2011
		World Town Planning Day at School of Architecture and Planning In association with Chennai Metropolitan Development Authority	-	November 2011
		Lecture on "Situating Architectural Computing with Design and Research" at School of Architecture and Planning, Hindustan University		January 2012

28. *Student projects*

   ➢ *percentage of students who have done in-house projects including inter-departmental projects*

   Inhouse project - 100% (Architecture Design project from First year to Third year)

   ➢ *percentage of students doing projects in collaboration with other universities / industry / institute*

   NIL

29. *Awards / recognitions received at the national and international level by*

   ➢ Faculty

   Prof. S.Ravi, - Honorary member of Indian Institute of Architecture – 2012

   Best Teacher Award of Indian Institute of Architecture – 2010

   ➢ *Doctoral / post doctoral fellows :* **NIL**

   ➢ *Students*

   National Association of Students of Architecture Organizing National Convention every year. Students of B.S.A.U. participated and won Awards and Certificates.

30. *Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.*

   NIL

31. Code of ethics for research followed by the departments

1. COA- norms for INSTITUTIONAL consulting practices

2. TURNITIN software to prevent PLAGIARISM by university

Code of ethics for research in our University is given in **Annexure D - 3.1 (Criterion III)**

32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B.Arch- jul. 2013	299	50	30	NA	NA

33. Diversity of Students:

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
B.Arch	Not Applicable			

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

NIL

35. Student progression

Student progression	Percentage against enrolled
UG to PG	Not applicable
PG to M.Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
Employed	
• Campus selection	Not applicable
• Other than campus recruitment	
Entrepreneurs	Not applicable

36. *Diversity of staff*

Percentage of faculty who are		Total Nos (9)
graduates of the same university	NIL	0
from other universities within the State	88%	8
from universities from other States	12%	1
from universities outside the country	-	0

37. *Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period*

NIL

38. *Present details of departmental infrastructural facilities with regard to*

a) Library

Category	Acquisition prior to the preceding year	Total No. of acquisition during the preceding year	Cumulative acquisition on date
Books	925	45	970
Journals/Periodicals	6	8	14
Thesis	3	7	10
Multi Media Library	-	15	15

    b) Internet facilities for staff and students   *AVAILABLE*

    c) Total number of class rooms   *4*

    d) Class rooms with ICT facility   *3*

    e) Students' laboratories (computer lab)   *1*

    f) Research laboratories   *1*

    g) Studio   *6*

39. *List of doctoral, post-doctoral students and Research Associates*

    a) from the host institution/university   **NIL**

    b) from other institutions/universities   **NIL**

40. *Number of post graduate students getting financial assistance from the university.*

NIL

41. *Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.*

    1. Market survey of existing facilities

    2. Feasibility study of Projected requirements

    3. COA norms for new programs

42. *Does the department obtain feedback from*

    a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

    1. Curriculum reforms committee of the university has prescribed certain methodologies for evaluation.

    2. Board of studies has been constituted twice in the academic year 2012-13 and the feedback has been incorporated in curriculum.

    b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

    1. Students' class committee meeting is conducted twice per semester

    2. Students' feedback on staff is obtained once per semester

    3. The minutes of the meeting and analysis of the feedback is implemented on development of syllabus and lesson plans

    c. alumni and employers on the programmes offered and how does the department utilize the feedback?

    Not applicable

43. *List the distinguished alumni of the department (maximum 10)*

    Not applicable

44. *Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.* *Integrated in the Lesson Plans*

    1. All theory based courses offer EXPERT LECTURE

    2. All studio based exercises involve SITE VISIT, CASE STUDY.

    3. Studio designs are evaluated by EXPERT JURY

45. *List the teaching methods adopted by the faculty for different programmes.*

    1. Chalk & talk

    2. Seminar & debates.

    3. Audio visual tools for slide shows.

    4. Smart class workshops with laptops.

46. *How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?*

    1. Lesson plans

    2. Class committee meetings, resolutions & minutes

    3. Evaluation of Assessment

    4. Architectural Design Project

47. *Highlight the participation of students and faculty in extension activities.*

Students participate in the society activities. Some of the students are the members of NSO, YRC, NSS and Rotary club.

48. *Give details of "beyond syllabus scholarly activities" of the department.*

1. Parallel study program- BIM , Building Information Modelling training is conducted 3 sessions per week. From Jan.12, 2013 onwards 40 sessions per semester.

2. One day Craft workshop was conducted during Aug 2013.

49. *State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.*

1. COA inspection was held in Apr.2013 and approved extension of program based on the performance appraisal report.

2. The University is accredited by ISO 9001-2008.

50. *Briefly highlight the contributions of the department in generating new knowledge, basic or applied.*

Developing Knowledge for Virtual Design & Construction through application of BIM – Building information Modelling / simulation of performance based design

51. *Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.*

Strengths:

1) Uniqueness in terms of establishing institution -industry interface through sand witched practical training sessions and making students industry ready.

2) Flexibility in mixing basic sciences, professional courses, electives with studio based architectural projects instilling confidence.

3) Constant guidance, monitoring and interaction by the council of architecture in imparting standards of architecture education.

4) Ready and constant support to the department from fraternity of architects at all India level being a close knit community.

5) Comprehensive accreditation, audit and administrative support provided by our university helps the faculty to focus on core competence.

Weaknesses:

1) Complexity in design guidance and monitoring of large number of students

2) Incorporating emerging trends in material and technology in the existing intense curriculum structure

3) Non-availability of expert teaching on select topics

4) Convincing students on the ability to distinguish relevant information from junk data.

5) Team working and responsibility undertaking by students to be improved to be competitive in the profession.

Opportunities:

1) Expanding tie-up with Indian Institute of architects by enrolling student members to avail benefits

2) Hosting of joint studio programs with other schools in and around Chennai and from other states through an MOU – memorandum of understanding.

3) MOOC – massive online courses available from top global universities and the students can be encouraged to enrol for emerging courses in architecture.

4) Twinning programs with international universities can be conducted on integrated masters program in architecture.

5) Allied fields like architectural journalism, project management, interior & product design, provide immense Career opportunities.

Challenges:

1) Ensuring uniformity of academic input and evaluation of students of various sections in a year.

2) Effecting co-relation between academic knowledge base with professional design projects to students.

3) Training on Architectural software enhances design visualisation and agility of students' submissions.

4) Increasing competition from international forum of architects, our students would be trained for cross cultural work environments.

5) Multi-disciplinary collaborative professional approach would be inculcated by exposing students to Construction, facility management & infrastructure development projects.

52. *Future plans of the department.*

➢ Post graduate program on ARCHITECTURE & PLANNING and UG in Interior design to be started in forthcoming academic year.

➢ Research – more faculty to join ph.d program in architecture

➢ Sponsored research programs to be taken up by faculty members.

➢ Research papers to be published in refereed journals by all the faculty members

➢ National competitions in architecture - Students' are encouraged to participate and special coaching is provided to improve chances of success.

➢ Institutional consulting practice for the faculty members to be facilitated thereby

CS New building for CSA to be designed as per international standards for 120 students' intake in 2015-16.

➢ NATA centre – national aptitude test in architecture to be established with COA approval

➢ A plays a major role in development of new buildings & master plan of the university

➢ Events- seminars, conferences shall be organized on a monthly basis.

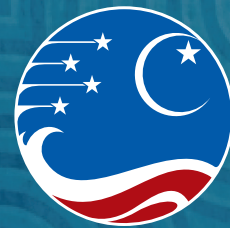➢ Publications – web based CSA journal shall be developed.

Enter with Hope & leave with Pride.

B.S.ABDUR RAHMAN
U N I V E R S I T Y

B.S.ABDUR RAHMAN INSTITUTE OF SCIENCE & TECHNOLOGY
(Estd.u/s 3 of the UGC Act, 1956)

(Formerly B.S.ABDUR RAHMAN CRESCENT ENGINEERING COLLEGE)

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