Evaluative Report of School of Engineering and Technology (SET)

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

2. **Year of establishment**:- 2009

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

4. **Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)**
   BCA, MCA, B.Tech. CSE, B.Tech. IT, M.Tech. CSE with specialization in Networking, M.Tech. CSE with specialization in Software Engineering, M.Sc. IT with specialization in Networking.

5. **Interdisciplinary programmes and departments involved**
   FIVE years Integrated B.Tech. CSE with Law. School of Law is involved.

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

7. **Details of programmes discontinued, if any, with reasons**
   B.Tech. in IT. Fewer admissions.

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**
   We teach Computer Science subjects like Programming in C, Object Oriented and Programming, Database Management System, Fundamentals of Computers and many more to the other engineering departments of SET and various schools of Sharda University.

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

	Sanctioned	**Filled**	**Actual (including CAS & MPS)**
Professor		1	
Associate Professors		5	
Asst. Professors		32	
Teaching Assistants		2	
Office Assistant		1	
Lab Technicians		3	
Attendants		4	

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

Name	**Qualification**	**Designation**	**Specialization**	**No. of Years of Experience**	**No. of Ph.D./ M.Phil. students guided for the last 4 years**	
					PhD	**M.Tech**
Prof. (Dr.) Ishan	**Ph.D.** (IT Outsourcing) from Birla	Professor	Mobile Computing,	29 Yrs of Teaching &	3	16

Ranjan	Institute, **M.A.Sc.** from Dept of Electrical and Computer Engg., Concordia Unversity, Monteral, Canada, **ME** in Measurement and Instrumentation from IIT-Roorkee, **B.E.** in Electrical Engineering from IIT-Roorkee		Software Engineering, Operating System	Industry experience		
Dr. Ravi Rastogi	Ph.D. in Computer Science and Engineering from Uttarakhand Technical University, Dehradun, Masters in Compurter Science from Fairleigh Dickison Univ., USA.	Associate Professor	Database Management Systems, Data Structures, Software Engineering	More than 12 Yrs (8+ Yrs of Teaching and 4+ Yrs of Industry)	0	10

Dr. Rashi Aggarwal	Ph. D in Computer Science GBTU Lucknow	Associate Professor	Fractal Geometry	14	4	0
Mr. Ashok Kumar Sahoo	M.Tech, G.B.Technical University, Ph.D. (Pursuing) Sharda University	Associate Professor	Algorithms, Pattern Recognition, Soft Computing	16 years in teaching	0	5
Dr. Manoj Kumar Gupta	Ph.D. from the dept of Computer Science and Engineering, IIT Roorkee, M.Tech (CSE) HBTI Kanpur, B.E(CSE) CCS Univ. Meerut	Associate Professor	Bioinformatics, Computational Biology, Data Mining	13.5yrs (Teaching-10yrs, Research-3.5yrs)	0	0
Dr. Ruchi Agarwal	Ph.D. in Computer Science from Birla Institute of Technology (BIT),Mesra,Ranchi	Assistant Professor	Data Mining	12 Years	0	0
Mr. T.P. Singh	M.Tech. (CSE), Pursuing PhD in Computer Science from Jamia Millia Islamia University, Delhi	Assistant Professor	Soft Computing, Pattern Recognition, Data Mining	18+ Years (14 + Years in Teaching and 3+ years in Industry)	NA	6

Dr. Kiran Ravulakollu	PhD, University of Sunderland, UK. June, 2012	Assistant Professor	Artificial Intelligence, Computer Science & Engineering		NA	8
Mr. Gouri Shankar Mishra	M.Tech (CSE) GBTU, LUCKNOW	Assistant Professor	Natural language processing	13	NA	5
Mr. Sudeep Varshney	MS (Software Systems) BITS Pilani, Pursuing PhD in Computer Science & Engineering from Indian School of Mines, Dhanbad , Jharkhand	Assistant Professor	Computer networks, WSN	Around 11+ Years (Teaching)	NA	3
Ms. Amrita	Ph.D.(Pursuing) from Sharda University, UP; M.Tech (CS) from Banathali Vidyapith, Rajasthan	Assistant Professor	Soft Computing, Intrusion Detection in Netowk, Network Security	14 Years(Teaching : 8; Industry & Gov.:6)	NA	4

Mr. Mukul Varshney	Pursuing PhD In computer Sci & Engg. from sharda University,M.Tech(CSE) from AMU, Aligarh, B.Tech (CSE) from UPTU, lucknow	Assistant Professor	Parallel Computing & Computer Architecture	5+ Yr	NA	2
Ms. Shivani Garg	M.Tech (CSE) from Kurukshetra University, kurukshetra, B.Tech (CSE) from Kurukshetra University, Kurukshetra	Assistant Professor	Wireless Sensor Networks, Computer Organization	9+ Yrs	NA	1
Ms. Aparajita Mathpal	M.Tech (CSE) from University School of Information Technology, Gurugobind Singh Indraprastha University(Delhi), B.Tech (CSE) from H.N.B.Garhwal University	Assistant Professor	Genetic alorithm, Wireless communication	4+ Yrs	NA	2

Mr. Kapil Madan	M.E in Software Engineering from Thapar University Patiala,B.Tech(CSE) from Kurukshetra University	Assistant Professor	Network Security, Software Engineering	3+Yrs	NA	0
Ms. Khushboo Taneja	M.E (CSE) from Thapar University, Patiala, B. Tech (CSE) from Guru Jambheshwar University of Science & Technology, Hisar	Assistant Professor	Data Mining and Warehousing, Programming in C	3+ Yrs	NA	0
Ms. Ritika Chugh	M.Tech (CSE) from Kurukshetra University, kurukshetra, B.Tech (CSE) from Kurukshetra University, Kurukshetra	Assistant Professor	LAN, Software Engineering	4.6	NA	4
Ms. Abha Kiran Rajpoot	M.Tech(CSE) from NIT Kurukshetra,B. tech (CSIT) from MJP Rohilkhand University,Bareilly	Assistant Professor	Wireless Sensor Networks ,Genetic Algorithm	6+Yrs	NA	1

Ms. Shaveta Khepra	M.Tech (CSE) from NITJ, B.Tech CSE from DAVIET Jalandhar	Assistant Professor	Active queue management	4+	NA	0
Mr. Pushpendra K. Rajput	Pursuing Ph. D. from NIT, Jalandhar M. Tech.(CSE) from NIT, /Jalandhar B. Tech.(IT) from BIT, meerut(UPTU)	Assistant Professor	Software Engineering, Cryptography	4+	NA	0
Mr. Ompal Singh	M.Tech (IT) from Karnataka State University, Mysore	Assistant Professor	C Programming , Computer Graphics	9	NA	0
Mr. Pradeep Kumar Mishra	Pursuing Ph.D From sharda University, M.Tech (IT)	Assistant Professor	C, Programming , Operating System	9+	NA	1
Mr. Amit Upadhyay	M,Tech(CSE) From Uttarakhand Technical University . B.tech From UPTU Lucknow	Assistant Professor	C Programming , Operating Systemcs ,Computer Graphi	8.4	NA	2
Ms. Preeti Kaushi	M.Tech(CS) from BITS , Mesra,	Assistant Professor		6	NA	0

k						
Mr. Rajiv Kumar	M.Tech(IT) From Bengal Engineering and Science University, West Bengal	Assistant Professor	Image Processing, Agent based Software Engineering, Multimedia System	10	NA	6
Ms. Rikky Rastogi	M.Tech. from NITTTR Chd.	Assistant Professor	Software Engg., Data Stru, ERP	7	NA	0
Mr. Rupesh Kumar Jindal	M.Tech. IT and B.Tech. IT	Assistant Professor	ERP, E-Commerce, Software Enginerring, Data Mining	12	NA	
Ms. Supriya Khaitan	PhD(Pursuing), M.Tech IT from GGSIPU and B.Tech CSE from PTU	Assistant Professor	Network Security	11	NA	0
Mr. Vivek Dimri	M.Tech (CSE) from Jamia Hamdard University, Delhi	Assistant Professor	JAVA, Object Oriented Programming	6 years	NA	0

Ms. Megha Chhabra	M.Tech (CSA) from Thapar University, Patiala	Assistant Professor	Image processing, Fuzzy.	4+years	NA	
Mr. Pankaj Chejara	M.Tech(CSE) from MNIT Jaipur	Assistant Professor	Computer Network, Network security	2+ years	NA	0
Ms. Jyotsna Seth	M.Tech(SE) from Thapar University, Patiala	Assistant Professor	Software Engineering	2.8 Yrs	NA	0
Mr. Surendra Singh Chahar	M.Tech (IT) from Karnataka State University, Mysore	Assistant Professor	Database Management System, Computer Networks	10 years	NA	0
Mr Jagdish Kukereja	Pursuing Ph.D in CSE from Mewar University ,, M.Tech(CSE) from Devi Ahilya University ,Indore , M.Sc.(Electronics) from Devi Ahilya University	Assistant Professor	Computer Architecture ,Embedded System	18	NA	0

Mr. Devendra Gautam	M.E(CSE) from R.G.P.V Bhopal,B.E(CSE) from R.G.P.V Bhopal	Assistant Professor	Theory of Computation, Compiler Design	8	NA	0
Ms. Kavita Patel	Pursuing Ph.D from Amity University, M.Tech (CS) and B.Tech(CS) from Thakur College of Engineering and Technology	Assistant Professor	Data Mining and network communication	2	NA	0
Ms. Nishu Singh	M.Tech from Delhi Technological University, B.Tech(IT) from Gautam Budh Technical University	Assistant Professor	algorithms, web maintenance ,software engineering,,Data structure	2 months	NA	0
Ms. Anamika Mitra	M.Tech. CSE, B.Tech. IT (Both from UP Tech. Univ)	Teaching Assistant			NA	
Ms. Palvi	B.Tech. IT	Teaching Assistant			NA	

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

a) Prof. A. K. Soni Visiting Faculty

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

There are no temporary faculty in this semester (Jan – May 2015)

14. Programme-wise Student Teacher Ratio

Program		**Semester / Term**	**No. of Students (year wise)**	**No. of Students (program wise)**
BCA		2	52	148
BCA		4	72	
BCA		6	24	
MCA		2	12	66
MCA		4	15	
MCA		6	39	
B.Tech.	IT	8	25	25
B.Tech.	CSE	2	177	797
B.Tech.	CSE	4	167	
B.Tech.	CSE	6	231	
B.Tech.	CSE	8	222	
M. Tech.	CSE - Networking	2	38	48
M. Tech.	CSE - Networking	4	10	
M.Tech.	CSE - Software Engg.	2	20	40
M.Tech.	CSE - Software Engg.	4	20	
M.Sc.	IT - Networking	3	4	4

Total:- 1128

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

	Sanctioned	Filled	Actual
Technical Staff		3	3
Administrative Staff		1	1

There are THREE Lab Technician to handle Computer Labs. ONE admin staff as office assistant in CSE department.

16. **Research thrust areas as recognized by major funding agencies**
Intelligent System
E-Governance

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) Nil b) 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**
- **national recognition**
- **international recognition**

Nil

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

Collaboration with Tech-Mahindra.

22. Publications:

- **Number of papers published in peer reviewed journals (national / international) :-** 46
- **Monographs :-** 01
- **Chapters in Books :-** 00
- **Edited Books :-** 02
- **Books with ISBN with details of publishers :-** 02
  1) Book Tittle : "Cyber Crime, Digital Forensic and Jurisdiction ", ISBN: 978-3-319-15149-6, Publisher: Springer
  2) Book Tittle : "Sensor Integration Model for Multimodel Stimuli Localization", ISBN: 978-36-59661679, Publisher: LAP Lambart, Hamburg, Germany
- **Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) :-**
  20
- **Citation Index – range / average :-**
  (range ➔ 10 – 11) / (average ➔ 10.5)
- **SNIP :-** Nil
- **SJR :-** Nil
- **Impact Factor – range / average :-** (range ➔ 0.46 – 1.5) / (average ➔ 0.98)
- **h-index :-** 4

23. Details of patents and income generated

Nil

24. Areas of consultancy and income generated

Details of the Project

Topic: "Development of Intelligent System as Graphology Expert"

Sponsored by : MSME
Total Cost : 8 lakhs
Incubatee : Pradeep Kr Mishra
Mentor : Dr. Ishan Ranjan
Team Member : Rajiv Kumar & Dr. Ayoub Khan.

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

NO

26. Faculty serving in

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

1) Dr. Ishan Ranjan, Member Selection Committee, Industry Applications Awards Panel, Computer Society of India.
2) Dr. Kiran, Editorial board Member for International Journal of Advanced Computer Research (IJACR)
3) Dr. Ravi Rastogi, serving as Editorial board Member for International Journal of New Innovations in Engineering and Technology

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

a) Faculty Development program
b) THREE Workshops
c) NINE Lecture series by expert of industry as well as academician.
d) Faculty also goes to various industry to get different training
e) Industrial visit

28. Student projects

- **percentage of students who have done in-house projects including inter- departmental projects**
  B.Tech. CSE Final year 250 out of 251 (Percentage ➔ 99.6)
  B.Tech. IT Final year 91 out of 91 (Percentage ➔ 100)
- **percentage of students doing projects in collaboration with other universities / industry / institute**
  B.Tech. CSE Final year 1 out of 251 (Percentage ➔ 0.4)

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

- 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

The following clauses of Ph.D regulation of Sharda University are related to the code of ethics for research:

12.0 REVIEW OF THE PROGRESS

12.1 The research progress will be reviewed by the Dean Research in consultation with the supervisor. Each research scholar will submit a progress report at the end of each semester in the prescribed format.

12.2 In case two consecutive progress reports are unsatisfactory, the research scholar may be de-rgistered from the Ph.D. programme.

18.0 PRE Ph.D. PRESENTATION

18.1 On completion of the research work, the research scholar shall submit a request and eight copies of synopsis including bibliography of research work to Dean Research who in turn will advise SRC to conduct pre Ph.D. open presentation.

18.2 SRC will make one of the following recommendations:

(i) Qualify
(ii) Reappear*
(iii) Disqualify

* The committee may define the period and time for reappearing.

19.0 PANEL OF EXAMINERS

The supervisor will submit along with synopsis, a panel of the examiners drawn from premier Institutes/ University/Organizations to SRC. The panel will have minimum four examiners each from India and abroad. SRC will finalize the synopsis and the panel of examiners with its recommendation for further processing. **The** Vice-Chancellor shall approve the names of **three examiners, preferably one from abroad, out of the names recommended by SRC.**

20.0 SUBMISSION OF THESIS

20.1 The research scholar will submit the following documents to University.

(a) 04 copies of synopsis of the thesis.

(b) 04 hard bound copies of the thesis (along with a soft copy) in a format.

(c) A no-dues certificate from all concerned.

(d) Proof of having two research papers accepted/published in refereed indexed Journals.

20.2 The University will send the synopsis of the thesis to the examiners for their consent for evaluation. On receipt of the consent, the thesis in hard and soft copy would be sent to them for evaluation.

20.3 If the consent of the examiners is not received within one month, the synopsis of the thesis will be send to the next examiner as approved by the Vice-Chancellor.

32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	**Applications received**	**Selected**		**Pass percentage**	
		Male	Female	Male	Female
2010 CSE	NA	212	57		
2011 CSE	1835	243	72		

2012 CSE	999	221	68		
2013 CSE	784	159	36		

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**
2010 CSE		35%	65%	NA
2011 CSE		41.90%	55.10%	3%
2012 CSE		34.20%	59.20%	6.60%
2013 CSE		34.30%	56.40%	9.20%

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

All the eligible students appeared for the Defense Services examinations.

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	
Entrepreneurs	

36. Diversity of staff :-

Percentage of faculty who are graduates	
of the same university	(0 out of 38) NIL
from other universities within the State	(3 out of 38) 7.9%
from universities from other States	(22 out of 38) 57.9%
from universities outside the country	(4 out of 38) 10.5%

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

No Ph.D. / D.Sc. D.Litt / M.Phill are awarded, till date.

- Mr. Rajiv Kumar had submitted his Ph.D. thesis
- Mr. Ashok Kumar Sahoo had submitted his Ph.D. thesis.

38. Present details of departmental infrastructural facilities with regard to

a) Library

There is central library in Sharda University. Remain open long time and has the following facilities:-

i. Computers with Internet
ii. Online access to many books and articles.

iii. B.Tech. Project reports and M.Tech. Dissertation reports.
iv. Journals
v. News Papers of many regional languages.
vi. Previous year question papers are also available.

b) Internet facilities for staff and students

Sharda Campus is WiFi, with a speed of 1 GB.

c) Total number of class rooms

Department has 14 Classrooms and 3 big seminar halls (301-PGDM, 101-SET3 and 102-SET3)

d) Class rooms with ICT facility

All the classrooms are equipped with Mic-Speakers, Projectors, White boards and Projector Screens, Podium for Faculty

e) Students' laboratories

Sr. No.	Name of the Laboratotry	Venue
1	Algorithm Laboratory	Computer LAB 201 A PGDM
2	JAVA Laboratory	Computer LAB 201 B PGDM
3	Hardware & Networking Laboratory	Computer LAB 311 A SET-4
4	Dot Net Laboratory	Computer LAB 311 B SET-4
5	Web Designing Laboratory	Computer LAB 314 A SET-4
6	MATLAB Laboratory	Computer LAB 314 B SET-4
7	Database Laboratory	Computer LAB 314 C SET-4
8	C/C++ Programming Laboratory	Computer LAB 402 A SET-3
9	Basic Programming Laboratory	Computer LAB 402 B SET-3

f) Research laboratories

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

a) from the host institution/university

Registered Students 2011

S.No.	Doctoral Candiadte Name
1	Rajiv Kumar
2	Ashok Kumar Sahoo
3	Amrita
4	Gauri Shankar Mishra

Registered Students 2014

S.No.	Doctoral Candiadte Name
1	Mukul varshney

Research plan to be submitted 2014

S.No.	Doctoral Candiadte Name
1	Supriya Khaitan
2	Shivani garg
3	Shalini Sharma

b) from other institutions/universities

Registered Students 201**1**

S.No.	Doctoral Candiadte Name
1	Ruchi Gupta
2	Prabhjot Kaur

3	Rohit Khokher
4	Pradeep Kumar Sarangi
5	Saurabh Sharma
6	Shashank Sahu
7	Alok Katiyar
8	Harish Kumar
9	Avnees Vashishtha
10	Anupama Kausik
11	Ram Jeet Singh Yadava
12	Raghunandan Pd SAW
13	Pradeep Maheshwari
14	Reetika Wason
15	Mandeep Kaur
16	Gaurav Agarwal

Registered Students 2012

S.No.	**Candiadte Name**
1	Jaya Sinha
2	Nivedita
3	Sandeep nath Mathur
4	Sushil kumar
5	Amit Kumar

Registered Students 2013

S.No.	**Candiadte Name**
1	Shailesh Shrivastava
2	Ms. Vinita Rohilla
3	Pankaj Kumar
4	Himanshi Bhambri

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

None, as of now

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

methodology.

Yes, in brief the methodology adopted for start of any new Course is as follows:

1. The Dean of the school constitutes a committee to evaluate the possibility of introducing new, relevant and viable programmes for which there is a market demand. The committee shall consist of internal experts and the external experts. Head of the Department shall be the Chairman of the Committee.
2. The Committee shall collect the feedback from all the stakeholders, analyze the same and identify the need for introducing new subjects. The feedback collected by the committee is scrutinized, summarized and submitted to the Dean, School of Engineering and Technology.
3. The Dean shall finalize the recommendations of the committee and Vice Chancellor with full proposal for new programme.
4. The proposal includes the budget incorporating all requirements including infrastructure and manpower for the introduction of new programme.
5. On receiving the Vice-Chancellor's approval, the Dean shall arrange for the presentation of curriculum in the 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?**

The design of the courses and the framing of the syllabi are done by the department Board of Studies constituting internal experts of the subjects within the department or across the departments and external experts from industry together. Regular meetings are held in the department to discuss and review this. Hence the curriculum is constantly being reviewed for relevance.

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

The department has alumni who are proud to belong to this institution and who display a great sense of loyalty. This is the 6th year of the Computer Science and Engineering department and the alumni have shown great enthusiasm. Some of them take guest lecturers for the students and contribute to bringing in industry experience to the classroom.

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

The TAQ questionnaires administered by the School give valuable feedback to each faculty. This is reviewed by the faculty concerned and the Dean of School of Engineering & Technology and action taken accordingly.

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

Sl. No.	Name	Roll No.	Mob. No.	Email ID	Company + CTC

1	Rohit Kumar Polishetty	110101167	9990808766	rohith.polishetty@gmail.com	Red Carpet Software Solution + 8.5
2	Madhurendra Pandey	100101120	8010109959	madhurendrapandey.91@gmail.com	Dell International services + 2.9
3	Abhishek	100101004	8802072377	abhishek.rana56@gmail.com	Metadesign Solution + 3.9
4	Manoj Kumar	100102052	7042234311	manojkbss@gmail.com	IWS + 2.20
5	Pramod kumar Singh	100101169	9990393111	pramods.@line.com	lares Softech Pvt. Ltd.
6	Kabar Raza Taqvi	110121004	9911816785	akbarrazataqvi@gmail.com	Net Novaz
7	Saurabh Kumar	100102089	9582112424	saurabkr.it@gmail.com	Naptol + 2.16
8	Sashi Verma	100102092	8005417674	vermasashi621@gmail.com	TCS

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

Despite having limited time in the university working hours, there is no compromise on the quality or expectations from the students. Each is expected to complete assignments which include Power Point

presentations, group work, discussions and field trips to industrial organizations, banks and the IT industry.

In order to facilitate the overall personality of the students, for the newly admitted students, Cultural Programmes, Inter-Class Competitions, Guest Lectures, Industrial Visits, handled Outdoor

Technical Skill enhancement program (TSEP) is run by the department for the final year students, who are about to face company interviews. TSEP includes Seminars, Remedial Coaching Classes, Subject specific Guest Lectures, Extra Lectures for the final Year students, Soft Skills Development Workshops, English Speaking Camps, Information and Technology (IT) Workshops, Student Exchange Programmes and many more extra-curricular activities. The students are encouraged to participate in various Inter-Collegiate Competitions and have done so with distinction and aplomb.

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

- Lectures,
- PPT presentations,
- Workshops, Seminars
- Site visits
- Study tours
- Involving practicing professionals in various subjects.
- Case Study Method
- Co-operative Learning

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

- Student's feedback report.
- Continuous Internal Assessment
- Classroom seminar sessions
- Faculty feedback report
- Regular department meetings of faculty to take stock and plan.
- The performance of the students in national & international level examinations like GATE and GRE

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

Students and faculty members take part in various club activities. Students are actively involved in the Union activities and many faculty members are active in faculty associations

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

- Organizing National Level Inter-collegiate Competition for the students across the country.
- Participation in various Inter-collegiate competitions by our students.
- Paper presentation by faculty at state, national and international level.
- Faculty participation in various seminars and workshops.
- Involvement of the faculty in the research activities – doctoral research.
- Courses on Professional Skill Enhancement (PSE), General Aptitude and Technical Aptitude are taught to all students.
- Add on programs are conducted by the department to equip the students with skills required by industries.
- Seminars and workshops are arranged to improve the Technical Skills of the students and to make them aware of current technology.

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.

The broad areas in which department has contributed in generating new knowledge, basic or applied are – Distributed and Mobile Computing, Image Processing, Information Security, Information Retrieval, Text Analytics, Soft Computing, Distributed Computing,

Biometric system.

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

STRENGTHS

Faculty & Research

- Strong faculty qualification, talented and dedicated, knowledgeable and cooperative faculty, great collaboration and good communication among faculty.
- A critical mass of faculty, quite reasonable size (almost enough to cover a variety of basic courses). High quality faculty having expertise in a broad range of modern CSE fields.
- Strong leadership, good department chair
- Excellent administrative support
- Cohesive department with stability

Academic Programs

- Well defined program assessment (including program objectives, course learning outcomes, and instruction assessments).
- Flexible curriculum management with devoted teachers.
- Good Master of Technology program with new courses.
- Good faculty members in teaching and TA support

Engaging Students in Research

- Numerous research/independent study opportunities for students
- Easy to involve students in projects via independent study

Research and Instructional Facility

- Good computing environment (labs and server), Adequate lab facilities.
- Interactions with Community
- Close relationships with local DoD companies.

WEAKNESS

- Inactive in research funding. Develop more national/state level grant proposals and increase/establish funds available for RAs.

- Need to involve more graduate students in research.
- Increase collaborative research/projects among the faculty member.

Instructions and Curriculum

- Senior design course supported by all faculties which provides students flexibilities in choosing a project having their interests and active participation in the research.
- Too much teaching load.
- Lack of activities between faculty, students and industry
- Space for LTL teaching support; student' research and technical support
- Limited program visibility and corresponding limited ability for student to grow
- beyond classrooms, and to increase recognition by helping faculty submitting proposals at the central, state, private corporations and foundations

OPPORTUNITIES

- Excellent faculty dedicated to teaching, combined with a new $500K IAV center that will augment the research arm, producing grant opportunity
- Opportunities to find research grants from industry and government agencies
- Increase engagement/external funding thru new center of excellence
- Tremendous opportunity to team up with other universities
- Develop interdisciplinary research / projects
- Develop collaborative grants proposals and projects among CS faculty

Graduate and Undergraduate Programs Enhancement

- Make the department more research oriented
- Booster research and funding with compensation.
- Explore joint projects/programs with other departments/universities
- Strengthen the graduate program; increase its student enrollment including 2+2

Graduate Programs

- Offer more online courses

- Student-taught seminar series
- Presenting eye-catching uses of computer science to freshman
- Attracting more engineering students into our courses (the trend is improving)
- Expand outreach activities, e.g., high school programming contest
- Maintaining and utilizing better contact to our alumni

Visibility and Outreach

- Increase visibility of CS department to non-affiliated regional businesses
- Increase visibility of the CEE program to surrounding community, high schools, local
- colleges, beyond county, state borders.
- Extend Continuing education and distance learning beyond state line and country
- Maintaining and utilizing better contact to our alumni

CHALLENGES

Encroachment and Inconsistency

- Loss of expertise thru retirement of senior faculty
- Faculty complacency, heavy consultant engagement with industries, less service to the department.
- Not much participation of students in faculty research
- Simply not enough time in the day to do everything

What if we have collaborations and partnerships?

- Limited research funding by local companies
- Overall financial weaknesses may threaten the hiring of new faculty at the desired level.
- Somewhat decreasing pool of good students willing to work as TAs.

52. Future plans of the department

1. Introduction of New Courses – MS by Research, Integrated M.Tech. Program
2. More focus on Research – to give more emphasis to generation of patents and copyrights out of the research results.
3. Infrastructure Development – both physical and research

infrastructure development with the involvement of the alumni of the department.

4. Credit Transfer Scheme – to encourage UG and PG students to spend one or two semesters in institutes like IITs as well as to encourage students from those institutes for visiting CSE Department.
5. National Collaboration and Student Exchange programs with top tier national institutes like IITs.
6. More International Collaboration and Exchange programs with internationally acclaimed Universities and encouraging dual degree programs.
7. Industry Collaborations to encourage student support, research infrastructure support and collaborative research.