

## ANNUAL ASSESSMENT STATUS REPORT

**NAME OF THE INSTITUTE: SCHOOL OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY**

**Year of Report: 2011-12**

**PART A The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year.**

1. Curricular Aspect	<ul style="list-style-type: none"><li>• <b>Institute of Electrical and Electronics Engineers (IEEE)</b> and <b>Association of Computing Machinery (ACM)</b> are two world class Computer Science and Engineering Societies at USA. Curriculum is designed after adopting <b>IEEE/ACM</b> designed curricula.</li><li>• All M.Tech. programmes are innovative and conducted at few places in country. The curricula have been adopted from International Universities.</li><li>• Laboratory assignments and project based learning is an integrated component of curriculum aspect.</li><li>• The curriculum is updated from time to time.</li><li>• Week wise teaching plan is prepared for every course</li><li>• Curriculum development process is participatory involving various stake holders</li><li>• Curriculum update based on the industry requirements and advances in knowledge. Industry experts nominated in academic planning.</li><li>• Formal feedback is obtained from the students. Obtained feedback is utilized for updating the courses</li><li>• Informal feedback from ex-students and field professionals is taken into consideration.</li><li>• Scheme / Curriculum design and possible updations discussed in academic planning and department committee in the</li></ul>
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	<p>beginning of session.</p> <ul style="list-style-type: none"> <li>• All courses of School of Computer Science and IT are job-oriented courses. They students are prepared not only for placement but are ready to handle complex software projects inline with mission and objectives of the institute. Special emphases are given on topics like communication skills, personality development and team building skills.</li> <li>• Innovative and unique Graduate program 5 year integrated MCA is being proposed</li> <li>• Interdisciplinary approach is followed</li> <li>• Emphasis is on project based learning</li> <li>• Students for MCA courses are admitted through Pre-MCA entrance exam conducted by Professional Examination Board, M.P., M.Tech.students are admitted on the basis of GATE score and Ph.D. courses now on the basis of Entrance exam and Interview</li> <li>• UGC norms are strictly adhered to in theeligibility criteria.</li> <li>• State governments norms are followed in admission process for reserved categories</li> </ul>
<p>2. Teaching – learning and Evaluation</p>	<ul style="list-style-type: none"> <li>• AICTE/UGC norms strictly followed for appointment of teachers.</li> <li>• Lectures are supplemented by assignments, seminars and industrial strength software projects.</li> <li>• Library equipped with latest books (1 lac /year books purchased).</li> <li>• Special emphasis is given on practical learning through labs.</li> <li>• Exposure to research and innovation skills through Students Project is introduced.</li> <li>• Teacher student ratio is 1:20</li> <li>• School of Computer Science boasts of a team of qualified</li> </ul>

	<p>faculty (02 Professors, 03 Readers, 20 lecturers).</p> <ul style="list-style-type: none"> <li>• Teachers are motivated for attending refresher courses, seminars, workshops, conferences etc.</li> <li>• Vacancies in regular faculty positions are being met by contractual appointments and visiting faculty.</li> <li>• Orientation and Refresher courses are conducted for computer science teachers of affiliated college.</li> <li>• Continuous and comprehensive evaluation process is followed with two internals, lab viva and end-semester exam in each course.</li> <li>• Grade-credit Teacher based evaluation system is followed.</li> <li>• Strict adherence to examination schedule, timely evaluation of answer sheets and declaration of results.</li> <li>• Students' are evaluated on their performance in examination and answer sheets are shown to them.</li> <li>• Result processing is computerized.</li> <li>• Teaching learning process incorporates ICT component.</li> <li>• External audit in the form of Comprehensive viva is a special feature of evaluation.</li> <li>• Innovative Evaluative practices like peer evaluation, open book examination, MCQ based tests, Teacher Evaluation by Students are followed.</li> <li>• Environmental education, Quizzes, and Professional and Social Issues are some of the value added courses which is part of curriculum.</li> <li>• Departmental meeting is held on the monthly basis and as per need.</li> <li>• Important days, co-curricular activities and Annual function are observed/celebrated and are strictly adhered to as per academic calendar.</li> </ul>
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<p>3. Research, consultancy and Extension</p>	<ul style="list-style-type: none"> <li>• <b>Approximately 50 research papers are published in 2011-12</b></li> <li>• Self instructional material in electronic and digital form is developed</li> <li>• Organised one day workshop on Ethical Hacking in 10 Jan 2012</li> <li>• Workshop for Campus Selection: 11<sup>th</sup> Feb, 2012- By Edgemakers</li> <li>• Organised one day workshop on ‘Teaching Methodologies in Database &amp; Data Mining’ on Feb 13, 2012</li> <li>• Organised one day workshop on Mobile Computing on March 5, 2012</li> <li>• Seminar on “Resource management in mobile peer to peer computing”, July 2011</li> <li>• Workshop on “New directions in information and communication opportunities”, 15<sup>th</sup> September 2011</li> <li>• Workshop on “Fun with Matlab”, November 2011.</li> <li>• Seminar on “The great mind challenge on software development competition”, by T. V. Gopal on 26<sup>th</sup> and 27<sup>th</sup> August 2011</li> <li>• One day Workshop on 25<sup>th</sup> January 2012, “Language Theory” by Dr. Maya Ingle</li> <li>• One day workshop on “Carrier Opportunities in CS and IT” by Mr. Ram Hablani on 22<sup>nd</sup> Nov. 2011</li> <li>• Motivational lecture by Mr. SandeepAtre on 1<sup>st</sup> February 2012</li> <li>• Expert Lecture on “Yoga for IT professionals” by Mr. VimalVyas, Ex-employee, Wipro Systems Ltd</li> </ul>
<p>4. Infrastructure</p>	<ul style="list-style-type: none"> <li>• The department has newly constructed building over 1 lac Sq.</li> </ul>

<p>and Learning Resources</p>	<p>ft. area costing 10 Crores.</p> <ul style="list-style-type: none"> <li>• Department has 2 multimedia theaters of capacity 100 and a Seminar Hall of capacity 240. All are air-conditioned.</li> <li>• Four Laboratories having 4000 sq. ft. space approximately, equipped with computer resources and Internet facility.</li> <li>• Lecture notes and Power-point presentation are available on website.</li> <li>• Department has five rooms equipped with multimedia projectors which may be occupied by Under-Graduate and Post-Graduate classes whenever needed.</li> <li>• Department has supported to organize events of other departments also.</li> <li>• Interactive white board in seminar room.</li> <li>• Department has enriched library with approx. 15500 books.</li> <li>• E-journal facility available.</li> <li>• All labs are well equipped and air conditioned</li> <li>• Language lab facility</li> </ul>
<p>5. Student Support and Progression</p>	<ul style="list-style-type: none"> <li>• Good placement, most of the students are absorbed in MNCs.</li> <li>• Alumni association is formed in the department.</li> <li>• Students avail of Hostel, internet and Health facilities of the University.</li> <li>• Grievances redressal mechanism exists and counseling is provided to students.</li> <li>• Students participated in University Cultural and Sports activities.</li> <li>• Stress management/ Yoga sessions are conducted.</li> </ul>
<p>6. Governance &amp; leadership</p>	<ul style="list-style-type: none"> <li>• Full academic autonomy.</li> <li>• Major academic and administrative decisions taken through</li> </ul>

	<p>department committee.</p> <ul style="list-style-type: none"> <li>• Sizable faculty representation on various committees of Apex bodies like UGC,AICTE and Universities.</li> <li>• Faculty involved in Selection, Examination and Professional Development activities of the Universities.</li> <li>• Consultancy and support to Schools in conducting Selections, Management and Professional Development activities.</li> <li>• Academic Calendar is strictly followed. Teaching schedule is adhered to and syllabus is covered on time.</li> <li>• Results declared on time.</li> <li>• Assessment of students is undertaken through regular and continuous evaluation and end semester examination.</li> <li>• Student feedback system is followed for continuous improvement.</li> <li>• University's various examinations are organized and conducted in the department.</li> <li>• Organize and conduct other competitive exams and government organization exams like Civil Judge, CET, NET etc.</li> </ul>
7. Innovative practices	<ul style="list-style-type: none"> <li>• Advance methods/models of teaching are adopted.</li> <li>• Students' feedback system implementation.</li> <li>• Students are provided with internet facility.</li> <li>• Use of problem solving approach, case study method, field trips, direct observation of exceptional children, self learning Material, dramas/ Skits etc. for teaching learning process.</li> </ul>

**INNOVATIVE PRACTICES:**

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**PART B: Action Taken during the year**

1	Activities reflecting the goals and objectives of the institution	<ul style="list-style-type: none"> <li>• To prepare professionals in the field of IT who have excellent analytical skills, communication skills, team building spirit by offering interdisciplinary courses like Communication skills, Organizational behavior, Entrepreneurship at UG and PG level.</li> <li>• To produce international quality IT professionals, who can independently design, develop and implement computer applications through experimentation and extensive lab exercises.</li> <li>• To provide extension services by conducting Seminars, Workshops, Publications and expert lectures of Computer Science and IT.</li> <li>• To guide, collaborate and conduct Researches in emerging areas of Computer Science such as NLP, Cloud computing, algorithms, data mining, and mobile computing.</li> <li>• To produce Professionals who come out with holistic development by organizing cultural and academic competitions/events that are planned and executed by students under the guidance of faculty.</li> </ul>
2	New academic programme initiated (UG & PG)	<ul style="list-style-type: none"> <li>• Planning an innovative 5 year integrated MCA as per AICTE approval from 2013 session.</li> </ul>
3	Innovations in curricular design and transaction	<ul style="list-style-type: none"> <li>• Semester System is followed.</li> <li>• Reasoning and Thinking Exercises to the students are given for one hour per week.</li> <li>• Updated Curriculum.</li> <li>• Active Participation of whole Faculty in Curriculum revision every year.</li> <li>• Technology enabled teaching, research, assessment and extension activities.</li> <li>• On the basis of performance of students after each assessment, personal assistance and tutorial classes are being organized.</li> <li>• Staff Members, Project Fellows, students, Office and Library staff are provided with Computer &amp; Internet Facility.</li> <li>• Mentoring System is followed</li> <li>• Activity Based Strategy is used.</li> <li>• Lecture Method is mostly integrated with Discussion, Question and answer method, etc. Role Playing, Seminar, Quiz, etc. are also used as per the need of the topic.</li> </ul>

		<ul style="list-style-type: none"> <li>• Power Point Presentations are prepared for lectures</li> <li>• Computer Based Examination is conducted in some subjects</li> <li>• Seminars, Software competitions and presentations are organized time to time</li> <li>• Assessment through multiple choice questions in some papers is followed</li> <li>• Peer &amp; Self Evaluation as a good practice is followed</li> <li>• Test/Assignments/ Lab Exercises are given regularly</li> </ul>
4	Inter-disciplinary programs started	<ul style="list-style-type: none"> <li>• Communication skills</li> <li>• Professional &amp; Social issues in IT</li> <li>• Accounting &amp; Financial Management</li> <li>• Organizational &amp; Management concepts</li> <li>• Legal Aspects of IT</li> <li>• Social &amp; developmental computing</li> <li>• Entrepreneurship</li> <li>• English Language</li> </ul>
5	Examination Reforms implemented	<ul style="list-style-type: none"> <li>• Self Evaluation as a good practice is followed.</li> <li>• Evaluation is continuous and comprehensive, transparent and open with feedback.</li> <li>• MCQ based tests are a regular feature at UG and PG level.</li> </ul>
6	Candidates Qualified NET/SLET/GATE	All M.Tech. students are GATE qualified. Around 5 candidates have cleared NET. About 10-15 students clear GATE exam every year.
7	Initiative towards Faculty development program	<ul style="list-style-type: none"> <li>• Staff Members are provided with Computer &amp; Internet Facility.</li> <li>• Staff members are encouraged to participate in different national and international seminars and conferences</li> <li>• School of Computer Science and IT offers forum for discourse by organizing National and State Level Seminars/Workshops/Conferences.</li> </ul>
8	Total number of seminars / workshops conducted	<ul style="list-style-type: none"> <li>• Organised one day workshop on Ethical Hacking in 10 Jan 2012</li> <li>• Workshop for Campus Selection: 11<sup>th</sup> Feb, 2012- By Edgemakers.</li> <li>• Organised one day workshop on 'Teaching Methodologies in Database &amp; Data Mining' on Feb 13,</li> </ul>



		<p>2012</p> <ul style="list-style-type: none"> <li>Organised one day workshop on Mobile Computing on March 5, 2012</li> <li>Seminar on “Resource management in mobile peer to peer computing”, July 2011</li> <li>Workshop on “New directions in information and communication opportunities”, 15<sup>th</sup> September 2011</li> <li>Workshop on “Fun with Matlab”, November 2011.</li> <li>Seminar on “The great mind challenge on software development competition”, by T. V. Gopal on 26<sup>th</sup> and 27<sup>th</sup> August 2011</li> <li>One day Workshop on 25<sup>th</sup> January 2012, “Language Theory” by Dr. Maya Ingle</li> <li>One day workshop on “Carrier Opportunities in CS and IT” by Mr. Ram Hablani on 22<sup>nd</sup> Nov. 2012</li> <li>Motivational lecture by Mr. SandeepAtre on 1<sup>st</sup> February 2012</li> <li>Expert Lecture on “Yoga for IT professionals” by Mr. VimalVyas, Ex-employee, Wipro Systems Ltd.</li> </ul>
9	<p>Research projects</p> <p>a) Newly implemented</p> <p>b) Completed</p>	<ul style="list-style-type: none"> <li>Intelligent Info. Systems for disease diagnosis in crops.</li> <li>Performance analysis of incaradhoc multimedia services.</li> <li>GC-SAP Project under DRS-I for Database &amp; Related Research areas.</li> <li>Effectiveness of requirement engineering practices in designing quality software products.</li> <li>Computation of Sparse metrics- parallel processing.</li> <li>Speech Recognition</li> </ul>
10	Patents generated if any	NIL
11	New collaborative research programme	<ul style="list-style-type: none"> <li>Two students have registered for PhD programme in collaboration with I<sup>2</sup>IT, Pune.</li> </ul>
12	Research grants received from various agencies	<ul style="list-style-type: none"> <li>UGC-SAP under Special Assistance Programme- 45 lakh.</li> </ul>

		<ul style="list-style-type: none"> <li>• DST-FIST for Network management and network security programme- 40 lakh.</li> <li>• 3. UGC Basic infrastructure support – 10 lakh.</li> </ul>
13	Details of Research Scholars	Research Scholars- 32
14	Citation index of faculty members and impact factor	<ul style="list-style-type: none"> <li>• The impact factor of journals published by our faculty members is in the range of 0.5 to 1.</li> <li>• Most of the faculty members have published their research work in standard Journals and conferences.</li> <li>• Few papers have been published in IEEE digital library also.</li> </ul>
15	Honors /awards to the faculty	<ul style="list-style-type: none"> <li>• Ph.D. thesis of Dr. Hemant Mehta got Runner-up position in Outstanding Doctoral Dissertation Award in International conferenec on soft Computing for Problem Solving (SocPros 2011) at IIT Rookee in Dec 2011.</li> <li>• Dr. Hemant Mehta was awarded Nixi Fellowship worth 1000\$ to participate In 20th International WWW Conference,2011.</li> </ul>
16	Internal resources generated	The department has started various self financing courses such as BCA, M.Sc, M.Tech. to generate internal resources.
17	Details of departments getting SAP, FIST, etc assistance / recognition	<ul style="list-style-type: none"> <li>• UGC-SAP under Special Assistance Programme- 45 lakh since April 2009.</li> <li>• DST-FIST for Network management and network security programme- 40 lakh, since April 2008.</li> </ul>
18	Community services	<ul style="list-style-type: none"> <li>• The students of SCS has done various software projects for Industry, hospitals etc.</li> <li>• Our students and faculty members regularly donate blood to needy people.</li> <li>• Moreover SCSians donate old cloths to poor people.</li> </ul>
19	Teacher and officers newly recruited	8 Contractual faculties have been appointed.
20	Teaching - non teaching staff ratio	30:9
21	Improvements in the library services	Our library is fully automated and all the staff and students are using the same. The latest books are available in the library. We are going to implement RFID services in the library.
22	New books /journals subscribed and their value	New books worth Rs. 1.5 lacs were purchased.
23	Courses in which student assessment of teachers is introduced and the action taken	Feedback is analyzed and communicated to respective teachers for improvement in all courses.

	on student feedback	
24	Unit cost of education Unit cost = total annual expenditure budget (actual) divided by the number of students enrolled.	$(6995336/664)=10535.14Rs$
25	Computerization of administration and the process of admissions and examination, result issue of certificates	Examination, result processing and issuing of certificates is computerized.
26.	Increase in the infrastructural facilities	A new building with three multimedia theaters, a number of lecture, tutorial etc halls, seminar hall, administrative block, a double story library, research labs, placement cell, examination section, sports facilities.
27.	Technology upgradation	New building is equipped with latest software and hardware tools. There is a WiFi and RFID facilities available in the campus. Around 200 computers have been installed in the new building.
28.	Computer and internet access and training to teachers and students	Internet facility available for teachers& students.
29.	Financial aid to students	Scholarships to the SC /ST students as per rules of M.P. Govt.
30,	Activities and support from the Alumni Association	<ul style="list-style-type: none"> <li>• We obtain the feedbacks from our Alumni working in various areas and the guidance is given to the students to meet the need of the real world.</li> <li>• Alumni also visit the campus to guide and suggest students.</li> <li>• Alumni members timely give the industrial reports to the department via e-mails.</li> </ul>
31.	Activities and support from the Parent Teacher Association	NIL

32.	Health services	Common university health services for students available.
33.	Performance in sports activities	Active participation of students in Cricket, Volley ball, Badminton, chess , Table tennis etc.
34.	Incentives to outstanding sportspersons	Winner Certification and prizes.
35.	Student achievements and awards	<ul style="list-style-type: none"> <li>• Total 42 students have been placed at reputed IT companies in year 2011-12.</li> <li>• M.Tech II Semester Students (Neha Rawatkar, Shruti Dubey, Deepika Parmar) got Student best paper award in International Conference, at PIMS, 2011.</li> <li>• MCA III Semester Students got Second position in national level “SQL query competition” at Delhi University 2011.</li> </ul>
36.	Activities of the Guidance and Counseling unit	The School is providing counseling services to needy students.
37.	Placement services provided to students	The Software Engineer Mr. Nitin Uikey is looking after placement activities.
38.	Development programs for non-teaching staff	Computer training provided by SCS&IT teaching staff through IT Centre.
39.	Healthy practices of the institution	<ul style="list-style-type: none"> <li>• Student Feedback System</li> <li>• Student Interaction for Quality Assessment</li> <li>• Open House</li> <li>• Collective Feedback</li> <li>• Alumni Interaction for Student Development</li> <li>• To Train Students in Soft Skills</li> <li>• ICT for Enhanced Teaching Learning</li> <li>• Feedback System from All Stakeholders</li> <li>• Preparation of a Teaching Plan</li> <li>• Industry and Society Interface Cell</li> <li>• Electronic Submission of Grades by Teachers</li> <li>• Uniform Directory Structure</li> <li>• Code of Conduct for Comprehensive, Lab, Project</li> </ul>

		<p>Viva</p> <ul style="list-style-type: none"> <li>• Continuous Evaluation of Students</li> <li>• Simultaneous Conduct of Examination and Evaluation</li> <li>• Electronic Surveillance System</li> <li>• e-Library</li> <li>• Student Participation</li> <li>• Book Exhibition</li> </ul>
40.	Linkages developed with National/International, Academic/Research bodies	The department has MOUs with I <sup>2</sup> IT Pune and Thailand Exchange Programme [Neerusuan University, Thailand]
41.	Any other relevant information the institution wishes to add	The department has always tried to meet the charter of goals and objectives contained in its Vision.

**Part C: Detail the plans of the institution for 2012-13:**

- Review of syllabus
- Introducing AICTE approved dual degree MCA Program
- Development of Digitalized Instructional Material of Superior Quality keeping in pace with the current times
- Development of Web Based Research Model
- Organization of Computer Awareness Programmes in society
- Organization of Seminars, Conferences and Workshops at State and National levels
- Teacher empowerment program for school and college teachers of tribal areas
- Establishment of Guidance and Counseling and Extension service cell
- Up gradation of Library
- **Appointment of regular Qualified and Research Oriented Faculty**
- 5 Years Integrated MCA programme
- English Language Lab facility to all UTDs
- To Be a:
  - Center for University policies on e-Governance
  - Center for Quality CS and IT education
  - Role model for other IT institutions
  - Facilitator of IT professionals

Name & Signature of Coordinator, IQAC  
UTD

Name & Signature of Head,