

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Action Taken Report on B. Tech CSE Program R 13 Feedback Implemented in R16 introduced in the AY 2016 - 17

Action taken based on the suggestions from Students:

- Q1. Course Content of Curriculum is in tune with the Program Outcomes
- Q2. Course Content is designed to enable Problem Solving Skills and Core competencies
- Q3. Courses placed in the curriculum serves the needs of both advanced and slow learners
- Q4.Contact Hour Distribution among the various Course Component (LTP) is Satisfactory
- Q5. Electives indulge the passion to learn new technologies in emerging areas
- Q6. Curriculum enables Self learning to realize the expectations
- Q7. Composition of Basic Sciences, Engineering, Humanities and Management Courses is a right mix and satisfactory
- Q8. Sufficient Laboratory sessions to improve the technical skills of students
- Q9.Inclusion of Minor Project/ Mini Projects improves the technical competency and leadership skills among the students

Analysis of Overall Feedback given by the Students on R 13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	55.1	33	7.6	2.2	2.1	4.368	Excellent
Q2	46.7	36.6	16.7	0	0	4.3	Excellent
Q3	34.7	40.1	17.2	4.9	3.1	3.984	Very Good
Q4	30.9	34	27.3	3.5	4.3	3.837	Very Good
Q5	31.3	43.8	17.1	3.4	4.4	3.942	Very Good
Q6	30.5	39.3	22.3	4.2	3.8	3.888	Very Good
Q7	31.4	48.6	15	2.7	2.3	4.041	Excellent
Q8	28.4	51	14.1	3.9	2.7	3.988	Very Good
Q9	34.8	37.7	17.2	4.7	5.5	3.913	Very Good

Itemized responses given to the Suggestions of Students

Suggestion: Introduce ML course.

Action Taken: Introduced Artificial Neural Networks and Artificial Intelligence as a professional elective

Suggestion: Add more hours for laboratory courses.

Action Taken: Increased number of hours for laboratory courses by integrating theory with lab.

Suggestion: Introduce new programming languages. Need more training programs on recent technologies. Include more industry oriented courses.

Action Taken: Modular courses are introduced to have hands-on knowledge in emerging technologies used in industry like LAMP, OCJP for software development.

Suggestion: No need of STLD and MSMP subjects to CSE guys instead add data science, ML etc. Include Python course as core subject. Overall curriculum is good.

Action Taken: Instead of minor courses we introduced Department Elective Stream Courses like Advanced Networks, Computer Vision, Technologies for Business Applications, Embedded Computing, Soft Computing and Data Science.

Suggestion: Give more time for practical and hands-on.

Action Taken: In core courses minor projects are introduced to make the student's industry ready.

Suggestion: Give more time for campus recruitment training.

Action Taken: Introduced employability and skill-based courses in every semester to make the student's industry ready.

Suggestion: Technical stuff is good, but there must be improvement in the communication skills and management skills.

Action Taken: To get the interdisciplinary knowledge open electives courses are introduced in the field of management and humanities.

Suggestion: Strengthen programming skills in C, JAVA, Python, and Web Technologies courses.

Action Taken: Offered Credits for online Courses (NPTEL, Swayam, Coursera, FDX) to inculcate life learning skills over the students. Honors degree is introduced for advanced learners to have advanced courses in the field of information technology.

Action taken based on the suggestions from Atumni:

- Q1.Curriculum establishes strong foundation for understanding the basic engineering concepts
- Q2. Course Content of Curriculum is in tune with the Program Outcomes
- Q3. Curriculum imparts the Job Oriented Skills
- Q4.Professional and Open Electives of Curriculum serves the technical advancements needed to serve in the industry
- Q5. Tools and Technologies learned in laboratory sessions enriches the problem-solving skills
- Q6. Ability to compete with peers in other Universities

Analysis of Overall Feedback given by the Alumni on R 13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	47.3	45.9	5.4	1.4	0	4.391	Excellent
Q2	47.3	28.4	18.9	5.4	0	4.176	Excellent
Q3	43.2	32.4	18.9	5.4	0	4.131	Excellent
Q4	28.4	39.2	29.7	2.7	0	3.933	Very Good
Q5	44.6	33.8	17.6	4.1	0	4.192	Excellent
Q6	29.7	60.8	8.1	1.4	0	4.188	Excellent
Q7	63.5	35.1	1.4	0	0	4.621	Excellent

Itemized responses given to the suggestions of Alumni

Suggestion: Add ML course and improve contents in AI, java, etc

Action Taken: Introduced Artificial Neural Networks and Artificial Intelligence as a professional elective. Based on the suggestions the content of AI is revised.

Suggestion: More practical and industry oriented courses are required.

Action Taken: Introduced Technologies for Business Applications stream of courses that contains Scripting Languages, Opens systems of web technologies, middleware technologies, and Emerging Technologies as professional electives.

Suggestion: Introduce open elective course and there must be improvement in the communication skills and management skills.

Action Taken: To get the interdisciplinary knowledge open electives courses are introduced in the field of management and humanities.

Suggestion: Most of the software fields have a big demand for **SAP**, .NET, Java, C#, PHP, Microsoft Azure and visual studio, Python...etc If u want to continue AI and machine learning...plz change the syllabus, coz R13 AI has nothing in it. I request you to add SAP...for 2 semesters (1 for development, 1 for testing).

Action Taken: Modular courses are offered as a one-credit course and every student must undergo at least one modular course. The primary objective of modular courses is to have the hands-on knowledge in emerging technologies used in industry like data visualization tools, rapid web development tools, and design & analysis tools for software development.

Suggestion: Improve the coding skills by allocating more time for laboratories in the curriculum.

Action Taken: Increased number of hours for laboratory courses by integrating theory with lab.

- Q1. Course Content of Curriculum is in tune with the Program Outcomes
- Q2. Course Content enhances the Problem-Solving Skills and Core competencies
- Q3. Allocation of Credits to the Courses are satisfactory
- Q4. Contact Hour Distribution among the various Course Components (LTP) is Justifiable
- Q5. Electives indulge the passion to learn new technologies in emerging areas
- Q6. Curriculum promotes Self learning
- Q7. Composition of Basic Sciences, Engineering, Humanities and Management Courses is satisfactory
- Q8. Courses with laboratory sessions are sufficient to improve the technical skills of students
- Q9.Inclusion of Minor/ Mini Projects improved the technical competency and leadership skills among the students

Analysis of Overall Feedback given by the Faculty on R 13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	48.7	32.5	10.3	0	8.5	4.129	Excellent
Q2	59	38.5	0	1.7	0.9	4.533	Excellent
Q3	39.3	59	0	0	1.7	4.342	Excellent
Q4	54.7	29.1	15.4	0	0.9	4.37	Excellent
Q5	44.4	53.8	0.9	0	0.9	4.408	Excellent
Q6	56.4	21.4	18.8	1.7	1.7	4.291	Excellent
Q7	61.5	35	2.6	0	0.9	4.562	Excellent
Q8	47.9	29.9	21.4	0	0.9	4.242	Excellent
Q9	51.3	26.5	2.6	18.8	0.9	4.088	Excellent

Itemized responses given to the suggestions of Faculty

Suggestion: Courses like Internet of things (IoT), Block chain Technologies should be included in elective pool.

Action Taken: Internet of things, Fuzzy Set Theory and Logic, and Optimization Techniques are introduced as a professional elective courses.

Suggestion: Flexibility in curriculum and need for skill oriented courses was suggested. The curriculum has been designed to make students industry ready by imparting analytical and reasoning, language and soft skills in addition to technical competencies, as desired by the industry.

Action Taken: Employability and skill-based courses were introduced in every semester to make the students industry ready.

Suggestion: DWDM is the course being offered in IV B. Tech I semester. BDA is the course being offered as elective course. As DWDM is pre requisite for BDA, DWDM should be offered in earlier.

Action Taken: As DWDM is pre requisite for BDA, DWDM should be offered earlier semester. In R16 it is moved from IV B. Tech I semester to III B. Tech II semester.

Suggestion: It is better to remove the number systems and introduction to computer issues from Unit-I and better to add programming skills and problem-solving techniques in Problem-solving and Computer Programming course.

Action Taken: Revised the problem solving & computer programming course and renamed as computer programming. Strengthen computer programming with a good number of programming exercises.

Suggestion: Suggested to have courses for IoT from V semester onwards like network programming, embedded systems, IoT with cloud and IoT with web.

Action Taken: Advanced Microcontrollers, Real Time Operating Systems, Embedded C, and Internet of Things are introduced in Embedded Computing Stream as professional elective courses.

Suggestion: It is better to include more practical oriented topics from the 2nd Unit onwards instead of theoretical issues in the Big Data Analytics course.

Action Taken: Big data analytics course is revised based on given suggestions.

Action taken based on the suggestions from Employers:

- Q1. Course Content of Curriculum is in tune with the Program Outcomes
- Q2. Curriculum provides the scope for improving the skills required by IT and IT enabled Industries.
- Q3. Professional and Open Electives are fulfilling the ever- evolving needs of IT industries
- Q4. Tools and technologies described in the curriculum are enough to design and develop new applications of IT Industry.
- Q5.Problem Solving and Soft Skills acquired by the students through the curriculum will enable them to be placed in IT Industry.

Analysis of Overall Feedback given by the Employers on R 13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	66.7	12.1	3	18.2	0	4.273	Excellent
Q2	48.5	21.2	24.2	6.1	0	4.121	Excellent
Q3	69.7	15.2	9.1	3	3	4.456	Excellent
Q4	30.3	48.5	21.2	0	0	4.091	Excellent
Q5	75.8	9.1	6.1	9.1	0	4.519	Excellent

Itemized responses given to the suggestions of Employers

Suggestion: Include Embedded Systems and IoT related fundamental courses in the curriculum. Thereby students can understand the internal architecture of microprocessors and microcontrollers.

Action Taken: Introduced Embedded Systems as professional elective steam with necessary IOT related courses.

Suggestion: Better to include courses related to mobile application development and simulation & modelling because students are expected to have knowledge of simulation tools in present scenario.

Action Taken: Offered Mobile Communications course as a core course and optimization techniques as a professional course.

Suggestion: Need to focus more on development of IOT applications

Action Taken: IOT was introduced as a Professional elective and will be motivated to participate in design and development of IOT applications.

Suggestion: Motivate the students to focus on real time problems. Introduce the trending technologies as a laboratory subject.

Action Taken: As per suggestions Data science stream is introduced in a Professional elective pool. Courses like Advanced Databases, distributed systems, Cloud computing, and Big Data Analytics were introduced in that stream.

Action taken based on the suggestions from Parents:

- Q1. Curriculum enhances the intellectual aptitude of your ward
- O2. Curriculum realizes the personality development and technical skilling of your ward
- Q3. Satisfaction about the Academic, Emotional Progression of your ward
- Q4.Competency of your ward is on par with the students from other Universities/Institutes
- Q5. Course Curriculum is of the global standard and is in tune with the needs of IT and IT enabled industries

Analysis of Overall Feedback given by the Parents on R 13

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	76.8	14.8	7.4	0	1.1	4.665	Excellent
Q2	69.4	21.8	5.9	1.5	1.1	4.56	Excellent
Q3	67.9	22.9	5.5	0	3.7	4.513	Excellent
Q4	72.7	16.2	7.4	0	3.7	4.542	Excellent
Q5	77.9	9.6	8.9	1.5	2.2	4.598	Excellent

Hemized responses given to the suggestions of Parents

Suggestion: Give more importance for problem solving skills in curriculum.

Action Taken: Advanced Programming Languages are included from the 2nd year onwards to implement projects in various advanced areas.

Suggestion: The curriculum should be more practical oriented than theory and suitable for project-oriented learning

Action Taken: Lab integrated with Theory and Minor projects along with core courses transform the students as industry ready.

Suggestion: Add employability related courses in curriculum

Action Taken: Introduced employability and skill-based courses in every semester to make the student's industry ready.

Suggestion: The curriculum must improve the placements opportunities

Action Taken: Modular courses are offered as a one-credit course and every student must undergo at least one modular course. The primary objective of modular courses is to have the expertise on emerging technologies used in industry like data visualization tools, rapid web development tools, and design & analysis tools for software development.

HoD, CSE