

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Action Taken Report on B. Tech ECE Program R 16 Feedback Implemented in R19 introduced in the AY 2019 - 20

Action taken based on the suggestions from Students:

- Q1. Course Contents of Curriculum are in tune with the Program Outcomes.
- Q2. The depth of the course content is adequate to have significant learning outcomes
- Q3. Curriculum is sufficient to bridge the gap between industry standards /current global scenarios and academics.
- Q4. The practical's enable to develop experimental, design, problem solving and analysis skills of the students.
- Q5. The timely coverage of syllabus is possible in the mentioned number of hours.
- Q6. The Curriculum providing opportunity towards self-learning to realize the expectations.
- Q7. Rate the capability of the curriculum for improving ethical values in students
- Q8. The number of theoretical courses and laboratory sessions sufficient to improve the technical skills of students
- Q9. Electives enable the passion to learn new technologies in emerging area

Analysis of Overall Feedback given by the Students on R 16

	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	64	36	0	0	0	4.64	Excellent
Q2	52	48	0	0	0	4.52	Excellent
Q3	43.4	56.6	0	0	0	4.434	Excellen
Q4	33.3	66.7	0	0	0	4.333	Excellen
Q5	39.9	60.1	0	0	0	4.399	Excellen
Q6	40	60	0	0	0	4.4	Excellen
Q7	36.9	63.1	0	0	0	4.369	Excellen
Q8	34.5	65.5	0	0	0	4.345	Excellen
Q9	36.6	63.4	0	0	0	4.366	Excellen

Itemized responses given to the Suggestions of Students

Suggestion: Rather than giving special training on PCB add this as a course/ Lab, students can learn effectively.

Action Taken: In R19 we introduced PCB Laboratory.

Suggestion: Few contents can be shift to first year physics in the Electromagnetic field theory and transmission lines.

Action Taken: The concepts of electro statics and Magneto statics are included in first year physics.

Suggestion: Advanced courses like Mobile OS, Machine leaning and 5G should be add in the curriculum.

Action Taken: In R19 we included the courses in elective pool.

Suggestion: All minor projects should be replaced with one mini project per each semester so that students can go out with good projects.

Action Taken: In R19 curriculum, Intra-disciplinary Projects and inter- departmental Projects which requires the knowledge from two or more courses are introduced.

Suggestions: Organise good number of workshops to improve hands on

Action Taken: Organized good number of the add-on and modular courses by industry experts. Encouraged the students to participate in global coding competitions and online certification courses.

Suggestion: The course on ARM processors and Internet of things should be in Professional Core such that every student must undergone to advanced courses in electives.

Action Taken: Enrichment of Microcontrollers course with ARM processors through which student will be able to familiar with advanced processors, and IoT is shifted from Elective to Professional core in R19.

Suggestion: When we compared to outside world ECE curriculum is good. There are some subjects which are useful and we need more programming languages like exclusive python.

Action Taken: In R19, Python was introduced.

Suggestion: Please include more seminars and less weekend exams

Action Taken: Introducing of the periodic tests is the one which shows that there is a continuous improvement in attainment of course outcomes and program outcomes. Hence there is no possibility in reducing weekend tests.

Suggestion: Remove minor projects for each subject. There is no enough time to manage academics and learn new technologies. We have no time to learn other courses. All the minor projects increase stress levels and those are no enough to put in resume

Action Taken: As industry is expecting more hands on skills, it is mandate for introducing of minor projects.

Action taken based on the suggestions from Alumni:

- Q1.Curriculum provides strong foundation for understanding the basic engineering concepts.
- Q2. Course Content of Curriculum is in tune with the Program Outcomes.
- Q3.Curriculum imparts all the skills required for Job.
- Q4.Professional and Open Electives of Curriculum improves the technical skills needed to serve in the industry.
- Q5. Tools and Technologies learned in laboratory sessions enriches the problem-solving skills
- Q6. Ability to compete with your peers from other Universities.
- Q7.Current Curriculum is superior to your studied Curriculum.

Analysis of Overall Feedback given by the Alumni on R 16

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	45.8	54.2	0	0	0	4.458	Excellent
Q2	70.8	29.2	0	0	0	4.708	Excellent
Q3	45.8	54.2	0	0	0	4.458	Excellent
Q4	70.8	29.2	0	0	0	4.708	Excellent
Q5	45.8	54.2	0	0	0	4.458	Excellent
Q6	45.8	54.2	0	0	0	4.458	Excellent
Q7	54.2	45.8	0	0	0	4.542	Excellent

Itemized responses given to the suggestions of Alumni

Suggestion: Curriculum should be suitable for Higher studies. And encourage students towards higher studies.

Action Taken: Our curriculum is on par with AICTE curriculum which is well suited for industry and higher education. Organizing add-on and modular courses by industry experts in mid of course curriculum to enhance the student's skill set.

Suggestion: Organize good number of workshops to improve hands on

Action Taken: APPSSDC conducted additional courses like ALEXA and IOT hands on Workshop.

Suggestion: Replace outdates courses with trending courses, only four course are suggested in final year

Action Taken: We designed our course curriculum in such a way to meet the required number of credits and eligible for receiving the degree. However in R19 curriculum, 4th year consisting of 4 subjects only.

Suggestion: Including more lab sessions for big data ...as there is requirement in IT sector and coming out of college with hands on experience is really useful.

Action Taken: Big Data Analytics Theory and Lab components are already introduced in R16 and R19 curriculum. In R19 curriculum syllabus has enhanced as per industry requirements

Suggestion: Explore the students to the practical world, make them to do certification courses or teach them courses and try them to get the certification in that like AWS, Devops..etc. Try to give more practical related work and make them to stick to it until they completed, add deadlines.

Action Taken: In R19 curriculum NPTEL certification is mandatory to student, Additional certification courses for skill development are introduced.

Suggestion: Data science Machine Learning, Big Data and AWS may be these are few booming technologies. Try to assign mini projects to the students by the department and include the latest technologies so that they will try to learn and get an practical exposure while they are performing (Python, Angular, Reactjs..etc)

Action Taken: In R19 curriculum Machine Learning along with minor project will be assigned to the student and also introduced Deep Learning as Department Elective

Suggestion: Our Curriculum contains all the inputs required for the latest technology but we fail at implementation. We are aware of those technologies but no hands on experience. I recommend to concentrate on the concept rather than the marks (QB)

Action Taken: In R19 curriculum we introduced the subjects with practical.

Suggestion: There are many opportunities for data analysts. If you make BDA as core course instead of elective, that may help you in increasing job opportunities.

Action Taken: Big Data Analytics Theory and Lab components are already introduced in R16 and R19 curriculum. In R19 curriculum syllabus has enhanced as per industry requirements.

Suggestion: Offer Embedded Systems course because it is a pre requisite course for embedded computing stream which also covers IoT.

Action Taken: In R19 curriculum Embedded Systems included as Department elective with practical session.

Action taken based on the suggestions from Faculty:

- Q1. Course Content of Curriculum is in tune with the Program Outcomes
- Q2. Course Contents enhance the Problem-Solving Skills and Core competencies
- Q3. Allocation of Credits to the Courses are satisfactory
- O4. Contact Hour Distribution among the various Course Components (LTP) is Justifiable
- Q5. Electives imparts the passion to learn new technologies in emerging areas
- Q6.Curriculum encourages 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 16

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	45.9	54.1	0	0	0	4.459	Excellent
Q2	44.5	55.5	0	0	0	4.445	Excellent
Q3	47.9	52.1	0	0	0	4.479	Excellent
Q4	43.2	56.8	0	0	0	4.432	Excellent
Q5	47.9	52.1	0	0	0	4.479	Excellent

Itemized responses given to the suggestions of Faculty

Suggestion: Incorporate open ended programmatic assignments

Action Taken: In R19 We have introduced departmental projects for open ended programmatic assignments.

Suggestion: Collections frame work not included in the OOPS through java course Syllabus. It is better to include in the syllabus as those topics are very useful during problem solving in coding competitions.

Action Taken: In R19 course content of OOPS through Java is revised and we introduced Practical Labs with additional Technical seminars.

Suggestion: In R16 Python Programming course included in Department elective but it is suggestible to include that course as core course so that all that students can learn python programming

Action Taken: In R19 we introduced Practical Labs for python with additional Technical seminars.

Suggestion: Programming subject is very important for CSE and IT students. Better to introduce C programming in two semesters and increase the credits score also in R19 regulation. And give more time for practice sessions.

Action Taken: In R19 we introduced PPS-I in B.Tech I Year I sem and PPS-II in B.Tech I Year II sem with practical sessions.

Suggestion: Include interdisciplinary projects to enhance student's knowledge.

Action Taken: In R19 we introduced interdisciplinary project to enhance their knowledge.

Suggestion: Students performance in laboratory should be assessed by industry experts.

Action Taken: In R19 we introduced Technical seminars with the industrial experience person.

Suggestion: Organize more technical trainings

Action Taken: In R19 we introduced Practical Labs for Artificial Intelligence, Competitive Coding, Mobile Ad-hoc networks, IOT.

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 required skills of IT and IT enabled Industry Demands
- 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 16

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	39.3	56.2	4.5	0	0	4.348	Excellent
Q2	50.6	38.2	9	0	0	4.328	Excellent
Q3	27	66.3	4.5	0	0	4.137	Excellent
Q4	38.2	58.4	3.4	0	0	4.348	Excellent
Q5	32.6	66.3	0	0	0	4.282	Excellent

Itemized responses given to the suggestions of Employers

Suggestion: Please give real time examples apart from the syllabus

Action Taken: Yes, In R19 Curriculum to cover content beyond syllabus PPS-I, PPS-II, competitive coding are introduced

Suggestion: Please include new technologies final so that they will be industry ready

Action Taken: In R19 we introduced Practical Labs for Artificial Intelligence, Competitive Coding, Mobile Ad-hoc networks, IOT.

Suggestion: Students also need to focus on communication and presentation skills.

Action Taken: In R19 Curriculum courses are provided to improve communication and presentation skills

Suggestion: Students are good at basics. Need to brush up communication skills to enhance their projection with their technical knowledge.

Action Taken: In R19 Curriculum Technical Seminars and intra disciplinary projects will make students familiar with practical exposure.

Suggestion: Please collaborate more sessions with industry people so that students will know what they are go to do in next phase.

Action Taken: Modular courses are introduced. Every year students are taken to industrial tour to get practical exposure.

Action taken based on the suggestions from Parents:

- Q1.Curriculum enhances the intellectual aptitude of your ward
- Q2. Curriculum improves 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 16

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	57.8	24.4	17.8	0	0	4.4	Excellent
Q2	38.9	40	21.1	0	0	4.178	Excellent
Q3	32.2	38.9	28.9	0	0	4.033	Excellent
Q4	35.6	43.3	21.1	0	0	4.145	Excellent
Q5	16.7	50	33.3	0	0	3.834	Very Good

Itemized responses given to the suggestions of Parents

Suggestion: Add employability courses in curriculum

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

Suggestion: Emerging technologies as a subject helps us more than it being an elective

Action Taken: In R19 AI is introduced as part of curriculum

Suggestion: Develop programming skills

Action Taken: In R19 we introduced many programs to develop programming skills

Suggestion: The curriculum is good but execution is lacking on the student part

Action Taken: Modular courses are introduced. And we introduced innovative Teaching learning methodologies like Activity Based Learning, Flipped Learning, it increases involvement of students.

Suggestion: Introduce the courses which are use full for their Placements Point of view

Action Taken: Modular courses are introduced and training classes are conducted for placements.

Signature of the Coordinator