



**DEPARTMENT OF INFORMATION TECHNOLOGY**

**Action Taken Report on B. Tech IT 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. Course Contents are 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 Components (LTP) is Satisfiable
- Q5. Electives have enabled the passion to learn new technologies in emerging areas
- Q6. Curriculum is providing opportunity towards Self learning to realize the expectations
- Q7. Composition of Basic Sciences, Engineering, Humanities and Management Courses is a right mix and satisfiable
- Q8. Laboratory sessions are sufficient to improve the technical skills of students
- Q9. Inclusion of Minor Project/ Mini Projects improved the technical competency and leadership skills among the students

**Analysis of Overall Feedback given by the Students on R16**

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	49.3	37.1	9.3	2.4	2	4.296	Excellent
Q2	44.7	36.8	10.5	3.7	4.3	4.139	Excellent
Q3	29.6	46	16.4	5	3	3.942	Very Good
Q4	29.5	34.2	26.6	3.5	6.2	3.773	Very Good
Q5	30.8	42.2	18.5	3.7	4.8	3.905	Very Good
Q6	24.1	40.2	27.4	4.2	4.1	3.76	Very Good
Q7	31.2	47.8	15.3	2.5	3.1	4.012	Excellent
Q8	26.3	52.2	14.4	4.1	3	3.947	Very Good
Q9	33.7	37.4	19.1	4.5	5.4	3.898	Very Good

**Itemized responses to the Suggestions of Students**

**Suggestion:** Add employability courses like machine learning, digital marketing, cloud computing in industry prospective

**Action Taken:** Introduced cloud computing and machine learning courses as professional electives

**Suggestion:** Add interdepartmental projects to get the knowledge on other engineering streams

**Action Taken:** Included inter-departmental (interdisciplinary) projects in 3rd Year I and II semesters to have the core knowledge on other engineering domains

**Suggestion:** Add skill-based courses to the curriculum

**Action Taken:** Introduced competitive coding and Industrial oriented modular courses for improving skills among students

**Suggestion:** Include the seminars and project-based learning

**Action Taken:** In this curriculum, introduced two courses on technical seminars with two credits. One course (technical seminar-I) in 2nd year I semester and another course (technical seminar-II) in 2nd year II semester.

**Suggestion:** It is better to introduce field projects

**Action Taken:** Societal Centric and Industry related projects is a mandatory course for all the students in 4th year I semester

**Suggestion:** It is better to offer branch-specific basic science and Engineering courses

**Action Taken:** Introduced Information Technology branch-specific Engineering Mathematics, Physics, and Chemistry

**Suggestion:** It is better to reduce the number of courses in a semester and ask the students to design and implement various types of projects to get hands-on practice

**Action Taken:** In every semester, student must carry out at least one project from 2nd year onwards.

**Suggestion:** Minimize the number of evaluation schemes and include the courses based on the feedback from industry experts

**Action Taken:** During the assessment of students in Laboratory courses, one industrial person acts as external examiner to test the student knowledge in industry prospective

**Suggestion:** More choice for students to select the courses in the semester

**Action Taken:** Included a pool of departmental electives and open electives courses from other departments to offer more choices to students in selecting the courses.

**Suggestion:** Offer intradepartmental projects to get the knowledge to use various courses knowledge

**Action Taken:** Intra-departmental projects-I and II are mandatory courses in 2nd year I semester and II semester to test the knowledge of courses studied in the respective semester

**Suggestion:** Offer a greater number of employability courses like big data, data mining, Internet of things, Cloud computing

**Action Taken:** Introduced data mining techniques, Bigdata analytics, Internet of things as core courses, and cloud computing as a professional elective

**Action taken based on the suggestions from Alumni:**

- Q1. Curriculum has paved a good foundation in understanding the basic engineering concepts
- Q2. Course Contents of Curriculum are in tune with the Program Outcomes
- Q3. Curriculum imparted all the required Job Oriented Skills
- Q4. Professional and Open Electives of Curriculum served the technical advancements needed to serve in the industry
- Q5. Tools and Technologies learnt during laboratory sessions has enriched 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	61.1	31.1	7.8	0	0	4.533	Excellent
Q2	63.3	14.4	18.9	3.3	0	4.374	Excellent
Q3	58.9	25.6	14.4	0	1.1	4.412	Excellent
Q4	57.8	23.3	13.3	4.4	1.1	4.32	Excellent
Q5	55.6	21.1	14.4	7.8	1.1	4.223	Excellent
Q6	61.1	22.2	14.4	1.1	1.1	4.408	Excellent
Q7	61.1	24.4	6.7	4.4	3.3	4.353	Excellent

**Itemized responses to the suggestions of Alumni**

**Suggestion:** Include more department related subjects and more on real-world related courses. Make mandatory to take real-world, most recent and future technologies related courses. Encourage conduction of Industry workshops more and categorize students according to their interests in various technologies and give training accordingly which will lead to student focus on their interesting technologies which will also help the university to get more placements and students will gain more productivity on their interest and faculty also will get more interest on students to teach more and more with lots of interest. This may lead to improve the quality of the university and get a lot of placements and new students will get interested to join our esteemed university

**Action Taken:** Introduced advanced courses like Blockchain technologies, Machine learning, Artificial intelligence, Advanced data mining in the curriculum to improve the placements

**Suggestion:** Include add on value courses during the semester back time to get exposure towards industry-related technologies

**Action Taken:** Every student must undergo at least a value-added course per year as a part of co-curricular activities. The duration of the value-added course is a minimum of 30 hours

**Suggestion:** Courses like Cloud Computing, Big data analytics, machine learning, and internet of things can be made as a core category

**Action Taken:** Big data analytics and the Internet of things offered as core courses. Cloud computing and Machine learning offered as department elective courses.

**Suggestion:** Advanced Programming Languages (like python, R, PHP, etc) can be included from the 2nd year onwards to implement projects in various advanced areas.

**Action Taken:** Python programming offered as a core course in the 2nd year II semester. R programming and PHP courses are offered in the department elective pool and students can opt for department electives from the 3rd year I semester onwards.

**Suggestion:** Include Artificial Intelligence and Neural Networks as professional electives

**Action Taken:** Introduced the Artificial Intelligence course as a department elective and included concepts of neural network in the course.

**Suggestion:** It is better to introduce the fundamental concepts of Data Science and Data Analytics courses in the curriculum to get the basic information about cutting edge technologies

**Action Taken:** Data Science using python is included in the open elective pool

**Suggestion:** Include Problem solving Techniques and approaches in 3rd year to attend the campus drives of various software industries and IT jobs

**Action Taken:** Competitive Coding is a mandatory course in 3rd year II semester to make the student competent in online coding competitions

**Suggestion:** Strengthen the coding skills by allocating at least 50% of course as laboratory courses

**Action Taken:** The number of lecture hours and Number of laboratory hours are equally allocated in the curriculum

**Action taken based on the suggestions from Faculty:**

Q1. Course Contents of Curriculum are 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 satisfiable

Q4. Contact Hour Distribution among the various Course Components (LTP) is Justifiable

Q5. Electives enable the passion to learn new technologies in emerging areas

Q6. Curriculum is providing opportunity towards Self learning

Q7. Composition of Basic Sciences, Engineering, Humanities and Management Courses is satisfiable

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	67.6	27	4.1	0	1.4	4.597	Excellent
Q2	59.5	36.5	4.1	0	0	4.558	Excellent
Q3	77	20.3	0	0	2.7	4.689	Excellent
Q4	73	16.2	10.8	0	0	4.622	Excellent
Q5	81.1	12.2	6.8	0	0	4.747	Excellent
Q6	70.3	18.9	8.1	0	2.7	4.541	Excellent
Q7	73	16.2	10.8	0	0	4.622	Excellent
Q8	77	16.2	2.7	0	4.1	4.62	Excellent
Q9	73	20.3	2.7	4.1	0	4.625	Excellent

**Itemized responses to the suggestions of Faculty**

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

**Action Taken:** This suggestion was implemented in this curriculum, both courses are made as to the core category. Data mining techniques course is offered in the 3rd year II semester and Bigdata Analytics is offered in 4th year I semester

**Suggestion:** Python Programming is not included it is better to include python programming in the next Curriculum

**Action Taken:** Introduced Python programming as a core course in the 2nd year II Semester

**Suggestion:** The curriculum is very good for students to build the knowledge required by industry give some more practical awareness to students

**Action Taken:** All professional elective courses offered with practical labs and 50% of learning through practical and project-based learning

**Suggestion:** The number of contact hours should be reduced. Assignments must be given such that students focus on additional skills More focus on skill-oriented programs

**Action Taken:** The number of lecture hours and Number of laboratory hours is equally allocated in the curriculum

**Suggestion:** For the Subject Scripting language, the syllabus in the curriculum is very huge and it covers advanced topics. For students, if basics are not covered, the advanced topics are very difficult to understand. And to complete the syllabus it requires more classes than provided in the curriculum.

**Action Taken:** This course was revised 30% and renamed as python programming by incorporating the given suggestion

**Suggestion:** introduce Technical seminars with the enhanced practical sessions

**Action Taken:** In this curriculum, introduced two courses on technical seminars with two credits. One course (technical seminar-I) in 2nd year I semester and another course (technical seminar-II) in 2nd year II semester

**Suggestion:** For the subject Statistics using python, Contents are advanced in the statistics part and it requires more time to implement the required packages in python and understand

**Suggestion:** Introduce Technical seminars with the industrial experience person

**Action Taken:** It is very much regular practice to organize guest lectures on emerging technologies with industrial persons as a co-curricular activity

**Suggestion:** Add more case studies for every laboratory course to enable the skills in students

**Action Taken:** This suggestion was well taken and implemented by adding a greater number of case studies in intra-department, inter-department and Societal Centric and Industry Related Projects

#### **Action taken based on the suggestions from Employers:**

Q1. Course Contents of Curriculum are 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	67.4	23.9	4.3	4.3	0	4.541	Excellent
Q2	58.7	26.1	13	2.2	0	4.413	Excellent
Q3	73.9	15.2	4.3	2.2	4.3	4.519	Excellent
Q4	52.2	37	6.5	4.3	0	4.371	Excellent
Q5	60.9	23.9	13	0	2.2	4.413	Excellent

#### Itemized responses to the suggestions of Employers

**Suggestion:** Offer courses on open source technologies to implement projects

**Action Taken:** All laboratories must be implemented using open source technologies which include the operating system environment and Open source web technologies course is offered as department elective

**Suggestion:** More practical exposure is required

**Action Taken:** Equal weightage has given for both theory and practical courses in the curriculum

**Suggestion:** Need to get real-time exposure and design & solve the local problems

**Action Taken:** Societal Centric and Industry Related Projects course with 3 credits are introduced as mandatory to get real-time exposure to local problems in 4th year I semester

**Suggestion:** Students need to work on communication and presentation skills

**Action Taken:** Introduced Technical Seminar-I & II as core courses to perform technical presentations on emerging technologies in the field of Information Technology. Thereby student will get the communication and presentation skills

**Suggestion:** Need to organize technical activities on emerging technologies apart from the syllabus

**Action Taken:** In addition to the curriculum, the department organizes value added courses, guest lectures with industrial persons, the workshops on emerging technologies

**Suggestion:** Students need to some real-time applications related to security

**Action Taken:** Offered cryptography and network security as a core course with laboratory

### Action taken based on the suggestions from Parents:

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

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	44.6	33.2	18.5	0	3.8	4.151	Excellent
Q2	44.6	32.6	15.2	3.8	3.8	4.104	Excellent
Q3	37.5	39.7	11.4	0	11.4	3.919	Very Good
Q4	44.6	29.3	14.7	0	11.4	3.957	Very Good
Q5	44	22.3	22.3	3.8	7.6	3.913	Very Good

#### Itemized responses to the suggestions of Parents

**Suggestion:** Include Employability and skill-oriented courses

**Action Taken:** Employability Skills-I & II courses are included in 3rd year and 2 credits are allocated for them. These courses are mandatory for all students.

**Suggestion:** The curriculum must improve the placements for students

**Action Taken:** Increased number of laboratory hours by integrating theory with laboratory courses. Also, minor projects in core courses are introduced to make the student's industry ready

**Suggestion:** It must support for higher education

**Action Taken:** Final examination question papers were drawn from premier institutions like IITs/NITs/Central Universities/IITs to make our student to attempt written tests of higher education programmes like M.Tech/MS/integrated M.Tech and Ph.D.

**Suggestion:** Include more importance in problem-solving skills in the curriculum

**Action Taken:** To improve the problem-solving skills of students, this curriculum offered two courses on problem-solving. Programming for Problem Solving -I & II courses are two basic engineering courses offered in 1st year I and II semesters

**Suggestion:** In-depth knowledge of core courses required to write the national level examinations



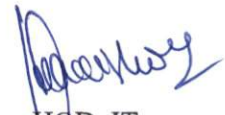
**Action Taken:** Offered the GATE/NET examination syllabus as core courses in the curriculum. Hence, all students must study and complete the GATE/NET national level examination syllabus

**Suggestion:** Include the courses based on the feedback from industry experts

**Action Taken:** Our employers are also one of the stakeholders to design the curriculum and the department BOS committee must contain at least 30% of members from industry

**Suggestion:** Must design project-based curriculum

**Action Taken:** The primary theme of this curriculum is a project-oriented curriculum. It offers intra-departmental, inter-departmental, and Societal Centric and Industry Related Projects.

  
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