VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

DEPARTMENT OF INFORMATION TECHNOLOGY

Action Taken Report on B. Tech IT Program R 19 Feedback Implemented in R21 introduced in the AY 2021 - 22

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 R19

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	49.2	47.5	2.3	0.7	0.3	4.446	**Excellent**
Q2	49.2	44.6	3.3	0.7	2.3	4.38	**Excellent**
Q3	29	62.4	5.9	1.7	1	4.167	**Excellent**
Q4	16.5	52.8	20.8	1.3	8.6	3.673	**Very Good**
Q5	30.7	61.1	5.3	1.7	1.3	4.185	**Excellent**
Q6	25.7	47.9	23.1	2	1.3	3.947	**Very Good**
Q7	18.5	59.4	6.3	0.7	15.2	3.656	**Very Good**
Q8	20.1	64.4	13.5	1.3	0.7	4.019	**Excellent**
Q9	57.4	34	5.9	0.7	2	4.441	**Excellent**

Itemized responses to the Suggestions of Students

Suggestion: Practice labs required for workshop and machine design

Action Taken: Converted workshop and machine design courses as pure practical oriented

Suggestion: Improve the programming or coding part in the curriculum

Action Taken: More weightage (5 credits) is given for python programming and object-oriented programming through JAVA courses to improve the coding/programming skills

Suggestion: Include robotics and its applications

Action Taken: Robotics and its applications course included as professional elective

Suggestion: AI & Machine learning course need to be included

Action Taken: Included Artificial Intelligence and Machine learning courses in the curriculum

Suggestion: Include advanced data structures in the syllabus

Action Taken: Added advanced data structures course as professional core to apply problem solving techniques during the coding challenges

Suggestion: Offer machine learning algorithms for images, text, and video

Action Taken: Introduced machine learning, natural language processing, computer vision as professional electives

Suggestion: Strengthen the web application development course with more interactive tools

Action Taken: Introduced interactive web application development tools like React js, node js, and java script in advanced web application development

Suggestion: Include the subject related to cryptocurrency

Action Taken: Introduced block chain and its applications as professional elective

Suggestion: Give more innovation challenges to students and improve the logical thinking in curriculum to develop them as in a good way

Action Taken: Introduced competitive programming as core professional and allocated 2 credits to it. There by students can be able to participate in the programming/coding challenges to improve logical thinking to solve the real time problems

Suggestion: NPTEL-SWAYAM course selection should be students wish. They should have some ideas regarding course. So at least for next semester course selection leave to students.

Action Taken: Students must earn the 9 credits from NPTEL-SWAYAM platform from professional electives category and open electives category

Suggestion: include application-oriented courses like digital marketing, cyber security tools

Action Taken: These emerging technologies are covered from value added courses

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 19

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	27.1	45.8	13.6	11.9	1.7	3.85	**Very Good**
Q2	35.6	18.6	32.2	11.9	1.7	3.745	**Very Good**
Q3	23.7	15.3	25.4	16.9	18.6	3.083	**Good**
Q4	30.5	18.6	23.7	11.9	15.3	3.371	**Good**
Q5	22	16.9	20.3	23.7	16.9	3.028	**Good**
Q6	32.2	15.3	23.7	6.8	22	3.289	**Good**
Q7	42.4	23.7	10.2	6.8	16.9	3.679	**Very Good**

Itemized responses given to the suggestions of Alumni

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: Include Natural language processing and Neural Networks as professional electives

Action Taken: Introduced the natural language processing, neural networks, and computer vision courses as a department elective

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

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

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 19

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	71.4	26.2	2.4	0	0	4.69	**Excellent**
Q2	57.1	38.1	4.8	0	0	4.523	**Excellent**
Q3	73.8	26.2	0	0	0	4.738	**Excellent**
Q4	78.6	16.7	4.8	0	0	4.742	**Excellent**
Q5	81	14.3	4.8	0	0	4.766	**Excellent**
Q6	69	21.4	9.5	0	0	4.591	**Excellent**
Q7	71.4	19	9.5	0	0	4.615	**Excellent**
Q8	73.8	21.4	0	0	4.8	4.594	**Excellent**
Q9	73.8	21.4	0	4.8	0	4.642	**Excellent**

Itemized responses given to the suggestions of Faculty

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: 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

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: 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

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 19

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	65.9	18.2	4.5	11.4	0	4.386	**Excellent**
Q2	47.7	25	25	2.3	0	4.181	**Excellent**
Q3	68.2	6.8	11.4	2.3	11.4	4.184	**Excellent**
Q4	31.8	47.7	13.6	6.8	0	4.042	**Excellent**
Q5	52.3	22.7	22.7	0	2.3	4.227	**Excellent**

Itemized responses given to the suggestions of Employers

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

Action Taken: Introduced cloud computing as professional core and machine learning courses as professional elective

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: 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-1 & 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: Offered cryptography and network security as a core course with laboratory

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: More practical exposure is required

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

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 19

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	39.6	39.6	18.9	0	1.8	4.149	**Excellent**
Q2	39.6	36.9	16.2	5.4	1.8	4.068	**Excellent**
Q3	27.9	52.3	10.8	0	9	3.901	**Very Good**
Q4	39.6	37.8	13.5	0	9	3.987	**Very Good**
Q5	40.5	33.3	17.1	5.4	3.6	4.014	**Excellent**

Itemized responses given to the suggestions of Parents

Suggestion: It must support for higher education

Action Taken: Final examination question papers were drawn from premier institutions like IITs/NITs/Central Universities/IIITs 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: 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: 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.

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: 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

HOD, IT