DEPARTMENT OF APPLIED ENGINEERING

Action Taken Report on B.Tech Automobile Engineering Program R19 Feedback Implemented in R21 introduced in the AY 2021-22

Action taken based on the suggestions from Students:

Q1.Course Contents of Curriculum in tune with the Program Outçomes

Q2.Course Contents designed and value added courses offered enriches Core Competencies

Q3.Courses offered in the curriculum serves the needs of both Automotive Industries and IT sector

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

Q5.Electives have enabled the passion to learn new technologies in emerging and Interdisciplinary Areas

Q6.Curriculum providing enable towards self-learning

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.Suggest any other points to improve the quality of the curriculum

Analysis of Overall Feedback given by the Students on R19

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	87.5	0	0	0	12.5	4.5	Excellent
Q2	68.8	18.8	0	0	12.5	4.317	Excellent
Q3	75	18.8	0	6.3	0	4.628	Excellent
Q4	93.8	0	6.3	0	0	4.879	Excellent
Q5	56.3	25	18.8	0	0	4.379	Excellent
Q6	81.3	18.8	0	0	0	4.817	Excellent
Q7	68.8	18.8	12.5	0	0	4.567	Excellent
Q8	43.8	12.5	43.8	0	0	4.004	Excellent
Q9	12.5	75	12.5	0	0	4	Excellent

Itemized responses given to the Suggestions of Students

Suggestion: Courses on current trends in coding can be added.

Action Taken: courses like python programming, Data structures, programming for problem solving, object Oriented Programming, DBMS, Robotics, 3d printing for automobile components are offered as electives and open electives.

Suggestion: In-house training to be provided for facing competitive exams.

Action Taken: Practices already started with R19 regulations and are continued in this regulation too.

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 Automobile Job Oriented Skills / prerequisite to pursue higher education

Q4.Electives of Curriculum served the technical advancements needed to serve in the industry

Q5.Tools and Methodologies followed during practical sessions has enriched the required practical knowledge to serve in Industry

Q6.Ability to compete with your peers from other Universities

Q7.Current curriculum meets the present industry demands

Analysis of Overall Feedback given by the Alumni on R19

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	100	0	0	0	0	5	**Excellent**
Q2	100	0	0	0	0	5	**Excellent**
Q3	100	0	0	0	0	5	**Excellent**
Q4	100	0	0	0	0	5	**Excellent**
Q5	100	0	0	0	0	5	**Excellent**
Q6	100	0	0	0	0	5	**Excellent**
Q7	100	0	0	0	0	5	**Excellent**

Itemized responses given to the suggestions of Alumni

Suggestion: Special focus need to be given to fast learners.

Action Taken: As continued with previous regulations Honour degree has been offered to the fast learners who have zero backlog history with 8.0 CGPA till end of second year.

Suggestion: Students need to work on real time problems faced by current automobile industry and society.

Action Taken: Concept of Project based learning has been introduced in which projects related to interdisciplinary and societal and industry oriented are to be carried out by students in respective semesters.

Suggestion: Courses on current trends are to be offered.

Action Taken: courses like python programming, Data structures, programming for problem solving, object Oriented Programming, DBMS, Competitive coding, Robotics,3d printing for automobile components are offered as electives.

Suggestion: Add more number of Employability courses in curriculum

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

Action taken based on the suggestions from Faculty:

Q1.Curriculum designed is in tune with program Vision and Mission

Q2.Contents of the curriculum enhances the core competencies and employability skills

Q3.Allocation of Credits to the Courses are satisfiable

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

Q5.Electives offered in the program makes the faculty to explore latest technologies.

Q6.Curriculum providing opportunity towards self-learning to meet the expectations

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

Q8.Number of theoretical courses and laboratory sessions sufficient to improve the technical skills of students

Q9.Suggest any other points to improve the quality of the curriculum.

Analysis of Overall Feedback given by the Faculty on R19

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	53.3	23.3	16.7	3.3	3.3	4.197	Excellent
Q2	53.3	36.7	3.3	6.7	0	4.366	Excellent
Q3	53.3	43.3	3.3	0	0	4.496	Excellent
Q4	50	23.3	23.3	3.3	0	4.197	Excellent
Q5	60	40	0	0	0	4.6	Excellent
Q6	60	36.7	0	3.3	0	4.534	Excellent
Q7	60	36.7	3.3	0	0	4.567	Excellent
Q8	56.7	40	3.3	0	0	4.534	Excellent
Q9	40	56.7	3.3	0	0	4.367	Excellent

Itemized responses given to the suggestions of Faculty

Suggestion: Latest BS Standards for Vehicle emission norms to be included.

Action Taken: These topics are covered in Automotive Emissions and control which is offered as mandatory course

Suggestion: Activities related to lifelong learning are to be imparted

Action Taken: To orient students towards self-learning Swayam and NPTEL course have been introduced as mandate

Suggestion: Benefits of 3D printing need to be provided to all the students irrespective of discipline

Action Taken: Concepts of 3D printing for Automobile have been incorporated.

Suggestion: Knowledge about motorsport vehicles is required

Action Taken: Subjects like racing two and four wheelers, fundamentals of motor sport engineering are offered as Department electives.

Action taken based on the suggestions from Employers:

Q1.Course Contents of B.Tech Automobile Engineering Curriculum is in tune with the Program Outcomes

Q2.Relevance of the Course Contents in tune with the Industry Demands

Q3.Elective are in-line with the technology advancements in Modelling and Automobile Manufacturing Sectors

Q4.Applicability of the tools and technologies described in the curriculum will be enough to practice in Industry.

Q5.Problem Solving and Soft Skills acquired by the students through the course contents will enable them to be placed in product and process industry,

Analysis of Overall Feedback given by the Employers on R19

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	60	20	20	0	0	4.4	Excellent
Q2	60	0	40	0	0	4.2	Excellent
Q3	80	20	0	0	0	4.8	Excellent
Q4	100	0	0	0	0	5	Excellent
Q5	80	20	0	0	0	4.8	Excellent

Itemized responses given to the suggestions of Employers

Suggestion: More emphasis on communication and technical terminologies.

Action Taken: Certifications like PET and BEC, CRT and life skills have been offered throughout the program at different stages.

Suggestion: Awareness on electric Vehicle maintenance should be given to the students.

Action Taken: Include courses related to electric and hybrid vehicles, like fuel cell technology, battery management systems like charging of batteries, recycling of batteries& battery thermal management system.

Suggestion: Automotive instrumentation and robotics related course can be included in the curriculum.

Action Taken: Robotics, Modelling of Electric and Hybrid vehicles, NVH offered as electives.

Suggestion: In-house training to be provided for facing competitive exams.

Action Taken: Practices already started with R19 regulations and are continued in this regulation too.

Suggestion: As per BS Standards, Supercharging and turbo charging areas need to be covered in the curriculum

Action Taken: These topics are covered in a course called Supercharging and turbo charging which is offered as elective course.

Action taken based on the suggestions from Parents:

1. Satisfaction of Academic and Emotional Progression of your ward
2. Satisfaction with the offered curriculum for your wards future endeavours?
3. Overall assessment of technical knowledge acquired by your ward who is pursuing his/her program in our University
4. Competency of your ward is on par with the students from other Universities/Institutes
5. Course Curriculum is of the global standard and is in tune with the needs of Automotive and IT enabled industries

Analysis of Overall Feedback given by the Parents on R19

Parameters	Strongly Agree	Agree	Moderate	Disagree	Strongly Disagree	Avg. Rating	Grade
Q1	100	0	0	0	0	5	**Excellent**
Q2	100	0	0	0	0	5	**Excellent**
Q3	100	0	0	0	0	5	**Excellent**
Q4	100	0	0	0	0	5	**Excellent**
Q5	100	0	0	0	0	5	**Excellent**

Itemized responses given to the suggestions of Parents

Suggestion: Based upon students' suggestions and their interest, computer related courses can be included as mandatory courses.

Action Taken: Courses like python programming, Data structures, Programming for problem solving, Object Oriented Programming, DBMS, Competitive coding, Robotics,3D Printing for automobile components are offered as electives.

Suggestion: Students need to be work on real time problems faced by current industry and society.

Action Taken: Concept of Project based learning has been introduced in which projects related to interdisciplinary and societal and industry oriented are to be carried out by students in respective semesters.

Suggestion: More practical or laboratory-oriented courses should be included to meet the industry demands.

Action Taken: A course has been introduced as mandatory course called Vehicle maintenance, MVT, Autotronics.

Suggestion: Topics like Battery Management System and Electrical Vehicle Maintenance, may be included in the curriculum as a program Electives.

Action Taken: As continued with previous regulations Battery Management System and Electrical Vehicle Maintenance Courses has been offered to the Students as Elective Course.

HoD,

Applied Engineering