

## DEPARTMENT OF AUTOMOBILE ENGINEERING

### B.Tech. Automobile Engineering

#### Programme Educational Objectives

The Under-graduate Programme in Automobile Engineering will be able to

1. Provide a strong foundation in mathematical, scientific and engineering fundamentals that enable the students to formulate, analyze and solve engineering problems and to prepare them for graduate studies
2. Apply knowledge and concepts of automotive technology to synthesize data and solve multi-disciplinary engineering problems
3. Continue to work as part of teams for successful career in automotive and ancillary industry that meet the needs of Indian and multinational companies
4. Undertake research and development projects with multi-disciplinary approach which are cost effective and efficient so as to resolve automotive engineering issues of social relevance
5. Demonstrate their professional, ethical and social responsibilities for a successful professional career and contribute their part for addressing various global issues

#### Program Outcomes

The Student of Automobile Engineering will be able to

- a) Apply acquired knowledge from undergraduate engineering and other disciplines to identify, formulate and present solutions to technical problems related to various areas of Automobile Engineering.
- b) Learn advanced technologies and analyze complex problems in the fields of Automobile Engineering.
- c) Design and implementation of Automotive systems using Auto CAD/CREO/ANSYS/CATIA
- d) Address specific problems in the field of automotive system design in the form of mini projects, analysis, and interpretation of data and synthesis of information to provide valid conclusions.
- e) Use the techniques, skills, latest Modelling / Design / Analysis / Simulation tools, software and equipment necessary to evaluate and analyze the systems in automotive design environments.
- f) Understand and commit to professional ethics, social responsibilities and norms of engineering practice.
- g) Develop confidence for self-education and imbibe professional values for lifelong learning.
- h) Demonstrate effective oral and written communication skills in accordance with technical standards.
- i) Become knowledgeable about contemporary developments.
- j) Ability to correct the mistakes effectively and learn from them to become good leaders.
- k) Understand the scenario of global business.

#### Program Specific Outcomes

After completion of the programme the student is able to

- I. Apply acquired knowledge from undergraduate engineering and other disciplines to identify, formulate and present solutions to technical problems related to various areas of Automobile Engineering.
- II. Learn advanced technologies and analyze complex problems in the fields of Automobile Engineering.
- III. Design and implementation of Automotive systems using Auto CAD/CREO/ANSYS/CATIA
- IV. Address specific problems in the field of automotive system design in the form of mini projects, analysis, and interpretation of data and synthesis of information to provide valid conclusions.