



Pimpri Chinchwad Education Trust's  
**Pimpri Chinchwad College of Engineering**  
Sector No. 26, Pradhikaran,  
Nigdi, Pune – 411 044



### COURSE OUTLINE

Department: Mechanical Engineering  
Class: BE-Mechanical  
Engineering

A.Y.:2021-22 Sem-I

Date:14-10-2021  
Name of the Course:Automobile

## Relevance of the course:

**Automobile** or **Automotive Engineering** has gained recognition and **importance** ever since motor **vehicles** capable for transporting passengers has been in vogue. The major task of an **Automobile Engineer** is the designing, developing, manufacturing and testing of **vehicles** from the concept stage to the production stage.

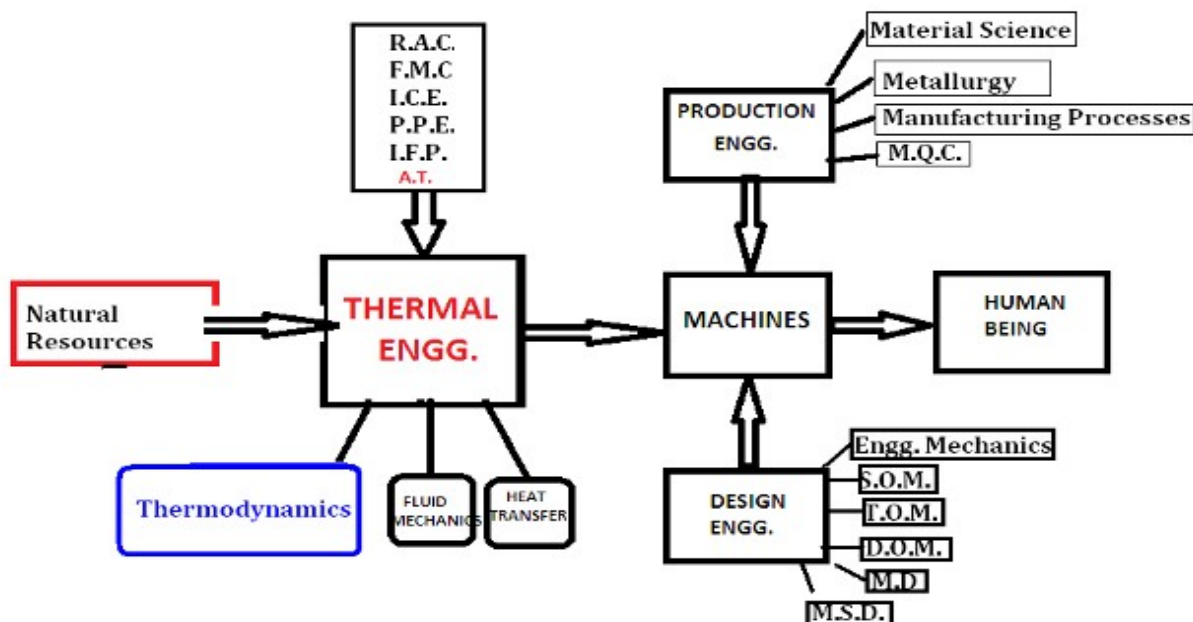
Automobile Engineering, also known as Automotive Engineering, is a field concerned with vehicle design, development, production, and safety testing. Automobile Engineers work closely with other engineers to improve automotive technical performance, vehicle aesthetics, and automotive software.

Automobile production requires a large team of professionals that specialize in specific aspects of Automobile Engineering. These specializations include control systems, aerodynamics, fluid mechanics, and emission control.

To enter the field of Automobile Engineering, most employers expect you to have a degree in a related engineering field, although some large automotive companies offer apprenticeships. Depending on the subject area you wish to specialize in, you may be required to get a postgraduate certification.

The position is ideal for employees with a strong work ethic that enjoys seeing how their work has paid off. Automobile Engineering has tangible results, meaning that engineers can see the success, or even failures, of their work. Moreover, individuals that enjoy problem-solving and challenges typically find satisfaction in the position of Automobile Engineer.

Hence knowledge of this subject is of utmost important for a Mechanical Engg. Graduate.



### Course Outcomes

CO No	CO Statement	No. of Lectures Planned	No. of Practical planned	Content Delivery method	Assessment tools Planned
1.	Students able to develop technical skill to solve problem related to drive train mechanisms and transmission systems of an automobile at service station. (Develop)	6	NA	Presentation , NPTEL , Video Lectures	In-Semester Examination Class Online Quiz, UT-I
2.	CO2- Students able to develop technical skill to solve problem related with axels, wheels, tires and steering mechanism of an automobile at the service station. (Develop)	8	NA	Presentation , NPTEL , Video Lectures	In-Semester Examination -UT-I
3.	CO3-To compare and select the proper suspension system and braking system for vehicle. (Evaluate)	6	NA	Presentation , NPTEL , Video Lectures	In-Semester Examination ,UT-II
4.	CO4-Students will be able to <b>analyze</b> performance of all types vehicles.( <b>analyze</b> )	6	NA	Presentation , NPTEL , Video Lectures	Unit Test-II , End sem Exam
5.	CO5-To diagnose the faults of automobile vehicles. (Evaluate).	9	NA	Presentation , NPTEL , Video Lectures	Unit Test-II Assignment,End sem Exam
6.	CO6-To apply the knowledge of EVs, HEVs and solar vehicles.(Apply)	7	NA	Presentation , NPTEL , Video Lectures	Assignment,End sem Exam




**Assignment:**

Assignment Planned	CO Mapped	Tentative schedule
Assignment-I	CO4,CO5,CO6	21/11/21 to 29/11/2021

**Mini Project topics offered:**No

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

**Industry visit/ Case studies planned:** No**Guest Lecture/ Co Teaching:** No

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Course Faculty BE- A Gaffar G.Momin	Course Faculty BE- B Course Coordinator- Gaffar G.Momin	Course Faculty BE-C Gaffar G.Momin