

Department of Automobile Engineering
Pedagogical initiatives by faculty member
Pedagogical initiatives adopted in the department (2017-18)

S. N	Faculty	Course	Topics covered	CO	Delivery method	% of content
1	Mr.R.Arun Raj, Assistant Professor	Manufacturing Technology	Fundamentals of manufacturing Technology using making of first aid box from each student	CO1	Project based learning	20
2	Dr.S.Ramkumar, Associate Professor	Automotive Fuels, Lubricants and Coolants	Properties and testing of fuels and lubricants	CO4	Research Based Education	20
3	Dr.M.Parthasarathy Associate Professor	Automobile Engineering	This teaching method involves the active participation of students to get experience by hands on training of following course contents Types and Construction of Clutches, Different types of Gear Box, Braking system	CO3 CO4	Hands on Learning	30
4	Dr.S.Jaichandar Professor	IC engine	Classification of internal combustion engine, engine components and sub systems	CO1 CO2	Mind mapping	20
5	Dr.M.Amala Justus Selvam Professor	Mechanics of machines	Slider crank and crank rocker mechanisms- Elliptical trammel	CO1	Experiential learning method	20
6	Mr.N.Murugu Nachippan, Assistant Professor	Automotive materials	Types of solid solution and imperfection Mechanical testing, Tensile, impact and hardness	CO1 CO5	Inquiry based learning	30

Pedagogical initiatives adopted in the department (2016-17)

S. N	Faculty	Course	Topics covered	CO	Delivery method	% of content
1	Mr.K.Arunkumar, Asst.Prof	Automotive Aerodynamics	Fundamental of fluid mechanics Aerodynamic drag of cars and optimization of shape	CO1 CO2	Project based learning	20
2	Mr.M.Rajesh Kumar, Asst.Prof	Automotive Fuels, Lubricants and Coolants	Properties and testing of fuels and lubricants	CO4	Research Based Education	20
3	Mr.R.Arun Raj, Asst.Prof	Environmental Science and Engineering	Ecosystem and biodiversity, Environmental pollution and Social issues	CO2 CO3 CO4	Service learning and Gallery Walk	50
4	Mr.N.Murugu Nachippan, Asst.Prof	Manufacturing Technology	Metal Casting Processes	CO1	Experiential learning Method	20
5	Mr.N.Murugu Nachippan, Asst.Prof	IC Engines	Fuel systems, Combustion and Combustion Chambers, Intake, Exhaust & Turbo charging systems	CO2 CO3 CO4	Gallery walk	40

1151AU104 Manufacturing Technology-Experiential Learning Method

Experiential learning is the process of learning through experience, and is more specifically defined as "learning through reflection on doing". Hands-on learning is a form of experiential learning but does not necessarily involve students reflecting on their product. Experiential learning is distinct from conventional learning, in which the learner plays a comparatively passive role.

Topics covered

- Metal Casting Processes

Course outcome

- Demonstrate preparation of moulds for casting applications

Expected Outcome

- Students will be able to perform and demonstrate casting operation.