SEM -III

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: III   Course Name: Applied Mathematics-III

The students will be able to:

Course Code	Course Outcome Statements
AEC 301.1	Gain basic knowledge of Laplace Transform & demonstrate an ability to identify , formulate & solve engineering problems
AEC 301.2	Understand methods in the theory of analytic functions of several complex variables, and applications of these to approximation and mapping problems.
AEC 301.3	Capable to identify & classify zeros, singular points, residues & their applications. Also participate & succeed in competitive exams.
AEC 301.4	Calculate both real and complex forms of the Fourier series for standard periodic waveforms and convert from real form Fourier series to complex form and vice-versa
AEC 301.5	Become familiar with Partial Differential equations & demonstrate an ability to identify, formulate & Solve engineering problems.
AEC 301.6	Acquire problem-solving skills in a broad range of significant mathematics.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: III   Course Name: THERMODYNAMICS

The students will be able to:

Course Code	Course Outcome Statements
AEC302.1	Apply various thermodynamics laws to the real life systems.
AEC302.2	Evaluate the role of entropy in a thermal equilibrium system.
AEC302.3	Estimate the properties of steam at different states.
AEC302.4	Define and understand natural and ideal processes and its application.
AEC302.5	Assess the basic difference between the gas Power cycle and vapour cycle.
AEC302.6	Understand the basic property relation and combustion process.

Mahatma Education Society's

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: III   Course Name: Strength of Materials

The students will be able to:

Course Code	Course Outcome Statements
AEC 303.1	Understand the concept of stress and strain for homogeneous, isotropic material.
AEC 303.2	Use of physics concept to solve variety of applied real world problems using the appropriate tools backed by mathematical to solve structural problem involving strength.
AEC 303.3.	Determine the stress and strain in members subjected to combined loading and apply the theories of failure and static loading.
AEC 303.4	Determine and analyse principal stress, maximum shearing and the stress acting on structural member.
AEC 303.5	Determine the deflection and rotation produced by axial, torsional and flexural load.
AEC 303.6	Design simple bars, beams and circular shafts for allowable stresses and loads.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: III   Course Name: Production Process I

The students will be able to:

Course Code	Course Outcome Statements
AEC304.1	Understand the basic concepts of Casting process their operations and applications
AEC304.2	Understand the concept of forming processes such as rolling, extrusion, forging their applications and process working.
AEC304.3	understand different metal joining processes such as welding, soldering, brazing also their process operations & applications
AEC304.4	Understand powder metallurgy process, sintering metal injection & applications.
AEC304.5	Understand different moulding process, application of plastics and their use, also moulding with ceramics.
AEC304.6	Understand different non-destructive testing techniques.

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: III   Course Name Material Technology

The students will be able to:

Course Code	Course Outcome Statements
AEC 305.1	Understand and classify basic engineering materials.
AEC 305.2	Differentiate various imperfections, deformations and failure mechanism.
AEC 305.3	Interpret SN – curve and phase diagrams to understand theory of alloys.
AEC 305.4	Test and analysis failure mechanisms
AEC 305.5	Choose the appropriate heat treatment process for specific requirement
AEC 305.6	Understand the significance of different alloying elements

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: III   Course Name: Computer Aided Machine Drawing

The students will be able to:

Course Code	Course Outcome Statements
AEL 301.1	Understand solid geometry, intersection of surfaces of various geometry
AEL 301.2	Understand design various 2D Drawing of standard machine elements
AEL 301.3	Analyse various assembly and details
AEL 301.4	Synthesis of various bearings, joints, ICE engine parts, Jig & fixture
AEL 301.5	Evolution of 2D & 3D drawing by using SOLID WORKS design software
AEL 301.6	Visualize & prepare detail drawing on sketch book for manufacturing purpose

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem :III   Course Name: Machine shop Practice I

The students will be able to:

Course Code	Course Outcome Statements
AEL 304.1	Acquire operating skills of various machines like lathe, shaper, milling etc.
AEL 304.2	Perform and conversant of operational function of plain turning, taper turning and screw cutting etc. on lathe machine
AEL 304.3.	Perform machining operations on lathe, shaper and milling machine
AEL 304.4	Plan the process requirements of engineering products, machines, materials requirements, Tools required in the process
AEL 304.5	Optimize the machining process operating parameters of speed, feed and depth of cut to produce customers desired output.
AEL 304.6	Identify the job and list out the operations required to produce the engineering products,

SEM -IV

Mahatma Education Society's

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: IV   Course Name: Applied Mathematics-IV

The students will be able to:

Course Code	Course Outcome Statements
AEC 401.1	Find the characteristic equation, eigenvalues and corresponding eigenvectors of a given matrix and are able to solve problems on functions of matrices.
AEC 401.2	Become familiar with the Green's, Stoke's and Gauss-divergence theorem to give a physical interpretation of the vector field & its applications.
AEC 401.3	Understand the importance of nonlinear optimization and are able to optimise (max / min) problems of Non Linear Programming.
AEC 401.4	Gain basic knowledge of probability distributions & demonstrate an ability to identify, formulate & solve problems
AEC 401.5	For Sampling Theory student will choose the appropriate test and determine whether a given hypothesis is accepted or not.
AEC 401.6	Understand application of statistical concepts and linear algebra for solving different engineering problems.

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: IV   Course Name: Fluid Mechanics

The students will be able to:

Course Code	Course Outcome Statements
AEC 402.1	Understand different properties of fluid, various types of fluid, their flows and principles of fluid flow.
AEC 402.2	Solve fluid flow problem using Lagrangian and Euler approach.
AEC 402.3	Analyse the types of flows and feasibility of flow using fundamental of fluid kinematic.
AEC 402.4	Design and develop various pipe systems as per requirements.
AEC 402.5	Understand the various fundamental of flow over bodies and apply them to solve the problem on the marine system and aeronautical system.
AEC 402.6	Fabricate fluid system for various applications or analyse fluid system using modelling and analysing tools through mini project.

Class/Sem: IV   Course Name: Industrial Electronics

The students will be able to:

Course Code	Course Outcome Statements
AEC 403.1	Understand the working of semiconductor devices.
AEC 403.2	Understand the applications of power electronic converters
AEC 403.3	Understand concept of OPAMP and 555 timers.
AEC 403.4	Demonstrate the knowledge of basic functioning of digital circuits
AEC 403.5	Demonstrate the knowledge of basic functioning of microcontroller based system
AEC 403.6	Understand speed-torque characteristics of electrical machines

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: IV   Course Name: Production Process II

The students will be able to:

Course Code	Course Outcome Statements
AEC 404.1	To have good knowledge of how to perform different metal removal process on different machines.
AEC 404.2	Develop and execute CNC machining programs to cut parts on a milling machine.
AEC 404.3	Compute force components of interest that are associated with processes that are performed by mechanical means & stresses and strains, both in-process and residual, for mechanical, thermal and thermo-mechanical processes.
AEC 404.4	Design a single, multiple point cutting and press tool and study the effect of coolants in it.
AEC 404.5	Evaluate the aspects of cutting Tools and Economics of machining.
AEC 404.6	To have knowledge on surface finish, cutting tool materials, coolants.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: IV   Course Name: Kinematics of Machinery

The students will be able to:

Course Code	Course Outcome Statements
AEC 405.1	Understand and explain various components of mechanisms.
AEC 405.2	Construct and apply mechanisms to provide specific motion.
AEC 405.3	Draw using various methods velocity and acceleration diagrams of mechanisms.
AEC 405.4	Construct CAM profile illustrating displacement, velocity, acceleration and jerk for the specific follower motion.
AEC 405.5	Define and apply different Flexible connectors.
AEC 405.6	Define different Terms used in gears and application of different Gears in power Transmission.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: IV   Course Name: Data Base and Information Retrieval

The students will be able to:

Course Code	Course Outcome Statements
AEL 401.1	To understand the needs of database management system and information retrieval system (DBMS and IR)
AEL 401.2	To conceptualize and analyse different data models and schemas in DBMS
AEL 401.3	To understand needs of database processing and learn techniques for controlling the consequences of concurrent data access
AEL 401.4	To apply and design graphical user interface techniques for retrieve the information from the database
AEL 401.5	To apply and synthesis the complex queries of SQL on DBMS
AEL 401.6	To understand the functional depended and design the database using different data models (ER Model, Relational Model)

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: IV   Course Name: Machine shop Practice II

The students will be able to:

Course Code	Course Outcome Statements
AEL 405.1	Acquire operating skills of various machines like lathe, shaper, milling etc.
AEL 405.2	Perform and conversant of operational function of plain turning, taper turning and screw cutting etc. on lathe machine
AEL 405.3.	Perform machining operations on lathe, shaper and milling machine
AEL 405.4	Plan the process requirements of engineering products, machines, materials requirements, Tools required in the process
AEL 405.5	Optimize the machining process operating parameters of speed, feed and depth of cut to produce customers desired output.
AEL 405.6	Identify the job and list out the operations required to produce the engineering products,

SEM -V

Mahatma Education Society's

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: V   Course Name: Internal Combustion Engines

The students will be able to:

Course Code	Course Outcome Statements
AEC 501.1	Understanding difference between SI & CI engine
AEC 501.2	Understanding the working of engine & its Components
AEC 501.3	Analyse engine performance characteristics
AEC 501.4	Perform exhaust gas analysis & its effect on environment
AEC 501.5	Identify alternative fuel & its effect
AEC 501.6	To Understand & analyse recent development in IC Engine

Mahatma Education Society's

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: V   Course Name: Mechanical Measurement and Control

The students will be able to:

Course Code	Course Outcome Statements
AEC 502.1	Classify various types of static characteristics and types of errors occurring in the system
AEC 502.2	Classify, and select proper measuring instrument for Linear and angular displacement
AEC 502.3	Classify and select proper measuring instrument for pressure and temperature measurement
AEC 502.4	Design mathematical model of system/process for standard input responses.
AEC 502.5	Analyse error and differentiate various types of control systems and time domain specifications
AEC 502.6	Analyse the problems associated with stability.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: V   Course Name: Heat Transfer

The students will be able to:

Course Code	Course Outcome Statements
AEC 503.1	Understand and differentiate between conduction, convection and radiation three modes of heat transfer.
AEC 503.2	Apply various principles of heat transfer to solve problems on thermal systems using differential analysis or electrical analogy.
AEC 503.3	Understand dimensional and graphing similarities in heat transfer analysis and its use to solve heat transfer systems.
AEC 503.4	Distinguish and solve real time problems using steady state and transient heat transfer analysis.
AEC 503.5	Differentiate between various types of heat exchangers and can evaluate, compare and improve effectiveness of heat exchangers.
AEC 503.6	Understand mechanism of boiling and condensation.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: V   Course Name: Automotive System

The students will be able to:

Course Code	Course Outcome Statements
AEC 504.1	Identify Automobile systems and subsystems
AEC 504.1	Dismantle and assemble Clutch
AEC 504.3	Dismantle and assemble Gearbox
AEC 504.4	Dismantle and assemble Propeller shaft
AEC 504.5	Dismantle and assemble Steering Gearbox
AEC 504.6	Dismantle and assemble Differential

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: V   Course Name: Business Communication and Ethics

The students will be able to:

Course Code	Course Outcome Statements
AEL 506.1	To understand the business communication process, ethics and its effective application.
AEL 506.2	Synthesize and apply report writing, proposal writing and the project management skills.
AEL 506.3	Apply appropriate analytical skills in project report presentations, group discussions and to communicate effectively in various formal settings.
AEL 506.4	To understand and learn various roles in group and organization understanding the interpersonal skills like emotional intelligence, leadership, negotiation, time management and team work.
AEL 506.5	Participate and achieve success in competitive exams and campus placements
AEL 506.6	To enhance social skills, business perspectives and inculcate employment skills.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: V   Course Name: Press Tool Design

The students will be able to:

Course Code	Course Outcome Statements
AEDLO5011.1	Understand various press working operations for mass production of sheet metal parts.
AEDLO5011.2	Identify press tool requirements to build concepts pertaining to design of press tools.
AEDLO5011.3	Prepare working drawings and setup for economic production of sheet metal components.
AEDLO5011.4	Select suitable materials for different elements of press tools.
AEDLO5011.5	Illustrate the principles and blank development in bent & drawn components.
AEDLO5011.6	Elaborate failure mechanisms of pressed components, safety aspects and automation in press working.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: V   Course Name: Machining Sciences And Tool Design

The students will be able to:

Course Code	Course Outcome Statements
AEDLO5012.1	Calculate the values of various forces involved in the machining operations.
AEDLO5012.2	Design various single and multipoint cutting tools
AEDLO5012.3	Analyse heat generation in machining operation and coolant operations.
AEDLO5012.4	Illustrate the properties of various cutting tool materials and hence select an appropriate tool material for particular machining application.
AEDLO5012.5	Demonstrate the inter-relationship between cutting parameters and machining performance measures like power requirement, cutting time, tool life and surface finish.
AEDLO5012.6	Analyse economics of machining operations

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: V   Course Name: Design of Jigs and Fixtures

The students will be able to:

Course Code	Course Outcome Statements
AEDLO5013.1	Write methodically, the sequence of operations of simple work-piece.
AEDLO5013.2	Identify and select locating and clamping points on work piece.
AEDLO5013.3	Demonstrate construction of drill jig.
AEDLO5013.4	Illustrate construction of milling fixture.
AEDLO5013.5	Identify appropriate combination of tools, jigs and fixture, suitable for a particular machining operation.
AEDLO5013.6	Design assembly of Jigs and fixtures on simple work-piece

SEM -VI

Mahatma Education Society's

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VI   Course Name: Chassis Body Engineering

The students will be able to:

Course Code	Course Outcome Statements
AEC601.1	Illustrate different types of Vehicle structures
AEC601.2	Comprehend various loads acting on vehicle body.
AEC601.3	Illustrate different vehicle body styles.
AEC601.4	Classify, different materials related to vehicle body.
AEC601.5	Discuss Aerodynamic concept related to vehicle body
AEC601.6	Illustrate importance of thin walled structures in vehicle body elements.

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VI   Course Name: Machine Design I

The students will be able to:

Course Code	Course Outcome Statements
AEC 602.1	Should be able to Understand various design consideration.
AEC 602.2	Should be able to Study and apply principles of machine design.
AEC 602.3.	Should be able to Design machine elements on the basis of strength, and economic criteria.
AEC 602.4	Should be able to Check (Validate results) design with the help of design software.
AEC 602.5	Should be able to prepare production drawing.
AEC 602.6	Should be able to Use design data books and various standard codes of practices.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VI   Course Name: Finite Element Analysis

The students will be able to:

Course Code	Course Outcome Statements
AEC 603.1	Students should be able to solve the complex field problems using various differential equations.
AEC 603.2	Students should be able to formulate mathematical model as well as FEA model for the various engineering problems.
AEC 603.3	Student should be able to understand the various aspects of FEA like elements, nodes, discretization variables boundary conditions, formulation and stiffness matrix.
AEC 603.4	Student should be able to solve the various 1D engineering problems like structural analysis, heat transfer, fluid flow, trusses and beams by using FEA method and FEA software
AEC 603.5	Student should be able to solve the 2D finite element problem using the concept like Jacobean matrix, CST elements and analysis by using FE software
AEC 603.6	Student should be able to evaluate the various mechanical components and to check their feasibility analytically as well as using FEA software.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VI   Course Name: Mechanical Vibrations

The students will be able to:

Course Code	Course Outcome Statements
AEC 604.1	understand the basic concepts and principles of vibration
AEC 604.2	Develop and analyse the differential equation of motion for vibratory systems analytically and also using MAT LAB
AEC 604.3	Estimate natural frequency of single degree and multi degree systems
AEC 604.4	Design and evaluate suspension system using concepts of vibration isolation and transmissibility
AEC 604.5	Understand the principles of vibration measuring instruments and use it to measure vibration using seismic equipment's
AEC 604.6	Solve the problems of rotor dynamics system and balancing of masses

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VI   Course Name: Mechatronics

The students will be able to:

Course Code	Course Outcome Statements
AEDLO6O2l..1	Identify the suitable sensor and actuator for a Mechatronics system
AEDLOO2l..2	Select suitable logic controls
AEDLO6O2l.3	Analyse continuous control logics for standard input conditions
AEDLO6O2l.4	Develop ladder logic programming
AEDLO6O2l.5	Design hydraulic/pneumatic circuits
AEDLO6O2l.6	Design a Mechatronics system

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VI   Course Name: Robotics

The students will be able to:

Course Code	Course Outcome Statements
AEDLO6O22.1	Demonstrate the basic functioning of a robot
AEDLO6O22.2	Identify various components of robots
AEDLO6O22.3	Carryout kinematic analysis, workspace analysis, and trajectory planning for a robot
AEDLO6O22.4	Identify suitable sensors/actuators for robot
AEDLO6O22.5	Select an appropriate robot for given industrial inspection and material handling systems
AEDLO6O22.6	Illustrate various aspects of a robot as a humanoid

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VI   Course Name: Automotive Materials

The students will be able to:

Course Code	Course Outcome Statements
AEDLO6O23.1	Identify the need for new alternative materials to improve efficiency of automobiles
AEDLO6O23.2	Distinguish between the materials requirements for various types of automobiles
AEDLO6O23.3	Estimate the role of different classes of materials for various automotive systems
AEDLO6O23.4	Select proper material while designing any automotive subsystem
AEDLO6O23.5	Select advanced materials for specific automobile components
AEDLO6O23.6	Comprehend Ashby charts for raptorial selection

SEM -VII

Mahatma Education Society's

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VII   Course Name: Chassis Body Engineering

The students will be able to:

Course Code	Course Outcome Statements
AEC701.1	Illustrate different types of Vehicle structures
AEC701.2	Comprehend various loads acting on vehicle body.
AEC701.3	Illustrate different vehicle body styles.
AEC701.4	Classify, different materials related to vehicle body.
AEC701.5	Discuss Aerodynamic concept related to vehicle body
AEC701.6	Illustrate importance of thin walled structures in vehicle body elements.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VII   Course Name: CAD/CAM/CAE

The students will be able to:

Course Code	Course Outcome Statements
AEC 702.1	Use techniques of computer graphics for geometric modelling and write equations for curves also solve problems based upon it.
AEC 702.2	Develop mathematical representation and object oriented programs for 2D and 3D transformations.
AEC 702.3	Create part programs for NC, CNC machines and use it.
AEC 702.4	Model and analyse real life applications using CAE tools.
AEC 702.5	Apply rapid prototyping and tooling concepts in product design and manufacturing
AEC 702.6	Understand and apply concepts of CIM.

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VII   Course Name: Automotive Design

The students will be able to:

Course Code	Course Outcome Statements
AEC 703.1	Select and design specific gear pairs for given conditions
AEC 703.2	Design Gearbox
AEC 703.3	Design various Engine components
AEC 703.4	Design clutch / brakes with drive lines.
AEC 703.5	Select standard components such as Bearings,/belts.
AEC 703.5	Study and select proper material

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VII   Course Name: Product Design and Development

The students will be able to:

Course Code	Course Outcome Statements
AEC704.1	Understand fundamental product design concepts
AEC704.2	Know the concept of embodiment design and basic of design of experiments
AEC704.3	Knowledge of basic criteria for manufacturing and assembly
AEC704.4	Understand product design methodologies
AEC704.5	Know Psychological & Physiological considerations.
AEC704.6	Understand product design needs and issues in industry

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VII   Course Name: Transportation on Management Motor Industry

The students will be able to:

Course Code	Course Outcome Statements
AEE 7017.1	Demonstrate transport management systems
AEE 7017.2	Implement advance techniques in traffic management
AEE 7017.3	Demonstrate understanding of motor vehicle act.
AEE 7017.4	Interpret about vehicle insurance and taxation.
AEE 7017.5	Illustrate the knowledge of Passenger transport operation.
AEE 7017.6	Illustrate the knowledge of Goods transport operation

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VII   Course Name: Project I

The students will be able to:

Course Code	Course Outcome Statements
AEP 701.1	Able to identify the conceptual problems factors and their levels in industries.
AEP 701.2	Able to formulate the real life problems factors and theirs levels in the form of mathematical model.
AEP 701.3	Able to plan and establish real life problems in the form of experimental setup.
AEP 701.4	Able to simulate and analyse the real life problems using the mathematical model and software
AEP 701.5	Able to prepare the report contents of conceptual problems factors, factor levels, academic literature, problem formulation, problem statement, factor analysis and conclusion & suggestion
AEP 701.6	Able to prepare the presentation of project contents details in brief using MS-office Power point

SEM -VIII

Mahatma Education Society's

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VIII   Course Name: Autotronics

The students will be able to:

Course Code	Course Outcome Statements
AEC 801.1	Illustrate working of different batteries and fuel cells used in automobiles.
AEC 801.1	Demonstrate working of charging system used in automobiles.
AEC 801.3	Illustrate working of starting system and drives used in automobiles.
AEC 801.4	Draw and interpret Lighting and wiring systems in automobile.
AEC 801.5	Comprehend working of different sensors and actuators used in automobiles.
AEC 801.6	Elaborate working of Electronic control module (ECM) with its importance in vehicle operation

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VIII   Course Name: Vehicle Dynamics

The students will be able to:

Course Code	Course Outcome Statements
AEC 802.1	Analyse the vehicle directional stability.
AEC 802.1	Enumerate the suspension systems, tire dynamics & directional stability of the vehicle.
AEC 802.3	Develop physical and mathematical model to predict the dynamics response of vehicles.
AEC 802.4	Demonstrate the ride characteristic of the vehicle...
AEC 802.5	Analyse the vehicle roll behaviour
AEC 802.6	Comprehend the various trends in Vehicle Dynamics.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VIII   Course Name: Vehicle Maintenance

The students will be able to:

Course Code	Course Outcome Statements
AEC 803.1	Demonstrate the maintenance procedure for automotive Engine and prepare checklist.
AEC 803.1	Comprehend of the operation of OBD for diagnosing various faults.
AEC 803.3	Identify the trouble diagnosis procedure for steering and suspension system.
AEC 803.4	Illustrate the trouble diagnosis procedure for electrical systems like Battery, starting Systems etc.
AEC 803.5	Illustrate trouble diagnosis procedure for lubrication and fuel delivery system etc.
AEC 803.6	Illustrate trouble diagnosis procedure for heating system of automobile.

Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VIII   Course Name: Vehicle Safety

The students will be able to:

Course Code	Course Outcome Statements
AEE8O22.1	Comprehend Vehicle design from safety point of view.
AEE8O22.1	Apply concepts of accident reconstruction analysis in real world.
AEE8O22.3	Enumerate interrelation ship among occupant, restraint systems and vehicles in accidents.
AEE8O22.4	Illustrate role and significance of seat in Rear crash safety
AEE8O22.5	Demonstrate different active and passive safety systems available in vehicles
AEE8O22.6	Illustrate various standards related to vehicle safety.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Automobile Engineering

Class/Sem: VIII   Course Name: Project II

The students will be able to:

Course Code	Course Outcome Statements
AEP 802.1	Able to identify the conceptual problems factors and their levels in industries.
AEP 802.2	Able to formulate the real life problems factors and theirs levels in the form of mathematical model.
AEP 802.3	Able to plan and establish real life problems in the form of experimental setup.
AEP 802.4	Able to simulate and analyse the real life problems using the mathematical model and software
AEP 802.5	Able to prepare the report contents of conceptual problems factors, factor levels, academic literature, problem formulation, problem statement, factor analysis and conclusion & suggestion
AEP 802.6	Able to prepare the presentation of project contents details in brief using MS-office Power point