ER.PERUMAL MANIMEKALAI COLLEGE OF ENGINEERING

DEPARTMENT OF MECHANICAL ENGINEERING

REGULATION: 2017

S.NO	COURSE NAME	COURSE OUT COMES	
1	C101 -Communicative English	C101.1	Understand the basics of English Grammar
		C101.2	Able to read articles in Magazines and News papers
		C101.3	Participate effectively and confidently in Technical discussions and conversations
		C101.4	Able to write Technical, Personal letters and E - Mails
		C101.5	Able to write Technical essays and write-ups.
2	C102 - Engineering Mathematics – I	C102.1	Use limit definition and rules of differentiation to differentiate functions.
		C102.2	Apply differentiation to solve maxima and minima problems
		C102.3	Evaluate integral problems by using techniques of integration.
		C102.4	Apply integration concepts to compute multiple integrals.
		C102.5	Apply various techniques in solving differential equations.
3	C103 - Engineering Physics	C103.1	Gain knowledge on the properties of matter and its application.
		C103.2	Acquire knowledge on the concepts of waves and optical devices and their application in fibre optics.
		C103.3	Explain the thermal properties of materials like thermal conductivity and thermal expansion and its application in heat exchangers.
		C103.4	Understand the concepts of quantum theory and its application in tunneling microscopes.
		C103.5	Able to classify various crystal structures, parameters and defects.
4	C104 - Engineering Chemistry	C104.1	Understand the types of water and water treatment techniques.
		C104.2	Utilize the various adsorbent in industries.
		C104.3	Classify the types of alloys and understand the component present in the alloys.
		C104.4	Explain the types of fuels and manufacturing of secondary fuels.
		C104.5	Illustrate the types of energy resources.
	&	C105.1	Develop algorithmic solutions for simple computational problems

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5	C105 - Problem Solving Python Programming	C105.2	Demonstrate programs using simple Python statements and expressions
		C105.3	Explain control flow and functions concept in Python for solving problems
		C105.4	Use Python data structures – lists, tuples & dictionaries for representing compound data
		C105.5	Explain files, exception, modules and packages in Python for solving problems
6	C106 - Engineering Graphics	C106.1	Discuss about conics and orthographic views of engineering components
		C106.2	Draw the projection of points, lines and planes
		C106.3	Classify solids and projection of solids at different positions
		C106.4	Show sectioned view of solids and development of surface
		C106.5	Draw isometric projection and perspective views of an object/solid
7	C107 - Problem Solving and Python Programming Laboratory	C107.1	Develop solutions to simple computational problems using Python programs
		C107.2	Solve problems using conditionals and loops in Python.
		C107.3	Develop Python programs by defining functions and calling them.
		C107.4	Use Python lists, tuples & dictionaries for representing compound data.
		C107.5	Develop Python programs using files.
8	C108 - Engineering Physics & Chemistry Lab	C108.1	Analyze the various modulus of elasticity of different types of materials.
		C108.2	Able to find the velocity of ultrasonic waves in different liquid.
		C108.3	Understand the various parameter affecting the thermal conductivity of poor conductor
		C108.4	Understand the concept of Laser and its diffraction for different usage
		C108.5	Analyze the acceptance angle and numerical aperture of optical fibers.
		C108.6	Understand the method of determine the strength of a pure acid and mixture of acids by using conductivity meter.
		C108.7	Understand the method of estimate the amount of iron content present in a given solution by means of potentiometric titration.
	English	C109.1	Read technical texts and write area specific texts effortlessly
		C109.2	Write formal letters / emails using vocabulary.

S.NO	COURSE NAME	COURSE OUT COMES	
9	C109 - Technical	C109.3	Speak appropriately and effectively in varies formal and informal contexts.
		C109.4	Prepare reports and winning job applications.
		C109.5	Listen and comprehend lectures in the area of specialization successfully.
10	C110 - Engineering Mathematics - II	C110.1	Understand the Concepts of Diagonalization of matrices.
		C110.2	Understand the concepts of Vector Calculus and their applications.
		C110.3	Interpret the Concepts of analytic functions and Conformal mapping.
		C110.4	Understand the integration concepts on Complex integration
		C110.5	Demonstrate the concepts of Laplace transformations and their applications
11	C111 - Materials Science	C111.1	Understand the various phase diagrams and their applications.
		C111.2	Acquire knowledge on Fe-Fe3C phase diagram, various microstructures and alloys.
		C111.3	Acquire the knowledge on mechanical properties of materials and their measurement
		C111.4	Understand the properties on magnetic, dielectric and superconducting properties of materials.
		C111.5	Understand the basics of ceramics, composites and nano materials
12	C112 - Basic Electrical, Electronics and Instrumentation Engineering	C112.1	Applying the fundamentals ofDC electric circuits and theorems
		C112.2	Applying the fundamentals ofAC electric circuits and wiring
		C112.3	Understanding the concepts of electrical machines
		C112.4	Understand the concepts of various electronic devices
		C112.5	Acquire knowledge on various electrical measuring instruments
13	C113 - Environmental Science & Engg	C113.1	Understand the types, characteristics of Ecosystem & Biodiversity.
		C113.2	Understand the types of pollution & its causes.
		C113.3	Understand the importance of Natural Resources.
		C113.4	Understand the Environmental problems.
		C113.5	Explain the importance of women, child education and HIV /AIDS.

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14	C114 - Engineering Mechanics	C114.1	Illustrate the vectorial and scalar representation of forces and moments.
		C114.2	Analyse the rigid body in equilibrium.
		C114.3	Evaluate the properties of surfaces and solids.
		C114.4	Calculate dynamic forces exerted in rigid body.
		C114.5	Determine the friction and the effects by the laws of friction.
15	C115 - Engineering Practices Laboratory	C115.1	Apply the knowledge of pipeline connections to household fittings and industrial buildings.
		C115.2	Prepare the different joints in roofs, doors, windows and furniture.
		C115.3	Perform step turning operation in a lathe.
		C115.4	Perform the various welding processes and know about its applications.
		C115.5	Produce a funnel using sheet metal.
16	C116 - Basic Electrical, Electronics and Instrumentation Engineering Lab	C116.1	Able to determine the performance characteristic of different electrical machines
		C116.2	Design simple electric circuits using basic laws and theorems
		C116.3	Design simple electronics circuits using diodes and transistors
		C116.4	Understand the concepts of measurement of AC signals
		C116.5	Analysis the measurements of displacement and temperature
17	C201 - Transforms and Partial Differential Equations	C201.1	Demonstrate the effective mathematical tools used for Solving partial differential equations
		C201.2	Illustrate the Fourier series which is central to many applications in engineering.
		C201.3	Apply the applications of partial differential equations for boundary value problems using Fourier series analysis.
		C201.4	Acquire Fourier transform techniques used in wide variety of situations.
		C201.5	Explain Z transform techniques for discrete time systems and solve difference equations using Z transform.
	hermodynamics	C202.1	Enlighten the fundamentals in various thermodynamic systems, formulate, analyze problems pertaining to various thermal components, and developing solutions.
		C202.2	Provide in-depth knowledge about second law statements, evaluate solutions pertaining to availability and influence of entropy with environment.

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18	C202 - Engineering T	C202.3	Explain the properties of pure substances, solve complex power generation cycle problems and impart research knowledge in all thermodynamic cycles.
		C202.4	Ensuring formulation in various complex thermodynamics relations to understand the properties of Ideal gas and real gas
		C202.5	Enhancing the basics of psychrometry to design and develop research oriented solution.
19	C203 - Fluid Mechanics and Machinery	C203.1	Apply the mathematical knowledge and engineering fundamentals on the Characteristics of fluid flow and properties of fluids.
		C203.2	Identify the engineering problems and design system components of fluid flow through circular conduits.
		C203.3	Identify and formulate parameters of fluid flow by research based dimensional analysis.
		C203.4	Apply appropriate techniques and use the theoretical knowledge of the fluid flow in various pumps
		C203.5	Apply the fundamental knowledge of mathematics, science and engineering for the solution of complex engineering problems in turbines.
20	C204 - Manufacturing Technology - I	C204.1	Provide with the basic concepts of engineering fundamentals on various molding and casting processes, apply appropriate techniques by to obtain defect free casting.
		C204.2	Acquire the basic knowledge, engineering fundamentals of metal joining processes and identify the suitable welding techniques and apply them to the specific needs with safe environmental conditions in welding industries.
		C204.3	Explain the basic engineering fundamentals of various metal forming processes, equipments, design of forming dies and select the suitable forming techniques.
		C204.4	Identify the basic characteristics of sheet metals and its forming processes, apply appropriate techniques and resources to fabricate sheet metal components.
		C204.5	Illustrate the basics of plastics and apply suitable methods, resources, modern engineering tools in manufacture of plastic components
21	C207 - Electrical Drives and Controls	C205.1	Understanding the heating and cooling curve and study the various classes of duty and Selection of power rating
		C205.2	Understand the performance characteristics of various electric motors and its braking methods
		C205.3	Understandthe Starting methods of DC &AC motors
		C205.4	Understand the Concepts of various speed control methods in DC motors
		C205.5	Understand the Concepts of variousspeed control methodsin AC motors
	ogy Laboratory - I	C206.1	Apply norms of the engineering practice to gain hands-on experience on lathe machine to perform Taper turning, External Thread cutting operations by using lathe machine.
		C206.2	Apply norms of the engineering practice to gain experience in lathe machine to perform Internal Boring & Internal Thread Cutting operations by using lathe machine.

S.NO	COURSE NAME	COURSE OUT COMES	
22	C206 - Manufacturing Technol	C206.3	Apply the engineering knowledge to turn safely and accurately an exercise to print specifications using many of the set-ups to perform Eccentric Turning, Knurling and parting operations associated with the lathe.
		C206.4	Apply knowledge, norms of the engineering practice and appropriate techniques to get hands on experience on Shaping machine.
		C206.5	Apply norms of the engineering practice to gain hands-on experience on machining of materials using milling machine.
23	C207 - Computer Aided Machine Drawing	C207.1	Sketch simple figures with title block using AutoCAD software commands.
		C207.2	Sketch curves like parabola, spiral and involute of square & circle and draw the orthographic projection of simple solids.
		C207.3	Prepare orthographic projection of simple machine parts and draw a plan of residential building.
		C207.4	Sketch simple steel truss and sectional views of simple solids.
		C207.5	Re Create Part Drawing, Sectional Views and Assembly Drawings as per Standards
24	C208 - Electrical Engineering Laboratory	C208.1	Understanding the heating and cooling curve and study the various classes of duty and Selection of power rating
		C208.2	Understand the performance characteristics of various electric motors and its braking methods
		C208.3	Understandthe Starting methods of DC &AC motors
		C208.4	Understand the Concepts of various speed control methods in DC motors
		C208.5	Understand the Concepts of variousspeed control methodsin AC motors
25	C209 - Interpersonal Skills / Listening and Speaking	C209.1	Listen and respond appropriately
		C209.2	Partcipate in group Discussions
		C209.3	Make effective Presentations
		C209.4	Partcipate confidently and appropriately in Conservation in both formal and informal
26	cs and Numerical Methods	C210.1	Apply the concept of testing of hypothesis for small and large samples in real life problems
		C210.2	Illustrate the complex engineering problems by using the modern tools in Design of Experiments
		C210.3	Understand the basic concepts and numerical technques for solving algebric and transcendental equations

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	C210 - Statisti	C210.4	Interpret the various types of interpolation, numerical differentiation and integration models.
		C210.5	Utilize the numerical techniques for solving initial value problems.
27	C211 - Kinematics of Machinery	C211.1	Explainthe engineering knowledge on the basic components and layout of linkages in the assembly of a machine, so as to identify and select suitable linkages as well as mechanisms for various engineering applications.
		C211.2	Explain the assembly with respect to the displacement, velocity, and acceleration at any point in a link of a mechanism.
		C211.3	Illustrate the motion resulting from a specified set of linkages, design few linkage mechanisms and CAM mechanisms for specified output motions.
		C211.4	Illustrate the basic concepts of toothed gearing and kinematics of gear trains and the effects of friction in motion transmission and in machine components.
		C211.5	Demonstrate the principles of friction in machine elements. Examine the concept of vibratory systems and their analysis in the domain of forced vibration.
28	C212 - Manufacturing Technology– II	C212.1	Acquire the basic machining concepts on the mechanics of chip formation in single point cutting tool.
		C212.2	Apply the knowledge gained in the working standards of turning machines for manufacture of products to serve the society.
		C212.3	Impart the ideas gained in shaping, milling and gear cutting machines to make finished products to satisfy the ethics of engineering norms.
		C212.4	Acquire the fundamentals involved in the abrasive and broaching processes along with the specifications with types, selection.
		C212.5	Demonstrate the simple CNC code, both manually and using a simple CAD/CAM system and use it to produce several components while working in groups.
29	C213 - Engineering Metallurgy	C213.1	Apply the knowledge of mathematics, science, and engineering fundamentals of alloys and Phase diagram of various materials and the classification of micro structure in steel and cast iron.
		C213.2	Acquire the knowledge of engineering fundamentals for heat treatment process. Identify, formulate, analysis and apply appropriate techniques used in all the heat treatment process with an understanding of its limitations.
		C213.3	Illustrate the engineering knowledge of ferrous and non-ferrous metal and its alloys. Identify, formulate the appropriate techniques and engineering application of ferrous and non-ferrous metal and alloys.
		C213.4	Illustrate the engineering knowledge of polymers, ceramics and composites. Identify, formulate the appropriate techniques and engineering application of polymers, ceramics and composites.
		C213.5	Illustrate the engineering knowledge of mechanical properties and its deformation mechanisms.

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30	C214 - Strength of Materials for Mechanical Engineers	C214.1	Apply the knowledge of mathematics, basic theory of science, fundamental principles to attain the solution of complex engineering problems on deformation of materials.
		C214.2	Identify, formulate to perform the stress analysis of a beam under axial loading, torsion, transverse loading to provide valid conclusions.
		C214.3	Apply the Torsion formulation stresses and deformation in circular and hollows shafts to analyze complex engineering problems.
		C214.4	Illustrate the fundamental concepts of deflection of beam by various methods.
		C214.5	Apply reasoning informed by the contextual knowledge to perform stress and strain deformations in Thin , Thick Cylinders, spherical shells
31	C215 - Thermal Engineering - 1	C215.1	Apply Thermodynamics Concept to different air standard cycle and solve problem
		C215.2	Solve problem in single stage and multi stage air compressor
		C215.3	Explain the functioning and feature of IC Engine, components and auxiliaries
		C215.4	Calculate performance parameter of IC Engine
		C215.5	Explain the flow in gas turbines and solve problems
32	C216 - Manufacturing Technology Laboratory–II	C216.1	Apply engineering knowledge, hands on experience to manufacture engineering components like Contour milling using vertical milling machine
		C216.2	Apply the engineering norms to produce engineering comonents like Spur, Helical Gear by using milling machine
		C216.3	Apply knowledge, norms of the engineering practice and appropriate techniques to get hands on experience on grinding machine.
		C216.4	Illustrate the importance of Measurement of cutting forces in Milling / Turning Process
		C216.5	Apply norms of the engineering practice to gain hands-on experience in CNC Part Programming and Machining
33	C217 - Strength of Materials and Fluid Mechanics Machinery Laboratory	C217.1	Ability to Perform Tension, Torsion, Hardness, Compression and Deformation test on Solid Materials
		C217.2	Use the measurements equipment for flow measurements
		C217.3	Perform test on different fluid machinery
		C217.4	Identify the solutions for turbine related problems and to meet the specified needs with appropriate consideration for fluid flow in turbines.
34	C218 - Advanced Reading and Writing	C218.1	Write the different types of Essays
		C218.2	Write Winning job Applications
		C218.3	Read and evaluate texts Critically
		C218.4	Display critical thinking in various professionals contexts
	I	C219.1	To understand the basic concepts of nozzles and to solve the friction losses in steam nozzles and capable of designing appropriate turbine as per the technological change

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35	C301 - Thermal Engineering - I	C219.2	Explain the functioning and features of different types of boilers and auxiliaries and calculate the performance parameters
		C301.1	Analyze the flow of steam turbines, and draw the velocity diagrams for steam turbine and solve problems
		C301.2	To summarize the concept of cogeneration, working features of heat pumps and heat exchangers
		C301.3	Demonstrate the various refrigeration and air conditioning cycles suited to working environmental conditions and ability to solve complex issues associated to modern techniques
36	C302 - Design of Machine Elements	C302.1	Evaluate The Engineering Problems Using Science For Understanding The Design Process And Select The Appropriate Material Based On Mechanical Properties
		C302.2	Demonstrate The Design Knowledge On Solid And Hollow Components, Shafts And Couplings
		C302.3	Provide An Engineering Knowledge On The Specific Engineering Area In Temporary And Permanent Joint
		C302.4	Apply Engineering Design Knowledge On Energy Storing Elements And Engine Components
		C302.5	Evaluate Engineering Knowledge And Analyze Complex Problems Assosiated With Design So As To Develop A Component Of Bearing In Machines
37	C303 - Metrology and Measurements	C303.1	Apply engineering knowledge, standard and necessary appropriate techniques used in measuring instruments for the specific requirements like sensitivity, accuracy and precision, etc.
		C303.2	Illustrate and understanding the engineering application of different measuring instruments for linear, angular, form and roughness measurements.
		C303.3	Identify the advanced measuring instruments and concepts of Machine Vision System elements and Applications.
		C303.4	Apply modern engineering techniques and software's in the measurement of linear, angular and form using in Laser Interferometer and CMM.
		C303.5	Explain engineering knowledge on different measuring equipments for the measurement of Power, Flow and Temperature.
38	Dynamics of Machines	C304.1	Identify, evaluate & apply the available static force analysis and dynamic force analysis of dynamics mechanisms.
		C304.2	Explain, formulate & calculate the Static and dynamic balancing in multi-cylinder inline, V-engines
		C304.3	Interpret, Analyse & synthesis, the concept of vibratory systems in the domain of free vibration.

S.NO	COURSE NAME	COURSE OUT COMES	
	C304 - I	C304.4	Examine, create & analyse the concept of vibratory systems in the domain of forced vibration .
		C304.5	Comprehend and apply the principles of governors & gyroscopes and their applications .
39		C305.1	Understanding the physics of solar radiation
		C305.2	Ability to classify the solar energy collectors and methodologies of storing solar energy
		C305.3	Knowledge in applying solar energy in useful way
		C305.4	Knowledge in wind energy and biomass with its economic aspects
		C305.5	Knowledge in capturing and applying other forms of energy sources like wind, biogas and geothermal energies
40	C306 - Kinematics & Dynamics Laboratory	C306.1	Evaluate and determine the velocity ratios of gear trains applicable in various form of complex dynamics engineering applications
		C306.2	Determine the static and dynamic values of various types of vibration systems with appropriate consideration for safety and environmental considerations.
		C306.3	calculate and determine the gyroscopic effect by means of system analysis and interpretation of data and synthesis of the parameters to provide valid design conclusions
		C306.4	Construct ,conduct and determine parameter values of various types of governors in tune with social responsibility to avoid over speed and fuel economy resulting in the green tribunal considerations
		C306.5	Evaluate , design and generate cam profiles and related standards of any cam system applicable in standard automation for safety measurements.
41	C308 - Thermal Engineering Laboratory	C307.1	Apply the knowledge of engineering fundamentals, advanced topics pertaining to the modes of heat transfer mechanism through conduction, convection and radiation in various mediums.
		C307.2	Identify, formulate and analyze complex engineering problems by heat conduction charts in solving two dimensional and three-dimensional heat conduction problems
		C308.1	Explain and analyze heat exchanger performance by using the method of log mean temperature difference, method of heat exchanger effectiveness and apply principles of heat transfer to develop mathematical models for uniform and non-uniform fins.
		C308.2	Evaluate the radiative heat exchange between surfaces and in diffuse,understand the mechanisms involved in radiation heat transfer, evaluate various law of radiation and radiation exchange between two mediums.
		C308.3	provide on oppournity the refrigeration cycles, methods for improving performance and design an air conditioning system using cooling loads by applying the knowledge of engineering fundamentals to understand vapour compression, absorption refrigeration system and components of refrigeration systems.

S.NO	COURSE NAME	COURSE OUT COMES	
42	C309 - Metrology and Measurements Laboratory	C309.1	Apply the knowledge of mathematics, science and engineering fundamentals to obtain the measurement from measuring instruments like sine bar, vernier height gauge and gear tooth vernier.
		C309.2	Evaluate and interpretation of data, and synthesis of the information to provide by the measuring instrument to be compare with the standard information and give the valid conclusions like electrical comparators and mechanical comparator etc..
		C309.3	Understand the design system components or process of the measuring instrument to measure the specific needs in engineering products like straightness, flatness by using auto collimator.
		C309.4	Create, select, and apply appropriate techniques, resources, to measure the Bore diameter of the product by the application of modern engineering with IT tools.
		C309.5	Identify the design system components or processof the measuring instrument to measure the power, flow and Temperature.
43	C310 - Design of Transmission Systems	C310.1	Develop knowledge of mathematics, engineering fundamentals, and governing equations of flexible drives, identify, formulate, solve engineering problems and design drives to meet desired needs within realistic constraints for sustainable development..
		C310.2	Utilyze knowledge of mathematics, engineering fundamentals, and governing equations of spur, parellel axix helical gears as per the requirements within realistic constraints.
		C310.3	Develop knowledge of mathematics, engineering fundamentals, and governing equations of Bevel, worm,cross helical gears as per the requirements within realistic constraints.
		C310.4	Apply knowledge of mathematics, engineering fundamentals, governing equations of gear box, and identify, formulate and solve engineering problems by designing appropriate components within the safe limits.
		C310.5	Analyze knowledge of mathematics, fundamental equations and solve engineering problems in drives such as CAM, Clutches and Brakes.
44	C311 Computer Aided Design and Manufacturing	C311.1	Explain the 2D and 3D Transformations, clipping algorithm, Manufacturing Models and Metrics
		C311.2	Explain the fundamentals of parametric curves, surface and solids
		C311.3	Summarize the different types standard system used in CAD
		C311.4	Apply NC and CNC Programming concept to develop part program for Lathe and Milling Machines
		C311.5	Summarize the different types of technique used in cellular Manufacturing and FMS
45	t and Mass Transfer	C312.1	Apply the engineering knowledge on heat conduction in analyzing, formulating with the obtained data and designing various complex conditions of thermal components.
		C312.2	Evaluate and investigate practically, heat transfer through mode of convection at complex conditions.
		C312.3	Identify, analyze and interpret data for designing heat exchangers associated with real cases considering environmental issues.

S.NO	COURSE NAME	COURSE OUT COMES	
	C312 - Hea	C312.4	Compute the shape factor in evaluating solution for heat radiation and applying the knowledge for designing the solar energy utilization needed for sustainable development.
		C312.5	Calculate and analyze the rate of mass transfer in complex engineering problems related to research issues.
46	C313 - Finite Element Analysis	C313.1	Apply knowledge of mathematics, science and engineering fundamentals to analyse Boundary value engineering problems by finite element Method
		C313.2	Identify, formulate and Analyze in one dimensional engineering problems by finite element analyses.
		C313.3	Identify, formulate and Analyze in two dimensional scalar variable engineering problems by finite element analyses.
		C313.4	Analysis of Complex two dimensional vector variable problems and interpretation of data using finite element method.
		C313.5	Explain experiments, Analyse and interpretation of data in Isoparametric formulation of heat transfer and fluid mechanics by finite element Method.
47	C314 - Hydraulics and Pneumatic	C314.1	Explain the fluid power and operation of different types of pumps
		C314.2	Summarize the feature and function of Hydraulic motors, actuators and flow control valves
		C314.3	Explain the different types of hydraulic circuit and system
		C314.4	Explain the different types of pneumatic circuit and system
		C314.5	Summarize the various trouble shooting methods and applications of hydraulic and pneumatics system
48	C315 - Automobile Engineering	C315.1	Apply basic science and engineering fundamental knowledge for identify and recognize the vehicle structure and engines to sustainable transportation for society in different condition.
		C315.2	Identify and understand the processes that meet the specified needs with appropriate consideration for engine auxiliary system with different circumference of practical.
		C315.3	Identify and select the power transmission processes of automobile that meet the specified needs with appropriate consideration through different manner for practical cases of transportation.
		C315.4	Develop the knowledge on steering; brakes and suspension systems for improve the design in automobiles.
		C315.5	Illustrate the awareness of alternative energy sources on automobiles for public health and environmental need for sustainable development.
	M. Laboratory	C316.1	Apply the knowledge of engineering fundamentals to Understand the role of design and analysis in mechanical engineering Components.
		C316.2	Design appropriate techniques, resources use to Create Mechanical Components 3D modeling by modern engineering software tools.

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49	C316 - C.A.D. / C.A.M	C316.3	Design and Development of mechanical part drawing and Assembly of components implemented in real time applications.
		C316.4	Design and Create Mechanical Components & Simulation of process using CAM Software with G and M codes.
		C316.5	Develop Appropriate techniques to create Manufacturing of Mechanical components using modern CNC Lathe and Milling Machines.
50	C317 - Design and Fabrication Project	C317.1	Develop communicative competence.
		C317.2	Show the soft skills to answer questions in the interviews.
		C317.3	Develop employability skills to enhance their prospect of placements.
		C317.4	Take international examination such as IELTS and TOEFL.
		C317.5	Make presentations and participate in group discussions.
51	C318 - Professional Communication	C318.1	Make effective Presentations
		C318.2	Partcipate confidently group discussion
		C318.3	Attend job interviews and be sucessful in them
		C318.4	Develop adequate soft skills required for the workplace