



M.I.E.T. ENGINEERING COLLEGE
(AUTONOMOUS)

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Accredited by NBA

Accredited with 'A+' grade by NAAC

(An ISO 9001:2015 Certified Institution)

(Recognized by UGC under section 2(f) & 12(B) of UGC Act, 1956)

TRICHY - PUDUKKOTTAI MAIN ROAD, TRICHY - 620 007



DEPARTMENT OF MECHANICAL ENGINEERING

List of COs for all courses Regulations

2021

and

CO-POs & PSOs Mapping for all courses Regulations 2021

LIST OF COs FOR ALL COURSES-REGULATIONS 2021

C101/CY3151-ENGINEERING CHEMISTRY	
C101.1	Understand the main knowledge and processes for drinking water and the design for basic treatment processes
C101.2	Relate basic knowledge of surface science and catalysis
C101.3	Illustrate the phase transition of one component and two component systems and the types of alloys and their applications in industries
C101.4	Determine the calorific values of fuels, perform flue gas analysis and combustion analysis
C101.5	Analyze and identify alternative energy storage devices
C101.6	Applying the knowledge to perform gas analysis & combustion analysis in engineering fields
C102/GE8151-PROBLEMS SOLVING AND PYTHON PROGRAMMING	
C102.1	Demonstrate algorithm, flowchart for various programs
C102.2	Do simple programs using python programming basics
C102.3	Illustrate programs by using arrays and string functions
C102.4	Develop simple programs using functions and pointers
C102.5	Design mini projects with structures
C102.6	Develop applications using python Programming Language
C103/HS3152 -PROFESSIONAL ENGLISH I	
C103.1	Read different genres of text adopting various reading strategies
C103.2	Develop the collaborative and social aspects of research and writing process.
C103.3	Use different types of structure of writing skills in various situations.
C103.4	Understand the basics of English skills in Communicative and Technical Writing.
C103.5	Analyse various types of technical issues and solve the problem.
C103.6	Apply language aptly in their professional career.
C104/MA3151 -MATRICES AND CALCULUS	
C104.1	Evaluate limit indeterminate forms, using L hospital rule.
C104.2	Calculate the maxima and minima value functions of two variables.
C104.3	Evaluate, Definite integrals using Reductions formula.
C104.4	Find the area of plain curves and volume of solid using double and triple integrals
C104.5	Have basic knowledge of differential equation in typical various engineering fields.
C104.6	Apply and solve physics and engineering problems.
C105/PH3151 - ENGINEERING PHYSICS	
C105.1	Understand the importance of mechanics.
C105.2	Express their knowledge in electromagnetic waves.
C105.3	Demonstrate a strong foundational knowledge in oscillations, optics and lasers.
C105.4	Understand the importance of quantum physics.
C105.5	Comprehend and apply quantum mechanical principles towards the formation of energy bands.
C105.6	Understand the concept of gyroscope and non-linear oscillator.

C106/GE3171-PROBLEM SOLVING AND PYTHON PROGRAMMING LABORATORY	
C106.1	Demonstrate algorithm, flowchart for various programs.
C106.2	Do simple programs using python programming basics.
C106.3	Illustrate programs by using arrays and string functions.
C106.4	Develop simple programs using functions and pointers.
C106.5	Design mini projects with structures.
C107/BS3171-PHYSICS AND CHEMISTRY LABORATORY	
C107.1	Analyze the physical principle involved in the various instruments; also relate the principle to new application.
C107.2	Perform various experiments in the areas of elasticity, optics, mechanics and thermal physics that will nurture the students in all branches of Engineering.
C107.3	Apply quantum mechanical principles towards the formation of energy bands.
C108/BE3251-BASIC ELECTRICAL AND ELECTRONICS ENGINEERING	
C108.1	Use various electrical components and parameters measurement for electrical circuits.
C108.2	Design magnetic circuits and installation of various electrical circuit devices.
C108.3	Understand the basics of semiconducting materials and their applications in analog devices.
C108.4	Understand the working of various types of motors and transformers.
C108.5	Understand the fundamentals of communication engineering.
C108.6	Work electrical components used in various instruments and devices
C109/GE3251-ENGINEERING GRAPHICS	
C109.1	Construct engineering curves.
C109.2	Sketch all the views of engineering objects in free hand.
C109.3	Draw the projection of points, lines and planes.
C109.4	Draw the projection of solids in any orientation.
C109.5	Develop the section and lateral surfaces of sectioned solids.
C109.6	Sketch the solids in perspective and isometric approaches.
C110/HS3251-PROFESSIONAL ENGLISH II	
C110.1	Acquire the skills in reading and listening of Technical English.
C110.2	Understand the basics of English skills in Technical Writing.
C110.3	Prepare resume, curriculum vitae and bio-data for the career development.
C110.4	Grasp the logical evolution of thought and content.
C110.5	Develop the collaborative and social aspects of research and writing process.
C110.6	Prepare job application, instructions, and recommendations confidently.
C111/MA3251 STATISTICS AND NUMERICAL METHODS	
C111.1	Apply the concept of testing of hypothesis for small and large samples in real life problems.
C111.2	Apply the basic concepts of classifications of design of experiments in the field of engineering.
C111.3	Apply the numerical techniques of differentiation and integration for engineering problems.
C111.4	Understand the knowledge of various techniques and methods for solving first and second order ordinary differential equations.
C111.5	Solve the partial and ordinary differential equations with initial and boundary conditions by using certain techniques with engineering applications.

C111.6	Applying finite difference methods for solving second order differential equations.
C112/PH3251-MATERIALS SCIENCE	
C112.1	Use crystallography and its importance for varied materials properties.
C112.2	Understand the electrical and magnetic properties of materials and their applications.
C112.3	Understand clearly of semiconductor physics and functioning of semiconductor devices.
C112.4	Understand the optical properties of materials and working principles of various optical devices.
C112.5	Appreciate the importance of functional nano-electronic devices.
C112.6	Analyze the importance of advanced materials used in Mechanical components.
C113/BE3271-BASIC ELECTRICAL AND ELECTRONICS ENGINEERING LABORATORY	
C113.1	Use experimental methods to verify the Ohm's and Kirchhoff's Laws.
C113.2	Analyze experimentally the load characteristics of electrical machines.
C113.3	Analyze the characteristics of basic electronic devices.
C113.4	Use DSO to measure the various parameters.
C114/GE3271-ENGINEERING PRACTICES LABORATORY	
C114.1	Perform joining operations in engineering materials.
C114.2	Carry out the basic machining operations in engineering materials.
C114.3	Carry out basic home electrical works and appliances.
C114.4	Measure the electrical quantities.
C114.5	Understand basic electronic components.
C114.6	Integrate the components and gates using soldering practices.
C115/ME3351-ENGINEERING MECHANICS	
C201.1	Apply the equilibrium equation for the statics of the particle.
C201.2	Apply the equilibrium equation for the rigid body.
C201.3	Determine the centroidal properties of surfaces and solids.
C201.4	Determine the Moment of Inertia for surfaces and solids.
C201.5	Solve the problems related to friction.
C201.6	Analyze the dynamic problems for particles and bodies.
C116/ME3392-ENGINEERING MATERIALS AND METALLURGY	
C202.1	Understand alloys and phase diagrams, Iron-Iron carbon diagram.
C202.2	Understand isothermal transformation and heat treatment processes.
C202.3	Understand the alloying elements influence on both ferrous and non-ferrous metals.
C202.4	Understand the properties and applications of non-metallic materials.
C202.5	Understand the testing proceeding for measuring mechanical properties.
C202.6	Review the properties and applications of composites.
C117/ME3391-ENGINEERING THERMODYNAMICS	
C203.1	Apply the basic concepts of thermodynamics for energy conversion phenomenon.
C203.2	Calculate thermal efficiency and coefficient of performance for heat engines, refrigerators and heat pumps.
C203.3	Evaluate the performance of steam power cycles.
C203.4	Derive simple thermodynamic relations of ideal and real gases.
C203.5	Calculate the properties of air vapor mixtures using psychometrics.
C203.6	Explain the performance of refrigeration systems and its environmental impacts.

C118/CE3391-FLUID MECHANICS AND MACHINERY	
C204.1	Understand the fundamentals of fluid properties.
C204.2	Understand the flow characteristics of various fluids.
C204.3	Solve the problems related to flow through pipes and boundary layer.
C204.4	Perform the dimensional analysis and model studies for various cases.
C204.5	Solve the problems of various turbines and its performances.
C204.6	Analyse the performance and problems in various pumps.
C119/ME3393-MANUFACTURING PROCESSES	
C205.1	Explain the principle of different metal casting processes.
C205.2	Describe the various metal joining processes.
C205.3	Illustrate the different bulk deformation processes.
C205.4	Apply the various sheet metal forming process.
C205.5	Apply suitable molding technique for manufacturing of plastics components.
C205.6	Understand the various advanced furnaces in manufacturing processes.
C120/MA3351-TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATIONS	
C206.1	Analyse Partial Differential Equations in various methods.
C206.2	Solving Fourier Series for different types of functions.
C206.3	Computing the solutions of the heat equation and wave equation subject to boundary conditions.
C206.4	Deduce the Gaussian function and Convolution theorem form using Fourier Transforms.
C206.5	Form finite difference method in Z-transforms.
C206.6	Form finite difference method for mechanical engineering applications.
C121/ME3381-COMPUTER AIDED MACHINE DRAWING LABORATORY	
C207.1	Understand the drawing standards and Fits & Tolerance.
C207.2	Understand the software toolbars and commands.
C207.3	Produce detailed drawing of different types of Bearings.
C207.4	Produce detailed drawing of different types of Valves.
C207.5	Produce detailed drawing of different types of Couplings.
C207.6	Produce detailed drawing of different types of Engine parts.
C122/ME3382-MANUFACTURING TECHNOLOGY LABORATORY	
C208.1	Joint two metals using Gas Metal Arc Welding.
C208.2	Produce mould cavity for different shapes of components.
C208.3	Perform lathe and drilling operation for various components.
C208.4	Produce different components using Milling and Gear hopping Machines.
C208.5	Perform the cylindrical and surface grinding process.
C208.6	Measure the cutting forces of lathe and milling using dynamometer.
C123/CE3491-STRENGTH OF MATERIALS	
C209.1	Understand the basic concepts of stress and strain of solids.
C209.2	Understand the basic concepts of deformation of solids.
C209.3	Apply transverse loading on beams and stresses in beam.
C209.4	Apply basic equation of torsion in designing of shafts and helical springs.
C209.5	Determine the slope and deflection of beam by various methods.

C209.6	Analyze the cylindrical thin and thick shells under circumferential and radial loading.
C124/GE3451-ENVIRONMENTAL SCIENCES AND SUSTAINABILITY	
C210.1	Understand the functions of environment, ecosystems and biodiversity and their conservation.
C210.2	Identify the causes, effects of environmental pollution and natural disasters and contribute to the preventive measures in the society.
C210.3	Understanding of renewable and non-renewable resources and contribute to the sustainable measures to preserve them for future generations.
C210.4	Recognize the different goals of sustainable development and societal development.
C210.5	Demonstrate the knowledge of sustainability practices and identify green materials, energy cycles and the role of sustainable urbanization.
C210.6	Develop mechanical devices to overcome environmental issues.
C124/ME 3491- THEORY OF MACHINES	
C211.1	Analyze the kinematic mechanisms and their inversions.
C211.2	Analyze the motion of spur gear and gear trains.
C211.3	Examine frictional characteristics in various types of machine elements.
C211.4	Analyze the static and dynamic forces on simple machine members.
C211.5	Estimate the damped and forced vibrations of a simple system.
C211.6	Explain the different mechanisms and dynamic forces acting.
C126/ME3492 -HYDRAULICS AND PNEUMATICS	
C212.1	Understand the operational principles of fluid power systems and hydraulic pumps.
C212.2	Understand the workings of hydraulic actuators and control components.
C212.3	Understand the hydraulic circuits and systems.
C212.4	Understand the working of pneumatic circuits.
C212.5	Understand the working of electro-pneumatic circuits.
C212.6	Understand the troubleshooting and applications of hydraulic and pneumatic systems.
C127/ME3451 -THERMAL ENGINEERING	
C213.1	Apply thermodynamic cycles for various engines.
C213.2	Resolve problems related to steam nozzles, including the calculation of critical pressure ratios.
C213.3	Apply various conditions for steam and gas turbines.
C213.4	Understand feature and combustion of IC Engines.
C213.5	Evaluate the performance of the IC Engines.
C213.6	Understand the concepts and performances of auxiliary systems.
C128/ME3493-MANUFACTURING TECHNOLOGY	
C214.1	Understand the metal removal mechanism with considering various machining parameters.
C214.2	Understand the lathe and special lathe machines mechanisms and operations.
C214.3	Understand the reciprocating machine tools mechanisms and operations.
C214.4	Understand the various surface finishing processes.
C214.5	Understand the operational principles of CNC machine tools and operations.
C214.6	Write the CNC programming for various operations in CNC Lathe machine.
C129/CE3481-STRENGTH OF MATERIALS AND FLUID MACHINERY LABORATORY	
C215.1	Determine the tensile, torsion and hardness properties of metals.

C215.2	Determine the stiffness properties of helical spring.
C215.3	Determine compressive properties of carriage spring.
C215.4	Determine of coefficient of discharge of a century meter and friction factor for flow through pipes.
C215.5	Determination of metacentric height and forces due to impact of jet on a fixed plate.
C215.6	Determine the performance characteristics of centrifugal pumps, reciprocating pump and turbine.
C216/ME3461-THERMAL ENGINEERING LABORATORY	
C216.1	Understand Valve Timing, Port Timing and Actual p-v diagrams of IC engines through experiments.
C216.2	Conduct Performance and heat balance Test on 4 – stroke Diesel Engine.
C216.3	Conduct Morse Test on Multi-Cylinder Petrol Engine and Retardation Test on a Diesel Engine.
C216.4	Determine of p- θ diagram, heat release characteristics of an IC engine and Flash Point and Fire Point of various fuels lubricants.
C216.5	Conduct performance test on a two-stage reciprocating air compressor and determine COP of a refrigeration system.
C216.6	Evaluate performance and energy balance on a steam generator.
C301/ME3591-DESIGN OF MACHINE ELEMENTS	
C301.1	Understand the basic design parameters of various machine elements.
C301.2	Analyze the various stresses induced at different loading conditions.
C301.3	Apply the basic design procedure to design the shafts, bearings and couplings.
C301.4	Design the temporary and permanent joints.
C301.5	Design the various energy storing elements and engine components.
C301.6	Design the various machine members as per standard design catalogs.
C302/CME386-GAS DYNAMICS AND JET PROPULSION	
C302.1	Understand basic concepts and isentropic flows of fluids.
C302.2	Understand the compressible flow through ducts.
C302.3	Analyze the variation of flow parameters across the normal and oblique shocks.
C302.4	Analyze the performance of various jet propulsion systems.
C302.5	Understand space propulsion system and its performance.
C302.6	Apply Rocket performance calculations.
C303/CME336-HYBRID AND ELECTRIC VEHICLE TECHNOLOGY	
C303.1	Understand the configuration of hybrid drive requirements for a vehicle.
C303.2	Apply appropriate hybrid and electric drive trains in a vehicle.
C303.3	Create and install suitable AC and DC drives for electric vehicles.
C303.4	Apply a suitable energy storage system for a hybrid / electric vehicle.
C303.5	Understand concern energy management strategies to ensure better economy and efficiency.
C303.6	Create the Basic components of Electric vehicles and DC to AC voltage control.
C304/ME3592-METROLOGY AND MEASUREMENTS	
C304.1	Discuss the concepts of measurements in metrological instruments.

C304.2	Explain the principles of linear and angular measuring instruments for industrial applications.
C304.3	Understand the concepts of various computer aided inspection tools.
C304.4	Explain the different form measurements in industry.
C304.5	Understand the basic concepts of interchangeability and selective assembly.
C304.6	Understand the working principle of measuring equipments to measure intensive and extensive properties.
C305/MR3491-SENSORS AND INSTRUMENTATION	
C305.1	Understand various calibration techniques and signal types of sensors.
C305.2	Understand motion, proximity and ranging sensors.
C305.3	Understand force, magnetic and heading sensors.
C305.4	Understand optical and pressure sensors.
C305.5	Understand the temperature sensors.
C305.6	Apply signal conditioning and DAQ systems.
C306/ME3581-METROLOGY AND DYNAMICS LABORATORY	
C306.1	Use measurement tools and perform measurements in quality impulsion.
C306.2	Utilize various gauges for measurement.
C306.3	Demonstrate linear and angular measurement using precision instruments.
C306.4	Apply the load cell to measure the force and torque.
C306.5	Use thermocouple and comparator for taking measurement.
C306.6	Measure bore diameter using Bore gauge, telescope gauge and surface roughness using Surface Finish Measuring Equipment.
C307/CME389-DESIGN OF TRANSMISSION SYSTEM	
C307.1	Apply design of flexible elements of drives like belt, rope and chain.
C307.2	Apply the design concept to spur gears and parallel axis helical gears.
C307.3	Apply the design concept to bevel, worm and cross helical gears.
C307.4	Apply the design concept to gear boxes.
C307.5	Apply the design concept to cams.
C307.6	Apply the design concept to clutches and brakes.
C308/CME364-ENERGY STORAGE DEVICES	
C308.1	Understand a suitable energy storage device.
C308.2	Understand the workings of various energy storage devices and their importance.
C308.3	Understand the basic characteristics of batteries for mobile and hybrid systems.
C308.4	Apply the storage of renewable energies and management systems.
C308.5	Understand the need for other energy devices and their scope for applications.
C308.6	Understand the basic characteristics of Fuel cell and biogas storage applications.
C309/ME3691-HEAT AND MASS TRANSFER	
C309.1	Comprehend the conduction heat transfer equations for diverse geometries.
C309.2	Comprehend the convection heat transfer equations for diverse geometries.
C309.3	Analyze the various phase change heat transfer problems.
C309.4	Analyze the various heat exchangers' problems.

C309.5	Solve the thermal radiation problems.
C309.6	Compute mass transfers in binary mixtures and related energy exchanges.
C310/CME 387-NON TRADITIONAL MACHINING PROCESSES	
C310.1	Understand the difference between traditional and non-traditional machining processes.
C310.2	Understand the mechanical energy based processes.
C310.3	Understand the chemical and electro chemical energy based processes.
C310.4	Understand the thermo-electric energy based processes.
C310.5	Understand the nano finishing processes.
C310.6	Understand the hybrid non-traditional machining processes.
C311/CME333- RENEWABLE POWERED OFF HIGHWAYVEHICLES AND EMISSION CONTROL TECHNOLOGY	
C311.1	Understood low and zero carbon fuels suitability and methods of use in off-road vehicles.
C311.2	Suggest green energy production methodologies and its use in off-road vehicle categories.
C311.3	Explain various fuel cell types and its suitability in off-highway vehicles applications.
C311.4	Suggest techniques in the impact of in-cylinder technologies on engine out emissions control.
C311.5	Enders and the functioning of different currently available after treatment systems for managing engine-out emissions.
C311.6	Understood and explain the structural integrity in high way vehicle and advanced bio fuel production.
C312/ME3682-HEAT TRANSFER LABORATORY	
C312.1	Determine the thermal conductivity of pipe insulation, composite wall, insulating powder, oils, and water.
C312.2	Determine heat transfer coefficient of air and pin-fin under natural convection and forced convection.
C312.3	Measure heat flux under pool boiling and flow boiling in various regimes.
C312.4	Measure heat transfer coefficient in film-wise and drop-wise condensation
C312.5	Measure Stefan – Boltzmann constant and emissivity of a grey surface.
C312.6	Calibrate of thermocouples / RTDs at standard reference temperatures.
C313/ME3681-CAD/CAM LABORATORY	
C313.1	Understand various commands of 3D geometric object using modeling software.
C313.2	Apply 3D assembly model for different machine elements using modeling software.
C313.3	Apply manual part program for CNC machining center of linear and circular cuts.
C313.4	Apply manual part program for CNC machining center of Canned Cycle Operations.
C313.5	Apply manual part program for CNC turning center turning, thread cutting and drilling operations.
C313.6	Apply Computer Aided Part-Programming for machining and turning center.
C401/OCS351 -ARTIFICIAL INTELLIGENCE AND DATA SCIENCE FUNDAMENTALS	
C401.1	Understand the foundations of AI and the structure of Intelligent Agents.
C401.2	Use appropriate search algorithms for any AI problem.
C401.3	Utilize the AI learning methods.
C401.4	Solving problem using Supervised learning.

C401.5	Solving problem using Unsupervised learning.
C401.6	Develop the program for Industrial automation and other applications.
C402/ME3792-COMPUTER INTEGRATED MANUFACTURING	
C402.1	Discuss the basics of computer-aided engineering.
C402.2	Choose appropriate automotive tools and material handling systems.
C402.3	Discuss the overview of group technology, FMS and automation identification methods.
C402.4	Design using computer aided process planning for manufacturing of various components
C402.5	Acquire knowledge in computer process control techniques.
C402.6	Explore computer program for manufacturing.
C403/GE3791-HUMAN VALUES AND ETHICS	
C403.1	Identify the importance of democratic, secular and scientific values in harmonious functioning of social life.
C403.2	Practice democratic and scientific values in both their personal and professional life.
C403.3	Find rational solutions to social problems.
C403.4	Behave in an ethical manner in society.
C403.5	Practice critical thinking and the pursuit of truth.
C403.6	Identify the human values.
C404/GE3792-INDUSTRIAL MANAGEMENT	
C404.1	Discuss basic concepts of management, various forms of business organization and trade unions function in professional organizations.
C404.2	Explore the planning, organizing and staffing functions of management in professional organization.
C404.3	Apply the leading, controlling and decision making functions of management in professional organization.
C404.4	Discuss the organizational theory in professional organization.
C404.5	Apply principles of productivity and modern concepts in management in professional organization.
C404.6	Apply Modern mechanisms of industrial processes and managing the industry.
C405/ME3791-MECHATRONICS AND IoT	
C405.1	Choose appropriate actuators and sensors to create mechatronics system.
C405.2	Create appropriate signal conditioning circuits for mechatronics system and have an ability to use PLC to operate automated systems.
C405.3	Explain the basics of Embedded system and IoT.
C405.4	Explain a controlling input / output devices with Raspberry Pi and Arduino.
C405.5	Create a suitable Mechatronics and IoT system design and development for specified real-time use.
C405.6	Develop a solution for specified real-time use.
C406/OIM 353-PRODUCTION PLANNING AND CONTROL	
C406.1	Prepare the production planning and control act work-study table.
C406.2	Prepare the product planning.
C406.3	Prepare the production scheduling.
C406.4	Prepare plan for Inventory Control.
C406.5	Utilize the manufacturing requirements manufacturing requirement Planning (MRP II)
C406.6	Utilize the manufacturing Enterprise Resource Planning (ERP).

C407/OR351-FOUNDATION OF ROBOTICS	
C407.1	Interpret the features of robots and technology involved in the control.
C407.2	Apply the basic engineering knowledge and laws for the design of robotics.
C407.3	Explain the basic concepts like various configurations, classification and parts of end effectors compare various end effectors, grippers, tools, and sensors used in robots.
C407.4	Explain the concept of kinematics, degeneracy, dexterity and trajectory planning.
C407.5	Demonstrate the image processing and image analysis techniques by machine vision system.
C407.6	Apply the robotic applications in medical and advanced engineering applications.
C408/ME3781-MECHATRONICS AND IOT LABORATORY	
C408.1	Explain fundamental sensory instruments such as force, temperature and pressure sensors.
C408.2	Express and execution of mechatronics systems with various pneumatic, hydraulic and electrical systems.
C408.3	Explain microprocessors and microcontrollers in an automation system requires correct I/O device interface and programming.
C408.4	Create a correct I/O device interface and programming for PLCs in automation.
C408.5	Use the IoT to express to sense and set in motion of mechatronic components.
C408.6	Develop the IoT to sense and set in motion of mechanical industrial components.
C409/ME3811-Project Work	
C105.1	Identify real world problems of core engineering and related systems.
C105.2	Formulate new set of problems.
C105.3	Take on with industrial changes.
C105.4	Evaluate to obtain solution for problems in mechanical engineering systems.
C105.5	Adapt to work as a team for the successful completion of the project.
C105.6	Document preparation and communication very clearly.

CO-POs & PSOs MAPPING FOR ALL COURSES-REGULATIONS 2021

Course Outcome	Programme Outcomes (POs)											PSOs	
	1	2	3	4	5	6	7	8	9	10	11	1	2
C101/CY8151 - ENGINEERING CHEMISTRY													
C101.1	3	3	2	2	2	-	-	-	-	-	2	3	2
C101.2	3	2	3	-	2	-	-	-	-	-	-	3	-
C101.3	3	3	3	-	-	-	-	-	-	-	3	3	-
C101.4	3	3	3	2	2	-	-	-	-	-	2	3	2
C101.5	2	3	3	3	3	-	-	-	-	-	-	2	3
C101.6	2	3	3	-	-	-	-	-	-	-	-	2	-
C102/GE8151-PROBLEMS SOLVING AND PYTHON PROGRAMMING													
C102.1	3	3	3	3	3	-	-	-	-	-	-	-	-
C102.2	2	2	-	3	3	-	-	-	-	-	-	-	-
C102.3	3	2	2	3	3	-	-	-	-	-	-	-	-
C102.4	2	2	-	2	3	-	-	-	-	-	-	-	-
C102.5	2	3	2	3	3	-	-	-	-	-	-	-	-
C102.6	3	2	2	2	3	-	-	-	-	-	-	-	-
C103/HS3152- PROFESSIONAL ENGLISH I													
C103.1	-	-	-	-	-	-	3	2	3	-	3	2	3
C103.2	-	-	-	-	-	-	3	2	3	-	3	2	3
C103.3	-	-	-	-	-	-	3	3	3	-	3	2	3
C103.4	-	-	-	-	-	-	3	2	3	-	3	2	3
C103.5	-	-	-	-	-	-	3	3	3	-	3	2	3
C103.6	-	-	-	-	-	-	3	2	3	-	3	2	3
C104/MA3151 -MATRICES AND CALCULUS													
C104.1	3	3	3	3	2	-	-	-	-	-	3	3	3
C104.2	3	3	3	3	2	-	-	-	-	-	3	3	3
C104.3	3	3	3	3	2	-	-	-	-	-	3	3	3
C104.4	3	3	3	3	2	-	-	-	-	-	3	3	3
C104.5	3	3	3	3	2	-	-	-	-	-	3	3	3
C104.6	3	3	3	3	2	-	-	-	-	-	3	3	3
C105/PH3151 - ENGINEERING PHYSICS													
C105.1	3	3	2	2	2	-	-	-	-	-	2	3	2
C105.2	3	2	3	-	2	-	-	-	-	-	-	3	-
C105.3	3	3	3	-	-	-	-	-	-	-	3	3	-
C105.4	3	3	3	2	2	-	-	-	-	-	2	3	2
C105.5	2	3	3	3	3	-	-	-	-	-	-	2	3
C105.6	2	3	3	-	-	-	-	-	-	-	-	2	-
C106/GE3171-PROBLEM SOLVING AND PYTHON PROGRAMMING LABORATORY													
C106.1	3	3	3	3	3	-	2	3	2	-	3	3	3
C106.2	3	3	3	3	3	-	2	3	2	-	3	3	3

C106.3	3	3	3	3	3	-	2	3	2	-	3	3	3
C106.4	3	3	3	3	3	-	2	3	2	-	3	3	3
C106.5	3	3	3	3	3	-	2	3	2	-	3	3	3
C107/BS3171-PHYSICS AND CHEMISTRY LABORATORY													
C107.1	3	3	3	3	3	-	3	2	3	2	-	2	2
C107.2	3	3	3	3	3	-	3	2	3	2	-	2	2
C107.3	3	3	3	3	3	-	3	2	3	2	-	2	2
C108/BE3251-BASIC ELECTRICAL AND ELECTRONICS ENGINEERING													
C108.1	3	3	3	-	-	-	-	-	-	-	2	2	-
C108.2	2	2	-	3	-	-	-	-	-	-	3	3	-
C108.3	3	3	1	1	-	-	-	-	-	-	2	1	-
C108.4	1	2	1	-	-	-	-	-	-	-	3	3	-
C108.5	3	3	-	-	-	-	-	-	-	-	2	3	-
C108.6	2	2	3	2	-	-	-	-	-	-	3	2	-
C109/GE3251-ENGINEERING GRAPHICS													
C109.1	2	2	3	-	-	-	-	-	-	-	2	2	3
C109.2	2	3	2	-	-	-	-	-	-	-	3	3	2
C109.3	3	2	2	3	-	-	-	-	-	-	3	3	2
C109.4	3	2	2	2	-	-	-	-	-	-	3	3	2
C109.5	3	3	3	2	2	-	-	-	-	-	3	3	3
C109.6	3	3	3	-	2	-	-	-	-	-	3	2	3
C110/HS3251-PROFESSIONAL ENGLISH II													
C110.1	-	-	-	-	-	-	3	2	3	-	3	2	3
C110.2	-	-	-	-	-	-	3	2	3	-	3	2	3
C110.3	-	-	-	-	-	-	3	3	3	-	3	2	3
C110.4	-	-	-	-	-	-	3	2	3	-	3	2	3
C110.5	-	-	-	-	-	-	3	3	3	-	3	2	3
C110.6	-	-	-	-	-	-	3	2	3	-	3	2	3
C111/MA3251-STATISTICS AND NUMERICAL METHODS													
C111.1	3	2	-	2	-	-	-	-	-	-	3	3	-
C111.2	2	-	-	3	3	-	-	-	-	-	-	-	-
C111.3	-	2	3	-	-	-	-	-	-	-	2	-	-
C111.4	-	3	-	-	2	-	-	-	-	-	2	3	-
C111.5	-	-	3	2	-	-	-	-	-	-	-	-	-
C111.6	3	3	2	3	2	-	-	-	-	-	3	3	-
C112/PH3251-MATERIALS SCIENCE													
C112.1	3	3	3	3	2	-	-	-	-	-	-	-	-
C112.2	2	-	3	-	-	-	-	-	-	-	-	-	-
C112.3	2	2	-	-	-	-	-	-	-	-	-	-	-
C112.4	3	-	-	2	3	-	-	-	-	-	-	-	-
C112.5	3	3	3	2	3	-	-	-	-	-	-	-	-
C112.6	3	2	3	-	2	-	-	-	-	-	-	-	-

BE3271-BASIC ELECTRICAL AND ELECTRONICS ENGINEERING LABORATORY													
C113.1	3	2	3	2	3	-	-	-	-	-	3	3	3
C113.2	3	2	3	2	3	-	-	-	-	-	3	3	3
C113.3	3	2	3	2	3	-	-	-	-	-	3	3	3
C113.4	3	2	3	2	3	-	-	-	-	-	3	3	3
C113.5	-	-	-	-	-	-	-	-	-	-	-	-	-
C113.6	-	-	-	-	-	-	-	-	-	-	-	-	-
C114/GE3271-ENGINEERING PRACTICES LABORATORY													
C114.1	3	3	2	-	2	-	-	2	3	2	-	2	2
C114.2	3	3	2	-	2	-	-	2	3	2	-	2	2
C114.3	3	3	2	-	2	-	-	2	3	2	-	2	2
C114.4	3	3	2	-	2	-	-	2	3	2	-	2	2
C114.5	3	3	2	-	2	-	-	2	3	2	-	2	2
C114.6	3	3	2	-	2	-	-	2	3	2	-	2	2
C115/ME3351-ENGINEERING MECHANICS													
C201.1	3	3	3	3	3	-	-	-	-	-	1	3	-
C201.2	3	3	2	3	3	-	-	-	-	-	2	-	-
C201.3	3	3	3	2	2	-	-	-	-	-	2	2	-
C201.4	3	3	2	3	3	-	-	-	-	-	2	2	-
C201.5	3	3	3	3	3	-	-	-	-	-	3	-	-
C201.6	3	3	2	2	2	-	-	-	-	-	3	3	-
C116/ME3392-ENGINEERING MATERIALS AND METALLURGY													
C202.1	3	3	-	-	-	-	-	-	-	-	1	3	2
C202.2	3	3	-	-	-	-	-	-	-	-	1	3	2
C202.3	3	3	-	-	-	-	-	-	-	-	1	3	3
C202.4	3	3	-	-	-	-	-	-	-	-	1	3	2
C202.5	3	3	-	-	-	-	-	-	-	-	3	3	3
C202.6	3	3	-	-	-	-	-	-	-	-	3	3	3
C117/ME3391-ENGINEERING THERMODYNAMICS													
C203.1	3	3	3	3	3	-	-	-	-	-	2	3	2
C203.2	2	3	3	3	3	-	-	-	-	-	2	2	2
C203.3	3	3	3	3	3	-	-	-	-	-	2	2	2
C203.4	3	3	2	3	3	-	-	-	-	-	2	2	2
C203.5	3	2	3	3	2	-	-	-	-	-	3	2	2
C203.6	3	2	3	2	2	-	-	-	-	-	3	3	3
C118/CE3391-FLUID MECHANICS AND MACHINERY													
C204.1	3	3	3	2	2	-	-	-	-	-	2	3	2
C204.2	2	3	3	3	1	-	-	-	-	-	1	2	2
C204.3	3	3	3	3	3	-	-	-	-	-	3	2	3
C204.4	3	3	2	3	3	-	-	-	-	-	2	2	1
C204.5	3	3	2	3	3	-	-	-	-	-	3	3	3
C204.6	3	2	3	2	2	-	-	-	-	-	3	2	2

C119/ME3393-MANUFACTURING PROCESSES													
C205.1	3	3	-	-	3	-	-	-	-	-	-	2	2
C205.2	2	3	-	-	2	-	-	-	-	-	2	2	2
C205.3	3	2	-	-	3	-	-	-	-	-	-	2	2
C205.4	3	2	-	-	3	-	-	-	-	-	2	2	2
C205.5	3	2	-	-	3	-	-	-	-	-	2	2	2
C205.6	3	2	-	-	2	-	-	-	-	-	2	3	2
C120/MA3351-TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATIONS													
C206.1	3	3	3	3	-	-	-	-	-	-	-	-	-
C206.2	3	3	2	3	2	-	-	-	-	-	-	-	-
C206.3	3	3	2	3	-	-	-	-	-	-	-	-	-
C206.4	3	3	3	3	2	-	-	-	-	-	-	-	-
C206.5	3	3	3	3	2	-	-	-	-	-	-	-	-
C206.6	3	3	3	3	-	-	-	-	-	-	-	-	-
C121/ME3381-COMPUTER AIDED MACHINE DRAWING LABORATORY													
C207.1	3	3	3	3	3	3	-	3	3	3	3	3	3
C207.2	3	3	3	3	3	3	-	3	3	3	3	3	3
C207.3	3	3	3	3	3	3	-	3	3	3	3	3	3
C207.4	3	3	3	3	3	3	-	3	3	3	3	3	3
C207.5	3	3	3	3	3	3	-	3	3	3	3	3	3
C207.6	3	3	3	3	3	3	-	3	3	3	3	3	3
C122/ME3382-MANUFACTURING TECHNOLOGY LABORATORY													
C208.1	3	3	3	3	3	3	-	3	3	3	3	3	3
C208.2	3	3	3	3	3	3	-	3	3	3	3	3	3
C208.3	3	3	3	3	3	3	-	3	3	3	3	3	3
C208.4	3	3	3	3	3	3	-	3	3	3	3	3	3
C208.5	3	3	3	3	3	3	-	3	3	3	3	3	3
C208.6	3	3	3	3	3	3	-	3	3	3	3	3	3
C123/CE3491-STRENGTH OF MATERIALS													
C209.1	3	3	3	-	2	-	-	-	-	-	2	3	2
C209.2	3	3	3	-	2	-	-	-	-	-	3	-	2
C209.3	2	3	2	-	2	-	-	-	-	-	2	2	3
C209.4	3	3	2	-	2	-	-	-	-	-	2	2	2
C209.5	3	3	2	-	2	-	-	-	-	-	2	-	3
C209.6	2	2	2	-	2	-	-	-	-	-	2	3	2
C124/GE3451-ENVIRONMENTAL SCIENCES AND SUSTAINABILITY													
C210.1	3	3	2	-	-	3	2	2	-	-	2	2	-
C210.2	2	2	-	-	-	2	2	-	-	-	2	2	-
C210.3	3	2	-	-	-	2	2	-	-	-	2	2	-
C210.4	3	2	-	-	-	2	2	2	-	-	2	2	-
C210.5	3	2	-	-	-	2	1	-	-	-	2	2	-
C210.6	2	3	2	-	-	3	2	-	-	-	2	2	-

C124/ME 3491-THEORY OF MACHINES													
C211.1	3	3	3	3	2	-	-	-	-	-	2	3	3
C211.2	3	-	3	3	3	-	-	-	-	-	-	1	1
C211.3	3	3	2	2	2	-	-	-	-	-	3	1	1
C211.4	-	3	3	3	2	-	-	-	-	-	-	3	3
C211.5	3	3	3	2	3	-	-	-	-	-	2	1	1
C211.6	3	3	2	2	2	-	-	-	-	-	1	2	2
C126/ME3492-HYDRAULICS AND PNEUMATICS													
C212.1	3	3	3	1	-	-	1	-	-	-	2	2	-
C212.2	3	2	2	-	-	-	-	-	-	-	2	-	-
C212.3	3	2	2	2	-	-	2	-	-	-	2	3	-
C212.4	3	2	3	-	-	-	-	-	-	-	2	3	-
C212.5	3	2	3	2	-	-	2	-	-	-	2	-	-
C212.6	3	3	3	1	-	-	1	-	-	-	1	2	-
C127/ME3451-THERMAL ENGINEERING													
C213.1	3	3	3	3	3	-	-	-	-	-	3	3	2
C213.2	3	3	3	3	2	-	-	-	-	-	-	3	1
C213.3	3	3	-	-	-	-	-	-	-	-	3	3	2
C213.4	3	2	2	2	2	-	-	-	-	-	-	3	3
C213.5	3	3	2	2	2	-	-	-	-	-	2	2	2
C213.6	2	2	-	-	-	-	-	-	-	-	2	3	1
C128/ME3493-MANUFACTURING TECHNOLOGY													
C214.1	3	3	3	-	3	-	-	-	-	-	2	3	2
C214.2	3	2	2	-	3	-	-	-	-	-	2	3	1
C214.3	2	2	2	-	2	-	-	-	-	-	2	2	2
C214.4	2	2	2	-	2	-	-	-	-	-	2	2	2
C214.5	3	3	2	-	2	-	-	-	-	-	2	-	2
C214.6	3	3	3	-	3	-	-	-	-	-	2	3	2
C129/CE3481-STRENGTH OF MATERIALS AND FLUID MACHINERY LABORATORY													
C215.1	3	2	-	3	3	-	-	-	-	-	3	3	2
C215.2	3	2	-	3	3	-	-	-	-	-	-	2	2
C215.3	3	2	-	-	3	-	-	-	-	-	2	3	2
C215.4	3	2	-	2	3	-	-	-	-	-	2	2	2
C215.5	3	2	-	2	3	-	-	-	-	-	-	-	2
C215.6	3	2	-	2	3	-	-	-	-	-	3	-	1
C216/ME3461-THERMAL ENGINEERING LABORATORY													
C216.1	3	3	3	3	3	3	-	3	3	3	3	3	3
C216.2	3	3	3	3	3	3	-	3	3	3	3	3	3
C216.3	3	3	3	3	3	3	-	3	3	3	3	3	3
C216.4	3	3	3	3	3	3	-	3	3	3	3	3	3
C216.5	3	3	3	3	3	3	-	3	3	3	3	3	3
C216.6	3	3	3	3	3	3	-	3	3	3	3	3	3

C301/ME3591-DESIGN OF MACHINE ELEMENTS													
C301.1	2	3	3	2	-	-	-	-	-	-	2	3	2
C301.2	3	2	2	2	2	-	-	-	-	-	3	3	2
C301.3	3	3	3	3	3	-	-	-	-	-	2	3	-
C301.4	3	2	2	2	3	-	-	-	-	-	2	2	2
C301.5	3	3	3	3	3	-	-	-	-	-	3	2	2
C301.6	3	3	3	3	-	-	-	-	-	-	2	2	-
C302./CME386-GAS DYNAMICS AND JET PROPULSION													
C302.1	3	3	3	2	1	-	-	-	-	-	-	-	-
C302.2	3	3	3	3	1	-	-	-	-	-	-	-	-
C302.3	2	3	3	3	1	-	-	-	-	-	-	-	-
C302.4	2	2	2	2	3	3	-	-	-	-	-	-	-
C302.5	3	2	2	-	3	2	-	-	-	-	-	-	-
C302.6	3	2	3	-	3	2	-	-	-	-	-	-	-
C303/CME336-HYBRID AND ELECTRIC VEHICLE TECHNOLOGY													
C303.1	3	3	2	-	2	-	-	-	-	-	-	3	-
C303.2	2	3	2	-	2	-	-	-	-	-	-	2	-
C303.3	3	2	3	-	2	-	-	-	-	-	-	2	-
C303.4	2	2	2	-	3	-	-	-	-	2	-	2	-
C303.5	3	2	2	-	3	-	-	-	-	2	-	2	-
C303.6	3	2	3	-	3	-	-	-	-	-	-	2	-
C304/ME3592-METROLOGY AND MEASUREMENTS													
C304.1	3	3	-	-	2	-	-	-	-	-	3	3	3
C304.2	3	3	-	-	2	-	-	-	-	-	3	3	3
C304.3	3	3	-	-	2	-	-	-	-	-	3	3	2
C304.4	3	3	-	-	3	2	-	-	-	-	3	2	3
C304.5	3	3	-	-	3	2	-	-	-	-	3	2	3
C304.6	3	3	-	-	3	2	-	-	-	-	3	3	2
C305/MR3491-SENSORS AND INSTRUMENTATION													
C305.1	3	3	-	-	3	-	-	-	-	-	-	3	-
C305.2	3	3	-	-	3	-	-	-	-	-	-	2	-
C305.3	3	2	2	-	3	-	-	-	-	-	-	2	-
C305.4	2	2	2	-	2	-	-	-	-	-	-	1	-
C305.5	2	2	3	-	2	-	-	-	-	-	-	2	-
C305.6	3	3	3	2	3	-	-	-	-	-	-	3	-
C306/ME3581-METROLOGY AND DYNAMICS LABORATORY													
C306.1	3	3	3	3	3	3	-	3	3	3	3	3	3
C306.2	3	3	3	3	3	3	-	3	3	3	3	3	3
C306.3	3	3	3	3	3	3	-	3	3	3	3	3	3
C306.4	3	3	3	3	3	3	-	3	3	3	3	3	3
C306.5	3	3	3	3	3	3	-	3	3	3	3	3	3
C306.6	3	3	3	3	3	3	-	3	3	3	3	3	3

C307/CME389-DESIGN OF TRANSMISSION SYSTEM													
C307.1	3	2	3	3	-	-	-	-	-	-	2	3	3
C307.2	3	2	2	-	-	-	-	-	-	-	2	2	3
C307.3	3	2	3	2	-	-	-	-	-	-	2	2	3
C307.4	3	2	3	-	-	-	-	-	-	-	2	2	3
C307.5	3	3	3	2	-	-	-	-	-	-	3	3	3
C307.6	3	3	3	3	-	-	-	-	-	-	2	3	3
C308/CME 364-ENERGY STORAGE DEVICES													
C308.1	3	2	1	1	2	-	-	-	-	-	-	1	2
C308.2	3	2	-	1	2	-	-	1	-	-	2	1	3
C308.3	3	2	-	1	2	-	-	-	-	-	-	2	2
C308.4	3	2	1	1	3	-	-	-	-	-	3	2	2
C308.5	3	2	1	1	2	-	-	-	-	-	-	-	-
C308.6	3	2	1	1	-	2	-	3	-	-	3	2	2
C309/ME3691-HEAT AND MASS TRANSFER													
C309.1	3	3	2	3	2	-	-	-	-	-	-	3	2
C309.2	3	3	3	3	3	-	-	-	-	-	-	3	3
C309.3	3	3	3	3	2	-	-	-	-	-	-	3	3
C309.4	3	3	2	3	2	-	-	-	-	-	-	3	2
C309.5	3	3	2	3	3	-	-	-	-	-	-	3	3
C309.6	3	3	2	3	2	-	-	-	-	-	-	3	2
C310/CME387-NON TRADITIONAL MACHINING PROCESSES													
C310.1	3	3	-	2	-	-	-	-	-	2	-	-	2
C310.2	3	3	-	2	3	-	-	-	-	2	-	-	3
C310.3	3	3	-	2	-	-	-	-	-	2	-	-	3
C310.4	3	3	-	2	3	-	-	-	-	2	-	-	3
C310.5	2	2	-	2	2	-	-	-	-	2	-	-	2
C310.6	2	2	-	2	3	-	-	-	-	2	-	-	2
C311/CME333-RENEWABLE POWERED OFF HIGHWAYVEHICLES AND EMISSION CONTROL TECHNOLOGY													
C311.1	3	3	-	2	2	-	-	-	-	-	-	3	-
C311.2	3	3	-	2	3	-	-	-	-	-	-	3	-
C311.3	2	2	-	2	2	-	-	-	-	-	3	3	-
C311.4	2	2	1	1	3	-	-	-	-	-	2	3	-
C311.5	3	3	1	1	3	-	-	-	-	-	2	3	-
C311.6	3	3	-	2	3	-	-	-	-	-	-	3	-
C312/ME3682-HEAT TRANSFER LABORATORY													
C312.1	3	3	2	-	3	-	-	-	-	-	2	3	2
C312.2	3	3	-	2	3	-	-	-	-	-	2	3	-
C312.3	3	3	-	2	-	-	-	-	-	-	2	3	2
C312.4	3	3	2	2	-	-	-	-	-	-	2	3	2
C312.5	3	3	2	-	2	-	-	-	-	-	2	3	2
C312.6	3	3	-	-	2	-	-	-	-	-	2	3	-

C313/ME3681-CAD/CAM LABORATORY													
C313.1	3	3	3	3	3	-	-	3	3	3	3	3	3
C313.2	3	3	3	3	3	-	-	3	3	3	3	3	3
C313.3	3	3	3	3	3	-	-	3	3	3	3	3	3
C313.4	3	3	3	3	3	-	-	3	3	3	3	3	3
C313.5	3	3	3	3	3	-	-	3	3	3	3	3	3
C313.6	3	3	3	3	3	-	-	3	3	3	3	3	3
C401/OCS351-ARTIFICIAL INTELLIGENCE AND DATA SCIENCE FUNDAMENTALS													
C401.1	3	3	-	-	3	-	-	-	-	2	-	3	-
C401.2	3	2	-	-	3	-	-	-	-	2	-	3	2
C401.3	-	2	-	-	3	-	-	-	-	3	-	-	2
C401.4	-	2	2	-	-	-	-	-	-	-	-	-	-
C401.5	3	3	2	-	-	-	-	-	-	-	-	-	1
C401.6	3	-	3	-	-	-	-	-	-	-	-	3	-
C402/ME3792-COMPUTER INTEGRATED MANUFACTURING													
C402.1	3	2	2	-	2	-	-	-	-	-	-	-	-
C402.2	3	2	2	-	2	-	-	-	-	-	-	2	-
C402.3	3	3	3	2	2	-	-	-	1	-	-	1	-
C402.4	3	2	2	2	3	-	-	-	1	-	-	1	-
C402.5	3	3	3	-	2	-	-	-	1	-	-	2	-
C402.6	2	2	2	-	3	-	-	-	-	-	-	2	-
C403/GE3791-HUMAN VALUES AND ETHICS													
C402.1	2	-	2	-	-	3	-	-	-	2	-	-	3
C402.2	3	-	2	-	-	3	-	-	-	2	-	-	2
C402.3	2	-	3	-	-	2	-	-	-	3	-	-	2
C402.4	3	-	3	-	-	3	-	-	-	3	-	-	2
C402.5	3	-	2	-	-	3	-	-	-	2	-	-	2
C402.6	3	-	2	-	-	2	-	-	-	3	-	-	3
C404/GE3792-INDUSTRIAL MANAGEMENT													
C404.1	-	-	2	2	-	3	3	2	2	-	3	2	-
C404.2	-	-	2	2	-	2	3	2	2	-	2	2	-
C404.3	-	-	1	2	-	2	2	3	2	-	2	1	-
C404.4	-	-	1	2	-	3	2	3	3	-	2	1	-
C404.5	-	-	2	2	-	3	2	3	3	-	3	2	-
C404.6	-	-	2	2	-	3	3	2	3	-	3	2	-
C405/ME3791-MECHATRONICS AND IoT													
C405.1	3	2	1	1	1	-	-	-	-	-	-	1	2
C405.2	3	2	1	1	3	-	-	1	-	-	2	1	3
C405.3	3	2	1	1	1	-	-	-	-	-	-	2	2
C405.4	3	2	1	1	3	-	-	-	-	-	3	2	2
C405.5	3	2	1	1	3	2	-	3	-	-	3	2	2
C405.6	-	-	2	2	-	3	3	2	3	-	3	2	-

C406/OIM 353-PRODUCTION PLANNING AND CONTROL

[illegible]

C407/OR351-FOUNDATION OF ROBOTICS

C407.1	3	3	3	2	2	-	-	-	-	2	-	-	-
C407.2	3	-	2	3	3	-	-	-	-	2	-	-	-
C407.3	3	2	3	-	3	-	-	-	-	3	-	-	-
C407.4	3	2	2	3	3	-	-	-	-	2	-	-	-
C407.5	2	-	-	1	2	-	-	-	-	2	-	-	-
C407.6	3	2	-	3	3	-	-	-	-	2	-	-	-

C408/ME3781-MECHATRONICS AND IOT LABORATORY

C408.1	3	3	-	-	-	-	-	-	-	-	-	3	2
C408.2	3	3	3	-	-	-	-	-	-	-	-	-	-
C408.3	3	2	2	-	-	-	-	-	-	-	-	-	3
C408.4	2	3	3	-	3	-	-	-	-	-	-	3	2
C408.5	-	3	3	-	3	-	-	-	-	-	2	3	2
C408.6	2	-	3	-	3	-	-	-	-	-	2	3	2

C409/ME3811-PROJECT WORK

[illegible]