

ELECTRICAL AND ELECTRONICS ENGINEERING

COURSE	C.OCODE	COURSEOUTCOME DESCRIPTION
English	C1101.1	Apply The Four Languages Learning Skills-Listening, Speaking, Reading, Writing (Lsrw) For Professional Success.
	C1101.2	Employ Knowledge Of Grammatical Structures And Vocabulary In Speech And Writing
	C1101.3	Apply Effective Communication Skills To Enhance Professional Possibilities.
	C1101.4	Develop Acceptable Personality Traits Suitable For Chosen Profession.
Mathematics-I	C1102.1	Solve the Differential Equations of first and higher order related to various engineering applications.
	C1102.2	Apply Laplace Transforms to solve linear differential equations with constant coefficients..
	C1102.3	Apply the knowledge of partial differentiation techniques to solve physical problem like maxima and minima functions.
	C1102.4	Solve the first and higher order of partial differential equations and apply to various engineering problems
Chemistry	C1106.1	Identify the advantages and limitations of plastics, elastomers and their use in day to day life.
	C1106.2	Identify the fuels which are commonly used and their economics, advantages and limitations.
	C1106.3	Select the suitable methods of corrosion control and gain the knowledge of applications of batteries.
	C1106.4	Recognize the need of Nano materials, green synthesis, liquid crystals, Superconductors and their uses.
	C1106.5	Obtain the knowledge of semiconductors, insulators and magnetic materials.
	C1106.6	Obtain the knowledge of generation of electricity from various Non-Conventional energy sources like solar energy, hydropower, geothermal energy.
Engineering Mechanics	C1111.1	Calculate frictional force by resolving the forces into components, moment of force
	C1111.2	Draw complete and correctly labeled Free Body Diagrams of rigid bodies or systems of rigid bodies in static equilibrium
	C1111.3	Compute the Centroid and the Centre of gravity of 2-D bodies using the method of composite area
	C1111.4	Analyze the properties of surfaces & solids in relation to moment of inertia.
	C1111.5	Apply fundamental concepts of kinematics and kinetics of particles to the analysis of simple, practical problems
	C1111.6	Determine the complete motion of a rigid body resulting from an application of a system of forces, using work energy and impulse momentum principles
Computer programming	C1107.1	Gains the knowledge on Computer Hardware, Software concepts, Writing Algorithms, Drawing Flowcharts, Writing, Compiling and Executing simple C programs in Linux environment.
	C1107.2	Distinguishes branching, iteration and data representation using Arrays and Strings.
	C1107.3	Constructs programs using Modular programming and Recursive solution formulation..
	C1107.4	Explains working with pointers and how they are used to allocate memory dynamically and Uses miscellaneous aspects like enum, typed of, structure and union types in applications.
	C1107.5	Explains operations on files and working with different types of files.
	C1107.6	Gains the knowledge on Computer Hardware, Software concepts, Writing Algorithms, Drawing Flowcharts, Writing, Compiling and Executing simple C programs in Linux environment.
Environmental Science	C1108.1	Ability to acquire knowledge about the importance of environment & availability of resources
	C1108.2	Understand different environmental challenges induced due to anthropogenic activities as well as nature.
	C1108.3.	Able to identify the solutions to the environmental problems for the sake of healthy life by protecting our natural resources.
	C1108.4	Create awareness on the social issues, environmental protection acts
	C1108.5	Able to understand the environmental impact of developmental activities.

English Lab	C1114.1	Recognize the sounds of English with the help of audio visual aids
	C1114.2	Build confidence and overcome inhibitions while speaking in English.
	C1114.3	Demonstrate acquired language skills in performing the designated activity.
Chemistry Lab	C1122.1	Obtain the knowledge of acid-base titrations to determine the strength of acid and base solutions.
	C1122.2	Gain the knowledge of Redox titrations to determine the concentration of samples such as Ores, $KMnO_4$ and Copper using different indicators.
	C1122.3	Obtain the knowledge of complexometry titrations to determine the hardness of given water sample by EDTA method.
	C1122.4	Gain the knowledge of commonly used instruments such as pH meter, Conductivity meter and Potentiometer to determine the strength of given acid solutions.
Computer programming Lab	C1119.1	Understand various computer components, Installation of software. C programming development environment, compiling, debugging, and linking and executing a program using the development environment.
	C1119.2	Analyzing the complexity of problems, Modularize the problems into small modules and then convert them into programs.
	C1119.3	Construct programs that demonstrate effective use of C features including arrays, strings, structures, pointers and files.
	C1119.4	Apply and practice logical ability to solve the real world problems.
English -II	C1201.1	Apply the four languages learning skills-listening, speaking, reading, writing (LSRW) for professional success.
	C1201.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	C1201.3	Apply effective communication skills to enhance professional possibilities.
	C1201.4	Develop acceptable personality traits suitable for chosen profession.
Mathematics-II	C1202.1	Solve System Of Linear Simultaneous Equations Of Various Matrix Methods.
	C1202.2	Apply Eigen Value Computation Techniques To Reduce A Given Quadratic To Canonical Form
	C1202.3	Apply Laplace Transforms Functions For Solving Ordinary Differential Equations.
	C1202.4	Apply Special Functions To Evaluate Improper Integrals.
Mathematics-III	C1203.1	Solve system of linear algebraic equations and apply Eigen value computation technique to reduce a given quadratic to canonical form
	C1203.2	Apply double and triple integrals to find areas and volumes.
	C1203.3	Apply special functions to evaluate improper integrals
	C1203.4	Apply the concepts of vector calculus to the problems of work done by a force, circulation and flux
Engineering Physics	C1207.1	Gains the knowledge of optical phenomena and identify their importance in Engineering.
	C1207.2	Differentiate between ordinary & laser light sources and identify suitable laser in different applications
	C1207.3	Improve the acoustic quality of concert halls and apply Ultrasonic waves concept in Non Destructive Testing.
	C1207.4	Know the structure of various crystals and the production of nuclear energy and its utilization in various industrial applications.
	C1207.5	Summarize magnetic & dielectric material properties and recognize their need in engineering applications.
ENGG CIRCUITANALYSIS – I	C1208.1	To Understand passive and active elements for electric networks
	C1208.2	To observe the waveforms for single phase circuits using AC
	C1208.3	To study the RLC series and parallel waveforms
	C1208.4	To Understand magnetic circuits using Dot convention
	C1208.5	To solve the Electric circuit problems using different theorems
Engg Drawing	C1206.1	Construct polygons and draw curves used in engineering applications

	C1206.2	Construct scales, Apply concept of orthographic projection to project points and lines parallel to one reference planes.
	C1206.3	Produce orthographic projections of lines inclined to both the reference planes.
	C1206.4	Produce orthographic projections of planes inclined to both the reference planes.
	C1206.5	Produce orthographic projections of regular solids inclined to both the reference planes.
	C1206.6	Represent objects in 3D view through isometric views from orthographic views and vice versa
English Lab	C1221.1	Recognize the sounds of English with the help of audio visual aids
	C1221.2	Build confidence and overcome inhibitions while speaking in English.
	C1221.3	Demonstrate acquired language skills in performing the designated activity.
Physics Lab	C1225.1	Apply the knowledge of different phenomena of light like interference, diffraction and handle various optical measuring instruments.
	C1225.2	Analyze various electronic circuits and its components and verify the laws of stretched string.
	C1225.3	Draw the relevance between theoretical knowledge and the means to imply it in a practical manner by performing various relative experiments
ENG & IT WORK SHOP	C1224.1	Apply wood working knowledge in making simple wooden joints
	C1224.2	Apply the development of surfaces concept in producing simple sheet metal works
	C1224.3	Prepare simple fitting joints with the use of proper fitting tools

MECHANICAL ENGINEERING

COURSE	C.OCODE	COURSEOUTCOME DESCRIPTION
English	C1101.1	Apply the four languages learning skills-listening, speaking, reading, writing (LSRW) for professional success.
	C1101.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	C1101.3	Apply effective communication skills to enhance professional possibilities.
	C1101.4	Develop acceptable personality traits suitable for chosen profession.
Mathematics-I	C1102.1	Solve the Differential Equations of first and higher order related to various engineering applications.
	C1102.2	Apply Laplace Transforms to solve linear differential equations with constant coefficients.
	C1102.3	Apply the knowledge of partial differentiation techniques to solve physical problem like maxima and minima of functions.
	C1102.4	Solve the first and higher order of partial differential equations and apply to various engineering problems
APPLIED CHEMISTRY	C1105.1	Identify the advantages and limitations of plastics, elastomers and their use in day to day life.
	C1105.2	Identify the fuels which are commonly used and their economics, advantages and limitations.
	C1105.3	Select the suitable methods of corrosion control and gain the knowledge of applications of batteries.
	C1105.4	Recognize the need of Nano materials, green synthesis, liquid crystals, Superconductors and their uses.
	C1105.5	Obtain the knowledge of semiconductors, insulators and magnetic materials.
	C1105.6	Obtain the knowledge of generation of electricity from various Non-Conventional energy sources like solar energy, hydropower, and geothermal energy.
ENGG. MECHANICS	C1111.1	Calculate frictional force by resolving the forces into components, moment of force
	C1111.2	Draw complete and correctly labeled Free Body Diagrams of rigid bodies or systems of rigid bodies in static equilibrium
	C1111.3	Compute the Centroid and the Centre of gravity of 2-D bodies using the method of composite area
	C1111.4	Analyze the properties of surfaces & solids in relation to moment of inertia.
	C1111.5	Apply fundamental concepts of kinematics and kinetics of particles to the analysis of simple, practical problems
	C1111.6	Determine the complete motion of a rigid body resulting from an application of a system of forces, using work energy and impulse momentum principles
COMP.PROGRAMMING	C1107.1	Gains the knowledge on Computer Hardware, Software concepts, Writing Algorithms, Drawing Flowcharts, Writing, Compiling and Executing simple C programs in Linux environment.
	C1107.2	Distinguishes branching, iteration and data representation using Arrays and Strings.
	C1107.3	Constructs programs using Modular programming and Recursive solution formulation.
	C1107.4	Explains working with pointers and how they are used to allocate memory dynamically and Uses miscellaneous aspects like enum, typed of, structure and union types in applications.
	C1107.5	Explains operations on files and working with different types of files.
ENVIRONMENTAL STUDIES	C1108.1	Ability to acquire knowledge about the importance of environment & availability of resources
	C1108.2	Understand different environmental challenges induced due to anthropogenic activities as well as nature.
	C1108.3	Able to identify the solutions to the environmental problems for the sake of healthy life by protecting our natural resources.
	C1108.4	Create awareness on the social issues, environmental protection acts
	C1108.5	Able to understand the environmental impact of developmental activities.
	C1118.1	Obtain the knowledge of acid-base titrations to determine the strength of acid and base solutions

APPLIED CHEMISTRY LAB	C1118.2	Gain the knowledge of Redox titrations to determine the concentration of samples such as Ores and oxalic acid using different indicators
	C1118.3	Obtain the knowledge of complexometry titrations to determine the hardness of given water sample by EDTA method.
	C1118.4	Gain the knowledge of commonly used instrument pH meter to determine the strength of given acid solution
ENG-COM LAB-1	C1114.1	Recognize the sounds of English with the help of audio visual aids
	C1114.2	Build confidence and overcome inhibitions while speaking in English
	C1114.3	Demonstrate acquired language skills in performing the designated activity
COMPUTER PROGRAMMING LAB	C1119.1	Understand various computer components, Installation of software. C programming development environment, compiling, debugging, and linking and executing a program using the development environment.
	C1119.2	Analyzing the complexity of problems, Modularize the problems into small modules and then convert them into programs.
	C1119.3	Construct programs that demonstrate effective use of C features including arrays, strings, structures, pointers and files.
	C1119.4	Apply and practice logical ability to solve the real world problems.

COURSE	C.OCODE	COURSEOUTCOME DESCRIPTION
ENG-II	C1201.1	Apply the four languages learning skills-listening, speaking, reading, writing (LSRW) for professional success.
	C1201.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	C1201.3	Apply effective communication skills to enhance professional possibilities.
	C1201.4	Develop acceptable personality traits suitable for chosen profession.
M-2	C1102.1	Solve algebraic and transcendental equations by using Numerical methods.
	C1102.2	Apply the concepts of interpolation to numerical integration and solve the differential equations by using numerical methods.
	C1102.3	Compute Fourier series of the periodic function and apply Fourier transform to a range of non-periodic function.
	C1102.4	Solve the wave, heat and Laplace equations
M-3	C1203.1	Solve system of linear algebraic equations and apply Eigen value computation techniques to reduce a given quadratic to canonical form
	C1203.2	Apply double and triple integrals to find areas and volumes.
	C1203.3	Apply special functions to evaluate improper integrals
	C1203.4	Apply the concepts of vector calculus to the problems of work done by a force, circulation and flux
ENGG PHYSICS	C1204.1	Gains the knowledge of optical phenomena and identify their importance in Engineering.
	C1204.2	Differentiate between ordinary & laser light sources and identify suitable laser in different applications
	C1204.3	Improve the acoustic quality of concert halls and apply Ultrasonic waves concept in Non Destructive Testing.
	C1204.4	Know the structure of various crystals and the production of nuclear energy and its utilization in various industrial applications.
	C1204.5	Summarize magnetic & dielectric material properties and recognize their need in engineering applications.
BEEE	C1209.1	Solve problems on electric networks using active and passive elements
	C1209.2	Analyze the concept of DC electrical machines and apply them for practical problems.
	C1209.3	Understand the basic concepts of Transformers and their applications.
	C1209.4	Analyze the concept of AC electrical machines and apply them for practical problems.
	C1209.5	To acquire the knowledge about the characteristics and working principles of semiconductor diodes, Bipolar Junction Transistor
ENGG. DRAWING	C1210.1	Construct polygons and curves used in engineering applications
	C1210.2	Construct scales, Apply concept of orthographic projection to project points and lines parallel to one reference planes.
	C1210.3	Draw orthographic projections of lines inclined to both the reference planes.
	C1210.4	Draw orthographic projections of planes inclined to both the reference planes.
	C1210.5	Draw orthographic projections of regular solids inclined to both the reference planes.
	C1210.6	Represent objects in 3D view through isometric views from orthographic views and vice versa
ENG-COM LAB-2	C1221.1	Recognize the sounds of English with the help of audio visual aids.
	C1221.2	Build confidence and overcome inhibitions while speaking in English.
	C1221.3	Demonstrate acquired language skills in performing the designated activity.
ENGG PHY LAB	C1222.1	Apply the knowledge of different phenomena of light like interference, diffraction and handle various optical measuring instruments.
	C1222.2	Analyze various electronic circuits and its components and verify the laws of stretched string.
	C1222.3	Draw the relevance between theoretical knowledge and the means to imply it in a practical manner by performing various relative

		experiments
ENGG.& IT WORKSHOPS	C1224.1	Follow necessary safety precautions while operating equipment and tools to avoid accidents in workshop.
	C1224.2	Apply wood working knowledge in making simple wood joints by selecting appropriate carpentry tools.
	C1224.3	Apply development of surfaces concept in producing simple sheet metal works with the use appropriate sheet metal tools.
	C1224.4	Prepare simple fitting joints with the use of proper fitting tools

ELECTRONICS AND COMMUNICATION ENGINEERING

COURSE	C.OCODE	COURSEOUTCOME DESCRIPTION
English	C1101.1	Apply the four languages learning skills-listening, speaking, reading, writing (LSRW) for professional success.
	C1101.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	C1101.3	Apply effective communication skills to enhance professional possibilities.
	C1101.4	Develop acceptable personality traits suitable for chosen profession.
Mathematics-I	C1102.1	Solve the Differential Equations of first and higher order related to various engineering applications.
	C1102.2	Apply Laplace Transforms to solve linear differential equations with constant coefficients.
	C1102.3	Apply the knowledge of partial differentiation techniques to solve physical problem like maxima and minima of functions.
	C1102.4	Solve the first and higher order of partial differential equations and apply to various engineering problems
Mathematics-II	C1110.1	Solve algebraic and transcendental equations by using Numerical methods.
	C1110.2	Apply the concepts of interpolation to numerical integration and solve the differential equations by using numerical methods.
	C1110.3	Apply Cauchy-Riemann equations to analytic functions and find the radius of convergence of the given series in complexfield.
	C1110.4	solve the real definite integrals in complex field
Applied Physics	C1104.1	Apply the knowledge of different phenomena of light in daily life.
	C1104.2	Characterize the coherent sources over ordinary sources and understand the polarization phenomenon, Lasers and their practical implications
	C1104.3	Able to differentiate the properties of the materials based on the response in electric and magnetic fields.
	C1104.4	Understand the electron transport mechanism in metals based on Quantum mechanics
	C1104.5	Gain the basic knowledge in semiconductor physics.
Computer programming and numerical methods	C1107.1	Gains the knowledge on Computer Hardware, Software concepts, Writing Algorithms, Drawing Flowcharts, Writing, Compiling and Executing simple C programs in Linux environment.
	C1107.2	Distinguishes branching, iteration and data representation using Arrays and Strings.
	C1107.3	Constructs programs using Modular programming and Recursive solution formulation.
	C1107.4	Explains working with pointers and how they are used to allocate memory dynamically and Uses miscellaneous aspects like enum, typedef, structure and union types in applications.
	C1107.5	Explains operations on files and working with different types of files.
Engineering Drawing	C1113.1	Construct polygons, scales and draw curves used in engineering applications, draw orthographic projection of points
	C1113.2	Apply concept of orthographic projection to project lines inclined to both reference planes.
	C1113.3	Produce orthographic projections of planes inclined to both the reference planes.
	C1113.4	Produce orthographic projections of regular solids inclined to both the reference planes.
	C1113.5	Construct isometric view from orthographic views and vice versa.
English Communication skills lab	C1114.1	Recognize the sounds of English with the help of audio-visual aids.
	C1114.2	Build confidence and overcome inhibitions while speaking in English.
	C1114.3	Demonstrate acquired language skills in performing the designated activity.
	C1115.1	Apply the knowledge of different phenomena of light like interference, diffraction and handle various optical measuring instruments.
	C1115.2	Analyze various electronic circuits and its components and verify the laws of stretched string.

Physics lab		
	C1115.3	Draw the relevance between theoretical knowledge and the means to imply it in a practical manner by performing various relative experiments
Engineering &It workshop	C1117.1	Ability to understand concepts MS office, Internet and MATLAB commands
	C1117.2	Apply knowledge for computer assembling, disassembling, software installation, solve trouble shooting problems and tools for documentation using LATEX
	C1117.3	Make simple wood joints by applying wood working knowledge and make sheet metal objects by applying development of surfaces concept.
	C11174	Prepare simple fitting joints with the use of proper fitting tools and analyze the basic house wiring circuits.
English-II	C1201.1	Apply the four language learning skills-listening, speaking, reading, writing (LSRW)
	C1201.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	C1201.3	Apply effective communication skills for professional students.
	C12014	Develop acceptable personality traits to become leaders.
Mathematics-III	C1203.1	Solve system of linear algebraic equations and apply Eigen value computation techniques to reduce a given quadratic to canonical form
	C1203.2	Apply double and triple integrals to find areas and volumes.
	C1203.3	Apply special functions to evaluate improper integrals
	C1203.4	Apply the concepts of vector calculus to the problems of work done by a force, circulation and flux
Applied Chemistry	C1211.1	Identify the advantages and limitations of plastics, elastomers and their use in day to day life.
	C1211.2	Identify the fuels which are commonly used and their economics, advantages and limitations.
	C1211.3	Select the suitable methods of corrosion control and gain the knowledge of applications of batteries.
	C1211.4	Recognize the need of nano materials, green synthesis, liquid crystals, Superconductors and their uses.
	C1211.5	Obtain the knowledge of semiconductors, insulators and magnetic materials.
	C1211.6	Obtain the knowledge of generation of electricity from various non-conventional energy sources like solar, hydro power and geo thermal energy
Environmental Science	C1212.1	Acquire knowledge about the importance of environment & availability of resources
	C1212.2	Understand different environmental challenges induced due to anthropogenic activities as well as nature.
	C1212.3	Identify the solutions to the environmental problems for the sake of healthy life by protecting our natural resources.
	C1212.4	Create awareness on the social issues, environmental protection acts
	C1212.5	Understand the environmental impact of developmental activities.
Data Structures	C1213.1	Understand basic concepts like array, sorting, searching, linear and non-linear data Structures and algorithms.
	C1213.2	Apply various linear and non-linear data structures, sorting and searching algorithms for solving computing problems.
	C1213.3	Analyze various methods of linear and non-linear data structures, sorting and searching algorithms.
	C1213.4	Evaluate the linear and non-linear data structures in a given application
Electrical &Mechanical technology	C1214.1	Explain the operation of DC generator, DC motor, 3-point starter and Speed control methods.
	C1214.2	Explain the operation of 3-Phase alternator and 3-Phase Induction motors.
	C1214.3	Explain the working principle of various measuring instruments.

	C1214.4	Explain generation from various sources and transformation of power and principles of basic thermodynamic.
	C1214.5	Explain the transfer of heat from various bodies through various modes
	C1214.6	Explain the transmission of power and various manufacturing methods .
English Lab-II	C1221.1	Recognize the sounds of English with the help of audio visual aids
	C1221.2	Build confidence and overcome inhibitions while speaking in English.
	C1221.3	Demonstrate acquired language skills in performing the designated activity.
Applied Chemistry lab	C1227.1	Obtain the knowledge of acid-base titrations to determine the strength of acid and base solutions.
	C1227.2	Gain the knowledge of Redox titrations to determine the concentration of samples such as Ores, KMnO_4 and Copper using different indicators.
	C1227.3	Obtain the knowledge of complexometry titrations to determine the hardness of given water sample by EDTA method.
	C1227.4	Gain the knowledge of commonly used instruments such as pH meter, Conductivity meter and Potentiometer to determine the strength of given acid solutions.
CP lab	C1119.1	Understand various computer components, Installation of software. C programming development environment, compiling, debugging, and linking and executing a program using the development environment.
	C1119.2	Analyzing the complexity of problems, Modularize the problems into small modules and then convert them into programs.
	C1119.3	Construct programs that demonstrate effective use of C features including arrays, strings, structures, pointers and files.
	C1119.4	Apply and practice logical ability to solve the real world problems.

COMPUTER SCIENCE AND ENGINEERING

COURSE	C.OCODE	COURSEOUTCOME DESCRIPTION
English	C1101.1	Apply the four languages learning skills-listening, speaking, reading, writing (LSRW) for professional success.
	C1101.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	C1101.3	Apply effective communication skills to enhance professional possibilities.
	C1101.4	Develop acceptable personality traits suitable for chosen profession.
Mathematics-I	C1102.1	Solve the Differential Equations of first and higher order related to various engineering applications.
	C1102.2	Apply Laplace Transforms to solve linear differential equations with constant coefficients.
	C1102.3	Apply the knowledge of partial differentiation techniques to solve physical problem like maxima and minima of functions.
	C1102.4	Solve the first and higher order of partial differential equations and apply to various engineering problems
Mathematics-II	C1109.1	Solve algebraic and transcendental equations by using Numerical methods.
	C1109.2	Apply the concepts of interpolation to numerical integration and solve the differential equations by using numerical methods.
	C1109.3	Compute Fourier series of the periodic function and apply Fourier transform to a range of non-periodic function.
	C1109.4	Solve the wave, heat and Laplace equations
Applied Physics	C1104.1	Apply the knowledge of different phenomena of light in daily life.
	C1104.2	Characterize the coherent sources over ordinary sources and understand the polarization phenomenon, Lasers and their practical implications
	C1104.3	Able to differentiate the properties of the materials based on the response in electric and magnetic fields.
	C1104.4	Understand the electron transport mechanism in metals based on Quantum mechanics
	C1104.5	Gain the basic knowledge in semiconductor physics.
Computer Programming	C1107.1	Gains the knowledge on Computer Hardware, Software concepts, Writing Algorithms, Drawing Flowcharts, Writing, Compiling and Executing simple C programs in Linux environment.
	C1107.2	Distinguishes branching, iteration and data representation using Arrays and Strings.
	C1107.3	Constructs programs using Modular programming and Recursive solution formulation.
	C1107.4	Explains working with pointers and how they are used to allocate memory dynamically and Uses miscellaneous aspects like enum, type def, structure and union types in applications.
	C1107.5	Explains operations on files and working with different types of files.
Engineering Drawing	C1113.1	Construct polygons and draw curves used in engineering applications
	C1113.2	Construct scales, Apply concept of orthographic projection to project points and lines parallel to one reference planes.
	C1113.3	Produce orthographic projections of lines inclined to both the reference planes.
	C1113.4	Produce orthographic projections of planes inclined to both the reference planes.
	C1113.5	Produce orthographic projections of regular solids inclined to both the reference planes.
	C1113.6	Represent objects in 3D view through isometric views from orthographic views and vice versa
Applied Physics Lab	C1115.1	Apply the knowledge of different phenomena of light like interference, diffraction and handle various optical measuring instruments.
	C1115.2	Verify the laws of thermo dynamics, electro magnetism and stretched string.
	C1115.3	Draw the relevance between theoretical knowledge and the means to imply it in a practical manner by performing various relative experiments
	C1119.1	Understand various computer components, Installation of software. C programming development environment, compiling, debugging, and linking and executing a program using the development environment.

Computer programming lab		
	C1119.2	Analyzing the complexity of problems, Modularize the problems into small modules and then convert them into programs.
	C1119.3	Construct programs that demonstrate effective use of C features including arrays, strings, structures, pointers and files.
	C1119.4	Apply and practice logical ability to solve the real world problems.
	C1114.1	Recognize the sounds of English with the help of audio visual aids
	C1114.2	Build confidence and overcome inhibitions while speaking in English.
English Language Lab	C1114.1	Recognize the sounds of English with the help of audio visual aids
	C1114.2	Build confidence and overcome inhibitions while speaking in English.
	C1114.3	Demonstrate acquired language skills in performing the designated activity.
English	C1201.1	Apply the four languages learning skills-listening, speaking, reading, writing (LSRW) for professional success.
	C1201.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	C1201.3	Apply effective communication skills to enhance professional possibilities.
	C1201.4	Develop acceptable personality traits suitable for chosen profession.
Mathematics-III	C1203.1	Solve system of linear algebraic equations and apply Eigen value computation techniques to reduce a given quadratic to canonical form
	C1203.2	Apply double and triple integrals to find areas and volumes.
	C1203.3	Apply special functions to evaluate improper integrals
	C1203.4	Apply the concepts of vector calculus to the problems of work done by a force, circulation and flux
Applied Chemistry	C1211.1	Identify the advantages and limitations of plastics, elastomers and their use in day to day life.
	C1211.2	Identify the fuels which are commonly used and their economics, advantages and limitations.
	C1211.3	Select the suitable methods of corrosion control and gain the knowledge of applications of batteries.
	C1211.4	Recognize the need of Nano materials, green synthesis, liquid crystals, Superconductors and their uses.
	C1211.5	Obtain the knowledge of semiconductors, insulators and magnetic materials.
	C1211.6	Obtain the knowledge of generation of electricity from various Non-Conventional energy sources like solar energy, hydropower, geothermal energy.
Environmental science	C1212.1	Acquire knowledge about the importance of environment & availability of resources
	C1212.2	Understand different environmental challenges induced due to anthropogenic activities as well as nature.
	C1212.3	Identify the solutions to the environmental problems for the sake of healthy life by protecting our natural resources.
	C1212.4	Create awareness on the social issues, environmental protection acts
	C1212.5	Understand the environmental impact of developmental activities.
Engineering Mechanics	C1216.1	Calculate frictional force by resolving the forces into components, moment of force
	C1216.2	Draw complete and correctly labeled Free Body Diagrams of rigid bodies or systems of rigid bodies in static equilibrium
	C1216.3	Compute the Centroid and the Centre of gravity of 2-D bodies using the method of composite area
	C1216.4	Analyze the properties of surfaces & solids in relation to moment of inertia.
	C1216.5	Apply fundamental concepts of kinematics and kinetics of particles to the analysis of simple, practical problems
	C1216.6	Determine the complete motion of a rigid body resulting from an application of a system of forces, using work energy and impulse

		momentum principles
Object Oriented Problem Solving Through C++	C1215.1	Explain the concepts of object-oriented programming and basic structure of C++ programming
	C1215.2	Apply the concept of constructor, destructor and operator overloading.
	C1215.3	Construct the C++ program, by using various inheritance concepts and virtual functions
	C1215.4	Design the template and exception handling for simple and complex programs.
	C1215.5	Describe various standard template library.
English language Lab	C1221.1	Recognize the sounds of English with the help of audio visual aids
	C1221.2	Build confidence and overcome inhibitions while speaking in English.
	C1221.3	Demonstrate acquired language skills in performing the designated activity.
Applied Chemistry Lab	C1227.1	Obtain the knowledge of acid-base titrations to determine the strength of acid and base solutions.
	C1227.2	Gain the knowledge of Redox titrations to determine the concentration of samples such as Ores, KMnO_4 and Copper using different indicators.
	C1227.3	Obtain the knowledge of complexometry titrations to determine the hardness of given water sample by EDTA method.
	C1227.4	Gain the knowledge of commonly used instruments such as pH meter, Conductivity meter and Potentiometer to determine the strength of given acid solutions.
Object Oriented Problem Solving Through C++ Lab	C1229.1	Understand the object oriented concepts with language environment.
	C1229.2	Design and implement the various concepts related to language.
	C1229.3	Apply various operations on Exception Handler and STL.

INFORMATION TECHNOLOGY

COURSE	C.OCODE	COURSEOUTCOME DESCRIPTION
English	C1101.1	Apply the four languages learning skills-listening, speaking, reading, writing (LSRW) for professional success.
	C1101.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	C1101.3	Apply effective communication skills to enhance professional possibilities.
	C1101.4	Develop acceptable personality traits suitable for chosen profession.
Mathematics-I	C1102.1	Solve the Differential Equations of first and higher order related to various engineering applications.
	C1102.2	Apply Laplace Transforms to solve linear differential equations with constant coefficients.
	C1102.3	Apply the knowledge of partial differentiation techniques to solve physical problem like maxima and minima of functions.
	C1102.4	Solve the first and higher order of partial differential equations and apply to various engineering problems
Mathematics-II	C1109.1	Solve algebraic and transcendental equations by using Numerical methods.
	C1109.2	Apply the concepts of interpolation to numerical integration and solve the differential equations by using numerical methods.
	C1109.3	Compute Fourier series of the periodic function and apply Fourier transform to a range of non-periodic function.
	C1109.4	Solve the wave, heat and Laplace equations
Applied Physics	C1104.1	Apply the knowledge of different phenomena of light in daily life.
	C1104.2	Characterize the coherent sources over ordinary sources and understand the polarization phenomenon, Lasers and their practical implications
	C1104.3	Able to differentiate the properties of the materials based on the response in electric and magnetic fields.
	C1104.4	Understand the electron transport mechanism in metals based on Quantum mechanics
	C1104.5	Gain the basic knowledge in semiconductor physics.
Computer programming & Numerical Methods	C1107.1	Gains the knowledge on Computer Hardware, Software concepts, Writing Algorithms, Drawing Flowcharts, Writing, Compiling and Executing simple C programs in Linux environment.
	C1107.2	Distinguishes branching, iteration and data representation using Arrays and Strings.
	C1107.3	Constructs programs using Modular programming and Recursive solution formulation..
	C1107.4	Explains working with pointers and how they are used to allocate memory dynamically and Uses miscellaneous aspects like enum, typed of, structure and union types in applications.
	C1107.5	Explains operations on files and working with different types of files.
Engineering Drawing	C1113.1	Construct polygons and draw curves used in engineering applications and scales
	C1113.2	Construct scales, Apply concept of orthographic projection to project points and lines parallel to one reference planes.
	C1113.3	Draw orthographic projections of lines inclined to both the reference planes.
	C1113.4	Draw orthographic projections of planes inclined to both the reference planes.
	C1113.5	Draw orthographic projections of regular solids inclined to both the reference planes.
	C1113.6	Represent objects in 3D view through isometric views from orthographic views and vice versa.
English Lab	C1114.1	Recognize the sounds of English with the help of audio visual aids
	C1114.2	Build confidence and overcome inhibitions while speaking in English.
	C1114.3	Demonstrate acquired language skills in performing the designated activity.
	C1115.1	Apply the knowledge of different phenomena of light like interference, diffraction and handle various optical measuring instruments.

Applied Physics Lab	C1115.2	Analyze various electronic circuits and study the temperature dependence of semiconductors.
	C1115.3	Draw the relevance between theoretical knowledge and the means to imply it in a practical manner by performing various relative experiments
Computer programming & Numerical Methods Lab	C1119.1	Understand various computer components, Installation of software. C programming development environment, compiling, debugging, and linking and executing a program using the development environment.
	C1119.2	Analyzing the complexity of problems, Modularize the problems into small modules and then convert them into programs.
	C1119.3	Construct programs that demonstrate effective use of C features including arrays, strings, structures, pointers and files.
	C1119.4	Apply and practice logical ability to solve the real world problems.

COURSE	C.O CODE	COURSE OUTCOME DESCRIPTION
English -II	C1201.1	Apply the four languages learning skills-listening, speaking, reading, writing (LSRW) for professional success.
	C1201.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	C1201.3	Apply effective communication skills to enhance professional possibilities.
	C1201.4	Develop acceptable personality traits suitable for chosen profession.
Mathematics-III	C1203.1	Solve system of linear algebraic equations and apply Eigen value computation technique to reduce a given quadratic to canonical form
	C1203.2	Apply double and triple integrals to find areas and volumes.
	C1203.3	Apply special functions to evaluate improper integrals
	C1203.4	Apply the concepts of vector calculus to the problems of work done by a force, circulation and flux
Applied Chemistry	C1211.1	Identify the advantages and limitations of plastics, elastomers and their use in day to day life.
	C1211.2	Identify the fuels which are commonly used and their economics, advantages and limitations.
	C1211.3	Select the suitable methods of corrosion control and gain the knowledge of applications of batteries.
	C1211.4	Recognize the need of Nano materials, green synthesis, liquid crystals, Superconductors and their uses.
	C1211.5	Obtain the knowledge of semiconductors, insulators and magnetic materials.
	C1211.6	Obtain the knowledge of generation of electricity from various Non-Conventional energy sources like solar energy, hydropower, and geothermal energy.
Environmental Science	C1212.1	Acquire knowledge about the importance of environment & availability of resources
	C1212.2	Understand different environmental challenges induced due to anthropogenic activities as well as nature.
	C1212.3	Identify the solutions to the environmental problems for the sake of healthy life by protecting our natural resources.
	C1212.4	Create awareness on the social issues, environmental protection acts
	C1212.5	Understand the environmental impact of developmental activities.
OOPSC++	C1215.1	Explain the concepts of object-oriented programming and basic structure of C++ programming
	C1215.2	Apply the concept of constructor, destructor and operator overloading.
	C1215.3	Construct the C++ program, by using various inheritance concepts and virtual functions
	C1215.4	Design the template and exception handling for simple and complex programs.
	C1215.5	Describe various standard template library.
	C1216.1	Calculate frictional force by resolving the forces with components, moments of force.

Engineering Mechanics	C1216.2	Draw complete and correctly laddled free body diagram of rigid bodies or systems of rigid bodies in static equilibrium.
	C1216.3	Compute the centroid and the center of gravity of 2-D bodies using the method of composite area.
	C1216.4	Analyze the properties of surfaces and solids in relation to moment of inertia.
	C1216.5	Apply fundamental concepts of kinematics and kinetics of particles to the analyses of simple, practical problems.
	C1216.6	Determine the complete motion of a rigid body resulting from an application of a system of forces using work energy and impulse momentum principles.
Applied Chemistry Lab	C1227.1	Obtain the knowledge of acid-base titrations to determine the strength of acid and base solutions.
	C1227.2	Gain the knowledge of Redox titrations to determine the concentration of samples such as Ores, KMnO ₄ and Copper using different indicators.
	C1227.3	Obtain the knowledge of complexometry titrations to determine the hardness of given water sample by EDTA method.
	C1227.4	Gain the knowledge of commonly used instruments such as pH meter, Conductivity meter and Potentiometer to determine the strength of given acid solutions.
English communication skills Lab	C1221.1	Recognize the sounds of English with the help of audio visual aids.
	C1221.2	Build confidence and overcome inhibitions while speaking in English.
	C1221.3	Demonstrate acquired language skills in performing the designated activity.
OOPS Lab	C1229.1	Understand various computer components, Installation of software. C programming development environment, compiling, debugging, and linking and executing a program using the development environment.
	C1229.2	Analyzing the complexity of problems, Modularize the problems into small modules and then convert them into programs.
	C1229.3	Construct programs that demonstrate effective use of C features including arrays, strings, structures, pointers and files.
	C1229.4	Apply and practice logical ability to solve the real world problems.