

ELECTRICAL AND ELECTORINICS ENGINEERING

COURSE	C.O CODE	COURSE OUTCOME DESCRIPTION
COMMUNICATIVE ENGLISH	R201102.1	Apply The Four Languages Learning Skills-Listening, Speaking, Reading, Writing (Lsrw) For Professional Success.
	R201102.2	Employ Knowledge Of Grammatical Structures And Vocabulary In Speech And Writing
	R201102.3	Apply Effective Communication Skills To Enhance Professional Possibilities.
	R201102.4	Develop Acceptable Personality Traits Suitable For Chosen Profession.
MATHEMATICS -I	R201101.1	Examine the convergence of series and apply mean value theorem to real life problem.
	R201101.2	Solve the Differential Equations of first and higher order related to various engineering applications.
	R201101.3	Apply the partial differentiation technique to solve physical problem
	R201101.4	Apply double and triple integrals to find areas and volumes.
Mathematics-II	R201109.1	Solve system of linear algebraic equations and apply Eigen value computation techniques to reduce a given quadratic to canonical form
	R201109.2	Solve algebraic and Transcendental equations by using Numerical methods
	R201109.3	Apply Newton's forward and backward interpolation and Lagrange's formula for equal and unequal intervals.
	R201109.4	Computer numerical solutions of differential equations.
PPSUC	R201110.1	Able to understand the fundamental concepts of computers and C language constructs
	R201110.2	Able to apply the concepts of C constructs Homogeneous and heterogeneous data types and pointers for solving the given problems
	R201110.3	Able to divide a given problem into modules using C constructs and functions to develop modular reusable code.
	R201110.4	Able to analyze the problem, choose appropriate C constructs and use the file system to solve mathematical and engineering problems accordingly.
ED	R201111.1	Construct polygons, scales and draw curves used in engineering applications
	R201111.2	Apply concept of orthographic projection to project points and lines inclined to both reference planes.
	R201111.3	Apply concept of orthographic projections of planes inclined to both the reference planes.
	R201111.4	Apply concept of orthographic projections of solids inclined to both the reference planes.
	R201111.5	Draw isometric view of objects from orthographic views and vice versa
English Lab	R201106.1	Recognize the sounds of English with the help of audio visual aids
	R201106.2	Build confidence and overcome inhibitions while speaking in English.
	R201106.3	Demonstrate acquired language skills in performing the designated activity.
EEW	R201112.1	To understand the limitations, tolerances, safety aspects of electrical systems and wiring.
	R201112.2	Ability to Select wires/cables and other accessories used in different types of wiring.
	R201112.3	To understand the basic concepts of electrical circuits and able to measure current, voltage and POWER IN A CIRCUIT
	R201113.1	Able to understand the concepts of C language
	R201113.2	Able to apply the C language constructions for simple problems

PPSUC LAB	R201113.3	Able to apply C constructs like homogeneous, heterogeneous data for a given mathematical problem
	R201113.4	Able to analysis a given scenario using functions & file concepts
COURSE	C.O CODE	COURSE OUTCOME DESCRIPTION
Mathematics-III	R201206.1	Apply the concepts of vector calculus to the problems of work done by a force, circulation and flux
	R201206.2	Apply Laplace Transforms to solve the ordinary differential equations
	R201206.3	Compute Fourier series of the periodic function and Apply Fourier transform to a range of non-periodic function.
	R201206.4	Solve the first and higher order partial differential equations and apply to various physical problems
APPLIED PHYSICS	R201207.1	Apply the knowledge of different optical phenomena in daily life.
	R201207.2	Distinguish between laser sources and conventional sources and study the propagation of light through optical fibers.
	R201207.3	Explain fundamental concepts of quantum mechanics and analyze the behaviour of electron in metals according to various theories
	R201207.4	Summarize magnetic & dielectric material properties and recognize their need in engineering applications.
	R201207.5	Understand electrons & holes behaviour in semiconductors and extraordinary behaviour of materials at various transition temperatures
DATA STRUCTURE THROUGH C	R201208.1	Describe how arrays, records, linked structures, stacks, queues, trees and graphs are represented in memory and used by algorithm
	R201208.2	Discuss the computational efficiency of the principal algorithms for sorting ,searching and hashing
	R201208.3	Demonstrate different methods for traversing trees and graphs
	R201208.4	Solve various algorithm design techniques for developing algorithms
ELECTRICAL CIRCUIT ANALYSIS	R201209.1	able to solve problems on nodal ,mesh analysis and other network reduction techniques
	R201209.2	Able to differentiate between electric and magnetic circuits
	R201209.3	Able to understand power factor and its significance
	R201209.4	Able to solve problems on resonance and network theorems
BASIC CIVIL AND MECHANICAL ENGG	R201227.1	Familiarize about Shear force diagram & Bending moment diagrams for various beams.
	R201227.2	Apply concepts of Rosette analysis for strain measurements.
	R201227.3	Analyze the characteristics of common building materials
	R201227.4	Explain the working characteristics of Internal Combustion engines.
	R201227.5	Distinguish the differences between boiler mountings and accessories.
APPLIED PHYSICS LAB	R201233.1	Apply the knowledge of different phenomena of light like interference, diffraction and handle various optical measuring instruments.
	R201233.2	Analyze various electronic circuits and study the temperature dependence of semiconductors.

	R201233.3	Apply the knowledge of phenomena like LASER diffraction and measure the numerical aperture of an optical fibre
DATA STRUCTURE THROUGH C	R201234.1	To develop skills to design and analyze simple linear and non linear data structures
	R201234.2	To Strengthen the ability to identify and apply the suitable data structure for the given real world problem
	R201234.3	To Gain knowledge in practical applications of data structures
BASIC CIVIL AND MECHANICAL ENGG LAB	R201251.2	Solve to arrive at finding constant speed and variable speed on IC engines and interpret their performance
	R201251.2	Estimate energy distribution by conducting heat balance test on IC engines
	R201251.3	Determine flow discharge measuring device used in pipes channels and tanks
	R201251.4	Test for performance of pumps and turbines by using concepts of fluid mechanics
Computer Programming and Num. Methods Lab	C.O CODE	COURSE OUTCOME DESCRIPTION
	C1208.2	Prepare Algorithm And Flowchart To Solve Simple Engineering Problems
	C1208.3	Write C Program To Solve Simple Engineering Programs Using Control Statements, Arrays And Functions
	C1208.4	Write C Program To Solve Simple Engineering Programs Using Pointers, Function Call By Value And Function Call By Reference
	C1208.5	Write C Program To Solve Simple Engineering Programs Using Structures And Files
	C1208.6	Explain About Sources Of Errors In Numerical Methods
	C1208.7	Identify Sources Of Errors In Numerical Methods
	C1208.8	Students Will Have A Fundamental Idea To Solve Partial Differential Equations.
English Language Lab	C1206.1	Recognize the sounds of English with the help of audio visual aids
	C1206.2	Build confidence and overcome inhibitions while speaking in English.
	C1206.3	Demonstrate acquired language skills in performing the designated activity.

MECHANICAL ENGINEERING

COURSE	C.OCODE	COURSEOUTCOMEDescription
C&DE M-1	R201101.1	Examine the convergence of series and apply mean value theorem to real life problem.
	R201101.2	Solve the Differential Equations of first and higher order related to various engineering applications.
	R201101.3	Apply the partial differentiation technique to solve physical problem
	R201101.4	Apply double and triple integrals to find areas and volumes.
ENGLISH	R201102.1	Apply the four languages learning skills-listening, speaking, reading, writing (LSRW) for professional success.
	R201102.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	R201102.3	Apply effective communication skills to enhance professional possibilities.
	R201102.4	Develop acceptable personality traits suitable for chosen profession.
ENGG PHYSICS	R201103.1	Apply the knowledge of different phenomena of light in daily life.
	R201103.2	Distinguish between laser sources and conventional sources and study the propagation of light through optical fibres.
	R201103.3	Summarize magnetic & dielectric material properties and recognize their need in engineering applications.
	R201103.4	Improve the acoustic quality of concert halls and apply Ultrasonic waves concept in Non Destructive Testing.
	R201103.5	Study the structures and properties of solid state materials, apply this knowledge to estimate the structure of the materials
ENGG DRAWING	R201103.1	Construct polygons, scales and draw curves used in engineering applications
	R201103.2	Apply concept of orthographic projection to project Points, St. lines inclined to one and both reference planes.
	R201103.3	Produce orthographic projections of planes inclined to both the reference planes.
	R201103.4	Produce orthographic projections of regular solids inclined to both the reference planes.
	R201103.5	Construct isometric view from orthographic views and vice versa.
	R201103.6	Drawing practice on AUTO-CAD
PPSUC	R201110.1	Apply the basic concepts of C Programming for problem-solving and different number systems.
	R201110.2	To use different operators, write programs that use control statements for a given problem.
	R201110.3	Illustrate the concepts of Homogeneous and heterogeneous data types, pointers and file system for solving mathematical and engineering problems.
	R201110.4	Decompose a given problem into functions and to develop modular reusable code.
ENGLISH LAB	R201106.1	Recognize the sounds of English with the help of audio visual aids
	R201106.2	Build confidence and overcome inhibitions while speaking in English.
	R201106.3	Demonstrate acquired language skills in performing the designated activity.
ENGG PHYSICS LAB	R201107.1	Apply the knowledge of different phenomena of light like interference, diffraction and handle various optical measuring instruments.
	R201107.2	Analyze various electronic circuits and its components and verify the laws of stretched string.
	R201107.3	Apply the knowledge of phenomena like LASER diffraction and resonance in sound waves

PPSUC LAB	R201113.1	Describe the basics of computer and understand the problem-solving aspect.
	R201113.2	Design and develop C program to evaluate simple expressions and logical operations.
	R201113.3	Develop & Implement C programs with suitable modules to solve the given problem.
	R201113.4	Demonstrate the concept of pointer and perform I/O operations in files.
COURSE	C.OCODE	COURSEOUTCOMEDescription
M-2	R201201.1	Solve system of linear algebraic equations and apply Eigen value computation techniques to reduce a given quadratic to canonical form
	R201201.2	Solve algebraic and Transcendental equations by using Numerical methods
	R201201.3	Apply Newton's forward and backward interpolation and Lagrange's formula for equal and unequal intervals.
	R201201.4	Compute numerical solutions of differential equations.
ENGG CHEMISTRY	R201202.1	Identify the advantages and limitations of plastic materials, elastomers and their use in day to day life.
	R201202.2	Select the suitable methods of corrosion control and gain the knowledge of applications of batteries.
	R201202.3	Recognize the need of nano materials, <i>liquid crystals</i> , semiconductors and super conductors.
	R201202.4	Obtain the knowledge of computational chemistry and molecular machines
	R201202.5	Obtain the knowledge of generation of electricity from various Non-Conventional energy sources.
ENGG MECHANICS	R201204.1	Analyze the system of forces acting on rigid bodies by FBD's
	R201204.2	Apply laws of friction to find friction forces acting on the rigid bodies
	R201204.3	Find Moment of Inertia of plane laminas by locating its Centroid and Analyze the frames and trusses to find internal forces in rigid members
	R201204.4	Analyze motion parameters of bodies both in translation and rotation(D'Alembert's Principle)
	R201204.5	Apply work- Energy and Impulse-momentum methods to find motion parameters of a moving bodies
BEEE	R201211.1	Analyze various electrical networks.
	R201211.2	Understand the operation of DC & AC Machines, machine testing procedures for evolution of performance.
	R201211.3	Analyze operation of half wave, full wave bridge rectifiers and OP-AMPs.
	R201211.4	Understanding operations of CE amplifier and basic concept of feedback amplifier
THERMO DYNAMICS	R201254.1	Explain the basic concepts of thermodynamic systems in the energy perspective; distinguish the point function and the path function with respect to energy, work and heat.
	R201254.2	Apply the knowledge of thermodynamic systems while learning the first law of thermodynamics and apply the steady flow steady state energy equation on several mechanical devices also understand the concept of equality of temperature, temperature measuring devices.
	R201254.3	Apply second law statements of thermodynamics on heat engines and heat pumps and analyze the concept of Carnot cycle, entropy, availability and irreversibility and understand the use of Maxwell's relations and thermodynamic functions.
	R201254.4	Demonstrate the process of steam formation and related properties and related steam utilizing mechanical devices with the help of appropriate property relations, steam tables and charts.

ENGG CHEMISTRY LAB	R201231.1	Obtain the knowledge of acid-base titrations to determine the strength of acid and base solutions.
	R201231.2	Gain the knowledge of Redox titrations to determine the concentration of samples such as Ores, $KMnO_4$ and Copper using different indicators.
	R201231.3	Obtain the knowledge of complexometry titrations to determine the hardness of given water sample by EDTA method.
	R201231.4	Gain the knowledge of commonly used instruments such as pH meter, Conductivity meter and Potentiometer to determine the strength of given acid solutions.
WORKSHOP PRACTICE LAB	C.OCODE	COURSEOUTCOMEDescription
	R201235.1	Apply working knowledge in making simple wood joints and fitting joints and simple sheet metal works
	R201235.2	Apply electrical working knowledge in making simple wirings
	R201235.3	Apply knowledge for computer assembling and software installation and how to solve the trouble shooting problems.
	R201235.4	Apply the tools for preparation of PPT, Documentation and budget sheet etc.
BEEE LAB	R201236.1	Estimate the performance of the different machines by the computation of efficiency and regulation.
	R201236.2	Examining the performance characteristics of DC & AC machines.
	R201236.3	Measuring various losses in DC machines & Transformers by conducting suitable tests.
	R201236.4	Summarize the characteristics & applications of different electronics devices.

ELECOTRONICS AND COMMUNICATION ENGINEERING

COURSE	C.OCODE	COURSEOUTCOMEDescription
Mathematics-I	C1101.1	Examine the convergence of series and apply mean value theorem to real life problem.
	C1101.2	Solve the Differential Equations of first and higher order related to various engineering applications.
	C1101.3	Apply the partial differentiation technique to solve physical problem
	C1101.4	Apply double and triple integrals to find areas and volumes.
Communicative English	C1102.1	Apply the four language learning skills-listening, speaking, reading, writing (LSRW)
	C1102.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	C1102.3	Apply effective communication skills for professional possibilities.
	C1102.4	Develop acceptable personality traits suitable for chosen profession.
Engineering Drawing	C1104.1	Construct polygons, scales and draw curves used in engineering applications
	C1104.2	Apply concept of orthographic projection to project points and lines inclined to both reference planes.
	C1104.3	Apply concept of orthographic projections of planes inclined to both the reference planes.
	C1104.4	Apply concept of orthographic projections of solids inclined to both the reference planes.
	C1104.5	Draw isometric view of objects from orthographic views and vice versa
English Communication Skills Lab	C1106.1	Recognize the sounds of English with the help of audio visual aids
	C1106.2	Build confidence and overcome inhibitions while speaking in English.
	C1106.3	Demonstrate acquired language skills in performing the designated activity.
PPSUC	C1110.1	Apply the basic concepts of C Programming for problem-solving and different number systems.
	C1110.2	To use different operators, write programs that use control statements for a given problem.
	C1110.3	Illustrate the concepts of Homogeneous and heterogeneous data types, pointers and file system for solving mathematical and engineering problems.
	C1110.4	Decompose a given problem into functions and to develop modular reusable code.
PPSUC LAB	C1113.1	Describe the basics of computer and understand the problem-solving aspect.
	C1113.2	Design and develop C program to evaluate simple expressions and logical operations.
	C1113.3	Develop & Implement C programs with suitable modules to solve the given problem.
	C1113.4	Demonstrate the concept of pointer and perform I/O operations in files.
Applied Chemistry	C1115.1	Identify the advantages and limitations of Plastic materials, Elastomers and their use in day to day life.
	C1115.2	Select the suitable methods of corrosion control and gain the knowledge of applications of batteries.
	C1115.3	Recognize the need of nano materials, <i>liquid crystals</i> , semiconductors and super conductors.
	C1115.4	Gain the knowledge of applications of different analytical instruments and generation of electricity from various Non-Conventional energy sources.

	C1115.5	Obtain the knowledge of computational chemistry and molecular machines.
Applied Chemistry Lab	C1116.1	Obtain the knowledge of acid-base titrations to determine the strength of acid and base solutions.
	C1116.2	Gain the knowledge of Redox titrations to determine the concentration of samples such as Ores, KMnO_4 and Copper using different indicators.
	C1116.3	Obtain the knowledge of complexometry titrations to determine the hardness of given water sample by EDTA method.
	C1116.4	Gain the knowledge of commonly used instruments such as pH meter, Conductivity meter and Potentiometer to determine the strength of given acid solutions.
COURSE	C.OCODE	COURSEOUTCOMEDESCRIPTION
Mathematics-II	C1201.1	Solve system of linear algebraic equations and apply eigen value computation technics to reduce a given quadratic to canonical form
	C1201.2	Solve algebraic and Transcendental equations by using Numerical methods
	C1201.3	Apply Newton 's forward and backward interpolation and Lagrange's formula for equal and unequal intervals.
	C1201.4	Compute numerical solutions of differential equations.
Applied Physics	C1207.1	Apply the knowledge of different optical phenomena in daily life.
	C1207.2	Distinguish between laser sources and conventional sources and study the propagation of light through optical fibres.
	C1207.3	Explain fundamental concepts of quantum mechanics and analyze the behavior of electron in metals according to various theories
	C1207.4	Summarize magnetic & dielectric material properties and recognize their need in engineering applications.
	C1207.5	Understand electrons & holes behavior in semiconductors and extraordinary behavior of materials at various transition temperatures
OOPS	C1212.1	Show competence in the use of the Java Programming language in the development of small to medium sized application programs that demonstrate professionally acceptable coding and performed standard
	C1212.2	Illustrate the basic principles of the object-oriented programming
	C1212.3	Develop exception handling and Multithreading with applications
	C1212.4	Design and Event handling in Gui applications and develop Networking applications
Network Analysis	C1213.1	To Define basic Electrical Quantities and associated units and relationship between charge, current, voltage and power.
	C1213.2	Discuss about what is active elements, passive elements and identification of mesh, node, path, loop.
	C1213.3	Analyze the dc excitations for RL, RC, RLC circuits
	C1213.4	To Analyze the concepts of network theorems for DC and AC and its application in practically
	C1213.5	Calculate the two port network parameters (Z, Y, ABCD, h & g).
BEE	C1214.1	Able to explain the operation of DC generator and analyze the characteristics of DC generator.

	C1214.2	Able to explain the principle of operation of DC motor and analyze their characteristics. Acquire the skills to analyze the starting and speed control methods of DC motors.
	C1214.3	Ability to analyze the performance and speed – torque characteristics of a3-phase induction motor and understand starting methods of 3-phaseinduction motor.
	C1214.4	Able to explain the operation of Synchronous Machines
	C1214.5	Capability to understand the operation of various special machines.
Applied Physics Lab	C1233.1	Apply the knowledge of different phenomena of light like interference, diffraction and handle various optical measuring instruments.
	C1233.2	Analyze various electronic circuits and study the temperature dependence of semiconductors.
	C1233.3	Apply the knowledge of phenomena like LASER diffraction and measure the numerical aperture of an optical fibre
Electronic Workshop	C1237.1	Examine characteristics and performance of AC and DC components
	C1237.2	Analyze the behavior of various measuring instruments.
	C1237.3	Describe the working of soldering and PCB layout
BEE Lab	C1238.1	Analyze characteristics & performance of dc shunt and series machines
	C1238.2	Analysing behaviour of 1-phase transformer at various loads and power factor conditions
	C1238.3	Analyze performance of 3- Φ induction motor and alternator

COMPUTER SCIENCE AND ENGINEERING

COURSE	C.O CODE	COURSE OUTCOME DESCRIPTION
Mathematics-I English	C1101.1	Examine the convergence of series and apply mean value theorem to real life problem.
	C1101.2	Solve the Differential Equations of first and higher order related to various engineering applications.
	C1101.3	Apply the partial differentiation technique to solve physical problem
	C1101.4	Apply double and triple integrals to find areas and volumes.
English	C1102.1	Apply the four languages learning skills-listening, speaking, reading, writing (LSRW) for professional success.
	C1102.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
	C1102.3	Apply effective communication skills to enhance professional possibilities.
	C1102.4	Develop acceptable personality traits suitable for chosen profession.
Applied Physics	C1117.1	Apply the knowledge of different optical phenomena in daily life.
	C1117.2	Distinguish between laser sources and conventional sources and study the propagation of light through optical fibers.
	C1117.3	Explain fundamental concepts of quantum mechanics and analyze the behavior of electron in metals according to various theories
	C1117.4	Summarize magnetic & dielectric material properties and recognize their need in engineering applications.
	C1117.5	Understand electrons& holes behavior in semiconductors and extraordinary behavior of materials at various transition temperatures
Programming for Problem Solving Using C	C1110.1	Apply the basic concepts of C Programming for problem-solving and different number systems.
	C1110.2	To use different operators, write programs that use control statements for a given problem.
	C1110.3	Illustrate the concepts of Homogeneous and heterogeneous data types, pointers and file system for solving mathematical and engineering problems.
	C1110.4	Decompose a given problem into functions and to develop modular reusable code.
Computer Engineering workshop	C1118.1	Apply knowledge for Computer Assembling and Software installation
	C1118.2	Understand and implement Unix commands
	C1118.3	Ability to effectively use Internet, World Wide Web(WWW) and Web browsers
	C1118.4	Apply the tools for MS-Word, PowerPoint , Excel and PDF documentation
English Language lab	C1106.1	Recognize the sounds of English with the help of audio visual aids
	C1106.2	Build confidence and overcome inhibitions while speaking in English.
	C1106.3	Demonstrate acquired language skills in performing the designated activity.
Applied Physics Lab	C1119.1	Apply the knowledge of different phenomena of light like interference, diffraction and handle various optical measuring instruments.
	C1119.2	Analyze various electronic circuits and study the temperature dependence of semiconductors.
	C1119.3	Apply the knowledge of phenomena like LASER diffraction and measure the numerical aperture of an optical fibre
Programming for Problem Solving	C1113.1	Describe the basics of computer and understand the problem-solving aspect.

Using C lab	C1113.2	Design and develop C program to evaluate simple expressions and logical operations.
	C1113.3	Develop & Implement C programs with suitable modules to solve the given problem.
	C1113.4	Demonstrate the concept of pointer and perform I/O operations in files.
Mathematics-II	C1201.1	Solve system of linear algebraic equations and apply Eigen value computation technics to reduce a given quadratic to canonical form
	C1201.2	Solve algebraic and Transcendental equations by using Numerical methods
	C1201.3	Apply Newton 's forward and backward interpolation and Lagrange's formula for equal and unequal intervals.
	C1201.4	Compute numerical solutions of differential equations.
Applied Chemistry	C1215.1	Identify the advantages and limitations of Plastic materials, Elastomers and their use in day to day life.
	C1215.2	Select the suitable methods of corrosion control and gain the knowledge of applications of batteries.
	C1215.3	Recognize the need of nano materials, liquid crystals, semiconductors and super conductors.
	C1215.4	Gain the knowledge of applications of different analytical instruments and generation of electricity from various Non-Conventional energy sources.
	C1215.5	Obtain the knowledge of computational chemistry and molecular machines.
Computer Organization	C1216.1	Recall the internal organization of computers, CPU,I/O and its main components
	C1216.2	Relate postulates of Boolean algebra and basic computer organization design
	C1216.3	Design and analyze combinational and sequential circuits and basics of I/O organization
Python Programming	C1217.1	Understand the need for learning basic concepts of Python programming language
	C1217.2	Apply various data structures in developing solutions to real time scenarios
	C1217.3	Analyze various concepts of functions, make use of packages, object oriented concepts in python programming and Outline Exception handling concepts.
	C1217.4	Apply the usage of pattern matching, GUI in python programming.
Data Structures	C1218.1	Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data.
	C1218.2	Apply the different linear data structures like stack and queue to various computing problems
	C1218.3	Implement different types of trees, heaps and apply them to problem solutions
	C1218.4	Identify different non linear data structures to analyze the performance of an algorithm.
Applied chemistry Lab	C1239.1	Obtain the knowledge of acid-base titrations to determine the strength of acid and base solutions.
	C1239.2	Gain the knowledge of Redox titrations to determine the concentration of samples such as Ores, KMnO ₄ and Copper using different indicators.
	C1239.3	Obtain the knowledge of complexometry titrations to determine the hardness of given water sample by EDTA method.
	C1239.4	Gain the knowledge of commonly used instruments such as pH meter, Conductivity meter and Potentiometer to determine the strength of given acid solutions.

Python Programming lab	C1250.1	Understand the need for learning basic concepts of Python programming language
	C1250.2	Apply various data structures in developing solutions to real time scenarios
	C1250.3	Analyze various concepts of functions, make use of packages, object oriented concepts in python programming and Outline Exception handling concepts.
	C1250.4	Design the usage of pattern matching, GUI in python programming.
Data Structures lab	C1241.1	Implement different sorting and searching algorithms
	C1241.2	Implement the stack, Queue and their applications
	C1241.3	Implement various types of linked lists and their applications
	C1241.4	Perform basic operations on trees and graphs and determine minimum spanning tree

INFORMETION TECNOLOGY

COURSE	C.O CODE	COURSE OUTCOME DESCRIPTION
Mathematics-I	C1101.1	Examine the convergence of series and apply mean value theorem to real life problem.
	C1101.2	Solve the Differential Equations of first and higher order related to various engineering applications.
	C1101.3	Apply the partial differentiation technique to solve physical problem
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English	C1102.1	Apply the four languages learning skills-listening, speaking, reading, writing (LSRW) for professional success.
	C1102.2	Employ knowledge of grammatical structures and vocabulary in speech and writing
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	C1102.4	Develop acceptable personality traits suitable for chosen profession.
Applied Physics	C1117.1	Apply the knowledge of different optical phenomena in daily life.
	C1117.2	Distinguish between laser sources and conventional sources and study the propagation of light through optical fibres.
	C1117.3	Explain fundamental concepts of quantum mechanics and analyze the behaviour of electron in metals according to various theories
	C1117.4	Summarize magnetic & dielectric material properties and recognize their need in engineering applications.
	C1117.5	Understand electrons& holes behaviour in semiconductors and extraordinary behaviour of materials at various transition temperatures
Programing for Problem Solving Using C	C1110.1	Able to understand the fundamental concepts of computers and C language constructs
	C1110.2	able to apply the concepts of C constructs Homogeneous and heterogeneous data types and pointers for solving the given problems
	C1110.3	able to divide a given problem into modules using c constructs and functions to develop modular reusable code.
	C1110.4	able to analyse the problem, choose appropriate C constructs and use the file system to solve mathematical and engineering problems accordingly.
Computer Engineering workshop	C1118.1	Students are able to understand the basic fundamentals of computer peripherals, storage, networking devices and Internet of Things.
	C1118.2	To impact the knowledge and usage of various productivity tools such as Power Point, Word, Excel and Latex.
	C1118.3	Develop presentation, documents and small applications using productivity tools such as word processor, presentation tools, spreadsheets, HTML & Latex.
	C1118.4	Build applications using productivity tools, HTML & LATEX
English Language lab	C1106.1	Recognize the sounds of English with the help of audio visual aids
	C1106.2	Build confidence and overcome inhibitions while speaking in English.
	C1106.3	Demonstrate acquired language skills in performing the designated activity.
	C1119.1	Apply the knowledge of different phenomena of light like interference, diffraction and handle various optical measuring instruments.
	C1119.2	Analyze various electronic circuits and study the temperature dependence of semiconductors.

Applied Physics Lab	C1119.3	Apply the knowledge of phenomena like LASER diffraction and measure the numerical aperture of an optical fiber
Programming for Problem Solving Using C lab	C1113.1	Able to understand the concepts of C language
	C1113.2	Able to apply the C language constructions for simple problems
	C1113.3	Able to apply C constructs like homogeneous, heterogeneous data for a given mathematical problem
	C1113.4	Able to analyze a given scenario using functions & file concepts
Mathematics-II	C1201.1	Solve system of linear algebraic equations and apply Eigen value computation techniques to reduce a given quadratic to canonical form
	C1201.2	Solve algebraic and Transcendental equations by using Numerical methods
	C1201.3	Apply Newton 's forward and backward interpolation and Lagrange's formula for equal and unequal intervals.
	C1201.4	Compute numerical solutions of differential equations.
Applied Chemistry	C1215.1	Identify the advantages and limitations of Plastic materials, Elastomers and their use in day to day life.
	C1215.2	Select the suitable methods of corrosion control and gain the knowledge of applications of batteries.
	C1215.3	Recognize the need of Nano materials, liquid crystals, semiconductors and super conductors.
	C1215.4	Gain the knowledge of applications of different analytical instruments and generation of electricity from various Non-Conventional energy sources.
	C1215.5	Obtain the knowledge of computational chemistry and molecular machines.
Computer Organization	C1216.1	Able to understand the logical design and functional architecture of computing systems.
	C1216.2	Able to identify, compare and assess issues related to bus, memory, Control and I/O functions.
	C1216.3	Able to correlate and analyze the operations carried out in Processing Unit .
	C1216.4	Able to design solutions in the area of computer architecture and logic designing.
Python Programming	C1217.1	Understand the fundamental concept and syntax of python programming language.
	C1217.2	Apply the basics of programming in the Python language.
	C1217.3	Analyze the coding tasks related conditional statements, functions, sequences, file handling, Exception handling.
	C1217.4	Create the python programs using object-oriented concept and GUI
Data Structures	C1218.1	Understand basic concepts of sorting, searching, linear and non-linear data Structures and algorithms.
	C1218.2	Apply the different linear and non-linear data structures, sorting and searching algorithms to various computing problems.
	C1218.3	Analyze the performance of various data structures, sorting and searching algorithms.
	C1218.4	Evaluate the linear and no linear data structures in a given application
Applied chemistry Lab	C1239.1	Obtain the knowledge of acid-base titrations to determine the strength of acid and base solutions.
	C1239.2	Gain the knowledge of Redox titrations to determine the concentration of samples such as Ores, KMnO ₄ and Copper using different indicators.
	C1239.3	Obtain the knowledge of complexometry titrations to determine the hardness of given water sample by EDTA method.

	C1239.4	Gain the knowledge of commonly used instruments such as pH meter, Conductivity meter and Potentiometer to determine the strength of given acid solutions.
Python Programming lab	C1250.1	Understand the need for learning basic concepts of Python programming language
	C1250.2	Apply various data structures in developing solutions to real time scenarios
	C1250.3	Analyze various concepts of functions, make use of packages, object oriented concepts in python programming and Outline Exception handling concepts.
	C1250.4	Design the usage of pattern matching, GUI in python programming.
Data Structures lab	C1241.1	Understand basic data structures such as arrays, linked lists stacks and queues.
	C1241.2	Implement and know the application of algorithms for sorting and pattern matching.
	C1241.3	Design programs using a variety of data structures such as stacks, queues, linked lists, binary trees, search trees, heaps and graphs.
	C1241.4	Implement ADTs such as lists, graphs, and search trees in C to solve problems.