

BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

Deviyakurichi – 636112.

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Regulation-2021

Course code & Name : HS3151&PROFESSIONAL ENGLISH – I

Sem : I


COURSE OUTCOMES:

After the course, the students should be able to:

C101.1	Listen, Comprehend and Correspond with others at various contexts
C101.2	Speak legibly and fluently under various life-time situations by applying proper communication modules
C101.3	Read and understand a variety of writings and technical text by analyzing the meaning and language
C101.4	Apply clear and legible writing skills in error free style in coherent manner
C101.5	Remember and use various communicative skills in precise and efficient way on technological contexts
C101.6	Form situational conversations and technical writing styles for interpersonal and effective communication

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C101.1	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C101.2	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C101.3	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C101.4	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C101.5	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C101.6	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C101	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

Course code & Name : MA3151&MATRICES AND CALCULUS – I
Sem : I


COURSE OUTCOMES:

After the course, the students should be able to

C102.1	Determine the Eigen values, Eigen vectors to diagonalize a matrix and reduce quadratic form to canonical form.
C102.2	Apply the concept of limits, continuity, rules of differentiation, techniques of differentiation to differentiate standard functions.
C102.3	Apply the concepts of Concavity, Convexity to determine the critical points, point of Inflection, Maxima and Minima of Single variable functions.
C102.4	Compute the derivatives of functions of two variables and apply them to calculate the maxima and minima.
C102.5	Determine integrals using techniques of integration, such as substitution, partial fractions and integration by parts.
C102.6	Apply various techniques to solve higher order differential equations with constant and variable Coefficients

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C102.1	3	2	1	-	-	-	-	1	1	-	-	-	2	-	-
C102.2	3	2	1	-	-	-	-	1	1	-	-	-	2	-	-
C102.3	3	2	1	-	-	-	-	1	1	-	-	-	2	-	-
C102.4	3	2	1	-	-	-	-	1	1	-	-	-	2	-	-
C102.5	3	2	1	-	-	-	-	1	1	-	-	-	2	-	-
C102.6	3	2	1	-	-	-	-	1	1	-	-	-	2	-	-
C102	3	2	1	-	-	-	-	1	1	-	-	-	2	-	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112.
THALAIVASAL (TK), SALEM (DT).

Course code & Name : PH3151 & ENGINEERING PHYSICS
Sem : I

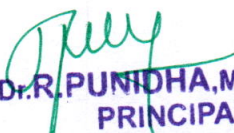
COURSE OUTCOMES:

After the course, the students should be able to:

C103.1	Demonstrate the properties of elasticity and measure the different moduli of elasticity
C103.2	Discuss the characteristics of laser and optical fiber
C103.3	Explain the concepts of ultrasonics in engineering
C103.4	Explain black body radiation, properties of matter waves and Schrodinger equation
C103.5	Classify the Bravais lattices and different types of crystal structures
C103.6	Summarize the information on growth of crystals and deformations

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C103.1	2	-	1	-	-	-	-	-	-	-	-	-	1	-	-
C103.2	2	1	-	-	-	-	-	1	1	1	-	-	1	-	-
C103.3	2	1	-	-	-	-	-	1	1	1	-	-	1	-	-
C103.4	2	1	-	-	-	-	-	1	1	1	-	-	1	-	-
C103.5	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-
C103.6	2	1	-	-	-	-	-	1	1	1	-	-	1	-	-
C103	2	1	1	-	-	-	-	1	1	1	-	-	1	-	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

Course code & Name : CY3151 & ENGINEERING CHEMISTRY

Sem : I

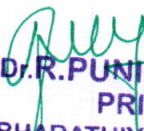
COURSE OUTCOMES:

After the course, the students should be able to:

C104.1	Determine the hardness of water and explain the water treatment methods.
C104.2	Define nano chemistry and its types and process of synthesizing nanoparticles
C104.3	Describe the phase diagram of one component and two component system and various methods of heat treatment of steel.
C104.4	Classify the various types of fuels by their characteristics and explain the flue gas analysis by Orsat method.
C104.5	Illustrate the working of Lead acid battery, lithium ion battery and fuel cell.
C104.6	Apply Nernst equation to determine the EMF of the cell and explain various corrosion control methods.

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C104.1	3	3	3	3	2	-	-	-	-	-	2	2	-	-	-
C104.2	3	3	3	3	2	-	-	-	-	-	2	2	-	-	-
C104.3	3	3	3	3	2	-	-	-	-	-	2	-	-	-	-
C104.4	3	3	-	-	2	-	-	-	-	-	-	-	-	-	-
C104.5	3	-	-	-	2	-	-	-	-	-	-	-	-	-	-
C104.6	3	-	-	-	2	-	-	-	-	-	-	-	-	-	-
C104	3	3	3	3	2	-	-	-	-	-	2	2	-	-	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112.
THALAIVASAL (TK), SALEM (DT).

Course code & Name : GE3151 & PROBLEM SOLVING AND PYTHON PROGRAMMING
Sem : I

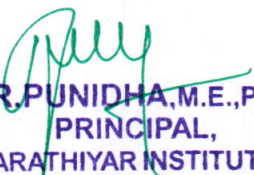
COURSE OUTCOMES:

After the course, the students should be able to:

C105.1	Explain Components of a Computer System, types of programming languages, types of software with examples and purpose.
C105.2	Perform problem analysis, use algorithms and prepare flow charts, pseudo code for solving simple problems.
C105.3	Use Conditional, iteration constructs of python programming and apply to solve simple problems
C105.4	Use Functions, recursive function, String functions in python programming and apply to perform linear and binary search
C105.5	Explain the various operations for manipulating Tuples, Dictionaries and Use List to perform simple and sorting operations
C105.6	Explain file handling operations, exception handling, modules and packages and illustrate programs for word count, file copy, merge operations and exception handling.

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C105.1	3	2	-	-	-	-	-	-	-	-	-	-	2	1
C105.2	3	2	-	-	-	-	-	-	-	-	-	-	2	1
C105.3	3	2	1	-	-	-	-	-	-	-	-	-	2	1
C105.4	3	2	1	-	-	-	-	-	-	-	-	-	2	1
C105.5	3	2	1	-	-	-	-	-	-	-	-	-	2	1
C105.6	3	2	1	-	-	-	-	-	-	-	-	-	2	1
C105	3	2	1	-	-	-	-	-	-	-	-	-	2	1


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

**Course code & Name : GE3171 & PROBLEM SOLVING AND PYTHON PROGRAMMING
LABORATORY**

Sem : I

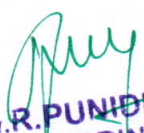
COURSE OUTCOMES:

After the course, the students should be able to:

C106.1	Develop simple Python programs using conditional and iterative constructs
C106.2	Develop simple Python programs using built-in functions and user-defined functions
C106.3	Develop a Python program using recursion to implement linear and binary search
C106.4	Develop a Python program using list to implement selection and insertion sort
C106.5	Develop Python programs to implement matrix operations
C106.6	Develop a Python program to implement file handling

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C106.1	3	2	1	-	1	-	-	-	-	-	-	-	2	1	1
C106.2	3	2	1	-	1	-	-	-	-	-	-	-	2	1	1
C106.3	3	2	1	-	1	-	-	-	-	-	-	-	2	1	1
C106.4	3	2	1	-	1	-	-	-	-	-	-	-	2	1	1
C106.5	3	2	1	-	1	-	-	-	-	-	-	-	2	1	1
C106.6	3	2	1	-	1	-	-	-	-	-	-	-	2	1	1
C106	3	2	1	-	1	-	-	-	-	-	-	-	2	1	1


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112.
THALAIVASAL (TK), SALEM (DT).

Course code & Name : BS3171 & PHYSICS AND CHEMISTRY LABORATORY

Sem : I

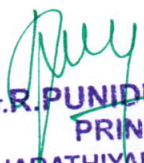
COURSE OUTCOMES:

After the course, the students should be able to:

C107.1	Calculate rigidity modulus and Young's modulus of a given material.
C107.2	Examine the size of a given particle, parameters of optical fiber and compute the thickness of a given thin wire.
C107.3	Discover the velocity of ultrasound, compressibility of a given liquid and band gap of a given semiconductor diode.
C107.4	Estimate the Chemical quality parameter of a water sample.
C107.5	Estimate the strength of acid by conductometric and pH metric titration.
C107.6	Estimate the amount of iron content in a given solution using potentiometer

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C107.1	3	2	1	-	-	-	-	1	1	1	-	-	1	-	1
C107.2	3	2	1	-	-	-	-	1	1	1	-	-	1	-	1
C107.3	3	2	1	-	-	-	-	1	1	1	-	-	1	-	1
C107.4	3	2	1	-	-	-	-	1	1	1	-	-	1	-	1
C107.5	3	2	1	-	-	-	-	1	1	1	-	-	1	-	1
C107.6	3	2	1	-	-	-	-	1	1	1	-	-	1	-	1
C107	3	2	1	-	-	-	-	1	1	1	-	-	1	-	1


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

Course code & Name : HS3251 & PROFESSIONAL ENGLISH – II
Sem : II


COURSE OUTCOMES:

After the course, the students should be able to:

C108.1	Listen, Understand and create technical correspondence at advanced level.
C108.2	Respond or answer to the contextual questions, interview questions, form instructions, draft reports
C108.3	Speak and analyze social issues, come out with effective ideas for discussion, understand the passages for meaning and vocabulary
C108.4	Assess error free technical writings, create legible and coherent technical papers, derive ideas of the given texts in a precise form
C108.5	Remember the updated elements of communication skills, nuances of non- verbal communication, business communication
C108.6	Create technical instructions, process instructions, self-appraisals, Resumes, reports on various situations

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C108.1	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C108.2	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C108.3	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C108.4	-	-	-	-	-	-	-	-	2	3	-	2	-	-	-
C108.5	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C108.6	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C108	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-


Dr.R.PUNIDHA,M.E.,Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112.
THALAIVASAL (TK), SALEM (DT).

Course code & Name : MA3251 & STATISTICS AND NUMERICAL METHODS
Sem : II


COURSE OUTCOMES:

After the course, the students should be able to:

C109.1	Determine the Laplace transform of standard functions using properties
C109.2	Apply Laplace transform and inverse transform to solve the initial value problems
C109.3	Solve the multiple integrals and apply the concept to find areas, volumes
C109.4	Determine the line, surface and volume integrals using Green's, Gauss and Stokes theorems
C109.5	Determine Analytic functions, Bilinear Transformations and apply the concept of conformal mapping to find the images of given curves.
C109.6	Determine the Contour Integrals using Cauchy's Integral and Residue theorems.

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C109.1	3	2	1	-	-	-	-	1	1	-	-	-	-	-	1
C109.2	3	2	1	-	-	-	-	1	1	-	-	-	-	-	1
C109.3	3	2	1	-	-	-	-	1	1	-	-	-	-	-	1
C109.4	3	2	1	-	-	-	-	1	1	-	-	-	1	-	1
C109.5	3	2	1	-	-	-	-	1	1	-	-	-	1	-	1
C109.6	3	2	1	-	-	-	-	1	1	-	-	-	1	-	1
C109	3	2	1	-	-	-	-	1	1	-	-	-	1	-	1


Dr.R. PUNIDHA.M.E.,Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICH! - 636 112,
THALAVASAL(TK), SALEM (DT).

Course code & Name : PH3202 & PHYSICS FOR ELECTRICAL ENGINEERING

Sem : II

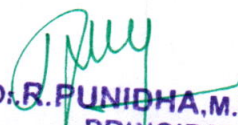
COURSE OUTCOMES:

After the course, the students should be able to:

C110.1	Describe the basics of dielectric materials and insulation
C110.2	Provide knowledge on electrical and magnetic properties of materials
C110.3	Appreciate the application of semiconductors and basic explanation about semiconductor physics
C110.4	Explain the functioning of semiconductor devices
C110.5	Illustrate the optical properties of materials and working principles of various optical devices
C110.6	Appreciate the importance of nanotechnology and nanodevices

MAPPING WITH PROGRAM OUTCOMES

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C110.1	3	1	1	-	-	-	-	2	1	-	-	-	1	-	-
C110.2	3	1	1	-	-	-	-	2	1	-	-	-	1	-	-
C110.3	3	1	1	-	-	-	-	2	1	-	-	-	1	-	-
C110.4	3	1	1	-	-	-	-	2	1	-	-	-	1	-	-
C110.5	3	1	1	-	-	-	-	2	1	-	-	-	1	-	-
C110.6	3	1	1	-	-	-	-	2	1	-	-	-	1	-	-
C110	3	1	1	-	-	-	-	2	1	-	-	-	1	-	-


D. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112.
THALAIVASAL (TK), SALEM (DT).

Course code & Name : BE3255 & BASIC CIVIL AND MECHANICAL ENGINEERING ENGINEERING
Sem : II


COURSE OUTCOMES:

After the course, the students should be able to:

C111.1	State the scope of civil Engineering and Overview of Civil Engineering and Explain the scope of Mechanical Engineering and Overview of Mechanical Engineering.
C111.2	State the functions of IC engine and differentiate the working principle of 2stroke, 4 stroke petrol and diesel engine, Types of power plant and classify the various types of boilers and conclude the use of boiler in power plant.
C111.3	Apply the principles of vapour absorption and compression systems and Explain the Operation and type of air conditioner.
C111.4	Apply the principles of surveying and use various measurements for surveying and Explain about various engineering materials and leveling instruments.
C111.5	Classify the types of bridges, foundation, floorings, roofs, plasters R.C.C structural members and state the purpose of dam.
C111.6	Elaborate the components of refrigeration and Air conditioning cycle.

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C111.1	3	2	1	1	-	-	-	2	-	-	-	2	2	-	-
C111.2	3	2	1	1	-	-	-	2	-	-	-	2	2	-	-
C111.3	3	2	1	1	-	-	-	2	-	-	-	2	2	-	-
C111.4	3	2	1	1	-	-	-	2	-	-	-	2	2	-	-
C111.5	3	2	1	1	-	-	-	2	-	-	-	2	2	-	-
C111.6	3	2	1	1	-	-	-	2	-	-	-	2	2	-	-
C111	3	2	1	1	-	-	-	2	-	-	-	2	2	-	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

Course code & Name : GE3251 & ENGINEERING GRAPHICS
Sem : II

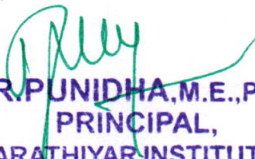
COURSE OUTCOMES:

After the course, the students should be able to:

C112.1	Familiarize the fundamentals and standards of engineering graphics
C112.2	Perform free hand sketching of basic construction and machine equipments.
C112.3	Project orthographic projection of lines and plane surfaces
C112.4	Draw the projection of solids and development of solid.
C112.5	Visualize and project isometric perspective section of solids and surfaces.
C112.6	Draw the free hand sketching of simple objects.

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C112.1	2	1	-	-	1	-	-	-	1	-	-	-	1	1	-
C112.2	2	1	-	-	1	-	-	-	1	-	-	-	1	1	-
C112.3	2	1	-	-	1	-	-	-	1	-	-	-	1	1	-
C112.4	2	1	-	-	1	-	-	-	1	-	-	-	1	1	-
C112.5	2	1	-	-	1	-	-	-	1	-	-	-	1	1	-
C112.6	2	1	-	-	1	-	-	-	1	-	-	-	1	1	-
C112	2	1	-	-	1	-	-	-	1	-	-	-	1	1	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112.
THALAIVASAL (TK), SALEM (DT).

Course code & Name : EE3251 & ELECTRIC CIRCUIT ANALYSIS
Sem : II


COURSE OUTCOMES:

After the course, the students should be able to:

C113.1	Explain circuits behaviour using circuit laws
C113.2	Apply mesh analysis, nodal analysis and network theorem to determine the behaviour of AC and DC circuit
C113.3	Compute the transient response of first order and second order system
C113.4	Compute power, line and phase voltage and currents of the given three phase circuit
C113.5	Explain the frequency response of the series and parallel RLC circuits
C113.6	Explain the behaviour of magnetic coupled circuit

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C113.1	3	2	1	-	1	-	-	-	-	-	-	-	2	1	-
C113.2	3	2	1	-	1	-	-	-	-	-	-	-	2	1	-
C113.3	3	2	1	-	1	-	-	-	-	-	-	-	2	1	-
C113.4	3	2	1	-	1	-	-	-	-	-	-	-	2	1	-
C113.5	3	2	1	-	1	-	-	-	-	-	-	-	2	1	-
C113.6	3	2	1	-	1	-	-	-	-	-	-	-	2	1	-
C113	3	2	1	-	1	-	-	-	-	-	-	-	2	1	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
 DEVIYAKURICH - 636 112.
 THALAVASAL (TK), SALEM (DT).

Course code & Name : HS3251 & PROFESSIONAL ENGLISH – II
Sem : II

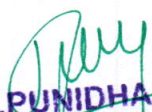
COURSE OUTCOMES:

After the course, the students should be able to:

C114.1	Demonstrate wiring for a simple residential house; identify the ratings of various appliances like fluorescent tube
C114.2	Calculate the different electrical quantities
C114.3	Measure the resistance to earth of electrical equipment
C114.4	Verify the truth tables of logic gates AND
C114.5	Develop soldering in a PCB
C114.6	Measurement of ripple factor of HWR and FWR

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C114.1	3	2	2	-	-	-	-	1	1	2	-	-	1	-	-
C114.2	3	2	2	-	-	-	-	1	1	2	-	-	1	-	-
C114.3	3	2	2	-	-	-	-	1	1	2	-	-	1	-	-
C114.4	3	2	2	-	-	-	-	1	1	2	-	-	1	-	-
C114.5	3	2	2	-	-	-	-	1	1	2	-	-	1	-	-
C114.6	3	2	2	-	-	-	-	1	1	2	-	-	1	-	-
C114	3	2	2	-	-	-	-	1	1	2	-	-	1	-	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

Course code & Name : EE3271 & ELECTRIC CIRCUITS LABORATORY
Sem : II


COURSE OUTCOMES:

After the course, the students should be able to:

C115.1	Use simulation and experimental verification methods to verify fundamental electrical laws for AC and DC circuits
C115.2	Use simulation and experimental verification methods to verify various electrical theorems
C115.3	Analyze transient behaviour of the given RL, RC and RLC circuit using simulation and experimental methods
C115.4	Analyze frequency response of given series simulation and experimental methods
C115.5	Analyze frequency response of parallel RLC circuit simulation and experimental methods
C115.6	Analyze the performance of the three phase circuit simulation and experimental methods

MAPPING WITH PROGRAM OUTCOMES:

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C115.1	3	2	2	-	-	-	-	1	1	2	-	-	1	1	-
C115.2	3	2	2	-	-	-	-	1	1	2	-	-	1	1	-
C115.3	3	2	2	-	-	-	-	1	1	2	-	-	1	1	-
C115.4	3	2	2	-	-	-	-	1	1	2	-	-	1	1	-
C115.5	3	2	2	-	-	-	-	1	1	2	-	-	1	1	-
C115.6	3	2	2	-	-	-	-	1	1	2	-	-	1	1	-
C115	3	2	2	-	-	-	-	1	1	2	-	-	1	1	-


Dr. R. FUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

Course code &Name : MA3303 (C201) /PROBABILITY AND COMPLEX FUNCTIONS

Semester : III


COURSE OUTCOMES:

After the course, the student should be able to:

COURSE	Course Outcomes
C201.1	Analyze foundational concepts of probability, including randomness, probability distributions, and expected values.
C201.2	Gain an understanding of the principles of basic statistical inference, such as sampling and estimation.
C201.3	Apply the capacity to interpret data and draw meaningful conclusions from it.
C201.4	Be able to apply basic probability and statistical methods to solve real-world problems.
C201.5	Evaluate the principles of complex functions, including trigonometric and exponential functions.
C201.6	Develop the ability to interpret and manipulate complex functions to solve problems.

MAPPING WITH PROGRAM OUTCOMES

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C201.1	3	2	-	-	1	-	-	-	-	-	-	1	1	1	1
C201.2	3	2	-	-	1	-	-	-	-	-	-	1	1	1	-
C201.3	3	2	-	-	1	-	-	-	-	-	-	-	-	-	1
C201.4	3	2	-	-	1	-	-	-	-	-	-	1	1	1	1
C201.5	3	2	-	-	1	-	-	-	-	-	-	1	1	-	-
C201.6	3	2	-	-	1	-	-	-	-	-	-	1	-	1	1
C201	3	2	-	-	1	-	-	-	-	-	-	1	1	1	1


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

Course code &Name : EE3301 (C202) / ELECTROMAGNETIC FIELDS

Semester : III


COURSE OUTCOMES:

After the course, the student should be able to:

COURSE	Course Outcomes
C202.1	Explain the basic mathematical concepts related to electromagnetic vector fields
C202.2	Apply the basic laws related to electrostatics
C202.3	Analyze the concepts of electrostatics, electrical potential, energy density and their applications.
C202.4	Apply the concepts of magnetostatics, magnetic flux density, scalar and vector potential and its applications.
C202.5	Create the concepts of Faraday's law, induced emf and Maxwell's equations
C202.6	illustrate the concepts of electromagnetic waves and poynting vector.

MAPPING WITH PROGRAM OUTCOMES

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C202.1	2	2	1	1	-	-	-	-	-	-	-	-	2	1	1
C202.2	2	2	1	1	-	-	-	-	-	-	-	-	2	1	-
C202.3	2	2	1	1	-	-	-	-	-	-	-	-	2	-	1
C202.4	2	2	1	1	-	-	-	-	-	-	-	-	2	1	1
C202.5	2	2	1	1	-	-	-	-	-	-	-	-	2	1	-
C202.6	2	2	1	1	-	-	-	-	-	-	-	-	2	1	1
C202	2	2	1	1	-	-	-	-	-	-	-	-	-	1	1


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112.
THALAIVASAL (TK), SALEM (DT).

Course code &Name : EE3302 (C203) / DIGITAL LOGIC CIRCUITS

Semester : III


COURSE OUTCOMES:

After the course, the student should be able to:

COURSE	Course Outcomes
C203.1	Explain the various number systems and compare the characteristics and operations of digital logic families.
C203.2	Describe the various types of number systems, binary codes, and examine the digital logic families.
C203.3	Use Karnaugh maps for simplification and implementation of combinational logic circuits.
C203.4	Design various synchronous and asynchronous sequential circuits
C203.5	Analyze the programmability logic devices.
C203.6	Discuss digital simulation for development of application oriented logic circuits.

MAPPING WITH PROGRAM OUTCOMES.

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C203.1	3	3	2	-	-	-	-	-	-	-	-	-	1	1	1
C203.2	3	3	2	-	-	-	-	-	-	-	-	-	1	1	-
C203.3	3	3	2	-	-	-	-	-	-	-	-	-	1	1	1
C203.4	3	3	2	-	-	-	-	-	-	-	-	-	1	1	1
C203.5	3	3	2	-	-	-	-	-	-	-	-	-	1	1	1
C203.6	3	3	2	-	-	-	-	-	-	-	-	-	1	1	1
C203	3	3	2	-	-	-	-	-	-	-	-	-	1	1	1


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

Course code &Name : EC3301(C204) / ELECTRON DEVICES AND CIRCUITS

Semester : III


COURSE OUTCOMES:

After the course, the student should be able to:

COURSE	Course Outcomes
C204.1	Explain the operation and characteristics of PN junction diode, operation of Rectifiers with its classifications and also operations of Display devices.
C204.2	Explain the Structure, operation and characteristics of BJT, JFET, MOSFET, UJT, Thyristor and also IGBT.
C204.3	Differentiate the CE, CB, CC amplifiers.
C204.4	Discuss about the Multistage and Differential amplifiers.
C204.5	Describe about the Negative and Positive feedback.
C204.6	Explain about the oscillators and its types.

MAPPING WITH PROGRAM OUTCOMES

COURSE	PO1	PO3	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C204.1	2	2	-	-	-	-	-	-	-	-	-	-	2	2	1
C204.2	2	2	-	-	-	-	-	-	-	-	-	-	2	2	-
C204.3	2	2	-	-	-	-	-	-	-	-	-	-	2	2	1
C204.4	2	2	-	-	-	-	-	-	-	-	-	-	2	2	1
C204.5	2	2	-	-	-	-	-	-	-	-	-	-	2	2	-
C204.6	2	2	-	-	-	-	-	-	-	-	-	-	2	2	1
C204	2	2	-	-	-	-	-	-	-	-	-	-	2	2	1


Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

Course code &Name : EE3303 (C205) / ELECTRICAL MACHINES-I

Semester : III


COURSE OUTCOMES:

After the course, the student should be able to:

COURSE	Course Outcomes
C205.1	Explain the basic concept of magnetic materials and circuits used in electric machines.
C205.2	Explain the construction, working principle of single and three phase transformers and analyze their performance for different loading conditions.
C205.3	Examine the diversified parameters of single phase transformer through various testing methods.
C205.4	Illustrate the concepts of electromechanical energy conversion principles and formulate the expressions for voltage and torque in all rotating machines.
C205.5	Explain the construction, working principle, types, characteristics and applications of DC generators.
C205.6	Explain the working principle, speed control methods of DC motor and estimate the performance of DC motors through various testing methodologies.

MAPPING WITH PROGRAM OUTCOMES

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C205.1	3	2	-	-	1	-	-	-	-	-	-	-	1	1	1
C205.2	3	2	-	1	1	-	-	-	-	-	-	-	1	1	-
C205.3	3	2	-	-	1	-	-	-	-	-	-	-	1	1	1
C205.4	3	2	-	-	1	-	-	-	-	-	-	-	1	1	1
C205.5	3	2	-	1	1	-	-	-	-	-	-	-	1	1	-
C205.6	3	2	-	1	1	-	-	-	-	-	-	-	1	1	1
C205	3	2	-	1	1	-	-	-	-	-	-	-	1	1	1


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT)

Course code &Name : CS3353 (C206) / C PROGRAMMING AND DATA STRUCTURES

Semester : III

COURSE OUTCOMES:

After the course, the student should be able to:

COURSE	Course Outcomes
C206.1	Develop java applications with threads and generics classes by learning stack, queue, tree data structure, abstract data type, linked list implementations, topological sort, graph connectivity, sorting and searching algorithms, hash functions and open addressing
C206.2	Learn the Architecture of Java Environment and understand the role of JVM and JRE
C206.3	Understand Object oriented concepts and basic characteristics of java.
C206.4	Define Exceptions and use I/O streams. Design and build simple Graphical User Interfaces.
C206.5	Design and build simple Graphical User Interfaces.
C206.6	Develop java applications with threads and generics classes.

MAPPING WITH PROGRAM OUTCOMES

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C206.1	2	2	2	-	-	2	2	2	-	-	-	-	2	2	1
C206.2	2	2	2	-	-	2	2	2	-	-	-	-	2	2	-
C206.3	2	2	2	-	-	2	2	2	-	-	-	-	2	2	1
C206.4	2	2	2	-	-	2	2	2	-	-	-	-	2	2	1
C206.5	2	2	2	-	-	2	2	2	-	-	-	-	2	2	-
C206.6	2	2	2	-	-	2	2	2	-	-	-	-	2	2	1
C206	2	2	2	-	-	2	2	2	-	-	-	-	2	2	1

Course code &Name : EC3311 (C207) / ELECTRONICS DEVICES AND CIRCUITS LABORATORY
Semester : III

COURSE OUTCOMES:

After the course, the student should be able to:

COURSE	Course Outcomes
C207.1	Study the Characteristics of Semiconductor diode, BJT configuration through experimentation
C207.2	Study the behavior of JFET and UJT through experimentation
C207.3	Study and understand behavior of photo diode and photo transistor through experimentation
C207.4	Apply diode for rectification purpose in half wave and full wave operation
C207.5	Study the working operation of oscillators RC phase shift and LC filters through experimentation
C207.6	Apply and study the operation of FET as differential operation through experimentation

MAPPING WITH PROGRAM OUTCOMES.

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C207.1	2	2	2	1	-	-	-	-	2	-	-	-	2	2	1
C207.2	2	2	2	1	-	-	-	-	2	-	-	-	2	2	-
C207.3	2	2	2	1	-	-	-	-	2	-	-	-	2	2	1
C207.4	2	2	2	1	-	-	-	-	2	-	-	-	2	2	1
C207.5	2	2	2	1	-	-	-	-	2	-	-	-	2	2	-
C207.6	2	2	2	1	-	-	-	-	2	-	-	-	2	2	1
C207	2	2	2	1	-	-	-	-	2	-	-	-	2	2	1

Course code &Name : EE3311 (C208) / ELECTRICAL MACHINES LABORATORY-1
Semester : III

COURSE OUTCOMES:

After the course, the student should be able to:

COURSE	Course Outcomes
C208.1	Ability to choose the rating of the protective device and measuring instruments required for a given experiment/machine
C208.2	Analyse different types of DC generators and Experimentally obtain the different characteristics of various dc generators.
C208.3	Experimentally obtain the different characteristics of dc motors and ability to conduct different types of speed control, testing in DC motors.
C208.4	Understand the concept of efficiency and the short circuit impedance of a three-phase transformer from no-load test, winding resistance, short circuit test, and load test.
C208.5	Understand the concept of various losses in transformer and Analyse different types of losses by conducting suitable test.
C208.6	Understand the starting methods of dc motors and Understand the effect of unbalanced loading on a three-phase transformer with different connections, and the effects and limitations of each connection

MAPPING WITH PROGRAM OUTCOMES

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C208.1	3	3	3	2	-	-	-	-	-	-	-	2	1	-	1
C208.2	3	3	3	2	-	-	-	-	-	-	-	2	-	-	-
C208.3	3	3	3	2	-	-	-	-	-	-	-	2	1	-	1
C208.4	3	3	3	2	-	-	-	-	-	-	-	2	1	-	1
C208.5	3	3	3	2	-	-	-	-	-	-	-	2	-	-	-
C208.6	3	3	3	2	-	-	-	-	-	-	-	2	1	-	1
C208	3	3	3	2	-	-	-	-	-	-	-	2	1	-	1

Course code &Name : CS3362 (C209) /C PROGRAMMING AND DATA STRUCTURES
LABORATORY

Semester : III

COURSE OUTCOMES:

After the course, the student should be able to:

COURSE	Course Outcomes
C209.1	Implement the linear data structures like list and stack using arrays and linked list.
C209.2	Implement the applications of linear data structures.
C209.3	Implement the non linear data structure like tree and its traversal and applications.
C209.4	Develop java applications using multithreading.
C209.5	Design and implement java programs using I/O Streams.
C209.6	Learn to develop GUI programming and event handling using swing and awt classes.

MAPPING WITH PROGRAM OUTCOMES

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C209.1	3	2	2	1	1	-	-	-	-	-	-	2	1	1	1
C209.2	3	2	2	1	1	-	-	-	-	-	-	2	1	1	1
C209.3	3	2	2	1	1	-	-	-	-	-	-	2	1	1	1
C209.4	3	2	2	1	1	-	-	-	-	-	-	2	1	1	1
C209.5	3	2	2	1	1	-	-	-	-	-	-	2	1	1	1
C209.6	3	2	2	1	1	-	-	-	-	-	-	2	1	1	1
C209	3	2	2	1	1	-	-	-	-	-	-	2	1	1	1