# **Vidya Jyothi Institute of Technology**

# Department of Humanities & Sciences (ECE)

## I Year II Semester – R22

#### **Course Outcomes**

#### **Course Name: Mathematics-II/ A222005**

After	After completing this course the student must demonstrate the knowledge and ability to	
CO 1	Classify the various types of differential equations of first order and first degree and apply the concepts of differential equations to the real world problems.	
CO 2	Solve higher order differential equations and apply the concepts of differential equations to the real world problems.	
CO 3	Find the Laplace Transform of various functions and apply to find the solutions of differential equations.	
CO 4	Evaluate the multiple integrals and identify the vector differential operators physically in engineering problems.	
CO 5	Evaluate the line, surface and volume integrals and converting them from one to another by using vector integral theorems.	

#### Course Name: Engineering Chemistry/ A222006

After	After completing this course the student must demonstrate the knowledge and ability to	
CO 1	Understand the basic properties of water and its usage in domestic and industrial purposes.	
CO 2	Acquire the basic knowledge of electrochemical procedures related to corrosion and its control.	
CO 3	Learn the fundamentals and general properties of polymers and other engineering materials.	
CO 4	Acquire knowledge of various energy sources.	

СО	Apply the knowledge of engineering materials in daily life.
5	

## Course Name: Engineering Chemistry Lab/ A222084

After	After completing this course the student must demonstrate the knowledge and ability to	
СО	Determination of parameters like hardness and chloride content of water.	
1		
со	Determination of rate of corrosion of mild steel in various conditions.	
2		
СО	To perform methods such as conductometry, potentiometry and pH metry in order to find	
3	out the concentrations or equivalence points of acids and bases.	
СО	To prepare polymers like Thiokol and Nylon-6.	
4		
СО	Estimation of Saponification value, Viscosity and surface tension of lubricant oils.	
5		

# Course Name: Basic Electrical Engineering / A222204

After	After completing this course the student must demonstrate the knowledge and ability to	
СО	Understand basic principles of electrical elements.	
1		
СО	Apply the concepts of AC circuits to various elements and combinations.	
2		
СО	Examine principle and tests of transformer.	
3		
СО	Contrast the working of DC machines and induction motors.	
4		
1		

СО	Asses working principle of AC Generator and electrical installations.
5	

#### Course Name: Basic Electrical Engineering Lab / A222283

After	After completing this course the student must demonstrate the knowledge and ability to	
CO 1	Understand basic electrical laws.	
CO 2	Analyze the response of different types of electrical circuits to different excitations.	
CO 3	Apply electric laws and find out performance of various electrical machines.	
CO 4	Assess the losses in electrical machines.	
CO 5	Evaluate the performance of electrical circuits and electrical machines.	

# Course Name: Engineering Graphics & Modelling /A222303

After	completing this course the student must demonstrate the knowledge and ability to
со	Comprehend the concepts of engineering drawing and CAD software.
1	
со	Conceptualize and draw the projections of points and straight lines
2	
со	Visualize and project different views of a planes and solids.
3	
СО	Evaluate the surfaces of solids developed for further processing in the engineering
4	applications.
со	Generate isometric and corresponding orthographic views of any given component.
5	

# Course Name: Python Programming Lab / A222583

After	After completing this course the student must demonstrate the knowledge and ability to	
CO 1	Develop the application specific codes using python.	
CO 2	Understand Strings, Lists, Tuples and Dictionaries in Python	
CO 3	Implement programs using modular approach, file I/O, Python standard library	

# Course Name: Electronics Devices & Circuits /A222402

After	After completing this course the student must demonstrate the knowledge and ability to	
СО	Acquire the knowledge of various electronic devices and their use on real life.	
1		
со	Know the applications of various devices.	
2		
СО	Acquire the knowledge about the Bipolar Junction Transistor.	
3		
СО	Acquire the knowledge about the Field Effect Transistor.	
4		
со	Acquire the knowledge about the role of special purpose devices and their applications.	
5		

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