

**AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER**  
**DEPARTMENT OF ELECTRONICS & COMPUTER ENGINEERING**  
**COURSE OUTCOMES (CO)**

**S.E. 2024 Course**

**Analog and Digital Electronics Circuits (PCC-204-ECE), SE-Sem-III**

After successfully completing the course students will be able to,

<b>Co. No.</b>	<b>Description</b>	<b>Bloom's Taxonomy Level</b>
C 201.1	Design EMOSFET amplifier circuits.	1,6
C 201.2	Design operational amplifier-based circuits for given applications.	1,6
C 201.3	Design Combinational and Sequential digital circuits.	1,6
C 201.4	Design digital circuits using state machines.	1,6
C 201.5	Solve real life problems using digital and analog circuits	1,2

**Universal Human Values and Professional Ethics (VEC-250-ECE), SE-Sem-III**

After successfully completing the course students will be able to,

<b>Co. No.</b>	<b>Description</b>	<b>Bloom's Taxonomy Level</b>
1	Recognize the concept of self-exploration as the process of value education and see they have the potential to explore on their own right.	1
2	Explore the human being as the coexistence of self and body to see their real needs/basic aspirations clearly.	4
3	Interpret the interconnectedness, harmony and mutual fulfilment inherent in the nature and the entire existence	2
4	Draw ethical conclusions in the light of Right understanding facilitating the development of holistic technologies production systems and management models	6

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**S.E. 2024 Course**

**Engineering Economics and Applications (EEM-240-ECE), SE-Sem-III**

After successfully completing the course students will be able to,

CO. No.	Course Outcomes	BT Level
1	Apply economic principles and time value of money concepts using practical tools.	3
2	Perform break-even and CVP analyses to support engineering decisions.	3
3	Analyze market competition and pricing strategies with case studies.	4
4	Evaluate projects with capital budgeting and interpret macroeconomic effects on electronics.	5

**Supply Chain Management (OEL-2201), SE-Sem-III**

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C201.1	Describe the structure of Supply Chain Management.	1
C201.2	Identify the various flows in real world supply chains.	2
C201.3	Understand the key Operational Aspects in Supply Chain Management.	2
C201.4	Evaluate the relationship between Customer Value and Supply Chain Management.	5

**Signals and Systems (PCC-207-ECE), SE-Sem-IV**

After successfully completing the course students will be able to,

CO. No.	Description	Bloom's Taxonomy Level
C291.1	Identify, classify basic signals and perform operations on signals	1,2,3
C291.2	Identify, Classify the systems based on their properties in terms of input output relation and in terms of impulse response and will be able to determine the convolution between to signals.	1,2,3
C291.3	Analyse and resolve the signals in frequency domain using Fourier series and Fourier Transform.	1,2,3,4
C291.4	Apply and analyse LTI systems and signals in complex frequency domain using Laplace Transform.	1,2,3,4
C291.5	Define and Describe the probability, random variables and random signals. Compute the probability of a given event, model, compute the CDF and PDF.	1, 2,3
C291.6	Compute the mean, mean square, variance and standard deviation for given random variables using PDF.	1,2,3

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**S.E. 2024 Course**

**Communication Systems (PCC-206-ECE), SE-Sem-IV**

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
201.1	Explain elements and basic parameters of communication system.	2
202.2	Apply mathematical equations to compute Amplitude Modulation parameters.	3,5
204.3	Analyze mathematical equations to compute Frequency Modulation parameters.	4,5
206.4	Evaluate Pulse Modulation Techniques for communication system.	5
205.5	Interpret Real World applications of communication system.	2

**Object Oriented Programming (PCC-208-ECE), SE-Sem-IV**

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C2O1.1	Explain the basic principles of the Java programming language.	1
C2O1.2	Develop Java programs by applying the concepts of classes and objects	2
C2O1.3	Implement programs using Inheritance, interfaces, and packages in Java.	3
C2O1.4	Analyze multithreading and exception handling mechanisms to create robust Java programs.	4
C2O1.5	Construct graphical applications using the Graphics class, AWT packages, and manage file I/O operations in Java.	5

**Environment Awareness (VEC-251-ECE), SE-Sem-IV**

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
CO1	Illustrate the interdependence of ecosystems through activity-based exploration.	2
CO2	Analyze the role of natural resources in sustainable development using real-world data.	4
CO3	Investigate biodiversity threats and conservation strategies through surveys and projects.	4
CO4	Create awareness tools or reports promoting sustainability based on their findings.	3

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**S.E. 2024 Course**

**Discrete Mathematics (PCC-203-ECE), SE-SEM-IV**

After successfully completing the course students will be able to,

<b>Co. No.</b>	<b>Description</b>	<b>Bloom's Taxonomy Level</b>
CO1	Formulate and solve real-world problems using fundamental concepts of sets, logic, and combinatorial techniques.	3
CO2	Construct valid formal proofs and apply logical reasoning techniques to analyze and verify propositions.	4
CO3	Analyze relations, their properties and closures; construct and use functions; and solve linear recurrence relations relevant to algorithmic problem-solving.	4
CO4	Apply graph and tree structures to model problems and design algorithmic solutions in computer science, including network theory and data structures.	6
CO5	Demonstrate understanding of algebraic structures such as groups, rings, and fields, and apply them to coding theory and computational applications.	3