AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER

DEPARTMENT OF ELECTRONICS ENGINEERING

COURSE OUTCOMES (CO)

SE. 2015 Course

Signals & Systems (204181), SE-Sem-III

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C281.1	**Identify, classify** basic signals and perform operations on signals	1,2,3
C281.2	**Identify**, **Classify** the systems based on their properties in terms of input output relation and in terms of impulse response and **determine** the convolution between to signals.	1,2,3
C281.3	**Analyse** and resolve the signals in frequency domain using Fourier series.	1,2,3,4
C281.4	**Analyse** and resolve the signals in frequency domain using Fourier Transform.	1,2,3,4
C281.5	**Apply and analyse**LTI systems and signals in complex frequency domain using Laplace Transform.	1, 2,3
C281.6	**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

Electronics Devices and Circuits (204182), SE-Sem-III

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C282.1	**Understand** JFET, its characteristics, operations, dc and ac analysis by implementation and simulation.	2
C282.2	**Understand** MOSFET, its characteristics, operation, and its dc **analysis.**	3, 6
C282.3	**Analyze** small signal model of FET and MOSFET.	4, 5
C282.4	**Understand** different circuits using MOSFET.	1, 2
C282.5	**Understand** and **apply concept** of positive and negative feedback in electronic circuits.	4, 6
C282.6	**Design** an adjustable voltage regulator circuits.	2, 3, 4

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COURSE OUTCOMES (CO)

SE. 2015 Course

Electrical Circuits and Machines (204183), SE-Sem-III

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C283.1	**Analyze** basic AC & DC circuit for voltage, current and power by using KVL, KCL, and network theorems.	4
C283.2	**Design** and **analyze** transformers.	4,6
C283.3	**Explain** construction, working, types of DC Machines, **Analyze** and **Select** a suitable motor for different applications.	2,3,4
C283.4	**Explain** construction, working, types of Three Phase AC Motors,**Analyze** and **Select** a suitable motor for different applications.	2,4,5
C283.5	**Explain** construction, working principle of BLDC Motor, Reluctance Motor, Universal Motor and **Select** proper electrical motor for given application.	2,5
C283.6	**Explain** working of Stepper Motor ,Servo motor, single phase Induction Motor and **Select** proper electrical motor for given application.	2,5

Data Structures and Algorithms (204184), SE- Sem- III

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C284.1	**Discuss** the computational efficiency of the principal algorithms such as sorting & searching.	2
C284.2	Write and **understand** the programs that use arrays & pointers in C.	2,4
C284.3	**Describe** how arrays, records, linked structures are represented in memory and use them in algorithms.	1
C284.4	Implement stacks & queues for various applications.	1,6
C284.5	**Understand** various terminologies and traversals of trees and use them for various applications.	2,4
C284.6	**Understand** various terminologies and traversals of graphs and use them for various applications.	2,4

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COURSE OUTCOMES (CO)

SE. 2015 Course

Digital Electronics (204185), SE-Sem-III

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C85.1	Use the basic logic gates and various reduction techniques of digital logic circuit in detail. **Analyze** and **Design** combinational circuits.	1,4,6
C85.2	**Analyze** and **Design** sequential circuits and implement hardware circuit to test performance and application.	4,6
C85.3	**Differentiate** between Mealy and Moore machines & **Design** ASM chart for sequential circuits.	2,6
C85.4	**Identify** and prevent various hazards and timing problems in a digital design.	2
C85.5	**Analyze** digital system **design** using PLD.	4,6
C85.6	**Understand** the architecture and use of microcontrollers for basic operations and Simulate using simulation software.	2,3

Electronic Measuring Instruments and Tools (204186), SE-Sem-III

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C286.1	**Understand fundamental** of various electrical measurements.	1, 2
C286.2	**Understand** and **describe** specifications, features and capabilities of electronic instruments.	1, 2
C286.3	Finalize the specifications of instrument and **select** an appropriate instrument for given measurement.	1,4
C286.4	Carry out required measurement using various instruments under **different** setups.	2,4
C286.5	Able to **compare** measuring instruments for performance parameters	2,5
C286.6	Select appropriate instrument for the measurement of electrical parameter professionally.	1,4

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COURSE OUTCOMES (CO)

SE. 2015 Course

Integrated Circuits (204187), SE-Sem-IV

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C287.1	**Describe**, **analyze** and **design** various blocks of OPAMP, **compare** ideal and practical Opamp parameters ,with their significance.	2,4.6
C287.2	**Analyze and design** linear applications of OPAMP.	4,6
C287.3	**Analyze and design** nonlinear applications of OPAMP.	4,6
C287.4	**Describe** various converters and **discuss** their performance parameters as application point of view	1,2
C287.5	I**nterpret** roll of positive feedback in various oscillators, **Analyze** and **design** various oscillators. **Also understand** and **appl**y the functionalities of PLL to various applications in communication	2,3,4,6
C287.6	**Classify** various active filters ,**sketch** their frequency response and **design** for given specifications	2,4,6

Control Systems(204188), SE-Sem-IV

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C288.1	**Determine** and **use** models of physical systems in forms suitable for use in the analysis and **design** of control systems.	1,3,6
C288.2	**Determine** the (absolute) stability of a closed-loop control system and **Perform** time domain analysis of control systems required for stability analysis.	1,4
C288.3	**Apply** root-locus, Frequency Plots technique to **analyze**control systems.	3,4
C288.4	**Perform** frequency domain analysis of control systems required for stability analysis.	4
C288.5	**Express** and **solve** system equations in state variable form.	2,3
C288.6	**Differentiate** between various digital controllers and **Explain** features ofdigital control systems	1,2

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COURSE OUTCOMES (CO)

SE. 2015 Course

Analog communication (204189), SE- Sem IV

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C289.1	**Describe** and **analyse** the techniques of generation and transmission and reception of Amplitude Modulation systems.	1,2,3,4
C289.2	**Describe** and **analyse** the techniques of reception of Amplitude Modulated signal	1,2,3
C289.3	**Describe** and **analyse** the techniques of generation and transmission of Frequency Modulation Systems.	1,2,3,4
C289.4	**Describe** and **analyse** the techniques of reception of Frequency Modulated signals.	1,2,3
C289.5	**Explain** signal to noise ratio, noise figure and noise temperature for single and cascaded stages in a communication system. **Develop** the ability to **compare** and contrast the strengths and weaknesses of various communication systems in presence of noise.	1,2,3
C289.6	**Understand** initial steps of signal processing for conversion of analog signal to Digital signal for Digital communication system	1,2,3

Object Oriented Programming (204191), SE- Sem IV

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C291.1	Justify the philosophy of object-oriented design and the concepts of encapsulation, abstraction, inheritance, and polymorphism;	2
C291.2	Design, implement, test, and debug simple programs in an object-oriented programming language	3
C291.3	Describe how the class mechanism supports encapsulation and information hiding.	2
C291.4	Design, implement, and test the implementation of "is-a" relationships among objects using a class hierarchy and inheritance.	3
C291.5	Compare and contrast the notions of overloading and overriding methods in an object-oriented language.	2
C291.6	Able to write Applet programming	2

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COURSE OUTCOMES (CO)

SE. 2015 Course

Employability Skill Development (204191), SE-Sem-IV

After successfully completing the course students will be able to,

Co. No.	Description	Bloom's Taxonomy Level
C291.1	**Compare** between "soft skills and hard skills" & "resume and curriculum vitae", understand the importance of professional presentations.	2
C291.2	Have skills and preparedness to **solve** the arithmetic and mathematical reasoning.	2, 3
C291.3	**Solve** the verbal and non-verbal aptitude.	2, 3
C291.4	**Understand** the basic concept of English sentences, Compose the Paragraph, Story, Letter and e-mail.	2,6
C291.5	**Identify** the preparatory steps to face a job interviews and tips to crack it, **develop** the personality traits for successful participation in group discussions.	1,6
C291.6	**Construct** the team and lead it for problem solving.	3