



SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY

Yamnampet, Ghatkesar, Medchal Dist., Hyderabad – 501 301

Department of Electronics and Computer Engineering (ECM)

7. UG Course Outcomes

Course Outcomes are narrower statements that describe what students are expected to know, and be able to do at the end of each course/subject. While the POs define the departmental outcomes, the COs are more oriented towards the subjects and are mostly defined by the faculties consulting higher authorities. The COs are more like statements that relate to the skills, knowledge, and behaviour the students acquire as they go through a specific course within a program. They collectively contribute to the program outcomes. They are to be mapped to the POs, and not necessarily to a single one.

Two or more COs can be mapped to a PO and a CO can be mapped to one or more PO(s). COs are mapped to different POs based on their influence on them

| Course Outcome (CO) | Name of the Course and Code Number | |
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| CO No. | C117 | Data Structures and C++ (DS and C++) (6E201) |
| 1 | C117.1 | Explain Abstract data type, stack and Queues with their applications |
| 2 | C117.2 | Write programs on Singly linked lists, Doubly linked lists, Circular list and explain their operations. |
| 3 | C117.3 | Explain concepts of Trees, AVL Trees and Graphs with examples and applications. |
| 4 | C117.4 | Describe object oriented programming approach and its elements |
| 5 | C117.5 | Write and explain programs on searching, sorting and hashing operations |
| 6 | C117.6 | Explain and apply concepts of oops, write programs implementing function and operator overloading. Writing programs with inheritance. |
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| CO No. | C207 | Discrete Structures and Graph Theory (DSGT) (6D301) |
| 1 | C207.1 | Describe Connectives, Normal Forms and Theory of Inference with suitable examples. |
| 2 | C207.2 | Solve problems with Predicate Calculus and generate inferences. |
| 3 | C207.3 | Solve and explain Relations and Ordering problems and solve |

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| | | problems of lattices. |
| 4 | C207.4 | Distinguish algebraic systems like semi-groups, monoids and groups and apply concepts of Combinatorics for solving problems |
| 5 | C207.5 | Solve problems with recurrence relations. |
| 6 | C207.6 | Explain and apply concepts of Euler's Formula, Multigraphs, Euler's Circuits, hamiltonian graph and Chromatic Numbers for solving problem |
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| CO No. | C216 | Software Engineering (6D414) |
| 1 | C216.1 | Apply process models in real world software products. |
| 2 | C216.2 | Classify software requirements specification document. |
| 3 | C216.3 | Design system models. |
| 4 | C216.4 | user interface and Evaluate test strategies for various softwares. |
| 5 | C216.5 | Describe product metrics, risk management. |
| 6 | C216.6 | Describe quality management |
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| CO No. | C301 | Computer Organization and Architecture (COA) (6DC11) |
| 1 | C301.1 | Understand the manner in which machines evolve and identifying the improvements made |
| 2 | C301.2 | Use data types with instruction set of specific architecture |
| 3 | C301.3 | Assessing the manner in which the processor performs the calculations |
| 4 | C301.4 | Analyze performance aspects with control unit along with pipelining |
| 5 | C301.5 | Evaluate memory access in terms of latency |
| 6 | C301.6 | Use communication protocols for interfacing |
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| CO No. | C315 | Micro Processors and Microcontrollers (MPMC) (6DC05) |
| 1 | C315.1 | Recall and apply a basic concept of digital fundamentals to Microprocessor based personal computer system. |
| 2 | C315.2 | Identify a detailed s/w & h/w structure of the Microprocessor. |
| 3 | C315.3 | Illustrate how the different peripherals (8255, 8253 etc.) are interfaced with Microprocessor. |
| 4 | C315.4 | Distinguish and analyze the properties of Microprocessors & Microcontrollers. |
| 5 | C315.5 | Analyze the data transfer information through serial & parallel ports. |

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| 6 | C315.6 | Train their practical knowledge through laboratory experiments. |
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| CO No. | C404 | Embedded and Real Time Systems (ERTS) (6DC06) |
| 1 | C404.1 | Identify and summarize the characteristics and challenges of designing an embedded system |
| 2 | C404.2 | Utilize and apply ARM architecture for Embedded System Design |
| 3 | C404.3 | Illustration of THUMB instruction set. |
| 4 | C404.4 | Learning ARM programming skills |
| 5 | C404.5 | Design simple input output hardware interfaces using ARM. |
| 6 | C404.6 | Explain the concepts and design requirements related to a real time systems |
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| CO No. | C405 | VLSI Design (6DC07) |
| 1 | C405.1 | Use Fourier series and Fourier transform to analyze signals appropriately. |
| 2 | C405.2 | Represent linear systems and find response. |
| 3 | C405.3 | Understand various amplitude modulation schemes |
| 4 | C405.4 | Understand various angle modulation schemes |
| 5 | C405.5 | Analyze noise and SNR values in analog modulation techniques |
| 6 | C405.6 | Understand the concept of pulse analog modulation |