

**AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER**

**Department Of Information Technology**

**Course Outcomes**

<b>Second Year – 2012 Course</b>			
<b>Course Code</b>	<b>Course Name</b>	<b>Course Outcomes</b>	
<b>Semester – I</b>			
<b>214443</b>	<b>DELD</b>	CO-1:	Apply knowledge of number systems, codes, Boolean algebra and use necessary A.C, D.C Loading characteristics as well as functioning while designing with logic gates.
		CO-2:	Use logic function representation for simplification with K-Maps and analyze as well as design Combinational logic circuits using SSI & MSI chips.
		CO-3:	Analyze Sequential circuits like Flip-Flops (Truth Table, Excitation table), their conversion & design the applications.
		CO-4:	Analyze Sequential logic design circuit like Registers , Ring Counter, Twisted Ring Counter and Mealy and Moore machines(Representation and Implementation ).
		CO-5:	Identify the Digital Circuits, Input/Outputs to replace by FPGA.
		CO-6:	Use VHDL programming technique with different modeling styles for any digital circuits.
		CO-7:	Use logic function representation for simplification with K-Maps and analyze as well as design Combinational logic circuit , Sequential Circuits and implement the design Steps, main programming technique with different modeling styles for any digital circuits with VHDL Programming , follow ethical standards and teamwork.

214444 /47	<b>Fundamentals of Data Structures and Programming Laboratory</b>	CO1	Students will be able to Understand fundamental concepts and structure of C- programming language.
		CO2	Understand concepts of C language like pointers and files.
		CO3	Understand the concepts of data structure, data type and array data structure.
		CO4	Analyze algorithms and determine their time complexity.
		CO5	Know how and when to apply standard algorithms for searching and sorting along with their performance.
		CO6	Implement linear data structures and its applications like polynomial, sparse Matrix etc.
		CO7	<b>Implement</b> program in C for basic operations in discrete mathematics, searching, sorting and file handling.
214452/55	<b>Data Structures and Files(DSF) &amp; DSF-Lab</b>	CO1	Analyze stack data structures with implementation and applications
		CO2	Analyze and Implement Queue data structure and its applications.
		CO3	Understand tree as abstract data type (ADT) and its implementation.
		CO4	Solve graph based problems for Spanning Trees, Shortest path, transitive closure and topological sorting.
		CO5	Understand symbol tables and hash tables with their applications
		CO6	Develop sequential, direct access and indexed file sequential file based programs
		CO7	Develop programs in C++ to implement learned algorithm design techniques, data structures and their applications following ethical standards and teamwork
214441	<b>Discrete Structures</b>	CO1	Use Set, Mathematical Propositions and Proof Techniques to determine logical

			possibilities in a given situation.
		CO2	Demonstrate an understanding of relations and functions and be able to determine their properties
		CO3	Discuss the ideas of Groups & Rings
		CO4	Use Graph theory to formulate the problems and solve them
		CO5	Use trees to formulate the problems and solve them
		CO6	Understand the ideas of Permutations, Combinations & Discrete Probability.
		CO7	Design & implement C programs to learn basic mathematical operations on set & data structures.
<b>214450/54</b>	<b>Processor Architecture And Interfacing &amp; Processor Interfacing Laboratory</b>	CO1	Memorize architectural details of 80386 microprocessor
		CO2	Interpret memory management of 80386 microprocessor
		CO3	Examine multitasking of 80386 microprocessor
		CO4	understand Interrupts and exception
		CO5	Design Interface stepper motor to 8051
		CO6	Design timing diagram with respective to 8051
		CO7	Student will be develop the assembly language programs and interfacing with input output devices to 8051 microcontroller though ethics and team work
<b>214445/48</b>	<b>PSOOP (TH) and OOPL(PR)</b>	CO1	Analyze and organize the concept related to problem solving in OOP.
		CO2	Develop logic for solving different problems in OOPs.
		CO3	Examine and Implementing the concept of array and text.
		CO4	Describe the procedural and object oriented paradigm with concepts of streams, classes, functions, data and objects.

		CO5	Discover, explore and apply tools and best practices in object-oriented programming using function overloading, operator overloading, Inheritance, virtual functions, and virtual class.
		CO6	Describe the Exception handling and Template.
		CO7	Demonstrate the use of various OOPs concepts with the help of Implementation.
<b>214442</b>	<b>Computer Organization (COA)</b>	CO1	Understand structure, function of and Solve problems based on computer arithmetic.
		CO2	Explain different types of addressing mode with instruction format.
		CO3	Learn knowledge about micro-programming of a processor.
		CO4	Understand concepts related to Control unit organization and its Hardwired control.
		CO5	Understand concepts related to memory & address translation.
		CO6	Learn and Understand Programmed I/O and DMA of 8237, 8251, 8255 IC.
<b>214453</b>	<b>Foundations of Computer Network (FCN)</b>	CO1	Understand terminology and concepts of analog and digital signals and their transmission
		CO2	Recognize usage of various modulation and multiplexing techniques in communication
		CO3	Discuss various transmission media and switching networks
		CO4	Understand the terminology and concepts of the OSI reference model and the TCP-IP reference model.
		CO5	Demonstrate error detection, error correction methods and protocols in Data Link Layer
		CO6	Discuss Multiple Access protocols and Ethernet standards
<b>214449/55</b>	<b>Computer Graphics</b>	CO1	Understand mathematics and logic

	<b>and Computer Graphics Laboratory</b>		to develop Computer programs for elementary graphic operations
		CO2	Implement scientific and strategic approach to solve complex problems in the domain of Computer Graphics
		CO3	Develop the competency to understand the concepts related to 3D Transformations and Projections
		CO4	Implement the concepts related to Segments Windowing and Clipping
		CO5	Compare concepts related to Computer Vision and Virtual reality
		CO6	Demonstrate the logic to develop animation and gaming programs
		CO7	Apply and implement 2D and 3D transformation algorithm for generating simple animation without using any animation tool