Mahavir Education Trust's

SHAH & ANCHOR KUTCHHI ENGINEERING COLLEGE

Affiliated to University of Mumbai, Approved by D.T.E. & A.I.C.T.E.| Awarded 'A' Grade by D.T.E., M.S. | Electronics Enginering Program Accredited by N.B.A.,
New Delhi for 2 years w.e.f. 6th Aug.,2014 | Computer Engineering Program Re-Accredited by N.B.A.,New Delhi for 3 yeas w.e.f. 1st July 2019 | Information Technology
Program Accredited by N.B.A.,New Delhi for 3 years w.e.f. 1st July 2019

ISO 9001 Certified

DEPARTMENT OF COMPUTER ENGINEERING
Semester – III

Unique Course Number: CSC301   Course Name: Applied Mathematics-III

Unique CO Number	Course Outcome (CO) Statement
CSC3011	To *compute* the Laplace Transform of standard functions both from the definition and by using tables and *select* and *use* the appropriate theorems in finding Laplace Transform and Inverse Laplace Transform.
CSC3012	To *select* and *combine* the necessary Laplace Transform techniques to *solve* ordinary differential equations involving Heaviside's unit step function / Dirac Delta function.
CSC3013	To *calculate* real/complex form of Fourier Series for standard periodic functions and to *recognize* even and odd functions and use the resulting simplifications for obtaining Fourier series.
CSC3014	To *explore* the nature of relationship between two variables and *predict* the value of the response variable for the given values of the explanatory variable.
CSC3015	To *solve* engineering problems using complex variable techniques and to *transfer* a region to another region using conformal mapping.
CSC3016	To *compute* the Z- Transform of elementary sequences both from the definition and by using tables and *select* and *use* the appropriate theorems in finding Z- Transform and Inverse Z- Transform.

Unique Course Number: CSC302   Course Name: Digital Logic Design and Analysis

Unique CO Number	Course Outcome (CO) Statement
CSC3021	To explain different number systems and their conversions.
CSC3022	To identify how to analyze and minimize Boolean expressions.
CSC3023	To develop and analyze combinational circuits.
CSC3024	To develop and analyze sequential circuits
CSC3025	To explain the basic concepts of VHDL
CSC3026	To explain basics of TTL and CMOS Logic families.

Unique Course Number: CSC303   Course Name: Discrete Mathematics

Unique CO Number	Course Outcome (CO) Statement
CSC3031	Understand the notion of mathematical thinking, mathematical proofs and to apply them in problem solving.
CSC3032	Ability to reason logically.
CSC3033	Ability to understand relations, Diagraph and lattice.
CSC3034	Ability to understand the use of functions, graphs and their use in programming applications.
CSC3035	Understand the use of groups and codes in Encoding-Decoding.
CSC3036	Apply discrete structures like probability, permutations, combinations, generating functions into other computing problems such as formal specification, verification, artificial intelligence, cryptography, Data Analysis and Data Mining etc.

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Unique Course Number: CSC304   Course Name: Electronic Circuits & Communication Fundamentals

Unique CO Number	Course Outcome (CO) Statement
CSC3041	Describe importance of oscillators and power amplifies in communication system
CSC3042	Choose digital modulation technique and different multiplexing techniques.
CSC3043	Utilize the basic concept of OPAMP and their applications.
CSC3044	Exemplify use of semiconductor devices and its applications
CSC3045	Identify of different modulation & demodulation technique used in analog communication.
CSC3046	Apply basic concept of information theory and channel capacity

Unique Course Number: CSC305   Course Name: Data Structures

Unique CO Number	Course Outcome (CO) Statement
CSC3051	Implement various Linear and Nonlinear data structures
CSC3052	Handle operations like insertion, deletion, searching and traversing on various data structures
CSC3053	Select appropriate sorting technique for given problem
CSC3054	Select appropriate sorting technique for given problem
CSC3055	Apply learned concepts in various domains like DBMS and Compiler Construction
CSC3056	Choose appropriate data structure for specified problem domain

Unique Course Number: CSL301   Course Name: Digital System Lab

Unique CO Number	Course Outcome (CO) Statement
CSL3011	To explain the basics of various digital components.
CSL3012	To explain various types of codes and their conversion.
CSL3013	To illustrate the given expression in standard Sum of Products form and Products of Sum form. and To model the reduced expression using Universal gates.
CSL3014	To develop the combinational logic circuits
CSL3015	To explain Flip flop conversion and develop counters
CSL3016	To develop digital circuits using VHDL

Unique Course Number: CSL302   Course Name: Basic Electronics Lab

Unique CO Number	Course Outcome (CO) Statement
CSL3021	Experiment are designed to implement CE amplifier, students should be able to view the output characteristics of CE amplifier using multisim software.
CSL3022	Experiment are based to design Hartely and colpitt oscillators in communication systems
CSL3023	Experiment are designed so that students can implement OP-AMP IC741 and its various applications.
CSL3024	Experiment are designed to implement analog modulation techniques like AM and FM and study output waveforms
CSL3025	Experiment are designed to implement pulse width modulation along with the waveforms.
CSL3026	Experiment are designed to implement functioning of superheterodyne receiver.

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Unique Course Number: **CSL303**   **Course Name: Data structure Lab**

Unique CO Number	Course Outcome (CO) Statement
CSL3031	Implement various Linear and Nonlinear data structures.
CSL3032	Handle operations like insertion, deletion, searching and traversing on various data structures.
CSL3033	Select appropriate sorting technique for given problem
CSL3034	Select appropriate searching technique for given problem
CSL3035	Apply learned concepts in various domains like DBMS and Compiler Construction
CSL3036	Choose appropriate data structure for specified problem domain

Unique Course Number: **CSL304**   **Course Name: OOPM(Java) Lab**

Unique CO Number	Course Outcome (CO) Statement
CSL3041	Apply fundamental programming constructs
CSL3042	Identify classes, objects, members of a class and relationship among them needed for a specific problem and write java application using OOP principles and packages
CSL3043	Demonstrate the concept of array, strings and vector.
CSL3044	Implement the concept of inheritance and interfaces.
CSL3045	Implement the notion of exception handling and multithreading.
CSL3046	Develop GUI based application.