



Mahavir Education Trust's

## Shah & Anchor Kutchhi Engineering College,

Chembur, Mumbai 400 088

### Information Technology

Academic Year 2021-22

#### Semester II

Sem	Course Code	Course Name	CO Number	Course Outcome Statements
II	FEC201	Applied Mathematics-II	FEC2011	Choose and utilize Gamma & Beta function to evaluate improper integrals
			FEC2012	Demonstrate the ability to evaluate definite integrals numerically using Trapezoidal, Simpson 1/3rd & Simpson 3/8th rule.
			FEC2013	Identify the different types of differential equations and choose the analytical or numerical method to solve first order first degree differential equations.
			FEC2014	Solve and analyze the higher order linear differential equations with constant coefficients
			FEC2015	Evaluate multiple integrals using a transformation of coordinates, change of order of integration.
			FEC2016	Compute area, mass of lamina and volume by using double and triple integrals.
II	FEC202	Applied Physics-II	FEC2021	Recall the basic laws and principles of Optics, Electricity, Magnetism and Nano- science.
			FEC2022	Discuss the principles of diffraction of light, LASERs, Optical fibers & Nanotechnology.
			FEC2023	Understand and describe the concepts pertaining to Electrodynamics, Relativity & Sensors.
			FEC2024	Develop and utilize the concepts of diffraction of light, LASERs, Optical fibers and Nanotechnology for interpretation in various applications.
			FEC2025	Apply the theory of Electrodynamics, Relativity and Sensors for explaining respective applications.
			FEC2026	Demonstrate the use of concepts learnt in practical applications.
II	FEC203	Applied Chemistry -II	FEC1031	Explain the concept of Engineering Chemistry such as calorific value, knocking, and types of spectroscopy
			FEC1032	Distinguish the range of electromagnetic spectrum and illustrate the concept of emission spectroscopy
			FEC1033	Illustrate the effect of corrosive environment on engineering material and summarizing 12 principles of green chemistry
			FEC1034	Identify the types of corrosion and suggest control measures in industries

			FEC1035	Select the greener path following the principles of green chemistry.
			FEC1036	Explain the process to determine the quality of fuel and calculate the amount of oxygen required for complete combustion
II	FEC204	Engineering Graphics	FEC2041	Apply the basic principles of projections of lines and planes
			FEC2042	Apply the basic principles of projections in projection of solids.
			FEC2043	Apply the basic principles of sectional views in section of solids
			FEC2044	Apply the basic principles of projections in converting 3 D view to 2D drawing
			FEC2045	Read a given drawing
			FEC2046	Visualize an object from the given two views.
II	FEC205	C programming	FEC2051	Explain and exemplify the elementary C concepts through programs, algorithms and flowcharts.
			FEC2052	Discuss and demonstrate decision making and branching statements in C
			FEC2053	Discuss and demonstrate decision making and looping statements in C
			FEC2054	Apply the concept of function on the given problem statement.
			FEC2055	Demonstrate the use of homogeneous and heterogeneous data types in C.
			FEC2056	Illustrate the use of pointers
II	FEC206	Professional Communication and Ethics- I	FEC2061	Eliminate barriers and use verbal and nonverbal cues at social and workplace situations.
			FEC2062	Employ Listening strategies to comprehend wide ranging vocabulary, grammatical structures ,tone and pronunciation.
			FEC2063	Prepare effectively for speaking at social, academic and business situations.
			FEC2064	Use reading strategies for faster comprehension, summarization and evaluation of texts.
			FEC2065	Acquire effective writing skills for drafting academic, business and technical documents.
			FEC2066	Successfully interact in all kinds of settings, displaying refined grooming and social skills.
II	FEL201	Engineering Pysics-II	FEL2011	To perform the experiment based on diffraction grating to find the wavelength of laser light. T
			FEL2012	To perform the experiment to Measure divergence of laser beam.
			FEL2013	To perform the experiment to find numerical aperture of an optical fiber
			FEL2014	To perform the experiment based on photodiode to study I/V characteristics and plot the reverse biased

				characteristics of the same.
			FEL2015	o perform the experiment using Ultrasonic distance meter for measurement of distance
			FEL2016	Design and implement miniature projects related to physics
II	FEL202	Engineering Chemistry-II	FEL2021	Determine the % of moisture content present in the solid fuel and to explain its effect on calorific value
			FEL2022	Estimate acid value of oils and discuss its importance in selecting lubricating oil.
			FEL2023	Estimate the electrode potential of metal and indentify its ability to resist corrosion
			FEL2024	Identify the factors controlling the rate of corrosion of metal
			FEL2025	Differentiate between greener and non greener chemical processes.
			FEL2026	Document their observations and interpretation after performing the experiment satisfactorily
II	FEL203	Engineering Graphics	FEL2031	Use different Command from draw toolbar.
			FEL2032	Use different Command from modify toolbar and application to line problem.
			FEL2033	Read orthographic projection.
			FEL2034	Draw orthographic projections using AutoCAD.
			FEL2035	Draw Sectional orthographic projections using AutoCAD.
			FEL2036	Draw isometric projection using AutoCAD.
II	FEL204	C programming	FEL2041	Demonstrate the use operators in C
			FEL2042	Implement Conditional Statements in C
			FEL2043	Implement Looping constructs in C
			FEL2044	Decompose a problem into functions and synthesize a complete program.
			FEL2045	Solve given problem using C data type like array and strings
			FEL2046	Illustrate the concept of structures and pointers
II	FEL205	Professional Communication and Ethics- I	FEL2051	Learn and comprehend all types of spoken discourse successfully
			FEL2052	speak fluently and make effective professional presentation
			FEL2053	Read large quantities of text in short times to comprehend, summaries and Evaluate.
			FEL2054	Draft precise business letters. Academic essays and technical Guidelines.

			FEL2055	Dress finely and conduct themselves with panache in social, academic and professional situation
II	FEL206	Basic Workshop practice-II	FEL2061	Develop the necessary skills required to handle / use different tools for carpentry, sheet metal working and brazing.
			FEL2062	Design and model of a T-Lap joint.
			FEL2063	Demonstration of a wood turning job.
			FEL2064	Develop the necessary skills required to handle / use different tools to design , fabricate and assemble PCB
			FEL2065	Demonstrate and simulate different software for PCB designing and electrical connections for different load.
			FEL2066	Design and modeling of a sheet metal job along with brazing operation.