DON BOSCO INSTITUTE OF TECHNOLOGY, KURLA, MUMBAI

FE (BASIC SCIENCES AND HUMANITIES) DEPARTMENT, (EVEN SEMESTER, 2022-23)

Course Name:	Engineering Mathematics II	
Course Code	FEC201	
Faculty Name:	Ms. Sonali J. and Mr. Somnath P.	
Year	1	Sem	II

CO Number	Course Outcome
FEC201.1	Students will be able to (i) Identify the equations representing standard curves in Cartesian and polar coordinate systems (ii) Identify
FEC201.2	Students will be able to (i) Reduce the differential equation in appropriate form, obtain integrating factor, complementary function and
FEC201.3	Student will be able to solve problems in ordinary differential equations using appropriate method and apply it in solving electrical
FEC201.4	Student will be able to (i) Apply the principles of Integral Calculus (single, double and triple integrals) to solve a variety of practical
FEC201.5	Students will be able to solve the differential equation by reducing it to appropriate form.
FEC201.6	Student will be able to apply open source software SCILAB to trace standard curves, to solve initial value problems and to solve the

Course Name:	Engineering Physics II	
Course Code	FEC202	
Faculty Name:	Dr. Vinod Gokarna and Mr. Sameer Hadkar	
Year	1	Sem	II

CO Number	Course Outcome
FEC202.1	Students will be able to grasp and recall the basic concepts of core Physics topics like diffraction, fourndation for laser and fibre optics
FEC202.2	Students will be able to understand and describe the basic concepts of Physics topics like diffraction, fourndation for laser and fibre
FEC202.3	Students will be able to relate, integrate knowledge and explain the principles involved with their engineering disciplines like
FEC202.4	Students will be able to review, elucidate with examples and apply the fundamental principles of Physics to solve numericals and
FEC202.5	Students will be able to demostrate and conclude on the experiment performed in topics like diffraction through slits and applications,
FEC202.6	Students will be able to perform mini projects which will encourage engineering students to venture into the research field.

Course Name:	Engineering Chemistry II	
Course Code	FEC203	
Faculty Name:	Ms.Kartiki B. and Ms. Anice M	
Year	1	Sem	II

CO Number	Course Outcome
FEC 203.1	Students will be able to define and recall the fundamental concepts in the field of corrosion science, fuels chemistry, green chemistry,
FEC 203.2	Students will be able to state principles of corrosion, spectroscopy, green chemistry and will be able to state the properties,

FEC 203.3	Students will be able to explain the corrosion mechanisms, fuel quality, green sythesis routes, various types of spectroscopy.
FEC 203.4	Students will be able to suggest appropriate control methods for corrosion. Students will be able to justify the need for use of
FEC 203.5	Students will be able to analyze data, solve numerical problems based on fuel quality and combustion, Nernst equations and atom
FEC 203.6	Seminar/Group Activity : Students will be able to review research literature, analyse complex problems, present new concepts, ideas,

Course Name:	**Engineering Graphics**		
Course Code	FEC204		
Faculty Name:	**Mr. Hemant H. and Mr. Sachin S.**		
Year	**1**	**Sem**	**II**
CO Number	**Course Outcome**		
FEC 204.1	Students will be able to reproduce and interpret the basics of engineering conventions in engineering drawing as per I.S		
FEC 204.2	Students will be able to demonstrate the understanding of the fundamental of projection drawing		
FEC 204.3	Students will be able to apply the basics of projection drawing to prepare orthographic views, sectional orthographic views andisometric view of n		
FEC 204.4	Students will be able to draw the intricate of section of solid and development of surfaces for the given cutting plane		
FEC 204.5	Students will be able to use CAD tool to draw different views of a 3D object		
FEC 204.6	Students will be able to use CAD tools to draw an object in 3D.		

Course Name:	**C Programming**		
Course Code	FEC205		
Faculty Name:	**Mr. Imran M. and Ms. Mrudul A.**		
Year	**1**	**Sem**	**II**
CO Number	**Course Outcome**		
FEC 205.1	Formulate simple algorithms for arithmetic, logical problems and translate them to programs in C language		
FEC 205.2	Implement, test and execute programs comprising of control structures		
FEC 205.3	Decompose a problem into functions and synthesize a complete program.		
FEC 205.4	Demonstrate the use of arrays, strings and structures in C language.		
FEC 205.5	Illustrate the concepts of structures, unions, and pointers and their applications		
FEC 205.6	Propose a solution to unknown problem at FE level		

Course Name:	**Professional Communication and**		
Course Code	FEC206		
Faculty Name:	**Mr. Sachin Sughave and Mr. Dipak**		
Year	**1**	**Sem**	**II**

CO Number	Course Outcome
FEC 206.1	Students will be able to recall and define concepts in grammar which include subject-verb agreement, articles, misplaced modifiers
FEC 206.2	Students will be able to explain a) the concept and meaning of communication, communication cycle,barriers to communication ,and
FEC 206.3	Students will be able to make use of appropriate grammatical concepts and principles of effective communication while writing
FEC 206.4	Students will be able to identify the importance of self development and make use of social etiquettes in professional arena.
FEC 206.5	Students will be able to apply the given rubric to evaluate the principles of public speaking and communication in a speech
FEC 206.6	Students will be able to

Course Name:	Engineering Physics II	
Course Code	FEL201	
Faculty Name:	Dr. Vinod Gokarna and Mr.Sameer Hadkar	
Year	1	Sem	II	

CO Number	Course Outcome
FEL 201.1	Students will be able to perform the experiments based on diffraction through slits using Laser source and analyze the results
FEL 201.2	Students will be able to perform the experiments using optical fibre to measure numerical aperture
FEL 201.3	Students will be able to perform the experiments using ultrasonic distance meter.
FEL 201.4	Students will be able to perform the experiments using Laser source and analyze the results
FEL 201.5	

Course Name:	Engineering Chemistry II
Course Code	FEL202
Faculty Name:	Ms.Kartiki B. and Ms. Anice M
Year	1	Sem	II

CO Number	Course Outcome
FEL 202.1	Students will be able to define and recall different properties and fundamental concepts related to coal analysis, green synthesis of
FEL 202.2	Students will be able to describe the procedure/ process involved in determining the moisture content of coal,green synthesis of
FEL 202.3	Students will be able to explain the various mechanisms and processes involved in the determining the moisture content of coal,green
FEL 202.4	Students will be able to reason out and justify the need for determining the moisture content of coal, green synthesis of aspirin, emf of
FEL 202.5	Students will be able to perform experiments, obtain data, solve numerical problems, analyze data and draw inference on basis of their

Course Name:	Engineering Graphics
Course Code	FEL203
Faculty Name:	Mr. Hemant H. and Mr. Sachin S.
Year	1	Sem	II

CO Number	Course Outcome
FEL 203.1	Students will be able to reproduce and interpret the basics of engineering conventions in engineering drawing as per I.S
FEL 203.2	Students will be able to demonstrate the understanding of the fundamental of projection drawing
FEL 203.3	Students will be able to apply the basics of projection drawing to prepare orthographic views, sectional orthographic views andisometric view of r
FEL 203.4	Students will be able to draw the intricate of section of solid and development of surfaces for the given cutting plane
FEL 203.5	Students will be able to use CAD tool to draw different views of a 3D object.
FEL 203.6	Students will be able to use CAD tools to draw an object in 3D.

Course Name:	C Programming		
Course Code	FEL204		
Faculty Name:	Mr. Imran M., Ms. Sana S. and Ms.		
Year	1	Sem	II

CO Number	Course Outcome
FEL 204.1	Translate given algorithms to a program
FEL 204.2	Correct syntax and logical errors.
FEL 204.3	Write iterative as well as recursive programs.
FEL 204.4	Represent data in arrays, strings and structures and manipulate them through a program.
FEL 204.5	Declare pointers and demonstrate call by reference concept.
FEL 204.6	Propose a solution to unknown problem at FE level

Course Name:	Professional Communication and		
Course Code	FEL205		
Faculty Name:	Mr. Sachin Sughave and Mr. Dipak		
Year	1	Sem	II

CO Number	Course Outcome
FEL 205.1	Students will be able to recall and define concepts in grammar which include subject-verb agreement, articles, misplaced modifiers
FEL 205.2	Students will be able to explain a) the concept and meaning of communication, communication cycle,barriers to communication ,and
FEL 205.3	Students will be able to make use of appropriate grammatical concepts and principles of effective communication while writing
FEL 205.4	Students will be able to identify the importance of self development and make use of social etiquettes in professional arena.
FEL 205.5	Students will be able to apply the given rubric to evaluate the principles of public speaking and communication in a speech
FEL 205.6	Students will be able to a) plan and develop a speech b) compose business letters