The Bombay Salesian's

Don Bosco Institute of Technology

Department of Electronics and Telecommunication Engineering

SE, TE & BE Internal Assessment – I Timetable (AY 2024-25 ODD Semester)

S.E.(EXTC) - SEM III

Course Code	Course Name	Faculty Incharge	Syllabus
ECC 301	Engineering Mathematics--III	Dr. Revathy	**Module 1 :** Laplace Transforms: Laplace Transforms of standard functions, Properties of Laplace Transforms, Evaluation of integrals using Laplace Transforms **Module 4 :** Complex Variables: Analytic functions, Harmonic functions, Harmonic Conjugates, C-R equations, Milne-Thompson method for constructing Analytic functions, Harmonic Conjugates and Orthogonal Trajectories
ECC 302	Electronic Devices & Circuits	Mr. Ankur Ganorkar	Module1,2,3
ECC 304	Network Theory	Ms. Freda Carvalho	Module 1 & Module 2
ECC 305	Electronic Instrumentation & Control Systems	Mr. JayaRajesh	**Module 1:** 1.1 Introduction to Basic instruments: Components of generalized measurement system Concept of accuracy, precision, linearity, sensitivity, resolution, hysteresis, calibration. **1.2 :** Measurement of Resistance: Kelvin's double bridge, Wheatstone bridge and Mega ohm bridge Measurement of inductance: Maxwell bridge and Hey bridge Measurement of Capacitance: Schering bridge **Module 3:** Introduction to control system Analysis: 3.1 : Introduction: Open and closed loop systems, example of control systems 3.2 Modelling: Modelling, Transfer function model 3.3 Block diagram reduction techniques **Module 2: LVDT**
ECC 303	Digital System Design	Ms. Poonam Chakraborty	**Module 1- Number Systems and Codes:** Review of Binary, Octal and Hexadecimal Number Systems, their interconversion, Binary code, Gray code and BCD code, Binary Arithmetic, Addition, Subtraction using 1's and 2's Complement **Module 2- Logic Family and Logic Gates :** Digital logic gates, Universal gates, Realization using NAND and NOR gates, Boolean Algebra, De Morgan's Theorem **Module 3-Combinational Logic Circuits:** SOP and POS representation, K-Map up to four variables

T E (EXTC) - SEM VI

Course Code	Course Name	Faculty Incharge	Syllabus
ECC 504	Random Signal Analysis	Dr. Ashwini Kotrashetti	**Module 1: Basic Concepts in Probability** - Definitions of probability, joint, conditional, total probability, Bayes' theorem,binary symmetric communication channel analysis. **Module 2.1: Introduction to Random Variables:** Continuous, discrete, and mixed random variables, probability density function, probability distribution function, and probability mass function, properties of PDF and CDF. **Module 2.2:** Special distributions- Binomial, Poisson, Uniform. **Module 3.2:** Expectation, Variance and Moments of Random Variables
ECC 502	Discrete Time Signal Processing	Mr. JayaRajesh	**Module1 :1.1** Discrete Fourier transform (DFT), DFT as a linear transformation, Properties of the DFT, Relationship of the DFT to other transforms, Filtering of long data sequences: Overlap-Save and Overlap-Add Method, **1.2.** Fast Fourier Transform: Radix-2 Fast Fourier Transforms (FFT), Radix-2 decimation in time and decimation in frequency FFT algorithms. **Module: 2 : 2.1** LTI systems as frequency-selective filters like low pass, high pass, band pass, notch, comb, all-pass filters, and digital resonators, Analog filter approximations: Butterworth, Chebyshev I, Elliptic Mapping from s-plane to the z-plane - impulse invariant and bilinear transformation,
ECC 503	Digital VLSI	Dr. Sudhakar Mande	1.1: Overview of VLSI Design Flow, Review of MOSFET operationMOSFET Capacitances, MOSFET scaling, Short channel effects 1.2: Fabrication process flow of NMOS and CMOS, Lambda based design rules 2.1: CMOS inverter operation, Voltage Transfer characteristics (VTC), Noise Margins, Propagation Delay, Power Dissipation
ECC 501	Digital Communication	Ms. Namita Agarwal	Module 1, Module 2, Module 4.1
ECC DLO 5014	Data Structures and Algorithm	Ms. Mrudul Arkadi	Module 1 , Module 2 , Module 3 - LL vs Array , insertion in SLL
HCSC501	Cyber security:Ethical Hacking	Mr. Prasad Padalkar	Module1, Module 2
HDSC501	Data Science:Mathematics for Data Science	Ms. Kalpita wagaskar	Module-1 Linear Algebra : Full,Module-2Probability and Statistics,2.1 Introduction, Random Variables and their Probability Distribution Probabilities
HAIMLC501	AI and ML:Mathematics for AI & ML	Mr. Udaychandra Nayak	Module1, Module 2

B E (EXTC) - SEM VII			
Course Code	**Course Name**	**Faculty Incharge**	**Syllabus**
ECC 701	Microwave Engineering	Ms. Freda Carvalho	Transmission line euqations, open and short circuit transmission lines, variation of impedance over length of line, Smith CHart, use of Smith chart in impedance matching, planar transmission lines, microstrip line, strip line and coplanar line. Microwave spectrum and bands, applications of microwaves, types of waveguides, rectangular waveguides, field equations in rectangular waveguide, field components of TM and TE waves for rectangular waveguides, modes of TM and TE waves, cutoff frequency of rectangular waveguide.
ECCDLO 7023	Internet Communication Engineering	Ms. Aparna Telgote	Module 1. Module 2, Module 3.1
ECC 702	Mobile Communication System	Ms. Aparna Telgote	Module 1, Module 2.1
ECC DLO	Big Data Analytics	Mr.Ankur Ganorkar	Module1,2,3
ILO7013	Management Information System	Mr. Prasad Padalkar	Module1, Module 2
ILO7016	Cyber Security and Laws	Ms. Priya Kaul	Module 1: Introduction to Cybercrime: Cybercrime definition and origins of the world, Cybercrime and information security, Classifications of cybercrime, Cybercrime and the Indian ITA 2000, A global Perspective on cybercrimes. Module 2: Cyber offenses & Cybercrime: How criminal plan the attacks, Social Engg, Cyber stalking, Cyber café and Cybercrimes, Bot nets, Attack vector, Cloud computing, Proliferation of Mobile and Wireless Devices, Trends in Mobility, Credit Card Frauds in Mobile and Wireless Computing Era, Security Challenges Posed by Mobile Devices, Registry Settings for Mobile Devices, Authentication Service Security, Attacks on Mobile/Cell Phones, Mobile Devices: Security Implications for Organizations, Organizational Measures for Handling Mobile, Devices-Related Security Issues, Organizational Security Policies and Measures in Mobile Computing Era, Laptops Module 3: Tools and Methods Used in Cyber line Phishing, Password Cracking, Key loggers and Spywares, Virus and Worms, Steganography, DoS and DDoS Attacks, SQL Injection, Buffer Over Flow, Attacks on Wireless Networks, Phishing, Identity Theft (ID Theft)
ILO7019	Development Engineering	Dr. Ashwini Kotrashetti	Concept of Development, Measures of Economic Development, HDI, GNP, GDP, PPP Nature and scope of rural development, Hierarchy of settlements; Social, economic and ecological constraints for rural development. Sarvodaya programme - Principles, Constitutional Direction, Impact on Rural India Panchayati Raj - Introduction, Governence Structure, Block Level Panchayat, Departments, District Level Panchayat, Village Level Panchayat, Source of Funds, Inclusivity
HIOTC701	IoT:Dynamic Paradigm in IoT	Mr. Yogesh Gholap	Module1- sensor & Actuator interfaces
HAIMLC701	AI and ML:AI&ML in Healthcare	Mr. Udaychandra Nayak	Module 1, 2.
HCSC701	Cyber security:Security Information Management	Ms. Aruna khubalkar	Module-I (1.1, 1.2, 1.3 and 1.4) and Module-II (2.1, 2.2)

12/08/2024.

Ms.Hemalata Mote/ Mr.kishore B
IA- Exam Coordinator

21/08/24.

Mrs.Namita Agarwal
Head of Department (EXTC)