DON BOSCO INSTITUTE OF TECHONOLGY, KURLA, MUMBAI

DEPARTMENT OF INFORMATION TECHNOLOGY

CAY- (Odd semester, 2016-17)

Course Name:	Applied Mathematics – III		
Course Code	SEITC301		
Faculty Name:	Sonali		
Year	2	**Sem**	III

CO Number	Course Outcome
C301.1	Define, obtain the Laplace Transforms, Inverse Laplace Transforms of various standard functions.Define harmonic functions,Orthogonal trajectories.Define conformal mapping and bilinear transformations.Define Scalar & vector product, gradient,curl, divergence, directional derivative. Define Z transform & Inverse Z transform.
C301.2	Obtain the Laplace Transforms, Inverse Laplace Transforms of combinations of standard functions using the properties of Laplace and Inverse Transforms. Find Cauchy – Riemann equations to verify if a function is analytic .Obtain the harmonic conjugate and orthogonal trajectory of given family. Find bilinear transformation and its fixed points. Find the image under given transformations.Understand the properties of orthogonal and orthonormal functions and obtain Fourier series, half-range Fourier series and Fourier sine and cosine series of periodic functions.Obtain complex form fourier series of functions. Obtain Volume of parallelopiped & tetrahedron. Understand properties of gradient. Find directional derivative of a function, curl, divergence. Obtain Z transform using properties of Z transform. Obtain Inverse Z transform using Partial fraction method.
C301.3	Apply Laplace and Inverse Laplace transform concepts to evaluate integrals, solve initial and boundary value problems.(Applications in Heat and Wave equations) Apply the concepts to obtain Fourier Integral representations of functions.Obtain line integral of a function.
C301.4	Evalute integral using Stoke's theorem & Gauss Divergence theorem.

Course Name:	Data Structure & Algorithm Analysis		
Course Code	SEITC302		
Faculty Name:	Sushree Satapathy		
Year	2	**Sem**	III

CO Number	Course Outcome
C302.1	Students will be able to define the ADT for different data structures
C302.2	Student will be able to demonstrate operations like searching, sorting, insertion, deletion, traversing mechanism, hashing etc. On various data structures
C302.3	Student will be able to identify appropriate data structure as applied to specified problem definition in different domains like DBMS, compiler construction etc.
C302.4	Sudents will be able to classify algorithms on the basis of their time complexity
L302.1	Student will be able to construct operations like searching, sorting, insertion, deletion, traversing mechanism, hashing etc. On various data structures
L302.2	Student will be able to choose appropriate data structure as applied to specified problem definition in different domains like DBMS, compiler construction etc.

Course Name:	Object Oriented Programming Methodology		
Course Code	SEITC303		
Faculty Name:	Aruna Khubalkar		
Year	2	Sem	III

CO Number	Course Outcome
C303.1	Classify procedural and OO methodologies.
C303.2	Apply OOP concepts in problem solving and implement them using classes and objects.
C303.3	Explain different features and components of Java programming language.
C303.4	Solve computational problems using basic constructs like if-else, control structures, array, strings.
C303.5	Demonstrate various collection classes.
C303.6	Justify which Java feature – interface, exceptions, multithreading, applets, to be used in problem solving.

Course Name:	Analog & Digital Circuits		
Course Code	SEITC304		
Faculty Name:	Madhavi Pednekar		
Year	2	Sem	III

CO Number	Course Outcome
C304.1	Students will be able to understand and aware of various analog and digital components to be used in Electronics world. (Remembering)
C304.2	Students will be able to explain functioning of different types of stable analog and digital circuits with their applications. (Understanding)
C304.3	Students will be able to perform Number System Calculations and Conversions, also to minimize the logical expressions using Boolean Laws to reduce the hardware cost for better performance of circuits. (Applying)
C304.4	Students will be able to acquire basic knowledge of designing various Analog and digital circuits like Combinational and Sequential circuits. (Analyzing)
C304.5	Students will be able to translate real world problems into digital logic formulations.(Evaluating)
C304.6	Students will be able to apply their basic knowledge acquired in designing simple analog & digital circuits to understand the need of Microprocessor and Microcontroller systems. (Creating)

Course Name:	Database Management Systems		
Course Code	SEITC305		
Faculty Name:	Shivsevak Negi		
Year	2	Sem	III

CO Number	Course Outcome
C305.1	To describe data models and schemas in DBMS
C305.2	To define and discuss the features of DBMS, Entity relationship and Relational database.
C305.3	To write/execute complex SQL queries to manipulate databases information.
C305.4	To explain the functional dependencies and apply normalization concept to design an optimal database.
C305.5	To explain the concept of Transaction and Query processing.

Course Name:	Principles of Analog & Digital Communication		
Course Code	SEITC306		
Faculty Name:	Namita Agarwal		
Year	2	Sem	III

CO Number	Course Outcome
C306 .1	Students will be able to define and describe the basic principles and techniques used in analog and digital communication.
C306 .2	Students will be able to explain and discuss about the various types of modulation-demodulation and multiplexing techniques
C306 .3	Students will be able to apply their knowledge to solve problems and calculate communication system parameters like BW,Power,SNR etc
C306 .4	Students will be able to analyze, compare and evaluate the performance of different types of communication systems.

Course Name:	Computer Graphics and Virtual Reality		
Course Code	TEITC501		
Faculty Name:	Vaishali Kavathekar		
Year	3	Sem	V

CO Number	Course Outcome
C501.1	Students will be able to define the basic concepts of computer graphics
C501.2	students will be able to differentiate the algorithm of scan conversion,curve generation, transformations, area filling ,clipping
C501.3	students will be able to demonstrate their abilities to create animation using Morphing, Warping techniques
C501.4	Students will be able to describe the concept of VR
C501.5	Students will analyze the different models of VR
C501.6	Student will be able to demonstrate visual object using VRML

Course Name:	Operating Systems		
Course Code	TEITC502		
Faculty Name:	Mahalaxmi S.		
Year	3	Sem	V

CO Number	Course Outcome
C502.1	Student will know about and recall the components of a computer system and the types of software
C502.2	Student will understand and be able to explain what makes a computer system function and the need for various architectures and the types of OS
C502.3	Student will understand the working of an OS as a manager of various resources and model it.
C502.4	Student will learn about the management policies and algorithms used by operating systems to manage resources and apply the same to problems .
C502.5	Student will implement some of the functions of OS such as scheduling policies page replacement algorithms, IPC and compare and conclude regarding the same.

Course Name:	Microcontroller and Embedded Systems		
Course Code	TEITC503		
Faculty Name:	Janhavi Baikerikar		
Year	3	**Sem**	V

CO Number	Course Outcome
C503.1	Student will be able to comprehend basic structure & concepts in embedded systems
C503.2	Student will be able to comprehend microcontroller architecture
C503.3	Student will be able to program microcontroller.
C503.4	Student will be able to design conceptual embedded system
C503.5	Student will be able to select memory allocation algorithm for a given embedded application
C503.6	Student will be able to control the usage of shared resources

Course Name:	Advanced Database Management Systems		
Course Code	TEITC504		
Faculty Name:	Aruna Khubalkar		
Year	3	**Sem**	V

CO Number	Course Outcome
C504.1	Create complex queries using SQL, so as to retrieve and manipulate information in a database.
C504.2	Design and develop full-fledged real life applications integrated with database systems.
C504.3	Clearly describe how databases are actually stored and accesses, how transaction ACID properties are maintained, and how a database recovers from failures.
C504.4	Apply security controls to avoid any type of security incidents on vital database systems.
C504.5	Explain advanced data systems using Object based systems or Distributed Databases for better resource management.
C504.6	Understand the importance of enterprise data and be able to organize data to perform analysis on the data and take strategic decisions.

Course Name:	Open Source Technologies		
Course Code	TEITC505		
Faculty Name:	Tayyabli Sayyad		
Year	3	**Sem**	V

CO Number	Course Outcome
C305.1	Students will be able to install Linux and they will be aware of Linux environment as Operating System
C305.2	Students will be able to demonstrate shell scripting and programming skills in open source environment for system administrators
C305.3	Students will be able to develop android applications
C305.4	Students will be able to implement various services in Linux environment
C305.5	Students will understand open source philosophy
C305.6	Students will be able to develop and manage website

Course Name:	Business Communication and Ethics		
Course Code	TEITC506		
Faculty Name:	Dr. Mohini		
Year	3	Sem	V

CO Number	Course Outcome
C506.1	Utilize communication skills effectively in both oral and written form
C506.2	Demonstrate knowledge of professional and ethical responsibilities
C506.3	Develop an attitude for life-long learning
C506.4	Manifest an entrepreneurial approach
C506.5	Participate and succeed in Campus placements and competitive examinations like GATE, CET.
C506.6	Demonstrate an awareness of contemporary issues
C506.7	Develop thinking skills necessary for analysing the impact of engineering solutions on Society

Course Name:	Software Project Management		
Course Code	BEITC701		
Faculty Name:	Mahalaxmi S.		
Year	4	Sem	VII

CO Number	Course Outcome
C701.1	Demonstrate an understanding of the relationships between the phases of the Project life cycle and SDLC, ITPM and the PMBOK process groups and knowledge area.
C701.2	Evaluate the need for various project implementation methods and the need for PM and ITPM.
C701.3	Apply the knowledge of the PMBOK areas to formulate the steps of preparing the deliverables of ITPM phases.
C701.4	Formulate the deliverables of ITPM phases.
C701.5	Practice team work and team spirit through the project work

Course Name:	Cloud Computing		
Course Code	BEITC702		
Faculty Name:	Tayyabli Sayyad		
Year	4	Sem	VII

CO Number	Course Outcome
C702.1	C702.1- Students will be able to Differentiate cloud computing from other computing techniques.
C702.2	C702.2 - Students will be able to Differentiate various cloud computing services and deployment techniques.
C702.3	C702.3 - Students will be able to Handle open source cloud implementation and Administration.
C702.4	C702.4 - Students will be able to understand risks involved in cloud computing.
C702.5	C702.5 - Students will be able to Create and deploy cloud application.

Course Name:	Intelligent System		
Course Code	BEITC703		
Faculty Name:	Uday		
Year	4	Sem	VII

CO Number	Course Outcome
C703.1	Students will able to describe the building blocks of AI
C703.2	Student will be able to recognize an appropriate problem solving strategy
C703.3	Student will be able to analyze and formulate problem solving technique and algorithm
C703.4	Student will be able to build simple IS by using either Java or Prolog
C703.5	Student will be able to design / build a knowledge representation scheme
C703.6	Student will be able to use Prolog and Java to develop in any logic machine / system in any domain of AI.

Course Name:	Wireless Technology		
Course Code	BEITC704		
Faculty Name:	Nilesh Ghavate		
Year	1	Sem	VII

CO Number	Course Outcome
C704.1	Student will be able to understand characteristics of communication channel, radio access techniques and multi user detection
C704.2	Student will be able to understand and compare various technologies used to implement wireless network
C704.3	Student will understand and apply cellular concepts and the security issues in wireless network
C704.4	Students will be able to understand the new trends in the mobile / wireless networking
C704.5	Student will be able to simulate the wireless network algorithms
C704.6	Student will be able to design a wireless network

Course Name:	Elective – I Image Processing		
Course Code	BEITC7051		
Faculty Name:	Anagha Shastri		
Year	4	Sem	VII

CO Number	Course Outcome
C7051.1	Students will be able to describe fundamental concepts of digital image processing and various enhance techniques in spatial and frequency domain.
C7051.2	Students will be able to explain spatial filtering concepts.
C7051.3	They will be able to solve problems based on fundamentals of signal processing, DFT and FFT.
C7051.4	They will be able to use various morphological operations and compression algorithms.
C7051.5	They will be able to illustrate image segmentation and representation techniques as well as various image processing applications.

Course Name:	Elective – I E-Commerce & E-Business		
Course Code	BEITC7053		
Faculty Name:	Vaishali Kavathekar		
Year	4	Sem	VII

CO Number	Course Outcome
C7053.1	Students will be able to understand the technical aspect of E- Commerce and E- Business
C7053.2	Students will be able to analyze the Hardware and software technologies required for E-Commerce
C7053.3	Students will be able to gain the knowledge on payment system of E-Commerce
C7053.4	Students will be able to understand the concept of E-Marketing and E- Business strategies
C7053.5	Students will be able to develop E- business model with various functionalities.
C7053.6	Students will be able to apply design principles for creating a web portal constituting modules of E-Commerce

Course Name:	Project Stage-I		
Course Code	BEITC707		
Faculty name	Tayyabli Sayyad		
Year	4	Sem	VII

CO Number	Course Outcome
C703.1	Students will able to describe the building blocks of AI
C703.2	Student will be able to recognize an appropriate problem solving strategy
C703.3	Student will be able to analyze and formulate problem solving technique and algorithm
C703.4	Student will be able to build simple IS by using either Java or Prolog
C703.5	Student will be able to design / build a knowledge representation scheme
C703.6	Student will be able to use Prolog and Java to develop in any logic machine / system in any domain of AI.