

HASMUKH GOSWAMI COLLEGE OF ENGINEERING, VAHELAL

SYLLABUS FOR MID SEM EXAM-MARCH-2018

CE-IT

Semester	Sub Code	Subject	Unit No(GTU Syllabus)	Unit Name(GTU Syllabus)
8th	2180703	ARTIFICIAL INTELLIGENCE	1,2,3,4	What is AI?,Problems, State Space Search & Heuristic Search Techniques,Knowledge Representation Issues,Using Predicate Logic.
	2180712	CLOUD COMPUTING	1,2,3,5	Introduction, Architecture, Abstraction and Virtualization,cloud security
	2180710	BIG DATA	1,2,3	Introduction to Big Data,Introduction to Hadoop & Hadoop Architecture,HDFS, HIVE AND HIVEQL, HBASE
	2180711	PYTHON	1,2,3,4,5	INTRODUCTION TO PYTHON, FUNCTIONS, SCOPING AND ABSTRACTION, STRUCTURE TYPES, MUTABILITY AND HIGHER ORDER FUNCTIONS, TESTING, DEBUGGING, EXCEPTIONS AND ASSERTIONS, CLASSES AND OBJECT-ORIENTED PROGRAMMING
	2180715	ANDROID	1,2	
	2180713	WEB DATA MANAGEMENT	1,2	Data Model, XPath and XQuery
	2180714	IOS	1,2	INTRODUCTION, SWIFT BASICS
Semester	Sub Code	Subject	Unit No(GTU Syllabus)	Unit Name(GTU Syllabus)
6th	2160701	SOFTWARE ENGINEERING	1, 2, 3 and 4	Introduction to Software and SE, Agile Development, Managing Software Projects, Requirement Analysis and Specification
	2160707	ADVANCED JAVA	1,3,4,6	Java Networking,Servlet API and Overview,Java Server Pages,Hibernate 4.0
	2160704	THEORY OF COMPUTATION	1,2,3	Review of Mathematical Theory,Regular Languages and Finite Automata,Context free grammar (CFG)
	2160708	WEB TECHNOLOGY	1,2,3,4,5	Introduction, Web Design, HTML, Stylesheets, Javascript
	2160711	.NET TECHNOLOGY	1, 2, 4, 8, 9	Introduction to .NET Framework, C# - The Basics and Console Applications in C#, ADO.NET, ASP.NET, Themes and Master Pages
	2160710	DISTRIBUTED OPERATING SYSTEM	1,2,3	Introduction to Distributed System,Communication in Distributed System, Synchronization in Distributed System
	2161603	DATA COMPRESSION AND DATA RETRIVAL	1,2,3,4,5	INTRODUCTION, HUFFMAN CODING, MATHEMATICAL PRELIMINARIES, ARITHMETIC CODING, PREDICTIVE CODING
Semester	Sub Code	Subject	Unit No(GTU Syllabus)	Unit Name(GTU Syllabus)
4th	2140702	OPERATING SYSTEM	1,2,3,4	Introduction, Process Management, Interprocess Communication, Deadlock
	2140705	OBJECT ORIENTED PROGRAMMING WITH C++	1,2,3,4	Concepts of OOP,C++ Basics,C++ Functions,Objects and Classes
	2140706	NUMERICAL AND STATISTICAL METHODS FOR COMPUTER ENGINEERING	1,2,3,4	Approximations and errors. Significant figures, accuracy and precision, Errors, round-off and truncation errors, error propagation. Roots of Equations: Mathematical background, Bisection, RegulaFalsi, NR method, Secant, Successive approximation method, Budan's Theorem, Barristow's method. Systems of linear algebraic equations: Mathematical background, Gauss elimination, Gauss-Jordan elimination, Gauss-Seidel, Gauss-Jacobi methods, ill- conditional Equations. Interpolation, Newton's forward, Newton's backward, Gauss's forward, Gauss's backward, Stirling's formula, Lagrange's Interpolation, Newton's divided difference formula, Cubic Spline Interpolation
	2140707	COMPUTER ORGANIZATION	1,2,3	Computer Data Representation,Register Transfer and Microoperations,Basic Computer Organization and Design,Programming the Basic Computer
	2140709	COMPUTER NETWORKS	1,4 (Up to Link State Routing Algorithm),5	Intorduction to Computer Networks & Internet,Network Layer, The Link Layer and Local Area Network
Semester	Sub Code	Subject	Unit No(GTU Syllabus)	Unit Name(GTU Syllabus)
2ND PG	2722301	SOA(2722301)	1,2,3	INTRODUCTION, ENTERPRISE ARCHITECTURE, BASIC CONCEPTS
	2720207	DCA(2720207)	1, 3, 4, 5	
	2720209	DMDW(2720209)	1,2,3	
	2720211	SPM(2720211)	PPT	
	2720725	E.E.GS(2720725)	2,3,6	Energy demand analysis and forecasting, Energy demand management, Economics of renewable energy supply