APJ Abdul Kalam Technological University
B.Tech INFORMATION TECHNOLOGY
Curriculum

SEMESTER 1

Courses	Lecture Hours	Tutorial Hours	Practical Hours	Total Hours	Credits
Calculus	3	1	0	4	4
Engineering Chemistry	3	1	0	4	4
Engineering Graphics	1	1	2	4	3
Introduction To Computing And Problem Solving	2	1	0	3	3
Introduction To Sustainable Engineering	2	0	1	3	3
Basics of Electrical Engineering	2	1	0	3	3
Engineering Chemistry Lab	0	0	2	2	1
Computer Science Workshop	0	0	2	2	1
Electrical Engineering Workshop	0	0	2	2	1
Total Hours				27	
Total Credits					23
Cumulative Credits					23

SEMESTER 2

Courses	Lecture Hours	Tutorial Hours	Practical Hours	Total Hours	Credits
Differential Equations	3	1	0	4	4
Engineering Physics	3	1	1	4	4
Engineering Mechanics	3	1	0	4	4
Design & Engineering	2	0	2	4	3
Basics of Mechanical Engineering	2	1	0	3	3
Basics of Electronics Engineering	2	1	0	3	3
Engineering Physics Lab	0	0	2	2	1
Mechanical Engineering Workshops	0	0	2	2	1
Electronics Engineering Workshops	0	0	2	2	1
Total Hours				28	
Total Credits					24
Cumulative Credits					47

SEMESTER 3

Courses	Lecture Hours	Tutorial Hours	Practical Hours	Total Hours	Credits
Probability, Random Process and Queueing Theory	3	1	0	4	4
Discrete Computational Structures	3	1	0	4	4
Digital System Design	3	1	0	4	4
Data Structures & Programming	3	1	0	4	4
Data Communication	3	0	0	3	3
Life Skills / Business Economics	2/0	0/0	2/3	4/3	3
Data Structures Lab	0	0	3	3	1
Digital Circuits Lab	0	0	3	3	1
Total Hours				28	
Total Credits					24
Cumulative Credits					71

SEMESTER 4

Courses	Lecture Hours	Tutorial Hours	Practical Hours	Total Hours	Credits
Abstract Algebra, Number Theory And Optimization	3	1	0	4	4
Computer Organization And Design	3	1	0	4	4
Algorithm Analysis and Design	4	0	0	4	4
Object Oriented Techniques	3	0	0	3	3
Principles of Database Design	3	0	0	3	3
Life Skills / Business Economics	2/0	0/0	2/3	4/3	3
Object Oriented Programming Lab	0	0	3	3	1
Algorithm Design Lab	0	0	3	3	1
Total Hours				28	
Total Credits					23
Cumulative Credits					94

SEMESTER 5

Courses	Lecture Hours	Tutorial Hours	Practical Hours	Total Hours	Credits
Software Architecture and Design Patterns	3	1	0	4	4
Theory Of Computation	3	0	0	3	3
Microprocessors and Microcontrollers	2	1	0	3	3
Operating Systems	3	0	0	3	3
Computer Networks	3	0	0	3	3
Elective 1 (Graph Theory, Unix Shell Programming, Computer Architecture& Parallel Processing, Computer Graphics & Multimedia)	3	0	0	3	3
Design Project	0	1	2	3	2
Microcontroller Lab	0	0	3	3	1
Database Lab	0	0	3	3	1
Total Hours				28	
Total Credits					23
Cumulative Credits					117

SEMESTER 6

Courses	Lecture Hours	Tutorial Hours	Practical Hours	Total Hours	Credits
Internet Technology	4	0	0	4	4
Compiler Design	2	1	0	3	3
Information Retrieval	3	0	0	3	3
Distributed Systems	3	0	0	3	3
Principles of Management	3	0	0	3	3
Elective 2 (Data Warehousing & Mining, Software Testing, Advanced DBMS, Information Theory & Coding)	3	0	0	3	3
Internet Technology Lab	0	0	3	3	1
Computer Networks Lab	0	0	3	3	1
Comprehensive Exam	0	1	1	2	2
Total Hours				27	
Total Credits					23
Cumulative Credits					140

SEMESTER 7					
Courses	Lecture Hours	Tutorial Hours	Practical Hours	Total Hours	Credits
Embedded Systems	4	0	0	4	4
Mobile Computing	3	0	0	3	3
Internetworking With TCP/IP	3	0	0	3	3
Knowledge Engineering	3	0	0	3	3
Web Application Development	3	0	0	3	3
Elective 3 (Software Project Management, Semantic Web, Cyber Forensics, Internet of Things, Machine learning)	3	0	0	3	3
Seminar & Project Preliminary	0	1	4	5	2
Web Applications Lab	0	0	3	3	1
Total Hours				27	
Total Credits					22
Cumulative Credits					162
SEMESTER 8					
Courses	Lecture Hours	Tutorial Hours	Practical Hours	Total Hours	Credits
Cryptography & Cyber Security	3	0	0	3	3
Data Analytics	3	0	0	3	3
Elective 4 (Distributed Systems, Cloud Computing, Evolutionary Computing, Adhoc & Sensor Networks, Service Oriented Architecture)	3	0	0	3	3
Elective 5 (Non Departmental)	3	0	0	3	3
Project					6
Total Hours				29	
Total Credits					18
Cumulative Credits					180