



COURSE STRUCTURE

B.Tech -Information Technology

I Year– I SEMESTER

S.No	Subject Code	Subject	L	T	P	C
1	16BH1T01	English – I	4	-	-	3
2	16BH1T03	Mathematics - I	4	-	-	3
3	16BH1T04	Mathematics – II (Mathematical Methods)	4	-	-	3
4	16BH1T10	Applied Physics	4	-	-	3
5	16CS1T01	Computer Programming using C	4	-	-	3
6	16ME1T02	Engineering Drawing	4	-	-	3
7	16BH1L01	English - Communication Skills Lab - 1	-	-	3	2
8	16BH1L03	Applied / Engineering Physics Lab	-	-	3	2
9	16BH1L04	Applied / Engineering Physics – Virtual Labs	-	-	3	-
10	16CS1L01	C-Programming Lab	-	-	3	2
		Total Credits				24

I Year– II SEMESTER

S.No	Subject Code	Subject	L	T	P	C
1	16BH2T02	English – II	4	-	-	3
2	16BH2T06	Mathematics - III	4	-	-	3
3	16BH2T12	Applied Chemistry	4	-	-	3
4	16IT2T01	Object Oriented Programming through C++	4	-	-	3
5	16BH2T13	Environmental Studies	4	-	-	3
6	16EC2T02	Basic Electrical & Electronics Engineering	4	-	-	3
7	16BH2L05	Applied / Engineering Chemistry Laboratory	-	-	3	2
8	16BH2L02	English - Communication Skills Lab – 2	-	-	3	2
9	16IT2L01	Object Oriented Programming Lab	-	-	3	2
		Total Credits				24



PRAGATI ENGINEERING COLLEGE

(AUTONOMOUS)

DEPARTMENT OF INFORMATION TECHNOLOGY



A-Grade

II Year– I SEMESTER

S.No	Subject Code	Subject	L	T	P	C
1	16BH3T07	Statistics with R Programming	4	-	-	3
2	16EC3T08	Digital Logic Design	4	-	-	3
3	16CS3T02	Mathematical Foundations of Computer Science	4	-	-	3
4	16IT3T02	Python Programming	4	-	-	3
5	16CS3T03	Data Structures through C++	4	-	-	3
6	16IT3T03	Software Engineering	4	-	-	3
7	16CS3L02	Data Structures through C++ Lab	-	-	3	2
8	16IT3L02	Python Programming Lab	-	-	3	2
		Total Credits				22

II Year– II SEMESTER

S.No	Subject Code	Subject	L	T	P	C
1	16BH4T14	Managerial Economics and Financial Analysis	4	-	-	3
2	16CS4T06	Computer Organization	4	-	-	3
3	16IT4T05	Language Processors	4	-	-	3
4	16IT4T06	Java Programming	4	-	-	3
5	16IT4T07	Database Management Systems	4	-	-	3
6	16IT4T08	Design and Analysis of Algorithms	4	-	-	3
7	16IT4L03	Database Management Systems Lab	-	-	3	2
8	16IT4L04	Java Programming Lab	-	-	3	2
9	16IT4P01	Term Paper(Audit course)	-	-	-	-
		Total Credits				22



III Year– I SEMESTER

S.No	Subject Code	Subject	L	T	P	C
1	16IT5T09	Advanced Java Programming	4	-	-	3
2	16IT5T10	Unix and Shell Programming	4	-	-	3
3	16IT5T11	Object Oriented Analysis and Design Using UML	4	-	-	3
4	16CS5T13	Operating Systems	4	-	-	3
5	16IT5T12	Software Project Management	4	-	-	3
6	16IT5L05	Advanced Java Programming Lab	-	-	3	2
7	16IT5L06	Unix and Operating Systems Lab	-	-	3	2
8	16IT5L07	Unified Modeling Language Lab	-	-	3	2
9	16BH5T17	Professional Ethics & Human Values	-	2	-	-
10	16IT5M01	MOOCS (Audit course)	-	-	-	-
Total Credits						21

III Year– II SEMESTER

S.No	Subject Code	Subject	L	T	P	C
1	16CS6T15	Computer Networks	4	-	-	3
2	16IT6T13	Data Mining	4	-	-	3
3	16IT6T14	Web Technologies	4	-	-	3
4	16IT6T15	Software Testing	4	-	-	3
5	16IT6E01 16IT6E02 16EC6E01 16EC6E04 16ME6E01 16ME6E02	Open Elective: i. Artificial Intelligence ii. Management Information System iii. Digital Signal Processing iv. Embedded Systems v. Robotics vi. Operations Research	4	-	-	3
6	16IT6L08	Web Technologies Lab	-	-	3	2
7	16IT6L09	Software Testing & Data Mining Lab	-	-	3	2
8	16BH6T16	IPR & Patents	-	2	-	-
9	16IT6P02	Mini Project	-	-	3	2
Total Credits						21



IV Year– I SEMESTER

S.No	Subject Code	Subject	L	T	P	C
1	16BH7T15	Management Science	4	-	-	3
2	16CS7T19	Cryptography and Network Security	4	-	-	3
3	16IT7T16	Mobile Computing	4	-	-	3
4	16IT7T17	Open Source Software	4	-	-	3
5	16IT7D01	Elective-I: i. Data Analytics ii. Information Retrieval Systems iii. Distributed Systems iv. Design Patterns v. Software Quality Assurance vi. Computer Graphics	4	-	-	3
	16IT7D02					
	16IT7D03					
	16IT7D04					
	16IT7D05					
	16IT7D06					
6	16IT7D07	Elective-II: i. Image Processing ii. Human Computer Interaction iii. Machine Learning iv. Decision Support System v. Artificial Neural Networks vi. E-Commerce	4	-	-	3
	16IT7D08					
	16IT7D09					
	16IT7D10					
	16IT7D11					
	16IT7D12					
7	16IT7L10	Mobile Computing Lab	-	-	3	2
8	16IT7L11	Open Source Software Lab	-	-	3	2
Total Credits						22

IV Year– II SEMESTER

S.No	Subject Code	Subject	L	T	P	C
1	16IT8T18	Cloud Computing	4	-	-	3
2	16IT8T19	Cyber Security	4	-	-	3
3	16IT8T20	Data Warehousing and Business Intelligence	4	-	-	3
4	16IT8D13	Elective-III: i. Agile Methodologies ii. Internet Of Things iii. Computer Vision iv. Multimedia Programming v. Social Networking & Semantic Web vi. Concurrent & Parallel Programming	4	-	-	3
	16IT8D14					
	16IT8D15					
	16IT8D16					
	16IT8D17					
	16IT8D18					
5	16IT8S01	Seminar	-	3	-	2
6	16IT8P03	Project work	-	-	-	10
Total Credits						24

L = Lecture

T = Tutorial

P = Practical

C = Credits



SUBJECTS TO OTHER BRANCHES

III Year– II SEMESTER (EEE)

S.No	Subject Code	Subject	L	T	P	C
1	16IT6E03	Object Oriented Programming through JAVA	4	-	-	3

IV Year– II SEMESTER (ECE)

S.No	Subject Code	Subject	L	T	P	C
1	16IT8D19	Web Technologies	4	-	-	3
2	16IT8D20	Python Programming	4	-	-	3