

COMPUTER SCIENCE & ENGINEERING
B. TECH (PART TIME) DEGREE COURSE

2013 SCHEME (RESTRUCTURED)

UNIVERSITY OF KERALA
THIRUVANANTHAPURAM

SCHEME -2013
PART TIME B.TECH (RESTRUCTURED)
COMPUTER SCIENCE & ENGINEERING (R)

First Semester

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
				L	T	D/P				
P 13.101	13.301	Engineering Mathematics-II (ABCEFHMNPRSTU)	4	3	1	-	50	3	100	150
P 13.102	13.302	Humanities (BEFMRSU)	3	3	0	-	50	3	100	150
P 13.103	13.304	Electronic Devices and Circuits (FR)	3	2	1	-	50	3	100	150
P 13.104	13.109	Foundations of Computing and Programming in C (FR)	6	4	2	-	50	3	100	150
P 13.105	13.306	Data Structures and Algorithms (FR)	4	2	2	-	50	3	100	150
P 13.106	13.307	Electronic Circuits Lab (FR)	4	-	-	4	50	3	100	150
Total			24	14	6	4	300		600	900

Second Semester

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
				L	T	D/P				
P 13.201	13.401	Probability, Random Processes and Numerical Techniques (FR)	4	3	1	-	50	3	100	150
P 13.202	13.402	Computer Organization and Design (FR)	3	2	1	-	50	3	100	150
P 13.203	13.403	Object Oriented Techniques (FR)	3	2	1	-	50	3	100	150
P 13.204	13.404	Data Communication (FR)	3	2	1	-	50	3	100	150
P 13.205	13.405	Data Base Design (FR)	4	2	2	-	50	3	100	150
P 13.206	13.308	Programming Lab (FR)	4	-	-	4	50	3	100	150
Total			21	11	6	4	300		600	900

Third Semester

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
				L	T	D/P				
P 13.301	13.501	Abstract Algebra, Number theory and Optimization (FR)	4	3	1	-	50	3	100	150
P 13.302	13.502	Linear Algebra and Queuing Theory (FR)	4	3	1	-	50	3	100	150
P 13.303	13.505	Microprocessors and Interfacing(R)	4	2	2	-	50	3	100	150
P 13.304	13.303	Discrete Structures (FR)	3	2	1	-	50	3	100	150
P 13.305	13.305	Digital System Design (FR)	4	2	2	-	50	3	100	150
P 13.306	13.407	Data Structures Lab(FR)	4	-	-	4	50	3	100	150
Total			23	12	7	4	300		600	900

Fourth Semester

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
				L	T	D/P				
P 13.401	13.601	Compiler Design (FR)	4	3	1	-	50	3	100	150
P 13.402	13.602	High Performance Microprocessors and Micro Controllers (R)	3	2	1	-	50	3	100	150
P 13.403	13.603	Design and Analysis of Algorithms (FR)	4	3	1	-	50	3	100	150
P 13.404	13.604	Computer Networks (FR)	3	2	1	-	50	3	100	150
P 13.405	13.406	Formal Languages and Automata Theory(R)	4	3	1	-	50	3	100	150
P 13.406	13.408	Digital System Lab(R)	4	-	-	4	50	3	100	150
Total			22	13	5	4	300		600	900

Fifth Semester

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
				L	T	D/P				
P 13.501	13.503	Operating Systems (FR)	3	2	1	-	50	3	100	150
P 13.502	13.504	Systems Programming (FR)	3	2	1	-	50	3	100	150
P 13.503	13.506	Object Oriented Design and JAVA Programming(R)	3	2	1	-	50	3	100	150
P 13.504	13.702	Principles of Programming Languages (FR)	3	2	1	-	50	3	100	150
P 13.505	13.703	Embedded Systems (R)	3	2	1	-	50	3	100	150
P 13.506	13.507	Object Oriented Programming Lab (R)	4	-	-	4	50	3	100	150
P 13.507	13.508	Application Software Development Lab (R)	4	-	-	4	50	3	100	150
Total			23	10	5	8	350		700	1050

Sixth Semester

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
				L	T	D/P				
P 13.601	13.605	PC Hardware and Interfacing (R)	4	3	1	-	50	3	100	150
P 13.602	13.606	Signals and Systems (R)	3	2	1	-	50	3	100	150
P 13.603	13.801	Cryptography and Network Security (R)	4	3	1	-	50	3	100	150
P 13.604	13.802	Computer System Architecture (R)	4	3	1	-	50	3	100	150
P 13.605	13.607	Microprocessor Lab (R)	4	-	-	4	50	3	100	150
P 13.606	13.608	System Software Lab (R)	4	-	-	4	50	3	100	150
Total			23	11	4	8	300		600	900

Seventh Semester

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
				L	T	D/P				
P 13.701	13.701	Computer Graphics (R)	3	2	1	-	50	3	100	150
P 13.702	13.704	Software Engineering and Project Management (FR)	3	2	1	-	50	3	100	150
P 13.703	13.705	Elective I	3	2	1	-	50	3	100	150
P 13.704	13.706	Elective II	3	2	1	-	50	3	100	150
P 13.705	13.707	Computer Hardware and Interfacing Lab (R)	4	-	-	4	50	3	100	150
P 13.706	13.708	Operating Systems and Network Programming Lab (R)	4	-	-	4	50	3	100	150
P 13.707	13.709	Seminar, Project Design and Industrial Visit (R)	3	-	-	3	150	-	-	150
Total			23	8	4	11	450		600	1050

Eighth Semester

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
				L	T	D/P				
P 13.801	13.803	Distributed Systems (R)	4	3	1	-	50	3	100	150
P 13.802	13.804	Elective III	4	3	1	-	50	3	100	150
P 13.803	13.805	Elective IV	4	3	1	-	50	3	100	150
P 13.804	13.806	Algorithm Design and Graphics Lab (R)	4	-	-	4	50	3	100	150
P 13.805	13.807	Project Work and Viva Voce (FR)	5	-	-	5	150	-	100	250
Total			21	9	3	9	350		500	850

Elective I

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject
P 13.703.1	13.705.1	Multimedia Systems and Data Compression (FR)
P 13.703.2	13.705.2	Computational Geometry (R)
P 13.703.3	13.705.3	Control Systems Engineering (R)
P 13.703.4	13.705.4	Web Technology (R)
P 13.703.5	13.705.5	C# and .NET Framework (R)

Elective II

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject
P 13.704.1	13.706.1	Fuzzy Set Theory and Applications (FR)
P 13.704.2	13.706.2	Data Mining and Information Retrieval (FR)
P 13.704.3	13.706.3	Digital Image Processing (R)
P 13.704.4	13.706.4	Pattern Recognition and Scene Analysis (R)
P 13.704.5	13.706.5	Advanced Data Base Management System (R)

Elective III

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject
P 13.802.1	13.804.1	Soft Computing (FR)
P 13.802.2	13.804.2	Cloud Computing (FR)
P 13.802.3	13.804.3	Fundamentals of Neural Networks (R)
P 13.802.4	13.804.4	Mobile and Wireless Networks (R)
P 13.802.5	13.804.5	Optimization Techniques and Decision Making (R)

Elective IV

PT B. Tech Course No	Equivalent B. Tech Course No	Name of subject
P 13.803.1	13.805.1	Robotics and Computer Vision (FR)
P 13.803.2	13.805.2	Graph Theory (FR)
P 13.803.3	13.805.3	Natural Language Processing (FR)
P 13.803.4	13.805.4	Mobile Computing (R)
P 13.803.5	13.805.5	Artificial Intelligence (R)