

DEPARTMENT OF INFORMATION TECHNOLOGY
CURRICULUM OF 2ND TO 4TH YEAR OF THE
UNDERGRADUATE ENGINEERING DEGREE PROGRAMME

2nd Year 1st Semester

Subject Code	Subject Name	Category	Type	Contact			Credit	Marks
				L	T	P		
IT/PC/B/T/211	Data Structures and Algorithms	PC	Basic	3	0	0	3	100
IT/BS/B/T/212	Mathematics for IT-I	BS	Basic	3	0	0	3	100
IT/PC/B/T/213	Database Management Systems	PC	Basic	3	0	0	3	100
IT/PC/B/T/214	Object Oriented Programming	PC	Basic	3	0	0	3	100
IT/PC/B/T/215	Computer Organization and Architecture	PC	Basic	3	0	0	3	100
IT/PC/B/S/211	Data Structures and Algorithms Lab	PC	Basic	0	0	3	1.5	100
IT/PC/B/S/212	Database Management Systems Lab	PC	Basic	0	0	3	1.5	100
IT/PC/B/S/213	Object Oriented Programming Lab	PC	Basic	0	0	3	1.5	100
IT/PC/B/S/214	Assembly and Machine Language Lab	PC	Basic	0	1	3	2.5	100
Total				15	1	12	22	900

2nd Year 2nd Semester

Subject Code	Subject Name	Category	Type	Contact			Credit	Marks
				L	T	P		
IT/PC/B/T/221	Object Oriented Systems	PC	Basic	3	0	0	3	100
IT/BS/B/T/222	Mathematics for IT-II	BS	Basic	3	0	0	3	100
IT/PC/B/T/223	Software Engineering	PC	Basic	3	0	0	3	100
IT/PC/B/T/224	Graph Theory and Combinatorics	PC	Basic	3	0	0	3	100
IT/PC/B/T/225	Computer Networks	PC	Basic	3	0	0	3	100
IT/PC/B/T/226	Graphics and Geometric Modeling	PC	Basic	3	0	0	3	100
IT/PC/B/S/221	Object Oriented Systems Lab	PC	Basic	0	0	3	1.5	100
IT/PC/B/S/222	Computer Networks Lab	PC	Basic	0	0	3	1.5	100
IT/PC/B/S/223	Software Engineering Lab	PC	Basic	0	1	3	2.5	100
Total				18	1	9	23.5	900

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3rd Year 1st Semester

Subject Code	Subject Name	Category	Type	Contact			Credit	Marks
				L	T	P		
IT/PE/B/T/311A IT/PE/B/T/311B IT/PE/B/T/311C	Elective-I <ul style="list-style-type: none"> • Cloud Computing • Sensor Networks • Artificial Intelligence 	PE	Basic	4	0	0	4	100
IT/PC/B/T/312	Wireless and Mobile Networks	PC	Basic	3	0	0	3	100
IT/PC/B/T/313	Web Technologies – I	PC	Basic	3	0	0	3	100
IT/PC/H/T/314	Automata and Compiler	PC	Honours	4	0	0	4	100
IT/PC/B/T/315	Operating Systems	PC	Basic	3	0	0	3	100
IT/PE/B/S/311A IT/PE/B/S/311B IT/PE/B/S/311C	Elective-I Lab <ul style="list-style-type: none"> • Cloud Computing Lab • Sensor Networks Lab • Artificial Intelligence Lab 	PE	Basic	0	0	3	1.5	100
IT/PC/H/S/312	Compiler Lab	PC	Honours	0	0	3	1.5	100
IT/PC/B/S/313	Operating System Laboratory	PC	Basic	0	0	3	1.5	100
Total				17	0	9	21.5	800

3rd Year 2nd Semester

Subject Code	Subject Name	Category	Type	Contact			Credit	Marks
				L	T	P		
IT/PC/B/T/321	Design & Analysis of Algorithm	PC	Basic	3	0	0	3	100
IT/PC/B/T/322	Information Security	PC	Basic	3	0	0	3	100
IT/PC/B/T/323	Web Technologies – II	PC	Basic	3	0	0	3	100
IT/PC/B/T/324	Multimedia Coding and Communications	PC	Basic	3	0	0	3	100
IT/PE/H/T/325A IT/PE/H/T/325B IT/PE/H/T/325C	Elective-II <ul style="list-style-type: none"> • Soft Computing • Big Data • Mobile Applications Development 	PE	Honours	3	0	0	3	100
	Open Elective	OE	Basic	3	0	0	3	100
IT/PC/B/S/321	Web Application Laboratory	PC	Basic	0	0	3	1.5	100
IT/PE/H/S/322A IT/PE/H/S/322B IT/PE/H/S/322C	Elective -II-Lab <ul style="list-style-type: none"> • Soft Computing Lab • Big Data Lab • Mobile Applications Development Lab 	PE	Honours	0	0	3	1.5	100
IT/PC/B/S/323	Multimedia Lab	PC	Basic	0	1	3	2.5	100
Total				18	1	9	23.5	900

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4th Year 1st Semester

Subject Code	Subject Name	Category	Type	Contact			Credit	Marks
				L	T	P		
IT/PC/B/T/411	Machine Learning	PC	Basic	3	0	0	3	100
IT/PE/B/T/412A	Elective-III • Data Warehousing and Data Mining • IoT and Next Generation Networks • Bio Informatics	PE	Basic	3	0	0	3	100
IT/PE/B T/412B								
IT/PE/B T/412C								
IT/PC/B/T/413	Distributed Computing	PC	Basic	3	0	0	3	100
IT/PC/H/T/414	Network Security	PC	Honours	3	0	0	3	100
IT/PC/B/S/411	Machine Learning Lab	PC	Basic	0	1	3	2.5	100
IT/PS/B/S/412	Project	PS	Basic	0	2	7	5.5	200
IT/PS/B/S/413	Seminar	PS	Basic	0	1	2	2	100
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Total				12	4	12	22	800

4th Year 2nd Semester

Subject Code	Subject Name	Category	Type	Contact			Credit	Marks
				L	T	P		
IT/PC/H/T/421	Data Science	PC	Honours	3	0	0	3	100
IT/HS/B/T/422	Management	HS	Basic	3	0	0	3	100
IT/PE/H/T/423A	Elective-IV • Pattern Recognition and Applications • NLP and Text Mining • Cyber Forensics and Security	PE	Honours	4	0	0	4	100
IT/PE/H/T/423B								
IT/PE/H/T/423C								
IT/PC/B/T/424	Image and Multimedia Processing	PC	Basic	3	0	0	3	100
IT/PC/B/S/421	Comprehensive Viva Voce	PC	Basic	0	0	3	1.5	100
IT/PS/B/S/422	Project	PS	Basic	0	2	7	5.5	200
IT/PS/B/S/423	Seminar	PS	Basic	0	1	2	2	100
Total				13	3	12	22	800