



RCC Institute of Information Technology, Kolkata
(Autonomous from Academic Session: 2024 – 2025)

Syllabus: B. Tech. in Electronics and Communication Engineering

Third Semester							
Sl. No.	Category	Course Code	Course Name	Contact Hours			Credits
				L	T	P	
1	Professional Core	RCC- PCC-EC-301	Electronic Devices & Fabrication Technology	3	0	0	3
2	Professional Core	RCC- PCC-EC-302	Digital System Design	3	0	0	3
3	Professional Core	RCC- PCC-EC-303	Data Structure and Algorithm	3	1	0	4
4	Professional Core	RCC- PCC-EC-304	Network Theory	3	0	0	3
5	Professional Core	RCC- PCC-EC-305	Signals, Systems and Stochastic Processes	3	1	0	4
6	Audit/ Mandatory	RCC- AU-EC-381	Environmental Science	2	0	0	0
7	Professional Core	RCC-PCC-EC-391	Electronic Devices & Fabrication Technology Lab	0	0	2	1
8	Professional Core	RCC- PCC-EC-392	Digital System Design Lab	0	0	2	1
9	Professional Core	RCC- PCC-EC-393	Data Structure and Algorithm Lab	0	0	2	1
10	Engineering Science	RCC- ESC-EC-381	Design Thinking	0	0	4	2
Total							22
Fourth Semester							
Sl. No.	Category	Course Code	Course Name	Contact Hours			Credits
				L	T	P	
1	Professional Core	RCC- PCC-EC-401	Analog Circuits	3	1	0	4
2	Professional Core	RCC- PCC-EC-402	Microprocessor and Microcontrollers	3	0	0	3
3	Professional Core	RCC- PCC-EC-403	Communication Systems Engineering	3	1	0	4
4	Professional Core	RCC- PCC-EC-404	Control System	3	0	0	3
5	Professional Core	RCC- PCC-EC-405	Computer Architecture	3	0	0	3
6	Audit/ Mandatory	RCC-AU-EC-481	Soft Skill and Ethics	2	0	0	0
7	Professional Core	RCC-PCC-EC-491	Analog Circuits Lab	0	0	2	1
8	Professional Core	RCC-PCC-EC-492	Microprocessor and Microcontrollers Lab	0	0	2	1
9	Professional Core	RCC- PCC-EC-493	Communication Systems and Stochastic Process Lab	0	0	2	1
10	Professional Core	RCC- PCC-EC-494	Control System Lab	0	0	2	1
11	Project	RCC-PROJ-EC-481	Micro Project (Eval)	0	0	4	2
Total							23



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Fifth Semester							
Sl. No.	Category	Course Code	Course Name	Contact Hours			Credits
				L	T	P	
1	Professional Core	RCC- PCC-EC-501	Digital Signal Processing	3	0	0	3
2	Professional Core	RCC- PCC-EC-502	Electromagnetic Waves	3	1	0	4
3	Professional Core	RCC- PCC-EC-503	Mobile Communication and Networks	3	0	0	3
4	Professional Elective Core	RCC- PEC-EC-501	A. Embedded System B. Information Theory and Coding C. Nanoelectronics	3	0	0	3
5	Professional Elective Core	RCC- PEC-EC-502	A. Power Electronics B. Biomedical Engineering C. Design and Analysis of Algorithms	3	0	0	3
6	Open Elective Core	RCC- OEC-EC-501	A. OOPs using JAVA B. Sensors & Industrial Automation C. Python Programming	3	0	0	3
7	Professional Core	RCC-PCC-EC-591	Digital Signal Processing Lab	0	0	2	1
8	Professional Core	RCC- PCC-EC-592	Electromagnetic Waves Lab	0	0	2	1
9	Open Elective Core	RCC-OEC-EC-591	A. OOPs using JAVA Lab B. Sensors & Industrial Automation Lab C. Python Programming Lab	0	0	2	1
10	Project	RCC- PROJ-EC-581	Internship/Training of minimum 2 weeks after 4th Sem	0	0	2w	1
Total							23
Sixth Semester							
Sl. No.	Category	Course Code	Course Name	Contact Hours			Credits
				L	T	P	
1	Professional Core	RCC- PCC-EC-601	Computer Networks	3	0	0	3
2	Professional Core	RCC- PCC-EC-602	VLSI Design	3	1	0	4
3	Professional Elective Core	RCC- PEC-EC-601	A. Machine Learning and Applications B. Digital Image Processing and Pattern Recognition C. Microwave Theory and Techniques	3	0	0	3
4	Professional Elective Core	RCC- PEC-EC-602	A. Satellite Communication and Remote Sensing B. Fiber Optic Communication C. Antennas and Propagation	3	0	0	3
5	Open Elective Core	RCC- OEC-EC-601	A. DBMS B. Web Technology C. Green Energy	3	0	0	3
6	Professional Core	RCC--PCC-EC-691	Computer Networks Lab	0	0	2	1
7	Professional Core	RCC--PCC-EC-692	VLSI Design Lab	0	0	2	1
8	Professional Elective Core	RCC- PEC-EC-691	A. Machine Learning and Applications Lab B. Digital Image Processing and Pattern Recognition Lab C. Microwave Theory and Techniques Lab	0	0	2	1
9	Mini Project	RCC- PROJ-EC-681	Mini Project	0	0	6	3
Total							22



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Seventh Semester							
Sl. No.	Category	Course Code	Course Name	Contact Hours			Credits
				L	T	P	
1	Humanities & Social Science	RCC- HSMC-EC-701	Human Resource Development	3	1	0	4
2	Open Elective Core	RCC- OEC-EC-702	A. Operating Systems B. Cyber Security C. Cloud Computing	3	0	0	3
3	Open Elective Core	RCC- OEC-EC-703	A. Entrepreneurship & Intellectual Property Rights B. IoT and Sensor Networks C. Software Engineering	3	0	0	3
4	Project	RCC- PROJ-EC-781	Project Seminar	0	0	4	2
5	Project	RCC- PROJ-EC-782	Internship/Training of minimum 4 weeks after 6th Sem	0	0	4w	2
Total							14
Eighth Semester							
Sl. No.	Category	Course Code	Course Name	Contact Hours			Credits
				L	T	P	
1	Humanities & Social Science	RCC- HSMC-EC-801	Organizational Behavior	2	0	0	2
2	Humanities & Social Science	RCC- HSMC-EC-802	Industrial Management	3	1	0	4
3	Project	RCC- PROJ-EC-881	Project	3	0	24	12
Total							18