



Integral University, Lucknow
Department of Electronics and Communication Engineering
Study and Evaluation Scheme

Program: B.Tech. Electronics and Communication Engineering

List of Electives

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Max. Marks	Credit	Total Credits	Attributes								
				L	T	P	CT	TA	Total	ESE				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	Co-Requisites	United Nations Sustainable Development Goals (SDG)
Departmental Elective-1																						
1	EC306	Microelectronics Technology	DE1	3	1	0	40	20	60	40	100	3:1:0	4	√		√						11,12
	EC307	Semiconductor Fabrication Technology	DE1	3	1	0	40	20	60	40	100	3:1:0	4	√		√						11,12
Departmental Elective-2																						
2	EC315	Nano Electronics	DE2	2	1	0	40	20	60	40	100	2:1:0	3	√	√	√						4,9
	EC316	Embedded System Design	DE2	2	1	0	40	20	60	40	100	2:1:0	3	√	√	√						8,9
	EC317	Analog Signal Processing	DE2	2	1	0	40	20	60	40	100	2:1:0	3	√	√	√						9
	EC318	Filter Design	DE2	2	1	0	40	20	60	40	100	2:1:0	3	√		√						4,8
	EC339	Solar Engineering	OE	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						7,8,9
	EC340	Wind Engineering	OE	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						7,8,9
EC341	Autotronics	OE	3	1	0	40	20	60	40	100	3:1:0	4	√		√						4,9	
Departmental Elective-3																						
3	EC319	RF and Microwave Engineering	DE3	3	1	0	40	20	60	40	100	3:1:0	4	√		√						4,9
	EC320	Microwave Devices and Communication	DE3	3	1	0	40	20	60	40	100	3:1:0	4	√		√						8,9
Departmental Elective-4																						
4	EC334	Microwave Engineering Lab.	DE4	0	0	2	40	20	60	40	100	0:0:2	1	√	√	√					EC319	4,9
	EC335	Microwave Communication Lab.	DE4	0	0	2	40	20	60	40	100	0:0:2	1	√	√	√					EC320	8,9
Departmental Elective-5																						
5	EC404	Mechatronics Engineering	DE5	3	1	0	40	20	60	40	100	3:1:0	4	√		√						4,9
	EC405	Solar Energy & Entrepreneurship	DE5	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						7,17
	EC406	Digital System Design using VHDL	DE5	3	1	0	40	20	60	40	100	3:1:0	4	√		√						8,9
	EC407	Digital Image Processing	DE5	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						4,9

Departmental Elective-6																						
6	EC408	Spread Spectrum Communication	DE6	3	1	0	40	20	60	40	100	3:1:0	4	√		√					4,8	
	EC409	Information Theory and Coding	DE6	3	1	0	40	20	60	40	100	3:1:0	4	√		√					8,9	
	EC410	Wireless Sensor Networks	DE6	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					8,9	
	EC411	Biomedical Instrumentation	DE6	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					3,4	
	EC412	Radar Guidance and Navigation	DE6	3	1	0	40	20	60	40	100	3:1:0	4	√		√					8,9	
Departmental Elective-7																						
5	EC415	Robotics and Industrial Automation Lab.	DE7	0	0	2	40	20	60	40	100	0:0:2	1	√	√	√					EC404	4,7,8
	EC416	Energy Lab.	DE7	0	0	2	40	20	60	40	100	0:0:2	1	√	√	√					EC405	7,8,9
	EC417	Digital System Design Lab.	DE7	0	0	2	40	20	60	40	100	0:0:2	1	√	√	√					EC406	4,8
	EC418	Multimedia and Image Processing Lab.	DE7	0	0	2	40	20	60	40	100	0:0:2	1	√	√	√					EC407	4,9