



Integral University, Lucknow
Department of Electrical Engg.
Study and Evaluation Scheme

Program: B. Tech. (Electrical Engg.) Semester VII

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub. Total	Credit	Total Credits	Attributes							United Nations Sustainable Development Goals (SDGs)
				L	T	P	CT	TA	Total	ESE				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
THEORIES																					
1	EE401	Power System Protection	Core	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√				9	
2	EE403	Electric Drives	Core	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√				9	
3		Departmental Elective –IX	Elective	3	1	0	40	20	60	40	100	3:1:0	4								
4		Departmental Elective –X	Elective	3	1	0	40	20	60	40	100	3:1:0	4								
5		Departmental Elective –XI	Elective	3	1	0	40	20	60	40	100	3:1:0	4								
PRACTICAL																					
6	EE402	Power System Protection Lab	Core	0	0	2	40	20	60	40	100	0:0:2	1	√	√	√				9	
7	EE404	Electric Drive Lab	Core	0	0	2	40	20	60	40	100	0:0:2	1	√	√	√				9	
8	EE406	Minor Project	Core	0	0	2	-	60	60	40	100	0:0:2	1	√	√	√				9	
9	*EE300	Industrial Training	Core	0	0	0	-	50	50	-	100	0:0:0	0	√	√	√				4	
Total				15	5	6	280	200	480	320	800		23								

*Industrial Training (EE-300) is compulsory during summer vacation of third year in which a student must obtain 50% passing marks. These marks will not be included in the result.



Integral University, Lucknow
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Study and Evaluation Scheme

Program: B. Tech. (Electrical Engg.) Semester VIII

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub. Total	Credit	Total Credits	Attributes							United Nations Sustainable Development Goals (SDGs)
				L	T	P	CT	TA	Total	ESE				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
THEORIES																					
1		Open Elective-2	Open Elective	3	1	0	40	20	60	40	100	3:1:0	4								
PRACTICAL																					
2	EE451	Seminar	Core	-	-	-		60	60	40	100	0:0:0	2	√	√	√				4,9	
3	EE499	B.Tech. Project	Core	-	-	-		60	60	40	100	0:0:0	4	√	√	√				4,9	
4	EE499	B.Tech. Project	Core	-	-	-		60	60	40	100	0:0:0	4	√	√	√				4,9	
5	EE499	B.Tech. Project	Core	-	-	-		60	60	40	100	0:0:0	4	√	√	√				4,9	
6	EE452	Comprehensive Assessment 3	Core	-	-	-		100	100	-	100	0:0:0	1	√	√	√				4,9	
Total				3	1	0	40	360	400	200	600		19								



Integral University, Lucknow
Department of Electrical Engg.
Study and Evaluation Scheme

Program: B. Tech. (Electrical Engg.)

List of Electives

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub Total	Credit	Total Credits	Attributes							United Nations Sustainable Development Goals (SDGs)
				L	T	P	CT	TA	Total	ESE				Em ployability	Entr epreneurship	Skill Deve lopment	Gen der Equ ality	Environ ment & Sustain ability	Hu man Valu e	Profe ssion al Ethics	
Departmental Elective I																					
1	EE221	Electrical Engineering Materials	DE 1	3	1	0	40	20	60	40	100	3:1:0	4	√						9	
	EE222	Probability Foundations for Electrical Engineers	DE 1	3	1	0	40	20	60	40	100	3:1:0	4		√					9	
	CS205	OOP & C++	DE 1	3	1	0	40	20	60	40	100	3:1:0	4		√						
	EE224	Illumination Engineering	DE 1	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√		√		9	
Departmental Elective II																					
2	EE321	Measurement & Instrumentation	DE 2	3	1	0	40	20	60	40	100	3:1:0	4		√	√				9	
	EE323	Process Instrumentation	DE 2	3	1	0	40	20	60	40	100	3:1:0	4	√		√				9	
	EE325	Conventional & CAD of Electrical Machines	DE 2	3	1	0	40	20	60	40	100	3:1:0	4	√		√				9	
	EC302	Integrated Circuits	DE 2	3	1	0	40	20	60	40	100	3:1:0	4	√		√					
Departmental Elective III																					
3	EE322	Measurement and Instrumentation Lab	DE 3	3	1	0	40	20	60	40	100	0:0:2	1		√	√				9	
	EE324	Process Instrumentation Lab	DE 3	3	1	0	40	20	60	40	100	0:0:2	1	√		√				9	
	EE326	Machine Design Lab	DE 3	3	1	0	40	20	60	40	100	0:0:2	1	√	√	√				9	
	EC309	Integrated Circuits Lab	DE3	3	1	0	40	20	60	40	100	0:0:2	1	√	√	√					
Departmental Elective IV																					
	EE331	Modern Power System	DE 4	3	1	0	40	20	60	40	100	3:1:0	4	√						7,8,9,11	
	EE333	Advance Control System	DE 4	3	1	0	40	20	60	40	100	3:1:0	4	√		√				9	

4	EE335	Industrial Automation	DE 4	3	1	0	40	20	60	40	100	3:1:0	4	√		√					7,8,9,11
	EC336	Communication Engineering	DE 4	3	1	0	40	20	60	40	100	3:1:0	4	√		√					
Departmental Elective V																					
5	EE341	Introduction to Soft Computing	DE 5	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					9
	EE343	Renewable Energy Technology	DE 5	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					7,9,11,13
	EE345	Power Electronics based Converters Design	DE 5	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					9
	EE347	Modeling and Dynamic analysis of Electrical Machines	DE 5	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					9
Departmental Elective VI																					
6	EE351	Sensor and Instrumentation	DE 6	2	1	0	40	20	60	40	100	2:1:0	3	√	√	√					9
	EE353	Power Station Practice	DE 6	2	1	0	40	20	60	40	100	2:1:0	3	√		√					9
	EE355	Nuclear & Advance Power Generation Technology	DE 6	2	1	0	40	20	60	40	100	2:1:0	3	√		√					9
	EE357	Biomedical Engineering	DE 6	2	1	0	40	20	60	40	100	2:1:0	3	√	√	√					9
	EE359	Energy Management	DE 6	2	1	0	40	20	60	40	100	2:1:0	3	√	√	√					7,9,11,13
Departmental Elective VII																					
7	EE332	Computer Aided Power System Lab	DE 7	0	0	240	20	60	40		100	0:0:2	1	√	√	√					9
	EE334	Advance Control System Lab	DE 7	0	0	240	20	60	40		100	0:0:2	1	√		√					9
	EE336	Automation Lab	DE 7	0	0	240	20	60	40		100	0:0:2	1	√		√					9
	EC337	Communication Engineering Lab	DE 7	0	0	240	20	60	40		100	0:0:2	1	√		√					
Departmental Elective VIII																					
8	EE342	Soft Computing Lab	DE 8	0	0	240	20	60	40		100	0:0:2	1	√	√	√					9
	EE344	Renewable Energy Lab	DE 8	0	0	240	20	60	40		100	0:0:2	1	√	√	√					7,9,11,13
	EE346	Converters Lab	DE 8	0	0	240	20	60	40		100	0:0:2	1	√	√	√					9
	EE348	Electrical machine modeling lab	DE 8	0	0	240	20	60	40		100	0:0:2	1	√	√	√					9
Departmental Elective IX																					
9	EE421	Electrical Insulation in	DE 9	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					9

		Power Apparatus & System																				
	EE423	Application of Power Electronics to Power System	DE 9	3	1	0	40	20	60	40	100	3:1:0	4	√		√						9
	EE425	EHVAC & EHVDC Transmission	DE 9	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						9
	EE427	Power System Dynamics	DE 9	3	1	0	40	20	60	40	100	3:1:0	4			√						9
	EE429	DSP and its application	DE 9	3	1	0	40	20	60	40	100	3:1:0	4	√		√						9
Departmental Elective X																						
10	EE431	Utilization of Electrical Energy & Traction	DE 10	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						9
	EE433	Power Quality & Mitigation	DE 10	3	1	0	40	20	60	40	100	3:1:0	4			√						9
	EE435	High Voltage DC Transmission	DE 10	3	1	0	40	20	60	40	100	3:1:0	4	√		√						9
	EE437	Electrical Distribution System & Automation	DE 10	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						9
	EE439	High Power Semiconductor Devices	DE 10	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						9
Departmental Elective XI																						
11	EE441	Flexible AC Transmission System	DE 11	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						9
	EE443	Special Electric Machines	DE 11	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						9
	EE445	Electrical System and Substation Design	DE 11	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						9
	EE447	Electric Vehicles	DE 11	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						9,13
	EE449	Energy Conservation & Energy Audit	DE 11	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√						7, 9,11,13