



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

Program: B. Tech. (Electrical & Computer Science Engg.) SemesterVII

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				S u b. T o t a l	Credi t	T o t a l C r e d i t s	Attributes							United Nations Sustainable Development Goals (SDGs)
				L	T	P	C T	TA	Tot al	ES E				Emp loya bilit y	Entre prenshurship	Skill Devel opment	Gen der Equality	Environ ment & Sustaina bility	Hum an Valu e	Profes sional 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	CS422	Artificial Intelligence	Elective	3	1	0	40	20	60	40	100	3:1:0	4	√		√				4,9	
4		Departmental Elective –V	Elective	3	1	0	40	20	60	40	100	3:1:0	4								
5		Departmental Elective –VI	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	CS423	Artificial Intelligence Lab	Core	0	0	2	40	20	60	40	100	0:0:2	1			√				4,9	
9	*EE300	Industrial Training	Core	0	0	0	-	50	50	-	100	0:0:0	0	√		√				4	
Total				15	5	6	320	160	480	320	900		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
Department of Electrical Engg.
Study and Evaluation Scheme

Program: B. Tech. (Electrical & Computer Science Engg.) Semester VIII

S. No.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				S u b. T o t a l	C r e d i t	T o t a l C r e d i t s	Attributes							United Nations Sustainable Development Goals (SDGs)
				L	T	P	C T	TA	Total	E S E				Emp loya bilit y	Entre prene urshi p	Skill Deve lopme nt	Gen der Equal ity	Environ ment & Sustaina bility	Hum an Valu e	Professi onal 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	1	√	√	√				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		18								

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	EE213	Numerical Analysis & Applications	DE 1	3	1	0	40	20	60	40	100	3:1:0	4			√					4
	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
	EE224	Illumination Engineering	DE 1	3	1	0	40	20	60	40	100	3:1:0	4	√		√		√			9
	CS206	Discrete Structure	DE 1	3	1	0	40	20	60	40	100	3:1:0	4			√					4
	CS207	Computer Graphics	DE 1	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					4,9
	CS270	Object Oriented Concepts using Java	DE 1	3	1	0	40	20	60	40	100	3:1:0	4	√		√					4,9
CS281	Graph Theory and Applications	DE 1	3	1	0	40	20	60	40	100	3:1:0	4			√					4	
Departmental Elective II																					
2	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
	EE331	Modern Power System	DE 2	3	1	0	40	20	60	40	100	3:1:0	4	√							7,8,9,11
	EE333	Advance Control System	DE 2	3	1	0	40	20	60	40	100	3:1:0	4	√		√					9
	EE345	Power Electronics based Converters Design	DE 2	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					9
EE347	Modeling and Dynamic analysis of Electrical Machines	DE 2	3	1	0	40	20	60	40	100	3:1:0	4	√	√	√					9	
Departmental Elective III																					
3	CS311	Software Project & Quality Management	DE 3	3	1	0	40	20	60	40	100	3:1:0	4	√		√					4
	CS320	Real-Time System	DE 3	3	1	0	40	20	60	40	100	3:1:0	4			√					4

	CS334	Cloud Computing	DE 3	3	1	0	40	2060	40	100	3:1:0	4			√				4,9,11
	CS341	Introduction to IoT	DE 3	3	1	0	40	2060	40	100	3:1:0	4			√				4,9
Departmental Elective IV																			
4	EE351	Sensor and Instrumentation	DE 4	2	1	0	40	2060	40	100	2:1:0	3	√	√	√				9
	EE352	Power Plant Instrumentation	DE 4	2	1	0	40	2060	40	100	2:1:0	3	√		√				9
	EE355	Nuclear & Advance Power Generation Technology	DE 4	2	1	0	40	2060	40	100	2:1:0	3	√		√				9
	EE357	Biomedical Engineering	DE 4	2	1	0	40	2060	40	100	2:1:0	3	√	√	√				4,9
Departmental Elective V																			
5	CS410	Distributed System	DE 5	3	1	0	40	2060	40	100	3:1:0	4			√				4
	CS412	Cryptography and Network Security	DE 5	3	1	0	40	2060	40	100	3:1:0	4	√	√	√				4,9
	CS417	Mobile computing	DE 5	3	1	0	40	2060	40	100	3:1:0	4			√				4
	CS418	Data warehousing and Data Mining	DE 5	3	1	0	40	2060	40	100	3:1:0	4			√				4,11,12
	CS419	Pattern Recognition	DE 5	3	1	0	40	2060	40	100	3:1:0	4			√				4
Departmental Elective VI																			
6	EE405	Smart Grid Topologies	DE 6	3	1	0	40	2060	40	100	3:1:0	4	√	√	√				4,9,11
	EE425	EHVAC & EHVDC Transmission	DE 6	3	1	0	40	2060	40	100	3:1:0	4	√	√	√				9
	EE433	Power Quality & Mitigation	DE 6	3	1	0	40	2060	40	100	3:1:0	4			√				9
	EE445	Electrical System and Substation Design	DE 6	3	1	0	40	2060	40	100	3:1:0	4	√	√	√				9
	EE447	Electric Vehicles	DE 6	3	1	0	40	2060	40	100	3:1:0	4	√	√	√				9,13