

RAJALAKSHMI ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY)
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
B.E. ELECTRICAL AND ELECTRONICS ENGINEERING
REGULATION – 2023
CHOICE BASED CREDIT SYSTEM
CURRICULUM AND SYLLABUS [I SEM –IV SEM]

SEMESTER I

S.NO	COURSE CODE	COURSE TITLE	PERIODS / WEEK					CATEGORY
			L	T	P	TOTAL	CREDITS	
1	HS 23111	Technical Communication I	2	0	0	2	2	HS
2	MA23111	Linear Algebra and Calculus	3	1	0	4	4	BS
3	CY23131	Chemistry for Electronics Engineering	3	0	2	5	4	BS
4	GE23131	Programming using C	1	0	6	7	4	ES
5	GE23111	Engineering Graphics	2	0	4	6	4	ES
6	GE23122	Engineering Practices - Electrical and Electronics	0	0	2	2	1	ES
7	MC23111	Indian Constitution and Freedom Movement	3	0	0	3	0	MC
8	GE23117	தமிழர்மரபு /Heritage of Tamils	1	0	0	1	1	HS
TOTAL			15	1	14	30	20	

SEMESTER II

S.NO	COURSE CODE	COURSE TITLE	PERIODS / WEEK					CATEGORY
			L	T	P	TOTAL	CREDITS	
1	HS23221/ HS 23222	Technical Communication II/ English for Professional Competence	0	0	2	2	1	HS
2	MA23212	Differential Equation and Complex Variables	3	1	0	4	4	BS
3	PH23232	Physics for Electronics Engineering	3	0	2	5	4	BS
4	CS23231	Data Structures	3	0	4	7	5	ES
5	EE23212	Electric Circuits	3	0	0	3	3	PC
6	EE23221	Electric Circuits Laboratory	0	0	2	2	1	PC
7	GE23121	Engineering Practices - Civil and Mechanical	0	0	2	2	1	ES
8	MC23112	Environmental Science and Engineering	3	0	0	3	0	MC
9	GE23217	தமிழரும் தொழில்நுட்பமும் / Tamils and Technology	1	0	0	1	1	HS
TOTAL			16	1	12	29	20	

SEMESTER III

S.NO	COURSE CODE	COURSE TITLE	PERIODS / WEEK					CATEGORY
			L	T	P	TOTAL	CREDITS	
1	MA23312	Fourier Series and Number Theory	3	1	0	4	4	BS
2	EE23311	Electromagnetic Theory	3	0	0	3	3	ES
3	EE23312	Electrical Machines – I	3	0	0	3	3	PC
4	EE23313	Measurements and Instrumentation	3	0	0	3	3	PC
5	EE23314	Electronic Devices and Circuits	3	0	0	3	3	PC
6	EE23315	Power Plant Engineering	3	0	0	3	3	ES
7	EE23321	Electronic Devices and Circuits Laboratory	0	0	2	2	1	PC
8	CS23336	Introduction to Python Programming	1	0	4	5	3	ES
TOTAL			19	1	6	26	23	

SEMESTER IV

S.NO	COURSE CODE	COURSE TITLE	PERIODS / WEEK					CATEGORY
			L	T	P	TOTAL	CREDITS	
1	EE23411	Electrical Machines – II	3	0	0	3	3	PC
2	EE23412	Transmission and Distribution	3	0	0	3	3	PC
3	EE23431	Digital Logic Circuits	3	0	2	5	4	PC
4	EE23432	Linear Integrated Circuits and Applications	3	0	2	5	4	PC
5	*****	Open Elective – I	3	0	0	3	3	OE
6	EE23421	Electrical Machines Laboratory	0	0	4	4	2	PC
7	GE23327	Soft Skills-I	0	0	2	2	1	EEC
8	CS23422	Python Programming for Machine Learning	0	0	4	4	2	ES
TOTAL			15	0	14	29	22	

SEMESTER V

S.NO	COURSE CODE	COURSE TITLE	PERIODS / WEEK					CATEGORY
			L	T	P	TOTAL	CREDITS	
1	EE23511	Power System Analysis	3	0	0	3	3	PC
2	EE23512	Power Electronics	3	0	0	3	3	PC
3	EE23513	Control Systems	3	0	0	3	3	PC
4	EE23P**	Professional Elective I	3	0	0	3	3	PE
5	EE23531	Microprocessors, Microcontrollers and Applications	3	0	2	5	4	PC
6	*****	Open Elective – II	3	0	0	3	3	OE
7	EE23521	Control and Instrumentation Laboratory	0	0	2	2	1	PC
8	EE23522	Innovation and Design Thinking for Electrical Engineers	0	0	4	4	2	EEC
9	GE23427	Soft Skills-II	0	0	2	2	1	EEC
TOTAL			18	0	10	28	23	

SEMESTER VI

S.NO	COURSE CODE	COURSE TITLE	PERIODS / WEEK					CATEGORY
			L	T	P	TOTAL	CREDITS	
1	EE23611	Protection and Switchgear	3	0	0	3	3	PC
2	EE23612	Solid State Drives	3	0	0	3	3	PC
3	EE23613	Electric Energy Utilization and Conservation	3	0	0	3	3	PC
4	EE23631	Applications of IoT in Electrical Engineering	2	0	2	4	3	PC
5	EE23P**	Professional Elective II	3	0	0	3	3	PE
6	EE23P**	Professional Elective III	3	0	0	3	3	PE
7	EE23621	Power Electronics and Drives Laboratory	0	0	2	2	1	PC
8	EE23622	Applications of AI and ML in Electrical Engineering	0	0	4	4	2	EEC
9	GE23627	Problem Solving Techniques	0	0	2	2	1	EEC
TOTAL			17	0	10	27	22	

SEMESTER VII

S.NO	COURSE CODE	COURSE TITLE	PERIODS / WEEK					CATEGORY
			L	T	P	TOTAL	CREDITS	
1	EE23711	Smart Grid	3	0	0	3	3	PC
2	EE23712	Power System Operation and Control	3	0	0	3	3	PC
3	EE23731	Renewable Energy Systems	3	0	2	5	4	PC
4	EE23P**	Professional Elective IV	3	0	0	3	3	PE
5	EE23721	Power System Simulation Laboratory	0	0	4	4	2	PC
6	EE23722	Project (Phase-I)	0	0	8	8	4	EEC
7		Industry Internship (2/4 weeks)	-	-	-	-	1	EEC
TOTAL			12	0	14	26	20	

SEMESTER VIII

S.NO	COURSE CODE	COURSE TITLE	PERIODS / WEEK					CATEGORY
			L	T	P	TOTAL	CREDITS	
1	EE23P**	Professional Elective V	3	0	0	3	3	PE
2	EE23P**	Professional Elective VI	3	0	0	3	3	PE
3	EE23821	Project Work(Phase –II)	0	0	12	12	6	EEC
TOTAL			6	0	12	18	12	
TOTAL CREDITS : 162								