

DIPLOMA IN ELECTRICAL ENGINEERING

3-Year Programme • 6 Semesters • University / Polytechnic-Style Curriculum

Programme Details

Duration	3 Years
Semesters	6
Programme	Diploma in Electrical Engineering
Mode	Full-time
Assessment	Internal Assessment + End-Semester Examination + Practical/Viva
Status	Sample curriculum; subject codes and scheme are indicative, not an official university syllabus.

Marking convention: For theory-plus-practical subjects, 30 marks are allocated to internal theory assessment, 70 to the end-semester theory examination, 20 to laboratory/term work and 30 to practical/viva. Practical-only subjects use 20 + 30 marks. This is an indicative scheme.

SEMESTER I

L = Lecture hours/week; T = Tutorial hours/week; P = Practical hours/week.

Code	Subject	L	T	P	Credits	IA Theory	ESE Theory	Lab IA	Practical / Viva	Total
DEE-101	Engineering Mathematics-I	4	0	2	5	30	70	50	0	150
DEE-102	Engineering Physics	3	0	2	5	30	70	50	0	150
DEE-103	Engineering Chemistry	3	0	2	5	30	70	50	0	150
DEE-104	Basic Electrical Engineering	3	0	2	5	30	70	50	0	150
DEE-105	Engineering Graphics	1	0	4	5	30	70	50	0	150
DEE-106	Workshop Practice	0	0	4	2	0	0	20	30	50
	SEMESTER TOTAL	14	0	16	27	150	350	270	30	800

SEMESTER II

L = Lecture hours/week; T = Tutorial hours/week; P = Practical hours/week.

Code	Subject	L	T	P	Credits	IA Theory	ESE Theory	Lab IA	Practical / Viva	Total
DEE-201	Engineering Mathematics-II	4	0	2	5	30	70	50	0	150
DEE-202	Electrical Circuit Theory	3	0	2	5	30	70	50	0	150
DEE-203	Electrical Measurements & Instruments	3	0	2	5	30	70	50	0	150
DEE-204	Electronic Devices & Circuits	3	0	2	5	30	70	50	0	150
DEE-205	Computer Fundamentals & Programming	2	0	4	5	30	70	50	0	150
DEE-206	Electrical & Electronics Workshop	0	0	4	2	0	0	20	30	50
	SEMESTER TOTAL	15	0	16	27	150	350	270	30	800

Suggested industrial exposure: 3–4 week summer internship after Semester II.

SEMESTER III

L = Lecture hours/week; T = Tutorial hours/week; P = Practical hours/week.

Code	Subject	L	T	P	Credits	IA Theory	ESE Theory	Lab IA	Practical / Viva	Total
DEE-301	Electrical Machines-I	3	0	2	5	30	70	50	0	150
DEE-302	Electrical Power Generation	3	0	0	4	30	70	0	0	100
DEE-303	Electrical Measurements & Instrumentation	3	0	2	5	30	70	50	0	150
DEE-304	Digital Electronics	3	0	2	5	30	70	50	0	150
DEE-305	Electrical Installation, Wiring & Safety	2	0	4	5	30	70	50	0	150
DEE-306	Electrical Circuits & Machines Lab	0	0	4	2	0	0	20	30	50
	SEMESTER TOTAL	14	0	14	26	150	350	220	30	750

SEMESTER IV

L = Lecture hours/week; T = Tutorial hours/week; P = Practical hours/week.

Code	Subject	L	T	P	Credits	IA Theory	ESE Theory	Lab IA	Practical / Viva	Total
DEE-401	Electrical Machines-II	3	0	2	5	30	70	50	0	150
DEE-402	Transmission & Distribution	3	0	2	5	30	70	50	0	150
DEE-403	Electrical Estimation & Costing	2	0	2	4	30	70	50	0	150
DEE-404	Power Electronics	3	0	2	5	30	70	50	0	150
DEE-405	Control Systems	3	0	2	5	30	70	50	0	150
DEE-406	Industrial Electronics Lab	0	0	4	2	0	0	20	30	50
	SEMESTER TOTAL	14	0	14	26	150	350	270	30	800

SEMESTER V

L = Lecture hours/week; T = Tutorial hours/week; P = Practical hours/week.

Code	Subject	L	T	P	Credits	IA Theory	ESE Theory	Lab IA	Practical / Viva	Total
DEE-501	Power System-I	3	0	2	5	30	70	50	0	150
DEE-502	Electrical Drives & Traction	3	0	2	5	30	70	50	0	150
DEE-503	Switchgear & Protection	3	0	2	5	30	70	50	0	150
DEE-504	Microprocessor & Microcontroller	3	0	2	5	30	70	50	0	150
DEE-505	Renewable Energy Systems	3	0	0	4	30	70	0	0	100
DEE-506	Industrial Training-I	0	0	4	2	0	0	20	30	50
	SEMESTER TOTAL	15	0	12	26	150	350	220	30	750

Industrial training: Recommended exposure to electrical maintenance, distribution, substations or automation.

SEMESTER VI

L = Lecture hours/week; T = Tutorial hours/week; P = Practical hours/week.

Code	Subject	L	T	P	Credits	IA Theory	ESE Theory	Lab IA	Practical / Viva	Total
DEE-601	Power System-II & System Analysis	3	0	2	5	30	70	50	0	150
DEE-602	PLC & Industrial Automation	3	0	2	5	30	70	50	0	150
DEE-603	Utilization of Electrical Energy	3	0	0	4	30	70	0	0	100
DEE-604	Electrical Testing & Maintenance	2	0	2	4	30	70	50	0	150
DEE-605	Electrical Safety, Energy Management & Audit	2	0	0	3	30	70	0	0	100
DEE-606	Major Project, Internship & Viva Voce	0	0	6	5	0	0	40	60	100
	SEMESTER TOTAL	13	0	12	26	150	350	190	60	750

Final requirement: Major project + internship/industrial training + viva voce.

ASSESSMENT & COURSE COMPONENTS

Core learning areas: electrical circuits, measurements, electrical machines, power generation, transmission and distribution, switchgear and protection, power electronics, drives, control systems, PLC/industrial automation, renewable energy, electrical installation, testing, maintenance, safety and project work.

Academic note: Indian diploma institutions commonly publish six-semester Electrical Engineering curricula with subject codes, credits, lecture/practical hours and internal/external assessment. The exact scheme varies by affiliating board or university. This document is therefore intended as a ready-to-edit professional template rather than an official institutional curriculum.