

CURRICULUM

REGULATION 2025

M.E. – POWER SYSTEMS ENGINEERING

- Full Time

SEMESTER

I TO IV

M.E. – POWER SYSTEMS ENGINEERING - FT – SEMESTER I TO IV

A. Foundation Courses (Credits-5)

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1.	44725B01	ADVANCED MATHEMATICS FOR ELECTRICAL ENGINEERS	MATH	FC - BS	3	0	0	3	NIL
2.	44725H01	RESEARCH METHODOLOGY AND IPR	EEE	FC - HS	2	0	0	2	NIL

B. Professional Core Courses (Credits-32)

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1	44725C01	ADVANCED POWER SYSTEM ANALYSIS	EEE	CC	3	0	0	3	NIL
2	44725C02	POWER CONVERTERS FOR DISTRIBUTED GENERATION SYSTEMS	EEE	CC	3	0	0	3	NIL
3	44725C03	POWER SYSTEM DYNAMICS AND CONTROL	EEE	CC	3	0	0	3	NIL
4	44725C04	DIGITAL PROTECTION FOR POWER SYSTEM	EEE	CC	3	0	0	3	NIL
5	44725C05	TRANSIENTS IN POWER SYSTEM	EEE	CC	3	0	0	3	NIL
6	44725C06	EHV POWER TRANSMISSION	EEE	CC	3	0	0	3	NIL
7	44725C07	HVDC TRANSMISSION	EEE	CC	3	0	0	3	NIL
8	44725C08	POWER QUALITY	EEE	CC	3	0	0	3	NIL
9	44725C09	RENEWABLE ENERGY GENERATION METHOD	EEE	CC	3	1	0	4	NIL
10	44725C81	ADVANCED POWER SYSTEM SIMULATION LABORATORY	EEE	CC	0	0	4	2	NIL
11	44725C82	POWER SYSTEM SIMULATION LABORATORY	EEE	CC	0	0	4	2	NIL

C. Elective Courses (Credits-19)

Professional Electives (Credits - 15)

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
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1	44725P01	DISTRIBUTED ENERGY RESOURCES AND MICROGRID	EEE	EC-PS	3	0	0	3	NIL
2	44725P02	OPTIMAL CONTROL AND FILTERING	EEE	EC-PS	3	0	0	3	NIL
3	44725P03	WIND ENERGY CONVERSION SYSTEM DESIGN	EEE	EC-PS	3	0	0	3	NIL
4	44725P04	LINEAR AND NON-LINEAR SYSTEM THEORY	EEE	EC-PS	3	0	0	3	NIL
5	44725P05	ELECTRIC POWER DISTRIBUTION SYSTEM DESIGN	EEE	EC-PS	3	0	0	3	NIL
6	44725P06	PULSE WIDTH MODULATION FOR PE CONVERTERS	EEE	EC-PS	3	0	0	3	NIL
7	44725P07	RESTRUCTURED POWER SYSTEM	EEE	EC-PS	3	0	0	3	NIL
8	44725P08	SMART GRID TECHNOLOGIES	EEE	EC-PS	3	0	0	3	NIL
9	44725P09	ADVANCED MICRO CONTROLLER BASED SYSTEMS	EEE	EC-PS	3	0	0	3	NIL
10	44725P10	SCADA SYSTEM AND APPLICATIONS	EEE	EC-PS	3	0	0	3	NIL
11	44725P11	FACTS AND CUSTOM POWER DEVICES	EEE	EC-PS	3	0	0	3	NIL
12	44725P12	POWER SYSTEM RELIABILITY	EEE	EC-PS	3	0	0	3	NIL
13	44725P13	POWER SYSTEM SECURITY	EEE	EC-PS	3	0	0	3	NIL

Open Electives – Interdepartmental Open Electives (Credits - 3)

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1	43325O01	BIO MEMS	ECE	OE - EA	3	0	0	3	NIL
2	43425O01	BIOMEDICAL PRODUCT DESIGN AND DEVELOPMENT	BME	OE - EA	3	0	0	3	NIL
3	40225O01	METAL ADDITIVE MANUFACTURING	MECH	OE - EA	3	0	0	3	NIL
4	48125O01	WASTE TO ENERGY	BTE	OE - EA	3	0	0	3	NIL
5	40925O01	ENVIRONMENTAL IMPACT ASSESSMENT	CIVIL-SE	OE - EA	3	0	0	3	NIL
6	41125O01	INDUSTRIAL SAFETY	MECH-ISE	OE - EA	3	0	0	3	NIL
7	41025O01	AGRO-FOOD SYSTEMS	BTE	OE - EA	3	0	0	3	NIL
8	41425O01	URBAN PLANNING AND SUSTAINABILITY	CIVIL-CEM	OE - EA	3	0	0	3	NIL
9	45125O03	ADVANCED CYBER SECURITY	CSE	OE-EA	3	0	0	3	NIL

Open Electives – University Multidisciplinary Open Electives (Credits - 1)

1.	40625U01	DENTAL HYGIENE & QUALITY OF LIFE	Dentistry	OE-UOE	1	0	0	1	NIL
2.	40625U02	NUTRITION FOR WELLNESS & SPECIFIC DISEASES	Nursing	OE-UOE	1	0	0	1	NIL
3.	40625U03	FUNDAMENTALS OF HOMOEOPATHY	Homoeopathy	OE-UOE	1	0	0	1	NIL
4.	40625U04	ADVERTISING	Arts & Science	OE-UOE	1	0	0	1	NIL
5.	40625U05	TEAMWORK & COLLABORATION	Arts & Science	OE-UOE	1	0	0	1	NIL
6.	40625U06	EMOTIONAL INTELLIGENCE	Arts & Science	OE-UOE	1	0	0	1	NIL
7.	40625U07	MEDIA MANAGEMENT	Arts & Science	OE-UOE	1	0	0	1	NIL
8.	40625U08	EXERCISE ESSENTIALS FOR PHYSICAL FITNESS	Physiotherapy	OE-UOE	0	0	2	1	NIL
9.	40625U09	ESSENTIAL SKILLS FOR MEDICAL EMERGENCIES	Medicine	OE-UOE	1	0	0	1	NIL
10.	40625U10	MEDICINE PLANTS IN DISEASE MANAGEMENT	Pharmacy	OE-UOE	1	0	0	1	NIL
11.	40625U11	BASIC LIFE SUPPORT	Allied Health Sciences	OE-UOE	1	0	0	1	NIL
12.	40625U12	MALLARKHAMBAM	Physical Education	OE-UOE	0	0	2	1	NIL
13.	40625U13	SILAMBAM	Physical Education	OE-UOE	0	0	2	1	NIL
14.	40625U1	BASIC FITNESS TRAINING	Physical Education	OE-UOE	0	0	2	1	NIL
15.	40625U15	RECREATIONAL GAMES	Physical Education	OE-UOE	0	0	2	1	NIL
16.	40625U16	INTRODUCTION TO LAW	Law	OE-UOE	1	0	0	1	NIL
17.	40625U17	FUNDAMENTALS OF LAW IN TECHNOLOGY AND CYBER SPACE	Law	OE-UOE	1	0	0	1	NIL
18.	40625U18	FOUNDATION COURSE IN YOGA	Rehabilitation And Behavior Sciences	OE-UOE	1	0	0	1	NIL
19.	40625U19	INTRODUCTION TO PSYCHOLOGY	Rehabilitation And Behavioral Sciences	OE-UOE	1	0	0	1	NIL
20.	40625U20	INTRODUCTION TO PUBLIC POLICY AND GOVERNANCE	Liberal Arts	OE-UOE	1	0	0	1	NIL
21.	40625U21	INDIAN ECONOMY AND DEVELOPMENT CHALLENGES	Liberal Arts	OE-UOE	1	0	0	1	NIL
22.	Course Code will be given after	Any SWAYAM / MOOC / NPTEL Courses which are not related to the discipline of study of the student can be		OE-UOE					

	receiving SWAYAM Certificate	chosen as an Open Elective in Consultation with the respective Faculty Advisor of the Institution.							
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**D. Employability Enhancement Courses and courses for presentation of
Technical skills related to the specialization (Credits-19)**

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1	44725RP1	PROJECT WORK PHASE -I	EEE	EE - P	0	0	12	6	NIL
2	44725RP2	PROJECT WORK PHASE -II	EEE	EE - P	0	0	24	12	NIL
3	44725I81	INTERNSHIP	EEE	EE -I	0	0	2	1	NIL

E. MANDATORY COURSES (Credits-2)**

**** The credits earned in category 'E' Courses will not be counted in CGPA calculation**

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1	44125Z81	ENGLISH FOR RESEARCH PAPER WRITING	ENG	AC	0	0	2	1	NIL
2	44125Z82	PERSONALITY DEVELOPMENT THROUGH LIFE ENLIGHTENT SKILLS	ENG	AC	0	0	2	1	NIL