

CURRICULUM

REGULATION 2021

**M.E – POWER SYSTEMS ENGINEERING
(FULL TIME)**

**SEMESTER
I TO IV**

g-l-d-z

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

A. Foundation Courses

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

B. Programme Core Courses (Credits-32)

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1		ADVANCED POWER SYSTEM ANALYSIS	EEE	CC	3	0	0	3	NIL
2		POWER CONVERTERS FOR DISTRIBUTED GENERATION SYSTEMS	EEE	CC	3	0	0	3	NIL
3		POWER SYSTEM DYNAMICS AND CONTROL	EEE	CC	3	0	0	3	NIL
4		DIGITAL PROTECTION FOR POWER SYSTEM	EEE	CC	3	0	0	3	NIL
5		TRANSIENTS IN POWER SYSTEM	EEE	CC	3	0	0	3	NIL
6		EHV POWER TRANSMISSION	EEE	CC	3	0	0	3	NIL
7		HVDC TRANSMISSION	EEE	CC	3	0	0	3	NIL
8		POWER QUALITY	EEE	CC	3	0	0	3	NIL
9		POWER ELECTRONICS FOR RENEWABLE ENERGY SYSTEMS	EEE	CC	3	1	0	4	NIL
10		POWER ELECTRONICS FOR POWER SYSTEMS LAB	EEE	CC	0	0	4	2	NIL
11		POWER SYSTEM SIMULATION LAB	EEE	CC	0	0	4	2	NIL

B. Elective Courses (Credits-18)

Program electives courses relevant to chosen specialization/branch (Credits - 15)

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1		DISTRIBUTED ENERGY RESOURCES AND MICRO GRID	EEE	EC-PS	3	0	0	3	NIL
2		OPTIMAL CONTROL AND FILTERING	EEE	EC-PS	3	0	0	3	NIL
3		WIND ENERGY CONVERSION SYSTEM DESIGN	EEE	EC-PS	3	0	0	3	NIL
4		LINEAR AND NON-LINEAR SYSTEM THEORY	EEE	EC-PS	3	0	0	3	NIL
5		ELECTRIC POWER DISTRIBUTION SYSTEM DESIGN	EEE	EC-PS	3	0	0	3	NIL

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6		PULSE WIDTH MODULATION FOR PE CONVERTERS	EEE	EC-PS	3	0	0	3	NIL
7		RESTRUCTURED POWER SYSTEM	EEE	EC-PS	3	0	0	3	NIL
8		SMART GRID TECHNOLOGIES	EEE	EC-PS	3	0	0	3	NIL
9		ADVANCED MICROCONTROLLER BASED SYSTEMS	EEE	EC-PS	3	0	0	3	NIL
10		SCADA SYSTEM AND APPLICATIONS	EEE	EC-PS	3	0	0	3	NIL
11		FACTS AND CUSTOM POWER DEVICES	EEE	EC-PS	3	0	0	3	NIL
12		POWER SYSTEM RELIABILITY	EEE	EC-PS	3	0	0	3	NIL
13		POWER SYSTEM SECURITY	EEE	EC-PS	3	0	0	3	NIL

Open Subjects – Electives from other Technical and /or Emerging Courses (Credits - 3)

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1		BIO MEMS	ECE	OE - EA	3	0	0	3	NIL
2		BIOMEDICAL PRODUCT DESIGN AND DEVELOPMENT	BME	OE - EA	3	0	0	3	NIL
3		METAL ADDITIVE MANUFACTURING	MECH	OE - EA	3	0	0	3	NIL
4		WASTE TO ENERGY	BTE	OE - EA	3	0	0	3	NIL
5		SUSTAINABLE BUILT ENVIRONMENT	CIVIL	OE - EA	3	0	0	3	NIL
6		ADVANCED CYBER SECURITY	CSE	OE - EA	3	0	0	3	NIL

D. Employability Enhancement Courses and courses for presentation of Technical skills related to the specialization (Credits-20)

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1		PROJECT WORK PHASE I	EEE	EE - P	0	0	12	6	NIL
2		PROJECT WORK PHASE II	EEE	EE - P	0	0	24	12	NIL
3		INTERNSHIP		EE - IT	3 Weeks			1	NIL
4		TECHNICAL SEMINAR	EEE	EE - S	0	0	2	1	NIL

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MANDATORY COURSES/AUDIT COURSES (NO CREDITS)
(NOT INCLUDED FOR CGPA CALCULATIONS)

SL. NO	COURSE CODDE	COURSE	OFFERING DEPT.	CATEGORY	L	T	P	C	PREREQUISITE
1.		ENGLISH FOR RESEARCH PAPER WRITING	ENG	AC	0	0	2	0	NIL
2.		DISASTER MITIGATION AND MANAGEMENT	CIVIL	AC	0	0	2	0	NIL
3.		VALUE EDUCATION	HS	AC	0	0	2	0	NIL
4.		CONSTITUTION OF INDIA	LAW	AC	0	0	2	0	NIL
5.		PEDAGOGY STUDIES	HS	AC	0	0	2	0	NIL
6.		PERSONALITY DEVELOPMENT THROUGH LIFE ENLIGHTEN SKILLS	ENG	AC	0	0	2	0	NIL

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