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YE.	SNo		COURSE	COURSE TITLE	L	T	P	C	SNo		COURSE	COURSE TITLE	L	T	P	Τ
	1	SE	ETMA105	APPLIED MATHEMATICS-I	3	1	0 4	4	1	SE	ETMA104	APPLIED MATHEMATICS-II	3	1	0	T
	2	SE	ETPH109	ENGINEERING PHYSICS	3	1	0 4	4	2	SE	ETEC101	BASICS OF ELECTRICAL & ELECTRONICS	3	1	0	T
	3		ETCH125	ENVIRONMENTAL STUDIES		0			3	SE	ETCS112	OBJECT ORIENTED PROGRAMMING				
	4	SE	ETCS103	PROGRAMMING FOR PROBLEM SOLVING		1		4	4	SE	ETEL101	COMMUNICATION SKILLS				
-	5	SE	ETME101	BASICS OF MECHANICAL ENGINEERING				4	5	OE		OPEN ELECTIVE - II				t
CNI	6	OE	Dimeror	OPEN ELECTIVE-I	1	1		4	6		ETME155	ENGINEERING GRAPHICS LAB	0	0	3	T
	7		ETPH151	ENGINEERING PHYSICS LAB	0	0		1	7	SE	ETEC151	BASICS OF ELECTRICAL & ELECTRONICS				
	8	SE	ETCS153	PROGRAMMING FOR PROBLEM SOLVING LAB		0		1	8	SE	ETCS166	OBJECT ORIENTED PROGRAMMING LAB				
	9		ETME151	BASICS OF MECHANICAL ENGINEERING LAB		0		1	9	SE	ETEL171	COMMUNICATION SKILLS LAB				
		UL	ETIMETOT	Division of Meditarione Englishment End	Ť	-	-		_		ETME157	WORKSHOP PRACTICE				
				TOTAL	15	4	6 2	6	10	JUL	BINEIU	TOTAL				
						_	_	_								_
	1		ETMA201	APPLIED MATHEMATICS-III		1		4	1	_	ETEC202	SIGNALS & SYSTEMS				
	2		ETDM301	DISASTER MANAGEMENT			0			CC		ADVANCE ANALOG ELECTRONICS				
	3	CC	ETEC233	ANALOG ELECTRONICS	3	1	0	4	3	CC	ETEE315	POWER SYSTEM-I				
	4	CC	ETEC207	CIRCUITS & SYSTEMS	3	1	0	4	4	CC	ETEE206	ELECTRICAL MACHINES	-	-	_	
,	5	CC	ETEC210	DIGITAL ELECTRONICS	3	1	0	4	5	CC	ETEC204	ELECTROMAGNETIC FIELDS THEORY	3	1	0	
	6	CC	ETEE201	ELECTROMECHANICAL ENERGY CONVERSION	3	1	0	4	6	SE	ETMC226	FUNDAMENTALS OF MANAGEMENT	3	0	0	
or contract	7	SE	ETEC263	ANALOG ELECTRONICS LAB	0	0	2	1	7	SE	ETEC264	ADVANCE ANALOG ELECTRONICS LAB	0	0	2	
2	8	SE	ETEC253	CIRCUITS & SYSTEMS LAB		0		1	8	SE		ELECTRICAL MACHINES LAB				
	9	SE	ETEC256	DIGITAL ELECTRONICS LAB		0		1	9	SE		MATLAB PROJECT LAB				
				ELECTROMECHANICAL ENERGY CONVERSION				\neg		100	D. D	WATTER BY TROVBET BITE	1		_	
	10	SE	ETEE251	LAB	0	0	2	1								
				TOTAL	18	5	8 2	27				TOTAL	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	5	6	
TE:	PRAG	CTICA	L TRAINING W	VILL BE FOUR WEEKS DURATION AT THE END OF FOURTH S	SEMES	TER	DUR	ING	SUMME	R BR	EAK AND THE	EVALUATION WILL BE DONE AT THE END OF FIFTH SEM	MESTE	R.		
	1	CC	ETEC311	MICROPROCESSOR SYSTEMS	3	1	0	4	1	SE	ETMC421	ENTREPRENEURSHIP DEVELOPMENT	3	0	0	
	2	CC	ETEC308	CONTROL SYSTEM	3	1	0	4	2	CC	ETEC314	DIGITAL SIGNAL PROCESSING	3	1	0	
			ETEC305	MEASUREMENT & INSTRUMENTATION	3	0	0	3	3	CC	ETEE403	SWITCHGEAR AND PROTECTION	3	1	0	Ī
	4		ETEE304	INDUSTRIAL ELELCTRICAL SYSTEMS			0		4	CC	ETEE316	POWER ELECTRONICS	3	1	0	-
	5		ETEC303	ANALOG & DIGITAL COMMUNICATION			0		5	CC	ETEC312	IoT ARCHITECTURE AND PROTOCOLS	3	0	0	1
	6	CC		POWER SYSTEM-II			0		6	_	ETEC401	EMBEDDED SYSTEMS	3	1	0	-
	7	SE	ETEC359	ANALOG & DIGITAL COMMUNICATION LAB			2		7			DIGITAL SIGNAL PROCESSING LAB	0	0	2	-
	8	SE	ETEC353	MICROPROCESSOR SYSTEMS LAB			2		8	_	ETEC451	EMBEDDED SYSTEMS LAB				
	9	SE	ETEC355	MEASUREMENT & INSTRUMENTATION LAB			2		9			POWER ELECTRONICS LAB				
	10	SE	ETEC358	CONTROL SYSTEM LAB			2			_	ETEC356	ELECTRONICS PROJECT DESIGN LAB				
	11		ETEC338				2			SE		POWER SYSTEM LAB				
		SE	ETEE351	PRACTICAL TRAINING-I			0		11	SE	E1EE302	POWER STSTEM LAB	10	10	-	-
_	12	SE		VALUE ADDED COURSE TOTAL			10 2		-			TOTAL	18	4	16	1
TE.	DD A	CTICA	L TRAINING W	VILL BE FOUR WEEKS DURATION AT THE END OF SIXTH SE					HMMED	DDEA	K AND THE EV			_		
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			ETEE401	RENEWABLE ENERGY SYSTEM			0		1		ETEE422	SMART ELECTRIC GRID				
			ETEC405	ARTIFICIAL INTELLIGENCE			0			CC		ELECTRIC & HYBRID VEHICLES				
	3	DE		DEPARTMENTAL ELECTIVE			0			DE		DEPARTMENTAL ELECTIVE				
LOCAL			ETEE404	ELECTRIC DRIVES			0		4	SE	ETEE460	MAJOR PROJECT	0	10	12	2
5	4		ETEE452	POWER SYSTEMS SIMULATION LAB			2						-	1	-	_
)			ETEE457	MINOR PROJECT			4			-			-	1	-	_
1	6		ETEE463	PRACTICAL TRAINING-II			2			-			_	\perp	_	_
	7	SE	ETEC455	ARTIFICIAL INTELLIGENCE LAB			2			_		morris.	-	+	1	
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	1		ETEC412	BIO MEDICAL ELECTRONICS	3	0	0	3	9		ETEE408	ELECTRIC TRACTION				
	2		ETEC402	ROBOTICS	3	0	0	3	10		ETEE410	SWITCHED MODE POWER CONVERTERS				
	3		ETEC410	SATELLITE COMMUNICATION	3	0	0	3	11		ETEE413	DESIGN OF ELECTRICAL SYSTEMS	3	0	0	
	4		ETEC413	RADAR & SONAR ENGINEERING			0		12		ETEE414	HIGH VOLTAGE ENEGINEERING	_	-	0	(
	-		ETECALA	BUTBODUCTION TO MANO TECHNICI OCM	1		0	2	12		ETEE415	COMPLETED METHODS IN DOWER SYSTEM	12	0		ĺ

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3 0 0 3 3 0 0 3 3 0 0 3 13

14 15 16 ETEE415

ETEE418

ETEE421

ETEE423

COMPUTER METHODS IN POWER SYSTEM

POWER SYSTEM OPERATION AND CONTROL

POWER QUALITY

PLC AND SCADA

TOTAL CREDITS [C]

B.Tech (EEE)-YEAR 2018-2022 (SCHEME OF STUDIES)

EVEN SEMESTER

ODD SEMESTER

SOET

5

6

ETEC414

ETEC425

ETEC430 ETEE407

J.P-

INTRODUCTION TO NANO TECHNOLOGY

FUZZY LOGIC AND SYSTEMS HVDC AND FLEXIBLE AC TRANSMISSION

DATA COMMUNICATION NETWORKS

Registrar K.R. Mangalam University Sohna Road, Gurugram, (Haryana,

				B.Tech (EEE): 2019-2023 (Selici	ine o	1 50	uuie	s as pc	CIRC	oice-based Cr	edit System)			
				ODD SEMESTER								EVEN SEMESTER			
	SNo		COURSE	COURSE TITLE	L	T	P	c	SNo		COURSE	COURSE TITLE	L	T	P
1	_	SE		APPLIED MATHEMATICS-I		1 (4	_	SE		APPLIED MATHEMATICS-II	3		0
1	2	SE		ENGINEERING PHYSICS		1 (4	2	SE	ETEC101A	BASICS OF ELECTRICAL & ELECTRONICS	3		0
1	3	SE		ENVIRONMENTAL STUDIES		0			3	SE	ETCS112A	OBJECT ORIENTED PROGRAMMING	3	1	0
1	4	SE		PROGRAMMING FOR PROBLEM SOLVING	_	_	_	4	4	SE	ETEL101A	COMMUNICATION SKILLS	4		0
1	5	SE		BASICS OF MECHANICAL ENGINEERING	$\overline{}$	_	_	4	5	OE		OPEN ELECTIVE - II			
1	6	OE	Emilion	OPEN ELECTIVE-I	1			4	6	SE	ETME155A	ENGINEERING GRAPHICS LAB	0	0	3
1	7	SE	ETPH151A	ENGINEERING PHYSICS LAB	0	0	_	1	7	SE	ETEC151A	BASICS OF ELECTRICAL & ELECTRONICS	0		2
1	8	SE		PROGRAMMING FOR PROBLEM SOLVING LAB	_	0	_	1	8	SE	ETCS166A	OBJECT ORIENTED PROGRAMMING LAB	0	0	2
1	9	SE		BASICS OF MECHANICAL ENGINEERING LAB		0		1	9	SE	ETEL171A	COMMUNICATION SKILLS LAB	0	0	2
1		OL .	Emilia	Bridge of Meditarional Brook paramount	1		1		10	_	ETME157A	WORKSHOP PRACTICE	0	0	3
				TOTAL	15	4	6 2	26				TOTAL	13	3	12
								_			T				_
		SE		APPLIED MATHEMATICS-III		1		4	1	cc	ETEC202A	SIGNALS & SYSTEMS	3		0
	2	SE		DISASTER MANAGEMENT		0		3	2	CC	ETEC216A	ADVANCE ANALOG ELECTRONICS			0
	3	cc		ANALOG ELECTRONICS		1		4	3	CC	ETEE315A	POWER SYSTEM-I	3		0
	4	cc		CIRCUITS & SYSTEMS		1		4	4	cc	ETEE206A	ELECTRICAL MACHINES	3	_	0
	5	cc		DIGITAL ELECTRONICS	_			4	5	CC	ETEC204A	ELECTROMAGNETIC FIELDS THEORY	_		0
	6	cc	ETEE201A	ELECTROMECHANICAL ENERGY CONVERSION	3			4	6	SE	ETMC226A	FUNDAMENTALS OF MANAGEMENT	-		0
	7	SE	ETEC263A	ANALOG ELECTRONICS LAB		0		1	7	SE	ETEC264A	ADVANCE ANALOG ELECTRONICS LAB	_		2
	8	SE	ETEC253A	CIRCUITS & SYSTEMS LAB		0		1	8	SE	ETEE256A	ELECTRICAL MACHINES LAB			2
	9	SE	ETEC256A	DIGITAL ELECTRONICS LAB		0		1	9	SE	ETEC252A	MATLAB PROJECT LAB	0	0	2
	10	SE	ETEE251A	ELECTROMECHANICAL ENERGY CONVERSION		0		1						-	
				TOTAL		5	_	27				TOTAL	18		6
E:	PRAC	CTICA	L TRAINING WI	LL BE FOUR WEEKS DURATION AT THE END OF FOURTH S	EMES	TER	DUR	ING	SUMME	R BR	EAK AND THE E	EVALUATION WILL BE DONE AT THE END OF FIFTH SEME	ESTE	₹.	
	1	СС	ETEC311A	MICROPROCESSOR SYSTEMS		1		4	1	SE		ENTREPRENEURSHIP DEVELOPMENT	3		
	2	CC	ETEC308A	CONTROL SYSTEM		1		4		cc	ETEC314A	DIGITAL SIGNAL PROCESSING	3		0
	3	CC	ETEC305A	MEASUREMENT & INSTRUMENTATION			0	3	3	CC	ETEE403A	SWITCHGEAR AND PROTECTION	3		0
	4	CC	ETEE304A	INDUSTRIAL ELELCTRICAL SYSTEMS	3	0		3	4	CC	ETEE316A	POWER ELECTRONICS	-		0
	5	cc	ETEC303A	ANALOG & DIGITAL COMMUNICATION	3	1	0	4	5	CC	ETEC312A	IoT ARCHITECTURE AND PROTOCOLS	3		0
	6	CC	ETEE312A	POWER SYSTEM-II	3		_	4	6	CC	ETEC401A	EMBEDDED SYSTEMS	-	_	0
	7	SE	ETEC359A	ANALOG & DIGITAL COMMUNICATION LAB	0			1		SE	ETEC360A	DIGITAL SIGNAL PROCESSING LAB	_		2
	8	SE	ETEC353A	MICROPROCESSOR SYSTEMS LAB	0	0	2	1	8	SE	ETEC451A	EMBEDDED SYSTEMS LAB	_		2
	9	SE	ETEC355A	MEASUREMENT & INSTRUMENTATION LAB	0	0	2	1	9	SE	ETEE364A	POWER ELECTRONICS LAB	-		2
	10	SE	ETEC358A	CONTROL SYSTEM LAB	0	0	2	1	10	SE	ETEC356A	ELECTRONICS PROJECT DESIGN LAB	0		2
	11	SE	ETEE351A	PRACTICAL TRAINING-I	0	0	2	1	11	SE	ETEE362A	POWER SYSTEM LAB	0	0	2
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				TOTAL		_	10 2	_				TOTAL	18		10
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-	1	cc	ETEE401A	RENEWABLE ENERGY SYSTEM	3	1	0	4	1	cc	ETEE422A	SMART ELECTRIC GRID	3	1	0
	_	_	ETEC405A	ARTIFICIAL INTELLIGENCE	3	1	0	4	2	cc	ETEE425A	ELECTRIC & HYBRID VEHICLES	3		
	3	DE		DEPARTMENTAL ELECTIVE	3	0	0	3	3	DE		DEPARTMENTAL ELECTIVE	3		
		cc	ETEE404A	ELECTRIC DRIVES	3	1		4	4	SE	ETEE460A	MAJOR PROJECT	0	0	12
	4	SE	ETEE452A	POWER SYSTEMS SIMULATION LAB	0	0	2	1		- 100					
	5	SE	ETEE457A	MINOR PROJECT	0		4	2							
	6	SE	ETEE463A	PRACTICAL TRAINING-II	0		2								
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	1	T	ETEC412A	BIO MEDICAL ELECTRONICS			0		9	I		ELECTRIC TRACTION	3	0	0
	2		ETEC402A				0		10		ETEE410A	SWITCHED MODE POWER CONVERTERS		0	
	3		ETEC410A	SATELLITE COMMUNICATION			0		11	_	ETEE413A			0	
	4		ETEC413A	RADAR & SONAR ENGINEERING			0		12	_	ETEE414A	HIGH VOLTAGE ENEGINEERING		0	
	5		ETEC414A	INTRODUCTION TO NANO TECHNOLOGY			0		13		ETEE415A	COMPUTER METHODS IN POWER SYSTEM	3	0	0
	6		ETEC425A	DATA COMMUNICATION NETWORKS	3	0	0	3	14		ETEE418A	POWER QUALITY	3		
			ETEC430A	FUZZY LOGIC AND SYSTEMS	3	0	0	3	15		ETEE421A	POWER SYSTEM OPERATION AND CONTROL	3	0	0
	7							3						0	_

TOTAL CREDITS [C]

Jing-Registrar

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

A	DO HIGH	L	T	P	C
ETEE460	MAJOR PROJECT	0	0	0	6

The undergraduate student in last semester is ready to apply and integrate the knowledge of variety of subjects which he/she had been taught in previous semesters.

EXPECTED OUTCOME:

- The major-project is a team activity having 1-4 students in a team. This is simulation based/electronic product design work with a focusing on electrical & electronic
- The major project may be a complete hardware or a combination of hardware and software. This part is the extension of minor project
- Major Project should design a system required in real life.
- It should encompass components, devices, analog or digital ICs, micro controller with which functional familiarity is introduced.
- After interactions with coordinator/supervisors and based on comprehensive literature survey/ need analysis, the student shall identify the title and define the aim and objectives of major project in extension with minor project.
- Students are expected to detail out specifications, methodology, resources required, critical issues involved in design and implementation and submit the proposal within first week of the semester.
- The student is expected to exert on design, development and testing of the proposed work as per the schedule.
- Completed major project and documentation in the form of major project report is to be submitted at the end of semester.
- Students are expected to prepare Major project on topics of general importance using new software and presentation tools. Students will also prepare a project report along with implementation and present it for the final evaluation.

Registrar K.R. Mangalam University Sohna Road, Gurugram, (Haryana) School of Engineering & Technology (SOET) K.R. Mangalam University Sohna road, Gurugram Haryana 122103

	TALLYON PROJECT	L	T	P	C
ETEE460	MAJOR PROJECT	0	0	0	6

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Registrar

K.R. Mangalam University Sohna Road, Gurugram, (Haryana) School of Engineering & Technology (SOET)

K.R. Mangalam U. Wersity

Sohna road, Gurugram

Haryana 122103

	L	T	P	C
MAJOR PROJECT	0	0	0	6
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Registrar

K.R. Mangalam University Sohna Road, Gurugram, (Haryana) School of Engineering & Technology (SOET)
K.R. Mangalam University
Sohna road, Gurugram

Haryana 122103 Verified by Dean-SOET

		L	T	P	C
ETEE460	MAJOR PROJECT	0	0	0	6

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Registrar

K.R. Mangalam University Sohna Road, Gurugram, (Haryana) School of Engineering & Technology (SOET)

K.R. Mangalam University

Sohna road, Gurugram

Haryana 122103

		L	T	P	C
ETEE460A	MAJOR PROJECT	0	0	12	6

COURSE OVERVIEW

The student will submit a synopsis at the beginning of the semester for approval from the departmental committee in a specified format. The student will have to present the progress of the work through seminars and progress reports.

COURSE OBJECTIVE

The objective of Project Work II & Dissertation is to enable the student to extend further the investigative study taken up under EC P1, either fully theoretical/practical or involving both theoretical and practical work, under the guidance of a Supervisor from the Department alone or jointly with a Supervisor drawn from R&D laboratory/Industry. This is expected to provide a good training for the student(s) in R&D work and technical leadership.

COURSE OUTCOMES

- In depth study of the topic assigned in the light of the Report prepared under minor project.
- Review and finalization of the Approach to the Problem relating to the assigned topic:
- Preparing an Action Plan for conducting the investigation, including team
- Detailed Analysis/Modelling/Simulation/Design/Problem Solving/Experiment as needed:
- Final development of product/process, testing, results, conclusions and future directions;
- Preparing a paper for Conference presentation/Publication in Journals, if possible;
- Preparing a Dissertation in the standard format for being evaluated by the Department.
- Final Seminar Presentation before a Departmental Committee.

K.R. Mangalam University Sohna Road, Gurugram, (Haryana)

DEAN School of Engineering & Technology (SOET) K.R. Mangalam U. Versity Sohna road, Gurugram

Haryana 122103