

SOET		2018-2022 (SCHEME OF STUDIES)																B.TECH. (CE)				Remarks
YEAR	SN	UC	ODD SEMESTER								EVEN SEMESTER											
			COURSE CODE	COURSE TITLE	L	T	P	C	COURSE CODE	COURSE TITLE	L	T	P	C								
FIRST	1	SE	ETMA105	APPLIED MATHEMATICS-I	3	1	0	4	1	SE	ETMA104	APPLIED MATHEMATICS-II	3	1	0	4						
	2	SE	ETPH109	APPLIED PHYSICS-I	3	1	0	4	2	SE	ETPH108	APPLIED PHYSICS-II	3	1	0	4						
	3	SE	ETEC119	ELECTRICAL SCIENCE	3	1	0	4	3	SE		OPEN ELECTIVE	6	0	0	6						
	4	SE	ETME106	ENGINEERING MECHANICS	3	0	0	3	4	SE	ETME107	MANUFACTURING PROCESSES	3	0	0	3						
	5	SE	ETCS103	PROGRAMMING FOR PROBLEM SOLVING	3	1	0	4	5	SE	ETCS112	OBJECT ORIENTED PROGRAMMING	3	1	0	4						
	6	SE	ETEL101	COMMUNICATION SKILLS	4	0	0	4	6	SE	ETCH125	ENVIRONMENTAL STUDIES	3	0	0	3						
	7	SE	ETPH151	APPLIED PHYSICS-I LAB	0	0	2	1	7	SE	ETPH152	APPLIED PHYSICS-II LAB	0	0	2	1						
	8	SE	ETEL171	COMMUNICATION SKILLS LAB	0	0	2	1	8	SE	ETCS166	OBJECT ORIENTED PROGRAMMING LAB	0	0	2	1						
	9	SE	ETEC161	ELECTRICAL SCIENCE LAB	0	0	2	1	9	SE	ETME155	ENGINEERING GRAPHICS LAB	0	0	3	1.5						
	10	SE	ETCS153	PROGRAMMING LAB	0	0	2	1	10	SE	ETME157	WORKSHOP PRACTICE	0	0	3	1.5						
	11	SE	ETME154	ENGINEERING MECHANICS LAB	0	0	2	1														
TOTAL					19	4	10	28	TOTAL					21	3	10	29					

SECOND	1	SE	ETMA201	APPLIED MATHEMATICS-III	3	1	0	4	1	CC	ETCE214	SURVEYING-II	3	1	0	4	
	2	SE	ETEC203	BASICS OF ELECTRONICS	3	1	0	4	2	CC	ETCE216	FLUID MACHINES	3	1	0	4	
	3	CC	ETCE213	SURVEYING-I	3	1	0	4	3	CC	ETCE206	CONSTRUCTION & CONCRETE TECHNOLOGY	3	1	0	4	
	4	CC	ETCE207	BUILDING MATERIALS & TECHNOLOGY	3	1	0	4	4	CC	ETCE204	SOIL MECHANICS	3	1	0	4	
	5	CC	ETCE217	FLUID MECHANICS	3	1	0	4	5	SE	ETMC226	FUNDAMENTALS OF MANAGEMENT	3	0	0	3	
	6	SE	ETCE261	SURVEYING-I LAB	0	0	2	1	6	CC	ETCE211	STRUCTURAL ANALYSIS-I	3	1	0	4	
	7	SE	ETME255	FLUID MECHANICS LAB	0	0	2	1	7	SE	ETCE256	CONSTRUCTION & CONCRETE TECHNOLOGY LAB	0	0	2	1	
	8	SE	ETEC259	BASICS OF ELECTRONICS LAB	0	0	2	1	8	SE	ETCE257	STRUCTURAL ANALYSIS-I LAB	0	0	2	1	
	9	SE	ETCE260	BUILDING DRAWING LAB	0	0	2	1	9	SE	ETCE252	FLUID MACHINES LAB	0	0	2	1	
									10	SE	ETCE262	SURVEYING-II LAB	0	0	2	1	
									11	SE	ETCE254	SOIL MECHANICS LAB	0	0	2	1	
TOTAL					15	5	8	24	TOTAL					18	5	10	28

THIRD	1	CC	ETCE208	STRUCTURAL ANALYSIS-II	3	1	0	4	1	CC	ETCE302	DESIGN OF CONCRETE STRUCTURES-II	3	1	0	4	
	2	CC	ETCE307	DESIGN OF CONCRETE STRUCTURES-I	3	1	0	4	2	SE	ETMC431	ENGINEERING ECONOMICS	3	0	0	3	
	3	CC	ETCE321	ENVIRONMENTAL ENGINEERING-I	3	1	0	4	3	CC	ETCE303	GEOTECHNICAL ENGINEERING	3	1	0	4	
	4	CC	ETCE313	ENGINEERING GEOLOGY & ROCK MECHANICS	3	1	0	4	4	CC	ETCE322	ENVIRONMENTAL ENGINEERING-II	3	1	0	4	
	5	CC	ETCE301	ESTIMATION & COSTING	3	1	0	4	5	CC	ETCE315	TRANSPORTATION ENGINEERING-I	3	1	0	4	
	6	SE	ETCE258	STRUCTURAL ANALYSIS-II LAB	0	0	2	1	6	CC	ETCE 320	WATER RESOURCE ENGINEERING	3	1	0	4	
	7	SE	ETCE354	ENVIRONMENTAL ENGINEERING LAB	0	0	2	1	7	SE	ETCE351	GEOTECHNICAL ENGINEERING LAB	0	0	2	1	
	8	SE	ETCE357	ENGINEERING GEOLOGY LAB	0	0	2	1	8	SE	ETCE453	CAD LAB	0	0	2	1	
	9	SE	ETCE381	PRACTICAL TRAINING-I	0	0	0	2	9	SE	ETCE353	TRANSPORTATION ENGINEERING-I LAB	0	0	2	1	
TOTAL					15	5	6	25	TOTAL					18	5	6	26


*NOTE: PRACTICAL TRAINING WILL BE OF FOUR WEEKS DURATION AT THE END OF SIXTH SEMESTER DURING SUMMER BREAK AND THE EVALUATION WILL BE DONE IN THE SEVENTH SEMESTER

FOURTH	1	CC	ETCE424	REMOTE SENSING & GIS	3	1	0	4	As per annexure IV	1	CC	ETCE404	EARTHQUAKE RESISTANT DESIGN	3	0	0	3
	2	CC	ETCE403	DESIGN OF STEEL STRUCTURE-I	3	1	0	4		2	SE/CC		DEPARTMENTAL ELECTIVE	3	1	0	4
	3	SE/CC		DEPARTMENTAL ELECTIVE	3	1	0	4		3	CC	ETCE408	DESIGN OF STEEL STRUCTURE-II	3	1	0	4
	4	CC	ETCE308	TRANSPORTATION ENGINEERING-II	3	1	0	4		4	SE	ETCE321	CONSTRUCTION PLANNING & MANAGEMENT	3	1	0	4
	5	CC	ETCE310	FOUNDATION ENGINEERING	3	1	0	4		5	SE	UCDM301A	Open Elective (DISASTER MANAGEMENT)	3	0	0	3
	6	CC	ETCE411	BRIDGE ENGINEERING	3	1	0	4		6	CC	ETCE452	MAJOR PROJECT	0	0	0	6
	7	SE	ETCE352	TRANSPORTATION ENGINEERING-II LAB	0	0	2	1									
	8	SE	ETCE356	FOUNDATION ENGINEERING LAB	0	0	2	1									
	9	SE	ETCE455	MINOR PROJECT	0	0	0	2									
	10	SE	ETCE481	PRACTICAL TRAINING-II	0	0	0	2									
TOTAL					18	6	4	30	TOTAL					15	3	0	24


DEPARTMENTAL ELECTIVES

1	SE	ETCE402	ENVIRONMENTAL IMPACT ASSESSMENT	3	1	0	4	6	CC	ETCE419	GROUND WATER DEVELOPMENT	3	1	0	4
2	SE	ETCE410	DISASTER MITIGATION AND MANAGEMENT	3	1	0	4	7	CC	ETCE416	HYDRO POWER ENGINEERING	3	1	0	4
3	CC	ETCE412	ENVIRONMENTAL POLLUTION & CONTROL	3	1	0	4	8	CC	ETCE417	GROUND IMPROVEMENT TECHNIQUES	3	1	0	4
4	CC	ETCE413	AIRPORT ENGINEERING	3	1	0	4	9	CC	ETCE418	SOLID WASTE MANAGEMENT	3	1	0	4
5	CC	ETCE414	PAVEMENT CONSTRUCTION & MAINTENANCE	3	1	0	4	10	CC	ETCE420	RAILWAY ENGINEERING	3	1	0	4

TOTAL HOURS: LECT [L]+PRAC [P]+TUT [T] (EXCLUDING NO L, T, S, P COURSES)	229
TOTAL CREDITS [C]	214


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B.Tech. (CE)				2019 - 2023 (Scheme of Studies as per Choice-Based Credit System)												SOET							
ODD SEMESTER												EVEN SEMESTER											
Year	SNo	Category	Course Code	Course Title	L	T	P	C	SNo	Category	Course Code	Course Title	L	T	P	C							
First	1	SE	ETCS103A	PROGRAMMING FOR PROBLEM SOLVING	3	1	0	4	1	SE	ETMA104A	APPLIED MATHEMATICS-II	3	1	0	4							
	2	SE	ETMA105A	APPLIED MATHEMATICS-I	3	1	0	4	2	SE	ETEC101A	BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING	3	1	0	4							
	3	SE	ETCH125A	ENVIRONMENTAL STUDIES	3	0	0	3	3	SE	ETCS112A	OBJECT ORIENTED PROGRAMMING	3	1	0	4							
	4	SE	ETPH 109A	ENGINEERING PHYSICS	3	1	0	4	4	SE	ETEL101A	COMMUNICATION SKILLS	4	0	0	4							
	5	SE	ETME101A	BASICS OF MECHANICAL ENGINEERING	3	1	0	4	5	SE		OPEN ELECTIVE - II	-	-	-	4							
	6	SE		OPEN ELECTIVE-I	-	-	-	4	6	SE	ETME155A	ENGINEERING GRAPHICS LAB	0	0	3	1.5							
	7	SE	ETPH151A	ENGINEERING PHYSICS LAB	0	0	2	1	7	SE	ETEC151A	BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING LAB	0	0	2	1							
	8	SE	ETCS153A	PROGRAMMING FOR PROBLEM SOLVING LAB	0	0	2	1	8	SE	ETCS166A	OBJECT ORIENTED PROGRAMMING LAB	0	0	2	1							
	9	SE	ETME151A	BASICS OF MECHANICAL ENGINEERING LAB	0	0	2	1	9	SE	ETEL171A	COMMUNICATION SKILLS LAB	0	0	2	1							
			TOTAL	15	4	6	26	10	SE	ETME157A	WORKSHOP PRACTICE	0	0	3	1.5								
			TOTAL	15	4	6	26				TOTAL	13	3	12	26								
Second	1	SE	ETMA 201A	Applied Mathematics-III	3	1	0	4	1	CC	ETCE 214A	Surveying & Geomatics	3	1	0	4							
	2	CC	ETCE 211A	Structural Analysis-I	3	1	0	4	2	CC	ETCE 206A	Construction & Concrete Technology	3	0	0	4							
	3	CC	ETCE 213A	Surveying-I	3	1	0	4	3	CC	ETCE 204A	Soil Mechanics	3	1	0	4							
	4	CC	ETCE 207A	Building Materials & Technology	3	0	0	4	4	SE	ETCE 321A	Project Planning and Management	3	0	0	3							
	5	CC	ETCE 217A	Fluid Mechanics	3	1	0	4	5	CC	ETCE 317A	Structural Analysis-II	3	1	0	4							
	6	SE	ETCE 264A	Disaster Preparedness and Planning	3	0	0	3	6	CC	ETCE 216A	Fluid Machines	3	1	0	4							
	7	SE	ETCE 261A	Surveying-I Lab	0	0	2	1	7	SE	ETCE 255A	Fluid Machines Lab	0	0	2	1							
	8	SE	ETME 255A	Fluid Mechanics Lab	0	0	2	1	8	SE	ETCE 256A	Construction & Concrete Technology Lab	0	0	2	1							
	9	SE	ETCE 257A	Structural Analysis-I Lab	0	0	2	1	9	SE	ETCE 258A	Structural Analysis-II Lab	0	0	2	1							
	10	SE	ETCE 260A	Building Drawing Lab.	0	0	2	1	10	SE	ETCE 262A	Surveying Lab	0	0	2	1							
			TOTAL	18	4	8	27	11	SE	ETCE 254A	Soil Mechanics Lab	0	0	2	1								
			TOTAL	18	4	8	27				TOTAL	18	4	10	28								
Proposed Scheme																							
Third	1	CC	ETCE 401A	Hydrology	3	0	0	3	1	CC	ETCE 302A	Design of Concrete Structures-II	3	1	0	4							
	2	CC	ETCE 301A	Estimation & Costing	3	1	0	4	2	CC	ETCE 364A	Irrigation Engineering	3	1	0	4							
	3	CC	ETCE 307A	Design of Concrete Structures-I	3	1	0	4	3	CC	ETCE 303A	Geotechnical Engineering	3	1	0	4							
	4	CC	ETCE 321A	Environmental Engineering -I	3	1	0	4	4	CC	ETCE 322A	Environmental Engineering-II	3	1	0	4							
	5	CC	ETCE 313A	Engineering Geology and Rock Mechanics	3	0	0	3	5	CC	ETCE 316A	Transportation Engineering-I	3	1	0	4							
	6	SE	ETCE 357A	Engineering Geology Lab	0	0	2	1	6	SE	ETCE 459A	Cad Lab	0	0	2	1							
	7	SE	ETCE 354A	Environmental Engineering Lab-I	0	0	2	1	7	SE	ETCE 351A	Geotechnical Engineering Lab	0	0	2	1							
	8	SE	ETCE 358A	Survey Camp	0	0	4	2	8	SE	ETCE362A	Transportation Engineering-I Lab	0	0	2	1							
	9	SE	ETCE 381A	Practical Training- I	0	0	2	1															
			TOTAL	15	#RE	#RE	#RE				TOTAL	15	5	6	23								
Note: Survey Camp of minimum 2 weeks will be held in the summer vacation of 4th semester completion and will be evaluated in 5																							
*Note: Practical training will be of four weeks duration at the end of Sixth Semester during summer break and the evaluation will be done in the Seventh Semester																							
Fourth	1	CC	ETCE 310A	Foundation Engineering	3	0	0	3	1	CC	ETCE 404A	Earthquake Resistant Design	3	0	0	3							
	2	CC	ETCE 403A	Design of Steel Structure-I	3	1	0	4	2	SE/CC		Departmental Elective	3	1	0	4							
	3	CC		Departmental Elective	3	1	0	4	3	SE	ETCE 408A	Design of Steel Structure-II	3	1	0	4							
	4	CC	ETCE 308A	Transportation Engineering-II	3	1	0	4	4	SE/CC		Departmental Elective	3	1	0	4							
	5	CC	ETCE 411A	Bridge Engineering	3	0	0	3	5	CC	ETCE 452A	Major Project	0	0	12	6							
	6	SE	ETCE 356A	Foundation Engineering Lab	0	0	2	1															
	7	SE	ETCE 352A	Transportation Engineering-II Lab	0	0	2	1															
	8	SE	ETCE 455A	Minor Project	0	0	4	2															
	9	SE	ETCE 481A	Practical Training II	0	0	2	1															
	10	SE		Value added courses	2	0	0	0															
			TOTAL	17	3	10	23				TOTAL	12	3	12	21								
Departmental Electives																							
1	PEC	ETCE 409A	Environmental Impact Assessment	3	1	0	4	8	PEC	ETCE 428A	Geophysical Studies	3	1	0	4								
2	PEC	ETCE 412A	Environmental Pollution & Control	3	1	0	4	9	PEC	ETCE 413A	Disaster Mitigation and Management	3	1	0	4								
3	PEC	ETCE 414A	Solid Waste Management	3	1	0	4	10	PEC	ETCE 418A	Hydro Power Engineering	3	1	0	4								
4	PEC	ETCE 415A	Airport & Harbour Engineering	3	1	0	4	11	PEC	ETCE 419A	Ground Improvement Techniques	3	1	0	4								
5	PEC	ETCE 416A	Pavement Construction & Maintenance	3	1	0	4	12	PEC	ETCE 420A	Railway Engineering	3	1	0	4								
6	PEC	ETCE 417A	Ground Water Development	3	1	0	4	13	PEC	ETCE 424A	Remote Sensing & GIS	3	1	0	4								
7	PEC	ETCE 424A	Remote Sensing & GIS	3	1	0	4	14	PEC	ETCE 426A	Non Destructive Techniques	3	1	0	4								
								15	PEC	ETCE 430A	Artificial Intelligence	3	1	0	4								
											Total Credits [C]				#REF!								

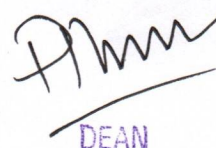

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 Sonria Road, Durgam, (Mumbai)

ETCE 452A	MAJOR PROJECT	C
		4

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. This may be continuation of minor project-I or minor project-II or a new project.



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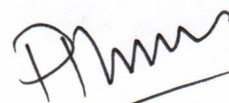
DEAN
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K.R. Mangalam University
Sohna Road, Gurugram
Verified by Dean-SOET

ETCE 454	MAJOR PROJECT	L	T	P	C
		-	-	-	6

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.



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

Verified by Dean-SOET

ETCE 452	MAJOR PROJECT	L	T	P	C
		-	-	-	6

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.



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Sohna Road, Gurugram, (Haryana)



Dean
School of Engineering & Technology (SOET)
K.R. Mangalam University
Sohna road, Gurugram
122101
Verified by Dean-SOET

ETCE 452	MAJOR PROJECT	L	T	P	C
		-	-	-	6

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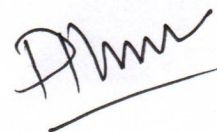
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School of Engineering & Technology (SOET)
K.R. Mangalam University
Sohna Road, Gurugram
Verified by Dean-SOET

ETCE 452	MAJOR PROJECT	L	T	P	C
		-	-	-	6

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