

ODD SEMESTER								EVEN SEMESTER								
Year	SNo	CourseCode	Course Title	L	T	P	C	SNo	Course Code	Course Title	L	T	P	C		
First	1	SE	ETMC121	Principles of Management	3	-	-	3	1	SE	ETEL101	Communication Skills	4	-	-	4
	2	CC	ETCA131	Introduction to Computers & IT, Office Automation	3	1	-	4	2	SE	ETCA231	Database System Concepts	3	1	-	4
	3	SE	ETCH125	Environmental Studies	3	-	-	3	3	SE	ETCA126	Computer Organization & Architecture	3	1	-	4
	4	SE	ETCA 133	Digital Logic	3	1	-	4	4	CC	ETCS112	Object Oriented Programming	3	1	-	4
	5	CC	ETCA135	Introduction to Programming	3	1	-	4	5	CC	ETCA136	Web Technologies	3	1	-	4
	6	SE	ETMA163	Basic of Mathematics	3	1	-	4	6	SE	ETMA144	Differential Equations & Optimization Techniques	3	1	-	4
	7	SE	ETCA161	Introduction to Computers & IT, Office Automation Lab	-	-	2	1	7	SE	ETCA269	Database System Concepts Lab	-	-	2	1
	8	SE	ETCA165	Introduction to Programming Lab	-	-	2	1	8	CC	ETCA164	Web Technologies Lab	-	-	2	1
	9	SE	ETCA 167	Digital Logic Lab	-	-	2	1	9	CC	ETCS166	Object Oriented Programming Lab	-	-	2	1
									10	SE	ETEL171	Communication Skills Lab	-	-	2	1
TOTAL				18	4	6	25	TOTAL				19	5	8	28	

Second	1	CC	ETCS 217	Data Structures	3	1	-	4	1	CC	ETCA232	Foundation of Computer Science	3	1	-	4
	2	CC	ETCS 206	Computer Graphics	3	1	-	4	2	CC	ETCS211	Operating Systems	3	1	-	4
	3	CC	ETCS202	Software Engineering	3	1	-	4	3	CC	ETCS304	Computer Networks	3	1	-	4
	4	CC	ETCS323	Java Programming	3	1	-	4	4	SE	ETMC123	Micro Economics	3	-	-	3
	5	SE	ETCS322	E- Commerce and ERP	3	1	-	4	5	SE	ETCA228	Mobile Application Development	3	1	-	4
	6	SE	ETMA233	Numerical Methods	3	1	-	4	6	SE	ETCA230	System Analysis and Design	3	1	-	4
	7	CC	ETCS 257	Data Structures Lab	-	-	2	1	7	SE	ETCS255	Operating Systems Lab	-	-	2	1
	8	SE	ETCS258	Computer Graphics Lab	-	-	2	1	8	SE	ETCA264	Mobile Application Development Lab	-	-	2	1
	9	CC	ETCS252	Software Engineering Lab	-	-	2	1	9	CC	ETCS365	Computer Networks Lab	-	-	2	1
	10	CC	ETCS361	Java Programming Lab	-	-	2	1	10	SE	ETCA380	Seminar	-	-	2	1
TOTAL				18	6	8	28	TOTAL				18	6	8	28	

Note: Practical training will be of four weeks duration at the end of fourth Semester during summer break and the evaluation will be done at the end of fifth Semester.

Third	1	CC	ETCS306	Data Warehousing and Data Mining	3	1	-	4	1	CC	ETCS422	Cloud Computing	3	1	-	4
	2	CC	ETCA227	Web Based Programming using PHP	3	1	-	4	2	CC	ETCA324	Net Framework	3	1	-	4
	3	CC	ETCA325	Linux Environment	3	1	-	4	3	CC	ETCA326	Enterprise Computing in JAVA	3	1	-	4
	4	CC	ETCS314	Mobile Computing	3	1	-	4	4	SE	ETCA362	Cloud Computing Lab	-	-	2	1
	5	CC	ETCS214	Theory of Computation	3	1	-	4	5	SE	ETCA364	Net Framework Lab	-	-	2	1
	6	SE	ETCA267	Web Based Programming Using PHP Lab	-	-	2	1	6	SE	ETCA366	Enterprise Computing in JAVA Lab	-	-	2	1
	7	SE	ETCS362	Data Warehousing and Data Mining Lab	-	-	2	1	7	SE	ETCA368	Major Project	-	-	6	3
	8	SE	ETCA365	Linux Environment Lab	-	-	2	1	8	Elective (with Lab)						
	9	SE	ETCA367	Practical Training	-	-	2	1	(i)	CC	ETCA328	Multimedia Technologies	3	1	-	4
									SE	ETCA370	Multimedia Technologies Lab	-	-	2	1	
								(ii)	CC	ETCA 330	Network Security & Cryptography	3	1	-	4	
								SE	ETCA372	Network Security & Cryptography Lab	-	-	2	1		
								(iii)	CC	ETCA 332	Software Testing	3	1	-	4	
								SE	ETCA374	Software Testing Lab	-	-	2	1		
TOTAL				15	5	8	24	TOTAL				12	4	14	23	
Total Hours: Lect [L]+Prac [P]+Tut [T]											181					
Total Credits [C]											155					


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Year	SNo	CourseCode	Course Title	L	T	P	C	SNo	Course Code	Course Title	L	T	P	C	
First	1	ETMC121A	SE Management Thoughts and Applications	3	-	-	3	1	ETEL 101A	SE Communication Skills	4	-	-	4	
	2	ETCA131A	CC Introduction to Computers & IT, Office Automation	3	1	-	4	2	ETCS112A	CC Object Oriented Programming	3	1	-	4	
	3	ETCS103A	CC Programming for Problem Solving	3	1	-	4	3	ETCS316A	CC WebTechnologies	3	1	-	4	
	4	ETMA163A	SE Basics of Mathematics	3	1	-	4	4	ETMA144A	SE Differential Equations & Optimization Techniques	3	1	-	4	
	5	ETCH 125A	SE Environmental Studies	3	-	-	3	5	ETCA 164A	SE Web Technologies Lab	-	-	2	1	
	6	ETCA161A	SE Introduction to Computers & IT, Office Automation Lab	-	-	2	1	6	ETCS166A	SE Object Oriented Programming Lab	-	-	2	1	
	7	ETCS153A	SE Programming for Problem Solving Lab	-	-	2	1	7	ETEL 171A	SE Communication Skills Lab	-	-	2	1	
	8		SE Open Elective - I	6	-	-	6	8		SE Open Elective - II	6	-	-	6	
TOTAL				21	3	4	26	TOTAL				19	3	6	25

Second	1	ETCS217A	CC Data Structures	3	1	-	4	1	ETCS222A	CC Computer Organization & Architecture	3	1	-	4	
	2	ETEC210A	SE Digital Electronics	3	1	-	4	2	ETCS307A	CC Database Management Systems	3	1	-	4	
	3	ETCS219A	CC Foundation of Computer Systems	3	1	-	4	3	ETCA326A	CC Enterprise Computing in JAVA	3	1	-	4	
	4	ETCS 211A	CC Operating Systems	3	1	-	4	4	SMMC123A	SE Business Applications Of Economics	3	-	-	3	
	5	ETCS323A	CC Java Programming	3	1	-	4	5	ETCA228A	CC Mobile Application Development	3	1	-	4	
	6	ETCS 257A	SE Data Structures Lab	-	-	2	1	6	ETCA366A	SE Enterprise Computing in JAVA Lab	-	-	2	1	
	7	ETEC 256A	SE Digital Electronics Lab	-	-	2	1	7	ETCS 355A	SE Database Management Systems Lab	-	-	2	1	
	8	ETCS361A	SE Java Programming Lab	-	-	2	1	8	ETCA264A	SE Mobile Application Development Lab	-	-	2	1	
	9	ETCA268A	SE Seminar	-	-	2	1	9	ETDM301A	SE Disaster Management	3	-	-	3	
TOTAL				15	5	8	24	TOTAL				18	4	6	25

Note: Practical training will be of six weeks duration at the end of fourth Semester during summer break and the evaluation will be done during fifth Semester.

Third	1	ETCS306A	CC Data Warehousing and Data Mining	3	1	-	4	1	ETCS314A	CC Mobile Computing	3	1	-	4	
	2	ETCA227A	CC Web Based Programming using PHP	3	1	-	4	2	ETCA324A	CC Net Framework	3	1	-	4	
	3	ETCA325A	CC Linux Environment	3	1	-	4	3	ETCS 202A	CC Software Engineering	3	1	-	4	
	4	ETCS304A	CC Computer Networks	3	1	-	4	4	ETCS422A	CC Cloud Computing	3	1	-	4	
	5	ETCS214A	CC Theory of Computation	3	1	-	4	5	ETCA364A	SE Net Framework Lab	-	-	2	1	
	6	ETCA267A	SE Web Based Programming Using PHP Lab	-	-	2	1	6	ETCA362A	SE Cloud Computing Lab	-	-	2	1	
	7	ETCS362A	SE Data Warehousing and Data Mining Lab	-	-	2	1	7	ETCA368A	SE Major Project	-	-	6	3	
	8	ETCA365A	SE Linux Environment Lab	-	-	2	1	8	Elective (with Lab)						
	9	ETCA367A	SE Practical Training	-	-	2	1	(i)	ETCA328A	CC Multimedia Technologies	3	1	-	4	
	10		Value Added Courses	2	-	-	-	(ii)	ETCA370A	SE Multimedia Technologies Lab	-	-	2	1	
TOTAL				15	5	8	24	(ii)	ETCA 330A	CC Network Security & Cryptography	3	1	-	4	
								(iii)	ETCA372A	SE Network Security & Cryptography Lab	-	-	2	1	
								(iii)	ETCA 332A	CC Software Testing	3	1	-	4	
									ETCA374A	SE Software Testing Lab	-	-	2	1	
TOTAL								TOTAL				15	5	12	26
Total Credits [C]												150			

Value Added Courses			
VAC101	SE	SELF DEVELOPMENT	2 - - -
VAC102	SE	PREPARING STUDENTS FOR FUTURE ROLES	2 - - -
VAC103	SE	UNIVERSAL HUMAN VALUES AND PROFESSIONAL ETHICS	2 - - -
VAC104	SE	ETIQUETTE FOR PROFESSIONALS	2 - - -
VAC105	SE	CITIES FOR PEOPLE	2 - - -
VAC106	SE	INDIAN CONSTITUTION	2 - - -
VAC107	SE	ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE	2 - - -
VAC108	SE	BOUTIQUE MANAGEMENT	2 - - -
VAC109	SE	UNDERSTANDING ADOLESCENTS BEHAVIOR	2 - - -
VAC110	SE	TIME MANAGEMENT	2 - - -


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ETCA368	MAJOR PROJECT	L	T	P	C
		-	-	6	3


The project can be developed in any technology desired by student. However, the same should be duly approved by the department. The same should be completed in VI Semester itself and will be evaluated through a panel of examiners consisting of the following:

Chairperson of Department: Chairperson
Project coordinator: Member
External expert: To be appointed by the University

The student will be required to submit two copies of his/her project report to the department for record (one copy each for the department and participating teacher).



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ETCA368	MAJOR PROJECT	L	T	P	C
		-	-	6	3

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Chairperson of Department: Chairperson

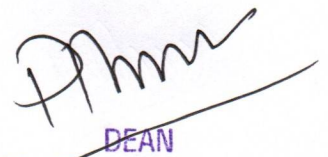
Project coordinator: Member

External expert: To be appointed by the University

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ETCA368	MAJOR PROJECT	L	T	P	C
		-	-	6	3

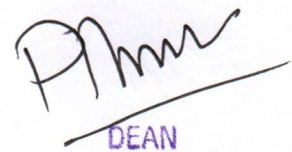
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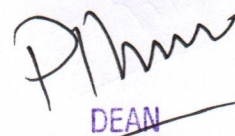
ETCA368A MAJOR PROJECT (Credit 3)

The assignment to normally include:

1. Review and finalization of the Approach to the Problem relating to the assigned topic.
2. Preparing an Action Plan for conducting the investigation, including team work.
3. Detailed Analysis/Modelling/Simulation/Design/ProblemSolving/Experiment as needed.
4. Final development of product/process, testing, results, conclusions and future directions.
5. Preparing a report in the standard format for being evaluated by the Department.
6. Final project presentation before a Departmental Committee.



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ETCS368A	Major Project	L	T	P	C
Version 1.0		-	-	-	6
Pre-requisites/Exposure	--				
Co-requisites	--				

The course is designed to provide an opportunity to students to demonstrate the ability to devise, select and use a range of methodologies and tools to the Chosen/Given project, applying the theoretical knowledge to a real life situation. Experiential Learning outside classroom through self-exploration, practical experience, Industry, field experience, live experience, research, design projects etc.

The learning process in the Project seeks out and focuses attention on many latent attributes, which do not surface in the normal class room situations. These experiential learning attributes through project includes Intellectual ability, Professional judgment and decision making ability, Inter-disciplinary approach, Skills for data handling, Ability in written and oral presentation, Sense of responsibility Developing professional Skills Application of theory, concepts in given industry /practical / field scenario.

Course Outcomes

On completion of this course, the students will be able to

- CO1. Use applied scientific knowledge to identify and implement relevant principles of mathematics and computer science.
- CO2. Use the relevant tools necessary for engineering practice.
- CO3. Define overall needs and constraints to solve a problem and develop/ design a prescribed engineering sub-system.
- CO4. Communicate effectively and learn to be a team player.

Catalog Description

Students are expected make a project based on the latest advancements related to the parent branch of Engineering. Students may opt for an in-disciplinary project (if feasible).

The project may be a complete hardware or a combination of hardware and software under the guidance of a Supervisor from the Department. This is expected to provide a good training for the student(s) in technical aspects

Student will be continuously evaluated during the semester in form of Project Progress Seminars. At the end of the semester, assessment of the research/project work of each student will be made by the board of examiners including supervisors on the basis of a viva-voce examination and the report submitted by the student.

Course Content

The assignment to normally include:

1. Review and finalization of the Approach to the Problem relating to the assigned topic.
2. Preparing an Action Plan for conducting the investigation, including team work.
3. Detailed Analysis/Modelling/Simulation/Design/Problem Solving/Experiment as needed.
4. Final development of product/process, testing, results, conclusions and future directions.

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5. Preparing a report in the standard format for being evaluated by the Department.
6. Final project presentation before a Departmental Committee.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination

Examination Scheme:


Components	Quiz	Attendance	Mid Term Exam	Presentation/ Assignment/ etc.	End Term Exam
Weightage (%)	10	10	20	10	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	Mapped Program Outcomes
CO1	Use applied scientific knowledge to identify and implement relevant principles of mathematics and computer science.	PO3
CO2	Use the relevant tools necessary for engineering practice.	PO5
CO3	Define overall needs and constraints to solve a problem and develop/ design a prescribed engineering sub-system.	PO3
CO4	Communicate effectively and learn to be a team player.	PO10

		Ethical and Professional Issues	Project Management	Application of Concepts	Life-long Learning	Project management and finance	Communication	Individual or team work	Ethics	Environment and sustainability	The engineer and society	Modern tool usage	Conduct investigations of complex problems	Design/development of solutions	Problem analysis	Engineering Knowledge
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
ETCS368A	Major Project			3		2					3					3

1=weakly mapped
2= moderately mapped
3=strongly mapped


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