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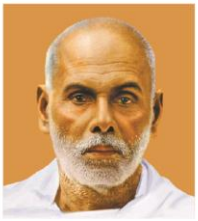

COURSE PLAN

Sree Narayana Guru College
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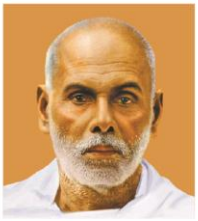

COURSE PLAN

THEORY

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE PLAN SCHEDULE

Name of the faculty	Nimisha M.K
Designation	Assistant Professor
Faculty department name	Computer Science and Engineering
Name of the course with course code	CST 205 OBJECT ORIENTED PROGRAMMING USING JAVA
Department to which this course is offered	Computer Science and Engineering
Semester	THIRD
Academic Year	2022-23

1. COURSE OVERVIEW

This course is to enable learners to solve problems by breaking it down to object level while designing software and to implement it using Java. This course covers Object Oriented Principles, Object Oriented Programming in Java, Inheritance, Exception handling, Event handling, multithreaded programming and working with window-based graphics. This course helps the learners to develop Desktop GUI Applications, Mobile applications, Enterprise Applications, Scientific Applications and Web based Applications.

2. COURSE OBJECTIVE

- To introduce basic concepts of object oriented design and programming in java.
- To give a thorough understanding of java languages
- To provide basic exposure to basic of multithreading, data connectivity etc.
- To impart the techniques of GUI based applications.

3. PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES

I. PROGRAM OUTCOMES

- ENGINEERING KNOWLEDGE
- PROBLEM ANALYSIS
- DESIGN / DEVELOPMENT OF SOLUTION
- CONDUCT INVESTIGATION OF COMPLEX PROBLEMS
- MODERN TOOL USAGE
- THE ENGINEER AND SOCIETY
- ENVIORNMENT AND SUSTAINABILITY
- ETHICS
- INDIVIDUAL AND TEAM WORK

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- COMUNICATION
- PROJECT MANAGEMENT AND FINANCE
- LIFE LONG LEARNING

II. PROGRAM SPECIFIC OUTCOME

- PSO1:-**Computer Science Specific Skills:** The ability to identify, analyze and design solutions for complex engineering problems in multidisciplinary areas by understanding the core principles and concepts of computer science.
- PSO2:-**Programming and Software Development Skills:** The ability to acquire programming efficiency by designing algorithms and applying standard practices in software project development to deliver quality software products.

4. COURSE OUTCOME

CO 1: To introduce basic concepts of object oriented design techniques and to understand the basis of java language.

CO 2: To get thorough knowledge of java languages and to utilize the features of java like datatypes, operators, control statements etc and how to use the object oriented concepts - classes, objects ,constructors, data hiding, inheritance and polymorphism.

CO 3: To understand the utilization of built in packages & interfaces and to illustrate how robust programs can be written in Java using exception handling mechanism , Input/ Output Streams and Files in Java to develop programs

CO 4: To provide basic exposure for the application of programs in Java using multithreading , String handling mechanism ,collection framework and event handling mechanisms.

CO 5: To impart the techniques of creating GUI based applications and database connectivity.

COURSE MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	M	L	L	L								L	M	L
CO2	M	M	M	L								L	L	L
CO3	M	M	L	L						L		L	M	L
CO4	M	M	M	L								L	L	L
CO5	L	M	M	L								L	L	L

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5. SYLLABUS

Course No.	Course Name	L-T-P - Credits	Year of Introduction
CST 205	OBJECT ORIENTED PROGRAMMING USING JAVA	3-1-0-4	2019

COURSE PLAN

Module	Contents	Hours
I	Approaches to Software Design - Functional Oriented Design, Object Oriented Design, Case Study of Automated Fire Alarm System. Object Modeling Using Unified Modeling Language (UML) – Basic Object Oriented concepts, UML diagrams, Use case model, Class diagram, Interaction diagram, Activity diagram, State chart diagram. Introduction to Java - Java programming Environment and Runtime Environment, Development Platforms -Standard, Enterprise. Java Virtual Machine (JVM), Java compiler, Bytecode, Java applet, Java Buzzwords, Java program structure, Comments, Garbage Collection, Lexical Issues.	8
II	Primitive Data types - Integers, Floating Point Types, Characters, Boolean. Literals, Type Conversion and Casting, Variables, Arrays, Strings, Vector class. Operators - Arithmetic Operators, Bitwise Operators, Relational Operators, Boolean Logical Operators, Assignment Operator, Conditional (Ternary) Operator, Operator Precedence. Control Statements - Selection Statements, Iteration Statements and Jump Statements. Object Oriented Programming in Java - Class Fundamentals, Declaring Objects, Object Reference, Introduction to Methods, Constructors, ***this*** Keyword, Method Overloading, Using Objects as Parameters, Returning Objects, Recursion, Access Control, Static Members, Final Variables, Inner Classes, Command Line Arguments, Variable Length Arguments. Inheritance - Super Class, Sub Class, The	11

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	Keyword ***super***, protected Members, Calling Order of Constructors, Method Overriding, the Object class, Abstract Classes and Methods, using ***final*** with Inheritance.	
III	Packages and Interfaces - Defining Package, CLASSPATH, Access Protection, Importing Packages, Interfaces. Exception Handling - Checked Exceptions, Unchecked Exceptions, ***try*** Block and ***catch*** Clause, Multiple ***catch*** Clauses, Nested ***try*** Statements, ***thro throws*** and ***finally***. Input/output - I/O Basics, Reading Console Input, Writing Console Output, Print Writer Class, Object Streams and Serialization, Working with Files.	**8**
IV	Java Library - String Handling – String Constructors, String Length, Special String Operations - Character Extraction, String Comparison, Searching Strings, Modifying Strings, using valueOf(), Comparison of String Buffer and String. Collections framework - Collections overview, Collections Interfaces- Collection Interface, List Interface. Collections Class – ArrayList class. Accessing a Collection via an Iterator. Event handling - Event Handling Mechanisms, Delegation Event Model, Event Classes, Sources of Events, Event Listener Interfaces, Using the Delegation Model. Multithreaded Programming - The Java Thread Model, The Main Thread, Creating Thread, Creating Multiple Threads, Synchronization, Suspending, Resuming and Stopping Threads.	**10**
V	Swings fundamentals - Swing Key Features, Model View Controller (MVC), Swing Controls, Components and Containers, Swing Packages, Event Handling in Swings, Swing Layout Managers, Exploring Swings –JFrame, JLabel, The Swing Buttons, JTextField. Java DataBase Connectivity (JDBC) - JDBC overview, Creating and Executing Queries – create table, delete, insert, select.	**8**

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Text Book:

1. Herbert Schildt, Java: The Complete Reference, 8/e, Tata McGraw Hill, 2011.
2. Rajib Mall, Fundamentals of Software Engineering, 4th edition, PHI, 2014.
3. Paul Deitel, Harvey Deitel, Java How to Program, Early Objects 11th Edition, Pearson, 2018.

References:

1. Y. Daniel Liang, Introduction to Java Programming, 7/e, Pearson, 2013.
2. Nageswararao R., Core Java: An Integrated Approach, Dramatic Press, 2008.
3. Flanagan D., Java in A Nutshell, 5/e, O'Reilly, 2005.
4. Barclay K., J. Savage, Object Oriented Design with UML and Java, Elsevier, 2004.
5. Sierra K., Head First Java, 2/e, O'Reilly, 2005.
6. Balagurusamy E., Programming JAVA a Primer, 5/e, McGraw Hill, 2014.

6. TEACHING PLAN

MODULE 1

Sl No:	Topic	Hours	Mode of Delivery	Planned Date	Actual Date	Course Outcome Number
1.1	Approaches to Software Design- Functional Oriented Design, Object- Oriented Design, Case Study of Automated Fire Alarm System.	1	L	12/9/'22	12/9/'22.	1
1.2	Object Modeling Using UML – Basic object oriented concepts	1	L	13/9/'22	13/9/'22	1
1.3	Basic object oriented concepts	1	L	14/9/'22	13/9/'22	1
1.4	UML diagrams, Use case model	1	T	16/9/'22	14/9/'22	1
1.5	Class diagram, Interaction diagram	1	L	19/9/'22	14/9/'22	1
1.6	Activity diagram, State chart diagram	1	L	20/9/'22	16/9/'22	1
1.7	Java programming Environment and Runtime Environment, Development Platforms - Standard, Enterprise. JVM, Java compiler, Bytecode	1	L	23/9/'22	24/9/'22	1
1.8	Java applet, Java Buzzwords, Java program structure, Comments,	1	L	26/9/'22	26/9/'22	1

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	Garbage Collection, Lexical Issues					
MODULE 2						
2.1	Core Java Fundamentals: Primitive Data types, Integers, Floating Point Types, Characters, Boolean	1	L	30/9/'22	27/9/22	2
2.2	Literals, Type Conversion and Casting, Variables, Arrays, Strings, Vector class.	1	L	3/10/'22	28/9/'22	2
2.3	Operators: Arithmetic Operators, Bitwise Operators, Relational Operators, Boolean Logical Operators, Assignment Operator, Conditional (Ternary) Operator, Operator Precedence.	1	L	10/10/'22	30/9/22 1/10/22	2
2.4	Control Statements: Selection Statements, Iteration Statements and Jump Statements.	1	L	10/10/'22	7/10/'22	2
2.5	Object Oriented Programming in Java: Class Fundamentals, Declaring Objects, Object Reference, Introduction to Methods	1	L	11/10/'22	10/10/'22	2
2.6	Constructors, ***this*** Keyword, Method Overloading, Using Objects as Parameters	1	L	12/10/'22	12/10/'22	2
2.7	Returning Objects, Recursion, Access Control, static Members	1	L	14/10/'22	13/10/'22	2
2.8	Final Variables, Inner Classes, Command-Line Arguments, Variable Length Arguments	1	L	17/10/'22	14/10/'22	2
2.9	Inheritance : Super class, Sub class, the keywords ***super***, ***protected*** Members,	1	L	18/10/'22 19/10/'22	17/10/22	2
2.10	Calling Order of Constructors, Method Overriding, the Object class,	1	L	21/10/'22	18/10/'22	2

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2.11	Abstract Classes and Methods, Using ***final*** with Inheritance	1	L	25/10/'22 26/10/'22	19/10/'22	2
	MODULE 3					
3.1	Packages and Interfaces: Defining Package, CLASSPATH, Access Protection, Importing Packages	1	T	28/10/'22	21/10/'22	3
3.2	Interfaces	1	L	31/10/'22	26/10/'22 28/10/'22	3
3.3	Input / Output: I/O Basics, Reading Console Input, Writing Console Output, Print Writer Class	1	L	1/11/'22	2/11/'22	3
3.4	Object Streams and Serialization	1	L	2/11/'22	2/11/'22	3
3.5	Working with Files	1	L	4/11/'22	9/11/'22	3
3.6	Exception Handling: Checked Exceptions, Unchecked Exceptions, ***try*** Block and ***catch*** Clause	1	T	8/11/'22	31/10/'22 1/11/'22	3
3.7	Multiple ***catch*** Clauses, Nested ***try*** Statements	1	L	9/11/'22	26/11/'22	3
3.8	***throw***, ***throws*** and ***finally***	1	L	11/11/'22	28/11/'22	3
	MODULE 4					
4.1	Java Library: String Handling – String Constructors, String Length, Special String Operations	1	L	14/11/'22	29/11/'22	4
4.2	Character Extraction, String Comparison, Searching Strings, Modifying Strings Using valueOf( ), Comparison of String Buffer and String.	1	T	15/11/'22 16/11/'22	30/11/'22	4
4.3	Collections framework – Collections overview, Collections Interfaces- Collection Interface	1	L	18/11/'22	2/12/'22	4
4.4	List Interface, Collections Class – ArrayList Class	1	L	21/11/'22	2/12/'22	4

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4.5	Accessing Collections via an Iterator.	1	L	22/11/22	3/12/'22	4
4.6	Event handling: Event Handling Mechanisms, Delegation Event Model	1	L	23/11/'22	5/12/'22	4
4.7	Delegation Event Model, Event Classes	1	L	25/11/'22	5/12/'22	4
4.8	Sources of Events, Event Listener Interfaces, Using the Delegation Model	1	L	29/11/'22 30/11/'22	6/12/'22	4
4.9	Multithreaded Programming: The Java Thread Model, The Main Thread, Creating Thread	1	T	2/12/'22	6/12/'22	4
4.10	Creating Multiple Threads, Synchronization, Suspending, Resuming and Stopping Threads.	1	L	5/12/'22	6/12/'22	4
	MODULE 5					
5.1	Swings fundamentals, Swing Key Features	1	T	6/12/'22	7/12/'22	5
5.2	MVC, Swing Controls, Components and Containers	1	L	7/12/'22	7/12/'22	5
5.3	Swing Packages, Event Handling in Swings.	1	L	9/12/'22	7/12/'22	5
5.4	Swing Layout Managers	1	L	12/12/'22	14/12/'22	5
5.5	Exploring Swings –JFrame, JLabel, The Swing Buttons, JTextField.	1	L	13/12/'22	14/12/'22	5
5.6	JDBC overview, Creating and Executing Queries create table, delete, insert, select (Basics only, DBMS course is not prerequisite).	1	T	14/12/'22 16/12/'22	15/12/'22	5
5.7	Creating and Executing Queries – create table, delete, insert, select.	1	L	19/12/'22 20/12/'22	15/12/'22	5
5.8	Creating and Executing Queries – create table, delete, insert, select.	1	T	21/12/'22.	16/12/'22 31/1/'22	5

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MODE OF DELIVERY: LECTURE / TUTORIAL / ASSIGNMENT / PRACTICAL

7. GRADING METHODS

Module	Series Test	Assignment	Class Test	Quiz	Tutorial
1	X				X
2	X				X
3	X				X
4	X				X
5	X				X

8. GAPS IN THE SYLLABUS

Sl No	Topic	Remedy	Affected CO	Affected PO	Affected PSO
1	HTML	learning materials	1,2,3,4,5	1,2,3,4,12	1

9. CONTENT BEYOND SYLLABUS

Sl No	Topic	Remedy	Affe cted CO	Affected PO	Affected PSO
1	Eclipse	Self study materials given.	1,5	1,2,3,4,12	1

10. SUBJECT HISTORY

- ✓ Year Of Introduction of the subject – 2019
- ✓ Faculty Handled Just before this time –Ms.NIMISHA M.K
- ✓ Pass Percentage during last three years – 62
- ✓ Target Pass Percentage – 69.6

11. Any other important matter to be brought into consideration:

Nil

Manual Prepared by:

NIMISHA M.K
ASSISTANT PROFESSOR
DEPARTMENT OF CSE

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Approved by:

VEENA K.K
ASSISTANT PROFESSOR
DEPARTMENT OF CSE

Dated signature of faculty member

31/8/'22.

Dated signature of Module Coordinator

31/8/22

Dated signature of HOD

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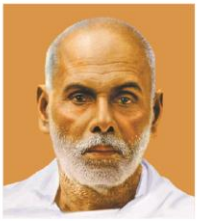

COURSE PLAN

LAB

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

COURSE PLAN SCHEDULE – LABORATORY COURSE

Name of the faculty	**JACOB THOMAS**
Designation	**ASSISTANT PROFESSOR**
Faculty department name	**MECHANICAL DEPARTMENT**
Name of the course with course code	**MEL 332: COMPUTER AIDED DESIGN AND ANALYSIS LAB.**
Semester	**SIXTH**
Academic Year	**2022-2023**

1. **COURSE OVERVIEW:** - The course is designed to train students to have hand on experience on using various application software for design and analysis of any type of projects in the platform of mechanical engineering. Students will be introduced to a team working environment where they develop the necessary skills for planning, preparing and executing an engineering project.
2. **COURSE OBJECTIVE**

To introduce students to the basics and standards of engineering design and analysis related to machine components.

To make students familiarize with different solid modelling and analysis software.

To convey the principles and requirements of modelling and analysis of machine elements.

To introduce the preparation of part modelling and assembly modelling of machineries.

To introduce standard CAD packages to perform Finite Element Analysis of machine parts.

PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES

I. PROGRAM OUTCOMES

- ENGINEERING KNOWLEDGE
- PROBLEM ANALYSIS
- DESIGN / DEVELOPMENT OF SOLUTION
- CONDUCT INVESTIGATION OF COMPLEX PROBLEMS
- MODERN TOOL USAGE
- THE ENGINEER AND SOCIETY
- ENVIORNMENT AND SUSTAINABILITY
- ETHICS
- INDIVIDUAL AND TEAM WORK
- COMUNICATION
- PROJECT MANAGEMENT AND FINANCE
- LIFE LONG LEARNING

II. PROGRAM SPECIFIC OUTCOME

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PSO1: Develop and implement new ideas on product design and development with the help of CAD/CAM tools while ensuring best manufacturing practices
PSO2: Able to integrate and apply knowledge in the solution of interdisciplinary engineering problems.

3. COURSE OUTCOME

CO1: Gain working knowledge in Computer Aided Design and modelling procedures.
CO2: Gain knowledge in creating solid machinery parts.
CO3: Gain knowledge in assembling machine elements.
CO4: Gain working knowledge in Finite Element Analysis.
CO5: Solve simple structural, heat and fluid flow problems using standard software.

COURSE MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	H									M				
CO2	H		L							H				
CO3	H	H							M	M				
CO4	H	L	H					L	M	H				
CO5	H	H	M					M	H	H				

4. SYLLABUS

SL.NO	PART - A (Minimum 6 models)	COURSE OUTCOMES	HOURS
1	Creation of high end part models (minimum 2 models, Questions for examinations must not be taken from this portions)	CO1, CO2	6
2	Creating assembly models of Socket and spigot joint, Knuckle Joint, Rigid flange couplings, Bushed Pin flexible coupling, Plummer block, Single plate clutch and Cone friction clutch. Pipe joints, Screw jack, Tail stock etc. (minimum 4 models)	CO1, CO2, CO3	12
	PART – B (Minimum 6 problems)		
3	Structural analysis. (minimum 3 problems)	CO4, CO5	6
4	Thermal analysis. (minimum 2 problems)	CO4, CO5	3
5	Fluid flow analysis. (minimum 1 problem)	CO4, CO5	3

5. TEXT BOOKS:

1. Daryl Logan, A First course in Finite Element Method, Thomson Learning, 2007
2. David V Hutton, Fundamentals of Finite Element Analysis, Tata McGraw Hill,2003
3. Ibrahim Zeid, CAD/ CAM Theory and Practice, McGraw Hill, 2007
4. Mikell P. Groover and Emory W. Zimmer, CAD/ CAM – Computer aided design and manufacturing, Pearson Education,1987
5. T. R. Chandrupatla and A. D. Belagundu, Introduction to Finite Elements in Engineering, Pearson Education, 2012

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TEACHING PLAN

CYCLE 1				
Exp No:	**Planned Date**	**EXPERIMENT NAME**	**COURSE OUTCOME**	**Actual Date**
1	7/2/23	Part modelling	1,2	14/02/23
2	14/2/23	Part modelling	1,2	28/02/23
3	21/2/23	Gib and Cotter joint	1,2,3	07/03/23
4	28/2/23	Rigid flanged coupling	1,2,3	14/03/23
5	7/3/23	Knuckle joint assembly	1,2,3	21/03/23
6	14/3/23	Plummer block assembly	1,2,3	28/03/23
7	21/3/23	Structural analysis	4,5	04/04/23
8	28/3/23	Structural analysis	4,5	11/04/23
9	4/4/23	Structural analysis	4,5	11/03/23
10	11/4/23	Motion study of Screw and Nut	4,5	18/04/23
11	18/4/23	Thermal analysis	4,5	18/06/23
12	25/4/23	Fluid flow analysis	4,5	20/06/23

6. **Subject History**
   - ✓ Year Of Introduction of the lab – 2019
   - ✓ Faculty Handled Just before this time – Jacob Thomas
   - ✓ Pass Percentage during last three years – 100%
   - ✓ Target Pass Percentage – 100%
7. Any other important matter to be brought into consideration:

Manual Prepared by:

<JACOB THOMAS, AP ME>

Approved by: Athul Raj PP

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<, AP ME>

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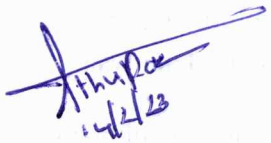
Dated signature of Module Coordinator 

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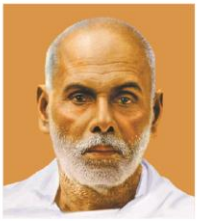

COURSE PLAN

PROJECT

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

COURSE PLAN SCHEDULE

Name of the faculty	LEENA NARAYANAN / VANI R/MEERA M
Designation	ASSISTANT PROFESSOR
Faculty department name	ELECTRONICS AND COMMUNICATION ENGINEERING
Name of the course with course code	ECD416 PROJECT PHASE II
Department to which this course is offered	ELECTRONICS AND COMMUNICATION ENGINEERING
Semester	EIGHTH
Academic Year	2022-23

1. COURSE OVERVIEW

- The course 'Project Work' is mainly intended to evoke the innovation and invention skills in a student.
- The course will provide an opportunity to synthesize and apply the knowledge and analytical skills learned, to be developed as a prototype or simulation.

2. COURSE OBJECTIVES

- To apply engineering knowledge in practical problem solving.
- To foster innovation in design of products, processes or systems.
- To develop creative thinking in finding viable solutions to engineering problems.

3. PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES

I. PROGRAM OUTCOMES

- ENGINEERING KNOWLEDGE
- PROBLEM ANALYSIS
- DESIGN / DEVELOPMENT OF SOLUTION
- CONDUCT INVESTIGATION OF COMPLEX PROBLEMS
- MODERN TOOL USAGE
- THE ENGINEER AND SOCIETY
- ENVIORNMENT AND SUSTAINABILITY
- ETHICS

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- INDIVIDUAL AND TEAM WORK
- COMMUNICATION
- PROJECT MANAGEMENT AND FINANCE
- LIFE LONG LEARNING

II. PROGRAM SPECIFIC OUTCOMES

PSO 1 - To demonstrate skills of students in designing, implementing and testing analog and digital electronic circuits, including microprocessor systems, for signal processing, communication, networking, VLSI and embedded systems applications.

PSO 2 - Apply their knowledge and skills to conduct experiments and develop applications using electronic design automation (EDA) tools.

4. COURSE OUTCOMES

CO 1: Students will be able to Model and solve real world problems by applying knowledge across domains.

CO 2: Students will be able to Develop products, processes or technologies for sustainable and socially relevant applications.

CO 3: Students will be able to Function effectively as an individual and as a leader in diverse teams and to comprehend and execute designated tasks.

CO 4: Students will be able to Plan and execute tasks utilizing available resources within timelines, following ethical and professional norms.

CO 5: Students will be able to Identify technology/research gaps and propose innovative/creative solutions.

CO 6: Students will be able to Organize and communicate technical and scientific findings effectively in written and oral forms.

5. COURSE MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	M	M	M	L	M	M	M	L	L	L	L	M	H	M
CO2	M	M	M		L	H	H	L	L		L	L	H	H
CO3									H	M	M	L		
CO4					M			H	M	M	H	M		
CO5	M	H	H	L	M							L	H	M
CO6					M			M	M	H	L	L		

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6. COURSE PLAN

In depth study of the topic: **1 week**
Review and finalization of the approach to the problem: **1 week**
Action plan for conducting the investigation: **1 week**
Detailed Analysis/ Modeling / Simulation/ Design/ Problem Solving: **1 week**
Experimenting the work:**1 week**
Testing the results: **1 week**
Final development of product: **1 week**
Preparation of Phase II report: **1 week**

7. PRESENTATION PLAN FOR PROJECT

Presentation Number	Planned Date	Actual Date	Theme of evaluation	Percentage of marks considered for final calculation
0	03.02.2023 10.02.2023 17.02.2023	03/02/2023 17/02/2023	IN DEPTH STUDY OF THE TOPIC	
1	27.02.2023 03.03.2023	06/03/2023	FIRST INTERIM EVALUATION AND FINALIZATION OF THE APPROACH TO THE PROBLEM	25%
2	10.03.2023	13/03/2023	ACTION PLAN FOR CONDUCTING THE INVESTIGATION	
3	15.03.2023 16.03.2023	27/03/2023 30/03/2023	DETAILED ANALYSIS/DESIGN/ PROBLEM SOLVING	
4	30.03.2023 31.03.2023	03/04/2023	EXPERIMENTING THE WORK	
5	04.04.2023	5/4/2023	SECOND INTERIM EVALUATION	25%
6	10.04.2023 12.04.2023	15/5/2023	TESTING THE RESULTS	
7	17.04.2023 19.04.2023 20.04.2023	19/5/2023	FINAL DEVELOPMENT OF PRODUCT	
8	02.05.2023	23/5/2023	FINAL EVALUATION	40%
9	24.05.2023	26/5/2023	PHASE II REPORT	10%

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8. Any other important matter to be brought into consideration:

Manual Prepared by: **LEENA NARAYANAN / VANI R/ MEERA M**

Dated signature of faculty member 4/2/'23

Dated signature of Module Coordinator 4/2/23

Dated signature of HOD 4/2/23

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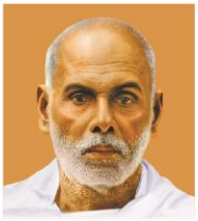

COURSE PLAN

SEMINAR

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

COURSE PLAN SCHEDULE

Name of the faculty	Mr. VAISHAKH M NAYANAR/ARCHANA CP/ABHILASH KRISHNAN T K
Faculty department name	EEE
Name of the course with course code	EEQ 413 SEMINAR
Department to which this course is offered	EEE
Semester	7th
Academic Year	2022-2023

COURSE OVERVIEW

The course 'Seminar' is intended to enable a B.Tech graduate to read, understand, present and prepare report about an academic document. The learner shall search in the literature including peer reviewed journals, conference, books, project reports etc., and identify an appropriate paper/thesis/report in her/his area of interest, in consultation with her/his seminar guide. This course can help the learner to experience how a presentation can be made about a selected academic document and also empower her/him to prepare a technical report

COURSE OBJECTIVE

1. To do literature survey in a selected area of study.
2. .To understand an academic document from the literate and to give a presentation about it.
3. To prepare a technical report

PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES

I. PROGRAM OUTCOMES

- ENGINEERING KNOWLEDGE
- PROBLEM ANALYSIS
- DESIGN / DEVELOPMENT OF SOLUTION
- CONDUCT INVESTIGATION OF COMPLEX PROBLEMS
- MODERN TOOL USAGE

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- THE ENGINEER AND SOCIETY
- ENVIORNMENT AND SUSTAINABILITY
- ETHICS
- INDIVIDUAL AND TEAM WORK
- COMUNICATION
- PROJECT MANAGEMENT AND FINANCE
- LIFE LONG LEARNING

II. PROGRAM SPECIFIC OUTCOME

- **PSO 1** -An ability to analyse and design electrical machinery, electrical and electronic circuits,electrical and solid state drive systems, lightning systems and deliver technological solution by assimilating advances in allied disciplines
- **PSO 2**–Able to provide socially acceptable technical solution to complex electrical engineering problems with the application of modern and appropriate techniques for sustainable development

III. COURSE OUTCOME

CO1	Identify academic documents from the literature which are related to her/his areas of interest (Cognitive knowledge level: **Apply**).
CO2	Read and apprehend an academic document from the literature which is related to her/ his areas of interest (Cognitive knowledge level: **Analyze**).
CO3	Prepare a presentation about an academic document (Cognitive knowledge level: **Create**).
CO4	Give a presentation about an academic document (Cognitive knowledge level: **Apply**).
CO5	Prepare a technical report (Cognitive knowledge level: **Create**).

COURSE MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	1	1		2	1					3
CO2	3	3	2	3		2	1					3
CO3	3	2			3			1		2		3
CO4	3				2			1		3		3
CO5	3	3	3	3	2	2		2		3		3

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3 - STRONG, 2 - MEDIUM, 1 – WEEK

Abstract POs defined by National Board of Accreditation			
PO#	**Broad PO**	**PO#**	**Broad PO**
PO1	Engineering Knowledge	PO7	Environment and Sustainability
PO2	Problem Analysis	PO8	Ethics
PO3	Design/Development of solutions	PO9	Individual and team work
PO4	Conduct investigations of complex problems	PO10	Communication
PO5	Modern tool usage	PO11	Project Management and Finance
PO6	The Engineer and Society	PO12	Life long learning

IV. SYLLABUS

General Guidelines

- The Department shall form an Internal Evaluation Committee (IEC) for the seminar with academic coordinator for that program as the Chairperson/Chairman and seminar coordinator & seminar guide as members. During the seminar presentation of a student, all members of IEC shall be present.
- Formation of IEC and guide allotment shall be completed within a week after the University examination (or last working day) of the previous semester.
- Guide shall provide required input to their students regarding the selection of topic/ paper.
- Choosing a seminar topic: The topic for a UG seminar should be current and broad based rather than a very specific research work. It's advisable to choose a topic for the Seminar to be closely linked to the final year project area. Every member of the project team could choose or be assigned Seminar topics that covers various aspects linked to the Project area.

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- A topic/paper relevant to the discipline shall be selected by the student during the semester break.
- Topic/Paper shall be finalized in the first week of the semester and shall be submitted to the IEC.
- The IEC shall approve the selected topic/paper by the second week of the semester.
- Accurate references from genuine peer reviewed published material to be given in the report and to be verified.

SEMINAR PLAN

STAGES	PLANNED DATE	ACTUAL DATE	THEME OF EVALUATION	PERCENTAGE OF MARKS CONSIDERED FOR FINAL CALCULATION
1	28/09/22	28/09/22	Topic Selection	20%
2	12/10/22	27/10/2022	Zeroth Review	20%
3	19/10/22	[illegible]	Zeroth Review	
4	26/10/22	30/11/2022	1st review	20%
5	09/11/22	02/12/2022	2nd review	20%
6	16/11/22	10/12/2022	Report Submission draft	20%
7	23/11/22	15/12/2022	Report Submission final	

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Manual Prepared by:

Mr. VAISHAKH M NAYANAR/Ms.ARCHANA CP/.

Approved by:

PROF.RAVEENDRAN K ,HOD EEE

Dated signature of faculty member 14/09/22.

Dated signature of Module Coordinator 14/09/22.

Dated signature of HOD 14/9/22

HOD (EEE)

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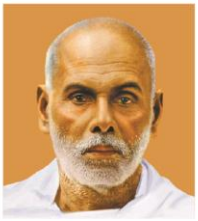

COURSE PLAN

COMPREHENSIVE COURSE WORK

SREE NARAYANA GURU COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

COURSE PLAN SCHEDULE

Name of the faculty	Ms. REVATHI P
Designation	Assistant Professor
Faculty department name	Civil Engineering
Name of the course with course code	**CET 308 Comprehensive Course Work**
Department to which this course is offered	Civil Engineering
Semester	VI
Academic Year	2022-23

1. **COURSE OVERVIEW**
   The course is designed to ensure that the student have firmly grasped the foundational knowledge in Civil Engineering familiar enough with the technological concepts. It provides an opportunity for the students to demonstrate their knowledge in various Civil Engineering subjects.
2. **COURSE OBJECTIVE**
   1.To practice more with core subjects for cracking Gate, placement test and other competitive examinations
3. **PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES**

I. PROGRAM OUTCOMES

- ENGINEERING KNOWLEDGE
- PROBLEM ANALYSIS
- DESIGN / DEVELOPMENT OF SOLUTION
- CONDUCT INVESTIGATION OF COMPLEX PROBLEMS
- MODERN TOOL USAGE
- THE ENGINEER AND SOCIETY
- ENVIORNMENT AND SUSTAINABILITY
- ETHICS
- INDIVIDUAL AND TEAM WORK
- COMUNICATION
- PROJECT MANAGEMENT AND FINANCE
- LIFE LONG LEARNING

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II. PROGRAM SPECIFIC OUTCOME

III. **PSO 1** –Demonstrate in-depth knowledge in the analysis, design, experimental research and construction aspects of civil engineering structures

IV. **PSO 2** –Apply the concept of sustainability in Civil Engineering

4. COURSE OUTCOME

- **CO 1** Learn to prepare for a competitive examination
- **CO 2** : Comprehend the questions in Civil Engineering field and answer them with confidence
- **CO 3** Communicate effectively with faculty in scholarly environments ·
- **CO 4** : Analyze the comprehensive knowledge gained in basic courses in the field of Civil Engineering

5. COURSE MAPPING

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	3	1	1			2							1	1
CO2	3	1				2			3					
CO3	3	1			1	2			3					1
CO4	3	3			1	2								

6. SYLLABUS

CET 201- Mechanics of Solids
CET 203- Fluid Mechanics and Hydraulics
CET 205- Surveying& Geomatics
CET 204- Geotechnical Engineering I
CET 309–Construction Technology and Management

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7. TEACHING PLAN

SL No:	TOPIC	No of Lectures
1	**Mechanics of Solids**	
1.1	Mock Test on Module 1 and Module 2	1
1.2	Mock Test on Module 3, Module 4 and Module 5	1
2	**Fluid Mechanics and Hydraulics**	1
2.1	Mock Test on Module 1, Module 2 and Module 3	1
2.2	Mock Test on Module 4 and Module 5	1
3	**Surveying& Geomatics**	1
3.1	Mock Test on Module 1 and Module 2	1
3.2	Mock Test on Module 3, Module 4 and Module 5	1
3.3	Feedback and Remedial	1
4	**Geotechnical Engineering I**	1
4.1	Mock Test on Module 1, Module 2 and Module 3	1
4.2	Mock Test on Module 4 and Module 5	1
5	**Construction Technology and Management**	1
5.1	Mock Test on Module 1, Module 2 and Module 3	1
5.2	Mock Test on Module 4 and Module 5	1
6	**Construction Technology and Management**	1
6.1	Mock Test on Module 1, Module 2 and Module 3	1
6.2	Mock Test on Module 4 and Module 5	1
6.3	Feedback and Remedial	1

8. Subject History

- ✓ Year of Introduction of the Subject – 2022
- ✓ Faculty Handled Just before this time – Dr. Susan Abraham
- ✓ Pass Percentage during last three years – 66.67%
- ✓ Target Pass Percentage – 85
- ✓ The following is the formula for calculating the target percentage of a subject.

9. Any other important matter to be brought into consideration:

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Manual Prepared by:

Ms. REVATHI P

ASSISTANT PROFESSOR

DEPARTMENT OF CE

Approved by:

Dr. Susan Abraham
Associate Professor
Department of CE

Dated signature of faculty member

3/2/23

Dated signature of Module Coordinator

3/2/23

Dated signature of HOD

3/2/23.

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