



**K L Deemed to be University**  
**Department of Computer Science and Engineering-Honors -- KLAZIZ**  
**Course Handout**  
**2024-2025, Even Sem**

Course Title	:FRONT END WEB DEVELOPMENT (EPAM)
Course Code	:22CS2241F
L-T-P-S Structure	: 2-0-2-0
Pre-requisite	:
Credits	: 3
Course Coordinator	:Miriya Trinath Basu
Team of Instructors	:
Teaching Associates	:

**Syllabus :**Git Basics: Understand of distributed version control system and its features, Set-up Git in your system, create branches and track files, create repository in Git and GitHub, describe merging, cloning, resolving conflicts and raising a PR flow with reviewers. Web fundamentals: HTML5 Basics-DOMTree, Semantic HTML5, CSS Basics: CSS3 Features, CSS Layouts, Responsive Design- Responsive Web - Media Queries, CSS Frameworks- Flexbox, CSSgrid Data Types, Functions, Error and Storage, Date and Regular expression DOM Events, OOP Introduction: Understand Object prototype, Object. defineproperty, Methods on objects, extending objects, Array prototype, understand prototype chain, Understand OOP in JS, Inheritance using ES5, Inheritance using ES6, Async JS NodeJS: NodeJS fundamentals, Call-back, Events and event loop, event emitter, node modules and package. Json, Nodejs Module system and patterns, CommonJS, ES6. React: ReactJS Fundamentals, Introducing JSX, Overview, Rendering Elements, Components and Props, State and Lifecycle Overview of React, elements and components, JSX Composition over inheritance, how browsers handle render, reflow/repaint VDOM concept + Fiber.js inv16 Dev infrastructure: webpack, babel, source-maps, react-hot-loader, react-dev-tools, (react-create app). Introduction to Web Development, Introduction to Typescript, Typescript Basics: Directives Basics, Attribute Directives, Host Listener, Host Binding, Built in Directives, Structural Directives, Create Structural Directive, Angular Component Life Cycle Hooks Introduction to Angular- Angular Architecture Angular Version History Angular CLI Basics, Setup Angular Project Angular Project Structure Components Modules Angular App Bootstrapping, Angular Decorators

**Text Books :** 1 Murach's HTML5 and CSS3 Zak Ruvalcaba, Anne Boehm Mike Murach & Associates 2018  
 2 JavaScript: The Definitive Guide: Master the World's Most-Used Programming Language David Flanagan O'Reilly Media 2020  
 3 Learning React: Functional Web Development with React and Redux Alex Banks O'Reilly Media 2017  
 4 Murach's HTML5 and CSS3 Zak Ruvalcaba, Anne Boehm Packt Publishing 2020

**Reference Books :** 1. Murach's HTML5 and CSS3 Zak Ruvalcaba, Anne Boehm 4th Edition Mike Murach & Associates  
 2. JavaScript: The Definitive Guide: Master the World's Most-Used Programming Language David Flanagan 7th Edition O'Reilly Media  
 3. Learning React: Functional Web Development with React and Redux Alex Banks 1st Edition O'Reilly Media  
 4. Angular for Enterprise-Ready Web Applications Doguhan Uluca 2nd Edition Packt Publishing

**Web Links :** <https://developer.mozilla.org/en-US/> <https://legacy.reactjs.org/docs/getting-started.html>  
<https://angular.io/docs>

**MOOCS :** 1. <https://www.coursera.org/professional-certificates/meta-front-end-developer>  
 2. <https://www.coursera.org/learn/single-page-web-apps-with-angularjs> <https://www.coursera.org/projects/modern-javascript-es6-basics>  
 3. [https://www.linkedin.com/learning/angular-essential-training-2?trk=learning-serp\\_learning-search-card\\_search-card&upsellOrderOrigin=default\\_guest\\_learning](https://www.linkedin.com/learning/angular-essential-training-2?trk=learning-serp_learning-search-card_search-card&upsellOrderOrigin=default_guest_learning)  
 4. [https://www.linkedin.com/learning/react-design-patterns?trk=learning-serp\\_learning-search-card\\_search-card&upsellOrderOrigin=default\\_guest\\_learning](https://www.linkedin.com/learning/react-design-patterns?trk=learning-serp_learning-search-card_search-card&upsellOrderOrigin=default_guest_learning)

**COURSE OUTCOMES (COs):**

<b>CO NO</b>	<b>Course Outcome (CO)</b>	<b>PO/PSO</b>	<b>Blooms Taxonomy Level (BTL)</b>
CO1	Apply the concepts of HTML5 and CSS3 for static web application	PSO1,PO1,PO5	3
CO2	Apply the concepts of JavaScript to develop client-side web application	PSO1,PO1,PO5	3
CO3	Apply concepts of advanced UI Designing using extended JavaScript	PSO1,PO1,PO5	3
CO4	Apply concepts of ngx, npm, and typescript to build a dynamic web application, Angular framework to build dynamic web application.	PSO2,PO1,PO5	3
CO5	Apply the web application using various technologies like HTML, CSS, JavaScript, and typescript using React/Angular framework	PSO2,PO1,PO5	3

**COURSE OUTCOME INDICATORS (COIs)::**

<b>Outcome No.</b>	<b>Highest BTL</b>	<b>COI-1</b>	<b>COI-2</b>
CO1	3	<b>Btl-2</b> Understand of Git installation and Commands to interact with repository	<b>Btl-3</b> Applying the HTML Tags to design a static web pages using CSS
CO2	3	<b>Btl-2</b> Understating the Concepts of Javascript basics, data types, Regular Expressions	<b>Btl-3</b> Applying DOM Events for designing the dynamic web pages
CO3	3	<b>Btl-2</b> Understand the Architecture of NodeJS	<b>Btl-3</b> Apply the NodeJS concepts for accessing low-level recourses
CO4	3	<b>Btl-2</b> Understand the structure of Type-Scripts, annotations, and Angular Architecture to build web applications	<b>Btl-3</b> Apply the Typescript concepts for creating web application based architecture, web components for application using Life cycle of Angular and its components using directives
CO5	3	<b>Btl-3</b> Develop the web application using various technologies like HTML,CSS, javascript, typescript	

**PROGRAM OUTCOMES & PROGRAM SPECIFIC OUTCOMES (POs/PSOs)**

<b>Po No.</b>	<b>Program Outcome</b>
PO1	Engineering Knowledge:Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Problem Analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences

PO3	Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations
PO4	Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions for complex problems that cannot be solved by straightforward application of knowledge, theories and techniques applicable to the engineering discipline.
PO5	Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
PO6	The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice
PO9	Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions
PO11	Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.
PSO1	An ability to design and develop software projects as well as Analyze and test user requirements.
PSO2	An Ability to gain working Knowledge on emerging software tools and technologies.

### Lecture Course DELIVERY Plan:

Sess.No.	CO	COI	Topic	Book No[CH No][Page No]	Teaching-Learning Methods	Evaluation Components
1	CO1	COI-1	Git Basics: Understand of distributed version control system and its features	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)
2	CO1	COI-1	Set-up Git in your system, create branches and track files, create arepository in Git and GitHub	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)
3	CO1	COI-1	Describe merging, cloning, resolving conflicts and raising a PR flow with reviewers	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)

Sess.No.	CO	COI	Topic	Book No[CH No][Page No]	Teaching-Learning Methods	EvaluationComponents
4	CO1	COI-2	Web fundamentals: HTML5 Basics-DOMTree, Semantic HTML5	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)
5	CO1	COI-2	CSS Basics: CSS3 Features, CSS Layouts, Responsive Design-Responsive Web - Media Queries	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)
6	CO1	COI-2	CSS Frameworks-Flexbox, CSSgrid Data Types	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)
7	CO1	COI-2	Functions, Error and Storage, Date and Regular expression DOM Events	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)
8	CO2	COI-1	OOP Introduction: Understand Object prototype, Object	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)
9	CO2	COI-1	Define property, Methods on objects, extending objects	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)
10	CO2	COI-1	Array prototype, understand prototype chain, Understand OOP in JS, Inheritance using ES5	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)
11	CO2	COI-2	Inheritance usingES6, Async JS NodeJS: NodeJS fundamentals	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)
12	CO2	COI-2	Call-back, Events and event loop, event emitter, node modules and package	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-I (MCQ)
13	CO2	COI-2	Json, Nodejs Module system andpatterns, CommonJS, ES6.	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs

Sess.No.	CO	COI	Topic	Book No[CH No][Page No]	Teaching-Learning Methods	EvaluationComponents
						Review,Semester in Exam-I (MCQ)
14	CO3	COI-1	React: ReactJS Fundamentals, Introducing JSX, Overview, Rendering Elements	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)
15	CO3	COI-1	Components and Props, State and Lifecycle	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)
16	CO3	COI-1	Overview of React, elements and components	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)
17	CO3	COI-2	JSX Composition over inheritance	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)
18	CO3	COI-2	How browsers handle render, reflow/repaint VDOM concept + Fiber.js inv16 Dev infrastructure: webpack, babel	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)
19	CO3	COI-2	Source-maps, react-hot-loader, react-dev-tools, (react-create app).	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)
20	CO4	COI-1	Introduction to Web Development, Introduction to Typescript	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)
21	CO4	COI-1	Typescript Basics: Directives Basics, Attribute Directives, Host Listener, Host Binding	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)
22	CO4	COI-1	Built in Directives, Structural Directives, Create Structural Directive, Angular	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)

Sess.No.	CO	COI	Topic	Book No[CH No][Page No]	Teaching-Learning Methods	EvaluationComponents
			Component Life Cycle Hooks			
23	CO4	COI-1	Introduction to Angular- Angular Architecture Angular Version History Angular CLI Basics	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Skill In-Sem Exam-II
24	CO4	COI-2	Setup Angular Project Angular Project Structure	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)
25	CO4	COI-2	Components Modules Angular App Bootstrapping	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)
26	CO4	COI-2	Angular Decorators	T1	Chalk,LTC,PPT,Talk	ALM,End Semester Exam Online,MOOCs Review,Semester in Exam-II (MCQ)

### Lecture Session wise Teaching – Learning Plan

**SESSION NUMBER : 1**

**No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Git Basics: Understand of distributed version control system and its features	3	PPT	One minute paper
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 2**

**No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE

				---
40	Set-up Git in your system, create branches and track files, create arepository in Git and GitHub	3	PPT	Peer Review
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 3****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Describe merging, cloning, resolving conflicts and raising a PR flow with reviewers	3	PPT	Seminars
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 4****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Web fundamentals: HTML5 Basics-DOMTree, Semantic HTML5	3	PPT	Fish Bowl
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 5****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	CSS Basics: CSS3 Features, CSS Layouts, Responsive Design- Responsive Web - Media Queries	3	PPT	Debate
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 6****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	CSS Frameworks- Flexbox, CSSgrid Data Types	3	PPT	Video synthesis
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 7****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Functions, Error and Storage, Date and Regular expression DOM Events	3	PPT	Brain storming session
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 8****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	OOP Introduction: Understand Object prototype, Object	3	PPT	Immediate feedback
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 9****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
-----------	-------	-----	---------------------------	-------------------------



5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Define property, Methods on objects, extending objects	3	PPT	Idea Pitching
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 10**

**No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Array prototype, understand prototype chain, Understand OOP in JS, Inheritance using ES5	3	PPT	Quiz/Test Questions
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 11**

**No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Inheritance usingES6, Async JS NodeJS: NodeJS fundamentals	3	PPT	Case Study
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 12**

**No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Call-back, Events and event loop, event emitter, node modules and package	3	PPT	Shadowing

5	summary	3	Talk	--- NOT APPLICABLE ---
---	---------	---	------	---------------------------

**SESSION NUMBER : 13****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Json, Nodejs Module system and patterns, CommonJS, ES6.	3	PPT	Leading question
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 14****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	React: ReactJS Fundamentals, Introducing JSX, Overview, Rendering Elements	3	PPT	Puzzle, Enigma, Contradiction
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 15****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Components and Props, State and Lifecycle	3	PPT	Puzzle, Enigma, Contradiction
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 16**

**No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Overview of React, elements and components	3	PPT	Think / Pair / Share
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 17****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	JSX Composition over inheritance	3	PPT	Quiz/Test Questions
5	summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 18****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	How browsers handle render, reflow/repaint VDOM concept + Fiber.js inv16 Dev infrastructure: webpack, babel	3	PPT	Just in-time teaching
5	Summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 19****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
-----------	-------	-----	---------------------------	-------------------------

5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Source-maps, react-hot-loader, react-dev-tools, (react-create app).	3	PPT	Just in-time teaching
5	Summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 20**

**No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Introduction to Web Development, Introduction to Typescript	3	PPT	Online Discussion Forums
5	Summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 21**

**No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Typescript Basics: Directives Basics, Attribute Directives, Host Listener, Host Binding	3	PPT	Gallery Walks
5	Summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 22**

**No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Built in Directives, Structural Directives, Create Structural Directive, Angular Component Life Cycle Hooks	3	PPT	Idea Pitching

5	Summary	3	Talk	--- NOT APPLICABLE ---
---	---------	---	------	---------------------------

**SESSION NUMBER : 23****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Introduction to Angular- Angular Architecture Angular Version History Angular CLI Basics	3	PPT	Sketching & Drawing
5	Summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 24****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Setup Angular Project Angular Project Structure	3	PPT	Design Charrettes
5	Summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 25****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Components Modules Angular App Bootstrapping	3	PPT	Model-Building Activity
5	Summary	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 26**

**No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
40	Angular Decorators	3	PPT	Statement-Opinion-Summary
5	Summary	3	Talk	--- NOT APPLICABLE ---

**Tutorial Course DELIVERY Plan:** NO Delivery Plan Exists

**Tutorial Session wise Teaching – Learning Plan**

No Session Plans Exists

**Practical Course DELIVERY Plan:**

Tutorial Session no	Topics	CO-Mapping
1	Working with Gitlab: Create a Gitlab account in case you don't have it or update the existing one	CO5
2	Working with HTML5 Tags:you should create the same page as shown in the picture - task/template.png by using HTML tags and attributes only. All relevant text (which is used in the template) can be found in the file task/content.txt. Please note that navigation menu should be working.	CO5
3	Basics of CSS: You need to create a print version of the web page. In the following pictures, you will see mock-ups which represent almost finished site (this is what you need to achieve).	CO5
4	Introduction to JavaScript:You need to calculate the profit of the deposit account. Workflow: User inputs initial amount of money. (Use prompt function).	CO5
5	JavaScript Datatypes (Objects):Write a JavaScript function that reverse an integer number. reverseNumber(12345) // returns 54321 reverseNumber(-56789) // returns -98765	CO5
6	JavaScript Functions: Write function, which returns filtered array based on function, which passed as a parameter	CO5
7	JavaScript Functions: Write function, which returns filtered array based on function, which NOT passed any parameters	CO5
8	Error Storages Identify the error storage by considering various Applications	CO5

<b>Tutorial Session no</b>	<b>Topics</b>	<b>CO-Mapping</b>
9	JS DOM Events:Write all of the tasks inside the index.js and an index.html file. For each task, you should create HTML template. Template for each task should be available in index.html file (each task has a special block, that separated by the comment). For providing styles, use styles.css file. (the same situation as for HTML template, each task has its own style block).	CO5
10	Java Script BOM: Write a program to build puzzle game make use of BOM Objects	CO5
11	JavaScript OOPs Concepts and react Hooks: Implement react hooks by using student grade system	CO5
12	Student application by using angular: implement Student Grade and all academic details by using angular	CO5

### Practical Session wise Teaching – Learning Plan

#### SESSION NUMBER : 1

No Session Outcomes are mapped

<b>Time(min)</b>	<b>Topic</b>	<b>BTL</b>	<b>Teaching-Learning Methods</b>	<b>Active Learning Methods</b>
5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---
25	Execution of the program	3	Talk	--- NOT APPLICABLE ---
10	VIVA	3	Talk	--- NOT APPLICABLE ---

#### SESSION NUMBER : 2

No Session Outcomes are mapped

<b>Time(min)</b>	<b>Topic</b>	<b>BTL</b>	<b>Teaching-Learning Methods</b>	<b>Active Learning Methods</b>
5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---

25	Execution of the program	3	Talk	--- NOT APPLICABLE ---
10	VIVA	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 3****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---
25	Execution of the program	3	Talk	--- NOT APPLICABLE ---
10	VIVA	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 4****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---
25	Execution of the program	3	Talk	--- NOT APPLICABLE ---
10	VIVA	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 5****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
-----------	-------	-----	---------------------------	-------------------------



5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---
25	Execution of the program	3	Talk	--- NOT APPLICABLE ---
10	VIVA	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 6****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---
25	Execution of the program	3	Talk	--- NOT APPLICABLE ---
10	VIVA	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 7****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---
25	Execution of the program	3	Talk	--- NOT APPLICABLE ---
10	VIVA	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 8**

**No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---
25	Execution of the program	3	Talk	--- NOT APPLICABLE ---
10	VIVA	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 9****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---
25	Execution of the program	3	Talk	--- NOT APPLICABLE ---
10	VIVA	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 10****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---
25	Execution of the program	3	Talk	--- NOT APPLICABLE ---

10	VIVA	3	Talk	--- NOT APPLICABLE ---
----	------	---	------	---------------------------

**SESSION NUMBER : 11****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---
25	Execution of the program	3	Talk	--- NOT APPLICABLE ---
10	VIVA	3	Talk	--- NOT APPLICABLE ---

**SESSION NUMBER : 12****No Session Outcomes are mapped**

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	3	Talk	--- NOT APPLICABLE ---
60	Explanation of the program	3	PPT	--- NOT APPLICABLE ---
25	Execution of the program	3	Talk	--- NOT APPLICABLE ---
10	VIVA	3	Talk	--- NOT APPLICABLE ---

**Skilling Course DELIVERY Plan:** NO Delivery Plan Exists**Skilling Session wise Teaching – Learning Plan**

No Session Plans Exists

**WEEKLY HOMEWORK ASSIGNMENTS/ PROBLEM SETS/OPEN ENDED PROBLEM-SOLVING EXERCISES etc:**

Week	Assignment Type	Assignment No	Topic	Details	co
------	-----------------	---------------	-------	---------	----

**COURSE TIME TABLE:**

	Hour	1	2	3	4	5	6	7	8	9
Day	Component									
<b>Mon</b>	Theory	--	--	--	--	--	--	--	--	--
	Tutorial	--	--	--	--	--	--	--	--	--
	Lab	--	--	--	--	--	--	--	--	--
	Skilling	--	--	--	--	--	--	--	--	--
<b>Tue</b>	Theory	--	--	--	--	--	--	--	--	--
	Tutorial	--	--	--	--	--	--	--	--	--
	Lab	--	--	--	--	--	--	--	--	--
	Skilling	--	--	--	--	--	--	--	--	--
<b>Wed</b>	Theory	H-S6	H-S6	H-S2	H-S2	H-S5	H-S5	---	---	---
	Tutorial	--	--	--	--	--	--	---	---	---
	Lab	--	--	--	--	--	--	---	---	---
	Skilling	--	--	--	--	--	--	---	---	---
<b>Thu</b>	Theory	H-S8	H-S8	H-S4	H-S4	H-S3	H-S3	--	--	---
	Tutorial	--	--	--	--	--	--	--	--	---
	Lab	--	--	--	--	H-S6	H-S6	H-S2	H-S2	---
	Skilling	--	--	--	--	--	--	--	--	---
<b>Fri</b>	Theory	H-S1	H-S1	--	--	H-S7	H-S7	--	--	---
	Tutorial	--	--	--	--	--	--	--	--	---
	Lab	--	--	H-S5	H-S5	--	--	H-S3	H-S3	---
	Skilling	--	--	--	--	--	--	--	--	---
<b>Sat</b>	Theory	--	--	---	---	--	--	--	--	---
	Tutorial	--	--	---	---	--	--	--	--	---
	Lab	H-S7	H-S7	---	---	H-S4	H-S4	H-S1,H-S8	H-S1,H-S8	---
	Skilling	--	--	---	---	--	--	--	--	---
<b>Sun</b>	Theory	--	--	--	--	--	--	--	--	--
	Tutorial	--	--	--	--	--	--	--	--	--
	Lab	--	--	--	--	--	--	--	--	--
	Skilling	--	--	--	--	--	--	--	--	--

**REMEDIAL CLASSES:**

Supplement course handout, which may perhaps include special lectures and discussions that would be planned, and schedule notified according

**SELF-LEARNING:**

Assignments to promote self-learning, survey of contents from multiple sources.

S.no	Topics	CO	ALM	References/MOOCs
------	--------	----	-----	------------------

**DELIVERY DETAILS OF CONTENT BEYOND SYLLABUS:**

Content beyond syllabus covered (if any) should be delivered to all students that would be planned, and schedule notified accordingly.

S.no	Advanced Topics, Additional Reading, Research papers and any	CO	ALM	References/MOOCs
------	--	----	-----	------------------

### EVALUATION PLAN:

Evaluation Type	Evaluation Component	Weightage/Marks		Assessment Dates	Duration (Hours)	CO1	CO2	CO3	CO4	CO5
<b>End Semester Summative Evaluation Total= 40 %</b>	<b>Lab End Semester Exam</b>	Weightage	10		120					10
		Max Marks	50							50
	<b>End Semester Exam (online MCQ)</b>	Weightage	10		180	2.5	2.5	2.5	2.5	
		Max Marks	100			25	25	25	25	
	<b>SEM End Project</b>	Weightage	20		120					20
		Max Marks	50							50
<b>In Semester Formative Evaluation Total= 25 %</b>	<b>Continuous Evaluation - Project</b>	Weightage	5		120					5
		Max Marks	50							50
	<b>Continuous Evaluation - Lab Exercise</b>	Weightage	10		120					10
		Max Marks	50							50
	<b>ALM</b>	Weightage	10		120	2.5	2.5	2.5	2.5	
		Max Marks	50			12.5	12.5	12.5	12.5	
<b>In Semester Summative Evaluation Total= 35 %</b>	<b>Semester in Exam-II (MCQ)</b>	Weightage	10		120			5	5	
		Max Marks	50					25	25	
	<b>Semester in Exam-I (MCQ)</b>	Weightage	10		120	5	5			
		Max Marks	50			25	25			
	<b>Project-Evaluation</b>	Weightage	10		120					10
		Max Marks	50							50
	<b>MOOCs Certification</b>	Weightage	5		120					5
		Max Marks	50							50

### ATTENDANCE POLICY:

Every student is expected to be responsible for regularity of his/her attendance in class rooms and laboratories, to appear in scheduled tests and examinations and fulfill all other tasks assigned to him/her in every course

In every course, student has to maintain a minimum of 85% attendance to be eligible for appearing in Semester end examination of the course, for cases of medical issues and other unavoidable circumstances the students will be condoned if their attendance is between 75% to 85% in every course, subjected to submission of medical certificates, medical case file and other needful documental proof to the concerned departments

### DETENTION POLICY :

In any course, a student has to maintain a minimum of 85% attendance and In-Semester Examinations to be eligible for appearing to the Semester End Examination, failing to fulfill these conditions will deem such student to have been detained in that course.

**PLAGIARISM POLICY :**

Supplement course handout, which may perhaps include special lectures and discussions

**COURSE TEAM MEMBERS, CHAMBER CONSULTATION HOURS AND CHAMBER VENUE DETAILS:**

Supplement course handout, which may perhaps include special lectures and discussions

<b>Name of Faculty</b>	<b>Delivery Component of Faculty</b>	<b>Sections of Faculty</b>	<b>Chamber Consultation Day (s)</b>	<b>Chamber Consultation Timings for each day</b>	<b>Chamber Consultation Room No:</b>	<b>Signature of Course faculty:</b>
Miriyala Basu	L	5-MA,6-MA,7-MA,8-MA	-	-	-	-
Miriyala Basu	P	5-MA,6-MA,7-MA,8-MA	-	-	-	-
Pavan Pagadala	L	1-MA,2-MA,3-MA,4-MA	-	-	-	-
Pavan Pagadala	P	1-MA,2-MA,3-MA,4-MA	-	-	-	-

**GENERAL INSTRUCTIONS**

Students should come prepared for classes and carry the text book(s) or material(s) as prescribed by the Course Faculty to the class.

**NOTICES**

Most of the notices are available on the LMS platform.

All notices will be communicated through the institution email.

All notices concerning the course will be displayed on the respective Notice Boards.

**Signature of COURSE COORDINATOR**

(Miriyala Trinath Basu)

**Signature of Department Prof. Incharge Academics & Vetting Team Member**

Department Of CSE-Honors

**HEAD OF DEPARTMENT:****Approval from: DEAN-ACADEMICS**

(Sign with Office Seal) [object HTMLDivElement]