K L Deemed to be University
Department of Computer Science and Information Technology -- KLVZA
Course Handout
2025-2026, Odd Sem

Course Title	:FRONT END DEVELOPMENT FRAMEWORKS
Course Code	:24SDCS01
L-T-P-S Structure	: 1-0-0-4
Pre-requisite	:
Credits	: 2
Course Coordinator	:Chitti Babu Ravela
Team of Instructors	:
Teaching Associates	:

Syllabus : Introduction to Git and Version Control Systems, Installing Git and Initial Setup, Git Basics (git init, git add, git commit), Understanding Git Workflow, Branching and Merging, Working with Remote Repositories (git clone, git pull, git push), Resolving Merge Conflicts, Git Logs and Viewing History, Git Reset, Revert, and Checkout, Working with .gitignore, Creating and Managing Branches, Basic Git Commands for Daily Use, Introduction to HTML5 structure, Semantic HTML5 tags, Forms and input types, Media elements (audio, video, images), CSS syntax and selectors, Introduction to responsive web design concepts.Advanced HTML5 elements (section, aside, nav, header, footer), HTML5 form enhancements (placeholder, required, autofocus, pattern), CSS positioning (static, relative, absolute, fixed, sticky), CSS media types and feature queries, CSS transitions and keyframe animations, Introduction to JavaScript, JavaScript syntax and data types, operators, functions and arrow functions, conditional statements and loops, objects, arrays, set and maps, DOM manipulation, event handling, ES6+ features (let, const, destructuring, spread/rest operators), promises and async/await, fetch API, form validation, error handling, localStorage and sessionStorage, modular JavaScript, classes and objects, Built In Objects, working with JSON, debugging and developer tools.Introduction to React, JSX syntax and expressions, functional components, props and state management, event handling in React, conditional rendering, list rendering and keys, useEffect and useState hooks, component lifecycle overview, forms and controlled components, React Router for navigation, lifting state up, component communication, structure of React apps, reusable components and atomic design principles, state management using Redux Toolkit, UI libraries like Material UI and Tailwind CSS, deployment using Vite.Context API for global state management, custom hooks for reusable logic, lazy loading and code splitting for performance, error boundaries for robust applications, unit testing with Jest and React Testing Library, introduction to Node.js (event loop, non-blocking I/O), setting up a Node.js project with npm, building a simple server with core modules (http), introduction to Express.js (setup, routing), creating RESTful endpoints (GET, POST), middleware basics (logging, parsing JSON, helmet for security), input validation and sanitization.

Text Books :1.Jon Duckett, HTML and CSS: Design and Build Websites, Wiley, 2011.2.Kyle Simpson, You Don’t Know JS (6-book series), O’Reilly Media, 2014-2019.3.Wes Bos and Scott Tolinski, React for Beginners, Independently Published, 2023.

Reference Books :1.Pro Git by Scott Chacon and Ben Straub, Apress, 2014. 2.Learning React by Alex Banks and Eve Porcello, O’Reilly Media, 2020. 3.Full-Stack React, TypeScript, and Node by David Choi, Packt Publishing, 2020.

Web Links : Git and GitHub for Beginners - https://www.coursera.org/learn/introduction-git-github
JavaScript: The Advanced Concepts - https://www.udemy.com/course/advanced- javascript-concepts/
Next.js & React - The Complete Guide - https://www.udemy.com/course/nextjs-react- the-complete-guide/

MOOCS : Git and GitHub for Beginners - https://www.coursera.org/learn/introduction-git-github
JavaScript: The Advanced Concepts - https://www.udemy.com/course/advanced- javascript-concepts/
Next.js & React - The Complete Guide - https://www.udemy.com/course/nextjs-react- the-complete-guide/

Course Rationale : This course is designed to provide students with a comprehensive foundation in modern web development, covering essential front-end and back-end technologies. The rationale behind the curriculum is to ensure learners gain practical, job-ready skills that reflect current industry demands in full-stack development.
Course Objectives :1. To equip students with skills in version control and front-end development using Git, HTML5, CSS, and JavaScript. 2. To develop proficiency in building interactive web applications using React and modern JavaScript features 3. To enable students to create scalable back-end services and full-stack applications using Node.js, Express.js, and Next.js. 4. To foster problem-solving and debugging skills through hands-on projects and real-world web development practices.

COURSE OUTCOMES (COs):

CO NO	Course Outcome (CO)	PO/PSO	Blooms Taxonomy Level (BTL)
CO1	Apply Git for version control in web development workflows, including branching and remote collaboration. Develop responsive web pages using semantic HTML5, advanced CSS3, and media queries. Implement dynamic functionality using JavaScript, DOM manipulation, and modern ES6+ features.	PO1,PO3,PSO1	3
CO2	Apply React concepts to build dynamic user interfaces using components, hooks, routing, and state management. Implement advanced React features such as Context API, lazy loading, reusable hooks, and UI design libraries. Develop backend services using Node.js and Express.js, including RESTful APIs, middleware, and input validation.	PO1,PO3,PSO1	3
CO6	Apply Git for version control to manage code versions and collaboration in web development projects. Develop responsive web pages using semantic HTML5, advanced CSS3, and media queries. Build dynamic front-end applications using JavaScript, ES6+ features, DOM manipulation, and React fundamentals.	PO1,PO3,PSO1	3

COURSE OUTCOME INDICATORS (COIs)::

Outcome No.	Highest BTL	COI-2	COI-3
CO1	3	**Btl-2** Understanding Git to initialize a repository, track file changes, and manage commits during a web development project.	**Btl-3** Integrate HTML, CSS, and JavaScript in a mini-project to demonstrate version-controlled, responsive, and dynamic web development.
CO2	3	**Btl-2** Understand the client-side routing in a single-page application using React Router.	**Btl-3** Apply full-stack integration by connecting React frontend to Express.js backend through API calls.
CO6	3		**Btl-3** Apply the concepts for Frontend development

PROGRAM OUTCOMES & PROGRAM SPECIFIC OUTCOMES (POs/PSOs)

Po No.	Program Outcome
PO1	Engineering Knowledge:Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
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
PSO1	An ability to Identify, Design, and Analyse complex computer systems, Implement and Interpret the results from those systems.

Lecture Course DELIVERY Plan:

Sess.No.	CO	COI	Topic	Book No[CH No] [Page No]	Teaching-Learning Methods	EvaluationComponents
1	CO1	COI-2	Introduction to Version Control & Git Concepts	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ
2	CO1	COI-2	Understanding Commits and History (log, diff, reset)	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ
3	CO1	COI-2	Branching and Merging Concepts	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ
4	CO1	COI-3	Git Collaboration: clone, push, pull, resolving merge conflicts	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ
5	CO1	COI-3	Forms and Input Types	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ
6	CO1	COI-3	Form Validation and Error Handling	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ
7	CO1	COI-3	Modular JS, Classes, Built-in Objects, JSON	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ
8	CO2	COI-2	Introduction to React, JSX Syntax, Functional Components	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ
9	CO2	COI-2	Props and State Management, Event Handling, Conditional Rendering	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ
10	CO2	COI-2	Hooks: useState and useEffect, Component Lifecycle Overview	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ
11	CO2	COI-3	React Router, Navigation, and List Rendering	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ
12	CO2	COI-	Forms and Controlled	1	LTC,PPT,Talk	ALM,MOOCs

Sess.No.	CO	COI	Topic	Book No[CH No] [Page No]	Teaching-Learning Methods	EvaluationComponents
		3	Components, Lifting State Up			Review,SQ
13	CO2	COI-3	Introduction to Express.js, Routing, REST APIs (GET, POST), Middleware Basics	1	LTC,PPT,Talk	ALM,MOOCs Review,SQ

Lecture Session wise Teaching – Learning Plan

SESSION NUMBER : 1

Session Outcome: 1 Able to understand the Git Basic concepts

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Introduction to Version Control & Git Concepts	2	PPT	Immediate feedback
20	Installing Git & Initial Configuration (git config)	3	PPT	Immediate feedback
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 2

Session Outcome: 1 Able to understand the Git commits

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Understanding Commits and History (log, diff, reset)	2	PPT	Immediate feedback
20	Basic Git Workflow: init, add, commit, status	3	PPT	Immediate feedback
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 3

Session Outcome: 1 Able understand the Branching and Merging Concepts

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

5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Branching and Merging Concepts	2	PPT	Immediate feedback
20	Demonstrate merging flow with diagrams	2	PPT	Immediate feedback
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 4

Session Outcome: 1 Able to Apply Git Collaboration: clone, push, pull, resolving merge conflicts

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Git Collaboration: clone, push, pull, resolving merge conflicts	3	PPT	Immediate feedback
20	Collaborate using GitHub and resolve a conflict	3	PPT	Immediate feedback
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 5

Session Outcome: 1 Able to use Forms and Input Types

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Forms and Input Types	3	PPT	Immediate feedback
20	Create a contact form with validations	3	PPT	Immediate feedback
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 6

Session Outcome: 1 Able to apply Form Validation and Error Handling

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

5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Form Validation and Error Handling	3	PPT	Immediate feedback
20	Add JS-based client-side validation	3	PPT	Immediate feedback
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 7

Session Outcome: 1 Able to apply Modular JS, Classes, Built-in Objects, JSON

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Modular JS, Classes, Built-in Objects, JSON	3	PPT	Immediate feedback
20	Build a mini weather app using modules and API response	3	PPT	Immediate feedback
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 8

Session Outcome: 1 Able to understand React, JSX Syntax, Functional Components

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Introduction to React, JSX Syntax, Functional Components	2	PPT	Immediate feedback
20	Identify JSX structure; create simple functional component	2	PPT	Immediate feedback
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 9

Session Outcome: 1 Able to understand Props and State Management, Event Handling, Conditional Rendering

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Props and State Management, Event Handling, Conditional Rendering	2	PPT	Immediate feedback
20	Build a simple toggle/button interaction component	3	PPT	Case Study
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 10

Session Outcome: 1 Able to understand Hooks: useState and useEffect, Component Lifecycle Overview

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Hooks: useState and useEffect, Component Lifecycle Overview	2	PPT	Immediate feedback
20	reate a counter + API fetcher with useEffect	3	PPT	Case Study
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 11

Session Outcome: 1 Able to apply React Router, Navigation, and List Rendering

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	React Router, Navigation, and List Rendering	3	PPT	Case Study
20	Create a multipage React app with Link, Routes, and map()	3	PPT	Case Study
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 12

Session Outcome: 1 Able to apply Forms and Controlled Components, Lifting State Up

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

5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Forms and Controlled Components, Lifting State Up	3	PPT	Immediate feedback
20	Build a form and manage form data centrally	3	PPT	Case Study
5	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 13

Session Outcome: 1 Able to apply routing and REST API's

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
5	Attendance	1	Talk	--- NOT APPLICABLE ---
20	Introduction to Express.js, Routing, REST APIs (GET, POST), Middleware Basics	3	PPT	Case Study
20	Build CRUD endpoints and log middleware	3	PPT	Case Study
5	Recap	1	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: NO Delivery Plan Exists

Practical Session wise Teaching – Learning Plan

No Session Plans Exists

Skilling Course DELIVERY Plan:

Skilling session no	Topics/Experiments	CO-Mapping
1	Project Initialization and First Commit	CO6
2	Branching and Feature Integration	CO6
3	Responsive Web Page and Git History Exploration	CO6
4	HTML5 and CSS Positioning with Responsive Design	CO6
5	JavaScript DOM Manipulation and Event Handling for Form Validation	CO6

Skilling session no	Topics/Experiments	CO-Mapping
6	ES6+ Features and Asynchronous JavaScript (Weather App)	CO6
7	Modular JavaScript and Working with JSON (Online Bookstore)	CO6
8	To-Do List Application with React Hooks	CO6
9	Book Explorer with React Router and Props	CO6
10	Feedback Collector with Redux Toolkit	CO6
11	Full-Stack Feedback Form with DB	CO6
12	Authentication with NextAuth.js	CO6
13	Authentication with Validation	CO6

Skilling Session wise Teaching – Learning Plan

SESSION NUMBER : 1

Session Outcome: 1 Able to Set up the project with Git and version control

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Initialize Git repository using git init.	3	PPT	Case Study
60	Set up .gitignore and project structure (HTML/CSS/JS folders).	3	PPT	Case Study
60	Add README.md and commit initial files with a message like "Initial commit with project structure".	3	PPT	Case Study
10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 2

Session Outcome: 1 Able to apply collaborative workflows using Git branches

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---

60	Create a new feature branch: git checkout -b feature-header.	3	PPT	Case Study
60	Merge it into the main branch using git merge.	3	PPT	Case Study
60	Push changes to GitHub with git push	3	PPT	Case Study
10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 3

Session Outcome: 1 Able to Apply HTML5 + CSS3 to build a responsive static page and track commits

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Create a responsive layout using Flexbox/Grid.	3	PPT	Case Study
60	Apply multiple commits for different page sections.	3	PPT	Case Study
60	Explore changes using git log, git diff, git checkout.	3	PPT	Case Study
10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 4

Session Outcome: 1 Master semantic HTML5 and layout positioning techniques

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Apply semantic tags like , , ,	3	PPT	--- NOT APPLICABLE ---
60	Apply CSS positions: static, relative, absolute, fixed.	3	PPT	--- NOT APPLICABLE ---
60	Implement a sticky header and responsive nav bar.	3	PPT	--- NOT APPLICABLE ---
10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 5

Session Outcome: 1 Able to Build interactivity and basic client-side validation

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Handle events onclick, onsubmit.	3	PPT	--- NOT APPLICABLE ---
60	Validate form fields empty check, pattern matching	3	PPT	--- NOT APPLICABLE ---
60	Display error messages dynamically using JS	4	PPT	--- NOT APPLICABLE ---
10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 6

Session Outcome: 1 Able to apply modern JavaScript (ES6+) and work with real-time APIs.

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Fetch weather data using fetch() and async/await	3	PPT	--- NOT APPLICABLE ---
60	Apply city-wise weather using API response.	3	PPT	--- NOT APPLICABLE ---
60	Show loading indicators and handle errors gracefully	3	PPT	--- NOT APPLICABLE ---
10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 7

Session Outcome: 1 Able to use Structure code modules and interact with JSON data

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Apply modules: e.g., book.js, cart.js, ui.js	3	PPT	--- NOT APPLICABLE

60	Load book data from a local books.json file.	3	PPT	--- NOT APPLICABLE ---
60	Apply JSON methods: JSON.stringify() and JSON.parse()	3	PPT	--- NOT APPLICABLE ---
10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 8

Session Outcome: 1 Able to Build a dynamic UI using React and useState/useEffect

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Apply TodoList and TodoItem components.	3	PPT	--- NOT APPLICABLE ---
60	Use useState to add/remove/update items	3	PPT	--- NOT APPLICABLE ---
60	Persist to localStorage using useEffect	3	PPT	--- NOT APPLICABLE ---
10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 9

Session Outcome: 1 Able to Apply client-side routing and data passing in React.

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Apply react-router-dom for navigation Routes, Link, useParams	3	PPT	--- NOT APPLICABLE ---
60	Create routes for Home, Book Detail, and About	3	PPT	--- NOT APPLICABLE ---
60	Pass data using props and fetch book details dynamically	3	PPT	--- NOT APPLICABLE ---

10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 10

Session Outcome: 1 Able to Manage global state using Redux Toolkit

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Set up Redux store and slices	3	PPT	--- NOT APPLICABLE ---
60	Create FeedbackForm and FeedbackList components	3	PPT	--- NOT APPLICABLE ---
60	Dispatch actions to add/delete feedback.	3	PPT	--- NOT APPLICABLE ---
10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 11

Session Outcome: 1 Able to Connect frontend with a backend and a database.

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Backend: Node.js + Express.js + MongoDB or SQLite	3	PPT	--- NOT APPLICABLE ---
60	API: Create routes for POST submit feedback, GET list feedback	3	PPT	--- NOT APPLICABLE ---
60	Add success/failure messages based on API response	3	PPT	--- NOT APPLICABLE ---
10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 12

Session Outcome: 1 Able to Implement secure login using third-party OAuth or credentials

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Integrate Next.js + NextAuth.js.	3	PPT	--- NOT APPLICABLE ---
60	Secure routes using useSession hook.	3	PPT	--- NOT APPLICABLE ---
60	Display login/logout UI and restrict access to private routes	3	PPT	--- NOT APPLICABLE ---
10	Recap	1	Talk	--- NOT APPLICABLE ---

SESSION NUMBER : 13

Session Outcome: 1 Able to implement Secure forms with client-side and server-side validation

Time(min)	Topic	BTL	Teaching-Learning Methods	Active Learning Methods
10	Attendance	1	Talk	--- NOT APPLICABLE ---
60	Client: Validate inputs using React Hook Form or custom logic	3	PPT	--- NOT APPLICABLE ---
60	Server: Use express-validator or Zod for field validation.	3	PPT	--- NOT APPLICABLE ---
60	Add password hashing with bcrypt and token generation	3	PPT	--- NOT APPLICABLE ---
10	Recap	1	Talk	--- NOT APPLICABLE ---

WEEKLY HOMEWORK ASSIGNMENTS/ PROBLEM SETS/OPEN ENDEDED 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									

Mon	Theory	---	---	---	---	--	--	---	---	V-S121,V-S122
	Tutorial	---	---	---	---	--	--	---	---	--
	Lab	---	---	---	---	--	--	---	---	--
	Skilling	---	---	---	---	V-S121,V-S121,V-S122,V-S122	V-S121,V-S121,V-S122,V-S122	---	---	--
Tue	Theory	--	--	--	--	--	--	--	--	--
	Tutorial	--	--	--	--	--	--	--	--	--
	Lab	--	--	--	--	--	--	--	--	--
	Skilling	--	--	--	--	--	--	--	--	--
Wed	Theory	---	---	---	---	--	--	---	---	V-S221,V-S222
	Tutorial	---	---	---	---	--	--	---	---	--
	Lab	---	---	---	---	--	--	---	---	--
	Skilling	---	---	---	---	V-S221,V-S221,V-S222,V-S222	V-S221,V-S221,V-S222,V-S222	---	---	--
Thu	Theory	--	--	--	--	---	---	---	---	---
	Tutorial	--	--	--	--	---	---	---	---	---
	Lab	--	--	--	--	---	---	---	---	---
	Skilling	---	---	V-S221,V-S221,V-S222,V-S222	V-S221,V-S221,V-S222,V-S222	---	---	---	---	---
Fri	Theory	--	--	--	--	---	---	---	---	---
	Tutorial	--	--	--	--	---	---	---	---	---

	Lab	- - -	- - -	--	--	---	---	- - -	- - -	---
	Skilling	- - -	- - -	V-S121,V-S121,V-S122,V-S122	V-S121,V-S121,V-S122,V-S122	---	---	- - -	- - -	---
Sat	Theory	- -	- -	--	--	--	--	- -	- -	--
	Tutorial	- -	- -	--	--	--	--	- -	- -	--
	Lab	- -	- -	--	--	--	--	- -	- -	--
	Skilling	- -	- -	--	--	--	--	- -	- -	--
Sun	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	CO6
End Semester Summative Evaluation Total= 40 %	Hackathon-Final Review	Weightage	25		120			25
		Max Marks	50					50
	Skill Sem-End Exam	Weightage	15		120			15
		Max Marks	50					50

In Semester Formative Evaluation Total= 35 %	**Skilling Continuous Evaluation**	Weightage	10		120			10
		Max Marks	50					50
	MOOCs Review	Weightage	5		120	2.5	2.5	
		Max Marks	50			25	25	
	Continuous Evaluation -Project	Weightage	12		120			12
		Max Marks	50					50
	ALM	Weightage	8		120	4	4	
		Max Marks	50			25	25	
In Semester Summative Evaluation Total= 25 %	**Skill In-Sem Exam-I**	Weightage	10		120			10
		Max Marks	50					50
	Skill In-Sem Exam-II	Weightage	10		120			10
		Max Marks	50					50
	Surpize Quiz	Weightage	5		90	2.5	2.5	
		Max Marks	50			25	25	

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

Name of Faculty	Delivery Component of Faculty	Sections of Faculty	Chamber Consultation Day (s)	Chamber Consultation Timings for each day	Chamber Consultation Room No:	Signature of Course faculty:
Surya Kiran Jonnalagadda	S	222-B	-	-	-	-
chandra rai	S	221-B	-	-	-	-
Dineshnath Gopinath	S	221-B	-	-	-	-
ANJU K	S	122-B	-	-	-	-
YENGALA AMARAIAH	S	121-B	-	-	-	-

annamaraju thanuja	S	222-B	-	-	-	-
Gnanadeepthi Bitra	S	121-B	-	-	-	-
K. VaniSri	L	121-MA	-	-	-	-
K. VaniSri	S	121-A	-	-	-	-
KOLLU NAIDU	L	221-MA	-	-	-	-
KOLLU NAIDU	S	221-A	-	-	-	-
Nagaraju TUMIKIPALLI	L	122-MA,222-MA	-	-	-	-
Nagaraju TUMIKIPALLI	S	122-A,222-A	-	-	-	-
Sampathirao Suneetha	S	122-B	-	-	-	-

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

(Chitti Babu Ravela)

Signature of Department Prof. Incharge Academics & Vetting Team Member

Department Of CS&IT

HEAD OF DEPARTMENT:

Approval from: DEAN-ACADEMICS
(Sign with Office Seal) [object HTMLDivElement]