GANPAT UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY

Programme	Bachelor of Technology			Branch/Spec.	Computer Engineering / Information Technology/CE-AI		
Semester	II			Version	2.0.0.1		
Effective from Academic Year		2022-23		Effective for the batch Admitted in			July 2022
Subject code		2ES1111	Subject Name		IT Workshop		

Teaching scheme					Examination scheme (Marks)			
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	-	-	2	-	2	Theory	00	00	00
Hours	-	-	4	-	4	Practical	30	20	50

Pre-requisites
Basic concepts of HTML

Course Outcomes

On successful completion of the course, the students will be able to:

CO1	Describe and utilize JavaScript programming concepts such as variables, arrays, conditionals, and loops.
CO2	Write and deploy JavaScript code to solve practical web design problems.
CO3	Implementing client-side interfaces using BOM, DOM, and AJAX.
CO4	Use Ajax to fetch information from the server and display it on the web page and create web applications with Ajax.
CO5	Apply various Angular features including directives

Theory syllabus
NIL

Practical content		
Unit	Content	Hrs.
1	**JavaScript Basic:** JS Introduction, Javascript popup boxes, JS Output, JS Statements, JS Syntax, JS Comments, JS Variables, JS Operators, JS Data Types.	04
2	**Java Script Controls:** JS Conditions: If , Else If & Switch, JS Loop: For, For In, While & Do While, JS Break, JS Type Conversion, JS Errors: Try, Catch & Throw.	06
3	**Java Script Functions:** Function Definitions, Function Parameters, Function Invocation, Function Call, Function Closures.	04
4	**OOPs Concept:** Class, Object, Constructor, Message Passing, Inheritance, Polymorphism	02
5	**JavaScript Objects:** JS Object: Methods & Properties, JS Array, JS String, JS Date, JS Math, JS Number, JS Boolean, JS Random.	08
6	**JavaScript Browser BOM:** JS Window, JS Screen, JS Location, JS History, JS Navigator, JS Popup Alert, JS Timing, JS Cookies.	06
7	**Java Script HTML DOM:** DOM Introduction, DOM Methods, DOM Document, DOM Elements, DOM HTML, DOM CSS, DOM Animations, DOM Events, DOM Event Listener, DOM Navigation, DOM Nodes, DOM Collections, DOM Node Lists.	08
8	**JavaScript Validation:** JS Regular Expression, JS form validation, JS email validation.	02
9	**JS AJAX:** AJAX Introduction, AJAX XMLHttp, AJAX Request, AJAX Response, AJAX XML File, AJAX Applications, AJAX Examples.	02
10	**AngularJS:** AngularJS Introduction, AngularJS MVC, AngularJS First App, AngularJS Data Binding, AngularJS Expressions, AngularJS Directives, AngularJS Controllers, AngularJS Modules, AngularJS Scopes, AngularJS Dependency, AngularJS Filters, AngularJS Tables, AngularJS Select, AngularJS DOM, AngularJS Forms, AngularJS Validation, AngularJS AJAX, AngularJS Animation.	14
11	**Mini Project:** Implement one small project using the concept of IT Workshop	04

Text Books	
1	Beginning JavaScript – 4th Edition by Paul Wilton, Jeremy McPeak, Wrox Publication
2	Beginning AngularJS 1st Edition,Kindle Edition by Andrew Grant
Reference Books	
1	JavaScript for Absolute Beginners by Terry McNavage. Apress publication
2	AngularJS by Brad Green, Shyam Seshadri, O'REILLY
ICT/MOOCs Reference	
1	http://nptel.ac.in/courses/106105084/25
2	https://www.w3schools.com/js/default.asp
3	https://www.tutorialspoint.com//javascript_online_training/index.asp
4	https://www.javatpoint.com/angularjs-tutorial

Mapping of CO with PO and PSO:															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	1	3	2	3	0	3	0	3	0	3	2	2	3	3
CO2	3	2	3	2	3	0	3	0	3	0	3	2	1	3	2
CO3	3	3	3	2	3	0	3	0	3	0	3	2	2	2	0
CO4	3	3	3	2	3	0	3	0	3	0	3	2	2	2	2
CO5	3	3	3	2	2	0	3	0	3	0	3	2	1	1	0