B.Voc- Software Development

Syllabus

CERTIFICATE COURSE IN ANGULAR JS

Pune District Education Association's

Baburaoji Gholap College, Sangvi, Pune-27.

(To be implemented from Academic Year 2023-2024)

CERTIFICATE COURSE IN ANGULAR JS

COURSE OBJECTIVE: Reduce the amount of code you write to build rich user interface applications.

- Increase the reliability and maintainability of UI by using data binding.
- Retrieve data from back-end server, manipulate it and display it with ease.
- Modularise your code with the custom services and directives.
- Providing two way binding of data.
- Create Single Page Applications (SPA).

COURSE OUTCOME: Using TypeScript and ECMAScript 6 to create components
- Using directives and components to define UI elements, routes and screens
- Working effectively with component lifecycle events
- Injecting dependencies to lessen coupling and increase testability
- Unit testing Angular applications with Karma and Jasmine
- Using property binding to link DOM elements with model data

Course Type	Course Code	Paper Title	Credit		Evaluation		
			Theory (T)	Practical (P)	Theory Exam(TE)	Practical Exam (PE)	Total
CCAJ	CCAJ28	CERTIFICATE COURSE IN ANGULAR JS	1	1	30	40	60

MODULE	TOPIC	Duration
Introduction	- Introduction to AngularJS - MVC Architecture - Conceptual Overview - Setting up the Environment - First Application - Understanding attributes	15
Expressions and Data Biding	- Number and String Expressions - Object Binding and Expressions - Working with Arrays - Forgiving Behavior - Understanding Data binding	10
Working with Directives	- Conditional Directives - Styles Directives - Mouse and Keyboard Events Directives	10
Controllers	- Understanding Controllers - Programming Controllers & $scope object - Adding Behavior to a Scope Object - Passing Parameters to the Methods - Having Array as members in Controller Scope. - Nested Controllers and Scope Inheritance. - Multiple Controllers and their scopes	5
Filters	Built-In Filters	**5**

	• Uppercase and Lowercase Filters • Currency and Number Formatting Filters • OrderBy Filter • Filter Filter • Creating Custom Filter	
Forms	• Using Simple Form • Working with Select and Options • Input Validations • Using CSS classes • Form Events • Custom Model update triggers • Custom Validations	5
Routing	• Introduction to SPA • Creating HTML Templates • Configuring Route Provider.	2
Modules	• Why Module? • Module Loading and Dependencies • Recommended Setup of Application • Creation vs Retrieval.	3
Services	• Understanding Services • Developing Creating Services • Using a Service • Injecting Dependencies in a Service	3
Ajax in AngularJS	• $http Service • $q Service • Ajax Impl using $http and $q Service	2
	Total	**60hr**

Text & Reference Books (Latest revised edition):

1.Web Programming, building internet applications, Chris Bates 2″ edition, Wiley Dreamtech
2.Java Server Pages —Hans Bergsten, SPD O'Reilly,
3.Java Script, D.Flanagan
4.Beginning Web Programming-Jon Duckett WROX.
5.Programming world wide web, R.W.Sebesta, Fourth Edition, Pearson.
Internet and World Wide Web — How to program. Dietel and Nieto, Pearson.

EXAMINATION AND EVALUATION:

ELIGIBILITY:

A candidate is eligible for admission to the Certificate Course Intellectual Property Rights after passing 12th Std. examination (H.S.C. 10 +2) from any stream or equivalent.

EXAMINATION PATTERN:

Internal Assessment:-
1. 40 percent of the total assessment will be done by internal examination.
2. One internal examination will be conducted for theory in mid time of the course.
3. The pattern of examination will be oral for theory.
4. The practical assessment is done on the basis of the assignments submission during the practical session.
5. Subject teachers have to design assignments for students according to syllabus during practical session.
6. The in-house teachers are responsible for conduction and coordination of the internal theory as well as practical examination.

Term end examination:
1. 60 percent of the total assessment will be done in term end examination.
2. There will be 3 hours practical exam and 1 hour oral exam for each student.
3. Examiners: 2 lecturer level examiners will be appointed (one internal examiner and one external examiner)

Setting of Question Papers (Applicable to theory subjects)
1. A candidate shall have to answer the questions in all the subjects in English only.
2. Question papers shall be framed so as to ensure that no part of the syllabus is left Out of study by a candidate.
3. Question paper shall be balanced in respect of various topics outlined in the Syllabus.
4. The question papers shall have a MCQ type Questions.

AWARD OF CREDITS:
Each course having 2 credits shall be evaluated out of 100 marks and student should secure at least 40 marks to earn full credits of that course.

GRADATION:
Gradation is according to following formula.

New Grades		
Percentage Marks	Grade	Grade Points
0	F	1
40	E	2
45	D	3

50	C	4
55	B	5
65	A	6
75	O	7

CERTIFICATION:

The college needs to provide 'Course Completion Certificate' to every student who completes the course successfully. The certificate must contain the grade obtained by the student in the examination.

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Principal
Baburaoji Gholap College, Sangvi, Pune-27.

IQAC
(Dr. Sangeeta Jagtap)
Baburaoji Gholap College, Sangvi, Pune-27.

Short Term Course Coordinator
(Prof. Vijay Ghare)
Baburaoji Gholap College, Sangvi, Pune-27.

HoD
(Mrs. Sonal Kadam)

Course Coordinator
(_____)

Department of Software Development
Baburaoji Gholap College, Sangvi, Pune-27.

Industry Expert

Subject Expert