

ANGULAR JS			
Course Code	21CSL581/ 21CBL583	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	0:0:2:0	SEE Marks	50
Credits	01	Total marks	100
Examination type (SEE)	PRACTICAL		
<b>Course objectives:</b>			
<ul style="list-style-type: none"> <li>To learn the basics of Angular JS framework.</li> <li>To understand the Angular JS Modules, Forms, inputs, expression, data bindings and Filters</li> <li>To gain experience of modern tool usage (VS Code, Atom or any other] in developing Web applications</li> </ul>			
<b>Sl.NO</b>	<b>Experiments</b>		
1	Develop Angular JS program that allows user to input their first name and last name and display their full name. <b>Note:</b> The default values for first name and last name may be included in the program.		
2	Develop an Angular JS application that displays a list of shopping items. Allow users to add and remove items from the list using directives and controllers. <b>Note:</b> The default values of items may be included in the program.		
3	Develop a simple Angular JS calculator application that can perform basic mathematical operations (addition, subtraction, multiplication, division) based on user input.		
4	Write an Angular JS application that can calculate factorial and compute square based on given user input.		
5	Develop AngularJS application that displays a details of students and their CGPA. Allow users to read the number of students and display the count. <b>Note:</b> Student details may be included in the program.		
6	Develop an AngularJS program to create a simple to-do list application. Allow users to add, edit, and delete tasks. <b>Note:</b> The default values for tasks may be included in the program.		
7	Write an AngularJS program to create a simple CRUD application (Create, Read, Update, and Delete) for managing users.		
8	Develop AngularJS program to create a login form, with validation for the username and password fields.		
9	Create an AngularJS application that displays a list of employees and their salaries. Allow users to search for employees by name and salary. <b>Note:</b> Employee details may be included in the program.		
10	Create AngularJS application that allows users to maintain a collection of items. The application should display the current total number of items, and this count should automatically update as items are added or removed. Users should be able to add items to the collection and remove them as needed. <b>Note:</b> The default values for items may be included in the program.		
11	Create AngularJS application to convert student details to Uppercase using angular filters. <b>Note:</b> The default details of students may be included in the program.		
12	Create an AngularJS application that displays the date by using date filter parameters		
<b>NOTE:</b> Include necessary HTML elements and CSS for the above Angular applications.			
<b>Course outcomes (Course Skill Set):</b>			
At the end of the course the student will be able to:			
<ol style="list-style-type: none"> <li>Develop Angular JS programs using basic features</li> <li>Develop dynamic Web applications using AngularJS modules</li> <li>Make use of form validations and controls for interactive applications</li> <li>Apply the concepts of Expressions, data bindings and filters in developing Angular JS programs</li> <li>Make use of modern tools to develop Web applications</li> </ol>			

### Assessment Details (both CIE and SEE)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the **maximum** marks (20 marks). A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each course. The student has to secure not less than 35% (18 Marks out of 50) in the semester-end examination (SEE). The student has to secure a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.

#### Continuous Internal Evaluation (CIE):

CIE marks for the practical course is **50 Marks**.

The split-up of CIE marks for record/ journal and test are in the ratio **60:40**.

- Each experiment to be evaluated for conduction with observation sheet and record write-up. Rubrics for the evaluation of the journal/write-up for hardware/software experiments designed by the faculty who is handling the laboratory session and is made known to students at the beginning of the practical session.
- Record should contain all the specified experiments in the syllabus and each experiment write-up will be evaluated for 10 marks.
- Total marks scored by the students are scaled down to 30 marks (60% of maximum marks).
- Weightage to be given for neatness and submission of record/write-up on time.
- Department shall conduct 02 tests for 100 marks, the first test shall be conducted after the 8<sup>th</sup> week of the semester and the second test shall be conducted after the 14<sup>th</sup> week of the semester.
- In each test, test write-up, conduction of experiment, acceptable result, and procedural knowledge will carry a weightage of 60% and the rest 40% for viva-voce.
- The suitable rubrics can be designed to evaluate each student's performance and learning ability. Rubrics suggested in Annexure-II of Regulation book
- The average of 02 tests is scaled down to **20 marks** (40% of the **maximum** marks).

The Sum of scaled-down marks scored in the report write-up/journal and average marks of two tests is the total CIE marks scored by the student.

#### Semester End Evaluation (SEE):

- SEE marks for the practical course is 50 Marks.
  - SEE shall be conducted jointly by the two examiners of the same institute, examiners are appointed by the University
  - All laboratory experiments are to be included for practical examination.
  - (Rubrics) Breakup of marks and the instructions printed on the cover page of the answer script to be strictly adhered to by the examiners. OR based on the course requirement evaluation rubrics shall be decided jointly by examiners.
  - Students can pick one question (experiment) from the questions lot prepared by the internal/external examiners jointly.
  - Evaluation of test write-up/ conduction procedure and result/viva will be conducted jointly by examiners.
  - General rubrics suggested for SEE are mentioned here, write up -20%, Conduction procedure and result in -60%, Viva-voce 20% of maximum marks. SEE for practical shall be evaluated for 100 marks and scored marks shall be scaled down to 50 marks (however, based on course type, rubrics shall be decided by the examiners)
  - The duration of SEE is 02 hours
- Rubrics suggested in Annexure-II of Regulation book

**Suggested Learning Resources:**

**Textbooks**

1. ShyamSeshadri, Brad Green —“AngularJS: Up and Running: Enhanced Productivity with Structured Web Apps”, Apress, O'Reilly Media, Inc.
2. AgusKurniawan–“AngularJS Programming by Example”, First Edition, PE Press, 2014

**Weblinks and Video Lectures (e-Resources):**

1. Introduction to Angular JS :<https://www.youtube.com/watch?v=HEbphzK-0xE>
2. Angular JS Modules :<https://www.youtube.com/watch?v=gWm0KmgmQkU>
3. <https://www.youtube.com/watch?v=zKkUN-mJtPO>
4. [https://www.youtube.com/watch?v=IC17\\_i2mtZA](https://www.youtube.com/watch?v=IC17_i2mtZA)
5. [https://www.youtube.com/watch?v=Y2Few\\_nkze0](https://www.youtube.com/watch?v=Y2Few_nkze0)
6. <https://www.youtube.com/watch?v=QoptnVCQHsU>

**Activity Based Learning (Suggested Activities in Class)/ Practical Based learning**

- Demonstration of simple projects/applications (course project)