DEPARTMENT OF COMPUTER SCIENCE & DESIGN

COURSE MODULE FOR THE SESSION 2026(EVEN SEMESTER)

Faculty Name: Mr. Shashank Patil	**Academic Year:** 2025 - 2026
Department: Computer Science & Design	

Course Code	Course Title	Core/Elective	Prerequisite	Contact Hours			Total Hrs/ Sessions
				L	T	P	
BCGL456B	Responsive Web design with Bootstrap 5.0	AEC/SEC	HTML, CSS	0	0	2	24 Hrs

Course Learning Objectives	**This course will enable students to:** CLO 1. To learn basic classes of CSS framework: Bootstrap 5.0. CLO 2. To develop simple Webpages with Bootstrap 5.0 classes. CLO 3. To make use of Bootstrap 5.0 classes for Web based User Interfaces.

Sl. No.	Topics Covered as per Syllabus	RBT
1	Develop a Web page(s) with suitable HTML elements to demonstrate Bootstrap 5.0 framework classes for Headings. (Refer Book: Chapter 13.1-13.5)	L3
2	Develop a Web page(s) with suitable HTML elements to demonstrate Bootstrap 5.0 framework classes for Text and Fonts. (Refer Book: Chapter 13.6-13.11)	L3
3	Develop a Web page(s) with suitable HTML elements to demonstrate Bootstrap 5.0 framework classes for Lists, Colors and Bootstrap Buttons. (Refer Book: Chapter 13.13-13.14 and 13.18-13.19)	L3
4	Develop a Web page(s) with suitable HTML elements to demonstrate Bootstrap 5.0 framework classes for Borders, Margins and Paddings. (Refer Book: Chapter 13.15-13.17)	L3
5	Develop a Web page(s) with suitable HTML elements to demonstrate Bootstrap 5.0 framework classes for Containers. (Refer Book: Chapter 14.1-14.3)	L3
6	Develop a Web page(s) with suitable HTML elements to demonstrate Bootstrap 5.0 framework classes for Grid System. (Refer Book: Chapter 14.4-14.7)	L3
7	Develop a Web page(s) with suitable HTML elements to demonstrate Bootstrap 5.0 framework classes for Images, Cards and Gutters. (Refer Book: Chapter 14.8-14.10)	L3
8	Develop a Web page(s) with suitable HTML elements to demonstrate Bootstrap 5.0 framework classes for Nav and Footers. (Refer Book: Chapter 14.11-14.12)	L3
9	Develop a Web page(s) with suitable HTML elements to demonstrate Bootstrap 5.0 framework classes for Badges, Progress bar, spinners and Pagination. (Refer Bootstrap 5 Tutorial @ www.w3schools.com)	L3

10	Develop a Web page(s) with suitable HTML elements to demonstrate Bootstrap 5.0 framework classes for Modals, Alerts and Popover. (Refer Bootstrap 5 Tutorial @ www.w3schools.com)	L3
11	Develop your personal online CV or a professional CV using suitable Bootstrap classes.	L6
12	Develop a blog post about your favourite topic or create memoirs/additional stories using suitable Bootstrap classes.	L6

List of Text Books

1. Bootstrap 5 Foundations, By Daniel Foreman, Foreman Technology LTD; 2nd edition (24 April 2021).

List of URLs, Text Books, Notes, Multimedia Content, etc

1. Bootstrap 5 Tutorial (https://www.w3schools.com/bootstrap5/)
2. Bootstrap 5 (https://www.geeksforgeeks.org/bootstrap-5-introduction/)

Course Outcomes (CO's)	At the end of the course the student will be able to: CO 1. Apply concepts of Bootstrap framework based layout and navigation classes to develop Web Pages. CO 2. Design Web pages to organize data and present text with features using Bootstrap framework. CO 3. Develop Web User interfaces for varieties of interactions with Bootstrap framework classes CO 4. Build Web pages involving animations, popups and accordions with Bootstrap framework classes. CO 5. Make use of Bootstrap framework image, alert and modal classes in developing Web pages.

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 out of 50) and for the SEE minimum passing mark is 35% of the maximum marks (18 out of 50 marks). A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/course if the student secures 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 are 50 Marks.

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

- Each experiment is to be evaluated for conduction with an observation sheet and record write-up.
- Rubrics for the evaluation of the journal/write-up for hardware/software experiments are designed by the

faculty who is handling the laboratory session and are 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 a test of 100 marks after the completion of all the experiments listed in the syllabus.
- In a 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.
- The marks scored shall be scaled down to 20 marks (40% of the maximum marks).

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

Semester End Evaluation (SEE):

- SEE marks for the practical course are 50 Marks.
- SEE shall be conducted jointly by the two examiners of the same institute, examiners are appointed by the Head of the Institute.
- The examination schedule and names of examiners are informed to the university before the conduction of the examination. These practical examinations are to be conducted between the schedule mentioned in the academic calendar of 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 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, writeup-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).
- Change of experiment is allowed only once and 15% of Marks allotted to the procedure part are to be made zero.
- The minimum duration of SEE is 02 hours.

The Correlation of Course Outcomes (CO's) and Program Outcomes (PO's)

Subject Code:	BCGL456B	TITLE: Responsive Web Design with Bootstrap 5.0										
List of Course Outcomes	Program Outcomes											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	TOTAL
CO-1	2	2	2	-	2	-	-	-	-	-	-	-	8
CO-2	2	2	2	-	2	-	-	-	-	-	-	-	8
CO-3	2	2	2	-	2	-	-	-	-	-	-	-	8
CO-4	2	2	2	-	2	-	-	-	-	-	-	-	8
CO-5	2	2	2	-	2	-	-	-	-	-	-	-	8
TOTAL	10	10	10	-	10	-	-	-	-	-	-	-	40

Note: 3 = Strong Contribution 2 = Average Contribution 1 = Weak Contribution - = No Contribution

The Correlation of Course Outcomes (CO's) and Program Specific Outcomes (PSO's)

Subject Code:	BCGL456B	TITLE: Responsive Web Design with Bootstrap 5.0	
List of Course Outcomes	Program Specific Outcomes (PSO's defined)		
	PSO1	PSO2	TOTAL
CO-1	3	-	3
CO-2	3	2	5
CO-3	3	2	5
CO-4	2	3	5
CO-5	2	3	5
TOTAL	13	10	23