

Course Title	Web Technologies and Programming			Course Code	BST 22283		
Year	2	Semester	2	Credits	3	Theory (hr)	15
						Practical (hr)	60
						Independent Learning (hr)	10

Aim of the Course:

To provide the knowledge and skills on web applications and use programming tools to solve problems

Intended Learning Outcomes:

After completion of this course, the learner should be able to:

- Explain the basic concepts of web designs and usability guidelines.
- Create a simple web application.
- Evaluate the design of a web application using standard criteria.
- Use the basic algorithmic techniques to solve problems.
- Design and implement a computer based system.

Course Capsule:

Theory
Web design: Basic principles of web design & development; Introduction to HTML and CSS; Web usability guidelines; Web hosting and maintenance; Programming: Introduction to Programming Languages; Introduction to software development; Data types, Variables, Arrays; Control structures, Procedures, Classes, Repetition Structures, Functions & Modules; GUI programming, Development frameworks

Practical
Working with Hyper Text Markup Language (HTML); Familiarize Cascade Style Sheet (CSS); Use web authoring application to design and develop web applications; Practice Image & video optimization techniques for web; Familiarize Web Hosting environment - WAMP / XAMPP; Basics of a programming development environments; Working with variables and operations; Working with Control Structures; Working with Repetition Structures and Arrays; Working with Functions & Modules Develop front-end applications using GUI programming; Practice database connection with Programming

Assessment:

Continuous assessment: 40%
 End semester assessment: 60%