# Alagappa University

(A State University Established in 1985)
Karaikudi- 630 003. Tamilnadu. India.
www.alagappauniversity.ac.in

2017 — Accredited with A+ Grade by NAAC (CGPA : 3.64)
2018 — Graded as Category-1 & Granted Autonomy
2018 — Swachh Campus Rank : 4
2021 — Rank : 33
2022 — Asia Rank : 220
2022 — World Ranking Bandwidth 501 – 600

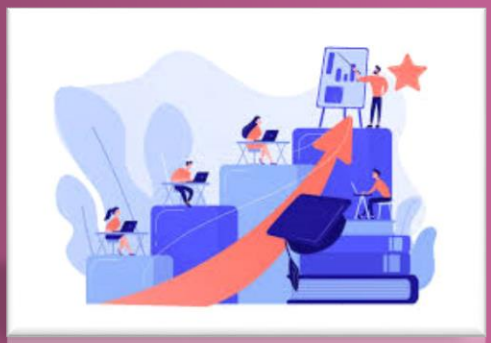
## Department of Computer Applications

## VALUE ADDED COURSES

**Course Code:** CAVAD7 **Course Name:** Web Programming

**2023-2024**

**Eligibility:** UG in Computer Science **Course Duration:** 20 hours



### COURSE OBJECTIVE:

- To understand the concepts and architecture of the World Wide Web.
- To understand markup languages
- To understand embedded dynamic scripting on client side Internet Programming
- To understand web development techniques on client-side.


### COURSE OUTCOME:

- To create a basic website using HTML and Cascading Style Sheets.
- To design and implement dynamic web page with validation using JavaScript objects.
- To apply different event handling mechanisms.
- To design front end web page and connect to the back end databases.

### COURSE CO-ORDINATOR:

**Dr. M.Vanitha**
Assistant Professor
Department of Computer Applications
Alagappa University
Karaikudi-630 003

**ALAGAPPA UNIVERSITY, KARAIKUDI**
**DEPARTMENT OF COMPUTER APPLICATIONS**
**VALUE ADDED COURSES**

| **Course Code: CAVAD7** | **Web Programming** | **20 Hours** |
|---|---|---|
| **Course Objectives:** | **OBJECTIVES:**<br>• To understand the concepts and architecture of the World Wide Web.<br>• To understand markup languages<br>• To understand embedded dynamic scripting on client side Internet Programming<br>• To understand web development techniques on client-side. | |
| **Unit I** | **Introduction To WWW:** Internet Standards – Introduction to WWW – WWW Architecture – SMTP – POP3 – File Transfer Protocol - Overview of HTTP, HTTP request – response — Generation of dynamic web pages. | |
| **Unit II** | **Markup Language (HTML5):** Basics of Html -Syntax and tags of Html- Introduction to HTML5 -Semantic/Structural Elements -HTML5 style Guide and Coding Convention– Html Svg and Canvas – Html API's - Audio & Video - Drag/Drop - Local Storage - Web socket API– Debugging and validating Html. | |
| **Unit III** | **Cascading Style Sheet (CSS3):** The need for CSS – Basic syntax and structure Inline Styles – Embedding Style Sheets - Linking External Style Sheets - Introduction to CSS3 – Backgrounds - Manipulating text - Margins and Padding - Positioning using CSS - Responsive Web Design - Introduction to LESS/SASS | |
| **Unit IV** | **Overview Of Javascript:** Introduction - Core features - Data types and Variables - Operators, Expressions, and Statements Functions - Objects - Array, Date and Math Related Objects - Document Object Model - Event Handling - Controlling Windows & Frames and Documents - Form validations. | |
| **Unit V** | **Advanced Features Of Javascript:** Browser Management and Media Management – Classes – Constructors – Object-Oriented Techniques in JavaScript – Object constructor and Prototyping - Sub classes and Super classes – Introduction to JSON – JSON Structure –Introduction to jQuery –Introduction to AJAX-Bootstrap - Bootstrap components. | |
| **Course Outcomes:** | • To create a basic website using HTML and Cascading Style Sheets.<br>• To design and implement dynamic web page with validation using JavaScript objects<br>• To apply different event handling mechanisms.<br>• To design front end web page and connect to the back end databases. | |

**REFERENCES:**


1. David Flanagan, "JavaScript: The Definitive Guide, Sixth Edition", O'Reilly Media, 2011
2. Harvey & Paul Deitel& Associates, Harvey Deitel and Abbey Deitel, "Internet and World Wide Web - How To Program", Fifth Edition, Pearson Education, 2011
3. Thomas A. Powell, "HTML & CSS: The Complete Reference", Fifth Edition, 2010
4. Thomas A Powell, Fritz Schneider, "JavaScript: The Complete Reference", Third Edition, Tata McGraw Hill, 2013
5. Thomas A Powell, "Ajax: The Complete Reference", McGraw Hill, 2008