Course Title	**Web Technologies**		
Course Code	**DI-322**		
Credit Hours	2 (2,0)		
Category	Domain Core		
Prerequisite	CC-112: Programming Fundamentals		
Co-Requisite	None		
Follow Up	EI-338: Enterprise Systems		
Course Learning Outcomes (CLOs)	At the end of the course, the students will be able to:	**BT**	**PLO**
	CLO1: Know web application architecture and, languages and application.	C1 (Know)	1
	CLO2: Describe various approaches to web application development.	C2 (Describe)	1
	CLO3: Develop web applications.	C3 (Apply)	1,3
Syllabus	**Introduction:** Web Applications, TCP/IP Application Services. **Web Servers:** Basic Operation, Virtual hosting, Chunked transfers, Caching support, Extensibility. SGML, HTML5, CSS3. **XML Languages and Applications:** Core XML, XHTML, XHTM MP. **Web Services:** SOAP, REST, WML, XSL. Operations, Processing HTTP Requests, Processing HTTP Responses, Cookie Coordination, Privacy and P3P, Complex HTTP Interactions, Dynamic Content Delivery. Server Configuration. Server Security. **Web Browsers Architecture and Processes:** Active Browser Pages: JavaScript, DHTML, AJAX. JSON. **Approaches to Web Application Development:** Programing in any Scripting language. Search Technologies, Search Engine Optimization. XML Query Language, Semantic Web, Future Web Application Framework. Implementation on compiler of all the concepts/topics discussed in the course which includes, Introduction to Java, Variables, data types, Control Structures, Methods, Classes, Interfaces, Method Overloading and Overriding, Revision of Object oriented programming courses in Java, GUI development, Event Handling, Database Connectivity, Exception Handling, File handling, HTML, CSS, Java Script, Server side Programming in Java, Http Request and Response, Servlets, Servlet Life Cycle, Java Beans, MVC.		
Suggested Instructional/ Reading Material	1. Paul J. Deitel and Harvey Deitel, Java How to Program, 11th Edition, Pearson, 2017, ISBN-10: 0134743350, ISBN-13: 978-0134743356. 2. Marty Hall and Larry Brown, Core Servlets and Java Server Pages, 2nd Edition, Pearson, 2017, ISBN-10: 8131701638, ISBN-13: 978-8131701638.		