

**NIRMA UNIVERSITY**  
**Institute of Technology**  
**B. Tech. Computer Science and Engineering**  
**Open Elective (open to all branches except Dept. of CSE)**

L	T	P	C
2	0	2	3

<b>Course Code</b>	2CSOE77
<b>Course Title</b>	Web Technology

**Course Outcomes:**

After successful completion of this course, student will be able to:

1. understand the architecture of the internet and web technology
2. design an efficient web application
3. use programming language to develop a web application.

**Syllabus:**

**Teaching Hours**

<b>Unit I</b> <b>Introduction to internet protocols and web servers:</b> Internet Protocol Model overview, Internet Protocol, Web servers, IIS Configurations and settings, Apache Configuration	<b>02</b>
<b>Unit II</b> <b>HTML:</b> HTML Documents, HTML Structure tags, HTML Block level tags, HTML Text level tags, Different types of Lists, Nesting of lists, Linking HTML Documents, Frames, tables and forms	<b>08</b>
<b>Unit III</b> <b>Cascaded Style Sheets:</b> Different approaches to style sheets, using multiple approaches, linking to style information in separate file, setting up style information using inline, internal and external style sheet	<b>08</b>
<b>Unit IV</b> <b>JavaScript:</b> JavaScript syntax, variables and their types, JavaScript operators, arrays and array methods, control statements, built-in objects in JavaScript, Array, String, validation using JavaScript	<b>08</b>

## Unit V

04

**Introduction to JSON:** Use of JSON data structures, JSON object, Collection of name-value pairs, ordered list of values

### **Self-Study:**

The self-study contents will be declared at the commencement of semester. Around 10% of the questions will be asked from self-study contents.

### **Laboratory Work:**

Laboratory work will be based on applications of the above syllabus with minimum 10 experiments to be incorporated.

### **Suggested Readings<sup>^</sup>:**

1. Deitel Nieto, Internet and World Wide Web: How To Program, Pearson
2. Scott Parker, The Web Designer's 101 Most Important Decisions Professional Secrets for a Winning Website, Adams Media
3. Kogent Learning Solutions Inc., Html5 Black Book: Covers CSS3, Javascript, XML, XHTML, Ajax, Php and JQuery, Dreamtech Press
4. Jon Duckett, Beginning Web Programming with Html, XHTML and CSS, Wiley India Pvt Ltd.

L=Lecture, T=Tutorial, P=Practical, C=Credit

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<sup>^</sup>this is not an exhaustive list