ITE1002 Web Technologies			
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		2 0 0 4 3	
Pre-req: CSE1001			

Objectives :
        To understand web architecture and web languages
        To program for web client and web server objects
        To understand web development environment and methodology

Expected Outcomes:
        On completion of this course, students will be able to
        Understand web essentials
        Develop Web Applications
        Implement Client/Server Web programming

Module	Topics	L Hrs	SLO
1	**Web Essentials**: Evolution of Web – Web architecture – HTML –XHTML- CSS	4	6
2	**Client-Side Scripting**: Javascript Basics –Arrays- Functions - Javascript objects – HTML DOM - DOM methods – Events- Regular Expressions – Form Validation- JSON-Jquery	5	6
3	**Web Applications:** Web applications- Web Application Frameworks-MVC framework- Angular JS – Single Page Applications-Responsive Web Design	5	6
4	**Client/Server Communication:** HTTP- Request/Response Model- HTTP Methods- RESTful APIs- AJAX-AJAX with JSON	4	6
5	**Web Servers:** Node.js-NPM- Callbacks -Events- Express framework-Cookies-Sessions-Scaling	5	6,7
6	**Storage:** MongoDB-Manipulating and Accessing MongoDB Documents from Node js	3	7
7	**Reactive frameworks:** Meteor JS framework – Templates – Events – Sessions – Publish & Subscribe –Accounts	2	6
8	**Expert talk on Intelligent and Symbiotic Web**	2	2
Total Lecture Hours **# Mode:** Flipped Class Room, [Lecture to be videotaped], Use of physical and computer models to lecture, Min of 2 lectures by industry experts		**30**	

Text Book
Brad Dayley, Node.js, MongoDB, and AngularJS Web Development, Addison Wesley, 2014
Reference Books
Jon Duckett, HTML & CSS Design and Build Websites, Wiley, 2011
Jon Duckett, JavaScript and JQuery: Interactive Front-End Web Development,Wiley,2014
Holdener, Ajax: The Definitive Guide,Oreilly,2008

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