

## Web Technologies

### Course Objectives:

This course is designed to introduce students with no programming experience to the programming languages and techniques associated with the World Wide Web. The course will introduce web-based media-rich programming tools for creating interactive web pages.

### Course Outcomes:

1. Analyze a web page and identify its elements and attributes.
- 2. Create web pages using XHTML and Cascading Styles sheets.
- 3. Build dynamic web pages .
- 4. Build web applications using PHP.
5. Programming through PERL and Ruby
6. write simple client-side scripts using AJAX

### Syllabus:

#### UNIT-I:

HTML tags, Lists, Tables, Images, forms, Frames. Cascading style sheets. Introduction to Java script. Objects in Java Script. Dynamic HTML with Java Script

#### UNIT-II:

**Working with XML:** Document type Definition, XML schemas, Document object model, XSLT, DOM and SAX.

#### UNIT-III:

**AJAX A New Approach:** Introduction to AJAX, Integrating PHP and AJAX. Consuming WEB services in AJAX: (SOAP, WSDL,UDDI)

#### UNIT-IV:

**PHP Programming: Introducing PHP:** Creating PHP script, Running PHP script. **Working with variables and constants:** Using variables,Using constants,Data types,Operators.**Controlling program flow:** Conditional statements,Control statements,Arrays,functions.Working with forms and Databases such as mySql, Oracle, SQL Sever.

#### UNIT-V:

Introduction to PERL, Perl language elements, Interface with CGI- A form to mail program, Simple page search

#### UNIT-VI:

Introduction to Ruby, variables, types, simple I/O, Control, Arrays, Hashes, Methods, Classes, Iterators, Pattern Matching, Practical Web Applications

### Text Books:

1. Programming the World Wide Web, Robert W Sebesta, 7ed, Pearson.
2. Web Technologies, Uttam K Roy, Oxford
3. The Web Warrior Guide to Web Programming, Bai, Ekedahl, Farrelll, Gosselin, Zak, Karparhi, MacIntyre, Morrissey, Cengage

### Reference Books:

1. Ruby on Rails Up and Running, Lightning fast Web development, Bruce Tate, Curt Hibbs, Oreilly ( 2006)
2. Programming Perl, 4ed, Tom Christiansen, Jonathan Orwant, Oreilly (2012)
3. Web Technologies, HTML< JavaScript, PHP, Java, JSP, XML and AJAX, Black book, Dream Tech.
4. An Introduction to Web Design, Programming, Paul S Wang, Sanda S Katila, Cengage