Course Design Document

Course Code	
Course Name	JavaScript Technologies: Core JavaScript, OOP JavaScript, jQuery

Duration (in days)	3	Proficiency Level	Fundamental
Pre-requisites	• Front End Technologies	Target Audience	Campus Hires

Learning Outcome

Upon successful completion of this course, participants will be able to

- Use JavaScript objects for creating dynamic web pages and write scripts to process forms
- Appreciate the need for XML documents and create them
- Validate XML documents with DTD and XSD
- Transform XML documents to HTML with XSLT
- Manipulate DOM with jQuery

Day-wise Session Plan

Day	Unit	Objectives	Hours
1	Java Script Programming	• Introduction to JavaScript • JavaScript variables, operators and programming constructs • Functions and Objects • Event Handling using JavaScript • Working with DOM • Form validations using DOM	8
2	Introduction to XML	• Introduction to XML • Explain how XML documents are structured	8
	Validation of XML Documents	• Element, attribute, and entity declarations in DTDs • Validate XML documents with DTD • Different schema constructs • Validate XML documents with XSDs • Concept of Namespaces	

3	jQuery	jQuery
		  • Overview of jQuery
		  • Downloading jQuery or using from CDN
		  • Use of $() function
		  • Don't jump the gun – use of $(document).ready() function
		DOM manipulation with jQuery
		  • Use of selectors in jQuery
		  • DOM traversal and manipulation
		  • Using Element, Class and ID Selectors with jQuery
		  • Modifying the Content and Styles of Selected Elements
			8

		• Adding and Removing Elements Using jQuery
		• Adding jQuery UI plugins
		   1. Date picker
		   2. Slider
		   3. Accordion
		   4. Tabs
		• Binding events to elements	

		Total	24