

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. Semester: I

M.E. Information Technology

Subject Name: **Advance Web Technology**

Sr.No	Course content
1.	Working with JSP, Understanding JSP, Describing the JSP Life cycle, Creating simple JSP pages , Working with simple JSP Pages, Working with JSP basic tags and Implicit objects, Using JavaBeans and Action tags in JSP, Using the Standard Tag Library(JSTL)
2.	HTML & JavaScript Programming: Introducing HTML Document Structure, Creating Heading on Web Page, Working with Links, Creating Paragraph, Working with images, Tables & Frames, Introduction to Forms & HTML Controls, Introducing Cascading Style Sheets & DHTML. Introducing JavaScript.
3.	Creating AJAX Applications – AJAX : A new approach , Understanding JavaScript for AJAX, Asynchronous data transfer with XMLHttpRequest, Implementing AJAX Frameworks.
4.	Java EE 5: An overview Exploring the Java EE5 platform, architecture, describing containers, developing applications
5.	Understanding Servlet programming: Features of Java Servlets, Servlet API, Servlet Life-cycle, Servlet Configuration, Working with ServletConfig and ServletContext, Creating a simple servlet, Features of Java Servlet, Servlet API, Servlet Life-Cycle, Servlet Configuration, Working with ServletConfig and ServletContext, Creating a sample servlet, Working with, HttpServletRequest and HttpServletResponse, Request Delegation and Request Scope, Servlet Collaboration
6.	Handling sessions in Servlets, What is session, Introducing Session Tracking, Session Tracking Mechanisms, Session Tracking and Java Servlet API Login Application using Session Tracking
7.	Event Handling in servlets, What are Events , What is event Handling, Types of Servlet Events, OnlineStore Application
8.	Understanding Java server Pages, Architecture of JSP page, Understanding the JSP Page Life cycle, JSP Elements, The JSP Expression Language, Debugging with JSPDebug, Performance, Using JSP Best Practices
9.	Implementing JSP tag extensions, Overview of Tag Extensions, Elements of Tag Extensions, Tag Extension API, Classic Tag Handlers, Simple Tag Handlers, JSP

	fragments, Understanding Tag files
10.	Implementing JavaServer Pages Standard Tag Library, Introducing JSTL, Working with the core tag Library, Working with the XML tag Library, Working with the Internationalization tag Library, Working with the SQL tag Library, Working with the Functions tag Library
11.	<p>Working with JavaServer Faces, Overview of JSF, Features of JSF, JSF Architecture</p> <p>Elements of JSF, JSF Request processing Life cycle, JSF Tag Libraries, JSF standard UI component, Working with Basic beans, JSF input validation, JSF type conversion, Handling Page navigation in JSF, Internationalization support in JSF</p> <p>Configuring JSF Application, Creating Backing Bean Employee, Creating the EmployeeDB class, Creating the EmailValidator class, Running the kogentProApplication</p>
12.	<p>Implementing Entities and Java Persistence API, Understanding ObjectRelational Mapping, Understanding the Java Persistence API, Introducing Entities, Life cycle of entity, Entity Relationship type, Mapping collection based Relationships</p> <p>Understanding JPQL, Creating Sample Application</p>

Reference Books:

1. Web Technologies Black Book by Dreamtech press
2. Java server Programming Black Book By DreamTech
3. Java server faces : A practical approach for beginners by Harwani