

Branch Name:	Information and Communication Technology
Program Code:	ET107
Semester/Year:	Semester VI/ Third Year
Course Name:	Advance Java Programming Practical
Course Code:	2ET1070602P
Pre-requisite:	Basic knowledge of Object-Oriented Programming Concepts.

Course Objectives:

1. The core objective of this course is to make the students aware about developing multitier and Web-based applications Using Java Technology.
2. This course aims to present JDBC Programming, Java Servlet, Java sever Pages, Java Server Faces, Hibernate and Spring MVC in Application development.
3. This course shall act as platforms for the students wishing to carry out further development in Web Application Development.

Teaching and Examination Scheme:

Credit	Teaching Scheme Hours per week				Evaluation Scheme (Marks)								Total (Marks)
					Theory (Marks)				Practical (Marks)				
	L	T	P	Total	SEE		CCA		SEE		CCA		
					Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
1	-	-	2	2	-	-	-	-	10	25	10	25	50

Sr. No	List of Practical	Content Hours
1.	Write a Java program that makes a connection with database using JDBC and insert, Update, delete and display student information from Database.	2
2.	Write a Java program that makes a connection with database using JDBC and prints metadata of this connection and Resultset Metadata.	2
3.	Create a simple calculator application that demonstrates the use of RMI.	2
4.	Write a Web application using Servlet to find the sum of all the digits of an input integer.	2
5.	Write a Servlet Which Accept Three Number Using Post Method and Display Maximum.	2
6.	Create login form and perform state management using Cookies, Http Session and URL Rewriting.(Servlet)	2
7.	Write a Web Application Using Filter to print the client's IP address and the current date time, each time it would access any Servlet.	2
8.	Write a Simple application for forwarding data from database to Servlet, Servlet to jsp and Display it Using JSP Scriptlet Tag.	2
9.	Write a Jsp Page That Accept Two Numbers and Find All Prime Number Between Them.	2
10.	Write a Web Application Using JspTo Demonstrate Login Module.	2
11.	Create database of student subject-wise data and retrieve all data using JSP and generate xml structure along with DTD and XML Schema definition	2

12.	Refer Practical 11 and apply XSLT (Style) to generated xml document and print your result.	2
13.	Study and implement Hibernate	2
14.	Study and Implement MVC using Spring Framework	2
15.	Develop an applet that uses the mouse listener, which overrides only two methods which are mouse Pressed and mouse Released.	2
16.	Develop a JSP program to display the grade of a student by accepting the marks of five subjects.	2

List of Reference Books:

1. Complete Reference J2EE by James Keogh McGraw publication, 6 September 2002
2. Core Java, Volume II: Advanced Features by Cay Horstmann and Gary Cornell Pearson Publication, 22 November 2004
3. J2EE Unleashed by Joseph J. Bambara, BPB publications, 5 October 2001
4. Professional Java Server Programming by Subrahmanyam Allamaraju, Cedric Buest Wiley Publication, 1 January 2007
5. Black Book “Java server programming” , Dream Tech Publishers, 2008

List of Open Source Software/learning website:

1. <http://williamstallings.com/DataComm/>

Course Learning Outcomes(CLO):On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Implement web-based applications using features of HTML and XML	4Analyze 2Understanding
CLO2	Identify reusable component for Graphical User Interface applications	2Understanding
CLO3	Apply the concepts of server side technologies for dynamic web applications	4Analyze
CLO4	Implement the web based applications using effective data base access with rich client interaction	2Understanding

Mapping of CLOs with POs & PSOs:

Course Learning Outcomes	Program Outcomes (POs)												Program Specific Outcomes (PSOs)			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CLO1	H	L	L	M	L	M			L				L	L	M	H
CLO2		L	M	H	L	L					L	L	M	L	M	M
CLO3	L	M	M	M	M	H		M		L			M	L	H	H
CLO4	M	L	M	L	M	H		M	L				M	L	H	H

H:High, M:Medium, L:Low