	Course code	Course Name	L-T-P- Credits	Year of Introduction
	IT431	Web Application Development Lab	0-0-3-1	2016

Prerequisite: IT409 Web application development

Course Objectives

- To develop the skill in Creating dynamic web pages with servlets
- To provide knowledge in connecting java programs with database using JDBC.
- To develop the skill in server side programming using JSP.
- To provide knowledge about MVC Design.
- Testing the application on an Application Server.
- Debugging Web applications locally and remotely.
- Developing applications in a team environment.

List of Exercises / Experiments (Minimum 8 are mandatory)

- 1. Authentication using Java Servlet
- 2. Authentication using JSP
- 3. Authentication using MVC Architecture
- 4. Design and development of Online Book Shop
- 5. Design and development of Online Examination
- 6. Design and development of online ticket reservation system
- 7. Design and development of online library
- 8. Design and development of online banking
- 9. Design and development of online job portal
- 10. Design and development of Online Auction

Class Project (Individual) (Mandatory)

Students are encouraged to propose innovative ideas in the field of E-commerce as projects.

Expected Outcome

By the end of the course, the student will be able to:

- i. Write programs in java to access database.
- ii. Write programmes in servlet to create dynamic web pages which access databases and track user sessions
- iii. Develop server side programmes in JSP.
- iv. Design and develop web applications using MVC architecture.
- v. Test and debug a web application.
- vi. Develop web application in a team environment.

References

- 1. Jason Hunter, William Crawford, Java Servlet Programming, Second Edition, ,O'Reilly Media
- 2. Hans Bergsten, Java Server Pages, O'Reilly
- 3. http://www.oracle.com/technetwork/java/index-jsp-135475.html
- 4. http://www.oracle.com/technetwork/java/javaee/jsp/index.html