

## **PL405 Software Engineering Lab**

**Prerequisites:** PL 306

**Objective:** This course will teach the use off various development, testing and project management tools.

### **Lab Contents:**

Tools/technologies: IDEs: Eclipse/NetBeans/Visual Studio; Java, C++, C#, Ruby on Rails;

1. Design pattern implementation in Java
2. TDD and Refactoring exercises( Eclipse Refactoring, Junit)
3. Source and version control: (Git and Git hub; subversion)
4. Java Doc
5. Build management & Dependency tools -(Maven/Ant build)
6. BDD (ex. JBehave/Cucumber)
7. Static code analysis tools
8. Continuous Integration tool
9. Defect tracking
10. Object Relational mapping (Hibernate)
11. Light weight frameworks(Spring)
12. UI design and testing( desktop/web- selenium)
13. Mini project implementation using Scrum tools