

Course Title	<b>SOFTWARE ENGINEERING</b>
Course Code	<b>CSC 323</b>
Course Purpose and Objectives	The purpose of this course is to provide advanced knowledge on various stages in a software life cycle – from the conception of the software to its decommissioning. To introduce various software engineering techniques, methods and models so that students could learn to design and implement better quality software. The main purpose of this course is not only to analyse and design a system but to analyse and design qualitatively systems. In this course students will be able to analyse and design a new system for a real case (organization or company). They might design some improvements on an existing system or redesign a new one.
Learning Outcomes	<ol style="list-style-type: none"> <li>1. Explain the various stages in software life cycle.</li> <li>2. Use software engineering techniques, methods and models.</li> <li>3. Design and implement better quality software.</li> <li>4. Use of industry standard tools for version management, issue tracking, automated build, unit testing, code quality management, code review and continuous integration.</li> <li>5. Critically evaluate the role of software design and architectural patterns in creating large code bases that will be maintainable over the long term.</li> </ol>
Course Content	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Software development in a team</li> <li>• Continuous Integration and Continuous development</li> <li>• Code quality</li> <li>• Software Architecture and Design</li> <li>• Risk Management</li> <li>• Working with open-source software systems</li> </ul>