

Introduction to Software Engineering

- **Course number and name:**
CC 515 – Introduction to Software Engineering
- **Credits and contact hours**
Credits Hours: 3Hrs
Contact Hours: In Lecture 2Hrs, and In Tutorial 2Hrs
- **Instructor’s or course coordinator’s name**
Coordinator Name: Prof. Dr. Ahmed Fahmy
- **Text book, title, author, and year**
 - “Software Engineering”, IAM Sommervill, 2004, 7th Ed.
 - “Software Engineer: A practitioner Approach” Roger Pressman, McGraw – Hill 2005
- **Specific course information**
 - a. **Catalog description**
Introduction to software engineering - Software life cycle – Project management – Verification - Validation – Testing - UML.
 - b. **prerequisites or co-requisites**
Prerequisites: CC319
 - c. **Types of Course (required, elective, or selected elective course) in the program**
Elective Course
- **Specific goals for the course**
 - a. **Specific outcomes of instruction**
After the completion of this course the students will be able to:

	Course Learning Outcomes	SO
1	Understand how to analyze, design, implement and test large-scale software.	C
2	Practice teamwork in developing software project.	D
3	Use techniques and standard documents used in each stage of the software life cycle.	J

Topics to be covered

- Introduction to Software Engineering
- Introducing the notion of S/W process
- The software process models
- Project Management
- Software Requirements
- UML
- Project Presentation
- Architectural Design
- Object Oriented Design
- Rapid Application Development
- Critical Systems Development
- Topics in Software Engineering: Verification and Validation
- Topics in Software Engineering: Testing