

Lecture 1

This lecture covers:

- 1. Course Outline**
- 2. Why software engineering: its importance**
- 3. Understanding of software engineering's definition**
- 4. Understanding of basic concepts of Software Engineering**

1. Course Outline

2. Why software engineering

- Organized, systematic, and controlled software development
- Software engineering is concerned with theories, methods and tools for professional software development
- Customer wants low cost and short time for software development

3. Understanding of software engineering's definition

- **Software engineering is an engineering discipline which is concerned with all aspects of software production.**

- **IEEE [IEE93]:**

Software Engineering: (1) The application of systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software; that is, the application of engineering to software. (2) The study of approaches as in (1).

4. Basic Concepts

- **Software itself**
- **Software Development life cycle**
- **System Development life cycle**
- **Computer Aided Software Engineering**
- **Software Project Management**
- **Software Process**
- **Software Quality Assurance**
- **Software Configuration Management**
- **Software Maintenance**