## SU DEPARTMENT OF COMPUTER SCIENCE SYLLABUS COSC 425/426

**Description:** A study of classical and object-oriented software engineering principles and methods.

covered. There

"Software Engineering" (9ed) by Sommerville; Addison Wesley, 2010.

<sup>&</sup>quot;The Unified Modeling Language Reference Manual" (2ed) by Booch, Rumbaugh and Jacobson; Addison Wesley, 2004.

Overview. Historical perspective. Agile and traditional software development processes.	2.0
Project management principles. Project planning and software cost estimation.	4.0
Requirements analysis and specification. Prototyping. Architectural and detailed designs.	4.0
Object-oriented concepts, analysis and design methods and principles. UML.	4.0
Test planning, processes, and strategies. Software reviews and inspections.  Open -source software development.	4.0

2.0 28.0

**EVALUATION** 

Projects 60% Exams 40%

XSW/SPW 5/2021

<sup>&</sup>quot;The Mythical Man-month" by Brooks, Jr; Addison Wesley, 1995.

<sup>&</sup>quot;Object-oriented and Classical Software Engineering" (8ed) by Schach; McGraw, 2011.

<sup>&</sup>quot;Introduction to Software Testing" (2ed) by Ammann and Offutt; Cambridge, 2014.