

## COSC 795 PhD Written Qualifying Examination

PhD Qualifying Exam Topic	Department
<b>Software Engineering</b>	<b>Computer Science</b>

The exam is closed book and closed notes. Basic scientific calculator is allowed.

### Relevant Undergraduate Course(s) at Khalifa University:

- COSC 336 Software Engineering

### Topics:

#	Topic Title	Reading Material [Primary Textbook, Chapter]
01	Software processes	Chapter 2
02	Agile software development	Chapter 3
03	Requirements engineering	Chapter 4
05	System modeling	Chapter 5
04	Architectural design	Chapter 6
06	Design and Implementation	Chapter 7
07	Software testing	Chapter 8
08	Software Evolution	Chapter 9
09	Software Reuse	Chapter 15
10	Component-based Software Engineering	Chapter 16
11	Distributed Software Engineering	Chapter 17
12	Service-oriented Software Engineering	Chapter 18

### Primary Textbook(s):

- [1] I. Sommerville, *Software Engineering*, 10th ed. Boston, MA, USA: Pearson Education, 2016. 978-0133943030

### Reference Material:

- [1] M. T. Valente, *Software Engineering: A Modern Approach*, Belo Horizonte, Brazil: Independent Publishing, 2024. [Online]. Available: <https://softengbook.org/>