

Certificate

Software Engineering and Quality

This program guides you through essential quality assurance methodologies and software engineering practices to effectively reduce software errors with a focus on software engineering, quality and testing, and user experience design. The Software Engineering and Quality program consists of three required courses and three to four elective courses.

Total Units: 14
Completion Time: 9-12 months (full-time)
Modality: Online, in person, or choose a mix of both.
Special Programs: F-1 Compliant and WIOA/TAA Funding Approved.



*Courses may have prerequisites; review the course page before enrolling. A checkmark indicates the course is typically offered during that term.**

Required Courses

6.5 Units | 3 Courses

COURSE NAME & NUMBER	UNITS	FALL	WINTER	SPRING	SUMMER
Object-Oriented Analysis and Design SEQA.X401	3.0	✓	✓	✓	✓
Managing Software Projects SEQA.X406	1.5		✓		✓
Software Quality Assurance and Testing SEQA.X403	2.0	✓		✓	

Elective Courses

7.5 Units | Choose 3 to 4 Courses

Software Engineering

COURSE NAME & NUMBER	UNITS	FALL	WINTER	SPRING	SUMMER
Data Structures and Algorithms Using Python CMPR.X425	3.0	✓	✓	✓	✓
Designing, Building, and Integrating RESTful API SEQA.X407	2.0	✓		✓	
DevOps Technologies SEQA.X408	3.0	✓		✓	
Advanced DevOps Technologies SEQA.X409	3.0		✓		✓

Quality and Testing

COURSE NAME & NUMBER	UNITS	FALL	WINTER	SPRING	SUMMER
Agile Software Development using TDD/BDD and Python SEQA.X404	3.0		✓		✓
Quality Management for Enterprises, Products, and Programs PPMT.X421	2.0				✓
Web Applications Testing, Comprehensive SEQA.X405	3.0	✓		✓	

User Experience Design

COURSE NAME & NUMBER	UNITS	FALL	WINTER	SPRING	SUMMER
User Experience Design Fundamentals UEWD.X414	3.0		✓		
Mobile Interface Design and Gen AI UEWD.X412	3.0		✓		✓

Completion Review

Once all certificate requirements have been met and your final grades are posted, please access your Student Portal to enroll in the "[Certificate Completion Fee](#)" to begin the review process. Please allow 4-6 weeks to receive your certificate.

Note: Experience with a programming language is required as well as a degree in computer science or engineering or equivalent experience in software development, testing, QA, or project management.