

# SOFTWARE DEVELOPMENT - ADVANCED TECHNICAL CERTIFICATE (ATC)

Explore More About This Program: <https://cwi.edu/program/software-development>

## Certificate Quick Facts

- **Instructional School:** Science, Technology, and Math
- **Department:** Computer Science and Information Technology
- **Program Code:** SWDV.ATC
- **Program Type:** Career and Technical Education
- **Available Fully Online:** No
- **Eligible for Federal Financial Aid:** Yes

NOTE: Courses required for this program *may* have an additional fee; more information can be found on the [Special Course Fees](#) web page.

## Certificate Requirements

Course	Course Title	Min Credits
<b>General Education Requirements</b>		
Select one of the following:		3
<u>GEM 1 - Written Communication course</u>		
<u>GEM 2 - Oral Communication course</u>		
<u>GEM 3 - Mathematical Ways of Knowing course</u>		3
PSYC 140	Human Relations for Career and Personal Success (GEM 6)	3
<b>Major Requirements</b>		
SWDV 105	Introduction to Programming	4
SWDV 110	Intermediate Programming	4
SWDV 115	Introduction to Web Application Development	4
SWDV 140	Intermediate Web Application Development	4
SWDV 143	Client-Side Frameworks	4
SWDV 152	Systems Analysis and Design	4
SWDV 210	Introduction to Server-Side Programming	4
SWDV 220	Fundamentals of Database Systems	4
SWDV 235	Advanced Web Application Development	4
SWDV 265	Mobile Development	4
SWDV 271	Game Development	4
SWDV 280	Collaborative Development	3
SWDV 293	Software Development Internship	1-3
<b>Minimum Credit Hours Required</b>		<b>57</b>