

SOFTWARE DEVELOPMENT - INTERMEDIATE TECHNICAL CERTIFICATE (ITC)

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.ITC
- **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
General Education Requirements		
Select one of the following:		3
GEM 1 - Written Communication course		
GEM 2 - Oral Communication course		
GEM 3 - Mathematical Ways of Knowing course		3
PSYC 140	Human Relations for Career and Personal Success (GEM 6)	3
Major Requirements		
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
Minimum Credit Hours Required		33

Certificate Plan: Fall Or Spring Start

The course sequence listed below is strongly recommended in order to complete your program requirements. Many Career and Technical Education (CTE) courses have prerequisites and/or corequisites that have been accounted for within this course sequence plan. Please register for your major requirements each semester as shown below using the Student Planning tool in myCWI. Consult your advisor for any questions regarding this plan.

NOTE: The required general education courses may be completed during any semester the student prefers, including summer semesters.

First Year

Fall		Credit Hours
SWDV 105	Introduction to Programming	4
SWDV 110	Intermediate Programming	4
SWDV 115	Introduction to Web Application Development	4
Select one of the following:		3
GEM 1 - Written Communication course		
GEM 2 - Oral Communication course		
Total Semester Credit Hours		15
Spring		
PSYC 140	Human Relations for Career and Personal Success (GEM 6)	3
SWDV 140	Intermediate Web Application Development	4
SWDV 143	Client-Side Frameworks	4
SWDV 152	Systems Analysis and Design	4

GEM 3 - Mathematical Ways of Knowing course	3
Total Semester Credit Hours	18
Minimum Credit Hours Required	33

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop static web design with HTML and CSS, frameworks. and client-side scripting.
- Develop dynamic web design using common frameworks and server-side programming.
- Demonstrate proficiency in multiple general purpose programming languages, along with industry standard best practices.