# SOFTWARE DEVELOPMENT - ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

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

## Degree Requirements

| Course | Course Title | Min Credits |
|---|---|---|
| **General Education Degree Requirements** | | |
| *Complete the following course to fulfill the GEM 1 requirement:* | | |
| GEM 1 - Written Communication course | | 3 |
| *Complete the following course to fulfill the GEM 2 requirement:* | | |
| GEM 2 - Oral Communication course | | 3 |
| *Complete the following course to fulfill the GEM 3 requirement:* | | |
| GEM 3 - Mathematical Ways of Knowing course | | 3 |
| *Complete the following course to fulfill the GEM 6 requirement:* | | |
| PSYC 140 | Human Relations for Career and Personal Success | 3 |
| *Complete the following course to fulfill the General Education Elective requirement:* | | |
| COMM 259 | Communicating Through Web Design | 3 |
| **Major Requirements** | | |
| SWDV 120 | Introduction to Programming | 3 |
| SWDV 125 | Intermediate Programming | 3 |
| SWDV 130 | Introduction to Web Application Development | 3 |
| SWDV 135 | Web Styling | 3 |
| 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 |
| **Minimum Credit Hours Required** | | **63** |

## Plan of Study Guide: Fall or Spring Start [1]

*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 Plan of Study Guide. Please register for your major requirements each semester as shown below using the Student Planning tool in myCWI. Consult your Student Success 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 120 | Introduction to Programming | 3 |
| SWDV 125 | Intermediate Programming | 3 |
| SWDV 130 | Introduction to Web Application Development | 3 |

| | | |
|---|---|---|
| SWDV 135 | Web Styling | 3 |
| GEM 2 - Oral Communication course | | 3 |
| | **Total Semester Credit Hours** | **15** |
| **Spring** | | |
| SWDV 140 | Intermediate Web Application Development | 4 |
| SWDV 143 | Client-Side Frameworks | 4 |
| SWDV 152 | Systems Analysis and Design | 4 |
| GEM 1 - Written Communication course | | 3 |
| | **Total Semester Credit Hours** | **15** |
| **Second Year** | | |
| **Fall** | | |
| PSYC 140 | Human Relations for Career and Personal Success (GEM 6) | 3 |
| SWDV 210 | Introduction to Server-Side Programming | 4 |
| SWDV 220 | Fundamentals of Database Systems | 4 |
| SWDV 235 | Advanced Web Application Development | 4 |
| GEM 3 - Mathematical Ways of Knowing course | | 3 |
| | **Total Semester Credit Hours** | **18** |
| **Spring** | | |
| COMM 259 | Communicating Through Web Design (GE Elective) | 3 |
| SWDV 265 | Mobile Development | 4 |
| SWDV 271 | Game Development | 4 |
| SWDV 280 | Collaborative Development | 3 |
| SWDV 293 | Software Development Internship | 1-3 |
| | **Total Semester Credit Hours** | **15** |
| | **Minimum Credit Hours Required** | **63** |

[1] This program can be started in either the fall or spring semester. The same course sequence should be followed for the major requirements, regardless of which semester you begin the program.

# Program Learning Outcomes

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

- Employ industry standard practices in the coding, design, and development of software.
- Utilize industry standard WYSIWIG authoring tools in the creation and deployment of websites.
- Use correct data modeling practices to develop databases designed for commerce.
- Develop dynamic websites utilizing industry standard scripting languages for database interaction.
- Install and configure software systems that provide website authoring, collaboration, and administration tools.
- Configure and deploy industry standard web servers.