COMPUTER STUDIES AND INFORMATION PROCESSING, SOFTWARE DEVELOPMENT - CERTIFICATE

SDVC

The Certificate in Software Development aims to provide required skills and training for an entry-level career in software development. Through this certificate, students acquire knowledge in one computer programming language (introductory and advanced level), foundational mathematics for computer science, and software development. Students will use an appropriate software development methodology in the completion of a group project.

Note: Students in this program must earn a grade of at least C in all computer course requirements and must maintain a 2.0 GPA. Credits earned in this certificate program can be applied toward the Computer Programming associate degree program. Many courses require prerequisites, corequisites and/or testing. See course descriptions for details (https://www.ccri.edu/catalog/current/courses/).

Program Learning Outcomes

Upon completion of this program, a student will be able to:

1. Show preparation for national exams/certifications.
2. Comply with today's business, industry standards.
3. Communicate effectively with clients, verbally, and in writing.
4. Demonstrate critical thinking in problem solving.
5. Compare and contrast techniques used for security management.
6. Work effectively in teams.

Certificate Requirements

Code	Title	Hours
COMI 1150	Programming Concepts	3
COMI 1510	Java Programming	3
COMI 1750	Web Development 1	3
COMI 2510	Advanced Java Programming	3
COMI 2530	Introduction to Software Engineering^	4
COMP 1200	Database Design & Management	3
MATH 1139	Mathematics for Liberal Arts Students (or MATH 1139C) MSCI; Scientific Reasoning; Quantitative Literacy	3
Total Hours		**22**

^ Work-based learning course

Recommended Course Sequence

Course	Title	Hours
Summer Session		
COMI 1150	Programming Concepts	3
	Hours	**3**
Year 1		
Semester 1		
COMI 1510	Java Programming	3
COMP 1200	Database Design & Management	3
MATH 1139	Mathematics for Liberal Arts Students	3
	Hours	**9**
Semester 2		
COMI 2510	Advanced Java Programming	3
COMI 1750	Web Development 1	3
COMI 2530	Introduction to Software Engineering^ [1]	4
	Hours	**10**
	Total Hours	**22**

[1] This course is offered in the Spring semester only.

^ Work-based learning course