

# Merritt College

## Computer Project Management

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### Overview

College	Merritt - Division II
Originator	Courtney Brown
Award Type	MC Certificate of Achievement

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### Codes and Dates

State Approval Date	9/21/2021
Curriculum Committee Approval Date	9/10/2020
Board of Trustees Date	1/19/2021
Current Effective Date	8/01/2021
Program Control Number	41331
Top Code	0702.00* - Computer Information Systems

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### Description

The Computer Project Management Certificate of Achievement Program is a workforce program providing instruction in the application of Software Engineering skills to Business projects that use computers for process improvement or innovation. This program can be completed in one year or less and qualifies the graduate to enter the designated occupation at the prevailing wage. It includes training in both principles of management and software engineering to support successful completion of these projects. It also equips the non-technical project manager to manage software projects enabling them to compete for project management positions in the software development work force.

Specifically, students will learn use of the software engineering process and application of skills, tools, and techniques to manage project activities; enumeration of project goals as sequences of tasks with clearly defined beginning, end, scope, and resources; analysis of project goals to create a prioritized task list that will lead to successful completion; analysis of budget and human resources to develop a utilization plan; and communication of progress, status, and milestones. Skills applicable to any kind of project are supplemented by instruction in software engineering to support one of the prevalent project management needs of the Silicon Valley and the Bay Area workforce. These enable the design of integrated software systems to efficiently fulfill business processes and needs.

To qualify for the Computer Project Management Certificate of Achievement Program, students must complete 14-15 units of required core courses with the option to complete 2 units (*150 hours of paid work or 120 hours of unpaid work*) of Occupational Work Experience (OWE) in Project Management. This OWE qualifies them to take the Certified Associate Project Manager (CAPM) examination from the governing body Project Management Institute.

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### Career Opportunities

• Computer and Information Systems Managers (SOC 11-3021): Excludes "Computer Occupations" (15-1111 through 15-1199). • Computer Systems Analysts (SOC 15-1121): • Information Security Analysts (SOC 15-1122): Excludes "Computer Network Architects" (15-1143).

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## Program Learning Outcomes

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

1. Manage activities with defined beginning and end in time, defined scope and resources accomplish a singular goal.
2. Coordinate a project team to deliver the on-time, on-budget results.
3. Prioritize activities and communicate results, milestones, and deadlines.

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### Degree Requirements:

#### Major Core Courses Credit Hours: (7 Required)

CIS 051	Introduction to Information Technology Project Management	4
CS 080	Software Engineering	3

#### Major Elective Courses - List A Credit Hours: (3 - 5 Required)

*Select one course for a minimum of 3 units*

CS 020	Python Application Programming	3
CIS 001	Introduction to Computer Information Systems	4
CIS 005	Introduction to Computer Science	5
CIS 006	Introduction to Computer Programming	5
CIS 007	Control Structures and Objects	4

#### Major Elective Courses List B Credit Hours: (2 - 9 Required)

*Select at least one course for a minimum of 2 units or select an optional restricted elective group from the list below*

CIS 234A	World Wide Web Publishing I	2
CIS 234E	Creating an E-Commerce Web Site	2
BUS 050	Principles of Management	3
BUS 054	Small Business Management	3
BUS 070	Introduction to Marketing	3
BUS 074	Introduction to Advertising	3
BUS 076	E-Commerce/Entrepreneurship	3
BUS 083	Introduction to Digital Marketing	3

#### Optional Occupational Work Experience Credit Hours: (0 Required)

*Students who select CIS 469 are able to provide evidence of applicable work experience on their college transcript. The student must secure 150 hours of paid work or 120 hours of unpaid work in project management prior to enrolling in CIS 469.*

COPED 469	Occupational Work Experience in Security Administration	2
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#### Optional Restricted Electives Credit Hours:

*Select one group of Optional Restricted Electives from the list below*

#### Group A: Web/ECommerce Project Management Credit Hours: (0 Required)

CIS 059	Applications in Information Security	3
CIS 234A	World Wide Web Publishing I	2
CIS 234E	Creating an E-Commerce Web Site	2

#### Group B: Digital Marketing Project Management Credit Hours: (0 Required)

BUS 070	Introduction to Marketing	3
BUS 074	Introduction to Advertising	3

BUS 083 Introduction to Digital Marketing 3

**Group C: Cybersecurity Project Management**

**Credit Hours:** (0 Required)

*Requires selection of CS20, CIS 5, CIS 6, or CIS 7 from elective list A*

CIS 055 Hacker Techniques, Exploits, and Incident Handling 3

CIS 071 Introduction to Information Systems Security 3

CIS 060 Computer Forensics Fundamentals 3

**Group D: Data Science/Artificial Intelligence/ML Project Management**

**Credit Hours:** (0 Required)

*Requires selection of CS20, CIS 5, CIS 6, or CIS 7 from elective list A*

CS 060 Applications of Artificial Intelligence and Deep Learning 3

CIS 042 Spreadsheet Applications 4

CIS 098 Database Programming with SQL 4

**Group E: Blockchain and Cryptocurrency**

**Credit Hours:** (0 Required)

CIS 100 Introduction to Blockchain, Cryptocurrencies, and Identity 3

CIS 066 XML Documents and Applications 2

CIS 108 Scripting for Systems Automation and Data Analysis 3

CIS 234E Creating an E-Commerce Web Site 2

**Total: 12.000 - 21.000**