

DevOps - Development and Operations Automation Degree and Certificate (pending)

| Program Requirements | | Credit Hours: (11-13 Required) | | |
|--|--|---|-------------------------|--------------|
| <i>Aligned with Information Technology (IT) Model Curriculum(ITMC)</i> | | | | |
| Course Number | Course Name | Equiv. Cert. | C-ID Descr. | Units |
| CIS 110 and | Information & Communication Technology Essentials | A+ | IT IS 110 | 5 |
| CIS 005 or | Introduction to Computer Science | MS Office | IT IS 120 | 5 |
| CIS 006 or | Introduction to Programming | | IT IS 130 or COMP112 | 5 |
| CIS 007 or | Control Structures and Objects | | IT IS 130 or COMP122 | 4 |
| CS 020 and | Python Application Programming | | IT IS 130 or COMP122 | 3 |
| CIS 062 or | Introduction to Systems Analysis and Design | | IT IS 140 | 3 |
| CIS 071 or | Introduction to Information Systems Security | Security+ | IT IS 160 | 3 |
| CIS 072 or | Systems and Network Administration | Server+ | IT IS 155 | 3 |
| CIS 073 or | Networking Concepts | Network+ | IT IS 150 | 3 |
| CIS 106A | Routing and Switching Networks | CCENT | IT IS 151 | 3 |
| General Education Requirements | | Credit Hours: (13-15 Required) | | |
| | PCCD General Education Pattern (19 Units) | | | |
| DevOps Required Courses | | Credit Hours: (16 - 19 Required) | | |
| CIS 051 and | Introduction to Information Technology Project Management | CAMP (PMI) | | 4 |
| CIS 059 and | Applications in Information Security | | | 3 |
| BUS 019 or | Business Communications | | BUS 115 | 3 |
| ENGL 1A or | Composition and Reading | | | 4 |
| ENGL 5 and | Critical Thinking in Reading and Writing | | | 3 |
| CIS 108 and | Scripting for Systems Automation and Data Analysis | | | 3 |
| MATH 13 or | Introduction to Statistics | | | 4 |
| MATH 16A or | Calculus for Business and Life/Social Sciences | | | 3 |
| MATH 3A | Calculus I | | | 5 |
| Select One Group of Restricted Electives | | Credit Hours: (12 - 13 Required) | | |
| Social Media and Online Community Management | | Credit Hours: | | |
| CIS 221 and | Introduction to Information Technology Project Management | | | 1 |
| CIS 247 and | Information Systems Skills Challenge | | | 1 |
| SOC 001 and | Introduction to Sociology | | | 3 |
| PSYCH 001A and | Introduction to General Psychology | | | 3 |
| PSYCH 006 and | Social Psychology | | | 3 |
| COPEd 450 | General Work Experience | | | 1 |
| Cybersecurity Operations | | Credit Hours: (13 Required) | | |
| CIS 055 and | Hacker Techniques, Exploits & Incident Handling | | | 3 |
| CIS 060 and | Computer Forensics Fundamentals | | | 3 |
| CIS 052 and | Cloud Security Fundamentals | | | 3 |
| CIS 053 and | Intrusion Detection In-Depth: Compliance, Security, Forensics and Troubleshooting | | | 3 |
| CIS 247 | Information Systems Skills Challenge | | | 1 |
| | CIS 247 requires participation in one round of Ethical Hacking Competition: National Cyber League (NCL), CyberPatriots, CyberDefenders, or equivalent. | | | |
| DevOps Software Engineering Automation/Continuous Integration | | Credit Hours: (13 Required) | | |
| * MC/CCSF/CSM Course # | | | | Units |
| CS80 / CS177 / | Software Engineering | | | 3 |
| CIS178 /CS178 / CIS145 | Build Automation for DevOps and QA/Intro to DevOps | | | 4 |
| CIS 179 / / | Agile Software Management and Project Automation | | | 3 |
| COPEd 450 / / | General Work Experience in Project Management | | | 3 |
| <i>*MC=Merritt College, CSM= College of San Mateo, CCSF= City College of San Francisco</i> | | | | |
| <i>This sequence qualifies you</i> | | <i>for the Project Management Institute Agile Certified Practitioner exam https://www.pmi.org/certifications/types/agile-acp</i> | | |
| Mobile Application Build and Test Automation | | Credit Hours: (12 Required) | | |
| CIS 033 and | Software Architectures and Algorithms | | | 4 |
| CIS 093 and | Cross Platform Mobile Application Development | | | 3 |
| CIS 178 and | Build Automation for DevOps and QA/Intro to DevOps | | | 4 |
| COPEd 450 | General Work Experience | | | 1 |
| Total: 52.00 - 60.00 | | | | |

What are My Career Opportunities?

DevOps is at the center of rapid transformation in software development and IT operations. This fast-track program combines IT & IS courses with DevOps program specific courses into a program you can complete less than 2 years.

Development Operations Engineer salaries in California

\$137,891 per year

Based on 5,191 salaries



Development Operations Engineer salaries by company in California

| DevOps - Software Engineering Automation and CI | | | | | |
|---|--------|----------------|-----|---------------|----|
| Salary Est. | # Jobs | Position Types | | Location | |
| \$115,000 | 310 | Full-time | 355 | San Francisco | 76 |
| \$125,000 | 262 | Contract | 13 | San Diego | 41 |
| \$130,000 | 217 | Internship | 12 | Palo Alto | 33 |
| \$140,000 | 141 | Commission | 1 | San Jose | 20 |
| \$145,000 | 91 | | | Sunnyvale | 20 |
| Total | 1021 | | | | |

Source: Indeed.com

The modern world runs on software; people that know how to build software are always in demand. You don't have to be a software developer to work in DevOps. A person with the skills to use Virtual Machines (VMs) to automatically build, deploy, and test software that other team members write can enter one of the most in-demand and high-paying workforce careers in 2 years or less. The average salary (based on a survey of 5,191) is \$137,891 with approximately 1,021 open positions in the SF Bay Area alone. You don't have to know how to write software to get started in DevOps; just how to build it!

What Types of Positions Can I Get?

The DevOps Build Master role is an essential member of a software development team. They may be employees or an independent contractor & entrepreneur using automation to streamline software pipeline for several companies. This course is also part of a regional collaborative sequence of study that qualifies the graduate to take the Project Management Institute Agile Certified Practitioner (PMI-ACP) exam and gain a globally recognized occupational certificate.

How Do I Learn This Inter-Disciplinary Skill Set?

This course follows a project driven structure. You start with a simple, bare, Virtual Machine (VM) and with each topic you add one or two capabilities in order to complete project oriented tasks. These tasks are scoped to help you acquire specific skills. Skill gaps are expected and many students are able to acquire skills and catch up fairly easily. There are XLabs - things you add to your VM that equip it to be used to complete the assignment; for example the ability to send mail from your build VM. The assignment reflects the learning outcome of each topic. The XLabs represent professional skills you will use again and again in different forms in your DevOps career.

[Apply and Enroll!](#)

<http://www.merritt.edu/wp/steps/>