

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

Award Type: A.S. Degree 50-59 units OR Certificate of Achievement units 31-34 units

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		ITIS 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	Applications in Information Security			1
SOC 001 and	Business Communications			3
PSYCH 001A and	Composition and Reading			3
PSYCH 006 and	Critical Thinking in Reading and Writing			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 for the Project Management Institute Agile Certified Practitioner exam</i> https://www.pmi.org/certifications/types/agile-acp				
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/>