RAMPath: Science, Technology, "Engineering, & Mathematics
(760) 245-4271
Info@vvc.edu

Programming I Certificate of Achievement

RAMPath Counselor
Lyman Insley
(760) 245-4271 x2208
Lyman.Insley@vvc.edu

CATALOG 2022-23

GE Pattern: None
Total Units: 18 Units
Program Code: PROG1.CERT

Additional Certificate/Degree Programs

*Computer Information Systems AS * Computer Science, AS-T * Network Specialist*
- *Electronics and Computer Technology AS * Electronics Engineering*
- *Technology AS * Computer Aided Drafting & Design **
- *MySQL Database Developer * UNIX Administrator * Web Authoring*

Year 1

Semester 1 — 4 Units

Category	Course	Title	GE Area	Unit
Req	CIS 201	Programming Concepts and Methods I		4
*MATH 105 College Algebra, is recommended for the computer programming field.				

Semester 2 — 7 Units

Category	Course	Title	GE Area	Unit
Req	CIS 202	Programming Concepts and Methods II		4
Req	CIS 264	Discrete Structures		3

Year 2

Semester 1 — 7 Units

Category	Course	Title	GE Area	Unit
Req	CIS 104	Object Oriented Analysis and Design		3
Req	CIS 221	Programming in Python Other options: CIS 205 JavaScript or CIS 206 Programming in Java		4

Category Key

(a)	Articulated Credit	A course taught at the high school that teaches the same content as the community college allowing the high school student to receive college credit.	GE	General Education	A course that fulfills a specific general education requirement for this degree, which can be replaced with another course that meets the same requirements.
Elec	Elective	A degree - applicable course that is part of a degree road map to ensure that there is a total of at least 60 units, which is a requirement for an AS degree.	RE	Restricted Electives	A course selected from a list of elective courses specified for this degree in the course list in the catalog, which can be replaced with another course from the same list.
Req	Required Core	A course that is required for this degree			

Must Receive a grade of C or better in all courses to receive a certificate

VVC does not discriminate on the basis of race, color, national origin, sex, age, or disability in any of its policies, procedures or practices. This nondiscrimination policy covers admission and access to, and treatment and employment in, college employment programs and activities. The Section 504-Disabled Counselor/Enabler at Victor Valley College may be reached at (760) 245-4271

MDCP Regional Labor Market Snapshot

JOBS in Computer Science and Technology Occupations

+580
5-year Job Demand Increase in **MDCP Region**

Average Hourly Wage

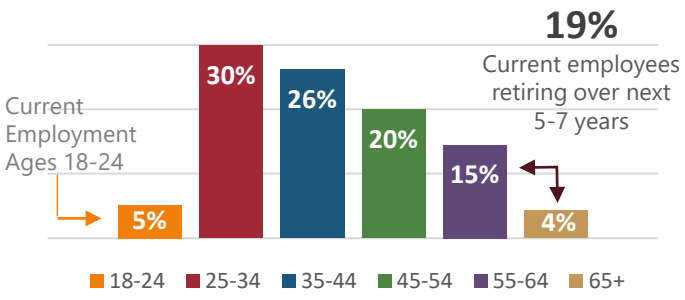
- $42.06 MDCP Region
- $40.51 SB County
- $50.46 California

EMPLOYMENT PROJECTIONS

1,430 (2022) → 2,009 (2027)

5-year demand includes new jobs, transfers, and retirements

Current Age Breakdown



CONTINUING EDUCATION AND TRAINING

Program	College
AS Computer Science AS-T	Victor Valley CC
BS Computer Engineering	Cal State, San Bernardino
BA Computer Systems	Cal State, San Bernardino
BS Computer Science/Business Apps	UC Riverside
MS Computer Engineering	UC Riverside
MS Electrical & Computer Engineering	UC Los Angeles

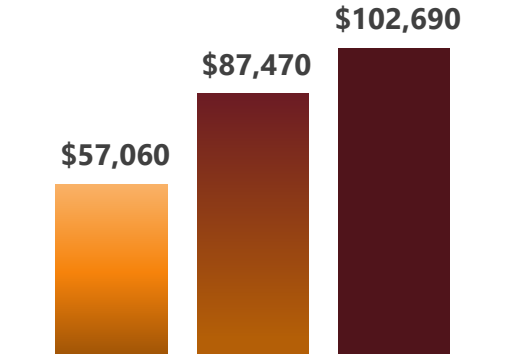
For additional information visit https://catalog.vvc.edu/degrees-certificates/computer-information-science/#PROG1-CERT

LOCAL EMPLOYERS

Employer	Website
A Plus Computers	www.applevalleycomputer.com
AVC Tech Services	www.avctechservice.com
Best Buy Geek Squad	https://stores.bestbuy.com/ca.html
Hi Desert PC Crew	www.hdpccrew.com
Leidos	https://www.leidos.com
Revature	https://revature.com/job-openings/
Topnotch Networking	www.tnnsupport.com

Salary Guide

AVERAGE BY EXPERIENCE



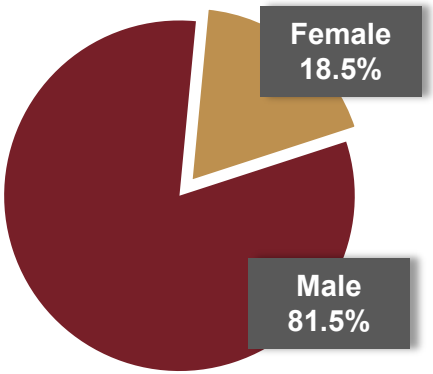
AVERAGE WAGE INFORMATION PER JOBS IN REGION

Occupation	Average Hourly Wage HD	SBC	California	HD Average Salary
Computer Repair Technicians (HS)	$22.32	$22.07	$23.23	$46,400
^Computer User Support Specialists (HS)	$29.49	$28.70	$34.51	$61,300
Computer Network Support Specialists (A)	$32.36	$31.54	$35.85	$67,300
^Computer Systems Analysts (B)	$48.88	$45.57	$57.43	$101,700
Information Security Analysts (B)	$50.25	$46.66	$65.00	$104,500
Network & Computer Systems Administrators (B)	$44.23	$43.37	$50.85	$92,000
^Database Administrators (B)	$47.90	$47.20	$55.66	$99,600
Computer Programmers (B)	$45.42	$42.52	$55.16	$94,500
Computer Hardware Engineers (B)	$62.34	$62.14	$81.72	$129,700
Software and Web Developers/Programmers (B)	$37.37	$35.33	$45.22	$77,700

Average hourly wage based on listed occupations
(HS = High School Diploma; PSC= Postsecondary Certificate; A = Associates Degree; B = Bachelor's Degree; M = Master's Degree, D = Professional or Doctorate Degree

HD Average wages based on listed occupations
^High Demand Occupation

Current Gender Breakdown



Employment and wage data Source: CHMURA JobsEQ 2022 Q2
MDCP Region (HD) - San Bernardino County (SBC), and California

MDCP CAREER PATHWAYS
Serving the High Desert Region