

## Career Profile for Programming and System Analysis

**General Program Description:** The **Associate in Applied Science (AAS) in Programming and System Analysis** program provides an in-depth exploration of different computer language and technical skills. The program includes but is not limited to the following: operating systems, local area networks, business communication, team roles, and dynamics. The optional **Certificate of Completion (CCL) in Programming and System Analysis** provides a stepped path that leads to the AAS degree.

**Advancement Options:** Skilled programmers who stay up-to-date with the latest technology should have good prospects for advancement. This is also true for those who have specialized knowledge and experience. In large organizations, programmers may be promoted to lead programmer. This position has both programming and supervisory responsibilities. Some applications programmers move into systems programming. In general, they do this by gaining experience and taking courses in systems software. Those who have general business experience may become programmer analysts or systems analysts. Some may be promoted to managerial positions. Other programmers may work in research and development areas, such as multimedia or Internet technology. Employers are increasingly contracting out programming jobs. Thus, more opportunities should arise for experienced programmers to work as consultants.

**Projected Job Growth:** This occupation has a projected **33% growth rate over 10 years** (between 2003 and 2013) for the Greater Phoenix region. There are an average projected **306 job openings each year**, comprised of 227 new jobs and 79 positions vacated by individuals leaving the field (due to retirement, death, career changes, or other reasons).

Location	Pay Period	Bureau of Labor Statistics - 2005 Salaries*		
		Entry-level	Median	Experienced
United States	Hourly	\$18.49	\$31.50	\$51.26
	Yearly	\$38,500	\$65,500	\$106,600
Greater Phoenix	Hourly	\$15.70	\$29.46	\$46.54
	Yearly	\$32,700	\$61,300	\$96,800
Arizona	Hourly	\$15.27	\$28.34	\$45.77
	Yearly	\$31,800	\$58,900	\$95,200

For more career information for Computer Programming, visit:  
[www.bls.gov/oco](http://www.bls.gov/oco), [www.maricopa.edu/workforce](http://www.maricopa.edu/workforce),  
<http://www.acinet.org/>, or  
[www.mc.maricopa.edu/students/career/](http://www.mc.maricopa.edu/students/career/)

For MCC program information, contact  
**Linda Collins, 480-461-7077**,  
 Department Chair, Business Administration  
 or visit [www.mc.maricopa.edu/dept/d07](http://www.mc.maricopa.edu/dept/d07)

\*Labor market information provided by AZ Dept of Economic Security in cooperation with the U.S. Dept of Labor, Bureau of Labor Statistics. Wages will vary depending on the employer, location, hours worked, experience, responsibility and other factors. Career and Re-Entry Services will collaborate with academic and occupational program departments to develop internship and career experience opportunities.

**Sample Job Titles:** Computer and Information Systems Managers, Computer Engineers, Computer Operators, Computer Support Specialists, Computer Systems Administrators, Computer Systems Analysts, Numerical Control Tool Programmers, Operations Research Analysts, Video Game Designers

**Types of Employers:** Computer systems design companies, Business management companies, Federal, state, and local government agencies, Software companies

**Local Employers who posted related jobs on local job boards:** Maricopa Community Colleges, Blue Cross / Blue Shield of Arizona, Assurant Specialty Property / American Reliable, Newtek Technology Services, Avnet, Inc.

**Professional Associations:**  
**Institute for Certification of  
 Computing Professionals**  
[http://www.iccp.org/](http://www.iccp.org)

**For current job openings, go to  
 Maricopa Career Network**  
<http://mcmaricopa.jobing.com/>

**The Association for Computing Machinery**  
[http://www.acm.org/](http://www.acm.org)

### Programming and Systems Analysis Overview At-A-Glance:

- Write programs that tell a computer what to do
- Usually know more than one programming language
- Spend working hours alone, but often work in teams
- May have flexible schedules, including telecommuting
- Often work long hours
- Have at least a bachelor's degree
- Stay up-to-date on new programming languages  
[www.azcis.intocareers.org](http://www.azcis.intocareers.org)

**For additional information on Machine Technology careers  
 or to watch occupational videos, visit:**

Arizona Career Information Systems (AzCIS)  
[www.azcis.intocareers.org](http://www.azcis.intocareers.org)  
 User name: mesacc; Password: 4azcis02

Career Voyages  
[www.careervoyages.gov](http://www.careervoyages.gov)

**Internships** are supervised practical training in a short-term or temporary position with an emphasis placed on instruction, training, mentoring, networking and gaining applied work experience. These positions may be paid or unpaid. Contact Career and Re-Entry Services for internship information: 480-461-7430.

Internship Completed: \_\_\_\_\_ Dates: \_\_\_\_\_ Location: \_\_\_\_\_

**Service-Learning** is a teaching and learning method that connects meaningful community service with academic learning through guided reflection. Contact the Center for Service- Learning for more information: 480-461-7393.

Service-Learning Completed: \_\_\_\_\_ Dates: \_\_\_\_\_ Location: \_\_\_\_\_

**Transfer Options:** Contact Transfer Services for more transfer information: 480-461-7452.

**Career Assessments Completed:**

Career Assessment / Results	Date Completed	Reviewed by

**Career Readiness Workshops / Activities Completed:**

Workshop Name / Activity	Date Completed	Follow Up Contact (s)
Resume Writing Workshop		
Resume completed and reviewed by:		
Participate in Mock Interview		
How To Prepare for a Career Fair		
Attend Career Fair / Job Expo Location:		
Joined Professional Association:		

**MCC Career and Re-Entry Services**  
**Providing Guidance for Career and Workplace Success**

For more Career Profiles, visit

<http://www.mc.maricopa.edu/students/career/careerprofiles.html>

Meet with a Career Advisor in Bldg #36, Room SS5N - adjacent to the Kirk Student Center, 480-461-7430

