Potential Career Options

Below is a sample of related career options; for some, additional experience and/or further education may be helpful or required.

**Application Programmer**
Write programs that tell computers how to perform specific tasks. Develop user-oriented programs that apply to engineering or science.

**Computer Security Specialist**
Protect data and computer resources from viruses, natural disasters, fraud and invasion of privacy.

**Computer/Software Engineer**
Design software including coding, testing, debugging, documentation and implementation. Evaluate existing communications, hardware and software.

**Consultant**
Work independently or in a firm to identify technical problems and provide solutions. Conduct testing and feasibility studies.

**Design Engineer**
Design software and hardware for specific business or engineering applications. Construct and test prototypes and models.

**Process Engineer**
Oversee the process for developing a software product. Work with managers, programmers, distributors and the public.

**Software Product Manager**
Develop business plans, determine if software is compatible with system, and oversee pricing, packaging, shipping and contracts with customers.

**Systems Analyst**
Examine the overall informational needs of the company and design or recommend computer systems and networks to address those needs. May conduct coding, testing, debugging, documentation and implementation of software.

**Systems Programmer**
Design and develop software to create a computer system. Develop programming standards and evaluate and modify existing software.

**Telecommunication Analyst**
Design communication networks. Install and operate data links.

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**Sample Job Titles**

<table>
<thead>
<tr>
<th>Application Developer</th>
<th>Quality Engineer</th>
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<tbody>
<tr>
<td>Applications Engineer</td>
<td>Reliability Engineer</td>
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<tr>
<td>Computer Engineer</td>
<td>Research and Development</td>
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<tr>
<td>Computer Programmer</td>
<td>Sales</td>
</tr>
<tr>
<td>Computer Security Specialist</td>
<td>Software Design &amp; Development</td>
</tr>
<tr>
<td>Consultant</td>
<td>Software Engineer</td>
</tr>
<tr>
<td>Design Engineer</td>
<td>Software Programmer</td>
</tr>
<tr>
<td>Information Systems Engineer</td>
<td>Systems Analyst</td>
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<tr>
<td>Network Engineer</td>
<td>Systems Designer</td>
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<tr>
<td>Operations System Manager</td>
<td>Systems Programmer</td>
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<tr>
<td>Process Engineer</td>
<td>Technical Writer</td>
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<tr>
<td>Product Development Engineer</td>
<td>Technology Development Program</td>
</tr>
<tr>
<td>Project Engineer</td>
<td>Telecommunication Analyst</td>
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</tbody>
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**Career Information Resources**
Vault is a comprehensive career resource that includes industry and profession overviews; rankings and profiles for employers and internship programs; a job and internship database; career articles, blogs and videos; sample resumes, cover letters and interview questions; and over 100 career guides. A selection of the Vault Guides is listed below.

- **Career Launcher:**
  - Computers and Programming
  - Internet

- **Vault Guide to:**
  - Computer Software Jobs
  - Engineering Jobs
  - Information Technology Jobs
  - Top Tech Employers

- **Vault Career Guide to:**
  - Information Technology

**Note:** Refer to the CPDC website for a link to Vault as well as the CPDC Tip Sheets and Handshake job postings.
Associations & Societies

Association for Computing Machinery (ACM) *
Association for the Advancement of Artificial Intelligence (AAAI) *
Association for Women in Computing **
Computing Research Association *
IEEE Computer Society *
National Society of Black Engineers (NSBE) *
National Society of Professional Engineers (NSPE) *
Society of Hispanic Professional Engineers **
Society of Women Engineers **

* Contains employment listings
** Contains employment listings for members

Career & Employment Websites

Computerjobs.com
Computerwork.com
Dice
EngineeringJobs
Graduating Engineer & Computer Careers Online
iHireTechnology
IT Careers at CareerBuilder.com
IT Diversity Careers
Occupational Outlook Handbook- Search Computer Programmers/Software Developers
Pittsburgh Career Connector (Pittsburgh Technology Council)

Note: A helpful list of general job search websites is available on the Internet Tip Sheet at www.rmu.edu/cpdc.

Selected RMU Activities & Organizations

American Society of Mechanical Engineers
Arab Engineers Club
Association of Computing Machinery
Community Advisors
Mechatronics Engineering Club
National Society of Black Engineers
Society for the Advancement of Management
Society of Women Engineers
Student Government Association
Student Program Board
Student Tutors
Women's Leadership and Mentorship Program Mentors

Bachelor-Level Internship Organizations

Bayer Corporation
Bombardier Transportation
Centria
DDI
Genco
Iron Bridge Integration, Inc.
Lucas Systems
Moderne Glass
NASA/LARSS

Bachelor-Level Hiring Organizations

Amazon
Boeing Industries
Chromalox
Decision Resources Inc.
FedEx
Honeywell
Iron Bridge
ISM Services, Inc.
Michael Baker Corporation

PHW Inc.
PLS Logistics Services
Robert Morris University IT Department
Rockwell Software
RoPro Design
Tate-Jones, Inc.
United States Steel Corporation
Westinghouse Electric
Wilcox Bros.

NASA
NetApp
Perryman Company
PNC Bank
Robert Morris University
Ryder Transportation
Schroeder Industries, LLC
Selective Insurance
United States Steel Corporation

Revised by D. Munn: 08/17/18