# Information Technology
## Marquand-Zion High School Career Cluster Program of Study

This Program of Study Template can serve as a guide, along with other career planning materials, as you continue your career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner’s educational and career goals. **Ask your high school counselor to help you fill in the required courses you need to graduate.**

<table>
<thead>
<tr>
<th>Grade</th>
<th>English 8 semesters</th>
<th>Math 6 semesters</th>
<th>Science 6 semesters</th>
<th>Social Studies 6 semesters</th>
<th>Other Required Courses, Recommended Electives</th>
<th>Career &amp; Technical Courses and/or Degree Major Courses</th>
<th>SAMPLE Occupations Relating to this Pathway</th>
</tr>
</thead>
</table>
| 9     | Comm Arts I         | High School Math | High School Science | High School S.S. Course   | Personal Finance Computer Science Computer Science Electives | Keyboarding, Computer Applications, Agriculture Computers | ► Communications Analyst  
► Data Communications Analyst  
► Information Systems Administrator  
► Information Systems Operator  
► Information Technology Engineer  
► Network Administrator  
► Network Architect  
► Network Engineer  
► Network Manager  
► Network Operations Analyst  
► Network Security Analyst  
► Network Specialist  
► Network Technician  
► Network Transport Administrator  
► PC Support Specialist  
► Systems Administrator  
► Systems Engineer  
► Systems Support Leader  
► Technical Support Specialist  
► Telecommunications Network Technician  
► User Support Specialist |
► Data Communications Analyst  
► Information Systems Administrator  
► Information Systems Operator  
► Information Technology Engineer  
► Network Administrator  
► Network Architect  
► Network Engineer  
► Network Manager  
► Network Operations Analyst  
► Network Security Analyst  
► Network Specialist  
► Network Technician  
► Network Transport Administrator  
► PC Support Specialist  
► Systems Administrator  
► Systems Engineer  
► Systems Support Leader  
► Technical Support Specialist  
► Telecommunications Network Technician  
► User Support Specialist |
| 11    | Comm Arts III       | Pre-College Algebra or high school math course | High School Science | High School S.S. Course – History & Government | *Personal Finance *Microapps *Computer Science Electives (Available for Dual Enrollment) | *MAC Computer Networking Classes (Available for Dual Enrollment) | ► Communications Analyst  
► Data Communications Analyst  
► Information Systems Administrator  
► Information Systems Operator  
► Information Technology Engineer  
► Network Administrator  
► Network Architect  
► Network Engineer  
► Network Manager  
► Network Operations Analyst  
► Network Security Analyst  
► Network Specialist  
► Network Technician  
► Network Transport Administrator  
► PC Support Specialist  
► Systems Administrator  
► Systems Engineer  
► Systems Support Leader  
► Technical Support Specialist  
► Telecommunications Network Technician  
► User Support Specialist |
| 12    | Senior Comm Arts & Comm Arts elective | Pre-College Algebra or high school math | High School Science | High School S.S. Course – History & Government | *Personal Finance *Microapps *Computer Science Electives (Available for Dual Enrollment) | *MAC Computer Networking Classes (Available for Dual Enrollment) | ► Communications Analyst  
► Data Communications Analyst  
► Information Systems Administrator  
► Information Systems Operator  
► Information Technology Engineer  
► Network Administrator  
► Network Architect  
► Network Engineer  
► Network Manager  
► Network Operations Analyst  
► Network Security Analyst  
► Network Specialist  
► Network Technician  
► Network Transport Administrator  
► PC Support Specialist  
► Systems Administrator  
► Systems Engineer  
► Systems Support Leader  
► Technical Support Specialist  
► Telecommunications Network Technician  
► User Support Specialist |

*Dual Credit courses can often be substituted for high school credit. Check with your Counselor.*  
*Dual Enrollment courses can be taken on a MAC campus or online.*

Assessments/Certifications: College Placement Assessments, Compass, ACT, SAT  
Clubs/Extracurricular Activities:  **Ask your Counselor what is available at your school.**  
Work-Based Learning: □ After School Employment  □ Internship/Mentorship  □ Job Shadowing  □ Service Learning
<table>
<thead>
<tr>
<th>Administrator</th>
<th>Account Manager</th>
<th>2D/3D Artist</th>
<th>Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyst</td>
<td>Administration Associate Analyst</td>
<td>Animator</td>
<td>Analyst</td>
</tr>
<tr>
<td>Architect</td>
<td>Analyst</td>
<td>Audio/Video Engineer</td>
<td>Architect</td>
</tr>
<tr>
<td>Communications Analyst</td>
<td>Application Integrator</td>
<td>Authoring Specialist</td>
<td>Business Analyst</td>
</tr>
<tr>
<td>Data Communications Analyst</td>
<td>Business Continuity Analyst</td>
<td>Blog Developer</td>
<td>Computer Engineer</td>
</tr>
<tr>
<td>Engineer</td>
<td>Call Center Support Representative</td>
<td>Designer</td>
<td>Data Modeler</td>
</tr>
<tr>
<td>Information Systems</td>
<td>Content Manager</td>
<td>Developer</td>
<td>Design Engineer</td>
</tr>
<tr>
<td>Administrator</td>
<td>Cross-Enterprise Integrator</td>
<td>Media Specialist</td>
<td>Designer/Engineer</td>
</tr>
<tr>
<td>Information Systems Operator</td>
<td>Database Administrator</td>
<td>Media/Instructional Designer</td>
<td>Development Engineer</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Desktop Publisher</td>
<td>Multimedia: Author</td>
<td>Engineer</td>
</tr>
<tr>
<td>Engineer</td>
<td>Developer</td>
<td>Page Developer</td>
<td>Program Manager</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Document Specialist</td>
<td>Producer</td>
<td>Programmer</td>
</tr>
<tr>
<td>Manager</td>
<td>Documentation Specialist</td>
<td>Production Assistant</td>
<td>Programmer Analyst</td>
</tr>
<tr>
<td>Network Consulting Engineer</td>
<td>DSS (Decision Support Services)</td>
<td>Programmer</td>
<td>Project Lead</td>
</tr>
<tr>
<td>Network Pre-Sales Engineer</td>
<td>E-Business Specialist</td>
<td>Search Engine Marketing Specialist</td>
<td>QA Specialist</td>
</tr>
<tr>
<td>Network: Administrator</td>
<td>Editor</td>
<td>Search Engine Optimization Specialist</td>
<td>Analyst</td>
</tr>
<tr>
<td>Operations Analyst</td>
<td>Electronic Publications Specialist</td>
<td>Site Developer</td>
<td>Test Engineer</td>
</tr>
<tr>
<td>PC Support Specialist</td>
<td>Electronic Transactions Implementer</td>
<td>Social Networking Specialist</td>
<td>Tester</td>
</tr>
<tr>
<td>Security Analyst</td>
<td>Help Desk Specialist</td>
<td>Specialist</td>
<td>Support Engineer</td>
</tr>
<tr>
<td>Specialist</td>
<td>Instructional Designer</td>
<td>Streaming Media Specialist</td>
<td>Support Representative</td>
</tr>
<tr>
<td>Support Lead</td>
<td>Integrator</td>
<td>Virtual Reality Specialist</td>
<td>Systems Analyst</td>
</tr>
<tr>
<td>Technical Support Specialist</td>
<td>Knowledge Architect</td>
<td>Web Developer</td>
<td>Systems Designer</td>
</tr>
<tr>
<td>Technician</td>
<td>Liaison</td>
<td>Webmaster</td>
<td>Technical Communicator</td>
</tr>
<tr>
<td>Telecommunications Network Technician</td>
<td>Maintenance Technician</td>
<td>Writer</td>
<td>Technician</td>
</tr>
<tr>
<td>Transport Administrator</td>
<td>Management Associate</td>
<td></td>
<td>Testing Engineer</td>
</tr>
<tr>
<td>User Support Specialist</td>
<td>Manager</td>
<td></td>
<td>Web Developer</td>
</tr>
<tr>
<td></td>
<td>Modeling Specialist</td>
<td></td>
<td>Webmaster</td>
</tr>
<tr>
<td></td>
<td>Online Publisher</td>
<td></td>
<td>Writer</td>
</tr>
<tr>
<td></td>
<td>PC Support Specialist</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Network Systems | Information Support and Services | Web and Digital Communications | Programming and Software Development |

**Cluster Knowledge and Skills**

- Academic Foundations
- Communications
- Problem Solving and Critical Thinking
- Information Technology Applications
- Systems
- Safety, Health and Environmental
- Leadership and Teamwork
- Ethics and Legal Responsibilities
- Employability and Career Development
- Technical Skills

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