Information Technology
Fredericktown 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 |
| 11    | Comm Arts III       | Pre-College Algebra or high school math course  
*English Comp I  
*Public Speaking  
*College Algebra  
*College Trig  
*College Calc  
*College Biology  
*College History I & II  
*College Political Systems  
*High School Science | High School Science  
*College Biology  
*College History I & II  
*College Political Systems  
*High School S.S. Course – History & Government  
*Microapplications  
*Personal Finance  
*Computer Science Electives (Available for Dual Enrollment)  
*Unitec – Computer networking classes  
*MAC Computer Networking Classes (Available for Dual Enrollment) | |
| 12    | Senior Comm Arts & Comm Arts elective  
*English Comp II  
*Intro to Literature | Pre-College Algebra or high school math  
*College Algebra  
*College Trig  
*College Calc  
*College Intro to Chem  
*College History I & II  
*College Political Systems  
*High School Science | High School Science  
*College Intro to Chem  
*College History I & II  
*College Political Systems  
*High School S.S. Course – History & Government  
*Microapplications  
*Personal Finance  
*Computer Science Electives (Available for Dual Enrollment)  
*Unitec – Computer networking classes  
*MAC Computer Networking Classes (Available for Dual Enrollment) | |

*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>Administrator</td>
<td>Analyst</td>
</tr>
<tr>
<td>Architect</td>
<td>Application Integrator Architect</td>
<td>Animator</td>
<td>Architect</td>
</tr>
<tr>
<td>Communications Analyst</td>
<td>Business Continuity Analyst</td>
<td>Audio/Video Engineer</td>
<td>Authoring Specialist</td>
</tr>
<tr>
<td>Data Communications Analyst</td>
<td>Call Center Support Representative</td>
<td>Blog Developer</td>
<td>Design Engineer</td>
</tr>
<tr>
<td>Engineer</td>
<td>Content Manager</td>
<td>Developer</td>
<td>Developer</td>
</tr>
<tr>
<td>Information Systems</td>
<td>Cross-Enterprise Integrator</td>
<td>Media Specialist</td>
<td>Media Specialist</td>
</tr>
<tr>
<td>Administrator</td>
<td>Database Administrator</td>
<td>Documentation Specialist</td>
<td>Media/Instructional Designer</td>
</tr>
<tr>
<td>Information Systems Operator</td>
<td>Desktop Publisher</td>
<td>DSS (Decision Support Services)</td>
<td>Multimedia: Author</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Developer</td>
<td>E-Business Specialist</td>
<td>Page Developer</td>
</tr>
<tr>
<td>Engineer</td>
<td>Document Specialist</td>
<td>Editor</td>
<td>Producer</td>
</tr>
<tr>
<td>Manager</td>
<td>Documentation Specialist</td>
<td>Electronic Publications Specialist</td>
<td>Production Assistant</td>
</tr>
<tr>
<td>Network Consulting Engineer</td>
<td>DSS (Decision Support Services)</td>
<td>Electronic Transactions Implementer</td>
<td>Programmer</td>
</tr>
<tr>
<td>Network Pre-Sales Engineer</td>
<td>E-Business Specialist</td>
<td>Help Desk Specialist</td>
<td>Search Engine Marketing Specialist</td>
</tr>
<tr>
<td>Network: Administrator</td>
<td>Editor</td>
<td>Instructional Designer</td>
<td>Search Engine Optimization Specialist</td>
</tr>
<tr>
<td>Operations Analyst</td>
<td>Integrator</td>
<td>Knowledge Architect</td>
<td>Site Developer</td>
</tr>
<tr>
<td>PC Support Specialist</td>
<td>Liaison</td>
<td>Maintenance Technician</td>
<td>Social Networking Specialist</td>
</tr>
<tr>
<td>Security Analyst</td>
<td>Management Associate</td>
<td>Manager</td>
<td>Specialist</td>
</tr>
<tr>
<td>Specialist</td>
<td>Modeling Specialist</td>
<td>Modeling Specialist</td>
<td>Streaming Media Specialist</td>
</tr>
<tr>
<td>Support Lead</td>
<td>Online Publisher</td>
<td>Online Publisher</td>
<td>Virtual Reality Specialist</td>
</tr>
<tr>
<td>Technical Support Specialist</td>
<td>PC Support Specialist</td>
<td>PC Systems Coordinator</td>
<td>Web Developer</td>
</tr>
<tr>
<td>Technician</td>
<td>Planner</td>
<td>Product Support Engineer</td>
<td>Webmaster</td>
</tr>
<tr>
<td>Telecommunications Network Technician</td>
<td>Product Support Engineer</td>
<td>Publications Manager</td>
<td>talking</td>
</tr>
<tr>
<td>Transport Administrator</td>
<td>Publisher</td>
<td>Sales Support Technician</td>
<td>Security Expert</td>
</tr>
<tr>
<td>User Support Specialist</td>
<td>Security Expert</td>
<td>Service Professional</td>
<td>Service Representative</td>
</tr>
<tr>
<td>Pathways</td>
<td>Architect</td>
<td>Support Engineer</td>
<td>Support Representative</td>
</tr>
<tr>
<td>K&amp;S</td>
<td>Support Designer</td>
<td>Systems Analyst</td>
<td>Systems Designer</td>
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<tr>
<td></td>
<td>Knowledge Architect</td>
<td>Technical Communicator</td>
<td>Technician</td>
</tr>
<tr>
<td></td>
<td>Liaison</td>
<td>Testing Engineer</td>
<td>Testing Engineer</td>
</tr>
<tr>
<td></td>
<td>Maintenance Technician</td>
<td>Warehouse Designer</td>
<td>Warehouse Designer</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>Writer</td>
<td>Writer</td>
</tr>
</tbody>
</table>

**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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