Agriculture, Food, and Natural Resources  
Central 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 @ Unitec</th>
<th>SAMPLE Occupations Relating to this Pathway</th>
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<tbody>
<tr>
<td>9</td>
<td>Comm Arts I</td>
<td>High School Math</td>
<td>High School Science Course</td>
<td>High School S.S. Course</td>
<td>Personal Finance Computer Science Ag electives</td>
<td>See high school counselor for course offerings</td>
<td>Occupations Requiring Postsecondary Education</td>
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<td>High School Science Course</td>
<td>High School S.S. Course</td>
<td>Personal Finance Computer Science Ag electives</td>
<td>See high school counselor for course offerings</td>
<td>Occupations Requiring Baccalaureate Degree &amp; Beyond</td>
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<td>► Microbiologist</td>
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<td>► Quality Control Specialist</td>
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</tbody>
</table>
| 11    | Comm Arts III & Comm Arts elective | Pre-College Algebra or high school math course | High School Science Course | High school S.S. Electives – History & Government | *Microapps  
  *Anatomy & Physiology  
  *Ag electives online  
  *Zoology  
  *General Chemistry  
  *Botany  
  *(Available for Dual Enrollment) | See high school counselor for course offerings | *Check with school counselor for dual enrollment classes available on the MAC on the web or on one of the MAC campuses |
|       | *English Comp I  
  *Public Speaking | *College Algebra, | *General Biology | *American  
  *History I & II,  
  *Western Civ I & II  
  *Spanish  
  *Gen Psyche and Socio |                                               |                                               |                                               |
| 12    | Senior Comm Arts  
  & Comm Arts elective | Pre-College Algebra high school courses | High School Science Course | High school S.S. Electives – History & Government | *Microapps  
  *Anatomy & Physiology  
  *Ag electives online  
  *Zoology  
  *General Chemistry  
  *Botany  
  *(Available for Dual Enrollment) | See high school counselor for course offerings | *Check with school counselor for dual enrollment classes available on the MAC on the web or on one of the MAC campuses |
|       | *English Comp II  
  *Intro to Literature | *College Algebra, | *Gen Chem | *American History I & II  
  *Western Civ I & II  
  *Spanish  
  *Gen Psyche and Socio |                                               |                                               |                                               |
The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fuel, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

<table>
<thead>
<tr>
<th>Pathways</th>
<th>Sample Career Specialties/Occupations</th>
<th>Cluster Knowledge and Skills</th>
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<tbody>
<tr>
<td>Food Products and Processing Systems</td>
<td>(Food Processing and preserving, Packaging, Distribution, Government monitoring &amp; regulation)</td>
<td>• Premier Leadership • Personal Growth • Career Success • Organizations and Associations • Organizational Structures and Processes • Safety, Health, and Environmental Management • Health and Safety Procedures • Tools, Equipment, Machinery and Technology • Issues • Technology and Globalization • Scientific Inquiry</td>
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<tr>
<td>Plant Systems</td>
<td>(Agronomic, Horticulture, Forestry, Turf, Viticulture, Soils, etc.)</td>
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<td>Animal Systems</td>
<td>(Large animals, small animals, wildlife animals, and research animals)</td>
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<td>Power, Structural &amp; Technical Systems</td>
<td>(Power, Structures, Controls, Geospatial Technology, Computer Systems, Electronics, Hydraulics, Pneumatics, etc.)</td>
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<tr>
<td>Natural Resources Systems</td>
<td>(Habitat Conservation, Forest Products, Parks and Recreation, Mining, Environmental Services, Fisheries, Soil Conservation, etc.)</td>
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<td>Environmental Service Systems</td>
<td>(Pollution Prevention, Water &amp; Air Quality, Hazardous Materials, Solid Waste Management, Health &amp; Safety Sanitation, etc.)</td>
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<tr>
<td>Agribusiness Systems</td>
<td>(Sales, Service, Farm and Ranch Management, Entrepreneurship, Economics, etc.)</td>
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