



**Industry Sector: Agriculture & Natural Resources**

Pathway: Ag Mechanics

Student Organization: FFA

| Grade | English Language Arts   | Math  | Social Studies                | Science   | Career Technical Education Course   | Other Required Courses or Recommended Electives    |  | Sample Occupations relating to this pathway  |
|-------|-------------------------|---|-------------------------------|---|---|--|--|--|
| 9     | <i>English 1 (1510)</i> | <i>Int Math 1 (2200)</i>                            |                               | <i>Int Sci 1 (2530)</i>                             | Introduction to Agricultural Mechanics (5040)<br>OR<br>Introduction to Agriculture (5000) | PE 1 (4500)  | Introduction to Agriculture and Natural Resources (5000) | <b>Occupations requiring a high school diploma</b> <ul style="list-style-type: none"> <li>Apprentice</li> <li>Farm/Ranch/Dairy Hand</li> <li>Dairy Equipment Maintenance</li> <li>Heavy Equipment Operator</li> </ul> <b>Industry recognized certifications, licenses, credentials or apprenticeships related to this pathway.</b> |
| 10    | <i>English 2 (1640)</i> | <i>Int Math 2 (2201)<br/>or Int Math 2-H (2202)</i> | <i>World History (1050)</i>   | <i>Biology &amp; Sustainable Agriculture (6255)</i> | Intermediate Agricultural Mechanics (5050)  | PE 2 (4510)  | <i>Spanish 1 (3000)<br/>or ASL 1 (3100)</i>              |  |
| 11    | <i>English 3 (1670)</i> | <i>Int Math 3 (2205)<br/>or Int Math 3-H (2206)</i> | <i>US History (1090)</i>      | <i>Chemistry &amp; Agriscience (6222)</i>           | Advanced Agricultural Mechanics-Ag Welding & Fabrication (5060)                           | <i>The Art and History of Floral Design (5090)</i> | <i>Spanish 2 (3010)<br/>or ASL 2 (3110)</i>              |  |
| 12    | <i>English 4 (1700)</i> | <i>CLMP (2250)<br/>or AP Calculus (2150)</i>        | <i>Gov / Econ (1130/1170)</i> | <i>Physics-H (2650)</i>                             | Advanced Agricultural Mechanics Design & Fabrication (5070)                               |  |  |  |

| 2 Year Postsecondary Degree/Certificate Programs  | 4 Year Postsecondary Program Options   | Occupations requiring some post-secondary  |
|---|--|--|
| <p><b>Hanford Adult School:</b> Certificate of Welding</p> <p><b>COS Tulare Campus:</b></p> <ul style="list-style-type: none"> <li>Agriculture Technology (AS)</li> <li>Certificate of Achievement in Ag Technology</li> <li>Skills Certificate in Ag Power Equipment &amp; Technician</li> <li>Skills Certificate in Irrigation Construction &amp; Installation</li> <li>Skills Certificate in Irrigation Management</li> <li>Welding Technology (AS)</li> <li>Certificate in Welding</li> </ul> <p><b>Reedley College</b></p> <ul style="list-style-type: none"> <li>Certificate - Maintenance Mechanic</li> <li>Certificate of Achievement - Manufacturing Maintenance Mechanic</li> <li>Certificate of Achievement - Manufacturing 1</li> <li>Certificate of Achievement - Welding Technology</li> <li>Certificate of Achievement - Machinist</li> <li>Certificate Achievement - Mechanized Agriculture</li> <li>Certificate of Achievement - Equipment Technician 1</li> <li>Certificate of Achievement - Equipment Technician 2</li> <li>Certificate of Achievement - Medium/Heavy Duty Truck Service &amp; Repair</li> <li>Welding Technology (AS)</li> <li>Manufacturing Maintenance Mechanic (AS)</li> <li>Machine Tool Technology (AS)</li> </ul> <p><b>West Hills College Coalinga:</b></p> <ul style="list-style-type: none"> <li>Certificate of Achievement - Welding Technology</li> <li>Industrial Maintenance Technology Program</li> <li>Certificate of Achievement - Heavy Equipment Operation</li> </ul> | <p><b>Fresno State:</b></p> <ul style="list-style-type: none"> <li>Bachelor of Science in Industrial Technology</li> <li>Masters of Science in Industrial Technology</li> <li>Single Subject Teaching Credential in Industrial Technology</li> </ul> | <p><b>Occupations requiring a 2 year Degree</b></p> <ul style="list-style-type: none"> <li>Agriculture Equipment Operator</li> <li>Welder</li> <li>Equipment Fabricator</li> <li>Farm Equipment Mechanic &amp; Service Technician</li> </ul> <p><b>Occupations requiring a BA/BS Degree</b></p> <ul style="list-style-type: none"> <li>Agriculture Engineer</li> <li>Agricultural Teacher</li> </ul> |

**Color Key As Follows:**

|  |   |
|--|---|
| Other Required Courses (A-G courses italicized)  | Required Courses (A-G courses italicized)                   |
| Dual/Concurrent Enrollment - Articulated Courses | Career Technical Education Courses (A-G courses italicized) |

