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| Career Technical Education (CTE) Program of Study for Entry into Community College | | | | | | | | | | | | | | | | | |
|  | | | **Name:** | | | | **ID:** | | **Gr:** | | | **Department:** Agriculture | | | | | |
| **Industry Sector:**  Agriculture and Natural Resources | | | | **Career Pathway:** Agricultural Mechanics—Emphasis in Welding Technology | | | | | | **Student Organization or Club:**  Future Farmers of America - FFA | | | | |
| **Recommended High School Course Schedule** | | | | | | | | | | | | | | | | | |
| ***Level*** | ***Grade*** | ***English*** | | ***Social Studies*** | ***Math*** | ***Science*** | | ***Other Required Courses, Electives, CTE*** | | | | | | ***Other Required Courses, Electives, CTE*** | | ***Work-Based***  ***Learning Activities*** | |
| Secondary | 9 | English 1 | | Geography & Health & Wellness | Algebra 1 | Agriculture Life Science | | Physical Ed 1 | | | | | | Strategic English I | | * FFA | |
| 10 | English 2 | | World History | Geometry | Environmental Ag Science | | Physical Ed 2 | | | | | | \*\*Ag Shop Skills | | * FFA * ROP Industry Day | |
| 11 | English 3 | | US History | Algebra 2/ Trigonometry | Ag Earth Science or Physics | | ROP Art and History of Floral Design (Fine Art) | | | | | | \*\*Welding Technology I | | * FFA * ROP Portfolio Day | |
| 12 | English 4 | | Government & Economics | **Select three periods from:**  College Prep Math, \*\*Equipment Construction I, \*\*Small Engines and Power Equipment , \*\*\*ROP Environmental Horticulture,  \*\*\*ROP Internships in Agriculture (2 periods), \*\*\*Beginning Drafting | | | | | | | | | \*\*Welding Technology II | | * FFA * Senior Exit Interviews * ROP Community   Classroom | |
| Postsecondary | **Articulated Courses: Student earns Merced College units of credit for the identified college course when student passes the ACE (Articulated Credit by Exam)** | | | | | | | | | | | | | | | | |
| MUHSD/ROP | | | | | | | | | MERCED COLLEGE | | | | | | |  |
| Welding I, II, Equipment Construction I, II | | | | | | | | | WELD 06: Fundamentals of Oxy-Fuel Welding & Shielded Metal Arc Welding | | | | | | | 3 |
| Small Engines and Power Equipment | | | | | | | | | MECH 15: Small Gas Engines | | | | | | | 3 |
| Ag Shop Skills PLUS an additional Ag Mechanics Junior/Senior Level Course such as Ag Welding I/II, OR Equipment Construction I/II, OR Small Engines, or Power Mechanics | | | | | | | | | MECH 10: Agriculture Skills | | | | | | | 3 |
| Beginning Drafting | | | | | | | | | DRFT 04A: Fundamentals of Computer-Aided Drafting | | | | | | | 3 |
| ROP Environmental Horticulture | | | | | | | | | LAND 11: Elements of landscape Horticulture | | | | | | | 3 |
| ROP Internships in Agriculture | | | | | | | | | CO-OP 41A: Cooperative Education in Agriculture | | | | | | | 3 |
| ***\*ROP Certificate Earned at Completion of Course \*\*Merced College credit earned through articulation \*\*\*ROP & Articulation*** | | | | | | | | | | | | | | | | | |
| Merced Community College Coursework Related to the Pathway | | | | | | | | | | | Sample Occupations Related to the Pathway | | | | | | |
| Degrees & Certificates | | | | | Sample Courses | | | | | | AA or AS Degree or Certificate | | | | BS or BA Degree | | |
| **Degrees:**  A.A. Welding Technology  **Certificates:**  Welding Technology | | | | | WELD 07: Fundamentals of T.I.G. and M.I.G  WELD 40A: Welding Design and Construction  WELD 40B: Welding Design and Construction,  Advanced  WELD 45: Advanced Arc Welding Procedures  WELD 48: Special Problems in Welding Technology | | | | | | Ag Sales & Services Technician  Certified Welder  Metal Fabricator  Welding Technician  Robotic Welding Technician  Underwater Welder  Autobody Technician | | | | Certified Welding Inspector  Welding Engineer  Research Engineer  Source/Material Engineer  Quality Assurance Inspector  Environmental Engineer  Ag Mechanics Instructor | | |

Merced College: POS Agriculture Mechanics pathway – Welding Community College – 4/20/12