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| Career Technical Education (CTE) Program of Study for Entry into 4-Year University | | | | | | | | | | | | | | | | | | |
|  | | | **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 or  English 1 Pre-AP | | Geography & Health & Wellness | | Geometry | Integrated Agricultural Biology | | | Physical Ed 1 | | | | \*\*Ag Shop Skills | | | * FFA | |
| 10 | English 2 or  English 2 Pre-AP | | World History or  World History Adv. | | Algebra 2/ Trigonometry | Chemistry | | | Physical Ed 2 | | | | \*\*Welding Technology I | | | * FFA * ROP Industry Day | |
| 11 | English 3 or  AP English  Lang/Comp | | US History or  AP US History | | Pre-Calculus or Probability & Statistics | Physics | | | Foreign Language | | | | \*\*Welding Technology II | | | * FFA * ROP Portfolio Day | |
| 12 | English 4 or  AP English Literature | | Government & Economics or AP US Govern. & Politics | | AP Calculus, AP Statistics | \*\*ROP Art and History of Floral Design (Fine Art) | | | Foreign Language | | | | Select one:  Equipment Construction I  \*\*Beginning Drafting | | | * 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 |
| 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 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  Equipment Fabricator  Welding Technician  Robotic Welding Technician  Underwater Welder  Autobody Technician | | | | Certified Welding Inspector  Fabrication Designer  Welding Engineer  Research Engineer  Source/Material Engineer  Quality Assurance Inspector  Environmental Engineer  Ag Mechanics Instructor | | |

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