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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:** Agriculture Mechanics—Emphasis in Power Mechanics | | | | | | **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 for Life | | 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 | | | | \*\*Small Engines and Power Equipment | | | * 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 | | | | \*\*Power Mechanics | | | * FFA * ROP Portfolio Day | |
| 12 | English 4 or  AP English Literature | | Government & Economics or AP US Govern. & Politics | | AP Calculus, or AP Statistics, or Elective | \*\*ROP Art and History of Floral Design (Fine Art) | | Foreign Language | | | | Select one:  \*\* Welding Technology 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 Technology I/II | | | | | | | | WELD 06: Fundamentals of Oxy-Fuel Welding & Shielded Metal Arc Welding | | | | | | | | 3 |
| Small Engines and Power Equipment or Power Mechanics | | | | | | | | 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 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. or A.S. in Mechanized Agriculture/heavy Equipment Mechanics  **Certificates:**  Compact Power Equipment  Mechanized Agriculture Technology/Heavy  Equipment Mechanic | | | | | MECH 22A: Diesel Engines  MECH 26: Power Equipment Electrical Systems  MECH 34: Service Fundamentals  MECH 35: Compact Power Equipment  MECH 40: Equipment Repair  WELD 07: Fundamentals of T.I.G. and M.I.G  WELD 40A: Welding Design and Construction  WELD 48: Special Problems in Welding Tech | | | | | | Equipment Service Technician  Agricultural Equipment Technician  Farm and Power Equipment Technician  Construction Equipment Technician  Hydraulic Technician  Diesel Equipment Technician  Heavy Equipment Operator  Heavy Duty Electrical Technician | | | | Parts and Service Manager  Shop Manager  Tractor Corporation Service Representative  Insurance Claims Adjuster  Golf Course Superintendent  Ag Mechanics Instructor  Agricultural Engineer | | |

Merced College: POS Agriculture Mechanics pathway – Power Equip. 4 Yr. University- 4/20/12