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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 orEnglish 1 Pre-AP | Geography & Health & Wellness for Life | Geometry | Integrated Agricultural Biology | Physical Ed 1  | \*\*Ag Shop Skills  | * FFA
 |
| 10 | English 2 orEnglish 2 Pre-AP | World History orWorld History Adv. | Algebra 2/ Trigonometry | Chemistry | Physical Ed 2  | \*\*Small Engines and Power Equipment  | * FFA
* ROP Industry Day
 |
| 11 | English 3 orAP EnglishLang/Comp  | US History orAP US History | Pre-Calculus or Probability & Statistics | Physics  | Foreign Language | \*\*Power Mechanics | * FFA
* ROP Portfolio Day
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| 12 | English 4 orAP 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 EquipmentMechanized Agriculture Technology/Heavy  Equipment Mechanic |  MECH 22A: Diesel EnginesMECH 26: Power Equipment Electrical SystemsMECH 34: Service FundamentalsMECH 35: Compact Power EquipmentMECH 40: Equipment RepairWELD 07: Fundamentals of T.I.G. and M.I.GWELD 40A: Welding Design and ConstructionWELD 48: Special Problems in Welding Tech |  Equipment Service TechnicianAgricultural Equipment TechnicianFarm and Power Equipment TechnicianConstruction Equipment TechnicianHydraulic TechnicianDiesel Equipment TechnicianHeavy Equipment OperatorHeavy Duty Electrical Technician |  Parts and Service ManagerShop ManagerTractor Corporation Service Representative Insurance Claims AdjusterGolf Course Superintendent Ag Mechanics Instructor Agricultural Engineer |

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