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| Career Technical Education (CTE) Program of Study for Entry into 4 year University |
|  | **Name:**       | **ID:**       | **Gr:**    | **Department:** Industrial Technology |
| **Industry Sector:** Manufacturing and Product Development | **Career Pathway:** Welding and Material Joining | **Student Organization or Club:**Skills USA and I DO It |
| **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 I Pre-AP | Geography & Health & Wellness  | Geometry | Biology | Physical Ed 1  | Fine Art  | * Skills USA
 |
| 10 | English 2 orEnglish 2 Pre-AP | World History orWorld History Adv. | Algebra 2/ Trigonometry | Chemistry | Physical Ed 2  | Foreign Language  | * Skills USA
* ROP Industry Day
 |
| 11 | English 3 orAP EnglishLang/Comp  | US History orAP US History | Pre-Calculus or Probability and Statistics | Physics | \*\* Metal Shop I | Foreign Language  | * Skills USA
* I DO IT
 |
| 12 | English 4 orAP English Literature | Government & Economics or AP US Govern. & Politics | AP Calculus or AP Statistics or Foreign Language | AP Chemistry or AP Physics | \*\*Beginning Drafting | \*\*Metal Shop II | * Skills USA
* I DO IT
* Senior Exit Interviews
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| 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 |  |
| Metal Shop 1-4  | WELD 06: Fundamentals of Oxy-Fuel Welding and Shielded Metal Arc Welding | 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.GWELD 40A: Welding Design and ConstructionWELD 40B: Welding Design and Construction,  AdvancedWELD 45: Advanced Arc Welding ProceduresWELD 48: Special Problems in Welding Technology |  Certified WelderWelding JourneymanStructural Steel and IronworkerFabricatorWelding TechnicianRobotic Welding TechnicianUnderwater Welder |  Certified Welding InspectorFabrication DesignerWelding EngineerResearch EngineerStructural EngineerEnvironmental EngineerManufacturing Engineer |

Merced College: POS Manufacturing & Product Development for Welding pathway for 4-Year University – 4/20/12