

| 9th Grade Introduction to Manufacturing | Focus: All 9th grade experiences are designed to introduce students to careers in advanced manufacturing and related fields. Students will have hands-on experiences from day one as they gain workforce knowledge. Activities are designed to help students spark interests in particular career pathway. Soft skills and technical skills are emphasized in all classrooms to promote workforce readiness. Student Learning Outcomes: Students are able to identify different careers within advanced manufacturing and related fields that they are interested in as a future career. Students are able to speak with a basic understanding about norms and cultural attributes of careers in advanced manufacturing and related fields. | Experiences include, but are not limited to: Communication Skills Conflict Resolution Field Trips/Industry Tours Organization Skills Safety Time Management Problem Solving Teamwork & Collaboration Dress for Success Attendance Code of Conduct Respect for authority & self Cleanliness Understand Basic Manufacturing Maintenance Components Production Processes Self & Peer Assessments | 5S Assessment DMAIC Process Project-Based Learning Good Manufacturing Practices Classroom Speakers Accountability Data Analysis Electronics Research Careers Critical Thinking Use of Basic Hand Tools Basic Measurement Precision Measurement Resume' Writing Quality in Manufacturing |
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| 10th Grade Career Exploration | Focus: All 10 th grade experiences provide students with opportunities to look closely at specific career options in advanced manufacturing and related fields. Students refine their areas of interests to prepare themselves to determine which pathway is appropriate for them at the conclusion of the school year. Soft skills and technical skills are still being emphasized in all classrooms to promote workforce readiness. Student Learning Outcome: Students are able to make an informed decision on which career pathway is most suited for them by the end of their 10 th grade school year. | Experiences include, but are not limited to: Computer Aided Design (CAD) Basic Robotics Business Ethics/Etiquette Classroom Speakers Field Trips/Industry Tours Project-Based Learning/Industry-Based Projects Lean Manufacturing Time Management Safety Tenacity/Determination Attention to Detail Dress for Success Critical Thinking Self & Peer Assessments | Communication Skills Work Ethics Organization Skills Critical Thinking Problem Solving Teamwork & Collaboration 5S Assessment DMAIC Process Accountability Data Analysis 3D Printing Resume' Writing Attendance |



| | | Focus: | Experiences include, but are not limited to: | |
|--------------------------|-------------|--|---|--|
| Grade | | All 11 th grade activities are designed to help prepare | Business Ethics/Etiquette | Communication Skills |
| | _ | students for their specific career or college pathway. | Classroom Speakers | Organization Skills |
| | UC | Students will begin to apply their learning through | • Field Trips/Industry Tours | Critical Thinking |
| | ti | work-based activities like job shadowing and | Project-Based Learning/Industry-Based | Problem Solving |
| | ra | continued interactions with industry professionals. | Projects | • Teamwork & |
| | a. | Hands-on learning opportunities remain in the | Time Management | Collaboration |
| | ep | forefront. | Safety | • 5S Assessment |
| | $^{\rm Or}$ | | OSHA Certification | DMAIC Process |
| L | r I | Student Learning Outcome: | Reading Blueprints | Accountability |
| [1 ^{t1} | 6 | Students are able to understand workplace culture, | Basic Electricity | Data Analysis |
| | ١re | etiquette and practices. | • Cleanliness | Understanding Excel |
| | () () | | Code of Conduct | Leadership Skills |
| |) | Students are able to demonstrate professionalism, | • ISO 9000 | Resume' Writing |
| | | punctuality, responsibility, and ethical behavior during | Attendance | Dress for Success |
| | | work-based experiences. | Critical Thinking | • Self & Peer Assessments |
| | | Focus: | Experiences include, but are not limited to: | |
| | | All 12 th grade students are engaged in hands-on and | Classroom Speakers | Communication Skills |
| | L. | practical experiences. Students experiences with | Job Shadowing | Organization Skills |
| | U. | industrial equipment will help prepare them for | Project-Based Learning/Industry-Based | Critical Thinking |
| | ne | experiences in the field. Workforce development will | Projects | Problem Solving |
| 12 th Grade | pr | continue, but focused on specific organizations. | Time Management | • Teamwork & |
| | 0 | Students' knowledge will be developed on the role of | • Safety | Collaboration |
| | ſe | an employee. | • 3D Printing | • 5S Assessment |
| | ev | | Computer Aided Design (CAD) | DMAIC Process |
| | Ď | Student Learning Outcome: | Understanding PLCs | Accountability |
| | G | Students are able to demonstrate knowledge and skills | Understanding Circuit Analysis | Data Analysis |
| | rC | specific to employment in their career pathway. | Intro to Automation | Instrumentation |
| | fo | | Cost Analysis/Justification | • How to fill out an |
| | K - | | Metric System/Fractions/Applied | application |
| | .0 | | Mathematics | Calibration |
| | | | • Ladder Logic | • Accuracy in Magaziromont |
| | \leq | | • Lauder Logic | Accuracy in Measurement |
| | \leq | | Attendance | Resume' Writing |
| | M | | AttendanceCritical Thinking | Accuracy in Weasurement Resume' Writing Dress for Success |

