

# Manufacturing Engineering Technology 2 Syllabus

## **Course Description/Goals:**

Students will reinforce, apply, and transfer knowledge and skills to develop systems using electrical controls and pneumatics or hydraulics devices, troubleshoot programmable logic controls for robot systems and develop a product on a CNC machine/lathe. Coursework will include using mathematical processes to analyze mathematical relationships, communicate ideas, and justify mathematical ideas/arguments using precise language in both written and oral communication. Students will have the opportunity to FANUC Robot Operator I Certification. This course counts as a Math credit. **This course does not meet NCAA eligibility for student-athletes. For more information, visit [eligibilitycenter.org](http://eligibilitycenter.org).**

## **Course TEKS/Objectives:**

In Manufacturing Engineering Technology II, students will gain knowledge and skills in the application, design, production, and assessment of products, services, and systems and how those knowledge and skills are applied to manufacturing. The study of Manufacturing Engineering Technology II will allow students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings.

## **[Manufacturing Engineering Technology 2 TEKS](#)**

## **Course Outline:**

<b>Semester 1</b>	<b>Semester 2</b>
<ul style="list-style-type: none"><li>-Basic Mechanical Elements</li><li>-Power Efficiency</li><li>-Gear Drives</li><li>-Decision Making in Manufacturing</li><li>-Hydraulics</li><li>-Chain Drives</li></ul>	<ul style="list-style-type: none"><li>-Program Logic Control</li><li>-Robot Application Development</li><li>-FANUC Robot Applications</li><li>-FANUC Robot Certification</li></ul>