

Computer Integrated Manufacturing

Local Course #: 82645

State Course ID: N1303748

Course Description:

Manufactured items are part of everyday life, and this course illuminates the opportunities related to understanding manufacturing. In this Project Lead the Way course, students discover and explore manufacturing processes, product design, robotics, and automation, and then they apply what they have learned to design solutions for real-world manufacturing problems.

Link to TEKS:

<https://tea.texas.gov/academics/learning-support-and-programs/innovative-courses/pltw-computer-integrated-manufacturing.pdf>

First 9 Weeks Major Topics:

Principles of Manufacturing: History of manufacturing, control systems, cost of manufacturing

Second 9 Weeks Major Topics:

Manufacturing Processes: Designing for manufacturability, how we make things, product development.

Third 9 Weeks Major Topics:

Elements of Automation: Introduction to robotic automation, introduction to Automation Power, Robotic programming and usage

Fourth 9 Weeks Major Topics:

Integration of Manufacturing: CIM systems, integration of Manufacturing