# **Advanced Manufacturing Management**



#### **Meet our students**

Our students complete one year of intensive studies, learning a range of advanced production management skills. These students have expertise in every aspect of advanced manufacturing management including lean manufacturing, advanced manufacturing concepts such as 3D printing, robotics, reverse engineering; traditional manufacturing processes (subtractive manufacturing), Enterprise Resource Planning (ERP), sustainable manufacturing, operations management, supply chain, energy management and sustainability, quality assurance and more. With their expertise and skills, these students are ready to tackle the variety of challenges faced by manufacturing and service organizations.

Learn more about the classes these students take by visiting the program webpage.

#### **Core competencies and skills**

- Analyzing and planning professional and engineering decisions in a manufacturing environment.
- Using quality improvement tools such as Pareto, histogram, cause-and-effect diagram, and check sheet.
- Identifying applications for current technologies including Solid Modeling, Robotics, Additive Manufacturing, Computer Aided Manufacturing (CAM), Vision Systems, Radio Frequency Identification (RFID), Flexible Manufacturing and Computer Integrated Manufacturing (CIM).
- Siemens Plant simulation, SAP, Solid Work, Retscreen, Minitab 16, Microsoft Project, PLC.
- Understanding the requirements set out by ISO 9000, 14000 and 50000.

#### **Sheridan Works**

• Students are trained to be ready for the following certifications: Green Belt, AHSRAE level 1, Bronze lean manufacturing.

#### Work term availability

• Summer (May – August)

Note: Students will be available for full-time hire upon completion of their work term.

### Work term capabilities

- Applying Life Cycle Assessment (LCA) to evaluate the impact of operations on the environment.
- Writing standardized work procedures.
- Performing basic energy audits to increase productivity and reduce energy costs.
- Creating a basic energy management plan in compliance with the ISO 50001 Energy Management System Standard.
- Implementing manufacturing engineering functions, including process, design improvements and equipment installation.
- Evaluating cost effectiveness of manufacturing products, processes, and operations.
- Applying plant simulation software and problem-solving techniques to resolve typical manufacturing problems.
- Recommending technologies required to increase productivity and reduce waste in a facility.
- Managing small manufacturing process and equipment design projects.

### **Employer resources**

- Employer webpage
- Program information
- Program course schedule

#### Post a job

To post a job, log in to our online platform Sheridan Works.

Don't have an account? Create one today using our Employer Registration Guide.

## **Sheridan Works**