#### Twin Cities Campus

# Manufacturing Operations Management Certificate

CCAPS Certificate Programs

### **College of Continuing and Professional Studies**

- Students will no longer be accepted into this program after Summer 2020. Program requirements below are for current students only.
- Beginning Fall Semester 2020, admission to this certificate program will be suspended.
- Program Type: Undergraduate credit certificate
- Requirements for this program are current for Fall 2022
- Required credits to graduate with this degree: 16
- Degree: Manufacturing Operations Mgmt Certificate

The manufacturing operations management certificate can assist students to move into a position of greater responsibility in the manufacturing industry. Students learn about the most recent manufacturing industry practices and technologies and understand them from the perspective of competitive business demands.

## **Program Delivery**

This program is available:

• partially online (between 50% to 80% of instruction is online)

### Admission Requirements

Students must complete 45 credits before admission to the program.

A GPA above 2.0 is preferred for the following:

- 2.50 already admitted to the degree-granting college
- 2.50 transferring from another University of Minnesota college
- 2.50 transferring from outside the University

For information about University of Minnesota admission requirements, visit the Office of Admissions website.

### General Requirements

All students are required to complete general University and college requirements including writing and liberal education courses. For more information about University-wide requirements, see the <u>liberal education requirements</u>. Required courses for the major or minor in which a student receives a D grade (with or without plus or minus) do not count toward the major or minor (including transfer courses).

#### Program Requirements

With approval of the program, up to 6 credits of transfer coursework may be used to satisfy requirements for this certificate.

### **Certificate Requirements**

#### **Core Requirements**

MM 3001W - Manufacturing in the Global Economy [WI] (3.0 cr)

MM 4102 - Optimizing Operations Management (3.0 cr)

#### **Technical Electives**

Choose ten credits from the following courses:

MM 3205 - Engineering for Manufacturing Operations (3.0 cr)

or MM 3305 - Advanced 3D Printing for Innovative Business Practices (3.0 cr)

or MM 4011 - Virtual Reality and Simulation in Manufacturing (3.0 cr)

or MM 4012 - Advanced Manufacturing: Applied Process and Technology (3.0 cr)

or MM 4035 - Global Supply Chain Management (3.0 cr)

or MM 4039 - The Science of Sourcing: Partnerships for Success (3.0 cr)

or MM 4045 - The Product Life Cycle in a Regulated Industry (3.0 cr)

or MM 4201 - Quality Engineering and Management (3.0 cr)

or MM 4311 - Sustainable Lean Manufacturing: Eliminating the Waste (3.0 cr)

or MM 4193 - Capstone Directed Study (3.0 cr)

or MM 4596 - Internship (1.0 cr)