15 credits must be graduate-level coursework. Refer to

# MANUFACTURING SYSTEMS ENGINEERING: MANUFACTURING ENGINEERING, MS

#### REQUIREMENTS

## MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum degree requirements (https:// guide.wisc.edu/graduate/#requirementstext) and policies (https:// guide.wisc.edu/graduate/#policiestext), in addition to the program requirements listed below.

### NAMED OPTION REQUIREMENTS MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
No	No	Yes	No	No

#### **Mode of Instruction Definitions**

**Accelerated:** Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

**Evening/Weekend:** Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

**Face-to-Face:** Courses typically meet during weekdays on the UW-Madison Campus.

**Hybrid:** These programs combine face-to-face and online learning formats. Contact the program for more specific information.

**Online:** These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

#### CURRICULAR REQUIREMENTS

Minimum 30 credits Credit Requirement Minimum 16 credits Residence	Requirement Detail					
Residence	Credit	30 credits				
Requirement	Residence Credit	16 credits				

Graduate Coursework Requirement	the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/ UW-1244 (https://policy.wisc.edu/library/UW-1244/).
	The department recommends taking coursework in College of Engineering, the School of Business, the Department of Statistics, the Department of Biological Systems Engineering, and the Department of Computer Sciences.
Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https://policy.wisc.edu/library/ UW-1203 (https://policy.wisc.edu/library/UW-1203/).
Other Grade Requirements	Must retake any courses for which a grade below C is recorded.
Assessments and Examinations	No language requirements.

#### **REQUIRED COURSES**

Minimum

Code	Title	Credits
E P D 611	Engineering Economics and Management	3
E P D 612	Technical Project Management	3
E P D 678	Supply Chain Management for Engineers	3
I SY E 412	Fundamentals of Industrial Data Analytics	3
I SY E 615	Production Systems Control	3
I SY E 618	Quality Engineering and Quality Management	3
ISYE/ME 641	Design and Analysis of Manufacturing Systems	3
M E 529	Design & Applications of Smart Manufacturing Processes	3
Electives <sup>1</sup>		6
Total Credits		30

<sup>1</sup> Students choose elective courses in consultation with their advisor.

Students in this program may not take courses outside the prescribed curriculum without faculty advisor and program director approval. Students in this program cannot enroll concurrently in other undergraduate or graduate degree programs. 1