ENGINEERING: ENGINEERING DATA ANALYTICS, MENG

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), 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

Requirement	Detail
Minimum Credit Requirement	30 credits
Minimum Residence Credit Requirement	16 credits
Minimum Graduate Coursework Requirement	15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/).
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 formal examination required.
Language Requirements	None.

REQUIRED COURSES

Code	Title	Credits
Core Courses		**15**
Students must complete at least 15 credits from the following courses:		
E P D 416	Engineering Applications of Statistics	
I SY E 412	Fundamentals of Industrial Data Analytics	
I SY E/M E 512	Inspection, Quality Control and Reliability	
I SY E/COMP SCI/ E C E 524	Introduction to Optimization	
I SY E 603	Special Topics in Engineering Analytics and Operations Research (Topic: Applied Temporal Data Analytic)	
I SY E 649	Interactive Data Analytics	
M E 459	Computing Concepts for Applications in Engineering	
M E/COMP SCI/ E C E 532	Matrix Methods in Machine Learning	
M E 548	Introduction to Design Optimization	
M E/COMP SCI/ E C E/E M A/ E P 759	High Performance Computing for Applications in Engineering	
Electives		**15**
Students choose 15 elective credits from courses numbered 300 and above within Engineering Management, Manufacturing Systems, Polymer Engineering, and Sustainable Systems Engineering in consultation with their advisor.		
Total Credits		**30**

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.