ENGINEERING: ENGINE SYSTEMS, M.ENG.

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	30 credits must be graduate-level coursework. Details can be found in the Graduate School's Minimum Graduate Coursework (50%) policy (https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/)).
Overall Graduate GPA Requirement	3.00 GPA required. This program follows the Graduate School's 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 BC is recorded.
Assessments and Examinations	No formal examination required.
Language Requirements	No language requirements.

REQUIRED COURSES

Code	Title	Credits
Required courses:		**22**
E P D 622	Engine Design I	3
E P D 623	Engine Design II	3
E P D 624	Engine Performance and Combustion	3
E P D 625	Engine Gas Dynamics	3
E P D 627	Perspectives on Engine Modeling Seminar	1
E P D 628	Analysis of Trends in Engines	1
E P D 629	Powertrain Systems and Controls	3
E P D 633	Engine Boosting	2
E P D 642	Thermodynamics of Engine Systems	3
Electives:		**8**
E P D 620	Electrified Powertrain Systems	
E P D 621	Batteries for xElectrified Vehicles	
E P D 630	Engine Design III	
E P D 635	Exhaust Aftertreatment Systems	
E P D 645	Electric Machines for Traction Applications	
E P D 646	Electric Drives for Traction Applications	
E P D 612	Technical Project Management	
E P D 647	Trends in Electrification Seminar	
E P D 699	Independent Study	
E P D/ACCT I S/ GEN BUS 781	Financial and Business Acumen	
E P D/GEN BUS/ MARKETNG 782	Marketing for Non-Marketing Professionals	
E P D/GEN BUS/ M H R 783	Leading Teams	
E P D/GEN BUS/ M H R 785	Effective Negotiation Strategies	
E P D/GEN BUS/ OTM 784	Project Management Essentials	
E P D 631	Electrified Vehicle-Level Modeling	
E P D 720	Engine Noise and Vibration	
E P D 701	Writing for Professionals	
E P D 702	Professional Presentations	
E P D 704	Organizational Communication and Problem Solving	
E P D 706	Change Management	
E P D 708	Creating Breakthrough Innovations	
E P D 712	Ethics for Professionals	
Other courses with program director approval.		

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.