Engineering Management Course Schedule Plan

Ten courses are required for the EM degree. Students must complete five core courses and five courses from the selected track. All courses must be completed within five years.

Refer to the EP website <u>http://ep.jhu.edu/</u> for course offerings each semester.

Courses are subject to cancellation for insufficient enrollment. Consult your advisor if a course you planned to take is not listed in the semester's schedule.

Delivery methods:

OL (primarily online, recorded lectures, asynchronous, could include some synchronous activities), VL (primarily synchronous real-time video conference, could include some recorded lectures, could include some in-person activities [remote option available]).

Course Number	Course Title	Prerequisites (as listed or with instructor approval)	Delivery method ¹	Offering plan ¹
595.660	Planning and Managing Projects	None	VL and OL	All semesters
595.662	Technical Organization Management	595.660	OL	All semesters
595.665	Strategic Communications in Technical Organizations	595.660	OL	All semesters
595.676	Finance, Contracts, and Compliance for Technical Professionals	595.660	OL	All semesters
595.781	Executive Technical Leadership	595.660, 595.662 (or 595.661 or 595.663), 595.676 (or 595.664 or 595.666), 595.665	VL ²	Fall, Spring

REQUIRED CORE COURSES

¹Please consult the semester schedule when registering as delivery methods and offering schedule may change.

² Students are expected to attend the in-person day-long capstone event (near the end of the semester) in the Laurel, MD area

All semesters = Summer, Fall, Spring

Sixteen Specialty Tracks are offered with more on the way.

The student must take five courses in their chosen track. The requirements vary between tracks. The student should consult the Engineering Management track webpage, https://ep.jhu.edu/programs/engineering-management/courses/#tracks

for specific information. All courses must be approved by the respective trackadvisor.

The currently available EM tracks are:

Applied and Computational Mathematics
Applied Biomedical Engineering
Applied Physics
Artificial Intelligence
Civil Engineering
Computer Science
Cybersecurity
Data Science
Electrical and Computer Engineering
Environmental Engineering, Science, and Management Programs
Healthcare Systems Engineering
Information Systems Engineering
Materials Science and Engineering
Mechanical Engineering
Structural Engineering
Space Systems Engineering
Structural Engineering
Systems Engineering
Technical Leadership*

*Technical Leadership electives are offered through the Engineering Management program. The student must select five graduate-level elective courses from the Engineering Management program EN.595.xxx. At least two of these elective courses must be at the 700 level (EN.595.802 Directed Studies in Engineering Management can count as the capstone experience in place of EN.595.781 or as one of the 700-level electives with Chair approval). The Engineering Management advisor will have the flexibility to work with each student to determine the appropriate mix of courses and must approve the program of study.

Course Number	Course Title	Prerequisites (as listed or with instructor approval)	Delivery method ¹	Offering plan ¹
595.701	Product and Supply Chain Management for Technical Professionals	595.660	VL	All semesters
595.727	Advanced Concepts in Agile Technical Management	none	VL	All semesters
595.731	Business Law for Technical Professionals	none	OL	All semesters
595.742	Quality Management in Technical Organizations	none	VL	All semesters

595.758	Data Science for the Technical Leader	none	OL	All semesters
595.762	Leading Technical Organizations	595.662 (or 595.661 or 595.663)	OL	All semesters
595.766	Advanced Technology	none	VL	Spring
595.793	Applied Innovation for Technical Professionals	none	OL	Fall
595.802	DirectedStudies in Engineering Management	N/A		
675.740	Assuring Success of Aerospace Programs (SSE program course)	675.600 and 675.601 or instructor approval	OL	All semesters
705.615	Artificial Intelligence for Leaders (AI program course)	N/A	OL	TBD

Residential Course Options for Technical Leadership Track

From the Homewood Residential Engineering Management Program, Center for Leadership Education (CLE). Courses are ½ semester credit, two courses required for full-semester equivalent.

663.660	Managing People and Resolving Conflict	
663.671	Leading Change	
663.673	Leading Teams in Virtual, International, and Local Settings	

¹Please consult the semester schedule when registering as delivery methods and offering schedule may change.