

Student Course Planning Models

Course offerings may differ depending on when students begin and department resources.

Students may take classes in any order they choose.



INDUSTRIAL & SYSTEMS
ENGINEERING

Electives*

Program	Master of Science - Industrial and Systems Engineering	Master of Engineering Management (MEM)- Systems option	MEM- Manufacturing option	MEM- Occupational Safety and Ergonomics option	MEM- Product Innovation option
Fall 2026	Lean Systems*	Lean Systems	Lean Systems	Lean Systems	Lean Systems
Spring 2027	Linear Programming; Graduate Seminar (1 hour)	Project Management	Project Management	Project Management	Project Management
Summer 2027	Human Factors Engineering*	Human Factors Engineering	Human Factors Engineering	Human Factors Engineering	Human Factors Engineering
Fall 2027	Advanced Engineering Statistics; Elective*	Engineering and Technology Management; Systems Engineering	Engineering and Technology Management; Control of the Manufacturing Floor and Processes	Engineering and Technology Management; Occupational Safety Engineering	Engineering and Technology Management; Product Design, Development and Test
Spring 2028	Engineering Economic Systems; Elective*	Engineering Economic Systems; Life Cycle Engineering	Engineering Economic Systems; Elective*	Engineering Economic Systems; Elective*	Engineering Economic Systems; Product Launch, Manufacturing, and Delivery
Summer 2028	Elective*	Elective*	Elective*	Fundamentals of Ergonomics	Elective*
Fall 2028	Elective*; Elective*	Elective*; Elective*	Six Sigma; Elective*	Elective*; Elective*	Elective*; Elective*
Total Hours	31	30	30	30	30

*Sample Electives

- Decision Support Systems
 - Simulation-Based Planning and Scheduling
 - Multi-Paradigm Modeling and Simulation
 - Adaptive Optimization
 - Fuzzy Systems and Neural Networks
 - Computer and Network Security
 - Rocket Propulsion
 - Supply Chain Management
- Organizational Leadership, Ethics, and Change
 - Data Analytics and Modeling
 - System Safety Engineering
 - Data Mining
 - Reliability Engineering
 - Advanced Algorithms
 - Dynamics of Flight
 - Quantitative Analysis for Business Decisions