

Student Course Planning Models – Start Fall 2025

Course Offerings may differ depending on when students start and department resources. Students may take classes in any order they choose.

Electives*

Program	MSISE	MEM- Manufacturing	MEM- Occupational Safety and Ergonomics	MEM- Product Innovation	MEM- Systems
Fall 2025	Lean Systems*	Lean Systems	Lean Systems	Lean Systems	Lean Systems
Spring 2026	Linear Programming; Graduate Seminar (1 hour)	Control of the Manufacturing Floor and Processes	Project Management	Project Management	Project Management
Summer 2026	Human Factors Engineering*	Human Factors Engineering	Human Factors Engineering	Human Factors Engineering	Human Factors Engineering
Fall 2026	Advanced Engineering Statistics; Elective*	Engineering and Technology Management; Six Sigma	Engineering and Technology Management; Elective*	Engineering and Technology Management; Product Design, Development and Test	Engineering and Technology Management; Systems Engineering
Spring 2027	Engineering Economic Systems; Elective*	Engineering Economic Systems; Elective*	Engineering Economic Systems; Elective*	Engineering Economic Systems; Product Launch, Manufacturing, and Delivery	Engineering Economic Systems; Life Cycle Engineering
Summer 2027	Elective*	Elective*	Fundamentals of Ergonomics	Elective*	Elective*
Fall 2027	Elective*; Elective*	Project Management; Elective*	Occupational Safety Engineering; Elective*	Elective*; Elective*	Elective*; Elective*
Total Hours	31	30	30	30	30

*Sample Electives

- Decision Support Systems
- Organizational Leadership, Ethics, and Change
- Simulation-Based Planning and Scheduling
- Data Analytics and Modeling
- Multi-Paradigm Modeling and Simulation
- System Safety Engineering
- Adaptive Optimization
- Cognitive Engineering and System Design
- Reliability Engineering
- Data Analytics

- Computer and Network Security
- Rocket Propulsion
- Supply Chain Management

- Advanced Topics in Algorithms
- Dynamics of Flight
- Quantitative Analysis for Business Decisions