

Student Course Planning Models – Start Fall 2023

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 2023	Lean Systems*	Lean Systems	Lean Systems	Lean Systems	Lean Systems
Spring 2024	Linear Programming; Graduate Seminar (1 hour)	Project Management	Project Management	Project Management	Project Management
Summer 2024	Human Factors Engineering*	Human Factors Engineering	Human Factors Engineering	Human Factors Engineering	Human Factors Engineering
Fall 2024	Advanced Engineering Statistics; Elective*	Engineering and Technology Management; Six Sigma	Engineering and Technology Management; Occupational Safety Engineering	Engineering and Technology Management; Product Design, Development and Test	Engineering and Technology Management; Systems Engineering
Spring 2025	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 2025	Elective*	Elective*	Fundamentals of Ergonomics	Elective*	Elective*
Fall 2025	Elective*; Elective*	Control of the Manufacturing Floor and Processes; Elective*	Elective*; 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
- Organizational Leadership, Ethics, and Change
- Data Analytics and Modeling
- System Safety Engineering
- Data Mining
- Reliability Engineering

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

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