

## Student Course Planning Models – Start Spring 2024

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
Spring 2024	Lean Systems*; Graduate Seminar (1 hour)	Lean Systems	Lean Systems	Lean Systems	Lean Systems
Summer 2024	Human Factors*	Human Factors	Human Factors	Human Factors	Human Factors
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 I
Spring 2025	Linear Programming; Elective*	Engineering Economic Systems	Engineering Economic Systems	Engineering Economic Systems; Product Launch, Manufacturing, and Delivery	Engineering Economic Systems; Life Cycle Engineering
Summer 2025	Engineering Economic Systems	Project Management or Special Topics	Project Management or Special Topics	Project Management or Special Topics	Project Management or Special Topics
Fall 2025	Elective* Elective*	Control of the Manufacturing Floor and Processes; Elective*	Fundamentals of Ergonomics; Elective*	Elective* Elective*	Elective* Elective*
Spring 2026	Elective*	Elective*; 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
- Data Mining
- Fuzzy Systems and Neural Networks
- Reliability Engineering
- Computer and Network Security
- Advanced Algorithms
- Rocket Propulsion
- Dynamics of Flight
- Supply Chain Management
- Quantitative Analysis for Business Decisions