

Program Options

The following is necessary to fulfill the requirements of an option:

- Perform at least 20 weeks of co-op experience in the option area
- Complete courses in an option area using either professional electives (PE) or free electives (see list of approved courses within each option below)

The Ergonomics Program Option allows for further study in the design of systems with respect to biomechanical, physiological and cognitive human capabilities, and how to best integrate humans within systems.

Ergonomics/Human Factors Option (Complete three courses)	
ISEE-730	Biomechanics
ISEE-731	Advanced Topics in Ergo/HF
ISEE-732	Systems Safety Engineering
ISEE-760	Design of Experiments

The Supply Chain Management Program Option provides further study in the design, planning, execution, control, and monitoring of distribution and logistics activities with the objective of ensuring the cost-effective delivery of products and services globally.

Supply Chain Management (Complete three courses)	
ISTE-608	Database Design and Implementation or MGIS-755 Information Technology Strategy and Management
ISEE-703	Supply Chain Management
ISEE-704	Logistics Management
ISEE-711	Advanced Simulation
ISEE-720	Production Control

The Manufacturing Program Option allows for advanced learning in how products can be manufactured, assembled, maintained, and ultimately disassembled in safe, efficient, cost effective, and environmentally acceptable ways.

Manufacturing Option (Complete three courses)	
ISEE-626	Contemporary Production Systems
ISEE-740	Design for Manufacture and Assembly
ISEE-741	3D Printing
MECE-404	Robotics

The Lean Six Sigma Program Option allow students to further expand their learning of industry-recognized skills to streamline processes, improve product quality, reduce waste and increase competitive advantage. This program option focuses on the integration and application of process and quality methodologies.

Lean Six-Sigma Option (Complete three courses)	
ISEE-626	Contemporary Production Systems
ISEE-682	Lean Six Sigma Fundamentals
ISEE-728	Production Systems Management
ISEE-760	Design of Experiments