

GLOBAL INNOVATION AND LEADERSHIP, MASTER OF SCIENCE

<https://msil.engineering.jhu.edu/>

The Master of Science in Global Innovation and Leadership (MSIL) degree program is designed to provide students with the skills and knowledge necessary to drive innovation and lead teams in a global setting. The program emphasizes the importance of cultural awareness, collaboration, and problem-solving in the development of new ideas and technologies. In addition to core coursework in leadership and innovation, students in the program will choose from one of several technical tracks, including data analytics, cyber security, systems engineering, engineering management, environmental planning and management, and healthcare systems engineering. These tracks will allow students to specialize in a specific area of interest and gain expertise in the tools and techniques needed to succeed in their chosen field.

Throughout the program, students will have the opportunity to work on real-world projects and case studies, applying their knowledge and skills in a practical setting. They will also have access to a network of industry professionals and experts who can provide guidance and support as they develop their careers. Upon graduation, students will be prepared to take on leadership roles in a variety of sectors, including technology, healthcare, engineering, and environmental planning. With a Master's degree in Global Innovation and Leadership, students will be well-equipped to tackle the complex challenges of the 21st century and drive positive change in their organizations and communities.

Graduate Requirements

Please consult directly with the MSIL program director to confirm the below requirements; changes may have occurred since this annual publication.

Students in the MSIL program take the following to fulfill degree requirements:

- Five advanced courses in the engineering technical track (15 credits, with a minimum of 3 credits per course)
- Seven courses in the management track, including: Design and Innovation in a Global Setting, MSIL Seminar, Financial Management, Management and Global Team Leadership, Design and Innovation Capstone, Project Management, and Global Innovation IP Protection (19.5 credits). This list of courses is subject to change.
- No grade lower than C may be applied to the program (and only one C is permitted)
- Courses must be at the graduate level (600-level or higher)
- Departments sponsoring technical tracks may impose stricter requirements for course work within the track.
- Students are additionally required to complete EN.500.603 Graduate Orientation and Academic Ethics, and the Responsible Conduct of Research which do not count towards the degree requirements above.

Advising

MSIL students will receive advising on the technical track from a designated faculty member affiliated with that track. MSIL students will

be advised regarding the management track by members of the Center for Leadership Education faculty.

Faculty

Faculty members teaching the technical track courses are listed in their respective engineering departments elsewhere in this catalogue. Faculty members teaching the management track courses are listed in the Center for Leadership Education section of this catalogue.

Program Requirements

Management Track

All Master of Science in Global Innovation and Leadership students will participate in a 19.5-credit management track, in which the entering class will take two required, full-semester innovation and leadership courses during their first semester:

- Design and Innovation in a Global Setting (3 credits)
- MSIL Seminar (3 credits)

The remaining required management track courses (13.5 credits) include

- Financial Management (3 credits)
- Management and Global Team Leadership (3 credits)
- Design and Innovation Capstone (3 credits)
- Project Management (3 credits)
- Global Innovation IP Protection (1.5 credits)

The Global Innovation and Leadership program reserves the right to change the list of eligible courses at its discretion.

Technical Tracks

In addition to fulfilling the management track requirements, MSIL students must complete the requirements for one of the technical tracks (5 courses, 15 credits total/3 credits per course). Technical Tracks do not appear on the transcript or diploma. These are:

- Automation, AI, and Cybersecurity
- Data Analytics
- Engineering Management
- Environmental Planning and Management
- Healthcare Systems and Technology
- Systems Engineering

Please note: the course requirements listed below are a general guide and are subject to change frequently. For degree requirements, please refer to the technical track advisor. Refer to the website for more information: <https://msil.engineering.jhu.edu/academics/technical-track/>