Aerospace Systems Engineering

Jason Merret
Welcome New Graduate Students

• Director of the Master of Engineering Program in Aerospace Systems Engineering
  • Part of the Aerospace Graduate Program
  • Currently run out of the GCOE

• Master of Engineering Program
  • 14 existing students
  • 3 graduates
  • 8 new students

• Looking forward to meeting and with each one of you
  • All graduate students are welcome to come chat with me
What is Systems Engineering?

Systems Engineering is a holistic perspective of the engineering profession, enterprises that engage engineers, and communities that operate the products, systems and services that engineers create.

- Systems Engineering is a broad discipline
  - Systems Engineering addresses the integration of large, complex Family-of-Systems, Systems-of-Systems, Systems and Subsystems

- Systems Engineering has been captured in many different forms

- The SYSTEMS ENGINEER is a "big picture" engineer.

- Controls the overall systems design to meet the needs of all of the stakeholders. (buyers, operators, maintainers and commanders)
Aerospace System - Complexity
Master of Engineering Degree
Vision

• Develop Aerospace Engineers with technical depth/breadth that will be focused at the system level while preparing them to become system, project, or program engineers through a professionally based master’s program

• Utilize College of Engineering resources available to the Aerospace Department to continue to develop and advance the degree programs offered by the department
Master of Engineering ASE Website

- [https://aerospacesystemsmeng.engineering.illinois.edu/](https://aerospacesystemsmeng.engineering.illinois.edu/)
Format

• Replaces AE MS-NT in Systems Engineering
• Student customizable
• Practicum replaces math requirement
• On-campus
  • 3 semester program
    • Fall-Spring-Summer
    • Fall-Spring-Fall
    • Spring-Fall-Spring
    • Spring-Fall-Summer (Not possible at this time due to 542-543 sequence)
  • No student funding (TA or RA)
• On-line
  • 5 year maximum
Professional Development/Practicum

• Student will participate/solve in an industry style problem/work package

• GCOE will do its best to connect the student with a company that is relevant to their field of study within the MEng program

• Typical Problem scope
  • Small problem that is solvable in a semester
  • Systems engineering oriented
  • Technical challenge encouraged

• 30-40 page report at the end of the semester
Questions and Feedback

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