Design systems for autonomous surveillance and natural disaster response, cyberinfrastructure for space traffic, and technology for connected vehicles.

**Research Focus Areas**
- Data analytics, informatics & machine learning
- Energy, water, environment & sustainability
- Health care systems
- Human factors & sociotechnical systems
- Optimization
- Smart transportation & manufacturing logistics
- Space, defense & security

**Program Highlights**
- Highly ranked programs
- 10 distinct graduate tracks
- Online MS and graduate certificates
- Flexible interdisciplinary curriculum
- High-profile research and valuable internships
- Hispanic-serving Institution

**Degrees**
- PhD Systems & Industrial Engineering
- PhD Software Engineering
- MS Engineering Management (online options)
- MS Industrial Engineering (online options)
- MS Systems Engineering (online options)
- MS Software Engineering (online options)

**Certificates** (online options)
- Engineering Management
- Quality & Reliability Engineering
- Systems Engineering

**Top 25**
Industrial/systems/manufacturing grad programs (U.S. News & World Report 2022)

**Nation’s First**
Academic systems engineering program

**Funding Options Throughout Degree Lifecycle, Including:**
- Four-year SIE scholarship
- Research/teaching assistantships
- Fellowship awards

**Application Deadlines**
- MS & Graduate Certificate
  - Fall: January 15
  - Spring: June 1
- Doctoral Program
  - Fall: December 1

**Contacts**

**Systems & Industrial Engineering and Engineering Management Graduate Programs**
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**Software Engineering Graduate Programs**
*Liza Soto, Software Engineering Graduate Coordinator, Sr.*
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"The opportunity to work on a NASA-funded mission while obtaining a graduate degree seemed too good to be true. I am part of a mission that will directly enhance our knowledge of the solar system – all while still being in school."

- Kristofer Drozd, PhD student
With industrial engineering, the beauty is that you can expand to almost all engineering areas, and it encourages collaboration. It can be applied to a variety of other disciplines.

- Hongyue Jin, assistant professor

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Faculty Expertise

Hannah Budinoff – hdb@arizona.edu
design for manufacturing, additive manufacturing, engineering design and design methodology, engineering education, sustainable manufacturing

Tomas Cerny – tcerny@arizona.edu
software architecture, cloud native systems, code analysis, software design, technical debt, system evolution

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stochastic programming, robust and distributionally robust optimization, semidefinite and copositive optimization, network design and energy management

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traffic signal systems, urban traffic operations, transportation modeling, connected vehicles, autonomous vehicles, intelligent transportation systems

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Systems thinking, systems decision making, decision analysis, systems design, resource management, planning

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cyberphysical systems security, smart manufacturing systems, statistical process monitoring, manufacturing process data analytics, advanced metrology systems, data-driven quality control

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medical informatics, health care systems engineering, computing applications for critical care medicine, traumatic brain injury, STEM integration, engineering ethics

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cost modeling, software cost estimation, harmonization of systems and software engineering, acquisition policy, process improvement methods, human systems integration, professionalization of systems engineering

Yue Wang – ywang@arizona.edu
Inventory management, transportation and logistics, supply chain optimization

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