Graduate School Information Night

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Aerospace Engineering

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Welcome!

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Outline

• Why attend graduate school?
• AE Graduate Program overview
• Financial support
• Application process
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Why Attend Graduate School?
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- More knowledge/specialization
- Higher salary for advanced degrees*
  - BS starting salary - $61K
  - MS starting salary - $76K
  - PhD starting salary - $100K
- More career paths
- Interest in research

* Salary information from Spring 2018 NACE Salary Survey
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AE Graduate Programs

• Master of Engineering (MEng)
  – Aerospace Systems
  – Started Spring 2020

• Masters of Science (MS)
  – Non-thesis (MSNT)
  – Thesis

• PhD (including direct) – now with 5-year funding guarantee
AE @ Illinois By-the-Numbers

- Faculty
- Rank (USNWR)
- Grad (total)
- MS
- PhD
- MS Online
- MEng
Master of Science

• Targets students wanting detailed knowledge in AE

• MS (without thesis)
  – 32 hours of coursework
    • Grad courses 4 hrs each
    • Possible 4 hrs independent study
  – 2 semesters possible, 3 more reasonable
  – Self-supported (no TA/RA)

• MS (with thesis)
  – 24 hours of coursework
  – 8 hours of thesis credit
  – Typically 4 semesters + summer
  – RA/TA funding available
  – MS Thesis
BS + MS Combined Program

- You receive both BS and MS degrees
- Overall GPA of 3.4 for BS
- MS Degree requirements are the same
- Apply January 1st of your junior year (after you complete fall semester junior AE core classes)
- Application process same as MS
- Can shave ~1 semester off BS + MS time
Master of Engineering

- Targets students interested in *system level design* and *program management* in aerospace engineering
- Highly recommended by AE Recent Alumni
- Similar to MSNT, but with math ⇔ practicum
- 32 hours of coursework
  - AE 542 + AE 543 (Aerospace Systems Eng. I & II) Required
- 3 semesters
Ph.D. (Doctor of Philosophy)

- Targets students wanting to define the leading edge of knowledge
- 24 hours of coursework beyond the MS + 24 hrs thesis credit
- Typically 3-5 years beyond the MS
- RA support guaranteed + 1 semester TA required
- Qualifying Exam
- Preliminary Exam
- Thesis and Final Defense
Direct PhD Program

- Allows students with GPA ≥ 3.75 to “skip” the MS and directly enter the PhD program
- Why?
  - 1 thesis vs. 2 theses
  - Shaves ~1 year of BS ⇒ PhD process
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Financial Support

• MSNT + MEng: self-supporting
• MS + PhD
  – Advisor pays you a stipend, your tuition, health insurance, and other fees
  – Stipend ~ $2,500 / month for 50% appointment

• Fellowships: most attractive but very competitive
  – National: NSF GFRP, NASA NSTRF, DoD NDSEG & SMART
  – Campus: Illinois Distinguished
  – College: Carver, SURGE
  – Department: Stillwell, Beatty, GAANN
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Application Process

• AE has automatic admission into the MEng / MS programs if
  – UIUC Overall GPA ≥ 3.0
  – UIUC Technical GPA ≥ 3.25
  – Start graduate school immediately following graduation

• Entry into PhD program requires
  – Personal statement
  – 3 reference letters
  – GRE (+ TOEFL if international student)
Application Dates

• For Spring 2021 Entry
  – Now!

• For Fall 2021 Entry*:
  – January 1, 2021, for MS & PhD
  – July 1, 2021, for MSNT, MEng

• The GRE has been waved for SP21 and FA21 due to pandemic

*These are “soft” deadlines. We will accept your application any time but RA/TA funding gets more difficult the later you wait.
For More Information

• MS and PhD Programs:
  https://aerospace.illinois.edu/academics/graduate

• MEng Program:
  https://aerospacesystems.meng.engineering.illinois.edu/
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