Smead Aerospace Engineering Sciences
University of Colorado Boulder

Prospective BAM Student Orientation

March 11, 2022

3:00 PM-4:00 PM

Smead Aerospace
UNIVERSITY OF COLORADO **BOULDER**

Resources

- Aerospace BAM Program Page
- Regular graduate admissions page
- Graduate Student Handbook
- Graduate School Funding
  - Aid for Graduate & Professional Students
  - AES Funding Your Master's/PhD
- Tuition & Fee Rate Sheets SY 2021/22 *(2022/23 SY will be available after May 1)*
  - MS: In-State
  - MS: Out-of-State / International
  - ProMS: In-State / Out of State / International
- Graduate School Policies & Procedures
- BS graduation and BAM program required items
  - To be completed your final BS semester–detailed instructions will be sent to you early in the semester you graduate instructing you to:
    - Apply to graduate *(with your BS)*
    - Submit Master's Continuation form *(where you confirm when you will start your graduate program)*
    - Submit BAM Supplement form *(where you indicate the courses you will double-count and/or that are for the MS-only that you took as an undergraduate student)*
- Academic Calendar

What is BAM?

- The Bachelor's-Accelerated Master's program (BAM) offers the opportunity to **receive a bachelor's and master's degree in a shorter period of time**.
- Because some courses are allowed to double-count for both the BS and the MS degrees, **students can receive a master's degree in less time and at a lower cost** than if they were to enroll in a stand-alone master's degree program after completion of their baccalaureate degree.
- **Short application. No GRE, no letters of recommendation, no application fee required**.
- In addition, staying at CU Boulder to pursue a graduate degree **enables students to continue working with their established faculty mentors**.

What the BAM Program is not

- **The BAM Program is not a 5th year undergraduate degree**
  - You are committing to a graduate program
- **It is not something that you should do because your peers are doing it**
  - A graduate degree is an investment of your time and financial resources
  - This should be a decision that ties to your professional goals
- **It is not an extension of undergraduate advising and services**
  - A graduate student is entering the professional environment of graduate school
  - Consider it a job where you are held accountable meeting administrative deadlines and are expected to use campus resources and problem-solve with minimal guidance and supervision
- **It is not a race against time for you to get your MS as quickly as possible**
  - Ideally students complete in one year, but it is more common for BAM students to spread it out over three semesters
    - Have 4 years to complete once you officially start (are at graduate student status)
    - A summer course or two is VERY helpful!

AES BAM Applicant Requirements

- **Current Applicant Requirements:**
  - **3.50 cumulative GPA**
  - **3.50 GPA in ASEN coursework (2000-level and higher)**
    - Excluding ASEN 3036 & 3046 (H&SS courses)
    - NOTE: a student can take a Maymester 4000-level course (like ASEN 4128) to raise their ASEN GPA if necessary, but this would only be an option for students on the cusp.
    - ALSO NOTE: if you completed any 2000-level ASEN course summer 2020 or earlier, the GPA requirements are 3.25
  - **Are in the semester registering in ASEN 4018 - Senior Projects 1**
    - Typically spring of junior year
  - **Completed MAPS**
    - Students with outstanding MAPS requirements must be enrolled in courses necessary to complete these at the time their BAM application is submitted. Proof of enrollment must be submitted with application if course is not a CU Boulder course.

If you **do not meet the current BAM applicant requirements, you are encouraged to **apply via the "regular" route**.*

AES BAM Program Application Process

- **April 30 - Application opens; first day to apply**
  - Please do not apply before this date; your application will be denied if sent before April 30– applicant will have to reapply Between April 30 and June 30
  - NOTE: AES does NOT require any supporting documentation

- **June 30 - Application closes**
  - Late applicants will be denied
  - Reviews start June 30 and all decisions will be sent by July 31
  - Please read comments upon receiving your decision email

- **Visit AES's BAM Program page for more information and a link to the application:** https://www.colorado.edu/aerospace/academics/undergraduates/bachelors-accelerated-masters

Applying BS courses towards a graduate degree for BAM

- **You may take up to and including 12 credit hours while in the undergraduate program which can later be used toward the master's degree**
  - **Of the 12 credit hours** that can apply towards MS requirements:
    - **6 credit hours may be double-counted** towards both the BS degree and MS degree
      - These would typically be some of your Professional Area Elective (PAE) choices
    - The remaining 6 credit hours would be extra courses NOT applying towards your BS degree (like ASEN 5000-level courses taken senior year NOT applying towards your BS)

- **Review our department's BAM Program Page:** https://www.colorado.edu/aerospace/academics/undergraduates/bachelors-accelerated-masters
- **Review the institutional BAM Program Policy here:** https://www.colorado.edu/registrar/students/degree-planning/bam-program/policy

Applying BS courses towards a graduate degree for BAM

Of note…

- **These rules and conditions apply ***ONLY*** to active BAM students**
  - Discontinuing the BAM Program *takes away* these conditions
  - For undergraduates not in the BAM program, any graduate course you take to fulfill undergraduate requirements CANNOT BE USED towards a graduate degree at most institutions
    - Thus, courses NOT used towards undergraduate requirements *may* be able to be used towards a graduate degree depending on the institution

Enrolling in Graduate-Level Courses

- **Newly admitted** (over summer) **BAM undergraduate students:**
  - Will have access to enroll or waitlist in graduate-level courses typically a week after admission to BAM, but no later than **Monday, August 8**

- **For all other (non-BAM) undergraduate students:**
  - Email the instructor of the course requesting permission to enroll
  - Forward the instructor's permission email to **aes-enrollment-help@colorado.edu** with the following info:
    - Your **Student ID #**, **course number**, *and* **section number**
    - Our enrollment team will begin enrolling or waitlisting students in graduate courses on **Wednesday, August 10**

- Again, remember that **most institutions will not accept any credit used for undergraduate degrees to be used for graduate degree requirements**.

MS Degree Options

Two Options for Graduate/Master's Degree:

- "Traditional" Master's (MS)

  or

- Professional Master's (ProMS)

MS and ProMS General Requirements

- **Both MS and ProMS degrees require:**
  - 30 total credit hours, equivalent to 10 courses of which:
    - 24 credit hours, equivalent to 8 courses at the 5000 level or above
    - 18 credit hours, equivalent to 6 ASEN courses (*EMEN 5405 counts as ASEN)*
    - 3 credit hours, equivalent to 1 approved math course
    - Up to 6 credit hours, equivalent to 2 courses can be at the 4000-level from approved departments (see Graduate Student Handbook)
- **Grades must be B- or higher**
  - For courses going towards a certificate, grade must be a B or higher
  - Grades C+ and lower, Pass/Fail, and No Credit do not count towards the MS degree (but a letter grade will impact your GPA)
- **Maintain a 3.0 cumulative GPA**

Traditional Master's Degree (MS)

- **Must choose a *Focus Area*** (ASN, AUT, BIO, FSM, or RSESS)
  - Must **meet Focus Area-specific requirements**
  - Depending on Focus Area, must choose one of these options:
    - Complete a **certificate** – all certificate grades must be B or higher
    - **Graduate Projects I & II** courses
    - Focus Area-specific **course-based option** (for AUT and FSM only)
    - **MS thesis**

Focus Areas

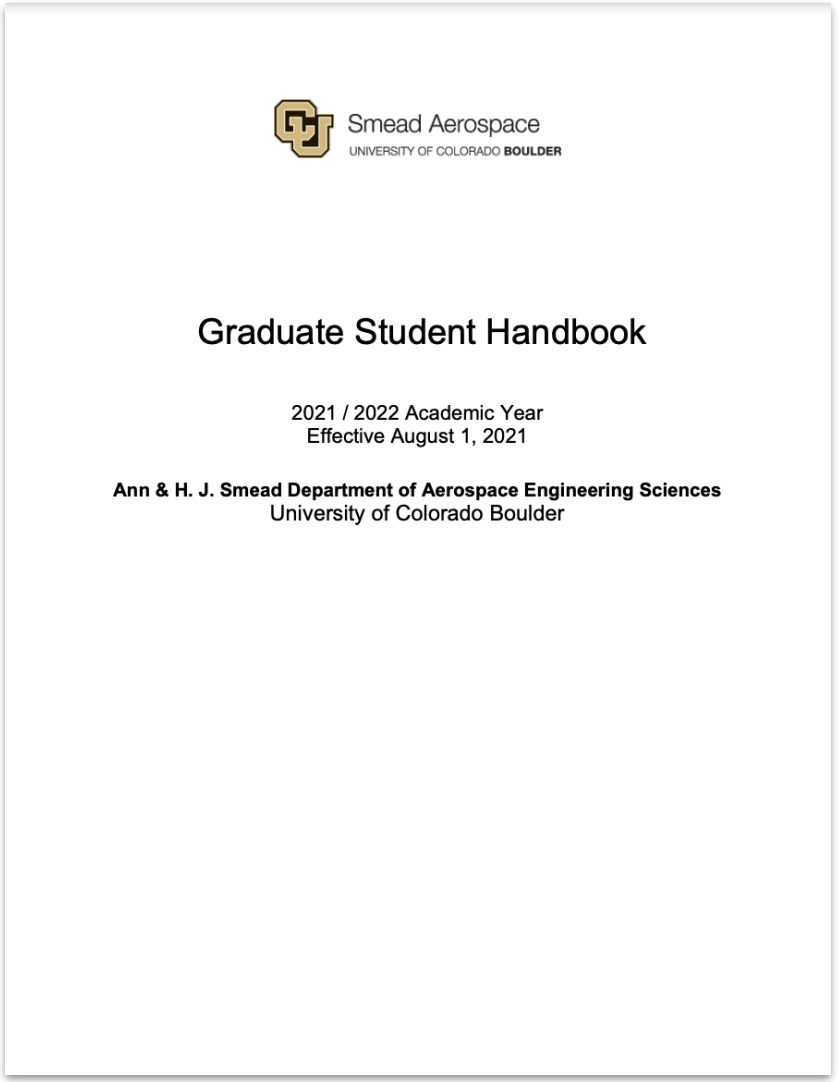
1. **Astrodynamics and Satellite Navigation (ASN)**
   - ***Lead:*** *Prof. Dan Scheeres*
2. **Autonomous Systems (AUT)**
   - ***Lead:*** *Prof. Zachary Sunberg*
3. **Bioastronautics (BIO)**
   - ***Lead:*** *Prof. Allie Anderson*
4. **Fluids, Structures, and Materials (FSM)**
   - ***Lead, Fluids:*** *Prof. Robyn Macdonald*
   - ***Lead, Structures & Materials:*** *Prof. Alireza Doostan*
5. **Remote Sensing, Earth & Space Sciences (RSESS)**
   - ***Lead:*** *Prof. Zoltan Sternovsky*

Explore more at the “Research Focus Areas” at the bottom of our homepage:
https://www.colorado.edu/aerospace/

Professional Master's Degree (ProMS)

- **Designed for working professionals**
- **Highly customizable curriculum and no Focus Area-specific requirements**
  - Completion of Graduate Projects I & II courses or a Certificate is an option but *NOT* required
  - Thesis option *NOT* available
- ***Different tuition structure*** (See Tuition & Fee Rate Sheet for ProMS)
- **ProMS students are eligible only for hourly campus positions, not for TA or RA opportunities**
  - TF positions (Teaching Facilitator) are possible

Find all this information and more in the Graduate Student Handbook



Smead Aerospace
UNIVERSITY OF COLORADO BOULDER

Graduate Student Handbook

2021 / 2022 Academic Year
Effective August 1, 2021

Ann & H. J. Smead Department of Aerospace Engineering Sciences
University of Colorado Boulder

What if I don't get into BAM or I missed the BAM application deadline?

“Regular” Graduate Admission to AES

If you don’t meet the BAM admissions requirements or miss the BAM application deadline, we *strongly* encourage you to apply via this route!

- **Application opens July 1**
- **Make sure you are aware of application deadlines**
  - **Fall Admission**
    - December 1 – Domestic and International applicants
  - **Spring Admission**
    - September 15 – International applicants
    - October 1 – Domestic applicants
- **Requirements:**
  - Undergraduate degree in engineering and a competitive GPA
  - Statement of Purpose / personal statement
  - 3 letters of recommendation
  - Transcripts
  - Resume
  - Currently, the GRE is NOT required for admission
- **Visit https://www.colorado.edu/aerospace/admissions/graduates for prerequisites and other information**

Funding

- **Self-funded degree:**
  - Student is financially responsible for tuition and fees
  - Funding could be via private funds, financial aid, fellowships or scholarships
  - See AES website for funding for more information: https://www.colorado.edu/aerospace/admissions/graduates/funding-your-mastersphd
  - See the Graduate School's Funding website for more information: https://www.colorado.edu/graduateschool/funding
  - See the Aid for Graduate & Professional students website for more information: https://www.colorado.edu/financialaid/aid-graduate-professional-students

- **Teaching/Course Facilitator (TF) Opportunities:**
  - Limited positions may be available for MS students
  - Other departments might have work opportunities that you can take advantage of as well
  - Not all positions offer tuition waivers (rare for MS students), most are salary or hourly-based
  - ProMS students can only take hourly positions

- **Department newsletters / announcements often contain opportunities for funding when available**

Contact Info & Office Hours for BAM Program Advising

Best way to reach me is through email:

- maureen.craig@colorado.edu

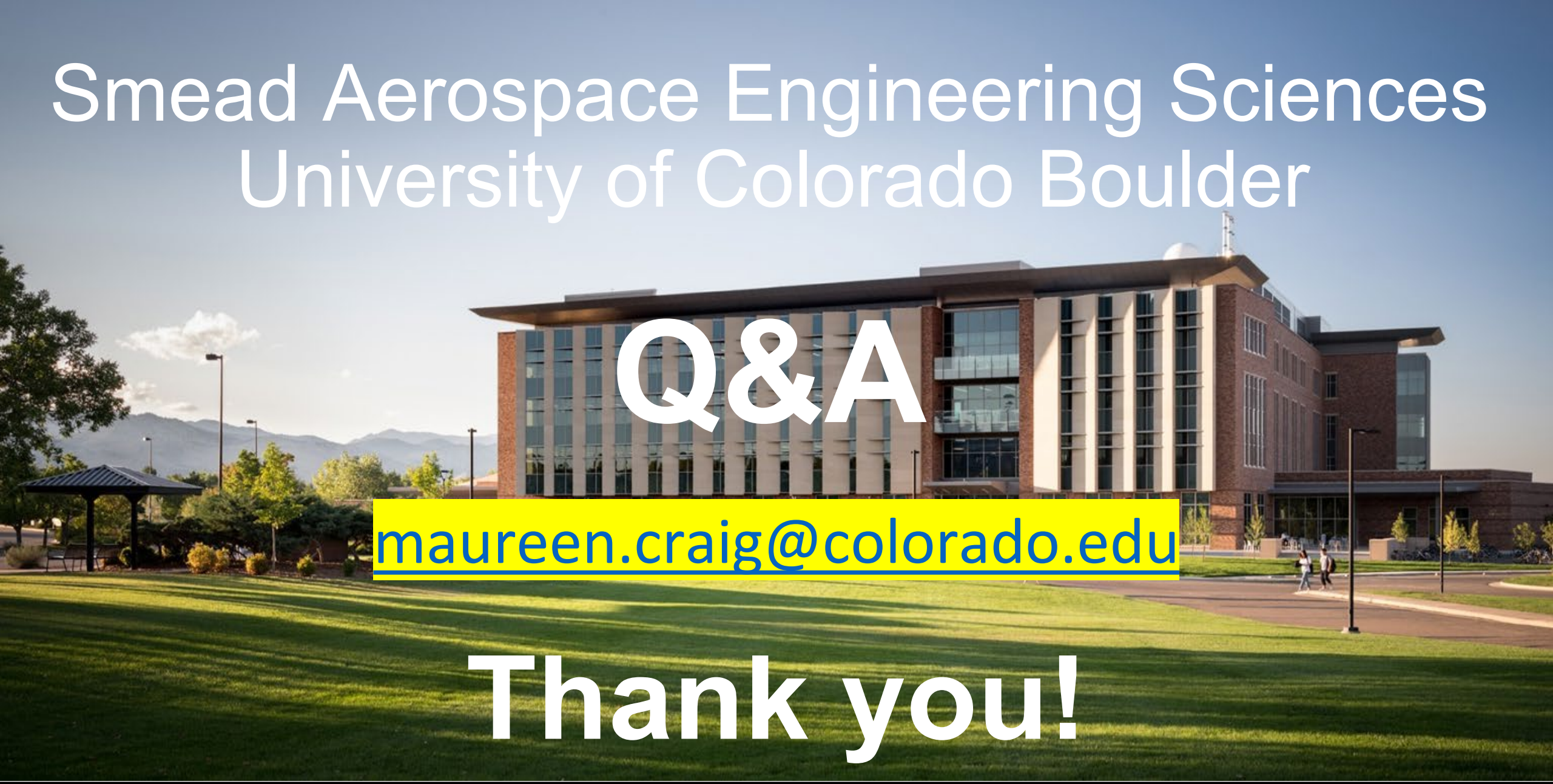
Office Hours for prospective BAM students via Zoom:

- Appointments available most Mondays between 1:00pm - 3:00pm and other days/times as available
- Graduate advisors use MS Bookings (not Buff Portal Advising) for scheduling appointments:
  - Maureen's appointment link:
    - *Schedule a BAM program / graduate advising appointment*

Tips and Advice

~From Prof. Holzinger, former Assoc. Chair for Graduate Studies

- **Do**
  - Treat your coursework like a job!
  - Take classes in what you're really interested in
  - Take responsibility for your own learning & degree plan
  - Schedule your work time carefully
  - Make some friends!
  - Take at least one full day off each week
- **Don't**
  - Assume this will be like undergrad program
  - Assume that faculty will spell everything out
  - Work or research if you're taking 4 classes
  - Related: try not to take 4 grad classes in one semester!
  - Forget your sense of curiosity!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Q&A
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Thank you!