Smead Aerospace Engineering Sciences
University of Colorado Boulder

Prospective BAM Student Orientation

April 14, 2023
3:00 PM-4:00 PM
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
  o You are committing to a graduate degree program
  o A graduate degree is an investment of your time and financial resources
  o This should be a decision that ties to your professional goals

• Is not an extension of undergraduate advising and services
  o A graduate student is entering the professional environment of graduate school
  o 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

• Is not a race against time for you to get your MS as quickly as possible
  o For many students, their goal is to complete their MS 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**
  - The application is called the "BAM intent form"
  - 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 admission decisions will be sent to applicants by July 31
  - Please read comments upon receiving your decision email

• **Visit the AES BAM Program page** for more information and a link to the application
Applying undergraduate courses towards graduate degree via 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:
    - Only 6 credit hours may be double-counted towards both the BS and MS degrees
      - These would typically be some of your Professional Area Electives (PAEs)
      - 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 the following resources for more detailed information:
  - The AES BAM Program page
  - The institutional BAM Program Policy page
Applying undergraduate courses towards graduate degree via 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:**
  - You will have access to self-enroll or waitlist in graduate-level courses beginning on **Monday, August 21 @ 12:01am**
    - Note that undergraduate enrollment closes from 6/15 – 8/21, so be ready to go on 8/21!

- **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 undergraduate students in graduate courses on **Wednesday, August 23**

Again, remember that most institutions will not accept any credit used to meet undergraduate degree requirements as transfer credit to meet graduate degree requirements, **even if it is a graduate-level course**.
Enrolling in Graduate-Level Courses

Graduate course recommendations for undergraduate students:

- **For ASEN courses**, visit the [AES BAM Program page](#) and review the “Recommended ASEN Graduate Courses (by focus area)” table towards the bottom of the page.
  - Those are courses that undergraduate BAM students have historically been successful in and are recommended by our faculty. Other graduate courses of interest can also be considered for enrollment, but if you have any questions or concerns regarding a course, you are encouraged to reach out to the instructor.
MS Degree Options
Two Options for Graduate/Master’s Degree:

You will choose one of these graduate degree options when you apply to the BAM program:

“Traditional” Master’s (MS)

or

Professional Master’s (ProMS)

*Note you are allowed to change to/from one degree option to the other **ONE TIME** after becoming a graduate student.
MS and ProMS General Requirements

• **Both** MS and ProMS degrees require:
  o 30 total credit hours, equivalent to 10 courses of which:
    ▪ 24 credit hours, equivalent to 8 courses must be at the 5000 level or above
    ▪ 18 credit hours, equivalent to 6 courses must be ASEN courses (*EMEN 5405 counts as ASEN*)
    ▪ 3 credit hours, equivalent to 1 course must meet the math requirement
  o Note:
    ▪ Up to 6 credit hours, equivalent to 2 courses can be at the 4000-level from approved departments (see *Graduate Student Handbook*). These can be taken while a graduate student if desired.
    ▪ What you select to use for BAM (up to 12 credit hours) will contribute to the 30 credit hours

• **Grades must be a B- or higher to meet graduate degree requirements**
  o For courses going towards a certificate, grades must be a B or higher
  o Grades C+ and lower, Pass/Fail, and No Credit do not count towards the graduate degree (but a letter grade will still 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. Dennis Akos

2. Autonomous Systems (AUT)
   Lead: Prof. Zachary Sunberg

3. Bioastronautics (BIO)
   Lead: Prof. Jim Nabity

4. Fluids, Structures, and Materials (FSM)
   Lead, Fluids: Prof. Robyn Macdonald
   Lead, Structures & Materials: Prof. Maryam Shakiba

5. Remote Sensing, Earth & Space Sciences (RSESS)
   Lead: Prof. Steve Nerem

Explore more at the “Research Focus Areas” section at the bottom of our homepage: https://www.colorado.edu/aerospace/
Professional Master’s Degree (ProMS)

• Designed for working professionals

• Highly customizable curriculum with *no Focus Area-specific requirements*
  o Completion of Graduate Projects I & II courses or a Certificate is an option but *NOT* required
  o Thesis option *NOT* available

• *Different tuition structure*
  o See "Tuition & Fee Rate Sheets" for the ProMS options on the Resources slide (slide 23)

• ProMS students are eligible only for hourly campus positions, not for TA or RA opportunities
  o TF (Teaching Facilitator) positions are possible
Find all this information and more in the Graduate Student Handbook

Graduate Student Handbook

2022 / 2023 Academic Year
Effective August 1, 2022

Ann & H. J. Smead Department of Aerospace Engineering Sciences
University of Colorado Boulder
What if I don’t get into BAM or missed the BAM application deadline?
“Regular” Graduate Admission to AES

If you don’t meet the BAM admission requirements or missed 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
  - Spring Admission
    - October 1
- 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 the AES Graduate Admissions page for more detailed admissions information
Funding

• **Master's Degrees are self-funded:**
  o Student is financially responsible for tuition and fees
  o Funding could be via private funds, financial aid, fellowships or scholarships
  o For more funding information, check out the following resources:
    - AES Funding Your Master's/PhD page
    - Graduate School's Funding page
    - Office of Financial Aid's Aid for Graduate & Professional Students page

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

• **Department newsletters / announcements often contain opportunities for funding when available**
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 the undergrad program
  ➢ Assume that faculty will spell everything out.
  ➢ Work a job or research if you’re taking 4 classes
  ➢ Related: try not to take 4 grad classes in one semester!
  ➢ Forget your sense of curiosity!
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 Monday afternoons and other days/times as available
• Graduate advisors use MS Bookings (not Buff Portal Advising) for scheduling appointments:
  o Maureen’s appointment link:
    ▪  Click here to schedule a BAM program / graduate advising appointment

  ➢ In the “Select service” section at the top, click “Undergraduate Prospective BAM student advising (appointments via Zoom)” to view open appointment days and times. Click on the times that are available or select a different day on calendar to view other availability.
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** *(2023/24 SY will be available after May 1)*
  - MS: In-State
  - MS: Out-of-State / International
  - ProMS: In-State
  - ProMS: Out of State / International
- **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**
Thank you!

Q&A

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