MAE GROUP ADVISING

Spring 2015

Student Schedules

- Full program in Excel Version 1.9 required
  - Helps to ensure you graduate when desired
  - Pay careful attention to prerequisites and long course sequences
- Each core course offered both fall and spring semesters
- Exception: MAE 4510/4511 Senior Design
  - Year-long course starting in Fall Only.
  - December graduates take previous fall / spring. Your spreadsheet MUST demonstrate degree fulfillment no later than Fall 2016 in order for you to sign up for Fall 2015 MAE 4510.
- Note: MAE 4510 is now 2-Credits (with a lab)
  - Those entering major prior to fall 2013 can choose either:
    - MAE 4510 2-credit and the free elective
    - MAE 4510 2-credits and one credit of MAE 4000 with no free elective.
  - Those entering after Fall 2013 must take:
    - MAE 4510 2-credits and one credit of MAE 4000 with no free elective.
- MAE 3501 moved to Tues/Thurs 3:05 – 4:20
- Program information can be found at:
  http://www.uccs.edu/advising/majors-and-minors.html
Prerequisites

- We never waive prerequisites
- Use the MAE suggested plan
- Now have the Self-Advising Excel spreadsheet
- It is the students’ responsibility to ensure courses are in order
- Permission number needed? **For a class missing a prerequisite you had transferred in**, please supply Ms. Stephanie Vigil, svigil5@uccs.edu, in the MAE Office with the following:
  - Your name and UCCS email address.
  - Your Student ID number
  - A copy of your entire degree audit with the prerequisite clearly highlighted (proof it counted as that prerequisite)
  - The **class and section** you need the permission number for
- Need a waiver for a transfer class? Submit to Dr. Albertson

Fall 2015 Technical Electives

- MAE 3040 Engineering Ethics (counts ONLY as business elective)
- MAE 4000 MAE Seminar (must take three times)
- MAE 4135 Aerodynamics (Note – only offered in fall. MAE 3130 is prer)
- MAE 4320 Sustainable Energy Systems
- MAE 4402 Intermediate Dynamics
- MAE 5011 Engineering Analysis I
- MAE 5146 Computational Techniques in Rarified Gas Dynamics
- MAE 5310 Intermediate Heat Transfer
- MAE 5320 Combustion
- MAE 5410 Astrodynamics
- MAE 5419 Trajectory Optimization

**Note:** All 5000-level courses require permission of instructor to register. To add, the instructor must email Ms. Vigil directly with student’s full name and the course. She will then supply the student a permission number.
Summer Courses

- Summer Core (Assuming sufficient enrollment):
  - MAE 2055 Mechatronics I
  - MAE 2200 Materials Engineering
  - MAE 2301 Thermodynamics
  - MAE 3005 Measurements Lab
  - MAE 3130 Fluid Mechanics and Lab
  - MAE 3201 Strengths of Materials
- Additional Summer 2015 (Assuming sufficient enrollment):
  - CS 1090 Intro to Programming
  - MAE 2104 Engineering Mechanics II
  - MAE 3040 Ethics (Online)
  - MAE 3310 Heat and Mass Transfer and Lab
  - MAE 3342 Engineering Economy (Online)
  - MAE 4120 Machine Design II
  - MAE 4421 Controls
  - MAE 5391 Rocket Propulsion

Math & Aerospace Minors

- Aerospace Minor
  - No additional classes
  - Directs technical electives to aerospace-specific courses
  - GPA of 2.0 in minor courses
- Math Minor
  - One additional course from Math 2150, 3110, 3410, 3500, 3510, 4130, 4140, 4210, or 4310
  - C or better in ALL math classes. Will grant ONE exception for a C-.
    Contact the Math Department to petition for the exception.
- MUST take Math 3810 instead of ECE 3610.
- Minor information can be found at: http://www.uccs.edu/advising/majors-and-minors.html
Scheduling Issues

- If you can’t register for a course required for graduation:
- Email Dr. Albertson by May 8th with:
  - A copy of your degree audit
  - Details on the issue
  - A copy of your completed sample plan
  - Your expected graduation date
  - The information must be supplied for the issue to be investigated. Jalberts@uccs.edu
- She will NOT address such emails after this date.

Academic Advising

- Each student has an assigned MAE Faculty Advisor
- Offer help outside of group advising
  - Course recommendations
  - Career advice
  - General support and resource referrals
  - See your portal
Writing Portfolio

- Guarantees every UCCS student meets minimum written communication standard
- See website for more information: http://www.uccs.edu/~writingportfolio/
- Submitted:
  - Once you have earned 60 credits
  - At least two semesters BEFORE you graduate (including summer semester)
- NEW: Will enroll in PORT 3000 to submit required work

Seniors

http://www.uccs.edu/mae/seniors.html

- Must do senior audit with Claire Ami (A – K) or Nate Raugutt (L – Z) the semester BEFORE graduation. Example: those graduating in May 2016 must complete their senior audit during Fall 2015.
- Must do senior exit survey the semester you graduate.
- Fundamentals of Engineering Exam
  - First step in two-step professional engineering license
  - Coordinated by Ms. Stephanie Vigil.
  - $100 reimbursement from the Dr. Osborne fund for those who pass the exam.
- See: http://www.uccs.edu/mae/seniors.html for details and updates
**BS/MS Program**

- Simultaneously pursue the Bachelor of Science (BS) in Mechanical Engineering and Master of Science (MS) in Mechanical Engineering, leading to award of both degrees at the completion of the joint program.
- Currently enrolled UCCS ME students only
- Transfer students must complete at least 24 credit hours in the Mechanical Engineering BS program before applying to the concurrent program.
- Students may apply after completing a minimum of 30 credit hours of the mechanical engineering core courses.

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**MAE HONORS**

**PROGRAM OVERVIEW**

**CURRICULUM**
- Honors courses – take four
- MAE Seminar (MAE 4000)
  - 1 CH per term
  - Participate three terms out of five (3 CH)
  - Counts as a technical elective – aero minor
- Honors senior design project

**MEMBER BENEFITS**
- Small classes
- Early registration
- Honors participation noted on transcript
- Scholarship possibilities
MAE HONORS PROGRAM OVERVIEW

ADMISSION REQUIREMENTS
- Enrolled in MAE
- Minimum cumulative GPA of 3.5 for admission
- Must maintain cumulative GPA of 3.5

ADMISSION PROCEDURE
- Application:
  - Honors program application form
  - Letter of recommendation
  - Personal statement
- Applications accepted at any time

MAE HONORS FALL 2015
- MAE 2104 – Engineering Mech II
- MAE 3302 – Thermodynamics II
- MAE 3401 - Mod/Sim
- MAE 4510 – Engr Design I
- MAE Seminar – MAE 4000

QUALIFIED & INTERESTED?
FOR MORE INFORMATION, FILL OUT THE QUESTIONNAIRE IN YOUR ADVISING PACKET
GREEN ACTION FUND

- Every semester, YOU pay a $5 Green Action Fund Fee
- Fees fund projects that support sustainability on campus
- YOU can propose a project and receive funding for that project
- Funded projects include:
  - Solar tables
  - Hydration stations
  - Bike repair station
  - UCCS greenhouse expansion
  - Summit Village toilet retrofit
- For more information: www.ucss.edu/~gaf

American Society of Mechanical Engineers (ASME)

What is it

- Professional society for mechanical engineers
- Looks great on a resume!
- Engineering related activities
- Only $25 per year for membership
  - Freshmen join free
  - Includes magazine, and access to other online resources
Society of Automotive Engineers (SAE) 
UCCS Mini Baja

What is it?

- Professional society for automotive engineers
- Design, build, and test an off-road vehicle
- Participate in regional and national competitions
- Only $25 per year for membership

This group is an opportunity to network with other engineers through UCCS and in the professional field.

Past meetings: Resume Workshop, Northrop Grumman Breakfast, Speaker from Boecore

Upcoming meeting: Tour at Colorado Springs Utilities
April 4th at 2pm
Men and Women are welcome to join!
No additional Fee

More info at: http://www.uccs.edu/~swe/

If you are interested feel free to talk to any of our officers!
AIAA
AMERICAN INSTITUTE OF AERONAUTICS & ASTRONAUTICS

Model Aviation and Rocketry
Networking with Industry Professionals

Design- Build- Fly Competition
Design R/C airplane to complete missions, competing against international teams

- Develop design skills and problem solving
- Use cutting edge tools, such as:
  - CAD/CAM
  - CNC
  - Plasma Cutter
  - Laser cutter