Kevin T. Crofton Department of Aerospace and Ocean Engineering

CLASS OF 2020
INFORMATION SESSION

AEROSPACE & OCEAN ENGINEERING
AT VIRGINIA TECH

We are here to help you in every way possible to achieve your goal of earning a Bachelor of Science degree in Aerospace and/or Ocean Engineering

Dr. Eric Paterson Department Head
215 Randolph Hall
231–2314, egp@vt.edu

Dr. Bob Canfield Asst. Department Head
214 Randolph
231–5981, rac@vt.edu

Ms. Madhu Kapania Advisor
224 Randolph , 231–6699,
mkapania@vt.edu

Mr. Brian Kastner Advisor
224 Randolph 231–6612
briank4@vt.edu

Dr. Eric Paterson

A Message From the Department Head

Dr. Eric Paterson, Department Head, Aerospace and Ocean Engineering

I am pleased to introduce to you my distinguished colleagues, the faculty and staff of Aerospace and Ocean Engineering. There are currently 19 full-time faculty members, with graduate and undergraduate engineering degrees from 28 different universities in 7 different countries. Many work in both aerospace and ocean fields, but some specialize in one or the other. There are more than a dozen administrative and technical staff who support the research and education mission of the department, and more than a dozen research faculty who conduct research and in some cases participate in the department's teaching mission.

Our faculty numbers include four Professors who have been elected as Fellows of their professional engineering societies, four who have been honored by Virginia Tech with prestigious named professorships, and four junior faculty who have been honored by national agencies with highly competitive young investigator awards. These faculty members are responsible for educating one of the larger classes of Aerospace Engineering B.S. graduates in the nation, as well as a significant number of Ocean Engineering B.S. graduates. The department has awarded 100 or more B.S. degrees per year during the past several years, with graduates going to industry, government, graduate school, and professional school. The department's faculty are active in externally funded research, with more than $6.5 million in annual research expenditures. Research projects play a significant role in the education of graduate students, and we award some 30 M.S. degrees and 10 Ph.D. degrees annually.

Administration

- Dr. Eric Paterson
- Dr. Bob Canfield
- Dr. William Devenport
- Dr. Craig Woolsey

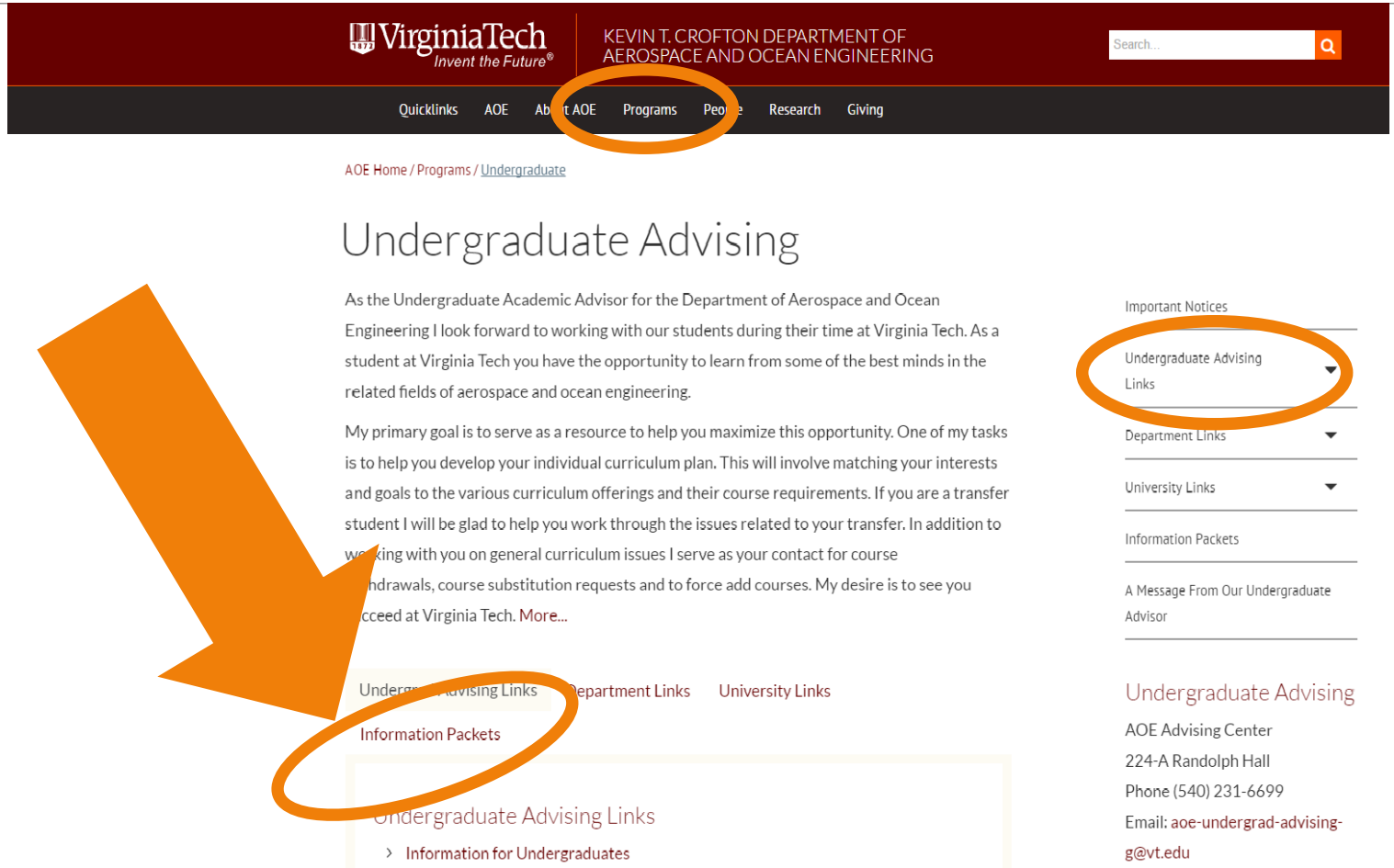
Faculty

- Dr. Alan Brown
- Dr. Bob Canfield
- Dr. William Devenport
- Dr. Mazen Farhood
- Dr. Troy Henderson
- Dr. Owen Hughes
- Dr. Rakesh K. Kapania
- Dr. Todd Lowe
- Dr. Lin Ma
- Dr. William Mason
- Dr. Leigh McCue
- Dr. Wayne Neu
- Dr. Eric Paterson

AOE Faculty

www.aoe.vt.edu/people

AOE Website: www.aoe.vt.edu



Agenda

- Welcome and Introductions
- Information Packets
- AOE Policies
- Academic Advising
- Academic Plan of Study
  - AE or OE Degree
  - Double Majors & Minors
- Co-Ops & Internships, Career Services
- Final Message

Advisors

- AOE has dedicated Career and Curriculum Advisors:
  - Ms. Kapania
  - Mr. Kastner
- You will be assigned an primary advisor that will appear on HokieSpa
- Please make an appointment to see your advisor as soon as possible when you enter the major
- The advising office is in Randolph 224-A, drop in during office hours or make an appointment

Advisors

Madhu Kapania

Phone: 231-6699

Email: mkapania@vt.edu

Brian Kastner

Phone: 231-6612

Email: briank4@vt.edu

Office Hours: 8:30am to 5:00pm

Randolph Hall, Room 224-A

AOE Policies

- Email via listservs: We maintain listservs for sophomores, juniors, and seniors
  - Pay attention to your email, we send important information from internship opportunities to department news
  - Listservs are maintained with your PID email account
- In-major GPA Rule: You must maintain a 2.0 GPA or higher for your AOE courses
- See Information Packet for more policies

Information Packets

- You now have a copy of the **Class of 2020 Information Packet/Draft**
  - Read it, use it, save it
  - Bring it with you during your advising appointment
  - Take note of any "draft" items – there may be changes that you will be notified about

- If you become a member of a later class, you will need to get a copy of the **Class of 20xx Information Packet**

- All Information Packets are put up on the AOE website (www.aoe.vt.edu/saffairs/advising)

Upcoming Registration Dates

- Fall 2017 Course Request
  - March 21 – March 28
- Fall 2017 Drop/Add
  - April 15 – May 12
- Summer 2017 Drop/Add
  - Opens March 11

Registration Considerations

- Full time status during fall & spring semesters is 12 hours, maximum credit hours is 19.
- Full time status during summer sessions (I & II) is 5 hours per session, maximum credit hours is 9.
- Be sure to check for any required co-requisites, pre-requisites, and/or major restrictions. Click on CRN# for comments and restrictions on the timetable of classes.
- Some classes are only offered the semester listed on the checksheet.
- There can be multiple sections of a class; some sections might be restricted while others are not. If a class you want is restricted please check other CRN numbers to see if any sections are not restricted.

Major Checksheets

- Can also be found at:
  - http://www.registrar.vt.edu/undergraduate/checksheets/college/index.html
  - Select the year closest to your projected graduation date.

- Checksheets show:
  - Courses required for graduation
  - Required courses that fulfill the CLE areas
  - When certain courses will likely be taken

Transfer Course Equivalents

- Students interested in taking classes at another college or university should carefully read the transfer credit request form and additional information at: https://www.eng.vt.edu/transferring/enge-courses

- The Transfer Credit Request Form contains the policies and procedures for seeking pre-approval, instructions for finding equivalent courses, the submission process, time frame for approval, directions for getting the official transcript sent back to VT for credit, and etc.

Change of Major Requirements

❑ ENGE 1215: Foundations of Engineering	❑ ENGE 1216: Foundations of Engineering
❑ ENGL 1105: First Year Writing	❑ ENGL 1106: First Year Writing
❑ MATH 1225: Calculus of a Single Variable	❑ MATH 1226: Calculus of a Single Variable
❑ CHEM 1035: General Chemistry	❑ PHYS 2305: Foundations of Physics
❑ CHEM 1045: General Chemistry Lab	❑ PHYS 2305: Foundations of Physics Lab

- ✓ Completion of all of the above courses
- ✓ Minimum of 12 GPA hours at VT
- ✓ Maximum of 55 GPA hours at VT
- ✓ Minimum **2.0** to apply

- ✓ Minimum **3.0** overall Virginia Tech GPA will **guarantee** students their first choice major
- ✓ Students below a 3.0 overall Virginia Tech GPA will be rank ordered according to their GPA and placed in their first, second, or third choice based on space availability.

Tools for Course Scheduling

- Plan of study:
  - Pathways Planner (Hokie Spa)
  - Web Resources: http://www.enge.vt.edu/Undergraduate/plansofstudy.html
- Degree Audit Reporting System (DARS)
  - On HokieSpa, it is highly recommended that your run a "What If" DARS for the major you would like to enter
  - See http://www.registrar.vt.edu/academic_records/dars/index.html to make sure you understand what requirements you have yet to fulfill to earn your degree
- Unofficial transcripts: HokieSpa (needed for internships and co-ops)

When to See an Advisor

- General Schedule Issues:
  - Scheduling course, staying on track with Plan of Study
  - ROTC; five year graduation plans
  - Co-ops
  - Internships
  - Study abroad
- Course Transfer Issues:
  - Check equivalency database
  - Fill in TR form and hand in to Dean's Office (212 Hancock)
  - Send transcripts to Registrar after course is complete
  - Minimum grade required is C, but only the hours will count (will not change your VT GPA)
  - If you have submitted everything and do not see it on transcript, see an advisor

When to See an Advisor

- Force-adds: if a course is full or the system isn't seeing the prerequisites
- Course Withdrawal:
  - Maximum of 3 courses
  - Does not affect GPA
  - Download form from Dean's office and get an advisor's signature
- Plan for Improvement (GPA < 2.0)
  - GPA needs to be above a 2.0 for overall and in-major GPAs
  - Plan of courses to improve the GPA
- Undergraduate Research Form
  - Needed for AOE 2994, 4974, 4994
  - Form needs to be completed and signed to register you and have course show on transcript

AE Checksheet

College Of Engineering

Department of Aerospace and Ocean Engineering

Bachelor of Science in Aerospace and Ocean Engineering, Major: Aerospace Engineering

For Students Graduating in Calendar Year 2020

128 Credits Required for Graduation

	Freshman Fall Semester 2016	Credits		Freshman Spring Semester 2017	Credits
	CHEM 1035 General Chemistry **(C–)** *Pre: None*	3		ENGL 1106 First-Year Writing *Pre: ENGL 1105*	3
	CHEM 1045 General Chemistry Lab *Co: CHEM 1035*	1		MATH 1226 Calculus of a Single Variable *Pre: MATH 1225 (minimum grade of C-)*	4
	ENGL 1105 First-Year Writing *Pre: None*	1		PHYS 2305 Found of Physics I w/lab **(C–)** *Pre: 1225; Co: MATH 1226*	4
	MATH 1225 Calculus of a Single Variable **(C–)** *Pre: Math Ready*	4		ENGE 1216 Foundations of Engineering **(C–)** *Pre: ENGE 1215*	2
	ENGE 1215 Foundations of Engineering **(C–)** *Co: MATH 1225*	2		CLE (Area 2, 3, or 7)	3
	CLE (Area 2, 3, or 7)	3			
	TOTAL	**16**		**TOTAL**	**16**
	Sophomore Fall Semester 2017	**Credits**		**Sophomore Spring Semester 2018**	**Credits**
	ESM 2214 Statics and Mechanics of Materials *Co: MATH 2204*	3		ESM 2304 Dynamics *Pre: ESM 2214, MATH 2204; Co: MATH 2214*	3
	MATH 2114 Introduction to Linear Algebra *Pre: MATH 1225 (min grade of B) or MATH 1226*	3		MATH 2214 Differential Equations *Pre: MATH 1226, MATH 2114*	3
	MATH 2204 Multivariable Calculus *Pre: MATH 1226*	3		AOE 2054 Electronics for Aerospace and Ocean Systems *Co: MATH 2214*	3 [S]
	PHYS 2306 Foundations of Physics I w/lab *Pre: MATH 1226, PHYS 2305*	4		AOE 2074 Computational Methods *Pre: ENGE 1216, MATH 2204*	2 [F,S,SII]
	AOE 2104 Intro to AOE *Pre: ENGE 1215, PHYS 2305*	3 [F,SII]		AOE 2024 Thin-Walled Structures *Pre: ESM 2214*	3 [S]
	CLE (Area 6)	1		CLE (Area 3) ECON 2005 Principles of Economics	3
	TOTAL	**17**		**TOTAL**	**17**

OE Checksheet

College Of Engineering
Department of Aerospace and Ocean Engineering
Bachelor of Science in Aerospace and Ocean Engineering, Major: Ocean Engineering
For Students Graduating in Calendar Year 2020
128 Credits Required for Graduation

Freshman Fall Semester 2016	Credits
CHEM 1035 General Chemistry **(C–)** *Pre: None*	3
CHEM 1045 General Chemistry Lab *Co: CHEM 1035*	1
ENGL 1105 First-Year Writing *Pre: None*	1
MATH 1225 Calculus of a Single Variable **(C–)** *Pre: Math Ready*	4
ENGE 1215 Foundations of Engineering **(C–)** *Co: MATH 1225*	2
CLE (Area 2, 3, or 7)	3
TOTAL	**16**

Freshman Spring Semester 2017	Credits
ENGL 1106 First-Year Writing *Pre: ENGL 1105*	3
MATH 1226 Calculus of a Single Variable *Pre: MATH 1225 (minimum grade of C-)*	4
PHYS 2305 Found of Physics I w/lab **(C–)** *Pre: 1225; Co: MATH 1226*	4
ENGE 1216 Foundations of Engineering **(C–)** *Pre: ENGE 1215*	2
CLE (Area 2, 3, or 7)	3
TOTAL	**16**

Sophomore Fall Semester 2017	Credits
ESM 2214 Statics and Mechanics of Materials *Co: MATH 2204*	3
MATH 2114 Introduction to Linear Algebra *Pre: MATH 1225 (min grade of B) or MATH 1226*	3
MATH 2204 Multivariable Calculus *Pre: MATH 1226*	3
PHYS 2306 Foundations of Physics I w/lab *Pre: MATH 1226, PHYS 2305*	4
AOE 2204 Intro to Ocean Engr *Pre: ENGE 1215, PHYS 2305; Co: MATH 2204*	3 [F,SII]
CLE (Area 6)	1
TOTAL	**17**

Sophomore Spring Semester 2018	Credits
ESM 2304 Dynamics *Pre: ESM 2214, MATH 2204; Co: MATH 2214*	3
MATH 2214 Differential Equations *Pre: MATH 1226, MATH 2114*	3
AOE 2054 Electronics for Aerospace and Ocean Systems *Co: MATH 2214*	3 [S]
AOE 2074 Computational Methods *Pre: ENGE 1216, MATH 2204*	2 [F,S,SII]
AOE 2024 Thin-Walled Structures *Pre: ESM 2214*	3 [S]
CLE (Area 3) ECON 2005 Principles of Economics	3
TOTAL	**17**

AE Junior Senior Checksheet

Junior Fall Semester 2018	Credits	Junior Spring Semester 2019	Credits
MATH 4564 Operational Methods *Pre: MATH 2214*	3	AOE 3054 AOE Experimental Methods *Pre: 3014, 3024, and 3034*	3 [S]
AOE 3014 Fluid Dynamics for Aerospace and Ocean Engineers *Pre: (2104 or 2204), ESM 2304, MATH 2214*	3 [F]	AOE 3114 Compressible Aerodynamics *Pre: 3014*	3 [S]
AOE 3034 System Dynamics and Control *Pre: ESM 2304, MATH 2214*	3 [F]	AOE 3134 Air Vehicle Dynamics *Pre: 3034*, ***or*** AOE 3144 Space Vehicle Dynamics, *Pre: 3034*	3 [S]
AOE 3124 Aerospace Structures *Pre: 2024*	3 [F]	AOE 3164 Thermodynamics and Aerospace Propulsion *Pre: 3014*	3 [S]
AOE 3154 Astromechanics *Pre: ESM 2304*	3 [F]	Technical Elective	3
TOTAL	**15**	**TOTAL**	**15**
Senior Fall Semester 2019	**Credits**	**Senior Spring Semester 2020**	**Credits**
AOE 4105 Experiments for Aerospace Design I *Pre: 3054, 3114, 3124, (3134 or 3144)*	1 [F]	AOE 4106 4105 Experiments for Aerospace Design II *Pre: 4105*	1 [S]
AOE 4065 Air Vehicle Design I, *Pre: 3054, 3114, 3124, 3134,* ***or*** AOE 4165 Space Vehicle Design, *Pre: 3054, 3114, 3124, 3144*	3 [F]	AOE 4066 Air Vehicle Design II *Pre: 4065;* ***or*** AOE 4166 Space Vehicle Design II *Pre: 4165*	3 [S]
MATH Elective *Choice of: MATH 4574, MATH 4404, or STAT 4705*	3	Technical Elective	3
Technical Elective	3	Technical Elective	3
Technical Elective	3	Technical Elective	3
CLE (Area 2, 3, or 7)	3	CLE (Area 2, 3, or 7)	3
TOTAL	**16**	**TOTAL**	**16**

OE Junior Senior Checksheet

Junior Fall Semester 2018	Credits	Junior Spring Semester 2019	Credits
MATH 4564 Operational Methods *Pre: MATH 2214*	3	AOE 3054 AOE Experimental Methods *Pre: 3014, 3024, and 3034*	3 [S]
AOE 3014 Fluid Dynamics for Aerospace and Ocean Engineers *Pre: (2104 or 2204), ESM 2304, MATH 2214*	3 [F]	AOE 3214 Ocean Wave Mechanics *Pre: 3014, MATH 4564*	3 [S]
AOE 3034 System Dynamics and Control *Pre: ESM 2304, MATH 2214*	3 [F]	AOE 3234 Ocean Vehicle Dynamics *Pre: 3034*	3 [S]
AOE 3224 Ocean Structures *Pre: 2024*	3 [F]	AOE 3264 Thermodynamics and Marine Propulsion *Pre: 3014*	3 [S]
AOE 3254 Physical Oceanography and Meteorology *Pre: 2204*	3 [F]	Technical Elective	3
TOTAL	**15**	**TOTAL**	**15**

Senior Fall Semester 2019	Credits	Senior Spring Semester 2020	Credits
AOE 4205 Experiments for Ocean Vehicle Design I *Pre: 3054, 3114, 3124, (3134 or 3144); Co: 4065 or 4165*	1 [F]	AOE 4206 Experiments for Ocean Vehicle Design II *Pre: 4105; Co: 4266*	1 [S]
AOE 4265 Ocean Vehicle Design I *Pre: 3054, 3114, 3124, 3134,*	3 [F]	AOE 4266 Ocean Vehicle Design II Pre: 3054, 3114, 3124, 3134, 4065	3 [S]
STAT 4705 Probability & Stat for Engr *Pre: MATH 2204*	3	Technical Elective	3
Technical Elective	3	Technical Elective	3
Technical Elective	3	Technical Elective	3
CLE (Area 2, 3, or 7)	3	CLE (Area 2, 3, or 7)	3
TOTAL	**16**	**TOTAL**	**16**

Double Majors and Dual Degrees

- Many AOE students choose to earn a double major in the “other” curriculum in the department
  - Double major can require as little as two extra credits
  - Programs of study for double majors are provided
  - Double major receives a diploma in the primary program
  - Double major certificate is issued to recognize the second major
  - Both majors are indicated on the transcript
  - A graduate desiring two diplomas (called “two degrees”) must take a minimum of thirty extra credits
  - Generally advisable to pursue a master’s degree rather than “two degrees”
- Some students pursue a second major outside of the department
  - Rare, typically involves significant additional coursework
  - AOE students have graduated with second majors in Math, Physics, English, Philosophy, Chemistry and other engineering
  - Generally better to pursue master’s degree rather than second major

Minors

- Minors often require significant additional coursework beyond the 130 credits necessary to graduate and are not generally available in engineering majors
- Except a Math minor requires little additional study beyond required AE, OE math credits
  - Typically possible by judicious selection of one technical elective
  - Contact the Math Department for a list of minor requirements and for the forms needed to sign up for the minor
- Naval Engineering

Curriculum for a Liberal Education and Electives

- The CLE requirements are well-established
  - See Info Packet for details and recommendations.
- ECON 2005 is required for graduation and may be taken as one of the two Area 3 requirements in the University Curriculum for a Liberal Education
  - If you choose to satisfy Area 3 requirements with courses not including ECON 2005, ISE 2014 may also be used to satisfy this requirement but this requires additional credits.
- MATH ELECTIVE:
  - AE students must take either Math 4574 or Math/AOE 4404 or Statistics 4705 on an A/F basis
  - OE students must take Statistics 4705
- TECHNICAL ELECTIVES: requires 18 credits of technical electives, all of which must be taken on an A/F basis
  - Details are in Info Packet
  - Prior approval is required for courses not on the approved list

Pass/Fail and Electives

- For AOE majors **all** required AOE courses and **all** math, science and technical electives must be taken on an A/F basis
- The university requires that **all** CLE courses must also be taken for A/F credit
- Only “free” electives and courses offered only P/F may be taken P/F
- Acceptable technical and math electives are listed in your packets
- Substitutions may be made with the **prior approval** of your advisor in some cases

Electives

Superscripted annotation [F,S,SI,SII] in Credits column indicates that a course is known to be offered in terms other than when shown. Course offerings are subject to change and the availability of sufficient resources. Students should confirm course offerings in advance with their department. Core courses common to all AOE majors are listed in black. Major courses are listed in blue. AE primary majors with an OE secondary major may substitute 2104 for 2204, and 4065-4066 or 4165-4166 for 4265-4266 in their secondary OE major.				
Curriculum for Liberal Education (CLE) Consult the CLE Alphabetical Listing at: http://www.cle.prov.vt.edu/guides/alpha.html, CLE courses need to be completed prior to graduation. If a CLE course is double-counted to satisfy two different CLE areas, a free elective(s) must be taken to maintain a minimum of 133 credits.				
CLE Area 1: Writing and Discourse (6 hrs)	**ENGL 1105**	**(3)**	**ENGL 1106**	**(3)**
CLE Area 2: Ideas, Cultural Traditions, Values Electives (6 hrs)		**(3)**		**(3)**
CLE Area 3: Society & Human Behavior electives (6 hrs)	**ECON 2005**	**(3)**		**(3)**
CLE Area 4: Scientific Reasoning and Discovery (8 hrs)	**CHEM 1035/1045**	**(4)**	**PHYS 2305**	**(4)**
CLE Area 5: Quantitative and Symbolic Reasoning (8 hrs)	**MATH 1225**	**(4)**	**MATH 1226**	**(4)**
CLE Area 6: Creativity & Aesthetic Experience elective (1 hr)				**(1)**
CLE Area 7: Global Issues Elective (3 hrs)				**(3)**
Technical Electives: The AOE department requires 9 credits of technical electives, of which 6 credits must be AOE 3000-level or higher courses. The remaining 3 may be selected from the attached approved list of computer programming courses and other 3000-level or higher technical courses.				

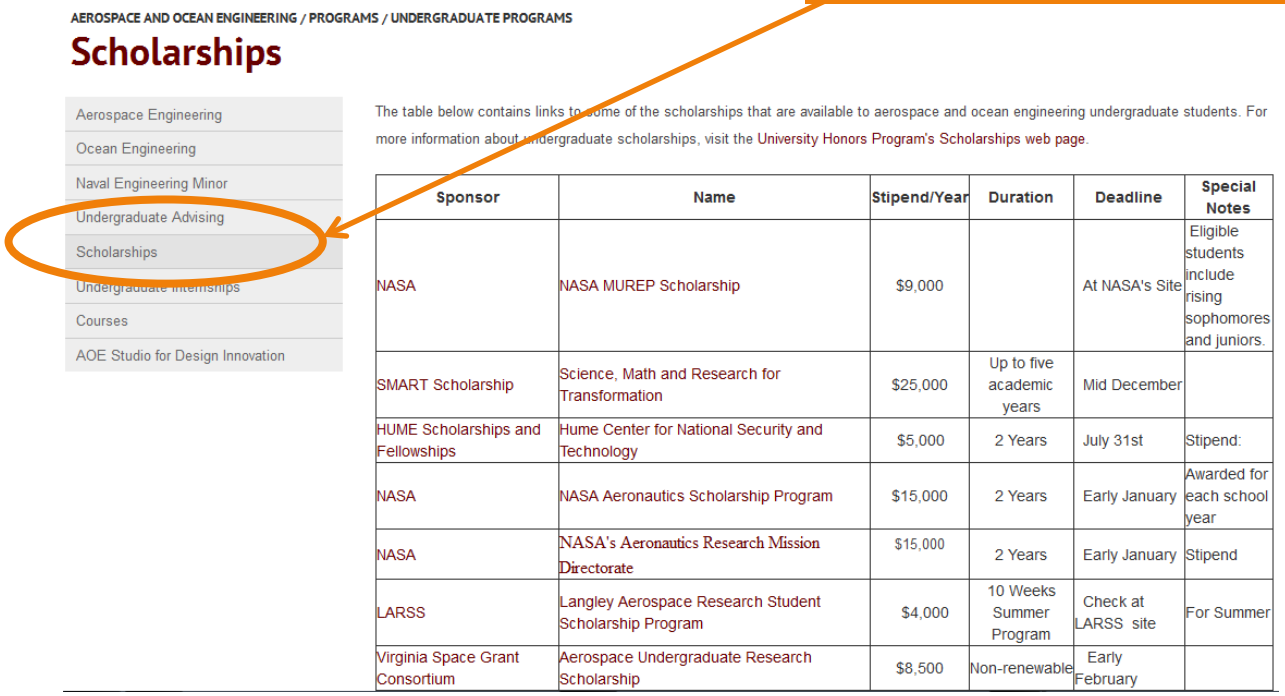
Senior Design

- In senior year, you are required to take AOE 4x65 and AOE 4x66, a two-course sequence in which you complete a group design project
  - AE students take either 4065-66, Aircraft Design, or 4165-66, Spacecraft Design
  - OE students take 4265-66, Ship Design
- AE students must make a choice in junior year:
  - Spacecraft Design requires AOE 4134 (Fall) and 4140 (Spring)
  - Aircraft Design requires AOE 3134 (Spring)

Scholarships, Co-Ops and Internships

- Many AOE undergraduates participate in Co-Ops and Internships
  - Your first step is to visit Career Services http://www.career.vt.edu/

www.aoe.vt.edu



AEROSPACE AND OCEAN ENGINEERING / PROGRAMS / UNDERGRADUATE PROGRAMS

Scholarships

Aerospace Engineering
Ocean Engineering
Naval Engineering Minor
Undergraduate Advising
Scholarships
Undergraduate Internships
Courses
AOE Studio for Design Innovation

The table below contains links to some of the scholarships that are available to aerospace and ocean engineering undergraduate students. For more information about undergraduate scholarships, visit the University Honors Program's Scholarships web page.

Sponsor	Name	Stipend/Year	Duration	Deadline	Special Notes
NASA	NASA MUREP Scholarship	$9,000		At NASA's Site	Eligible students include rising sophomores and juniors.
SMART Scholarship	Science, Math and Research for Transformation	$25,000	Up to five academic years	Mid December	
HUME Scholarships and Fellowships	Hume Center for National Security and Technology	$5,000	2 Years	July 31st	Stipend:
NASA	NASA Aeronautics Scholarship Program	$15,000	2 Years	Early January	Awarded for each school year
NASA	NASA's Aeronautics Research Mission Directorate	$15,000	2 Years	Early January	Stipend
LARSS	Langley Aerospace Research Student Scholarship Program	$4,000	10 Weeks Summer Program	Check at LARSS site	For Summer
Virginia Space Grant Consortium	Aerospace Undergraduate Research Scholarship	$8,500	Non-renewable	Early February	

Time to Graduate

- AOE curricula lead to graduation in four years (five years for Co-op students)
- Required **junior and senior level AOE courses are only offered once per year**, making it difficult to "stretch" the program over a longer period
- Some students enter the department later than normal or with fewer credits than normal and there are others who need to accommodate special programs such as ROTC or sports participation
- We will work with you to develop the needed schedule of coursework within the restrictions imposed by course teaching schedules, curricular and accreditation requirements, and elective availability
- **If you drop a course that is a prerequisite course, that drop could extend your program by a full year**

Sample Curriculum Problem: Cost of Dropping AOE 3014 in Junior Fall

Given: You are a junior in AE. In the fall semester you decide to drop AOE 3014, Aero/Hydro. Furthermore, you do not speak with your advisor about this decision. Determine the consequences of this action, particularly the cost.

Facts: AOE 3014 Aero/Hydro is a prerequisite for the following AOE courses: 3054, 3264, 3114, 4214, 4334. AOE 3054, 3114, 3264 and 4214 are in the Junior Spring Semester. AOE 3054 and 3114 are prerequisites senior AE classes. AOE 3054, 3264 and 4214 are prerequisites for senior OE classes. All of these courses are only offered once per year.

Consequence: You cannot take AOE 3054, 3114, 3264 or 4214 in Spring. You must wait until *next* Fall and take AOE 3014. You can then take AOE 3054, etc. the following Spring, in what *would have been* your last semester. However, since these courses are prerequisites for senior courses, you would not yet have taken all your senior courses.

The end result of this chain of events is that you will need another entire year to obtain your B.S. degree. The $ cost therefore is the cost of tuition, room and board for an additional year. In addition, there is the opportunity cost of another year of not earning the $50,000-$60,000 per year that AOE graduates typically earn after graduation.

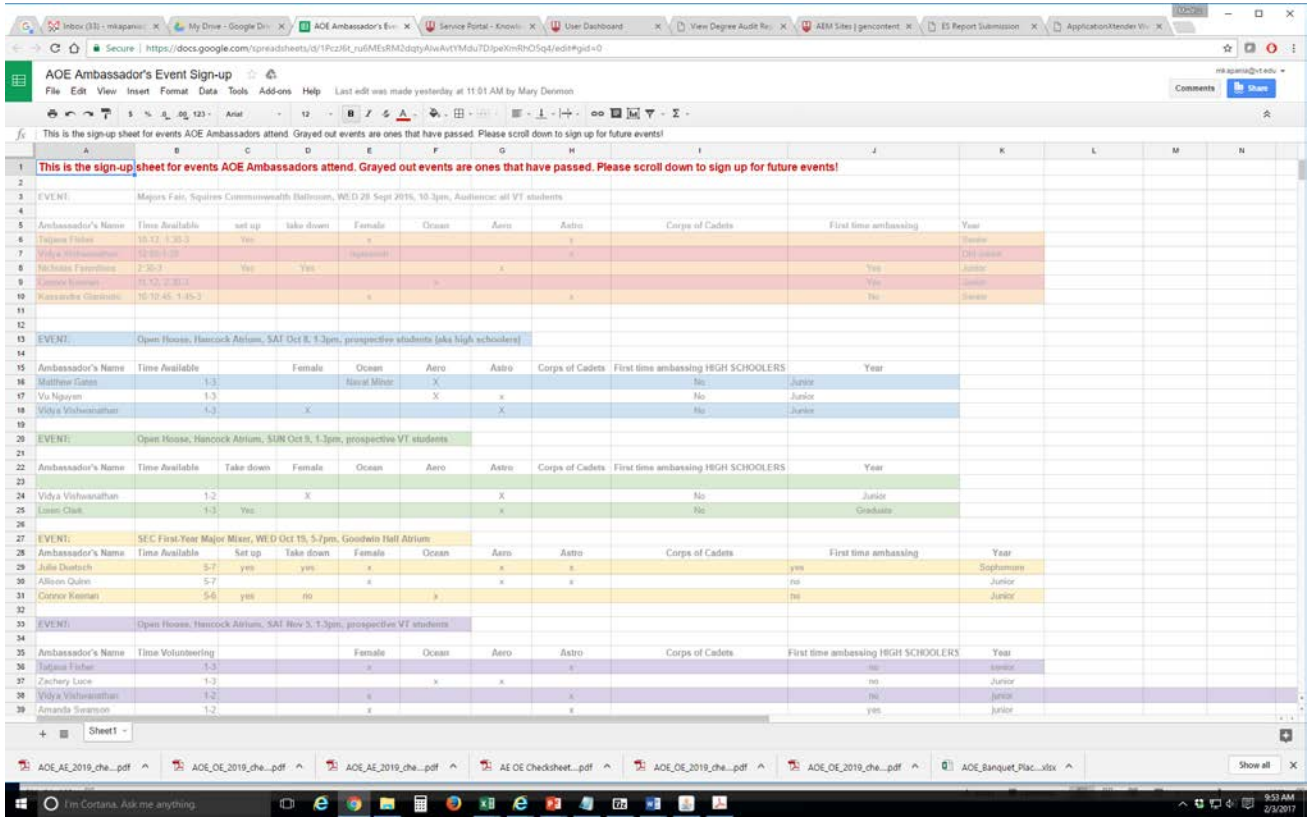
Lesson: *Speak with your advisor and/or with Ms. Kapania and Ms. Denmon before dropping any courses*.

Extracurricular Activities

- AIAA (American Institute of Aeronautics and Astronautics) is aerospace engineering professional society
  - Our student branch is among the largest and most active in AIAA
  - Activities include regular meetings, a regional paper competition and design competitions
- SNAME (Society of Naval Architects and Marine Engineers) is professional society for Ocean Engineers
  - Our student branch is very active and successful in SNAME national programs and design competitions
  - Members hold regular meetings and travel to the SNAME national meeting
- ΣΓΤ (Sigma Gamma Tau) is the national Aerospace honor society
  - Each semester the chapter selects the top AE and OE juniors and seniors for membership

AOE Ambassadors

- Membership via Google Groups



More Extracurriculars

- Design-Build-Fly
- Human-Powered Submarine
- Autonomous Underwater Vehicle
- Sounding Rocket Project

Final Thoughts

- Take charge of your career now
- Take responsibility for your curriculum
  - Read and know the info in your packet
  - Meet your advisor
  - Seek advice from us!
- Get involved
  - Student chapters
  - Student vehicle projects (DBF, AUV, HPS, SRP etc.)
- We are here to help you succeed, but you have to do the work