



Course Request for Spring 2024

Instructions for Seniors in AOE

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Course Request Basics

- Spring 2024 Course Request Dates:
 - October 17-31, 2023
- Request courses at any point in this window:
 - No priority for early course request.
 - But...don't wait till the last minute!
- Changes can later be made during Add/Drop:
 - 11/24/23 - 1/22/24

More Information From Engineering Education:

<https://eng.vt.edu/academics/undergraduate-students/resources-support/course-registration.html>

Spring 2024 Timetable

Virginia Tech Timetable of Classes

- Select Campus, Term, Subject, Section Type and optionally enter course number or CRN then press "Find".
- Limit your search with the course number to speed up download time.
Example: MATH 1 will give you all 1xxx MATH sections. MATH 12 will give you all MATH 12xx sections, MATH 120 will give you all MATH 120x sections and MATH 1205 will give you only MATH 1205 sections.
- **Textbook ISBN and pricing information**

Important Dates and Registration Information
(opens in a new window)

- [Academic Calendar](#)
- [View Exam Schedules](#)
- [Free Time and Lunch CRNs](#)
- [View Building Abbreviations](#)
- [Universal Access Campus Map](#)

Prerequisite Checking Enforced during Registration!
[Participating Departments enforcing Prerequisite Checking](#)

Campus <input type="text" value="Blacksburg"/> <small>On-Line Courses are listed under Virtual Campus</small>	Term <input type="text" value="Select Term"/> <input type="text" value="Spring 2021"/> <input type="text" value="Summer 2021"/>	The Curriculum for Liberal Education Area or Pathway to General Education <input type="text" value="Show All Areas"/> <small>Previously known as Core Curriculum</small>
Subject <input type="text" value="AOE - Aerospace and Ocean Engineering"/>	Section Type <input type="text" value="Show All Types"/>	Display <input type="text" value="ALL Sections (FULL and OPEN)"/>
Course Number <input type="text"/> <small>(Optional)</small>	Course Request Number (CRN) <input type="text"/> <small>(Optional) - must be at least 3 digits</small>	Comments: <input checked="" type="checkbox"/> <input type="text"/>
Course Modality <input type="text" value="ALL Modalities"/> <small>(Optional)</small>		

FIND class sections **Reset**

- Once the Spring 2024 Timetable becomes available, go to www.hokiespa.vt.edu and select “Timetable of Classes” at the bottom of the page to access it.
- Find the CRNs for the courses you plan to request.
- Access course request through Hokie SPA.



AE: Typical Senior Spring Courses

Typical Senior Spring Courses

SPRING SEMESTER FOURTH YEAR	Credits
AOE 4106 ⁽⁴⁾ Experiments for Aerospace Design <i>Pre: 4105, Co: 4066 or 4166</i>	1 ⁽⁵⁾
AOE 4066 ⁽⁴⁾ Air Vehicle Design <i>Pre: 4065; Co: 4106 or</i> AOE 4166 ⁽⁴⁾ Space Vehicle Design <i>Pre: 4165; Co: 4106</i>	3 ⁽⁵⁾
Track Technical Elective	3
Technical Elective	3
Technical Elective	3
Pathways Concept ⁽²⁾ 3*	3
TOTAL	16

Keep in Mind:

- You must sign up for the continuation of the FA 2023 senior design course you took.
- Once you are placed in courses following course request, run a DARS report and look it over to make sure you understand it. **Everything should be green or blue.**

OE: Typical Senior Spring Courses

Typical Senior Spring Courses

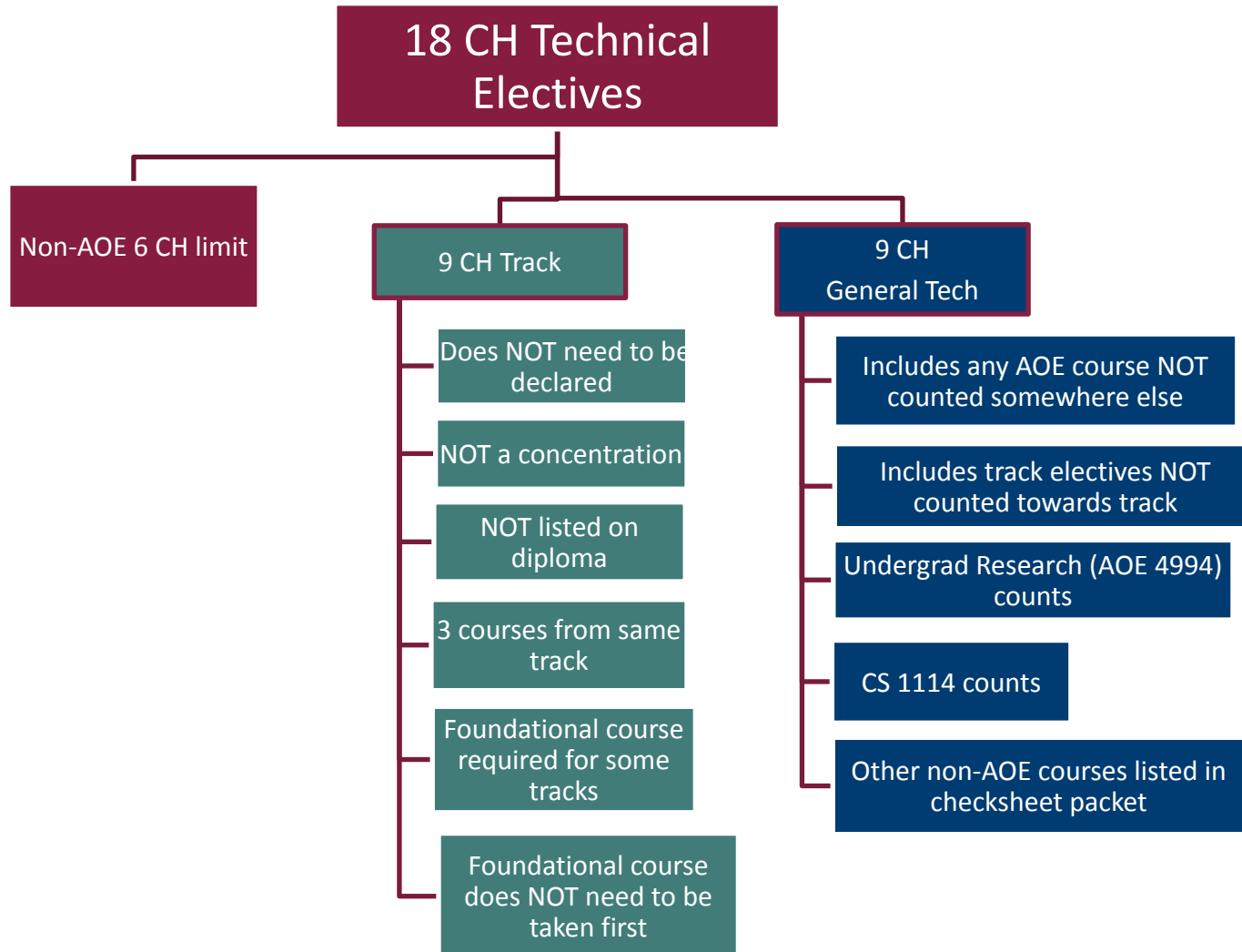
SPRING SEMESTER FOURTH YEAR	Credits
AOE 4206 ⁽⁴⁾ Experiments for Ocean Vehicle Design Pre: 4205; Co: 4266	1 ⁽⁵⁾
AOE 4266 ⁽⁴⁾ Ocean Vehicle Design Pre: 4265; Co: 4206	3 ⁽⁵⁾
Track Technical Elective	3
Technical Elective	3
Technical Elective	3
Pathways Concept ⁽²⁾ 3*	3
TOTAL	16

Keep in Mind:

- Once you are placed in courses following course request, run a DARS report and look it over to make sure you understand it.
Everything should be green or blue.

Track & Technical Electives

Technical Electives



Tracks

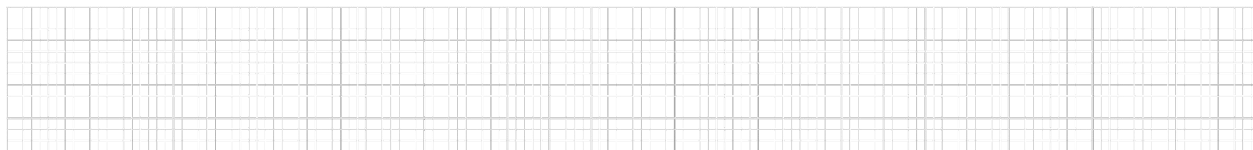
Tracks	Structures & Materials	Aero/Hydro Dynamics	Dynamics, Control, and Estimation	Vehicle & System Design	Naval Engineering	Space Engineering	Propulsion	Energy and the Environment
Foundational Courses / Track	AOE 4324 Energy Methods for Structures	AOE 3044: Boundary Layer & Heat Transfer	AOE 4004 State-Space Control	AOE 4084 (ESM 4084) Engineering Design Optimization	AOE 4264 Principles of Naval Engineering			
Track Courses	AOE 4054 (ESM 4444) Stability of Structures	AOE 4064 Fluid Flows in Nature	AOE 3134** Air Vehicle Dynamics	AOE 3354 Avionics Systems	AOE 4244 Naval and Marine Engineering Systems Design	AOE 2664 (ECE 2164) Exploration of Space Environment	AOE 4174 (ME 4174) Spacecraft Propulsion	AOE 4064 Fluid Flows in Nature
	AOE 4024 (ESM 4734) Intro to the Finite Element Method	AOE 4114 Applied Computational Aerodynamics	AOE 3144** Space Vehicle Dynamics	AOE 3804 Spl Topics in Aircraft Systems (HAW)	AOE 4274 Intermediate Ship Structural Analysis	AOE 4174 (ME 4174) Spacecraft Propulsion	AOE 4234 (ME 4234) Aerospace Propulsion Systems	AOE 4474 Propellers & Turbines
	AOE 4274 Intermediate Ship Structural Analysis	AOE 4434 Introduction to Computational Fluid Dynamics	AOE 3234** Ocean Vehicle Dynamics	AOE 4244 Naval and Marine Engineering Systems Design	AOE 4344 Dynamics of High Speed Marine Craft	AOE 4454 Spacecraft PNT & Orbit Determination	AOE 4474 Propellers & Turbines	AOE 4624 Foundations of Aero/Hydroacoustics
	AOE 5024 Vehicle Structures*	AOE 4474 Propellers & Turbines	AOE 4344 Dynamics of High Speed Marine Craft	AOE 4264 Principles of Naval Engineering	AOE 4474 Propellers & Turbines	AOE 4604 Booster Design, Fabrication, and Operation	AOE 4604 Booster Design, Fabrication, and Operation	AOE 4634 Wind Turbine Tech & Aerodynamics
	AOE 5034 Vehicle Structural Dynamics*	AOE 4624 Foundations of Aero/hydroacoustics	AOE 4454 Spacecraft PNT & Orbit Determination	AOE 4604 Booster Design, Fabrication, and Operation	AOE 5074 Advanced Ship Structural Analysis*	AOE 4654 (ECE 4154) Intro to Space Weather	AOE 4814 Sp Topics in Propulsion	AOE 4824 Sp Topics in Energy & Environment
	AOE 5074 Advanced Ship Structural Analysis*	AOE 5104* Advanced Aero and Hydrodynamics	AOE 4804 Sp Topics in DCE	AOE 4814 Sp Topics in Propulsion	AOE 5334* Advanced Ship Dynamics	AOE 4864 Special Topics in Space Engineering	AOE 5135* Vehicle Propulsion	ECE 4364 Alternate Energy Systems
	ESM 3054 (MSE 3054) Mechanical Behavior of Materials	AOE 5114* High Speed Aerodynamics	AOE 5204* Vehicle Dynamics & Control	CEE 5614 Analysis of Air Transportation Systems	ECE 4164 Global Navigation Satellite	AOE 5135* Vehicle Propulsion	AOE 5144 * Boundary Layer Theory & Heat Transfer	ENGR 3124 Intro to Green Engineering

Tracks	Structures & Materials	Aero/Hydro Dynamics	Dynamics, Control, and Estimation	Vehicle & System Design	Naval Engineering	Space Engineering	Propulsion	Energy and the Environment
Track Courses (cont'd.)	ESM 4024 Advanced Mechanical Behavior of Materials	AOE 5144 * Boundary Layer Theory & Heat Transfer	AOE 5334* Advanced Ship Dynamics	ME 4644 Intro to Rapid Prototyping	ECE 4364 Alt Energy Systems	AOE 5174* Introduction to Plasma Science	ME 3134 Fundamentals of Thermodynamics	ESM 4194 (ME 4194) Sustainable Energy Solution for a Global Society
	ESM 4044 Mechanics of Composite Materials	ME 3134 Fundamentals of Thermodynamics	AOE 5744* Linear Systems Theory	MGT 3304 Mgt Theory & Leadership	ME 3134 Fundamentals of Thermodynamics	AOE 5234* Orbital Mechanics	ME 4204 Internal Combustion Engines	ME 3134 Fundamentals of Thermodynamics
	ME 4624 Finite Element Practice in Mechanical Design		AOE 5754* Applied Linear Systems			ECE 3104 Intro to Space Systems & Technologies		
	MSE 2034 Elements of Materials Engineering		AOE 5764* Applied Linear Control			ECE 3154 Space Systems Design and Validation		
	MSE 3094 (AOE 3094) Materials & Manufacturing for Aero & Ocean Engineers		AOE 5774* Nonlinear Systems Theory			ECE 4164 Intro to GPS		
			ECE 4405 Control Systems			ECE 4194 Eng Principles of Remote Sensing		
			ECE 4406 Control Systems			PHYS 3655 Intro to Astrophysics		
			ECE 4624 Digital Signal Processing & Filter Design			PHYS 3656 Intro to Astrophysics		
			ESM 4114					

Senior Spring FAQs

Are there any courses I can take in the Winter Session?

- Not typically. You will not find AOE courses or math courses offered in the winter term.
- If you still need a Pathways course, many of these are offered in the Winter Session. Most are offered in online, asynchronous format.



In DARS my Pathways Concept 1 - Discourse (advanced) is incomplete. Do I need to add a specific course for this?

- No, you do not need to add an extra course for advanced discourse.
- The advanced discourse requirement is covered by a combination of AOE 3054 and senior design/experiments courses.
- As long as you complete all of the AE or OE major required courses, you will complete your advanced discourse requirement.
- **Once you are placed in your senior spring courses, Pathways 1a should appear in-progress complete (blue) in DARS. If it doesn't, see your advisor!**

I am taking Launch Vehicle Design for my senior design sequence. What should I do during course request?

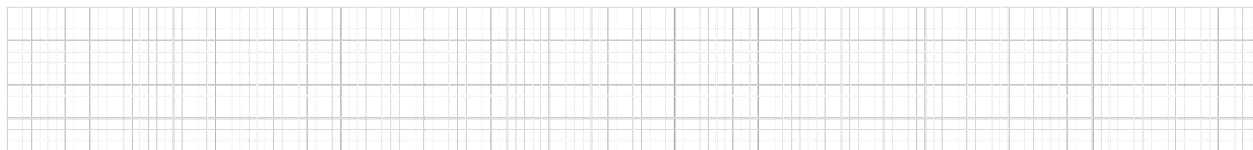
- Course request AOE 4366 for Spring 2024 as you would your other spring courses.
- Once enrolled in AOE 4366, ask your academic advisor to request that AOE 4366 be subbed as senior design/Pathways 1a in your DARS (since it does not appear as an option on your official checksheet).

Can I take AOE 5xxx level technical electives?

- If you are enrolled in the UG/G program you may take AOE 5xxx courses that work with your UG/G plan.
- If you are a senior with a GPA greater than or equal to 3.0 you may take AOE 5xxx courses with instructor permission.
- You will need to contact the [AOE graduate program coordinators](#) to be added to 5000-level courses during the add periods.

I took a special study (AOE 4984) that was supposed to count for my track. But, in my DARS I don't see it there. What's going on?

- Special studies do not automatically go in a track in DARS.
- If you have taken a special study that is supposed to count in a track, contact your advisor to request a substitution placing it in that track.



I looked at my DARS and I currently have course in multiple tracks? What's going on?

- Some courses are options in multiple tracks. So, they may show up under different tracks at first.
- If a course can be a track elective, DARS will place it there before putting it under general tech electives.
- Once you enroll in 3 courses that fulfill a single track, they should group together. Any other courses you have taken that could have been track courses should move to technical electives or free electives.
- **Once you are enrolled in your courses for SP 2024, your track and technical electives sections should show as complete (green) or in-progress complete (blue) in DARS. If they don't, see your advisor!**

How should I decide which track and general technical electives to take in the spring?

- Run a DARS!
- How many electives are still needed for your chosen track? Do you still need a required track course? How many total technical electives do you still need?
- **You may only count 6 credits of non-AOE technical electives** (track & general tech combined)
- Use our [AOE Technical Electives Guide](#).
- Once you are enrolled in your courses for Spring 2024, your track and technical electives sections should show as complete (green) or in-progress complete (blue) in DARS.
- **When in doubt, contact your advisor!**

Is there anything I need to do after course request to be sure that I'm in the correct courses to graduate in Spring 2024?

- Yes! Once you are placed in courses following course request, **run a DARS report** and look it over to make sure you understand it. Everything should be green or blue.
- If anything appears red, check with your academic advisor to understand what you need to do to fix it (e.g. request a substitution, enroll in an additional course, swap courses).
- Make any necessary course changes after the add period opens 11/24/23. Then, run another DARS. If there are still red sections, check with your advisor.
- **Run a DARS any time you make changes to your spring course plan.** You are responsible for making sure that you are in the correct courses.
- **When in doubt, consult your advisor!**

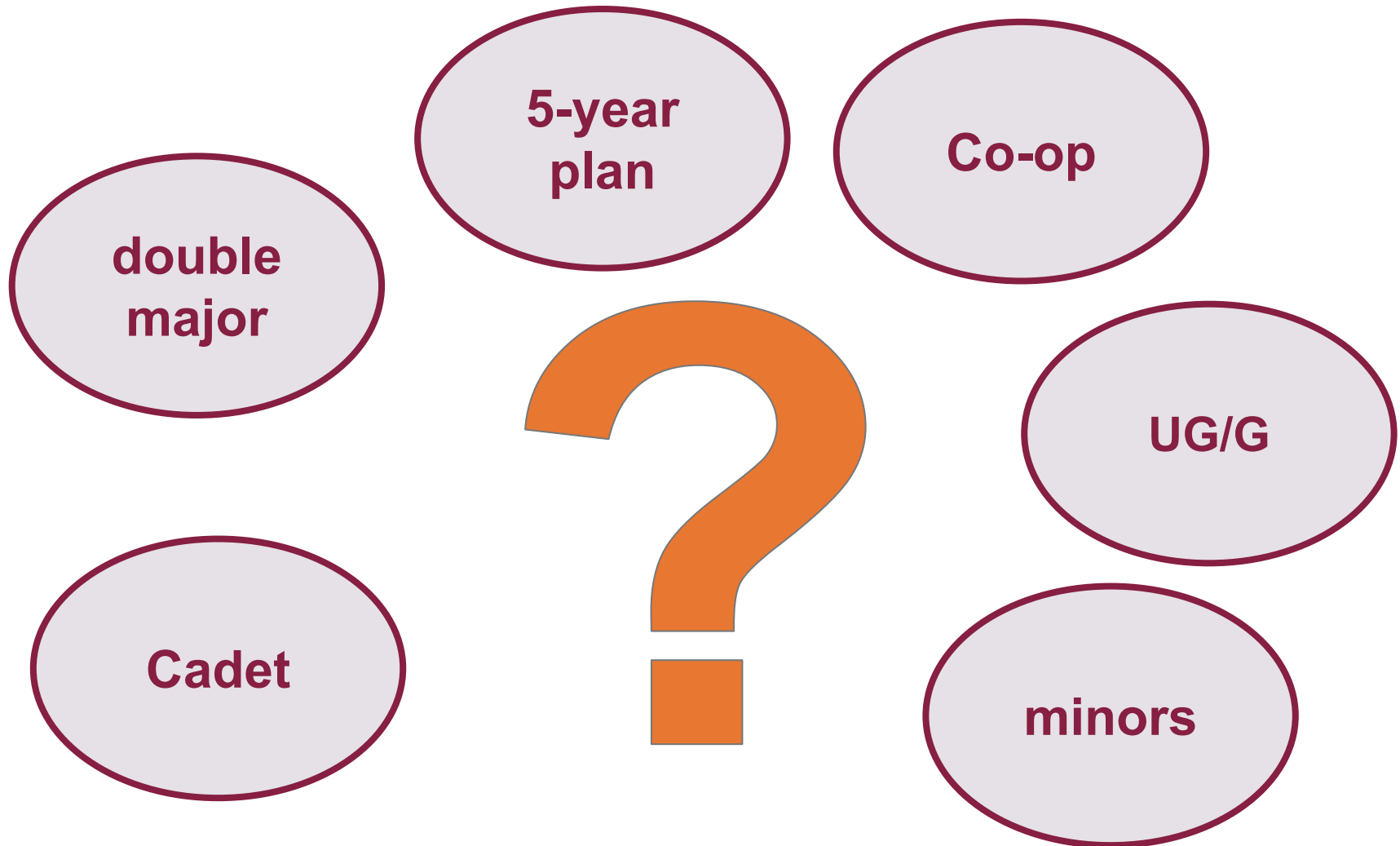
AOE Curriculum Resources

- [AOE Undergraduate Curriculum Webpage](#)
- [Virginia Tech Timetable of Classes](#)
- [Undergraduate AOE Course Catalog](#)



COLLEGE OF ENGINEERING
KEVIN T. CROFTON DEPARTMENT OF
AEROSPACE AND OCEAN ENGINEERING
VIRGINIA TECH.

Other Factors Impacting Your Planning?



Still Have Questions?

Contact your advisor!

Emily Metzgar (last names A-G): emilymetzgar@vt.edu

Chelsea Nowak (last names H-Ri): cnowak@vt.edu

Brian Kastner (last names Ro-Z): briank4@vt.edu

Schedule an appointment through [Navigate](#).