



Master of Engineering in Computer Science

Instructions to complete Plan of Study
2023-2024

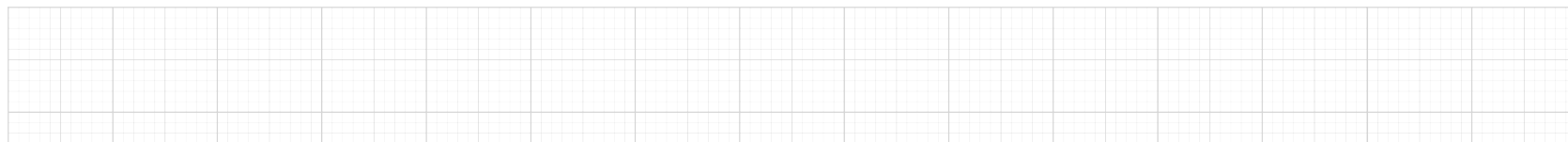
PLAN OF STUDY

Purpose of the Plan of Study

- The Plan of Study is a unique and useful tool for graduate students
- The Plan of Study allows a student to plan all of the courses needed to fulfill the degree requirements
- A Plan of Study can also be a helpful way to determine how to fit in additional activities or classes students may wish to participate in

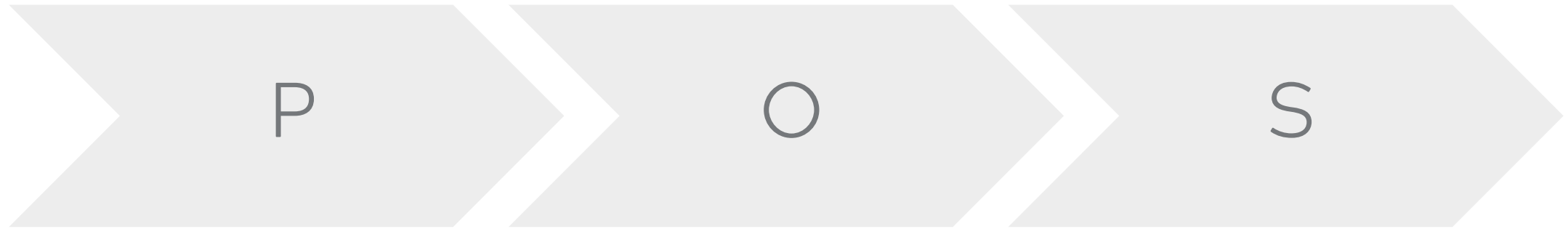
What is a Plan of Study

- The Plan of Study is a document where you specify the courses you have taken plus the courses that you intend to take, that together will help you complete your degree
- The Graduate School approved Plan of Study serves as a “contract” between you and the university about what courses you intend to take to obtain your degree





PLAN OF STUDY



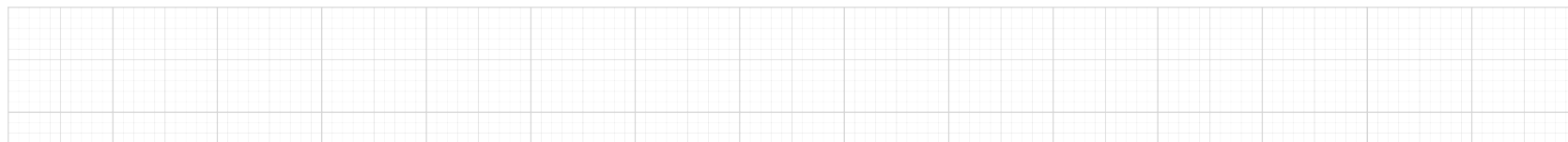
Prepare



Organize



Submit



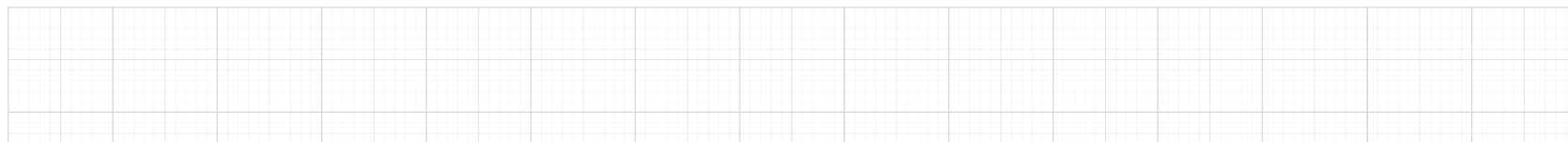
PREPARE

TIMELINE

- MEng CS Students should submit their Plan of Study prior to the last semester of study in the program
- Accelerated students should submit their Plan of Study in their first semester in the program
- International Students in F-1 status must have departmental approved Plan of Study prior to applying for [Curricular Practical Training \(CPT\)](#)

PROGRAM DOCUMENTS

- [MEng CS Guide](#) provides tips for choosing courses and degree planning
- [MEng Concentration Guide](#) provides a list of concentrations and anticipated term offerings of courses in each concentration
- [Design Your Degree Worksheet](#) can assist in planning your MEng CS Plan of Study
- [MEng CS Plan of Study](#) can be found in the Forms section of [CS – Graduate Programs](#)



MEng CS Degree Requirements

DEGREE REQUIREMENTS

- Complete 30 credit hours (10 courses) of coursework
- Maintain a 3.0 GPA or better on the Plan of Study course work
- Maintain an overall CGPA of 3.0 on ALL courses
- All courses on Plan of Study, must be completed with a grade of “C-” or better
- Transfer credits must follow the rules outlined on the [CS Administrivia](#) page
- All transfer credits must have earned grades of “B” or better

COURSE REQUIREMENTS

- CS5024: Ethics & Professionalism in CS
- CS5040: Intermediate Data Structures*
- CS5934: Capstone Design
- Three courses in one Concentration:
 - Software Development & Applications
 - Data Analytics & Artificial Intelligence
 - Computer Security
 - Human-Computer Interaction
- Four or Five elective courses (this could include up to 2 courses at 4000 level and one cognate course), depending upon if you were waived for CS5040

**Can be waived if an equivalent course has been completed*

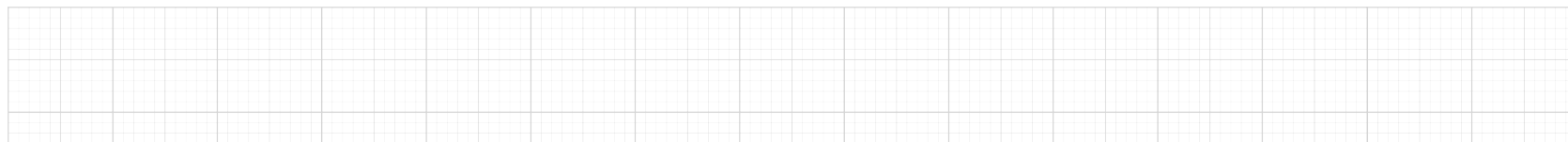
MEng CS Degree Requirements

REPEATING COURSES

- All courses on the approved Plan of Study, must be completed with a grade of “C-” or better
- Students are required to repeat any courses on an approved Plan of Study in which a grade below “C-” has been earned
- After the course has been repeated, the grade for the first enrollment will be Repeat Graduate (RG)
- Both courses must be listed on the Plan of Study

GPA

- Only the grade earned for the final enrollment of a Repeat Course will receive a letter grade and be calculated in the GPA
- Students must obtain a 3.0 GPA, both overall and for courses on the Plan of Study
- Grades in all courses are calculated into the overall GPA on the transcript



MEng CS Degree CONCENTRATIONS

Software Development & Applications

- Web Application Development
- Mobile Application Development
- Software Engineering
- Software Design and Quality
- User Interface Software
- Software Project Management

Data Analytics & Artificial Intelligence

- Introduction to Artificial Intelligence
- Machine Learning I
- Machine Learning II
- Introduction to Deep Learning
- Introduction to Urban Computing

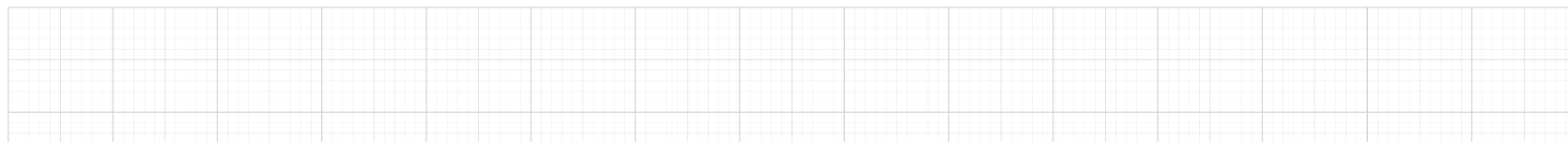
Computer Security

- Fundamentals of Information Security
- Network Architecture and Protocols I
- Network Security
- System and Software Security

Human-Computer Interaction*

- Usability Engineering
- Models and Theories of HCI
- Social Computing and CSCW
- Virtual Environments
- Information Visualization
- User Interface Software

*ONLY available at the Blacksburg campus



ORGANIZE

OFFERED FALL/SPRING

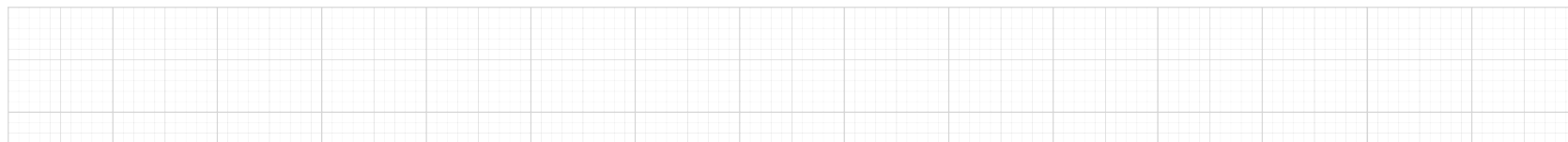
- CS5024: Ethics and Professionalism in CS
- CS5040: Intermediate Data Structures
- CS5805: Machine Learning I
- CS5704: Software Engineering
- CS5560: Fundamentals of Info Security
- CS5934: Capstone Project

COURSE OFFERING LINKS

- [Computer Science Graduate Courses](#)
- [Approved Cognate Courses](#)
- [Approved 4000 level courses](#)
- [Course Overlap](#)

COURSE OFFERINGS

- Most courses are offered on a regular schedule, either in the fall or spring or summer semesters
- Course offerings are not the same in Blacksburg and Northern Virginia
- Review [Virginia Tech Timetable of Classes](#) for each campus for available course offerings for your campus
- [Course Overlap](#) – Be aware of courses which have restrictions due to significant overlap



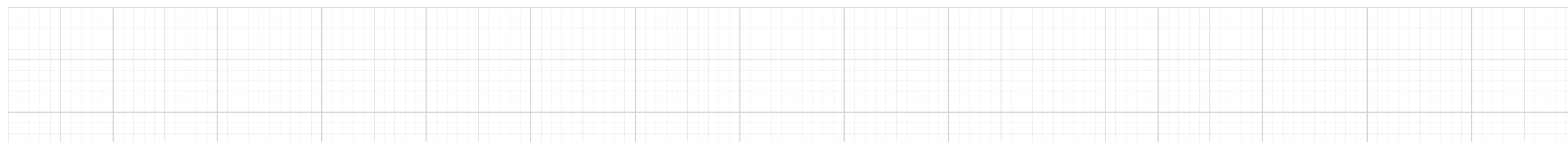
ORGANIZE

DESIGN YOUR DEGREE

- Complete Design your Degree Worksheet
 - Fill in all classes you have taken
- Review Concentration Guide, MEng CS Guide, VT Timetable of Classes & CS Classes
 - Enter courses you plan to take
 - Review program requirements
 - Review Concentration requirements
- Double check the worksheet
- If needed, schedule an appointment with the MEng CS Academic Advisor for course selection and degree planning

MEng CS PLAN OF STUDY

- All courses must have a grade of C- or better
- You must maintain a GPA of 3.0
- Maximum of 10 courses on Plan of Study
- GRAD5944 for CPT does not count toward the 10 class requirement
- Transfer and Accelerated UG/GR double-counted classes are **ONLY** listed in the Transfer Courses section
- Courses can only be listed ONCE on a POS



ORGANIZE

Last/Family Name:

Last 4 of VT ID#:

First/Given Name:

VT Email Address:

Est. Graduation Term:

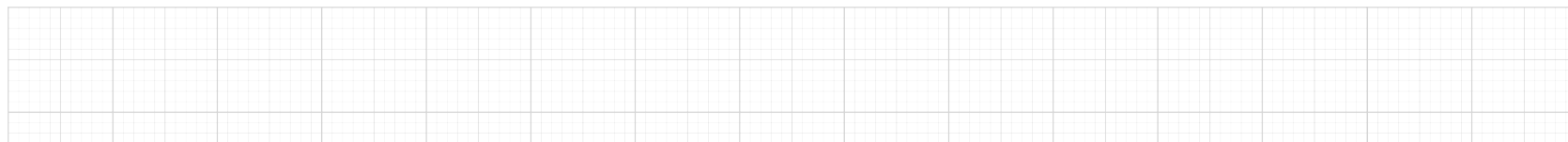
Campus:

Accelerated UG/G Student*:

No Yes

ENTER PERSONAL INFO

- Enter Last/Family Name
- Enter First/Given Name
- Enter Estimated Graduation Term (Fall/Spring/Summer and Year)
- Enter Last 4 of VT ID #
- Enter VT Email Address
- Choose Campus
- Check if you are an Accelerated UG/G Student



ORGANIZE

MEng Requirements

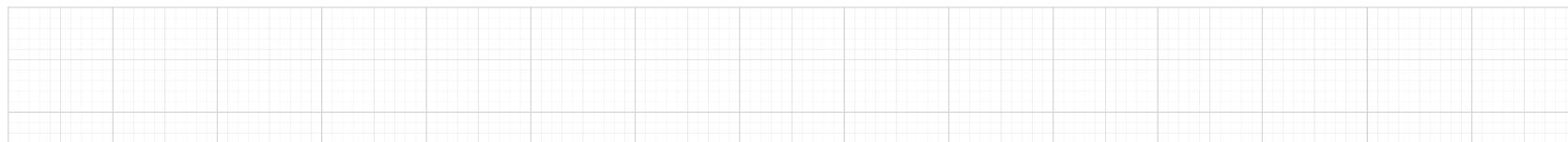
	Course Number	Course Name	Semester	Year	Credits
<input type="checkbox"/> Waived at admission	CS5040	Intermediate Data Structures*			
<input type="checkbox"/> Approved waiver request					

*CS 5040 requirement can be waived by departmental approval (to be replaced by another course at the 5000 or 6000-level), if an equivalent course has been completed previously.

	Course Number	Course Name	Semester	Year	Credits
	CS5024	Ethics and Professionalism in CS			
	CS5934	Capstone Project			

ENTER MEng REQUIREMENTS

- Enter MEng Requirements
 - Check CS5040 Waived at admission if appropriate
 - You can take CS5040 for credit even if it was waived
- Enter Semester (Fall/Spring/Summer)
- Enter Calendar Year course was taken or you intend to take
- Enter Credits for course



ORGANIZE

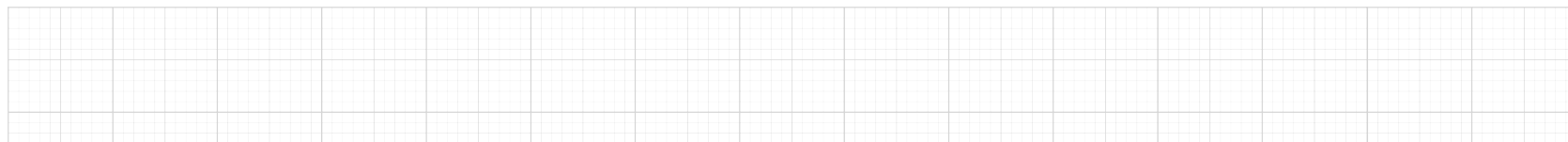
Concentration area

List courses in chronological order by term.

Concentration Area	Course Number	Course Name	Semester	Year	Credits

ENTER CONCENTRATION COURSES

- Enter Concentration Area
- Enter Course Number
- Enter Course Name
- Enter Semester (Fall/Spring/Summer)
- Enter Calendar Year course was taken or you intend to take
- Enter credits for course



ORGANIZE

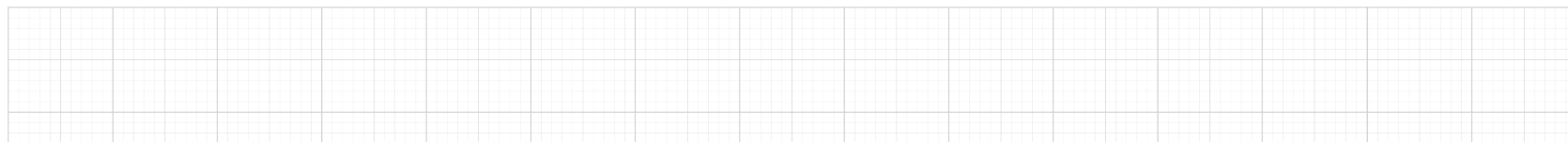
CS Courses at 5000 level and above. Excluding CS 5894, 5904, 5944, 5994, and 7994.

List courses in chronological order by term.

Course Number	Course Name	Semester	Year	Credits

ENTER 5000 LEVEL COURSES

- Enter Course Number
- Enter Course Name
- Enter Semester (Fall/Spring/Summer)
- Enter Calendar Year course was taken or you intend to take
- Enter Credits for course



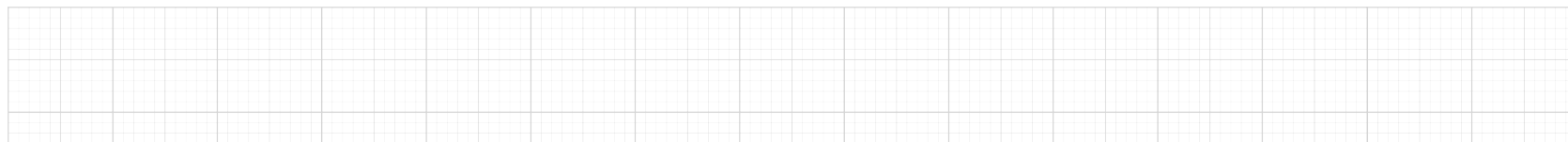
ORGANIZE

CS Courses at 4000 level - Maximum 6 credits - Excluding CS 4974, CS4984, and CS4994

Course Number	Course Name	Semester	Year	Credits

ENTER 4000 LEVEL COURSES

- Maximum of six credits at the 4000 level
- Enter Course Number
- Enter Course Name
- Enter Semester (Fall/Spring/Summer)
- Enter Calendar Year course was taken or you intend to take
- Enter Credits for course



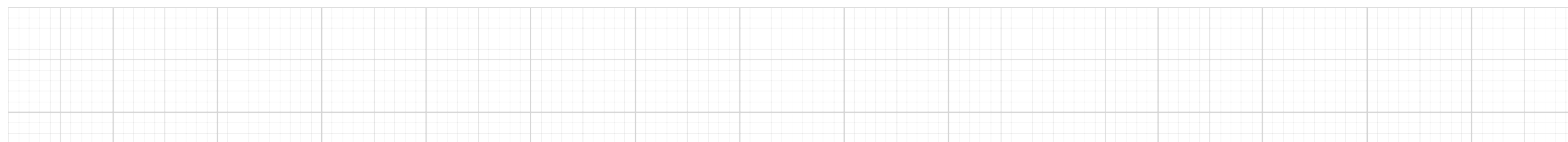
ORGANIZE

Approved Cognate Courses - Maximum 3 credits

Course Number	Course Name	Semester	Year	Credits

ENTER APPROVED COGNATE COURSE

- Maximum of three credits
- Enter Course Number
- Enter Course Name
- Enter Semester (Fall/Spring/Summer)
- Enter Calendar Year course was taken or you intend to take
- Enter Credits for course



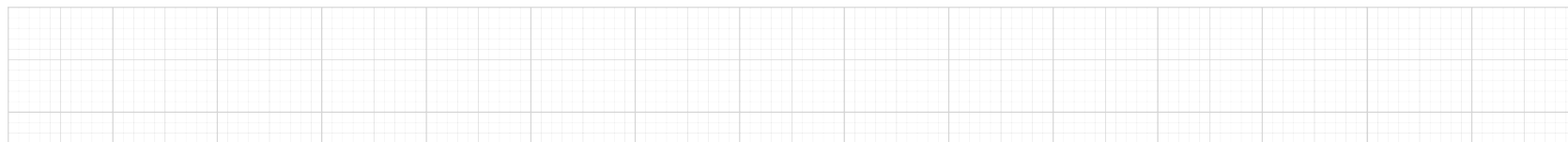
ORGANIZE

Graduate Cooperative Education Program for international students

Course Number	Course Name	Semester	Year	Credits
GRAD5944	Graduate Cooperative Education Program			

Enter GRAD5944 for CPT

- For International Students ONLY
- Enter Semester (Fall/Spring/Summer) of internship
- Enter Calendar Year of internship
- Zero Credits



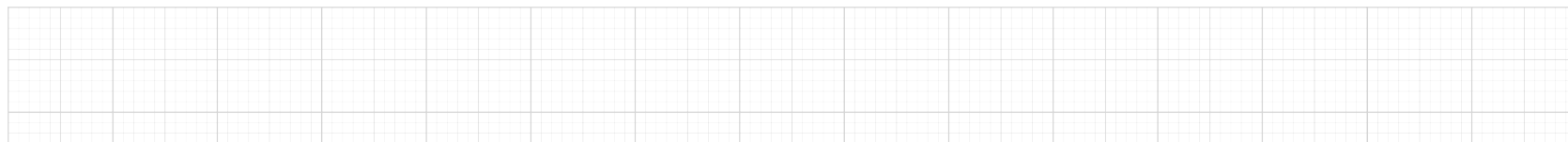
ORGANIZE

Transfer Courses:

VT Course Number, Name or Area	Original Course Number, Name, University	Semester	Year	Credits

ENTER TRANSFER COURSES

- Accelerated students list classes from Accelerated UG/GR Form
- List Graduate transfer classes
- Enter Course Number
- Enter Course Name
- Enter Semester (Fall/Spring/Summer)
- Enter Calendar Year course was taken or you intend to take
- Enter Credits for course



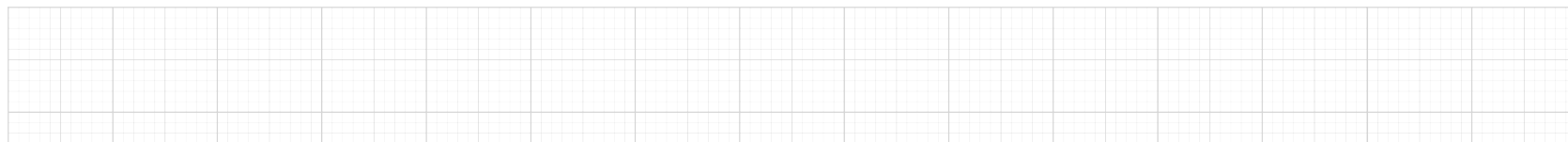
ORGANIZE

Approvals:

Role	Name	Signature	Date
Student			
Graduate Academic Advisor	Alexis L. Snyder		

ENTER NAME, SIGN AND DATE

- Enter Name
- Sign Plan of Study
- Enter Date
- Email Plan of Study to Alexis L. Snyder (asnyder017@vt.edu) for signature approval
- Submit academic advisor approved Plan of Study to [CS Graduate Form Submission Portal](#)



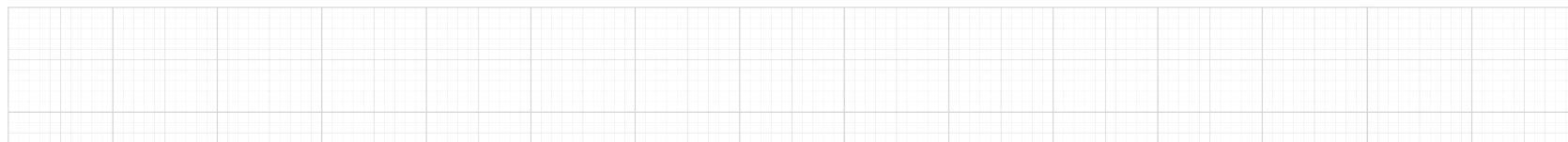
SUBMIT

PLAN OF STUDY - Review

- Review Plan of Study for errors
- Ensure all information is correct
- List Transfer & UG/GR courses in Transfer Courses section ONLY
- You may only list 10 courses on Plan of Study
- If you are pursuing a CPT/Internship then GRAD5944 will be the 11th course on your Plan of Study
- Department approved Plan of Study required for application for CPT/Internship

SUBMIT

- Email POS to Alexis L. Snyder for approval
- Submit the Plan of Study to the [CS Graduate Program Form Submission Portal](#)
- The Plan of Study can take two to four weeks to receive Graduate School Approval
- Please plan accordingly
- The Graduate School cannot expedite a Plan of Study or Student Forms



Q&A

QUESTIONS:

What if I change my courses after submitting the Plan of Study?

- You must complete a [Plan of Study Change Request](#) and submit to the [CS Graduate Form Submission Portal](#)
- Submit form in a timely manner
- Graduate school does not expedite forms

ADVISING:

- If you have questions regarding classes and degree planning, schedule an appointment with Alexis L. Snyder, MEng CS Academic Advisor through Navigate

