

4 year plan for EE CyberCorps UG/G student with Cyber Security Minor

Minimum Credits required: 132 (w/minor 137)

Based on 2016 graduation requirements

(This plan assumes no AP or Transfer Credit)

FRESHMAN FALL			FRESHMAN SPRING		
Course	CR	Category	Course	CR	Category
ENGE 1024 Engineering Exploration	2	Engineering Core	ENGE 1104 Exploration of Digital Future	2	Engineering Core
CHEM 1035 General Chemistry	3	Engineering Core	ECE 1574 Eng Problem Solving w/ C++	3	EE Major
CHEM 1045 General Chemistry Lab	1	Engineering Core	ENGL 1106 First Year Writing	3	CLE 1
MATH 1114 Linear Algebra	2	CLE 5/Eng Core	MATH 1224 Vector Geometry	2	CLE 5/Eng Core
MATH 1205 Calculus	3	CLE 5/Eng Core	MATH 1206 Calculus	3	CLE 5/Eng Core
ENGL 1105 First Year Writing	3	CLE 1	PHYS 2305 Foundations of Physics	4	CLE 4/Eng Core
CLE Area 6	1	CLE 6			
TOTAL CREDITS	15		TOTAL CREDITS	17	

SOPHOMORE FALL			SOPHOMORE SPRING		
Course	CR	Category	Course	CR	Category
ECE 2014 Engr Professionalism in ECE	2	EE Major	ECE 2534 Microprocessor System Des	4	EE Major
ECE 2004 Circuit Analysis	3	EE Major	ECE 2204 Electronics	3	EE Major
ECE 2074 Circuit Analysis Lab	1	EE Major	ECE 2274 Electronics Lab	1	EE Major
ECE 2504 Intro Computer Engineering	3	EE Major	ECE 2704 Signals and Systems	3	EE Major
MATH 2214 Differential Equations	3	CLE 5/Eng Core	MATH 2224 Multivariable Calculus	3	CLE 5/Eng Core
PHYS 2306 Foundations of Physics	4	CLE 4/EE Major	CLE Area 2	3	CLE 2
TOTAL CREDITS	16		TOTAL CREDITS	17	

JUNIOR FALL			JUNIOR SPRING		
Course	CR	Category	Course	CR	Category
ECE 3105 EM Fields I	3	EE Major	ECE 3106 EM Fields II	3	EE Major
ECE 3004 AC Circuit Analysis	3	EE Major	ECE 3204 Analog Electronics	3	EE Major
ECE 3074 AC Circuit Analysis Lab	1	EE Major	ECE 3274 Electronics Lab	1	EE Major
ECE 2574 Data Structures & Algorithms	3	Tech	ECE 3304 Intro Power Systems	3	EE Major
STAT 4714 Prob & Stat for EE	3	EE Major	ECE 3354 Power Lab	1	EE Major
ENGL 3764 Technical Writing	3	CLE 1/EE Major	ECE 3614 Intro Comm Systems	3	EE Major
CLE Area 7	3	CLE 7	CLE Area 3	3	CLE 3
TOTAL CREDITS	19		TOTAL CREDITS	17	

SENIOR FALL			SENIOR SPRING		
Course	CR	Category	Course	CR	Category
ECE 4564 Network App Design	3	Tech/UGG/Cyb Min	EE Capstone	3	Capstone
CS 4264 Principles of Computer Security	3	Tech/Cyb Min	ECE 4560 Comp and Net Security Fund	3	Tech/UGG/Cyb Min
CS 5204 Operating Systems	3	UGG	Cyber Elective from Interdisc list	3	Cyb Min
ECE 3704 Continuous & Discrete Sys.	3	EE Major	Engineering/Science Elective	3	EE Major
MATH Elective	3	EE Major	CLE Area 3	3	CLE 3
ISE 2014 Engineering Economy	2	Eng Core	CLE Area 2	3	CLE 2
TOTAL CREDITS	17		TOTAL CREDITS	19	

CLE – Curriculum for Liberal Education

Cyb Min – Cyber Security Minor (once the seminar is decided upon, it can be added to any semester in junior or senior year)

DTE – Design Technical Elective

UGG – Accelerated Undergraduate/Graduate Program (AKA BS/MS)

PLAN OF STUDY (POS) INSTRUCTIONS

Read Instructions Before Processing and Submitting the Plan of Study Form (POS)

The *POS* allows electronic signatures from the student, faculty advisor and *all* committee members. This is a proposed plan and changes can occur by completing a *Plan of Study Change Form* during the last semester of enrollment in courses. Only list the courses, seminar, and research credit hours required for degree. To change a Graduate Advisory Committee member or their position, a Plan of Study Committee/Advisor Form must be processed. All members, to include existing and new, must sign this particular form.

The electronic *POS* is to be submitted to your ECE Graduate Academic Advisor by the deadline set forth for degree program sought.

BLACKSBURG

or

NATIONAL CAPITAL REGION

M.S. and M.Eng.

Mary Taylor, taylor@m@vt.edu, (last names begin with A-J)
Cynthia Hopkins, hopkins@vt.edu, (last names begin with K-O)
Dr. Leslie Pendleton, pendlelk@vt.edu, (last names begin with P-Z)

All Degree Programs

Cynthia Robinson, cdrobi@vt.edu

direct-Ph.D. and Ph.D.

Cynthia Hopkins, hopkins@vt.edu

Master of Science (Thesis) and Master of Engineering (Project and Report)

A completed Master's POS signed by all committee members must be submitted to your ECE Graduate Academic Advisor, via e-mail attachment, by the end of the second academic semester (based on full time enrollment). For the Undergraduate/Graduate (UG/G), the Plan of Study must be submitted by the end of the first semester of graduate study.

Detailed information is stated in the Graduate Student Policy Manual under Chapter 4, Sections 1 and 2.

Direct-Ph.D.

Upon completion of 21 course credit hours, direct-Ph.D. students must submit a completed Master of Science POS, Thesis or Non-thesis option, signed by all committee members to your ECE Graduate Academic Advisor.

The Ph.D. POS thru the direct-Ph.D., must be completed during the first semester of enrollment in the Ph.D., 80 academic level.

Review Chapter 5, Section 4, in the Graduate Student Policy Manual for additional information related to the requirements of the Plan of Study for both degrees.

Doctor of Philosophy

A completed Ph.D. POS signed by all committee members must be submitted to your ECE Graduate Academic Advisor, via e-mail attachment, by the end of the third academic semester (based on full time enrollment).

Review Chapter 5, Section 4, in the ECE Graduate Student Policy Manual for additional information related to the requirements of the Plan of Study.

Proposed Graduate Plan of Study

John	Q	Student
(First)	(Middle name)	(Last)

VT ID # (last 4 digits only)

vt.edu E-Mail:

Academic Level: Master of Science/Thesis

Campus Consortium: Blacksburg

Degree	Research Area	Research Sub-Area
<input checked="" type="radio"/> EE	Communications	Computer Networks
<input type="radio"/> CPE	Must Choose One if CPE	Choose One If Applicable

Project and Report, Thesis, and Dissertation Credit Hours/do not include transfer credit hours

Enter credit hours for project and report, thesis, and dissertation that apply to degree only.

Dept	Course # and Catalog Course Title	Credit Hrs
ECE	5994: M.S. Thesis	9

5000 and 6000 Level Courses/include seminar credit hours, but do not include transfer courses; reference page 2.
(list in alphabetical order by department and then numerical order by course #)

Minimum of 27 hours for Ph.D.

List Year—Don't \surd or X

Dept	Course # and Catalog Course Title	Fall	Spring	Sum I	Sum II	Credit Hrs
ECE	5565: Network Arch & Protocols	2016				
ECE	5560: Network & Computer Security	2016				
ECE	5504: Computer Architecture	2016				
ECE	5xxx or other course (Network Security? System Security?)		2017			
ECE	5944: Seminar (must select two terms)	2016	2017			02
Total 5000 and Higher Level Course Credits						2

4000 Level Courses /must be VT courses.

(list in alphabetical order by department and then numerical order by course #)

Maximum of 6 hours for Masters & 3 hours for Doctoral

List Year—Don't \surd or X

Dept	Course # and Catalog Course Title	Fall	Spring	Sum I	Sum II	Credit Hrs
Total 4000 Level Course Credits						0

Course Transfer Validation List: Official transcript required for transfer courses along with a catalog course description justifying transfer courses. Reference the ECE Graduate Student Policy Manual for Transfer Courses.

*Denotes Transfer Credits From: Virginia Tech Accelerated UGG

**Denotes Transfer Credits From: _____

5000 and 6000 Transfer Level Courses

Information must coincide with official transcript—Course title must be the same title listed on the official transcript (list in alphabetical order by department and then numerical order by course #)

List Year—Don't √ or X

Dept	Course # and Catalog Course Title	Fall	Spring	Sum I	Sum II	Credit Hrs
CS	5204 Operating Systems /grade	2015				03
ECE	4564 Network Application Design /grade	2015				03
ECE	4560 Comp and Network Security Fund /grade		2016			03
Total 5000 and Higher Transfer Level Course Credits						9

Student's Signature: _____

Signatures of Student's Advisory Committee: Must e-mail form to faculty on an individual basis with the Chair providing their electronic signature first. Once signed by the Chair, the POS is locked so additional course changes can not occur.

Department	Type Committee Members	Electronic Signatures	Position
ECE	<i>Faculty Advisor or Adm Co-Chair</i>		Must Choose One
	<i>Co-Chair or Member</i>		Must Choose One
	<i>Member</i>		Member
	<i>Member</i>		Member
Ph.D. Must Choose One	<i>Out-of-Area Member</i>		Out-of Area Member
Ph.D. Must Choose One	<i>Select Blank to Type Name</i>		Out-of-Dept Member
	<i>Select Blank to Type Name</i>		Non-VT Member

*An out-of-area and out-of-department committee member is mandatory for Ph.D. Plans of Study.

**A Non-Virginia Tech committee member (optional) can serve the fifth committee member role for Ph.D Plans of Study. A short CV or resume, for person serving this role, must be attached to the Ph.D. Plan of Study upon submittal to student's ECE Academic Advisor.

Virginia Tech Personal Digital Certificates (e-Token)

To process using e-Token signatures, e-mail it first, as an attached document, to the Chair or Administrative Co-Chair (student can have one Chair or two Co-Chairs, with one appointed as the Administrative Co-Chair). The appointed ECE faculty advisor will return POS to student via e-mail attachment with approval by e-Token or send notification of any recommended changes. This process is repeated for the remaining committee members.

For ECE Graduate Advising Office Only:

Banner Initial Entry

Asst Dept Head, Graduate Education (Ph.D. Only)

ECE Approval