

Military Plan of Study



Department of Engineering Education
“General Engineering”

Introduction

- ∞ This presentation was designed to aid ROTC students in General Engineering to complete a plan of study which may be required for their service area.
 - Air Force-Form48
 - Army-104R
 - Navy-4 year plan

- ∞ The [Plan of Study](#) puts **YOU** in control of planning your college experience! It allows you to know your requirements by working through major checksheets and the Undergraduate Catalog.

- ∞ Consult with your advisor if you need help making a personalized schedule.

- ∞ **Allocate at least 1 week between the time your advisor reviews the plan and its due date so you have adequate time to make changes and gain your advisors signature.**

Tools Needed

- ☞ Tablet PC
- ☞ Four Year Plan Document (Form48, 104R, 4 year plan)
- ☞ The [Checksheets](#) for your intended major
- ☞ Your [Unofficial Transcript](#)
- ☞ List of service courses ([AS](#), [MN](#), [MS](#), MGT)
- ☞ [Alternative](#) plans...if available
- ☞ Curriculum for Liberal Education Guide ([CLE](#))

Choose a Checksheet

☞ Checksheets:

- <http://www.registrar.vt.edu/undergraduate/checksheets/index.html>

☞ Checksheets provide the graduation requirements for all majors offered at VT.

☞ Read all pages of the checksheet carefully when completing a plan of study.

☞ When following the checksheet, keep the courses in the order listed, please do not reorder unless you are moving a course to another semester.

☞ If you move a course to a different semester other than that listed on the checksheet, you should check to see if it is typically offered in that semester by using the timetables (see slide 14).

Alternative Plans

- ☞ Typically 4.5 or 5 years is recommended for Engineering students in the Corps of Cadets depending on AP, IB, Transfer credits.
- ☞ To aid in this process, some majors have created alternative plans of study for you located at:
 - <https://enge.vt.edu/undergraduate/planofstudy.html>
- ☞ Also check department websites for alternative plans, pre-req charts, flow charts, and course offerings that will help you create your plan.

Unofficial Transcript

- ∞ Your Virginia Tech Unofficial Transcript can be located at: www.hokiespa.vt.edu
 - Click Hokie Spa, Transcripts and Certifications Menu, then Unofficial Transcript.

Curriculum for Liberal Education (CLE)

CLE: <http://www.cle.prov.vt.edu/guides/>

Apha: <http://www.cle.prov.vt.edu/guides/alpha.html>

Area 1	Writing and Discourse ENGL 1105-1106/1204H	6 credits
Area 2	Ideas, Cultural Traditions, and Values	6 Credits
Area 3	Society and Human Behavior AE, MSE, & OE: requires ECON 2005 CEM: requires ECON 2005 and 2006	6 Credits
Area 4	Scientific Reasoning and Discovery CHEM 1035/1045-PHYS 2305	8 Credits
Area 5	Quantitative and Symbolic Reasoning MATH 1205-1206	6 Credits
Area 6	Creativity and Aesthetic Experience	1 Credit
Area 7	Critical Issues in a Global Context CE, CEM, ISE, BSE (LWRE option only): may be satisfied by a major course	3 Credit

*Can CLE courses count toward more than one area simultaneously? Generally, no. While there are some courses which do meet requirements in more than one area, they can only count toward one CLE area at a time. The only exception to this rule is that some Area 7 courses may simultaneously fulfill the requirements of another area in addition to Area 7.

CLE Military Courses

☞ There are some service areas that have courses that can also count for the **Curriculum for Liberal Education (CLE)**.

☞ **Air Force**

- AS 3215-(AREA 3)
- AS 4215 (AREA 7)

☞ **Army**

- None

☞ **Navy**

- MN 2104 (AREA 7)
- MN 4005 (AREA 3)



Air Force ROTC

FALL SEMESTER FRESHMAN			SPRING SEMESTER FRESHMAN		
COURSE	TITLE	CR HOURS	COURSE	TITLE	CR HOURS
AS 1115	INTRODUCTION TO THE AIR FORCE	1	AS 1116	INTRODUCTION TO THE AIR FORCE	1
AS 2934	AIR FORCE FITNESS	1	AS 2934	AIR FORCE FITNESS	1
AS 2944	AFROTC LEADERSHIP LABORATORY	1	AS 2944	AFROTC LEADERSHIP LABORATORY	1
MGT 1945	FUNDAMENTALS OF CADET LEADERSHIP	2	MGT 1946	FUNDAMENTALS OF CADET LEADERSHIP	2
FALL SEMESTER SOPHOMORE			SPRING SEMESTER SOPHOMORE		
AS 2115	THE DEVELOPMENT OF AIR POWER	1	AS 2116	THE DEVELOPMENT OF AIR POWER	1
AS 2934	AIR FORCE FITNESS	1	AS 2934	AIR FORCE FITNESS	1
AS 2944	AFROTC LEADERSHIP LABORATORY	1	AS 2944	AFROTC LEADERSHIP LABORATORY	1
MGT 2945	SMALL UNIT LEADERSHIP	1	MGT 2946	SMALL UNIT LEADERSHIP	1
FALL SEMESTER JUNIOR			SPRING SEMESTER JUNIOR		
AS 3215	AF MANAGEMENT AND LEADERSHIP (AREA 3)	3	AS 3216	AF MANAGEMENT AND LEADERSHIP	3
AS 2934	AIR FORCE FITNESS	1	AS 2934	AIR FORCE FITNESS	1
AS 2944	AFROTC LEADERSHIP LABORATORY	1	AS 2944	AFROTC LEADERSHIP LABORATORY	1
MGT 3945	CADET ORGANIZATIONAL LEADERSHIP	1	MGT 3946	CADET ORGANIZATIONAL LEADERSHIP	1
FALL SEMESTER SENIOR			SPRING SEMESTER SENIOR		
AS 4215	NATIONAL SECURITY FORCES (AREA 7)	3	AS 4216	NATIONAL SECURITY FORCES	3
AS 2934	AIR FORCE FITNESS	1	AS 2934	AIR FORCE FITNESS	1
AS 2944	AFROTC LEADERSHIP LABORATORY	1	AS 2944	AFROTC LEADERSHIP LABORATORY	1
MGT 4945	EXECUTIVE LEADERSHIP	1	MGT 4946	EXECUTIVE LEADERSHIP	1



Army ROTC

FALL SEMESTER FRESHMAN			SPRING SEMESTER FRESHMAN		
COURSE	TITLE	CR HOURS	COURSE	TITLE	CR HOURS
MS 1005	MS I, AROTC	2	MS 1006	MS I, AROTC	2
MGT 1945	FUNDAMENTALS OF CADET LEADERSHIP	2	MGT 1946	FUNDAMENTALS OF CADET LEADERSHIP	2
FALL SEMESTER SOPHOMORE			SPRING SEMESTER SOPHOMORE		
MS 2005	MS II, AROTC	2	MS 2006	MS II, AROTC	2
MGT 2945	SMALL UNIT LEADERSHIP	1	MGT 2946	SMALL UNIT LEADERSHIP	1
FALL SEMESTER JUNIOR			SPRING SEMESTER JUNIOR		
MS 3005	MS III, AROTC	3	MS 3006	MS III, AROTC	3
MGT 3945	CADET ORGANIZATIONAL LEADERSHIP	1	MGT 3946	CADET ORGANIZATIONAL LEADERSHIP	1
FALL SEMESTER SENIOR			SPRING SEMESTER SENIOR		
MS 4005	MS IV, AROTC	3	MS 4006	MS IV, AROTC	3
MGT 4945	EXECUTIVE LEADERSHIP	1	MGT 4946	EXECUTIVE LEADERSHIP	1

Additional
"History"
requirement
select one
course from:

HIST
1115, 1116,
3534, 3014,
3254, 3055,
3056, 3524

5 year cadets
should enroll in :
MS 4964 (2 or 3
credits) fall/spring



Naval ROTC

FALL SEMESTER FRESHMAN			SPRING SEMESTER FRESHMAN		
COURSE	TITLE	CR HOURS	COURSE	TITLE	CR HOURS
MN 1004	INTRODUCTION TO NAVAL SCIENCE	3	MN 2104	SEAPOWER AND MARITIME AFFAIRS (AREA 7)	3
MGT 1945	FUNDAMENTALS OF CADET LEADERSHIP	2	MGT 1946	FUNDAMENTALS OF CADET LEADERSHIP	2
FALL SEMESTER SOPHOMORE			SPRING SEMESTER SOPHOMORE		
MN 4005	LEADERSHIP AND MANAGEMENT I (AREA 3)	3	MN 3005	NAVIGATION	3
MGT 2945	SMALL UNIT LEADERSHIP	1	MGT 2946	SMALL UNIT LEADERSHIP	1
FALL SEMESTER JUNIOR			SPRING SEMESTER JUNIOR		
MN 1104	NAVAL SHIP SYSTEMS I: ENGINEERING	3	MN 2004	NAVAL SHIP SYSTEMS II: WEAPONS	3
MGT 3945	CADET ORGANIZATIONAL LEADERSHIP	1	MGT 3946	CADET ORGANIZATIONAL LEADERSHIP	1
FALL SEMESTER SENIOR			SPRING SEMESTER SENIOR		
MN 3006	NAVAL OPERATIONS	3	MN 4006	LEADERSHIP AND ETHICS	3
MGT 4945	EXECUTIVE LEADERSHIP	1	MGT 4946	EXECUTIVE LEADERSHIP	1

Additional Requirement:

- American Military History / National Security Policy
- Regional Studies/World Studies/Religions

See your midshipmen handbook under academics for details



“Raider” Naval ROTC

FALL SEMESTER FRESHMAN			SPRING SEMESTER FRESHMAN		
COURSE	TITLE	CR HOURS	COURSE	TITLE	CR HOURS
MN 1004	INTRODUCTION TO NAVAL SCIENCE	3	MN 2104	SEAPOWER AND MARITIME AFFAIRS (AREA 7)	3
MGT 1945	FUNDAMENTALS OF CADET LEADERSHIP	2	MGT 1946	FUNDAMENTALS OF CADET LEADERSHIP	2
FALL SEMESTER SOPHOMORE			SPRING SEMESTER SOPHOMORE		
MN 4005	LEADERSHIP AND MANAGEMENT I (AREA 3)	3	MGT 2946	SMALL UNIT LEADERSHIP	1
MGT 2945	SMALL UNIT LEADERSHIP	1			
FALL SEMESTER JUNIOR			SPRING SEMESTER JUNIOR		
MN 3204	EVOLUTION OF WARFARE *Offered Fall of Odd Years	3	MGT 3946	CADET ORGANIZATIONAL LEADERSHIP	1
MGT 3945	CADET ORGANIZATIONAL LEADERSHIP	1			
FALL SEMESTER SENIOR			SPRING SEMESTER SENIOR		
MN 4204	EXPEDITIONARY WARFARE *Offered Fall of Even Years	3	MN 4006	LEADERSHIP AND ETHICS	3
MGT 4945	EXECUTIVE LEADERSHIP	1	MGT 4946	EXECUTIVE LEADERSHIP	1

Additional Requirement:

- American Military History / National Security Policy (one of the following):
History 3055, 3056, 3505, 3506, 3534, 3544, 3254 or Political Science 1014, 1024

Timetables

∞ Timetable of Classes:

https://banweb.banner.vt.edu/ssb/prod/HZSKVTSC.P_DispRequest

- The timetable provides a searchable listing of the current or upcoming classes offered at VT.
- Click on the **CRN#** for course descriptions, pre-req's, co-req's, restrictions, etc.

∞ Historical Timetable:

https://banweb.banner.vt.edu/ssb/prod/HZSKVTSC.P_DispHistorical

- This database allows you to see if a class was taught in a given semester. For example, if you were wondering if a particular class would be taught in the spring you could look at past spring semesters on the Historical Timetable and see if it was taught then.

Things to keep in mind...

- ☞ Typically 4.5 or 5 years is recommended for Engineering students in the Corps of Cadets depending on AP, IB, Transfer credits.
- ☞ Curriculum for Liberal Education (CLE) courses are required and should be placed on your plan.
- ☞ Denote your CLE courses in parentheses for example: PSCI 1014 US Gov & Politics (Area 3), remember to check to see if any of your service classes count in the CLE.
- ☞ Keep your courses consistent on the plan, place your service class and corps lab in the same spot every time either first on each semester or last.
- ☞ **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.

Examples

Course #	Course Title	Hrs
CHEM 1035	General Chemistry (Area 4)	3
CHEM 1045	General Chemistry Lab (Area 4)	1
ENGE 1215	Foundations of Engineering	2
ENGL 1105	Freshman English (Area 1)	3
MATH 1225	Calculus (Area 5)	4
MGT 1945	Military Leadership Practicum	2
AS,MN,MS	(specific courses for your service area)	1-4

CLE & Technical Elective Examples		
	CLE Area 2	3
	Technical Elective	3
PHIL 1204	Knowledge and Reality (Area 2)	3
ME 4454	Adv Technology Motor Vehicles (TE)	3

You are not required to select the courses you wish to take for each CLE Area or Technical Elective at this time. If you choose to select the classes you wish to take for these requirements, please place in parentheses beside the course the corresponding area or technical elective notation. Please see example above.

Reminder: Not all classes are offered every semester...it is very important that you check the timetable and historical timetables for class offerings.