

NAVY ROTC & BS in AEROSPACE ENGINEERING – 4, 4.5 & 5 YEAR ACADEMIC PLANS = FALL 2014:

PLAN 1 –

Option 1 - if you are taking Calc 1 (APPM 1350) in the FALL:

<u>FALL FR</u>	<u>SPR FR</u>	<u>FALL SO</u>	<u>SPR SO</u>	<u>FALL JR</u>	<u>SPR JR</u>	<u>FALL SR</u>	<u>SPR SR</u>	<u>SUM/FALL 5TH YR</u>
APPM 1350-4	APPM 1360-4	ASEN 2001-4	ASEN 2003-5	ASEN 3111-4	ASEN 3128-4	ASEN 4013-3	LDHSS-3	WRTG 1150-3
CSCI 1320 - 4	PHYS 1110 - 4	ASEN 2002-4	ASEN 2004-5	ASEN 3112-4	ASEN 3200-4	ASEN 4018-4	ASEN 4028-4	UDHSS-3
GEEN 1400-3	AM MILT HIST/NSP-3 (LD HSS)	APPM 2350-4	APPM 2360-4	ASEN 3113-4	ASEN 3300-4	NAVR 3020-3	NAVR 4020-3	
NAVR 1010-2	ASEN 1022-3	NAVR 4010-3	<u>NAVR 4030-3</u>	NAVR 3040-3 (PAE)	NAVR 3030-3 (PAE)	ASEN 4138-3 (PAE)	WORLD CULT/REL/RS-3 (UD HSS)	
COEN 1500-1	<u>NAVR 2020-3</u>	<u>ASEN 2012-2</u>	17	<u>PHYS 1120-4</u>	<u>WRTG 3030-3</u>	<u>PAE-3</u>	<u>PAE-3</u>	
<u>LDHSS-3</u>	17	17		19	18	16	16	
17								

Option 2- if you are taking Calc 2 (APPM 1360) in the FALL:

<u>FALL FR</u>	<u>SPR FR</u>	<u>FALL SO</u>	<u>SPR SO</u>	<u>FALL JR</u>	<u>SPR JR</u>	<u>FALL SR</u>	<u>SPR SR</u>	<u>SUMMER(S)</u>
APPM 1360-4	APPM 2350-4	ASEN 2001-4	ASEN 2003-5	ASEN 3111-4	ASEN 3128-4	ASEN 4013-3	UDHSS-3	WRTG 1150-3
CSCI 1320 - 4	PHYS 1110 - 4	ASEN 2002-4	ASEN 2004-5	ASEN 3112-4	ASEN 3200-4	ASEN 4018-4	ASEN 4028-4	
GEEN 1400-3	AM MILT HIST/NSP-3 (LD HSS)	APPM 2360-4	PHYS 1120-4	ASEN 3113-4	ASEN 3300-4	NAVR 3020-3	NAVR 4020-3	
NAVR 1010-2	ASEN 1022-3	NAVR 4010-3	<u>NAVR 4030-3</u>	NAVR 3040-3 (PAE)	NAVR 3030-3 (PAE)	ASEN 4138-3 (PAE)	WORLD CULT/REL/RS-3 (UD HSS)	
COEN 1500-1	<u>NAVR 2020-3</u>	<u>ASEN 2012-2</u>	17	<u>LDHSS-3</u>	<u>WRTG 3030-3</u>	<u>PAE-3</u>	<u>PAE-3</u>	
<u>LDHSS-3</u>	17	17		18	18	16	16	
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Option 3 – if you are taking CALC 3 (APPM 2350) in the FALL:

<u>FALL FR</u>	<u>SPR FR</u>	<u>FALL SO</u>	<u>SPR SO</u>	<u>FALL JR</u>	<u>SPR JR</u>	<u>FALL SR</u>	<u>SPR SR</u>	<u>SUMMER(S)</u>
APPM 2350-4	APPM 2360-4	ASEN 2001-4	ASEN 2003-5	ASEN 3111-4	ASEN 3128-4	ASEN 4013-3	UDHSS-3	N/A
CSCI 1320 - 4	PHYS 1110 - 4	ASEN 2002-4	ASEN 2004-5	ASEN 3112-4	ASEN 3200-4	ASEN 4018-4	ASEN 4028-4	
GEEN 1400-3	AM MILT HIST/NSP-3 (LD HSS)	WRTG 1150-3	PHYS 1120-4	ASEN 3113-4	ASEN 3300-4	NAVR 3020-3	NAVR 4020-3	
NAVR 1010-2	ASEN 1022-3	NAVR 4010-3	<u>NAVR 4030-3</u>	NAVR 3040-3 (PAE)	NAVR 3030-3 (PAE)	ASEN 4138-3 (PAE)	WORLD CULT/REL/RS-3 (UD HSS)	
COEN 1500-1	<u>NAVR 2020-3</u>	<u>ASEN 2012-2</u>	17	<u>LDHSS-3</u>	<u>WRTG 3030-3</u>	<u>PAE-3</u>	<u>PAE-3</u>	
<u>LDHSS-3</u>	17	16		18	18	16	16	
17								

PLAN 2

Option 1 – if you are taking Pre-Calc for Engineers (APPM 1235) in the FALL:

<u>FALL FR</u>	<u>SPR FR</u>	<u>SUM FR</u>	<u>FALL SO</u>	<u>SPR SO</u>	<u>FALL JR</u>	<u>SPR JR</u>	<u>FALL SR</u>	<u>SPR SR</u>	<u>SUMMER (S)</u>
APPM 1235-4	APPM 1350-4	APPM 1360-4	ASEN 2001-4	ASEN 2003-5	ASEN 3111-4	ASEN 3128-4	ASEN 4013-3	WRTG 3030-3	WRTG 1150-3
LDHSS-3	PHYS 1110-4		ASEN 2002-4	ASEN 2004-5	ASEN 3112-4	ASEN 3200-4	ASEN 4018-4	ASEN 4028-4	UDHSS-3
GEEN 1400-3	CSCI 1320 - 4		APPM 2350-4	APPM 2360-4	ASEN 3113-4	ASEN 3300-4	NAVR 3020-3	NAVR 4020-3	
NAVR 1010-2	AM MILT HIST/NSP-3 (LD HSS)		NAVR 4010-3	<u>NAVR 4030-3</u>	NAVR 3040-3 (PAE)	NAVR 3030-3 (PAE)	ASEN 4138-3 (PAE)	WORLD CULT/REL/RS-3 (UD HSS)	
COEN 1500-1	<u>NAVR 2020-3</u>		<u>ASEN 2012-2</u>	17	<u>PHYS 1120-4</u>	<u>ASEN 1022-3</u>	<u>PAE-3</u>	<u>PAE-3</u>	
<u>LDHSS-3</u>	18		17		19	18	16	16	
16									

Option 2 – if you are taking Pre-Calc for Engineers (APPM 1235) in the FALL and can do the 5 year plan:

<u>FALL FR</u>	<u>SPR FR</u>	<u>FALL FR2</u>	<u>SPR FR2</u>	<u>FALL SO</u>	<u>SPR SO</u>	<u>FALL JR</u>	<u>SPR JR</u>	<u>FALL SR</u>	<u>SPR SR</u>
APPM 1235-4	APPM 1350-4	APPM 1360-4	APPM 2350-4	ASEN 2001-4	ASEN 2003-5	ASEN 3111-4	ASEN 3128-4	ASEN 4013-3	WRTG 3030-3
LDHSS-3	AM H/NSP-3 (LD HSS)	NAVR 4010-3	GEEN 2350-1	ASEN 2002-4	ASEN 2004-5	ASEN 3112-4	ASEN 3200-4	ASEN 4018-4	ASEN 4028-4
GEEN 1400-3	CSCI 1320 - 4	WRTG 1150-3	APPM 2450-1	APPM 2360-4	PHYS 1120-4	ASEN 3113-4	ASEN 3300-4	NAVR 3020-3	NAVR 4020-3
NAVR 1010-2	NAVR 2020-3	COEN 1360-1	NAVR 4030-3	ASEN 2012-2	<u>WORLD CULT-3 (UDH)</u>	<u>NAVR 3040-3 (PAE)</u>	<u>NAVR 3030-3</u>	ASEN 4138-3 (PAE)	ASEN 5148-3 (PAE)
COEN 1500-1	COEN 1350-1	<u>PHYS 1110-4</u>	ASEN 1022-3	<u>APPM 2460-1</u>	17	15	15	<u>PAE-3</u>	<u>ATOC 3180 (PAE)-3</u>
<u>LDHSS-3</u>	<u>ATOC 1050-3</u>	15	<u>UDHSS-3</u>	15				16	16
16	18		15						

MARINE OPTION:

<u>FALL FR</u>	<u>SPR FR</u>	<u>FALL SO</u>	<u>SPR SO</u>	<u>FALL JR</u>	<u>SPR JR</u>	<u>FALL SR</u>	<u>SPR SR</u>	<u>SUMMER (S)</u>
APPM 1350-4	APPM 1360-4	ASEN 2001-4	ASEN 2003-5	ASEN 3111-4	ASEN 3128-4	ASEN 4013-3	PAE-3	WRTG 1150-3
PHYS 1110-4	CSCI 1320 -4	ASEN 2002-4	ASEN 2004-5	ASEN 3112-4	ASEN 3200-4	ASEN 4018-4	ASEN 4028-4	
GEEN 1400-3	AM MILT HIST/NSP-3 (LD HSS)	APPM 2350-4	APPM 2360-4	ASEN 3113-4	ASEN 3300-4	NAVR 3101-3 (UDHSS)	NAVR 4020-3	
NAVR 1010-2	ASEN 1022-3	NAVR 4010-3	NAVR 4101-3 (UDHSS)	PHYS 1120-4	PAE-3	ASEN 4138-3 (PAE)	LDHSS-3	
COEN 1500-1	NAVR 2020-3	ASEN 2012-2	17	16	WRTG 3030-3	PAE-3	PAE-3	
LDHSS-3	17	17			18	16	16	

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1. **You MUST complete the following prerequisite courses with a grade of C or better prior to taking ASEN 2001, 2002 & 2012 in Fall 2014. The required prerequisite courses are APPM 1350, APPM 1360, PHYS 1110 & Programming 1 (CSCI 1320). If you get a grade of C- or lower in any of these classes you must repeat it and get a grade of C or better prior to taking ASEN 2001, 2002 & 2012.**
2. **COEN 1500 is a degree requirement for Aerospace. All ASEN freshmen MUST take COEN 1500 in the fall semester of their freshman year.**
3. **Completing the NROTC Academic Planning Schedule Form:**
 - a. HOURS (front page): Credit hours for the BS Degree in ASEN = 128. Credit hours required for NROTC = 47. NROTC credit hours that satisfy degree requirements = 21-24 credits. Total Credit Hours for commission = 151-154 credits. This range depends on AP/IB and other transfer credit.
 - b. Please get the Course Titles from the ASEN Degree Sheet: <http://www.colorado.edu/aerospace/current-students/undergraduates/curriculum/course-sequence>. You'll need to get the NAVR course titles from the detachment.
 - c. If you have AP, IB or other university level transfer courses, please pull your Transfer Credit Report from MyCUInfo (Student Tab, Student Center, Drop Down Menu – select Transfer Credit Report). To find out what degree requirements they count toward, please pull your degree audit (it can be found on MyCUInfo).
4. **LD HSS = Lower-Division Humanities/Social Sciences (9 credit hours). UD HSS = Upper- Division Humanities/Social Sciences (6 credit hours). All HSS courses MUST be from the approved list of HSS classes for engineering students: <http://www.colorado.edu/engineering/academics/policies/hss>**
5. **UD WRTG = Upper-division Writing Requirement (3 credit hours) – options, WRTG 3030, WRTG 3035, HUEN 1010 (if taken in the freshman year), HUEN 3100.**
6. **PAE = Professional Area Electives (15 credit hours total).** PAEs are 3000, 4000 & 5000 level Math, Science & Engineering Courses. Here are some helpful PAEs for ASEN ROTC students. ASEN 4138 = Aircraft Design, ATOC 3180 Aviation Meteorology (prereq is ATOC 1050-3 which counts as a Free Elective). APPM 3350 Advanced Engineering Calculus is helpful for the fall junior level ASEN classes. APPM 3310 Matrix Methods is useful for all of the ASEN classes, especially for ASEN 3128 & 3200 and all of the graduate level ASEN classes (if you plan to do the BS/MS program). If you don't want to take APPM 3310 (it is a time consuming class) and do not plan to do the BS/MS or a MS, you can take MATH 3130 Intro to Linear Algebra instead. Both count as PAEs. For a full listing of approved PAEs, please pull your degree audit (can be found on MyCUInfo) or visit this site to download the list of approved PAEs: <http://www.colorado.edu/aerospace/current-students/undergraduates/faq>
7. **FE = Free Electives.** 5 credit hours total if you take CSCI 1320-4. You can use 5-6 hours of NROTC classes towards your Free Electives (like lower-division ENGL/WRTG), etc.
8. CSCI 1320, ECEN 1310 C & MATLAB Programming for ECE, COEN 1300 Intro to Engineering Computing & CSCI 1300 Programming 1 all meet the **programming course requirement**
9. **The maximum hrs of ROTC you can use towards degree requirements = 6 hrs.** Normally for NAVY these are NAVR 3040 & NAVR 3030 which counts as PAE electives. For Marine Option students, they usually use NAVR 3101 & NAVR 4101 which count as UDHSS electives. BTW, NROTC requires some specific classes: (24 credits) - AMH/NSP-3, WC/R-3, LDWRTG/ENGL-3, UDWRTG-3, CALC=6, PHYS=6.
10. ASEN 1400 Gateway to Space, GEEN 1400 Engineering Projects & ECEN 1400 Intro Dig & Analog Electronics all meet the same requirement – you can take any of them. If you are a transfer student, please consult with Lauren Cole to get a full list of approved courses that fulfill this requirement. Engineering Projects courses are for first-year freshmen engineering students only.
11. If you are in Pre-Calc this fall (APPM 1235), you'll need to take Calc 2 over the summer in order to stay on track. APPM 1360 at CU-Boulder is typically taken during the months of June & July so see if you can arrange your cruise around this class. You can also take Calc 2 online over the summer but we do not encourage this since an in-class experience is more beneficial. If you take Calc 2 over the summer, we encourage you to get a tutor. All students who take summer classes outside of CU-Boulder must get the class pre-approved prior to taking it. If you've been approved for a 5-year plan, you should take APPM 1360 in the fall of the second year.
12. If you are following the normal ASEN degree plan, we encourage you to take PHYS 1120 the summer after your FR year (this summer) so that you won't be at 19 hours in the fall of your Junior Year. PHYS 1120 is offered during the Summer Session during Term B (month of July) so you will have to arrange your cruise around it. Or you can take PHY 212 at a community college in Colorado.
13. If you did NOT take 3 years of the same foreign language in high school (or 2 years of 2 different foreign languages), you have a **MAPS** deficiency in Foreign Language. Please connect with Lauren Cole to discuss your MAPS plan. You will need to complete either 3rd semester proficiency (i.e. SPAN 2110) or if you have 2 years of a foreign language from high school, you can take 2 semesters of a different foreign language here at CU-Boulder. Yes, all 1000 & 2000 level foreign language courses count as LDHSS.
14. If you are on scholarship and/or you contract with the NAVY, you should get security clearance in your junior year. I encourage you to apply for internships for the summer after your junior year as this can greatly enhance your career in the NAVY. One of our AIR FORCE students worked on the F-35 for his internship!!! One of our NAVY alumni who got pilot slot had an amazing internship at NGC and that helped his Naval career a lot.