

Astronomy and Astrophysics Major (Honors)

Sample Academic Plan for students beginning in Math 1150, 1149, or 1140

Year	Autumn Semester	Credit hours	Comment	Spring Semester	Credit Hours	Comment
1	ArtsSci 1100.10	1	Survey	Astron 1221 or CSE 122x [^] Math 1151 World Lang. 2 Gen Ed Course Total Hours	3 5 4 3 15	Programming Req. see note below Calculus I
	Astron 2895	1	Seminar			
	GenEd 1201	1	GE Launch Seminar			
	Math 1150	5	Precalculus			
	World Lang. 1	4				
	Gen Ed Course	3				
	Total Hours	15				
2	Math 1152*	5	Calculus II	Math 2153* Physics 1251H ^{%#} Gen Ed Course Gen Ed Course Total Hours	4 5 3 3 15	Calculus III Honors Intro Physics II
	Physics 1250H [%]	5	Honors Intro Physics I			
	World Lang. 3	4				
	Gen Ed Course	3				
	Total Hours	17				
3	Astron 2291	3	Intro Astrophysics I	Astron 2292 Math 2568* Physics 2301 [#] Gen Ed Course Gen Ed Course Total Hours	3 3 4 3 3 16	Intro Astrophysics II Linear Algebra Mechanics II
	Math 2415*	3	Differential Equations			
	Physics 2300 [#]	4	Mechanics I			
	Physics 3700	3	Data Analysis Lab			
	Gen Ed Course	3				
	Total Hours	16				
4	Astron 3350	3	Methods of Observation	Physics 5401H or Physics 5501H Physics Elective+ or Astron 5xxx ^{&} Gen Ed Course Free Elective [†] Total Hours	4 3 3 3 13	Honors E&M II Honors Quantum II See note below
	Physics 5400H	4	Honors E&M I			
	Physics 5500H	4	Honors Quantum I			
	Physics Elective+ or Astron 5xxx ^{&}	3	See note below			
	GenEd 4001	1	GE Reflection Seminar			
	Total Hours	15				

Degree Hours 122 (121 minimum required)

Courses in YELLOW are only offered in the term shown (i.e., offered in Autumn only or in Spring only)

NOTE: this is **only one of many** possible ways to move through the Astro curriculum. Consult with an academic advisor to develop and refine an academic plan that is appropriate for you.

Students beginning in Math 1149 or Math 1140 will follow a similar plan:

If starting in Math 1149, replace Math 1150 in Autumn Year 1 with Math 1149 (3 cr.) + one Gen Ed Course (3 cr.)

If starting in Math 1140, replace Math 1150 in Autumn Year 1 with Math 1140 (4 cr.) and replace Math 1151 in Spring Year 1 with Math 1141 (4 cr.)

You may need to adjust later coursework to ensure you meet the 121-credit minimum for graduation.

Details on symbols (* % ^ # & + †) can be found on the next page.

*This "standard" calculus sequence has many acceptable variations. Consult with your academic advisor if you have already taken or wish to take a different set of courses.

%Physics 1270-1271 is a version of the introductory Physics courses specifically intended for Physics and Astro majors. The Physics 1250-1251, 1250H-1251H, 1260-1261, and 1270-1271 series are all considered to be equivalent. Physics 1250 and 1251 are offered year-round (Autumn Spring, Summer), but the others are only offered once per year in Autumn-Spring.

^ Astronomy 1221 (Astronomy Data Analysis), CSE 1222 (C++), CSE 1223 (Java), or CSE 1224 (Python). Students who have changed majors from Engineering may substitute Engr 1221 or Engr 1281H.

Physics 1251H, 2300, and 2301 each require a grade of C+ or higher to move on in major coursework.

&Only one Astron 5xxx course is required: 5205 (Planetary Science) is offered in odd-year Springs; 5681 (Stellar Evolution) is offered in even-year Springs; 5682 (Cosmology) is offered every Autumn.

+ Due to sequencing and availability, the required Physics 5600 class cannot be taken until Autumn year 5. We will allow a Physics Elective - any additional upper-level Physics course - to substitute for 5600. Examples include Physics 5680 in Autumn, Physics 3470 in Spring, and Physics 5300 in Spring.

† Free Electives are only required if a student needs to take extra courses in order to reach the minimum of 121 degree hours for the B.S. degree set by the College of Arts and Sciences. Students may also schedule Free Electives if they prefer to remain full-time (12+ credits) for a semester.