## **Astronomy and Astrophysics Major**

Sample Academic Plan for students beginning in Math 1050 with Summer courses									
Year	Autumn Semester	Credit Hours	Course Title	Spring Semester	Credit Hours	Course Title	Summer Semester	Credit Hours	Course Title
1	ArtsSci 1100.10	1	Survey	Math 1075	4	Pre-Coll. Math II	Math 1148	4	Coll. Alg.
	Astron 2895	1	Seminar	World Lang. 2	4				
	GenEd 1201	1	Launch Sem.	Gen Ed Course	3				
	Math 1050	5	Pre-Coll. Math I	Gen Ed Course	3				
	World Lang. 1	4							
	Gen Ed Course	3							
	Total Hours	15		Total Hours	14		Total Hours	4	
2	Math 1149	3	Trigonometry	Astron 1221 or	3	Programming	Math 1152*	5	Calculus II
	World Lang. 3	4		CSE 122x <sup>^</sup>	3	see note below	Physics 1251 <sup>%#</sup>	5	Intro Phys. II
	Gen Ed Course	3		Math 1151	5	Calculus I			
	Gen Ed Course	3		Physics 1250 <sup>%</sup>	5	Intro Physics I			
	Gen Ed Course	3		Gen Ed Course	3				
	Total Hours	16		<b>Total Hours</b>	16		Total Hours	10	
3	Astron 2291	3	Astrophys. I	Astron 2292	3	Astrophys. II			
	Math 2153*	4	Calculus III	Math 2415*	3	Diff. Eq.			
	Physics 2300 <sup>#</sup>	4	Mechanics I	Math 2568*	3	Linear Algebra			
	Physics 3700	3	Data Ana. Lab	Physics 2301 <sup>#</sup>	4	Mechanics II			
	Total Hours	14		Total Hours	13		Total Hours	0	
		T							
4	Astron 3350	3	Meth. of Obs.	Physics 5400	4	Elec. & Magn.			
	Physics 5500	4	Quant. Mech. I	Physics 5501	4	Quant. Mech. II			
	Physics Elective <sup>⁺</sup> or Astron 5xxx <sup>&amp;</sup>	3	See note below	Physics Elective <sup>†</sup> or Astron 5xxx <sup>&amp;</sup>	3	See note below			
	Gen Ed Course	3		Gen Ed Course	3				
	GenEd 4001	1	Reflection Sem.						
	Total Hours	14		Total Hours	14		Total Hours	0	

**Degree Hours** 130 (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.

Details on symbols (\*  $^{\% ^{^{^{\prime}} \& ^{+}}}$ ) 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.

+ 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.

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

<sup>&</sup>lt;sup>#</sup>Physics 1271, 2300, and 2301 each require a grade of C+ or higher to move on in major coursework.

<sup>&</sup>lt;sup>&</sup>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.