## ASTRONOMY, ASSOCIATE IN SCIENCE

Astronomy is the branch of science which studies celestial objects and processes. Astronomers draw on many other disciplines to explain celestial phenomena including mathematics, physics, and chemistry. The Associate in Science degree in Astronomy at Monterey Peninsula College gives students a foundation in the introductory science and math which are needed for further study in Astronomy or a related field.

## **Learning Outcomes**

Upon successful completion of the program, students will be able to:

• Use the scientific method to investigate phenomena in the natural world and use concepts, experiments, and/or theory to explain them.

## Associate in Science Degree Major Requirements

Code	Title	Units
<b>Required Core</b>		
Select at least 18 units from the following:		
ASTR 10 & ASTR 10L	Introduction to Astronomy and Introduction to Astronomy Laboratory	
CHEM 1A	General Chemistry I	
CHEM 1B	General Chemistry II	
MATH 20A	Calculus with Analytic Geometry I	
MATH 20B	Calculus with Analytic Geometry II	
PHYS 3A	Science and Engineering Physics I	
PHYS 3B	Science and Engineering Physics II	
TOTAL MAJOR UNITS		18
Additional Requirements		42
Complete Competency Requirements and a general education pattern (MPC General Education, CSU General Education, or IGETC) for a total of 60 degree-applicable units 1 <sup>1</sup>		
Total Units		60
1		

Contact an MPC counselor for major preparation at specific institutions.

Please refer to the graduation requirements section of the Catalog for information about degree and certificate requirements including Reading and Writing, Mathematics, Information Competency, and General Education requirements.

The model sequence of coursework below is one pathway for students to complete the program. The information below is not an official educational plan. An MPC Counselor can assist you with creating a personalized education plan based on your academic, career, and personal goals. Visit MPC's Counseling website for more information about Counseling and up-to-date program requirements.

## Suggested 2-Year Course Sequence

Year 1		
Fall		Units
ENGL 1A or ENGL 1AE	College Composition or College Composition: Enhanced	3
LIBR 50	Introduction to Library and Research Skills	1
MATH 13	Pre-Calculus	5
ASTR 10 & ASTR 10L	Introduction to Astronomy and Introduction to Astronomy Laboratory	4
IGETC Area 4 (US	S-1 Course Recommended)	3
	Units	16
Spring		
ENGL 2	Argumentative Writing and Critical Thinking	3
MATH 20A	Calculus with Analytic Geometry I (Recommended Major Core Course)	4
IGETC Area 3A		3
IGETC Area 3B		3
IGETC Area 4 (US	S-2 & 3 Course Recommended)	3
	Units	16
Year 2 Fall		
SPCH 1 or SPCH 2	Public Speaking (CSU Requirement) or Small Group Communication	3
PHYS 3A	Science and Engineering Physics I (Recommended Major Core Course)	4
MATH 20B	Calculus with Analytic Geometry II (Recommended Major Core Course)	4
IGETC Area 3A or	- 3B	3
	Units	14
Spring		
MATH 20C	Calculus of Several Variables	4
PHYS 3B	Science and Engineering Physics II (Recommended Major Core Course)	4
IGETC Area 4		3
IGETC Area 5B		3
IGETC Area 6 (UC requirement)		
	Units	14
	Total Units	60