Associate of Science in Physical Science

TOCC's Science programs include an Associate of Science in Physical Science degree for transfer with the following concentrations: Astronomy, Physics, Computer Science and Engineering. All options in the AS Physical Science degree emphasize thorough preparation of students who plan to transfer to four-year colleges and universities after they graduate from TOCC. The AS Physical Science degree can help a student attain admission to one of Arizona's public universities as a junior and prepares students for transfer to fields such as engineering, computer science or physical sciences like astronomy, physics or geology.

Program learning outcomes

1. Describe concepts as they apply to physical sciences or computer science.
2. Design and conduct a research project in physical science or computer science.
3. Display a sense of place, by being able to identify engineering, science or technical issues on the Tohono O'odham Nation and propose a culturally-appropriate solution.
4. Apply critical and creative thinking skills to solve problems.

Associate of Science in Physical Science
Program of Study

	General Education Category	Course Requirement	Credits Required	Recommended courses for this degree*
General Education	Tohono O'odham Himdag	HIS 122 Tohono O'odham History and Culture (C)	3	
		THO 101 Elementary Tohono O'odham or THO 106 Conversational Tohono O'odham I	4	
	English Composition	WRT 101 Writing I	3	
		WRT 102 Writing II (I)	3	
	Mathematics	MAT 220 Calculus I	5	
	Humanities and Fine Arts	Choose any course from: Art General Education Selection	3	
		Choose any course from: Humanities General Education Selection	3	
	Social and Behavioral Sciences	Choose any course from: Social and Behavioral Science General Education Selection	3	
	Three Lab-loaded Physical Science Courses	PHY 210N Intro to Mechanics	5	
		PHY 216N Intro to Electricity and Magnetism	5	
		CHM 151N General Chemistry I	5	
		Total General Education Credits	42	

	Core Courses		Course Offered: F = Fall semester S = Spring semester Su = Summer session
Core Requirements	MAT 231 Calculus II	4	
	PHY 232 Principles of Research in the Physical Sciences	3	
	PHY 298 Service Learning Practicum	1	
	PHY 299 Research Practicum	1	
	Total Core Credits	9	

Electives	Choose any of the following courses: AST 101N, AST 102N, CIS 127, CHM 152N, EGR 102N, MAT 241.	9
	Total Credits for Elective	9
	Total Credits for Degree	60