

ASSOCIATE IN SCIENCE - CHEMICAL TECHNOLOGY

Previous Degree Required: HS Diploma

Eligible for Financial Aid: Yes

Delivery Method(s): On-Campus, Hybrid, Online

Location(s): Cocoa, Melbourne, Palm Bay, Titusville

Additional Limited Access Application Process Required: No

Program Testing Requirements: Assessment in Reading, Writing, and Math

Academic Community: STEM

Program Code: CHAS

Classification of Instructional Programs (CIP) Code: 41.0301

Florida Department of Education CIP Code: 1641030100

The A.S. Chemical Technology degree has the following associated College Credit Certificate (CCC):

- [Scientific Workplace Preparation CCC](#)

This degree program prepares students for employment as laboratory technicians, or to provide supplemental training for persons previously or currently employed in these occupations.

Upon completion of the program, the student will be able to assist chemists and chemical engineers by performing chemical and physical laboratory tests for various purposes such as quality control monitoring of on-going production operations, research and development, and the maintenance of health and safety standards in the laboratory.

Refer to the [Associate in Science Degree Programs](#) overview to find information about admission, graduation, general education and other requirements. Students who need technical electives will work with a bachelor's advisor to determine the courses best suited to their plan of study.

Visit the [program page](#) for more details and how to apply.

Specializations: Several EFSC Associate in Science (A.S.) and Bachelor degrees have multiple associated specializations. Students must select one specialization, and will receive the specific A.S./BAS degree only one time. While students may take courses from more than one specialization, the specific degree will be awarded only once.

Program Requirements

Code	Title	Credit Hours
General Education Courses		
BSCC 1010	General Biology 1	4
ENC 1101	Composition 1	3
MAC 1105	College Algebra	3
SPC 2608	Fundamentals of Speech Communication	3
	Humanities Core Requirement	3
	Social/Behavioral Science/Core-Civic Literacy Requirement	3
Major Courses		
CHM 1045	General Chemistry 1	3
CHM 1046	General Chemistry 2	3
CHML 1045	General Chemistry 1 Laboratory	1
CHML 1046	General Chemistry 2 Laboratory	1

CGS 1000	Exploring Digital Technology	3
or CGS 2100	Microcomputer Applications	

Specialization	
Select one specialization from below:	16
Biomedical Technology Specialization	
Chemical Technology Specialization	
Engineering Specialization	
Technical Electives	
Select 18 Technnical Elective credits ¹	18
Total Credit Hours	64

- Satisfy the [civic literacy competency](#) requirement

¹ **Note:** Courses in the specializations above can be used as technical electives as long as they are not being used to fulfill the specialization requirement.

Technical Electives

Code	Title	Credit Hours
BSCC 1427	Introduction to Biotechnology Methods 2	4
BSCC 2910	Biological Research	4
CHM 2941	Chemistry Internship	1-3
CHMC 2910	Chemical Research	4
ECO 2023	Principles of Economics 2 (Microeconomics)	3
ENC 2210	Technical Writing	3
HSC 1531	Medical Terminology	2
HSCC 1000	Introduction to Healthcare	3
MAC 1114	College Trigonometry	3
MAC 1140	Precalculus Algebra	3
MAC 1147	Precalculus Algebra/Trigonometry	5
MAC 1233	Essentials of Calculus	3
MAC 2311	Calculus 1 with Analytic Geometry	5
MAC 2312	Calculus 2 with Analytic Geometry	5
MAC 2313	Calculus 3 with Analytic Geometry	5
MAP 2302	Differential Equations	3
MAT 1033	Intermediate Algebra	3
MCBC 2010	Microbiology for Health Sciences	4
PHY 2025	Introduction to Principles of Physics	3
PHYL 2048	General Physics 1 Laboratory	1
PHYL 2049	General Physics 2 Laboratory	1
STA 2023	Statistics	3

Learning Outcomes

- Produce valid written scientific records
 - Supports Core Ability: *Communicate Effectively*
- Manipulate data to construct and interpret appropriate graphs.
 - Supports Core Ability: *Process Information*
- Working in a group, explore a scientific topic of interest.
 - Supports Core Ability: *Work Cooperatively*
- Problem Solving: Students will design, evaluate, and implement a strategy to answer an open-ended question or achieve a desired goal.
 - Supports Core Ability: *Think Critically & Solve Problems*

5. Select and utilize appropriate glassware, chemicals, and laboratory equipment to complete a common laboratory task.
 - *Supports Core Ability: Think Critically & Solve Problems*
6. Solve Chemical Kinetics or Equilibrium Problems.
 - *Supports Core Ability: Think Critically & Solve Problems*
7. Demonstrate appropriate interpersonal skills, decision-making strategies, and awareness of self-worth, ethics and values.
 - *Supports Core Ability: Model Ethical and Civic Responsibility*