



WHAT YOU WILL LEARN

Chemical technicians play a vital role in fields involving medical drugs, environmental pollution analysis, cosmetics, chemicals, plastics, alternative energy sources, fabrics and foods.

Chemical technicians use analytical techniques, many with state-of-the-art instrumentation, to aid in the development, testing and use of products.

The major purpose of the Chemical Technology Program at County College of Morris (CCM) is to prepare graduates for employment at the technician level for research, testing and quality control laboratories associated with the internationally prestigious pharmaceutical, chemical, personal care products, food industry, environmental, and chemical corporations located in New Jersey.

Students in this program learn modern chemical methods and instrumentation. They will graduate with both theoretical knowledge and practical training and an Associate in Applied Science degree.

WHY STUDY CHEMICAL TECHNOLOGY AT CCM?

• Faculty

The faculty is committed to providing quality education and maintains close relationships with students throughout their educational experience.

Many faculty members have had industrial experience, are involved in research, and have published articles in peer-reviewed journals. In addition, many belong to professional organizations including the American Chemical Society, The American Society for Microbiology and the Metropolitan Association of College and University Biologists.

Several faculty members have been nominated or won the National Institute for Staff and Organizational Development Excellence Award.

continued on back...

Curriculum Checksheet: www.ccm.edu/checksheets

Revised 07/21

CAREERS:

- Chemical research technicians
- Quality control technicians
- Plant control chemists
- Chemical material and product analysts
- Pollution analysts
- Pilot plant supervisors
- Product sales representatives
- Forensic technicians

CONTACT INFORMATION

Biology and Chemistry Department

973-328-5360

Sheffield Hall, Room 208



• Cooperative Education

The Biology and Chemistry department works collaboratively with Career Services in providing opportunities to the students for paid and unpaid internships.

To learn more about our Transfer Services and Career Services, visit: www.ccm.edu/student-life/campus-services/

• Facilities

Our laboratory facilities include not only standard lab equipment, but the most modern instrumentation including:

- Benchtop nuclear magnetic resonance (NMR)
- Gas (GC) and liquid chromatography (HPLC)
- Atomic absorption (AA)
- UV and visible spectroscopy
- Infrared spectroscopy (FTIR)
- Electrophoresis (HPCE)
- Polymerase chain reaction (PCR)
- Fourier transform infrared spectroscopy (FTIR)

In the course of their studies, students will use laboratory instrumentation to analyze real-world samples. Class sizes are small and students receive individual attention as well as supplemental help and free tutoring, if needed.

WHERE YOU CAN GO!

Students interested in transferring to other colleges should meet with an academic advisor as well as confer with the Office of Transfer Services to learn about transfer programs.

Graduates qualify for entry-level positions in research laboratories, quality-control laboratories, pilot plants, chemical production and environmental-monitoring facilities, testing laboratories and forensic laboratories.

Graduates can take advantage of employment opportunities offered by prestigious companies located in New Jersey.

Other graduates pursue baccalaureate degrees in chemistry or related disciplines at four-year institutions. Many employers will pay for continuing education towards a four-year degree and reward the employee with a pay increase and new classification if a more advanced degree is attained.

For additional information about career opportunities in chemistry, see www.acs.org.

CURRICULUM

General Education Foundation (21 CR)

COMMUNICATION (6 CR)

English Composition I	ENG 111	3
English Composition II	ENG 112	3

MATH/SCIENCE/TECHNOLOGY (3 CR)

Statistics	MAT 124	3
------------	---------	---

SOCIAL SCIENCE OR HUMANITIES (3 CR)

Choose from General Education course list (Humanities/Social Science)		3
---	--	---

GENERAL EDUCATION ELECTIVES (9 CR)

Choose from General Education course list		9
---	--	---

CHEMICAL TECHNOLOGY CORE (39 CR)

General Chemistry I Lecture	CHM 125	3
General Chemistry I Lab	CHM 126	1
General Chemistry II Lecture	CHM 127	3
General Chemistry II Lab	CHM 128	1
General Biology I	BIO 121	4
General Biology II	BIO 122	4
Analytical Chemistry – Instrumental Analysis	CHM 218	4
Essentials of Organic Chemistry	CHM 210	4
Concepts of Physics	PHY 103	4
TECHNICAL ELECTIVES (11 CR)		11

TOTAL

60

Note: You must see a faculty advisor to plan your sequence of courses. For the most up-to-date listing of courses, see the Curriculum Checklist for this program on the CCM website at www.ccm.edu/checksheets.

