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Chemistry M.S.

Introduction

The Master?s program in Chemistry is designed for graduate students and working chemists who seek to develop advanced professional skills. Through a combination of classroom study and hands-on laboratory work, students develop advanced skills and knowledge to prepare them for doctoral studies, careers in science education, or leadership positions in chemistry-related professions.

Delaware State?s program stands out for its emphasis on independent research. All master?s candidates design their own research study, conduct the laboratory trials and analysis, write up the results, and present their findings to department faculty. Students have great freedom to choose their area of inquiry, as well as the opportunity to demonstrate their creativity, problem-solving ability, and ingenuity in the lab.

Professional Preparation

Students in the Master?s program in Chemistry establish marketable credentials that advance their career prospects. Graduates who choose to further their studies compete very successfully for Ph.D. placements. Those who enter the work force (or are already in it) find many opportunities for employment in industries such as

- medical research
- drug manufacturing
- renewable energy
- environmental protection and restoration
- biotechnology
- law enforcement

Faculty

The Delaware State chemistry faculty boasts a number of accomplished researchers. Faculty members have secured major grants from the National Science Foundation, National Institute of Health, Department of Energy and other national funders to do ground-breaking research in areas such as hydrogen fuel cells, forensic chemistry, environmental chemistry, and pharmaceuticals. In addition to offering research opportunities and guidance, DSU professors help graduate students establish professional and academic networks to support their careers.

Research and Experience

Delaware State has nine chemistry research labs and three multipurpose labs, all equipped with high-end instrumentation and advanced computer technology. Students have access to equipment such as

- gas chromatographs with a variety of detectors
- a head space auto sampler for gas chromatograph
- a gas chromatograph /mass selective detector/infrared detector/computer system
- nuclear magnetic resonance spectrometers
- instrumentation for flame and flameless atomic absorption, dispersion infrared and FTIR
- ultraviolet-visible spectrophotometers
- capillary electrophoresis unit
- microwave digestion/extraction system
- high performance liquid chromatograph with data collection system
- electroanalytical system
- X-ray powder diffraction unit
- Thermal gravimetric analyzers
- Laser light scattering spectrometer

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