

Biochemical Sciences

The biochemical sciences program will enable students to complete courses that meet requirements in general education, the food science or biology programs and requirements for veterinary school.

Contrary to popular belief, there aren't "pre-vet" or "pre-med" majors; however, some departments offer "pre-vet" or "pre-med" tracks that incorporate all the requirements students need to apply to the professional school of their choice. The biochemical sciences Associate of Science degree allows students to fulfill part of these requirements at ATI before transitioning to Columbus to complete their bachelor's degree. In addition, students who intend to pursue veterinary careers can choose electives like animal nutrition or animal anatomy and physiology that provide an excellent foundation for later coursework.

Career Prospects

Graduates with an Associate of Science in biochemical sciences can find careers as food science technicians, quality assurance technicians, research/laboratory technicians (plant, animal and environmental).

Graduates with a Bachelor of Science in food science can become product development scientists, quality assurance supervisors, plant managers, food processing operations supervisors, food microbiologists, technical sales managers, flavor chemists, analytical laboratory directors, food research scientists, or food biotechnologists.

Graduates with a Bachelor of Science in biology can find careers in communications, business (pharmaceutical or sales), teaching, research biologists, biomedical or health science researchers, scientific writers, research or product development.

Graduates who further their education in a veterinary medicine program become practicing or research veterinarians.

Facilities

Ohio State ATI is adjacent to the Ohio Agricultural Research and Development Center, the site of numerous biochemical research projects and laboratories. ATI

Sample Courses

General Chemistry I & II

Pre-Calculus

Bio Sci: Energy Transfer and Development

Organic Chemistry I & II

Bio Sci: Form, Function, Diversity and Ecology

Mechanics, Kinematics, Fluid, Waves

Introduction to Rural Sociology

Basic and Practical Microbiology

biochemical science students may have the opportunity to work with researchers in such fields as bioenergy and biobased products such as fuels, specialty chemical and fiber products; environmental quality and sustainability; and food security, production, and human health.

Ohio State ATI has a biochemical science laboratories equipped with such instruments as:

- Incubators
- Centrifuges
- Gas Chromatographs
- High Performance Liquid Chromatographs
- Spectrophotometers
- Electrophoresis equipment (agarose and acrylamide)
- Polymerase Chain Reaction thermocycler
- UV/Vis gel box
- Tissue culture hood
- Immunoblotters
- Flame atomic absorption units

