

**Department of Natural & Applied Sciences**  
**Minors & Concentrations**

- **Applied Science: Agronomy Minor** is available to any major, the Minor in Applied Science: Agronomy will equip students to participate in solving many of the world's most pressing humanitarian needs: food and nutritional security, provision of adequate, safe water supplies, environmental remediation, and local energy security.

This minor is part of the newly launched Global Training Center for Applied Science and Sustainability. Housed at Evangel University, this Center is a multi-faceted faith-based venue for education, research, and collaboration to address the most serious and fundamental human needs throughout the world and thereby contributing to the fulfillment of the Great Commission.

Required Courses (14 credits): GSCI 111, BIOL 448 (Special Topics Applied Sustainability), BIOL 202, BIOL 342 or BIOL 343, BIOL 298/498 (Internship)

Elective Courses (6 credits from the following): BIOL 448: Special Topics (World Agricultural Systems), BIOL 448 Special Topics (Plant Propagation), BIOL 448: Special Topics (Applied Pathology), BIOL 123, ECON 212, ECON 213

- **Biology minor** complements any major, providing a broad base of scientific understanding, including an overview of the study of the most central concept in life sciences including genetics, cell biology, microbiology, and zoology. This minor is designed to educate students in both the breadth of subject matter encompassed by the biological sciences and the advancing knowledge at the forefront of this discipline.

Required Courses (20 credits): in biology; must include BIOL 200.

- **Chemistry minor** will equip students with fundamental understanding necessary to analyze properties and reactions of various substances. Students will become disciplined in laboratory techniques in addition to lecture coursework. Critical reasoning developed through chemistry will prove especially useful in graduate school admission. For pre-med students, chemistry is essential in understanding modern research and treatment.

Required Courses (18 credits): CHEM 111, 112, 271, 272

Elective Courses (4 credits from the following): CHEM 331, 375, or 431.

**Chemistry concentration** consists of 29-31 semester hours of chemistry, which must include CHEM 111, 112, 271, 272, 331, 496, and two additional courses from CHEM 332, 375, 431, 432, 435, or 445.

- **CIS minor** is intended for students in any major who wish to acquire more knowledge in programming, database systems, web programming, and networking. Computer information systems is the use of computers and information to enable people and organizations to be more creative and productive. Studying CIS involves learning to identify the needs of an individual or organization, design and develop systems to meet those requirements, and deploy these systems to solve real-world problems.

Required Courses (21 credits): CIS 101 (or proficiency), CIS 111, 311, 325, 441, and CPSC 111, 211. This list will be modified for Computer Science (CPSC) majors.

- **Computer Science minor** introduces the concepts, tools, and techniques involved in the programming of computers. Students learn to communicate ideas through a combination of language and technology. Work in the discipline is focused on the structure and operation of computer systems, the principles that underlie their design and programming, effective methods for their use in different classes of information processing tasks, and theoretical characterizations of their properties and limitations.

Required Courses (21 credits): CPSC 111, 211, 215, 225, 231, a second high order language, and one upper

division (300 or 400 level) CPSC course.

- **Environmental Science minor** provides students with a framework for understanding the role of environmental forces that shape human populations and society. Students gain knowledge of fundamental concepts in the physical, life, and interdisciplinary natural sciences. Students have opportunity to analyze interactions between different environmental components in relation to human and ecological health.

Required Courses (20 credits): in Biological/Environmental Science; must include BIOL 200, ENVR 343, and ENVR 377.

- **Forensic Science Minor** is available to any major, the Minor in Forensic Science is designed to introduce the student to various aspects of criminal cases, using methods from the natural and behavioral sciences to accumulate evidence used in criminal investigations. Forensic science requires coursework in the natural and behavioral sciences: biology, chemistry, criminal justice, and psychology. This instruction prepares you for careers in the various branches of forensic science such as criminal investigation, pathology, physical anthropology, toxicology, as well as the behavioral sciences. Students must take a minimum of 20 credits to complete the forensic science minor. Interested students should begin work on the minor program early in their academic career to provide ample time for scheduling the required courses.

Required Courses (17 credits): BIOL 101 or 124 or 211 or 311; CHEM 110, CJST 241, 422, PSYC 434

Elective Courses (3-4 credits): BIOL 235, CJST 372, COPH 215, PSYC 223, 351, ENGL 344

- **General Science minor** is designed for students with non-science majors. It provides opportunity for students of other disciplines to gain fundamental understanding of scientific concepts and critical thinking.

Required Courses (17 credits): BIOL 200, 201 or 202, CHEM 111, PHYS 211 or 231, and one of GSCI 111, 112 or 115.

- **Health Care minor** is available only to Health Care majors.

Required Courses (22 credits): BIOL 123, 211, 212, 235, 360, and CHEM 110.

- **Mathematics minor** is available to all majors, but proves especially useful for students planning to enter the graduate field in science. As research intensity and human knowledge grows, a broad understanding in science is critical, and is based on mathematical principles. Introductory understanding of complex mathematics gives students an unparalleled edge in future graduate and research studies.

Required Courses: 18 semester credits, must include MATH 232.

**Mathematics concentration** consists of 24 credit hours and must include MATH 232.

**Applied Mathematics concentration** requires 24 credits: Math 210, 231, 232, 233, 431 and two of the following: Math 310, 331, or 432.

- **Physical Science minor** is available to all majors. It indicates strong training in the two primary physical sciences, chemistry and physics.

Required Courses (17 credits): CHEM 111-112 and PHYS 211-212 or 231-232.

- **Physics minor** forms the basis of an Engineering or Physics degree which can be completed at another institution.

Required Courses (10 credits): Must include PHYS 231-232.

Elective Courses (8 credits): PHYS 245, 342, 351, 352, 411, 412, 448, or 493.

**Physics concentration** consists of 24 credits must include PHYS 231-232