



Engineering Technology (612)

Associate of Science

ABOUT OUR PROGRAM

This program is intended to provide the first two years of a four-year baccalaureate program. Students in this major will use their technical skills and knowledge of science and math in the support of engineering activities. Students should have interests in mechanical and electrical devices and mathematics, skills in using instruments, ability to make accurate observations and measurements, and ability to work with others as a part of a team.

NATURE OF WORK AND EMPLOYMENT

After attaining a baccalaureate degree, students may work in one of several different engineering specialties including aeronautical, agricultural, biological, chemical, civil, computer, electrical, industrial, manufacturing, material, mechanical, mining, and nuclear. Engineering Technicians are employed by companies in the electrical equipment, machinery, aerospace, and construction industries; by radio and TV stations; engineering and architectural firms; and by organizations in other fields. Faster than average job growth is projected due to anticipated increases in research and development expenditures and the expected growth in the output of technical products.

SPECIAL CONSIDERATIONS

Those interested in engineering should have an aptitude for science, mathematics, problem solving, and versatility. Good verbal and written skills along with the ability to work on a team are also needed. **The guideline listed is recommended only. Students should check with a student advisor for specific university requirements in this major.** Each student must meet with an advisor to ensure that the special requirements of the department and the institution to which they plan to transfer are fully met.

PROGRAM CONTACTS

Call Highland at 815-235-6121 for the following program contacts:

- Dr. Brendan Dutmier, Associate Dean, Natural Science and Mathematics
- David Esch, Physics/Engineering Faculty
- Theford Jackson, Transfer Coordinator/Student Advisor

RECOMMENDED COURSES

The following are recommended courses for this major only. Students must still meet all requirements for the Associate of Science degree (see page 58) in order to graduate from Highland Community College. For more information, please see your student advisor.

Chemistry

* CHEM 123 General College Chemistry I 5

Engineering

PHYS 120 Intro to Engineering 2

DRAF 151 Engineering Graphics 4

Economics

* ECON 111 Principles of Economics I 3

Computer Science

* INFT 190 Principles of Computer Science I 3

* INFT 290 Principles of Computer Science II 3

Mathematics

* MATH 177 Statistics 3

* MATH 168 Analytic Geometry and Calculus I 5

* MATH 268 Analytic Geometry and Calculus II 5

Physics

* PHYS 141 Introductory Physics I 4

* PHYS 142 Introductory Physics II 4

-or-

* PHYS 143 General Physics I 5

* PHYS 144 General Physics II 5

* Course has a prerequisite. See course descriptions.