ACADEMIC PROGRAMS

The engineering program in each of the fields of chemical (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/chemicalandmaterialsengineering), civil (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/civilandenvironmentalengineeringandengineeringmechanics), computer (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/computerengineering), electrical (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/electricalandcomputerengineering/#BACH_OF_SCI), and mechanical engineering (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/mechanicalandaerospaceengineering/#BACH) is designed to lead to a bachelor's degree in a four-year period. While students pursue curricula they themselves have chosen according to their fields of interest, they all take certain core courses in mathematics, chemistry, physics, English and engineering fundamentals. All of the programs permit additional specialization (as an overload) in minors in areas such as aerospace engineering (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/mechanicalandaerospaceengineering/#MINOR_AERO), bioengineering (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/chemicalandmaterialsengineering/#MINOR_BIO), chemical processing (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/chemicalandmaterialsengineering/#CHEM_PROC), composite materials engineering (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/chemicalandmaterialsengineering/#COM_MAT_ENG), computer systems (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/electricalandcomputerengineering/#COMP_SYS), engineering management (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/engineeringtechnologymajors/#ENM), engineering mechanics (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/civilandenvironmentalengineeringandengineeringmechanics/#ENG_MECH), environmental engineering (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/civilandenvironmentalengineeringandengineeringmechanics/#ENVIRON_ENG), materials engineering (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/chemicalandmaterialsengineering/#MAT_ENG), mechanical systems (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/mechanicalandaerospaceengineering/#MINOR_MECH_SYS), operations engineering (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/engineeringtechnologymajors/#OPE), polymer materials (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/chemicalandmaterialsengineering/#POLY), signals and systems (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/electricalandcomputerengineering/#SIGNS), structures (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/civilandenvironmentalengineeringandengineeringmechanics/#strut), transportation engineering (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/civilandenvironmentalengineeringandengineeringmechanics/#TRANSPORT) and water resources engineering (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/civilandenvironmentalengineeringandengineeringmechanics/#WATER) in the School of Engineering and in other areas such as languages, music and political science in other units of the University. Concentrations in the School of Engineering include aerospace engineering (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/mechanicalandaerospaceengineering/#AREO_CONC), electro-optics (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/electricalandcomputerengineering/#ELECTRO), energy systems-chemical (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/chemicalandmaterialsengineering/#ENERGY_SYS), engineering mechanics (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/mechanicalandaerospaceengineering/#ENERGY_SYS) and robotics (catalog.udayton.edu/undergraduate/schoolofengineering/programsofstudy/electricalandcomputerengineering/#ROBO). Although emphasis is on fundamental theories, continued attention is paid to the solution of practical problems which the student will encounter in the practice of engineering.

The programs in chemical engineering, civil engineering, computer engineering, electrical engineering and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.