Emphasis - Manufacturing

B.E. in Engineering

Description
The B.E. program is more broadly focused than the B.S. in engineering science programs. The B.E. is designed to provide students the opportunity to gain an understanding of engineering, scientific, and technical knowledge, which will enhance their career objectives in such areas as engineering science, medicine, law, professional education, public policy, military, management, and sales.

Minimum Total Credit Hours: 127

General Education Requirements
Students must complete at least 21 semester hours of general education requirements: 3 hours in humanities, 3 hours in fine arts, 3 hours in humanities/fine arts, 6 hours in social science, and the remaining 6 hours can be in any of the humanities/fine arts, social science, or general education courses as specified by the School of Engineering.

Course Requirements
Candidates for the B.E. degree must complete the following courses: Writ 100, Writ 101, or Hon 101; Writ 102, Liba 102, or Hon 102; Math 261-264, Math 353; Chem 105, 106, 115, 116, and Phys 211, 212, 221, 222; Csci 251; Engr 100, 309, 310, 313, 321, 330, 360, 361, 400; 9 hours of technical engineering electives; 3 additional hours of humanities/social science/fine arts beyond the 18 hours School of Engineering core/general education requirement; 33 hours of an approved emphasis area. The qualifications for the 9 hours of technical electives: any combination of courses offered by the School of Engineering with one course at the 200 level or higher and at least two courses at the 300 level or higher, for a combined total of 9 credit hours.

Other Academic Requirements
Students must maintain at least a 2.0 GPA in the emphasis classes for graduation.

Emphasis - Manufacturing

Description
Manufacturing Emphasis - This emphasis within the Bachelor of Engineering degree stresses manufacturing science and technology, while providing a cross-disciplinary foundation in business and accountancy to meet the need for qualified managerial and technical professionals in the rapidly expanding field of manufacturing. The curriculum provides core knowledge in engineering and manufacturing fundamentals with electives in accountancy, business, management information systems, and management and marketing. The student should consult with and obtain the approval of his/her academic adviser for the selection of the desired option courses.

Course Requirements
Candidates for the B.E. degree with an emphasis in manufacturing must complete the following courses: Math 261-264, Math 353; Writ 100 or Writ 101, Writ 102 or Liba 102; Chem 105, 106, 115, 116, and Phys 211, 212, 221, 222; Csci 251; Manf 250; Engr 309, 310, 313, 321, 330, 360, 361, 400; 9 hours of technical engineering electives including specifically Engr 312; Manf 450, 451, 452; 21 hours of humanities/social science/fine arts/general education including specifically Econ 202, 203, 230; Bus 250; one humanities; one fine arts; one additional humanities or fine arts; and 33 hours in the manufacturing emphasis area including Manf 150, 251, 252, 253, 254, 350, 351, 353; Accy 201 and 202; Mktg 351; Mgmt 371; Bus 321. Please see an advisor within the B.E. degree program for details of these required courses.