

### **Emphasis - Manufacturing**

- B.E. in Engineering
- Emphasis Manufacturing
- Degree Requirements

## **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.

#### **Degree Requirements**

The academic regulations for this degree program, as entered in the University of Mississippi Catalog, are in effect for the current or selected academic year and semester. The University of Mississippi reserves the right to 1) change or withdraw courses; 2) change rules for registration, instruction, and graduation; and 3) change other regulations affecting the student body at any time.

### **B.E.** in Engineering

#### **General Education**

REQUIREMENT	HOURS	DESCRIPTION
<u>Chem 105</u>	3	Complete Chem 105 with a passing grade.
<u>Chem 106</u>	3	Complete Chem 106 with a passing grade.
<u>Chem 115</u>	1	Complete Chem 115 with a passing grade.
<u>Chem 116</u>	1	Complete Chem 116 with a passing grade.
First Year Writing	6	Complete Hon 101, Writ 100, or Writ 101. and Complete one of the following courses: Liba 102, Writ 102 or Hon 102.
Math 261	3	Complete Math 261 with a passing grade.
Math 262	3	Complete Math 262 with a passing grade.
Math 263	3	Complete Math 263 with a passing grade.
Math 264	3	Complete Math 264 with a passing grade.





REQUIREMENT	HOURS	DESCRIPTION
Math 353	3	Complete Math 353 with a passing grade.
Phys 211	3	Complete Phys 211 with a passing grade.
Phys 212	3	Complete Phys 212 with a passing grade.
Phys 221	1	Complete Phys 221 with a passing grade.
Phys 222	1	Complete Phys 222 with a passing grade.
3 hrs fine arts	3	Student must successfully complete 3 hours in the fine arts. The course may be chosen from art history, art appreciation, and criticism of art, dance, music, and theatre arts. Courses emphasizing the enhancement of skills and performance are not acceptable.
3 hrs humanities	3	Complete 3 hrs of humanities choosing from course work in classics, literature, history, modern language, philosophy, religion, Southern studies, African American Studies, and Gender Studies.
3 hrs fine arts/humanities	3	Complete 3 additional hours in any of the humanities or fine arts categories defined by the School of Engineering general education requirements.
6 hrs social sciences	6	Complete 6 hours of social sciences choosing from the following; economics, anthropology, political science, psychology, and sociology.
3 hrs gen ed or SS/H/FA	3	Complete 3 hrs General Education work chosen from the following: additional fine art, additional social science, additional humanities, As 301, As 302, Bus 250, Bus 271, Edld 110, Edld 111, Edld 120, Edld 220, Mgmt 371, Msl 102, Nsc 211, or Spch 105.
3 hrs fine arts/humanities/soc sci	3	Complete 3 additional hours in any of the humanities, fine arts, or social science categories defined by the School of Engineering general education requirements.

#### **Major Requirements**

REQUIREMENT	HOURS	DESCRIPTION
<u>Csci 251</u>	3	Complete Csci 251 with a passing grade.
Engr 100	3	Complete Engr 100 with a passing grade.
Engr 309	3	Complete Engr 309 with a passing grade.
Engr 310	3	Complete Engr 310 with a passing grade.
Engr 313	3	Complete Engr 313 with a passing grade.
Engr 321	3	Complete Engr 321 with a passing grade.
Engr 360 or Engr 362	3	Complete either Engr 360 or Engr 362 with a passing grade.
Engr 361 or Engr 363	1	Complete either Engr 361 or Engr 363 with a passing grade.
Engr 400	1	Complete Engr 400 with a passing grade.
Engr 330	3	Complete Engr 330 with a passing grade.
6 hrs add'l SOE technical elective	6	Complete at least 6 hours of additional coursework offered by the School of Engineering at the 200-level or above.
3 hrs SOE tech elect at 300+ level	3	Complete at least 3 hours of additional coursework offered by the School of Engineering at the 300-level or above with a passing grade.
Enroll in a BE emphasis		Enroll in an emphasis within the B.E. in Engineering program.
School of Engineering GPA		Must be at least a 2.0

#### **Emphasis - Manufacturing**

REQUIREMENT	HOURS	DESCRIPTION
Accy 201	3	Complete Accy 201 with a passing grade.
Accy 202	3	Complete Accy 202 with a passing grade.
Bus 230 or Econ 230	3	Complete <u>Bus 230</u> or <u>Econ 230</u> with a passing grade.
<u>Bus 250</u>	3	Complete Bus 250 with a passing grade.
Bus 321	3	Complete Bus 321 with a passing grade.

The University of Mississippi is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award certificates and baccalaureate, master's, specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, call 404-679-4500, or visit online at www.sacscoc.org for questions about the accreditation.





REQUIREMENT	HOURS	DESCRIPTION
Econ 202	3	Complete Econ 202 with a passing grade. (Counting as a social science elective)
Econ 203	3	Complete Econ 203 with a passing grade.
Mktg 351	3	Complete Mktg 351 with a passing grade.
Mgmt 371	3	Complete Mgmt 371 with a passing grade.
Manf 150	1	Complete Manf 150 with a passing grade.
Manf 250	1	Complete Manf 250 with a passing grade.
Manf 251	3	Complete Manf 251 with a passing grade.
Manf 252	1	Complete Manf 252 with a passing grade. (Counting as a 200-level engineering elective)
Manf 253	3	Complete Manf 253 with a passing grade.
Manf 254	3	Complete Manf 254 with a passing grade.
Manf 350	3	Complete Manf 350 with a passing grade.
Manf 351	1	Complete Manf 351 with a passing grade.
Manf 353	3	Complete Manf 353 with a passing grade.

