Emphasis - Naval Science

B.S. in Engineering

Description

The B.S. in engineering provides the student with a fundamental knowledge of engineering science and prepares graduates for a variety of careers in industry and government, or for advanced study in engineering, business, or professional school.

Minimum Total Credit Hours: 127

Goals/Mission Statement

Program Educational Objectives

Graduates from the program, within 3-5 years after graduation, will:

- Meet or exceed the expectations of employers of general engineers;
- Continue their professional development by pursuing advanced study, including licensure and certifications if they so desire; and
- Continue their professional development by pursuing leadership opportunities and other positions of service in their profession and/or communities.

Student Outcomes

BSE students at the University of Mississippi should demonstrate the attainment of the following student outcomes:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies

General Education Requirements

For detailed information see the the General Education Requirements of the School of Engineering.

- Writ 101 and 102
- 3 hours of fine arts
- 6 hours of humanities
- 6 hours of social science
- Math 261, 262, 263, 264, and 353
- Chem 105, 106, 115, 116
- Phys 211, 212, 221, 222

Course Requirements

- Engr 101 and Engr 111
- Csci 256
- Engr 201 or Manf 250
- Engr 309, 310, 312, 313, 314, 321, 323, 330, 345, 360, 361, 400, 431, 451 and 452
- Manf 460
- 12 hours of approved engineering electives
- The pre-approved engineering electives are Engr 340, BME 200, BME 222, BME 301, BME 305, BME 311, BME 313, BME 314, BME 333, BME 350, BME 370, BME 510, BME 523, BME 524, Ch E 307, Ch E 308, Ch E 413, Ch E 520, Ch E 521, Ch E 522, Ch E 523, Ch E 524, C E 207, C E 208, C E 210, C E 325, C E 471, C E 472, Csci 111, Csci 112, Csci 343, El E 235, El E 331, G E 305, G E 405, M E 324, M E 325, M E 401, M E 406, and M E 421. Engineering courses not included in this list must be pre-approved by the director of general engineering.

Emphasis - Naval Science

Description

Students seeking an emphasis in naval science will be assigned an adviser in both the Department of Naval Science and School of Engineering.

Course Requirements

For an emphasis in naval science, students must complete 21 credit hours chosen from the following:

- NSC 211, 212, 213, 215, 216, 310, 312, 313, 315, 316, 317, 318, 320, 410, 412, 413, 415, 416, 417, or 418,