

Emphasis - Intelligent Security Studies

- B.S. in Engineering
- Emphasis Intelligent Security Studies

Degree Requirements B.S. in Engineeri

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

- Writ 101 and 102
- 3 hours of fine arts
- 3 hours of humanities
- 3 hours of fine arts, languages (modern, Greek, or Latin), or humanities
- 3 hours of social science
- 3 additional hours of humanities, languages (modern, Greek, or Latin), social science, or a general education course as defined by the School of Engineering
- Econ 310
- Math 261, 262, 263, 264, and 353
- Chem 105, 106, 115, 116
- Phys 211, 212, 221, 222

Course Requirements

- Engr 100 or Engr 102,
- Csci 251
- Engr 309, 310, 312, 313, 314, 321, 323, 330, 360, 361, 400, and Engr 450
- Manf 460
- 12 hours of approved engineering electives
- $_{\odot}$ 3 hours of which must be above the 200 level and
 - $_{\circ}\,$ 9 hours of which must be above the 300 level
- The pre-approved engineering electives are Engr 340, BME 200, BME 222, BME 301, 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 - Intelligent Security Studies

The Intelligence and Security Studies (ISS) emphasis is designed to prepare outstanding students at the University of Mississippi for entry-level positions in the U.S. Intelligence Community. Admission to the ISS emphasis is available to U.S. citizens after a rigorous selection process after completion of ISS 125. Additionally, the completion of an internship is required. Staff in the Center for Intelligence and Security Studies will work with the intelligence community to

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place students in internships that complement their academic experience. Internships may be in intelligence community agencies, other governmental organizations, and the private sector. Students must complete each course in the emphasis with a grade of "B" or better and must maintain an overall GPA of 3.0.

Course Requirements Emphasis Courses (18 hours)

- ISS 125 Introduction to Intelligence Studies (3 hr)
- ISS 125 Introduction to Intelligence Studies
 ISS 351 Advanced Analytics I (3 hr)
- ISS 351 Advanced Analytics I (3 III)
 ISS 352 Advanced Analytics II (3 III)
- ISS 352 Advanced Analytics
 ISS 490 Internship (3 hr)
- ISS 490 Internship (3 hr)
 ISS 499 Capstone (3 hr)
- One elective chosen from:
 - ISS 301 Survey of U.S. National Security Policy (3 hr)
 - ISS 360 Overview of Cybersecurity and Policy (3 hr)
 - ISS 420 Special Topics (3 hr)
 - ISS 480 National Security Issues for the 21st Century (3 hr)

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.S. in Engineering General Education

REQUIREMENT	HOURS	DESCRIPTION	
First Year Writing I	3	Sucessfully complete Hon 101, Writ 100, or Writ 101.	
First Year Writing II	3	Successfully complete one of the following courses: Liba 1 Writ 102 or Hon 102.	
3 hrs humanities	3	Successfully complete 3 hrs of humanities with a passing grade chosen from the following: African American studies (<u>Aas 20</u> 202), classics (Clc), environmental studies (<u>Envs 101</u>), gender studies (<u>G St 201, 202</u>), history (Hst), liberal arts (<u>Liba 202, 30</u> 312), literature (<u>Eng 103, 220-226</u>), philosophy (Phil), religion (Rel), Southern studies 100-level, and either <u>Hon 101</u> or <u>102</u> (i not being used to fulfill composition requirements).	
3 hrs fine arts	3	Complete 3 hrs of fine arts with a passing grade chosen from art history, music, dance, and theatre arts. Studio and workshop courses cannot be used to satisfy this requirement. Courses that satisfy this requirement are any Art History (AH); Liba 130, 204, 314; Mus 101, 102, 103, 104, 105; Danc 200; Thea 201, 202.	
3 hrs FA/Lang/Hum	3	Successfully complete 3 hrs of Fine Arts, Humanities, or Modern language with a passing grade. Modern Language inclu courses in courses in Ancient Greek (Gr), Arabic (Arab) nd Swahili (Swa). (Japn), Korean (Kor), Latin (Lat), Portuguese Russian (Russ), Spanish	
Econ 310	3	Successfully complete Econ 310.	

General Education II

REQUIREMENT	HOURS	DESCRIPTION
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.
Math 353	3	Complete Math 353 with a passing grade.
<u>Chem 105</u>	3	Complete <u>Chem 105</u> with a passing grade.
<u>Chem 115</u>	1	Complete <u>Chem 115</u> with a passing grade.
<u>Chem 106</u>	3	Complete <u>Chem 106</u> with a passing grade.
<u>Chem 116</u>	1	Complete <u>Chem 116</u> with a passing grade.
Phys 211	3	Complete Phys 211 with a passing grade.
Phys 221	1	Complete Phys 221 with a passing grade.
Phys 212	3	Complete Phys 212 with a passing grade.
Phys 222	1	Complete Phys 222 with a passing grade.



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Major Requirements

REQUIREMENT	HOUR	S DI	ESCRIPTION		
Engr 100 or Engr 102	3	C	omplete Engr 100 or Engr 102 with a passing grade.		
<u>CSci 251</u>	3	Co	omplete <u>CSci 251</u> with a passing grade.		
Engr 201	3	Co	omplete Engr 201 with a passing grade.		
Engr 309	3	Co	omplete Engr 309 with a passing grade.		
Engr 310	3	Co	omplete Engr <u>310</u> with a passing grade.		
Engr 312	3	Co	omplete Engr 312 with a passing grade.		
Engr 313	3	Co	omplete Engr 313 with a passing grade.		
Engr 314	1	Co	omplete Engr 314 with a passing grade.		
Engr 321	3	Co	omplete Engr 321 with a passing grade.		
Engr 323	3	Co	omplete Engr 323 with a passing grade.		
<u>Engr 360</u>	3	Co	omplete Engr <u>360</u> with a passing grade.		
<u>Engr 361</u>	1	Co	omplete Engr <u>361</u> with a passing grade.		
<u>Engr 400</u>	1	Co	omplete Engr 400 with a passing grade.		
<u>Engr 431</u>	3	Co	omplete Engr 431 with a passing grade.		
<u>Engr 451</u>	2	Co	omplete Engr 451 with a passing grade.		
<u>Engr 452</u>	1	Co	omplete Engr 452 with a passing grade.		
Manf 460	3	Co	omplete <u>Manf 460</u> with a passing grade.		
2 hrs approved engr electives 12		BI CI E	Complete 12 hours of approved engineering electives with 9 hrs at the 300+ level chosen from: <u>Engr 340, BME 200,</u> <u>BME 222, BME 301, BME 311, BME 313, BME 314, BME 333, BME 350, BME 370, BME 510, BME 523, BME 524,</u> <u>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</u> <u>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</u> <u>E 401, M E 406, and M E 421</u>		
<u> Emphasis - Intellige</u>	nt See	curit	v Studies		
REQUIREMENT	н	OURS	DESCRIPTION		
ISS 125 B min (BS ENGR (iss))	3		Complete ISS 125 with a grade of B or better.		

ISS 125 B min (BS ENGR (iss))	3	Complete ISS 125 with a grade of B or better.
ISS 351 B min (BS ENGR (iss))	3	Complete ISS 351 with a grade of B or better.
ISS 352 B min (BS ENGR (iss))	3	Complete ISS 352 with a grade of B or better.
ISS 490 B min (BS ENGR (iss))	3	Complete ISS 490 with a grade of B or better.
ISS 499 B min (BS ENGR (iss))	3	Complete ISS 499 with a grade of B or better.
3 hrs elect - B min (BS ENGR (iss))	3	Complete 3 hrs of electives with a grade of B or better chosen from: ISS 301, 360, 420, & ISS 480.
3 hrs social sciences	3	Successfully complete 3 hrs of social science with a passing grade chosen from anthropology (Anth), economics (Econ), political science (Pol), psychology (Psy), sociology (Soc), <u>Liba 203</u> , <u>313</u> , or <u>Hon 101</u> , <u>102</u>
3 hrs gen ed, lang, or SS/H/FA	3	Complete 3 additional hours with a passing grade of humanities, languages (modern, Greek, or Latin), social science, or a general education course as defined by the School of Engineering

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