

Curriculum Map

Bachelor of Science

Systems Integration Engineering

You may be required to complete college readiness courses (ENG 100E, MATH 152E, FYS 101E). This is an unofficial document; the student's program evaluation is the official document for viewing the requirements needed to complete the chosen bachelor's degree. Please consult with your advisor before registering for classes. This curriculum map assumes that you have not transferred in any previously completed college level courses.

All students must have 36 hours of general education courses. The approved course list is located in the MSU Catalog, <http://www.moreheadstate.edu/catalog>.

If an "f" or "s" is listed beside the course, this indicates the class is normally offered only in the fall semester (f) or spring semester (s).

FIRST YEAR COURSE SCHEDULE

✓	Course	Fall Semester	Credits		✓	Course	Spring Semester	Credits
	FYS 101	First Year Seminar	3			ENG 200	Writing II	3
	MATH 175	Calculus I	4			General Education	HUM II	3
	ENG 100	Writing I	3			MATH 275	Calculus II	4
	General Education	HUM I	3			SE 170	Introduction to Systems Eng.	3
	COMS 108	Fund. Of Speech Comm.	3			EEC 141	Fund. of Electric Circuits	3
Total Credit Hours			16		Total Credit Hours			16

SECOND YEAR COURSE SCHEDULE

✓	Course	Fall Semester	Credits		✓	Course	Spring Semester	Credits
	General Education	NSC I	3			EMM 103	Engineering Drawing	3
	General Education	NSC II	3			EMM 186	Manufacturing Processes I	3
	PHYS 231/231L (f)	Engineering Physics I/Lab	5			PHYS 232/232L (s)	Engineering Physics II/Lab	5
	EEC 241	Circuit Analysis	3			MATH 276	Calculus III	4
	General Education	SBS I	3			EEC 245 (s)	Digital Electronics	3
Total Credit Hours			17		Total Credit Hours			18

THIRD YEAR COURSE SCHEDULE

✓	Course	Fall Semester	Credits		✓	Course	Spring Semester	Credits
	EMM 270 (f)	Robotics Systems Applications	3			MATH 363	Differential Equations	3
	EEC 355	Digital & Microprocessor Systems	3			EMM 203 (s)	Computer Aided Design I	3
	EEC 345 (f)	Microprocessor Electronics	3			EMM 286 (s)	Manufacturing Processes II	3
	SBS II: ETM 300	Technology & Society	3			MATH 353	Statistics	3
	CHEM 111/111L	Principles of Chemistry I	4			EEC 445 (s)	Computer Electronics	3
Total Credit Hours			16		Total Credit Hours			15

FOURTH YEAR COURSE SCHEDULE

✓	Course	Fall Semester	Credits		✓	Course	Spring Semester	Credits
	SE 443	Sensors & Actuators	3			ETM 499C	Senior Capstone Design Thesis	3
	EEC 346	Programmable Logic Controllers	3			EMM 370 (s)	Robotics Interfacing Eng.	3
	SE 330	Engineering Systems Design	3			SE 488	Automation Systems	3
	SE 415	Control Systems Engineering	3			EMM 415	Computer Aided Engineering	3
Total Credit Hours			12		Total Credit Hours			12

I have reviewed the curriculum and course sequence for this Bachelor's degree and understand I have to follow this map with my advisor's guidance. I understand that I need an advisor to approve my schedule prior to registration each semester.

Student's Signature _____

Date _____

May 2020



Morehead State University™

Department of Engineering and Technology Management

Degree/Program

BS in Systems Integrated Engineering

Degree Options

Systems Integrated Engineering
(BSSIE)

Program Description

The BSSIE is designed to meet the needs of a wide range of industries. The first of its kind in Kentucky, the program prepares students to apply mathematical and scientific principles to the design, development and operational evaluation of total systems solutions to a wide variety of engineering problems, including the integration of human, physical, energy, communications, management, and information requirements as needed, and the application of requisite analytical methods to specific situations.

The BSSIE program integrates an appropriate blend of science, physics, and mathematics with hands-on mechanical and electrical engineering content to prepare graduates who are capable of applying engineering and mathematical concepts to solve complex technological problems.

The graduates of BSSIE program will be eligible for the Professional Engineering (PE) certification in System Engineering.

Career Opportunities

Systems Engineers
Mechatronics Engineers
Industrial Engineers
Manufacturing Engineers

Points of Pride:

Acquire specialized engineering knowledge
Engage in applied technical research.
Apply scientific and technological concepts to problem solving.
Learn to perform as a technical professional in the workplace.

Contact

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Web Site

www.moreheadstate.edu/etm/

Admission Requirements*

(In years as established by the college)

The first step is admission to Morehead State University, see MSU admission requirements.

For course lists and specific program requirements, please refer to the undergraduate catalog.

** For institutional admissions requirements visit
www.moreheadstate.edu.*

Program Requirements

Complete a minimum of 122 semester hours of prescribed and elective college credit, 36 semester hours of which will be general education courses and 42 semester hours of which must be courses numbered 300 or above. See the "Curriculum Map" for a specific program for prescribed program requirements of the Engineering and Technology Management (ETM) Programs

