

ENGINEERING

BACHELOR OF SCIENCE (B.S.)

NSU Florida

At a Glance

- Earn a degree in 123 credit hours.

Program Format

- Program is offered at the Fort Lauderdale/Davie Campus.

Program Highlights

- Gain top-tier engineering education, knowledge, leadership, and skills to analyze technical and societal problems and develop creative and responsible solutions.
- Obtain the highest professional standards of ethics and social responsibility to serve as an engineering ambassador and a leader in today's workforce.

Future Opportunities

Explore careers, such as

- biomaterial engineer
- biomechanical engineer
- biomedical engineer
- industrial engineer
- logistics engineer
- operations engineer
- process control analyst
- sales engineer
- system analyst

Learn More
computing.nova.edu

Advance Your Ability to Innovate

Secure the technological knowledge to analyze and understand how a single component impacts the operational life cycle of a system with NSU's B.S. in Engineering. Become proficient in areas including operations, performance testing, manufacturing, cost scheduling, benefit-cost analysis, training and support, and sustainability. Establish a commitment to the professional and ethical standards of engineering, and recognize the importance of community and professional service.

Develop key skills for a career in engineering, health care, banking and finance, manufacturing, process engineering, plant management, or transportation systems.

Get the NSU edge.

What You'll Study

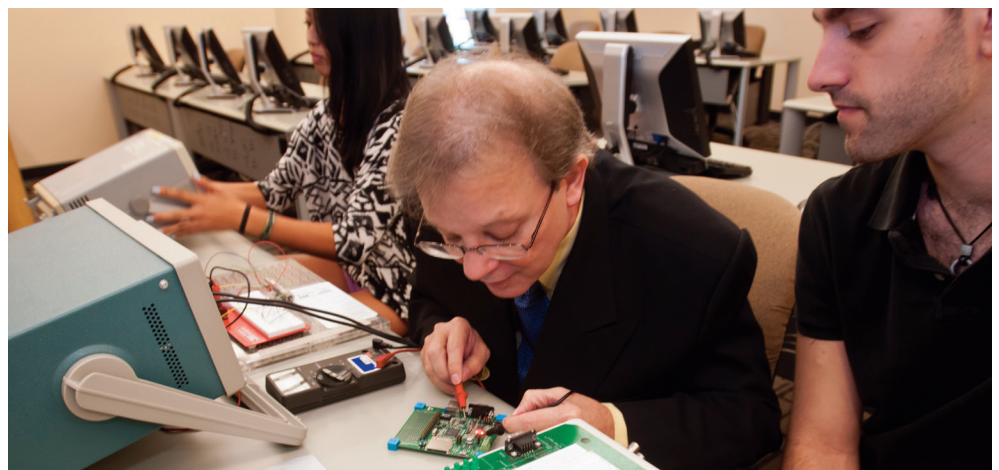
Explore the techniques, skills, and modern tools for engineering practice. Design a system, component, or process. Conduct experiments. Analyze and interpret data. Identify, formulate, and solve engineering problems. Analyze technical, environmental, and societal issues related to engineering designs and technology systems.

How You'll Gain More

Beginning in the first year of the program, participate in hands-on project applications of engineering and work on multidisciplinary teams.

Unique Opportunities

- Present your research or analytical work at the Undergraduate Student Symposium; awards presented.
- Attend and/or present your work based on your interests at local and national conferences.
- Practice assessments in various specializations using top lab facilities and equipment.
- Join national honor societies based on your academic achievements.



ENGINEERING

BACHELOR OF SCIENCE (B.S.)

2022–2023 Curriculum | Total Credits: 123

Students are required to complete 30 credits hours as part of the General Education Program. Freshmen starting in fall 2016 or later are required to successfully complete the First-Year Seminar (UNIV 1000) in their first semester at NSU.

MAJOR REQUIREMENTS

Mathematics (21 credits)

			Credits
MATH	2100	Calculus I	4
	OR		
MATH	2100H	Calculus I Honors	4
MATH	3300	Introductory Linear Algebra	3
MATH	3400	Ordinary Differential Equations	3
MATH	2200	Calculus II	4
	OR		
MATH	2200H	Calculus II Honor	4
MATH	3200	Calculus III	4
MATH	4500	Probability and Statistics	3

Sciences (16 credits)

BIOL	1500	Biology I / Lab	4
CHEM	1300	General Chemistry I / Lab	4
PHYS	2400	Physics I / Lab	4
PHYS	2500	Physics II / Lab	4

Note: 6 credits of MATH and 6 credits of BIOL/CHEM/PHYS may fulfill the General Education requirements.

Core Courses (50 credits)

CENG	4910	Engineering Ethics Seminar	1
EENG	2710	Electrical Circuits / Lab	4
GENG	1000	Introduction to Engineering	1
GENG	1012	Engineering Graphics	3
GENG	1016	Introduction to Engineering Design	3
GENG	2000	Engineering Design and Project Management I	2
GENG	2022	Statics	3
GENG	2050	Computer Applications in Engineering	3
GENG	2070	Materials and Processes	3

GENG	2450	Dynamics	3
GENG	2710	Electrical Circuits / Lab	4
GENG	3000	Engineering Design and Project Management II	3
GENG	3012	Thermal and Fluid Systems	3
GENG	3024	Mechanics of Materials	3
GENG	3050	Sensors, Measurements, and Controls	3
GENG	3420	Engineering Economics	3
GENG	3800	Quality Control for Engineers	3
GENG	4010	Senior Capstone Design Project I	3
GENG	4020	Senior Capstone Design Project II	3

CONCENTRATIONS

Students must select one of the following concentrations:

Biomedical Engineering (15 credits)

BENG	2080	Foundations of Biomedical Engineering	3
BENG	4030	Biomechanics and Materials	3
BENG	4040	Physiological Systems and Modeling for Engineering I	3
BENG	4050	Physiological Systems and Modeling for Engineering II	3
BENG	4200	Biomedical Instrumentation	3

Industrial and Systems Engineering (15 credits)

IENG	3010	Principles and Methods of Industrial and Systems Engineering	3
IENG	3060	Systems Optimization	3
IENG	4010	Work Measurement and Human Factors	3
IENG	4020	Analysis of Production Systems and Facility Design	3
IENG	4065	Discrete System Modeling	3

This publication should not be viewed as a substitution for official program requirements and outcomes. A student is responsible for meeting the curriculum and program requirements in the student catalog that are in effect when the student enters the program.

Nova Southeastern University admits students of any race, color, sexual orientation, gender, gender identity, military service, veteran status, and national or ethnic origin. ■ Nova Southeastern University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate's, baccalaureate, master's, educational specialist, doctorate, and professional degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Nova Southeastern University. 0383-2022-CCE-MCP

Admissions

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College of Computing
and Engineering
NOVA SOUTHEASTERN UNIVERSITY

NSU
Florida