



STEM DIVISION ENGINEERING SCIENCE

— FOUR-YEAR PLAN —

ABOUT

Engineering Science is a multidisciplinary degree that combines engineering, mathematical, and scientific principles and practices to develop new technologies and solve complex problems. The undergraduate degree program prepares graduates to design and develop innovative solutions to real-world problems in various industries such as transportation, energy, healthcare, and manufacturing. The degree program covers various subjects such as mechanics, electronics, materials science, computer science, chemistry, and physics. Students learn to apply concepts from these disciplines to design and analyze systems, structures, and processes that are efficient, safe, and sustainable. Graduates of engineering science programs are equipped with the skills and knowledge to work as engineers, researchers, consultants, and managers in various industries. They can also pursue advanced degrees in engineering or related fields to further enhance their knowledge and expertise. SNU students will take approximately 30 courses (98 credit hours) at SNU and 22 credit hours of ABET-accredited engineering courses at Oklahoma Christian University (OC) to earn the Bachelor of Science in Engineering Science degree. Students wishing to also earn a Bachelor of Mechanical Engineering degree may take an additional 23 credit hours at OC and graduate with a second bachelor's degree in mechanical engineering (BME Mechanical Engineering) atop the Engineering Science degree.



DEGREE PLAN

***The courses listed are for this specific program and are in addition to the general education courses required for all students. See the reverse side or go to snu.edu/gen-ed for more information on those courses.*

YEAR 1

Intro to Computer Science
General Chemistry I
Calculus I
Calculus II

YEAR 2

Calculus III	Introduction to Solid Modeling
Differential Equations	Strength of Materials
General Physics for Scientists and Engineers I & II	Mechanical Engineering Experience I & II

YEAR 3

Probability and Statistics I	Manufacturing Lab
Mechanical Engineering Circuits	Fluid Mechanics
Engineering Materials	Mechanical Engineering Experience III & IV

YEAR 4

Quantum Physics	Machine Design
Classical Mechanics I	System Design I
Classical Mechanics II	Mechanical Engineering Experience V & VI
Statistical Mechanics	

YEAR 5

Finite Element Analysis	Mechanical Engineering Experience VII & VIII
Heat Transfer	Mechanical Engineering Electives (9 credits)
System Design II	
System Design III	



GENERAL EDUCATION

General Education forms the foundation of every student's academic journey at SNU. As a Christian liberal arts university, we are committed to equipping students with the knowledge, values, and skills essential for their development as both thoughtful Christians and engaged community leaders. Our General Education curriculum is intentionally designed to be both comprehensive and flexible—allowing students to pursue their individual interests while ensuring they graduate prepared for lifelong learning, service, and growth.

The General Education program consists of approximately 51 credit hours that introduce and develop important skills such as the:

- Importance of thinking critically and solving problems
- Ability to communicate effectively
- Appreciation of human creativity
- Importance of science and technology in the 21st century
- Power of social responsibility in our community
- Awareness of global diversity
- Role of our Christian faith in daily life

Students take at least one foundational course and one upper-level windows course in each of these areas.

Central to SNU's mission is the engagement of students in transformational learning experiences designed to explore what it means to seek truth together with a Christ-centered community of scholars.

YEAR 1

- Composition I & Composition II
- Introduction to Speech
- A foundation course in Social Responsibility
- A foundation course in Science & Technology
- Christian Faith & Life

YEAR 2

- Modern World
- Aesthetics
- A foundation course in Critical Thinking & Problem Solving
- Old Testament or New Testament Literature & Life

YEAR 3

- A windows course in Social Responsibility
- A windows course in Effective Communication
- A windows course in Science & Technology
- A windows course in Critical Thinking & Problem Solving

YEAR 4

- A windows course in Global Perspectives
- A windows course in Artistic Expression
- Foundations of Christian Belief