





## **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 General Education brochure or go to snu.edu/gen-ed for more information on those courses.

(Year 5 is For those continuing with the BME in Mechanical Engineering)

01

Intro to Computer Science General Chemistry I Calculus I Calculus II

02

Calculus III
Differential Equations
General Physics for Scientists and Engineers 1 & 2
Introduction to Solid Modeling
Strength of Materials

Mechanical Engineering Experience I & II

03

Probability and Statistics I
Mechanical Engineering Circuits
Engineering Materials
Manufacturing Lab
Fluid Mechanics
Mechanical Engineering 3 & 4

04

Quantum Physics
Classical Mechanics I
Classical Mechanics II
Statistical Mechanics
Machine Design
System Design I
Mechanical Engineering Experience 5 & 6

05

Finite Element Analysis
Heat Transfer
System Design 2
System Design 3
Mechanical Engineering Experience 7 & 8

Mechanical Engineering Electives (9 credits)



"Your Engineering Science degree equips you with critical thinking and problem-solving skills that all engineers use in their daily work."

-Dr. Nick Zoller Professor of Mathematics



DEPARTMENT OF SCIENCE AND MATH SOUTHERN NAZARENE UNIVERSITY

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