

School of Electrical and Computer Engineering

Available Degree Programs

Welcome to the profession of Electrical Engineering and Computer Engineering. The School of Electrical and Computer Engineering (ECE) believes that our profession is one of the most fulfilling and rewarding professions for those who are interested in science, technology, engineering and mathematics (STEM), and who wish to use STEM knowledge to make the world a better place. Electrical and computer engineering is a game-changing profession that positively impacts all people in all parts of the world. Our technologies have driven the economic expansion of the world for the past 100 years and will continue to do so for many years to come.

The School offers numerous degree programs—two of which are available online—for almost any one at any stage of their professional development and career. Here is a brief summary of what we offer.

- **Bachelor of Science in Electrical Engineering (BSEE):** An accredited four year, 123 credit-hour undergraduate degree program that prepares students for an entry-level position in electrical engineering or for post-baccalaureate studies.
- **Bachelor of Science in Computer Engineering (BSCpE):** An accredited four year, 124 credit-hour undergraduate degree program that prepares students for an entry-level position in computer engineering or for post-baccalaureate studies.
- **Dual Degrees in Electrical Engineering and Computer Engineering (BSEE/BSCpE):** An ideal program for those who seek broad knowledge of electrical engineering and in-depth knowledge of computer engineering. It requires 12 additional credit-hours beyond the BSCpE degree and prepares students for an advanced entry-level position in electrical engineering, computer engineering, or for post-baccalaureate studies.
- **Master of Engineering in Electrical Engineering (MEngEE, non-thesis, online option):** A 33 credit-hour graduate program tailored to students who wish to gain advanced knowledge in subject areas associated with their professional pursuits. This non-research, instructional program is ideal for distance education students or for students interested in advanced professional development.
- **Accelerated “4+1” Master of Engineering in Electrical Engineering:** A value-added program for undergraduate students who want advanced training and education for highly specialized entry-level positions. It is designed to be completed in five years by conjoining the four year BSEE/BSCpE programs with the MEngEE program. The program allows 9 credit-hours of the BSEE/BSCpE programs to be applied to the MEngEE program, thus requiring only 24 additional credit-hours for the MEngEE program, which can then be completed in one year.
- **Master of Science in Electrical Engineering (MSEE, thesis, online option):** A 30 credit-hour graduate program tailored to students who wish to gain advanced knowledge in subject areas associated with their professional pursuits. The program emphasizes research

as part of the learning experience and culminates with the publication of a thesis. This program is an ideal preparatory experience for students who wish to pursue a PhD.

- **Doctor of Philosophy, Electrical Engineering (PhDEE):** The most advanced graduate degree program designed for students who wish to pursue research as an occupation in industrial or governmental laboratories, or for those who wish to have an academic career that emphasizes teaching and/or research. The focus of the program is on original and novel research that culminates in the publication of a dissertation.
- **Online:** The MEngEE and MSEE programs are offered both on the Stillwater campus and online, the latter option being ideal for those who seek a professional degree that is convenient to their location, schedule, and learning pace. The MEngEE and MSEE programs are offered through the CEAT Online Learning Office (<https://ceatonline.okstate.edu/>.)

The School offers a full cadre of courses to support all of its degree programs. Required courses in the undergraduate curriculum are offered each semester; most technical electives and graduate courses are offered once a year; some PhD-level courses are offered once every other academic year. Courses focus on the broad areas of power and energy, computers and digital electronics, analog electronics, control systems, communication systems, microwave and photonics, and digital signal processing. Lecture courses, particularly at the undergraduate level, are augmented by hands-on laboratory experiences to assure a well-rounded, applied, theory-based education. Subject matter experts with PhD's, many of whom have industrial experience, predominantly teach ECE courses.

For more info, visit our web pages at <https://ece.okstate.edu/>. For assistance and contact information, visit <https://ece.okstate.edu/content/contact>.