The Ph.D. in engineering science is offered in a number of emphasis areas: aeroacoustics, chemical engineering, civil engineering, computational hydroscience, computer science, electrical engineering, electromagnetics, environmental engineering, geology, geological engineering, hydrology, mechanical engineering, and material science and engineering.

**Minimum Total Credit Hours: 66**

**Course Requirements**
A student must complete the requirements for one of the emphasis areas. All doctoral programs require completion of a comprehensive examination, dissertation prospectus, and a dissertation. See the department chair or adviser for specific requirements for an emphasis area.

**Emphasis - Electrical Engineering**

**Description**
A Ph.D. in engineering science with emphasis in electrical engineering prepares a student with advanced technical knowledge and communication skills for pursuing a career in industry, engineering research and development, or public/government service. Students entering the program come from a variety of engineering and nonengineering disciplines such as physics and computer science.

**Course Requirements**
The Ph.D. with an emphasis in electrical engineering requires at least 48 hours of course work and at least 18 hours of dissertation credit. Of the 48 hours of course work, 12 hours must be in an approved minor area, at least 2 hours must be in seminar, and no more than 6 hours can come from research credit outside the dissertation. Course work must be approved by the student’s advisory committee.

**Other Academic Requirements**
A written comprehensive exam is taken during the first year of residency.