The heart of Computational Science and Engineering (CSE) is to develop innovative ways of solving engineering and scientific problems using computation as a tool. This new form of science compresses the development process in engineering and engenders knowledge discovery with a new paradigm in many areas because it enables “virtual experiments” and helps focus physical experiments to reduce or eliminate trial-end-error laboratory-based approaches. Further, it teaches students to solve complex problems with prevailing computer technology.

The CSE graduate concentration is designed to provide graduate students with a solid base in problem-solving using computation as a major tool for modeling complicated problems in science and engineering. This concentration requires students to complete 16 graduate credit hours, which are outlined below. Courses taken toward this concentration will count towards the student’s graduate degree.

For more information regarding the CSE Graduate Concentration, visit the Computational Science and Engineering website (http://cse.illinois.edu), or contact the CSE Office at 217-333-3247 or cse@cse.illinois.edu.

### Information listed in this catalog is current as of 05/2019