DOCTOR OF PHILOSOPHY (PHD) DEGREE IN THE FIELD OF COMPUTATIONAL SCIENCE AND ENGINEERING

Program Learning Outcomes for the PhD Degree in the field of Computational Science and Engineering

Upon completing the PhD degree program in the field of Computational Science and Engineering, students will be able to:

1. Acquire broad, advanced knowledge in Computational and Applied Mathematics, Computer Science, or Statistics that is also deep in one major area within one of the three disciplines.
2. Conduct independent research that demonstrates advanced mastery of a sub-discipline within one of the three disciplines.
3. Communicate advanced technical ideas effectively.

Requirements for the PhD Degree in the field of Computational Science and Engineering

For general university requirements, please see Doctoral Degrees (ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-doctoral-degrees). Students pursuing the PhD in the field of computational science and engineering, students must:

- Complete a course of study approved by the Computational Science Committee, including at least 2 courses outside the major area.
- Perform satisfactorily on preliminary and qualifying examinations and reviews.
- Produce an original thesis acceptable to the Computational Science Committee.
- Perform satisfactorily on a final public oral examination on the thesis.

Summary

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<th>Credit Hours</th>
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<td>Total Credit Hours Required for the PhD Degree in the field of Computational Science and Engineering</td>
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Recognizing the increasing reliance of modern science and engineering on computation as an aid to research, development, and design, the Department of Computational and Applied Mathematics, in conjunction with the Departments of Biochemistry and Cell Biology, Earth Science, Computer Science, Chemical and Biomolecular Engineering, Electrical and Computer Engineering, Civil and Environmental Engineering, and Statistics, has established an advanced degree program in computational science and engineering (CSE). The program focuses on modern computational techniques and provides a resource for training and expertise in this area.

The program is administered by a faculty committee chosen by the deans of engineering and natural sciences. The Computational Science Committee (CSC) helps students design an appropriate course of study and sets the examination requirements.

Students may enter the Computational Science and Engineering program either directly or indirectly through one of the participating departments (see list above). In all cases, however, students must fulfill the admissions requirements of their associated department. Students then meet the normal requirements for graduate study within that department in every way (including teaching and other duties), except that the curriculum and examination requirements are set by the Computational Science Committee.

Policies for the PhD Degree in the field of Computational Science and Engineering

Opportunities for the PhD Degree in the field of Computational Science and Engineering