

# COMPUTATIONAL SCIENCE AND ENGINEERING

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## Contact Information

Computational Science and Engineering  
<https://engrprofmasters.rice.edu/>

**Jan Odegard**  
 Program Director  
 odegard@rice.edu

The advanced degree program in Computational Science and Engineering addresses the current need for sophisticated computation in both engineering and the sciences. Such computation requires an understanding of parallel and vector capabilities and a range of subjects including visualization, networking, and programming environments. An awareness of a variety of new algorithms and analytic techniques also is essential to maximizing the power of the new computational tools.

The Master of Computational Science and Engineering (MCSE) professional master's degree is for persons interested in practicing within this field, while the PhD program concentrates more specifically on research.

Computational Science and Engineering does not currently offer an academic program at the undergraduate level.

## Master's Programs

- Master of Computational Science and Engineering (MCSE) Degree ([ga.rice.edu/programs-study/departments-programs/engineering/computational-science-engineering/computational-science-engineering-mcse](http://ga.rice.edu/programs-study/departments-programs/engineering/computational-science-engineering/computational-science-engineering-mcse))
- Master of Arts (MA) Degree in the field of Computational Science and Engineering\*

## Doctoral Program

- Doctor of Philosophy (PhD) Degree in the field of Computational Science and Engineering ([ga.rice.edu/programs-study/departments-programs/engineering/computational-science-engineering/computational-science-engineering-phd](http://ga.rice.edu/programs-study/departments-programs/engineering/computational-science-engineering/computational-science-engineering-phd))

## Coordinated Program

- Master of Business Administration (MBA) Degree / Master of Computational Science and Engineering (MCSE) Degree ([ga.rice.edu/programs-study/departments-programs/engineering/computational-science-engineering/business-administration-mba-computational-science-engineering-mcse](http://ga.rice.edu/programs-study/departments-programs/engineering/computational-science-engineering/business-administration-mba-computational-science-engineering-mcse))

\* Although students are not normally admitted to a Master of Arts (MA) degree program, graduate students may earn the MA as they work towards the PhD.

## Director

Jan Odegard, Kennedy Institute

## Advisory Committee

John Dobelman, *Statistics*  
 Matthias Heinkenschloss, *Computational and Applied Mathematics*  
 Eugene Ng, *Computer Science*  
 Micheal Orchard, *Electrical and Computer Engineering*

*For Rice University degree-granting programs:*

To view the list of official course offerings, please see Rice's Course Catalog ([https://courses.rice.edu/admweb!/SWKSCAT.cat?p\\_action=cata](https://courses.rice.edu/admweb!/SWKSCAT.cat?p_action=cata))

To view the most recent semester's course schedule, please see Rice's Course Schedule (<https://courses.rice.edu/admweb!/SWKSCAT.cat>)

## Description and Code Legend

**Note:** Internally, the university uses the following descriptions, codes, and abbreviations for this academic program. The following is a quick reference:

### Course Catalog/Schedule

- Course offerings/subject codes: Courses from various subjects can be applied towards this program

### Department (or Program) Description and Code

- Computational Science and Engineering: CSCE

### Graduate Degree Descriptions and Codes

- Master of Computational Science and Engineering degree: MCSE
- Master of Arts degree: MA
- Doctor of Philosophy degree: PhD

### Graduate Degree Program Description and Code

- Degree Program in Computational Science and Engineering: CSCE