

# COMPUTER SCIENCE - PH.D.

College of Arts and Sciences  
Department of Computer Science

[www.kent.edu/cs](http://www.kent.edu/cs)

## About This Program

The Computer Science Ph.D. program blends cutting-edge research with practical experience to prepare you for a successful career in the field. Read more...

## Contact Information

- Program Coordinator: **Hassan Peyravi** | [gradinfo@cs.kent.edu](mailto:gradinfo@cs.kent.edu) | 330-672-9047
- Connect with an Admissions Counselor: U.S. Student | International Student

## Program Delivery

- **Delivery:**
  - In person
- **Location:**
  - Kent Campus

For more information about graduate admissions, visit the graduate admission website. For more information on international admissions, visit the international admission website.

## Admission Requirements

- Bachelor's degree in computer science (or closely related field) from an accredited college or university<sup>1</sup>
- Minimum 3.000 GPA on a 4.000 point scale
- Official transcript(s)
- GRE scores
- Résumé
- Goal statement
- Three letters of recommendation
- English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning one of the following:
  - Minimum 525 TOEFL PBT score (paper-based version)
  - Minimum 71 TOEFL IBT score (Internet-based version)
  - Minimum 74 MELAB score
  - Minimum 6.0 IELTS score
  - Minimum 50 PTE score

<sup>1</sup> Students whose records clearly indicate a potential to do doctoral-level work in computer science may be directly admitted and must fulfill the requirements of both the master's and doctorate degrees.

For more information about graduate admissions, please visit the Graduate Studies admission website. For more information on international admission, visit the Office of Global Education's admission website.

## Application Deadlines

- **Fall Semester**
  - Application deadline: June 15
- **Spring Semester**
  - Application deadline: November 1
- **Summer Term**
  - Application deadline: April 1

*Applications submitted after these deadlines will be considered on a space-available basis.*

## Program Requirements

### Major Requirements

Code	Title	Credit Hours
<b>Major Requirements</b>		
Computer Science Electives (CS 70000 level) <sup>1</sup>		27-57
CS 89191	DOCTORAL SEMINAR <sup>2</sup>	3
CS 89199	DISSERTATION I <sup>3</sup>	30
<b>Minimum Total Credit Hours for Post-Baccalaureate Students</b>		<b>90</b>
<b>Minimum Total Credit Hours for Post-Master's Students</b>		<b>60</b>

<sup>1</sup> Maximum 9 credit hours of CS 89098 or CS 89991 may be applied towards the degree.

<sup>2</sup> Students must make a public presentation of project and/or research work (excluding dissertation defense and candidacy examination) at least two times before graduation. The presentation must take place in the doctoral seminar at least one full term before graduation and not more than two years after entering the program. The doctoral seminar is offered for 1 or 2 credit hours; therefore, the student must enroll in this course at least two times. This course can be taken multiple times but only 3 credit hours count toward the degree.

<sup>3</sup> Each doctoral candidate, upon admission to candidacy, must register for CS 89199 for a total of 30 credit hours. It is expected that a doctoral candidate will continuously register for Dissertation I, and thereafter CS 89299, each semester, until all requirements for the degree have been met. A dissertation describes original research performed by the student. The dissertation topic must be approved by the advisor and graduate coordinator. A dissertation committee, made up of graduate faculty, must be formed to assess the quality and value of the work. A public dissertation defense is made by the student. The final dissertation and defense must be approved by the advisor and dissertation committee.

## Graduation Requirements

### Proficiency Requirements and Candidacy

Students must clear core area proficiency requirements. Students admitted after completing a master's of computer science degree must take the Prelims examination within the first two semesters. Other students, including directly-admitted Ph.D. students, must take the Prelims examination within the first three semesters.

The candidacy examination is a comprehensive examination in the field of the major subject. The format of the candidacy examination will be determined by the student's Candidacy Examination Committee, which is composed of the student's advisor and two other graduate faculty members. The Candidacy Examination Committee must be approved

by the graduate coordinator. The student must complete the candidacy examination at least one year before the dissertation defense.

## Program Learning Outcomes

Graduates of this program will be able to:

1. Have all around breadth-of-knowledge and understanding of essential facts, concepts, principles and theories relating to advanced topics in computer science to be regarded as a scholar of computer science.
2. Demonstrate depth of knowledge at least in one specialized topic.
3. Conduct independent research by advancing the body of knowledge in the area through the doctoral dissertation research.
4. Clearly articulate advanced research problems and their solutions.
5. Present general computer science topics in a learning environment.
6. Develop and write publishable papers that clearly articulate advanced research problems and their solutions.
7. Demonstrate integrative and deep knowledge of essential literature, facts, concepts, principles and theories relating to a chosen area of research.
8. Perform complete and thorough literature searches.
9. Evaluate, comprehensively and critically, the extent to which a particular work relates to and/or contributes to a given field.
10. Publish and participate in a chosen research community.

## Full Description

The Ph.D. degree in Computer Science provides students with an educational and research environment that fosters personal and intellectual growth, flourishes academic goals and develops career paths through necessary training with emerging technologies. The program promotes research, discovery and integration, and is designed for students interested in becoming professional scholars, college and university professors or researchers in private, industrial or government research institutions.