

NC STATE Engineering COMPUTER SCIENCE

Established in 1967, we are located on NC State's award-winning Centennial Campus.

POINTS OF INTEREST

ACADEMICS

Undergraduate degree programs

- Bachelor of Science in Computer Science*
- Game Development Concentration
- Undergraduate Minor, Computer Programming
- Accelerated Bachelor's/Master's (ABM) Degree Program
- Certificate in Computer Programming
- Undergraduate Tracks in Security and Entrepreneurism

Graduate degree programs

- Ph.D.
- Master of Science (Thesis and Non-thesis options)
- Master of Computer Science (Professional degree, non-thesis, with on-campus or Distant Education options)
- Master of Computer Science - Tracks in Data Science, Security, and Software Engineering
- Master of Networking (Thesis and Non-thesis options) with available concentration in Service Sciences,

KEY STATISTICS

- Established in 1967 - one of the first official Computer Science Departments in the U.S.
- Approximately 49 faculty, 9 emeritus faculty, 31 lecturers and adjuncts, and 40 research, IT and administrative staff
- Select Rankings:
 - 5th among Online Master's Degree programs (Best Buy Online Degree) ¹
 - 12th in Computer Science M.S. enrollment ²
 - 9th in Computer Science Ph.D. enrollment ²
 - 24th in Computer Science undergraduate enrollment ²
 - 26th in Computer Science BS degrees awarded ²
 - 16th in Computer Science research expenditures ²
 - 7th in Computer Science MS degrees awarded ²
 - 8th in Computer Science PhD degrees awarded ²
 - 1st in Tenure-track female faculty among all CSC departments in Colleges of Engineering ²
 - 10th in Tenured or Tenure-track faculty among all CSC departments in Colleges of Engineering ²
 - 6th in Best Online Graduate Level Computer Information Technology programs ³

- Engineering Online Ranked Nation's 7th Best Online Graduate Engineering Program for Veterans and Active-duty Military Personnel (2018) ³
- 43rd in Best Graduate Computer Science programs ³
- 4th in Software Engineering Research ⁴
- 7th in High-performance Computing Research ⁴
- 31st in Systems Research ⁴

■ Facilities

- Engineering Building II (EB2), state-of-the-art teaching and research facility, opened in 2006
- Numerous research and teaching centers, institutes, laboratories and groups (e.g., Center for Educational Informatics, Digital Games Research Center, etc.)
- Leading-edge networking and computational infrastructure
- Corporate and Career Services Suite

Enrollment
2019-2020
Academic
Year

1,135

Undergraduate

519

Master's

199

Doctoral

- Awarded a Science of Security Label by the Department of Defense as part of its Science of Security and Privacy (SoS) Initiative
- Designated by NSA and DHS as a National Center of Excellence in Information Assurance Research (CAE-R)
- Academic Alliance Member of National Center for Women and Information Technology
- Recognized as a Laureate in Computerworld Honors Program in 2007 and 2009
- Video Game Design and Development program ranked #23 on the Princeton Review's list of "Top 50 Undergraduate Schools to Study Game Design for 2019" and recognized by Animation Career Review as #31 nationally (top 25%), #13 nationally among public schools and colleges (top 25%), and #6 in the South
- NC State named first North American university with access to IBM Q Hub Quantum Computer

OPPORTUNITIES

- Research with faculty - research centers and groups, undergraduate opportunities, scholars and honors programs
- Applied learning - award-winning capstone Senior Design Center projects
- More than 100 companies actively partner with the department via sponsored programs, research, scholarships, projects and initiatives.
- The department has a variety of student organizations providing leadership skills, service, networking, and informal learning opportunities, including:
 - ACM/AITP
 - Graduate Student Association
 - Honors Program/Honor Societies
 - Linux Users Group
 - STARS Student Leadership Corps
 - Women in Computer Science
- National competitions and recognition: student honors include 1st place in CSIDC World Finals, ACM Grand Award, Google Anita Borg Scholarship, IBM's Extreme Blue Internships, USA Today, Academic All American.

AREAS OF EXPERTISE

- Artificial intelligence
- Bioinformatics and computational sciences
- Computer-based education
- Graphics and visualization
- High-performance & power aware systems
- Networks
- Security
- Software engineering
- Theory and algorithms

The faculty foster strong multidisciplinary and collaborative interaction with other disciplines at NC State (e.g., Bio-informatics, eCommerce, serious games, etc.), other universities, industry, government agencies and laboratories, and other partners in the Research Triangle Park (RTP) and beyond.

CAREERS

- Average starting salaries, May 2019⁵
 - BS CSC - \$76,250
 - MS CSC - \$112,000

NC State is a **Tier 1 research institution**, and with over 30 centers, labs and groups, research is key to our mission. Research productivity stands at more than **\$64M** in active research grants, and annual expenditures are in the **\$10M** range.

- Proximity to world-famous Research Triangle Park (RTP) provides many opportunities for internships and co-ops. Approximately 25% of all NC State Engineering co-ops are from the department of Computer Science.
- NC State is a top supplier of new graduate talent to Cisco, IBM, SAS, NetApp, Fidelity Investments, Amazon, and many others.

SELECT FACULTY HONORS

- 30 National Science Foundation CAREER Award recipients and 1 NSF Young Investigator Award recipient
- National Academy of Engineering member
- Emmy Award recipient, National Academy of Television Arts & Sciences - for plasma screen technology
- Consumer Electronics Hall of Fame Inductee
- National Inventor's Hall of Fame Inductee
- National Academy of Inventors Fellow
- DOE Early Career PI Award recipient
- 2 American Association for Artificial Intelligence Fellows and a Senior Member
- American Mathematical Society Fellow
- 10 Institute of Electrical and Electronics Engineers (IEEE) Fellows
- IEEE Dist. Service Award recipient
- 3 IEEE Golden Core members
- IEEE Computer Society Distinguished Scientist, a Distinguished Visitor, and 2 Distinguished Lecturers
- ACM SIGSOFT Inaugural Influential Educator Award recipient
- ACM Fellow, 3 ACM Distinguished Scientists, a Distinguished Engineer, and a Distinguished Member
- Computing Research Assoc. (CRA) Digital Government Fellow
- NCDS Data Science Faculty Fellow
- 2 Senior Research Ethics Fellows
- Microsoft Research Outstanding Collaborator Award winner
- Center for Democracy & Technology Fellow
- Society for Industrial and Applied Mathematics (SIAM) Fellow

- IBM Smarter Planet Innovation Faculty Award winner
- 3 NC State University Faculty Scholars
- 3 recipients of the NC State Alumni Association Outstanding Research Award
- 12 members in the NC State Academy of Outstanding Teachers
- NC State Academy of Outstanding Faculty Engaged in Extension member
- Gertrude Cox Award for Innovative Excellence in Teaching and Learning with Technology recipient
- 2 members of the NC State Research Leadership Academy

SELECT DISTINGUISHED ALUMNI

- **David Burke** - Director of Cyber Warfare for Naval Aviation
- **Marshall Brain** - Founder of HowStuffWorks.com; NC State Distinguished Engineering Alumnus
- **Keith Collins** - Retired EVP and CIO, SAS Institute; NC State Distinguished Engineering Alumnus
- **Nirmit Desai** - Research Staff, IBM and Creator of Mesh Network Alerts
- **Suzanne Gordon** - Retired CIO, SAS Institute; NC State Distinguished Engineering Alumna
- **Steve Grobman** - Intel Fellow and CTO, McAfee
- **Richard Holcomb** - Serial Entrepreneur
- **Bobby Johnson, Jr.** - Former CEO and Co-founder of Foundry Networks; NC State Distinguished Engineering Alumnus
- **Dr. Elizabeth Mynatt** - Distinguished Professor; Executive Director, Georgia Tech Institute for People and Technology
- **Will Pagán** - Patent Attorney and IBM Master Inventor with Over 130 Patents
- **Rudy Puryear** - Partner and Director, Bain & Company IT practice
- **Erik Troan** - Serial Entrepreneur
- **Donna Troy** - Retired EVP and General Manager, Epicor Software
- **Dr. Nicki Washington** - Accomplished Author and Researcher on STEM Diversity
- **Josh Whiton** - Founder and Former CEO, TransLoc, Inc.

Our 9,600+ alumni are located in all 50 US states and in 24 countries.

*Accredited by CAC/ABET

¹ www.geteducated.com/rankings/best_computer.asp

² ASEE data, 2018

³ U.S. News and World Report, 2019

⁴ CSRankings.org

⁵ NC State University Career Center