The Department of Computer Science (CS) offers M.S. and Ph.D. degrees. Areas of research include analysis of algorithms, artificial intelligence, computer animation, computer games, computer graphics, computational logic, computer security, computer and sensor vision, data science, database systems, data visualization, image processing, image synthesis, machine learning, programming languages and environments, real-time embedded systems, software engineering, parallel and distributed computation, operating systems, storage systems, and visual analytics.

The M.S. degree in Computer Science has two tracks: thesis or project. Both are usually completed in two years, although it is possible to complete the program in one year. The Ph.D degree in Computer Science is usually completed in five years.

What can you expect from the Master’s and PhD programs in the Computer Science Department?

http://cs.soe.ucsc.edu/graduates

What salary (on top of tuition and fees) do first-year Graduate Student Researchers in your program earn?
Our GSRs earn between $5,662 - $6,039 per quarter.

When are graduate applications due for your program?
January 3, 2015

Where can I find detailed information about the admission and application process?
ga.soe.ucsc.edu/admissions

Who can I contact for more information?
Professor Wang-Chiew Tan, Graduate Director
(831) 459-3709, tan@soe.ucsc.edu

Tracie Tucker, Graduate Program Adviser
(831) 459-5737, ttucker@soe.ucsc.edu

http://cs.soe.ucsc.edu/graduates
Computer Science Faculty

Dimitris Achlioptas  Analysis of algorithms, machine learning, random structures
Scott Brandt  Vice Chancellor for Research. Operating systems, storage systems, real-time systems
Seshadhri Comandur  Randomized algorithms, graph/network analysis, algorithms for massive data
James Davis  ICTD, technology for global social issues, human computation, computational photography, computer vision, computer graphics
Luca de Alfaro  Reputation systems, crowdsourcing, game theory, formal methods.
Cormac Flanagan  Programming languages, computer security, web programming, concurrency, verification, type systems, dynamic analysis.
Lise Getoor  Machine learning, reasoning under uncertainty, artificial intelligence and database systems.
David Helmbold  Machine learning, computational learning theory, analysis of algorithms
Phokion G. Kolaitis  Computer Science Department Chair. Principles of database systems, logic in computer science, and computational complexity.
Suresh Lodha  Data curation, analytics, and visualization, computer vision
Darrell Long  Director of the Storage Systems Research Center. Storage systems, distributed computing, operating systems, mobile computing, reliability, computer security, video-on-demand systems
Charlie McDowell  Programming languages, parallel computing, and computer science education
Ethan L. Miller  Archival storage systems, non-hierarchical file systems and metadata management, non-volatile memory and next-generation storage, scalable file systems, reliable and secure storage, distributed systems, information retrieval, computer security
Alex Pang  Uncertainty visualization, tensor visualization, scientific visualization, comparative visualization, collaboration software, virtual reality interfaces
Ira Pohl  Artificial intelligence, programming languages, heuristic methods, educational and social issues, combinatorial algorithms
Neoklis Polyzotis  Online index tuning, P2P database systems, ranked queries, skyline queries
Wang-Chiew Tan  Data integration, data provenance, scientific databases, crowdsourcing.
Allen Van Gelder  Logic programming algorithms, parallel algorithms, complexity, programming languages, automated theorem proving, scientific visualization
S V N Vishwanathan  Machine learning, optimization, structured data, recommendation systems.
Marilyn Walker  Dialogue systems, natural language processing, computer games, human-computer interaction, machine learning, artificial intelligence
Manfred Warmuth  Online learning, machine learning, statistical decision theory, game theory, analysis of algorithms

Computational Media Faculty

Arnav Jhala  Artificial Intelligence: storytelling in games, intelligent machinima generation, smart graphics, and intelligent user interfaces
Michael Mateas  Computational Media Department Chair and Director, Center for Games and Playable Media. Artificial Intelligence (AI) for art and entertainment, game AI, AI and creativity, AI-based interactive storytelling, autonomous characters
Marilyn Walker  Dialogue systems, natural language processing, computer games, human-computer interaction, machine learning, artificial intelligence
Noah Wardrip-Fruin  Digital media, computer games, electronic literature, software studies
Jim Whitehead  Software engineering, software evolution, software bug prediction, level design in computer games, procedural content generation