Computer Science (MS)

Master of Science Degree Requirements

Code	Title	Hours
Core Courses		**6**
	Select a minimum of one course per category under "Core Courses" listed below	
Required Courses		**7**
CSC 600	Computer Science Graduate Orientation	
CSC 695	Master's Thesis Research	
Elective Courses		**9**
	CSC 500 or 700-level courses	
Minor Courses, CSC Graduate Electives or Restricted Electives		**9**
	"Minor Courses, CSC Graduate Electives or Restricted Electives" will be approved in conjunction with the academic committee	
Total Hours		**31**

Core Courses

Code	Title	Hours
Select minimum of two courses, one from each category		**6**
Theory Category		
CSC 503	Computational Applied Logic	3
CSC 505	Design and Analysis Of Algorithms	3
CSC 512	Compiler Construction	3
CSC 514	Foundations of Cryptography	3
CSC 565	Graph Theory	3
CSC 579	Introduction to Computer Performance Modeling	3
CSC 580	Numerical Analysis I	3
Systems Category		
CSC 501	Operating Systems Principles	3
CSC 506	Architecture Of Parallel Computers	3
CSC 510	Software Engineering	3
CSC 520	Artificial Intelligence I	3
or CSC 720	Artificial Intelligence II	
CSC 540	Database Management Concepts and Systems	3
CSC 561	Principles of Computer Graphics	3
CSC 570	Computer Networks	3
or CSC 573	Internet Protocols	
CSC 574	Computer and Network Security	3

Accelerated Bachelor's/Master's Degree Requirements

The Accelerated Bachelors/Master's (ABM) degree program allows exceptional undergraduate students at NC State an opportunity to complete the requirements for both the Bachelor's and Master's degrees at an accelerated pace. These undergraduate students may double count up to 12 credits and obtain a non-thesis Master's degree in the same field within 12 months of completing the Bachelor's degree, or obtain a thesis-based Master's degree in the same field within 18 months of completing the Bachelor's degree.

This degree program also provides an opportunity for the Directors of Graduate Programs (DGPs) at NC State to recruit rising juniors in their major to their graduate programs. However, permission to pursue an ABM degree program does not guarantee admission to the Graduate School. Admission is contingent on meeting eligibility requirements at the time of entering the graduate program.

Faculty

Department Head

Gregory E. Rothermel, *Professor*

Distinguished Professors

Tiffany M. Barnes

Laurie A. Williams, *Co-Director - NCSU Science of Security Lablet*

Distinguished University Professor

James C. Lester II, *Director of the Center for Educational Informatics*

Michael A. Rappa, *Director, Institute for Advanced Analytics*

Alumni Distinguished Graduate Professor

Georgios N. Rouskas, *Director of Graduate Programs*

Munindar P. Singh, *Co- Director - NCSU Science of Security Lablet*

Full Professor

Min Chi

Rada Y. Chirkova

Huaiyu Dai

Rudra Dutta, *Associate Department Head*

William H. Enck, *Director of Wolfpack Security & Privacy Research (WSPR) Laboratory*

Edward F. Gehringer

Xiaohui (Helen) Gu

Christopher G. Healey, *Goodnight Distinguished Professor Analytics, Institute for Advanced Analytics*

Steffen Heber

Timothy J. Menzies

R. Frank Mueller

Xipeng Shen

Matthias F. M. Stallmann

R. Raju Vatsavai

Associate Professors

Wesley K. G. Assunção

Dror Zeev Baron

Marcelo d'Amorim

Zhishan Guo

Khaled Harfoush

Arnav H. Jhala

Alexandros Kapravelos

Sandeep K. Kuttal

Xu Liu

Collin F. Lynch

Noboru Matsuda

Kemafor Anyanwu Ogan

Sharath Kumar Raghvendra

Bradley G. Reaves

David L. Roberts, *Assistant Director of Undergraduate Programs*

Alessandra Scafuro

Muhammad Shahzad

Donald R. Sheehy

Kathryn T. Stolee

Sharma Vallin Thankachan

Benjamin A. Watson

Wujie Wen

Assistant Professors

Samira Mirbagher Ajorpaz

Veronica M. Cateté

Anupam Das

Shiyan Jiang

Jung -Eun Kim

Chin Ho Lee

Jiajia Li

Jianqing Liu

Xiaorui Liu

Yuchen Liu

Yuan Liu

John-Paul Ore

Thomason W. Price

Dongkuan (DK) Xu

Dominik Wermke

Bowen Xu

Chenhan Xu

Man Ki Yoon

Ruozhou Yu

Teaching Professor

Sarah S. Heckman, *Director of Undergraduate Programs*

Teaching Associate Professors

Kimberly J. Titus

Tzvetelina (Lina) Battestilli

Jamie A Jennings

Jason T. King

Chandrika Satyavolu

Jessica Y. Schmidt

David B. Sturgill

Teaching Assistant Professors

Suzanne M. Balik

Abida Haque

Caio Batista de Melo

Alexander Card

Ignacio X. Dominguez

Adam Gaweda

Shuyin Jiao

Sterling M. McLeod

Lecturers

B. Jasmine Adams, *Director of Undergraduate Advising*

Scott Gerard

Margaret Heil, *Director of Senior Design Center*

ToniAnn Marini, *Assistant Director of Undergraduate Advising*

Research Professor

Franc Brglez

Assistant Research Professor

Bita Akram

Director

Leslie Rand-Pickett, *Graduate Career Services*

Emeritus Faculty

Dennis R. Bahler

Wu-show Chou

Jon Doyle

Edward W. Davis, Jr.

Robert J. Fornaro

Thomas L. Honeycutt

David F. McAllister

Harry Perros

Douglas S. Reeves

Woodrow Robbins

Carla D. Savage

William J. Stewart

Alan L. Tharp

David J. Thuente

Adjunct Faculty

Ram Chillarege

Aldo Dagnino

Steven Hunter

Chris Martens

Wookhee Min

Peng Ning

Christopher Parnin

Injong Rhee

Robert St. Amant

Xiaogang (Cliff) Wang

Tao Xie