

Computer Science (PhD)

Doctor of Philosophy in Computer Science (PhD)

Code	Title	Hours	Counts towards
Core Courses		12	
Select four courses - two from each category - within "Core Courses" listed below			
Required Courses		13	
CSC 600	Computer Science Graduate Orientation		
CSC 890	Doctoral Preliminary Exam		
CSC 700-level Courses (two or more)			
Elective / Research Courses		47	
"Elective / Research Courses" are approved in conjunction with the academic committee			
Total Hours		72	

Core Courses

Code	Title	Hours	Counts towards
Select four courses with two from each category		12	
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	
CSC 707	Automata, Languages and Computability Theory	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

Faculty

Department Head

Gregory E. Rothermel, *Professor*

Distinguished University Research Professor

Donald L. Bitzer

Distinguished Professors

Tiffany M. Barnes

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Distinguished University Professor

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

Alumni Distinguished Graduate Professor

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

Full Professor

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Min Chi

Rada Y. Chirkova

Huaiyu Dai

Rudra Dutta, *Associate Department Head*

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Xipeng Shen

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Chin Ho Lee

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Huining Li

Jianqing Liu

Xiaorui Liu

Yuchen Liu

Yuan Liu

Aditi Mallavarapu

John-Paul Ore

Thomason W. Price

Dongkuan (DK) Xu

Vijay Shah

Dominik Wermke

Bowen Xu

Chenhan Xu

Man Ki Yoon

Ruozhou Yu

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Lecturers

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Scott Gerard

Margaret Heil, *Director of Senior Design Center*

ToniAnn Marini, *Assistant Director of Undergraduate Advising*

Research Professor

Franc Brglez

Assistant Research Professor

Bitu Akram

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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

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Steven Hunter

Chris Martens

Wookhee Min

Peng Ning

Christopher Parnin

Injong Rhee

Robert St. Amant

Xiaogang (Cliff) Wang

Tao Xie