

Computer Networking (MS): Internship Concentration

Degree Requirements

This concentration will require an Internship of at least four months duration (maximum of seven months) and the student to take 3 credit hours of ECE 650 and obtain a Satisfactory grade. An internship of at least four calendar months duration would require that it span at least one semester and possibly part of summer. The credits for ECE 650 would be taken during the semester that includes the internship. The student would be considered as being enrolled full time during that semester.

A student would not enroll in this concentration in their first semester. They would switch to it in a later semester if they secure a suitable internship. Per normal CPT rules, International students studying on an F-1 visa would have to be present on a US campus for two full semesters (a full academic year), and present at NC State for one semester, before using CPT privileges to take an internship. If a student switches to this concentration but does not start the internship, they will switch back to the original plan.

This will be a concentration only for on-campus students. Students enrolled in our distance education – Engineering Online (EOL) - option will not be eligible.

Code	Title	Hours	Counts towards
Core Courses		9	
Select at least three courses from "Core Courses" listed below			
Theory Courses		3	
Select at least one courses from "Theory Courses" listed below			
Required Courses		4	
CSC 600	Computer Science Graduate Orientation		
	or ECE 600 ECE Graduate Orientation		
Select at least one 700-level course			
Concentration Requirement		3	
ECE 650	Internship *		
Additional Courses		12	
"Additional Courses" are approved in conjunction with the academic committee			
Thesis Option Courses			
CSC 630	Master's Independent Study (Non-Thesis Option)		
	or ECE 634 Individual Studies In Electrical Engineering		

CSC 695	Master's Thesis Research (Thesis Option)
	or ECE 695 Master's Thesis Research

Total Hours 31

* ECE 650 requires that a written report be submitted and accepted by an ECE faculty examiner as meeting the standards required by the course. The written report should cover both technical and non-technical aspects of what the student did and learned during the internship. The report should not disclose company proprietary information.

Core Courses

Code	Title	Hours	Counts towards
Select at least three courses from the following:			
CSC/ECE 570	Computer Networks	3	
CSC/ECE 573	Internet Protocols	3	
CSC/ECE 574	Computer and Network Security	3	
CSC/ECE 575	Introduction to Wireless Networking	3	
CSC/ECE 577	Switched Network Management	3	

Theory Courses

Code	Title	Hours	Counts towards
Select a minimum of one course below:			
CSC 505	Design and Analysis Of Algorithms	3	
CSC 565	Graph Theory	3	
CSC 579	Introduction to Computer Performance Modeling	3	
	or ECE 579 Introduction to Computer Performance Modeling		
CSC/ECE 776	Design and Performance Evaluation of Network Systems and Services	3	
ECE 766	Signal Processing for Communications & Networking	3	
CSC/ECE 777	Telecommunications Network Design	3	

Faculty

Full Professors

B. Jayant Baliga
Mesut E. Baran
Salah M. A. Bedair
Subhashish Bhattacharya
Alper Yusuf Bozkurt
Gregory T. Byrd
Rada Yuryevna Chirkova
Mo-Yuen Chow
Huaiyu Dai
William Rhett Davis
Alexandra Duel-Hallen
Michael James Escuti
Do Young Eun
Brian Allan Floyd
Paul D. Franzon
John J. Grainger
Edward Grant
Robert Wendell Heath
Brian L Hughes
Iqbal Husain
Ki Wook Kim
Frederick Anthony Kish Jr.
Robert Michael Kolbas
Hamid Krim
Ning Lu
Srdjan Miodrag Lukic
Leda Lunardi
Thomas Kenan Miller III
Veena Misra
Rainer Frank Mueller
John F. Muth
H. Troy Nagle Jr.
Arne Nilsson

Omer Oralkan
Mehmet Cevdet Ozturk
Harilaos George Perros
Douglas Stephen Reeves
Eric Rotenberg
Mihail Lorin Sichitiu
Daniel D. Stancil
Michael B. Steer
J K Townsend
James Tuck
Daryoosh Vashae
John Victor Veliadis
Ioannis Viniotis
Wenye Wang
Jonathan Wierer
Huiyang Zhou

Associate Professors

Jacob James Adams
Dror Zeev Baron
Michela Becchi
Aranya Chakraborty
Alexander G. Dean
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Ismail Guvenc
Khaled Abdel Hamid Harfoush
Michael W. Kudenov
Edgar Lobaton
Zeljko Pantic
Nuria Gonzalez Prelcic
David Ricketts
Nitin Sharma
Cranos M. Williams
Chengying Xu

Assistant Professors

Aydin Aysu

Amay Jairaj Bandodkar

Michael Daniele

Yaoyao Jia

Shih-Chun Lin

Spyridon Pavlidis

Bradley Galloway Reaves

Muhammad Shahzad

Wenyuan Tang

Chau-Wai Wong

Tianfu Wu

David H. Covington

Tildon H. Glisson Jr.

John R. Hauser

Michael A. Littlejohn

David Franklin McAllister

Carlton M. Osburn

Wilbur Carroll Peterson

Sarah Ann Rajala

Wesley E. Snyder

Practice/Research/Teaching Professors

Gregory Edward Bottomley

Laura J. Bottomley

James Paul Dieffenderfer

Robert Joseph Evans

Rachana Ashok Gupta

Douglas C. Hopkins

Steven Wade Hunter

Steven D. Jackson

Bongmook Lee

David Lee Lubkeman

Robert Dwight Oden Jr.

Hatice Orun Ozturk

Veety, Elena Nicolescu

Tania Milkova Paskova

Andrew J. Rindos III

Elena Nicolescu Veety

Leonard Wilson White

Donna G. Yu

Wensong Yu

Emeritus Faculty

Winser E. Alexander

George F. Bland