

Biomedical Engineering (MS): Thesis Concentration

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Code	Title	Hours
Required Courses		9
PHY 503 or PHY 504	General Physiology I ^{1,2} General Physiology II	
MA 501 or MA 502 or MA 520	Advanced Mathematics for Engineers and Scientists I ^{1,3} Advanced Mathematics for Engineers and Scientists II Linear Algebra	
ST 511 or ST 515	Statistical Methods For Researchers I ^{1,4} Experimental Statistics for Engineers I	
Biomedical Engineering Courses		9
Select 510-590-level or 700-level BME courses approved in conjunction with the academic committee ¹		
Technical Elective Course		3
Select one course from the following: At NC State 500-level or 700-level courses from the following course prefixes: BME/BMME (510 or higher), CHE, CE, ECE, ISE, MSE, MAE, NE or other courses as approved in conjunction with the program advisor. At UNC 400 – 700 level courses as approved in conjunction with the program advisor. BME/BMME courses must be 510 -590 or 700 level.		
Research Course		9
BME 695	Master's Thesis Research	
Total Hours		30

¹ Other graduate courses in applied or technical fields at NC State or UNC-Chapel Hill must be approved by the program advisor.

² Alternative course from UNC is BIOL 451 Comparative Physiology

³ Alternative courses from UNC are MATH 528 Mathematical Methods for the Physical Sciences I or MATH 535 Introduction to Probability or MATH 577 Linear Algebra

⁴ Alternative courses from UNC are BIOS 600 Principles of Statistical Inference or BIOS 650 Basic Elements of Probability and Statistical Inference I

Faculty

Department Chair

Paul Dayton

Associate Chairs

Lianne Cartee, *Associate Chair for Education*

Shawn Gomez, *Associate Chair for Research*

Directors

Lianne Cartee, *Director of Undergraduate Studies*

Matthew Fisher, *Director of Graduate Studies*

Associate Director

Naji Husseini, *Associate Director of Undergraduate Studies*

Distinguished Professors

Ashley Carson Brown, *Lampe Distinguished Professor*

Lianne Cartee, *Alumni Distinguished Undergraduate Professor*

Paul Dayton, *William R. Kenan Jr. Distinguished Professor*

Gregory Forest, *Grant Dahlstrom Distinguished Professor of Mathematics*

Caterina M. Gallippi, *William R. Kenan, Jr. Distinguished Professor*

Harvinder Gill, *Ronald B. and Cynthia J. McNeill Term Professor*

He (Helen) Huang, *Jackson Family Distinguished Professor*

Weili Lin, *Dixie Lee Boney Soo Distinguished Professor*

H. Troy Nagle

Roger Narayan

Koji Sode, *William R. Kenan Jr. Distinguished Professor*

George (Rick) Stouffer, *Ernest and Hazel Craige Distinguished Professor*

Professors

Ashley Brown

Lianne Cartee

Michael Daniele

Paul Dayton

Matthew Fisher

Gregory Forest

Jason Franz

Caterina M. Gallippi

Shawn Gomez

H. Troy Nagle Jr.

Derek Kamper

Weili Lin

Scott T. Magness

George (Rick) Stouffer

John F. Muth

David Zaharoff

Associate Professors

Rahima Benhabbour

Yevgeny Brudno

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Brian Diekman

Kenneth Donnelly

Oleg Favorov

Donald Freytes

Michael Gamcsik

David Hill

Devin Hubbard

Naji Hussein

David Lalush

Wes Legant

Ming Liu

Jeffrey Macdonald

Adriana San Miguel

Virginie Papadopoulou

Matthew Penny

Ross Petrella

William Polacheck

Imran Rizvi

Nitin Sharma

Emir Uzay

Anka Veleva

Michael Wiggin

Assistant Professors

Amy Adkins Alvarez

Joseph Burclaff

Melissa Caughey

Silvia Ceballos

Phillip Durham

Alon Greenbaum

Geoff Handsfield

Michael Jay

Kennita Johnson

Jinwook Kim

Margo MacDonald

Varun Nalam

Hayley Richardson

Rinku Roy

Francisco Santibanez

Sarah Shelton

Cameron Taylor

Michael Wilkins

Ian Andrew Williamson

Amol Yadav

Lecturers

Kevin R. Grayson

Nick Jardine