

Materials Science and Engineering (MR)

Degree Requirements

Code	Title	Hours	Counts towards
Required Courses		18	
Select a minimum of 18 credit hours of 500- to 700-level MSE courses approved in conjunction with the academic committee			
Additional Courses		12	
"Additional Courses" are approved in conjunction with the academic committee and may come from graduate-level courses in MSE or other technical disciplines			
Total Hours		30	

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.

Accelerated Bachelor's/Master's Degree Requirements

Undergraduate Requirements

The following undergraduate programs meet the undergraduate requirements for the Accelerated Bachelor's / Master's (ABM):

- Materials Science Engineering (<http://catalog.ncsu.edu/undergraduate/engineering/materials-science-engineering/materials-science-engineering-bs/#planrequirementstext>) (BS) (<http://catalog.ncsu.edu/undergraduate/engineering/materials-science-engineering/materials-science-engineering-bs/#planrequirementstext>)
- Materials Science Engineering (BS): Biomaterials Concentration (<http://catalog.ncsu.edu/undergraduate/engineering/materials-science-engineering/materials-science-engineering-bs-biomaterials-concentration/>)
- Materials Science Engineering (BS): Nanomaterials Concentration ([http://catalog.ncsu.edu/undergraduate/engineering/materials-science-engineering-bs-nanomaterials-concentration/](http://catalog.ncsu.edu/undergraduate/engineering/materials-science-engineering/materials-science-engineering-bs-nanomaterials-concentration/))

Double-Counted Courses

After taking 12 credit hours of double-counted courses in the BS degree, only 18 hours remain for completion of either master's degree in the fifth year.

Code	Title	Hours	Counts towards
The following courses may be double-counted between the Bachelor's and Master's degrees:			

MSE/NE 409/ MSE 509/NE 509	Nuclear Materials	3
MSE 440/540	Processing of Metallic Materials	3
MSE 445/545	Ceramic Processing	3
MSE 455/555	Polymer Technology and Engineering	3
MSE 456/556	Composite Materials	3
MSE 460/560	Microelectronic Materials	3
MSE 465/565	Introduction to Nanomaterials	3
MSE 480/580	Materials Forensics and Degradation	3

Faculty

Professors

Harald Ade
Aram Amassian
David Aspnes
Salah M.A. Bedair
Donald Brenner
Ramon Collazo
Jerome Cuomo
Jan Genzer
Reza Ghiladi
Ola Harrysson
Douglas Irving
Jacob L. Jones
Djamel Kaoumi
Frederick Kish
Frederick Kish
Thomas LaBean
James D. Martin
John F. Murth
Korukonda Murty
Jagdish Narayan
Roger Jagdish Narayan
Gregory N. Parsons

Melissa Pasquinelli

Zlatko Sitar

Franky So

Richard Spontak

Martin Thuo

Joseph B. Tracy

Daryoosh Vashaee

Yaroslava Yingling

Xiangwu Zhang

Yong Zhu

Associate Professors

Veronica Augustyn

Rajeev Gupta

Jagannadham Kasichainula

Nina Wisinger

Assistant Professors

Bharat Gwalani

Timothy Horn

Yin Liu

Yin Liu

Martin Seifrid

Ruijuan Xu

Research Professor

Christopher Rock

Teaching Assistant Professor

Alexey Gulyuk

Adjunct Professors

Barry Farmer

John Prater

Adjunct Associate Professor

Charles Guarnieri

Emeritus Faculty

Charles Balik

Elizabeth Dickey

Carl C. Koch

Yuntian Zhu