Engineering Management Analytics (Certificate)

The Analytics Certificate aims to meet the increasing demand for professionals like you, who are skilled in big data and data analytics across various industries, government sectors, and research organizations.

In this certificate program, led by top faculty members from the Colleges of Engineering, Management, and Sciences, you will delve into topics such as data mining, Python programming, and operations analysis. Additionally, you will focus on the foundational aspects of analytics from a technical engineering perspective.

More Information

Engineering Management Program Website (https://mem.grad.ncsu.edu/engineering-management-programs/)

To apply to the program, you need to:

- Complete an online application form
- Submit transcripts of all academic work after high school
- Provide a written personal statement
- Admission is competitive, and the GRE is not required. Your academic success plays a significant role in the admission process. However, completing a certificate program does not guarantee entry into a graduate degree program. You should have a STEM or another relevant bachelor's degree.

Applicant Information

- **Delivery Method:** On Campus, Online, Hybrid
- **Entrance Exam:** None
- **Interview Required:** None

Plan Requirements

Code	Title	Hours	Counts towards
Core Course		**3**	
ISE 501	Introduction to Operations Research (required)		
Statistics Courses		**3**	
Must complete one course below			
ST 515	Experimental Statistics for Engineers I		
ST 516	Experimental Statistics For Engineers II		
ST 517	Applied Statistical Methods I		
ST 518	Applied Statistical Methods II		
Elective Courses		**6**	
Must complete two courses below			
CE 537	Computer Methods and Applications		
ISE 519	Database Applications in Industrial and Systems Engineering		
ISE 535	Python Programming for Industrial & Systems Engineers		
ISE 537	Statistical Models for Systems Analytics in Industrial Engineering		
ISE 547	Applications of Data Science in Healthcare		
ISE 560	Stochastic Models in Industrial Engineering		
MBA 545	Decision Making under Uncertainty		
OR 504	Introduction to Mathematical Programming		
OR 506	Algorithmic Methods in Nonlinear Programming		
ST 554	Analysis of Big Data		
ST 555	Statistical Programming I		
ST 556	Statistical Programming II		
ST 558	Data Science for Statisticians		
ST 563	Introduction to Statistical Learning		
Total Hours		**12**	

Faculty

Director

Brandon M. McConnell, *Interim Director*

Full Professors

Sebastian Heese , *Owens Distinguished Professor of Supply Chain Management*

John Baugh, *Professor*

Joseph DeCarolis, *Professor*

Jingyan Dong, *Professor*

Yahya Fathi, *Professor*

Ola Harrysson, *Edward P. Fitts Distinguished Professor*

Jessica Jameson, *Professor*

Edward Jaselskis, *E.I. Clancy Distinguished Professor*

Russell King, *Foscue Distinguished Professor*

Yuan-Shin Lee, *Professor*

Maria Mayorga, *Professor*

Rohan Shirwaiker, *James T. Ryan Professor*

Daowen Zhang, *Professor*

Associate Professors

Karen Chen, *Associate Professor*

Adolfo R. Escobedo, *Associate Professor*

Michael Kay, *Associate Professor*

Tim Kraft, *Associate Professor of Operations and Supply Chain Management*

Osman Ozaltin, *Associate Professor of Personalized Medicine*

Daniel Saloni, *Associate Professor*

Jeffrey Stonebraker , *Associate Professor of Operations and Supply Chain Management*

Hong Wan, *Associate Professor*

Don Warsing, *Associate Professor of Operations and Supply Chain Management*

Assistant Professors

Xiaolei Fang, *Assistant Professor*

Leila Hajibabai, *Assistant Professor*

Associate Research Professor

Christopher D. Rock, *Associate Research Professor*

Associate Teaching Professor

Meagan Kittle Autry, *Associate Teaching Professor*

S. Sebnem Ahiska King, *Teaching Associate Professor*

Fred Livingston, *Associate Teaching Professor*

Kanton Reynolds, *Associate Teaching Professor*

Teaching Assistant Professor

Nur Ozaltin, *Teaching Assistant Professor*

Professor of the Practice

Doug Morton, *Professor of the Practice*

James Rispoli, *Professor of the Practice*

Michael Spano, *Professor of Practice*

Emeritus Faculty

Javad Taheri, *Associate Research Professor Emeritus*

Associate and Adjunct Faculty

Edwin Addison, *Adjunct Professor*

Lecturers

Steven DelGrosso, *Lecturer*

Dan Harris, *Lecturer*

Dan Kempton, *Adjunct Lecturer*

Robert Nunez, *Lecturer*