M.S. in Applied Statistics

Degree Requirements

The Master of Science in Applied Statistics requires 30 credits: 21 credits in core courses and 9 credits of elective courses. Students must successfully complete at least 24 of these credits at the 600-level or higher, and no more than six credits at the 500-level will be counted towards the degree. A master's thesis or a master's project is optional.

Seminar: In addition to the minimum 30 degree credits required, all students who receive departmental or research-based awards must enroll every semester in MATH 791 Graduate Seminar.

M.S. in Applied Statistics (courses only)

Code	Title	Credits
Core Courses		
MATH 644	Regression Analysis Methods	3
MATH 659	Survival Analysis	3
MATH 661	Applied Statistics [1]	3
MATH 662	Probability Distributions	3
MATH 664	Methods for Statistical Consulting	3
MATH 665	Statistical Inference	3
MATH 699	Design and Analysis of Experiments	3
Electives		
Select three of the following courses, or any other three related courses with the approval of the graduate advisor.		9
MATH 604	Mathematical Finance	3
MATH 605	Stochastic Calculus	3
MATH 611	Numerical Methods for Computation	3
MATH 630	Linear Algebra and Applications	3
MATH 654	Clinical Trials Design and Analysis	3
MATH 660	Introduction to statistical Computing with SAS and R	3
MATH 691	Stochastic Processes with Applications	3
MATH 698	Sampling Theory	3
MATH 763	Generalized Linear Models	3
MATH 768	Probability Theory	3
Total Credits		**60**

[1] MATH 661 Applied Statistics and MATH 663 Introduction to Biostatistics cannot both be used toward degree credits at NJIT. The requirements of MATH 661 Applied Statistics may, in individual cases, be substituted by MATH 663 Introduction to Biostatistics, at the discretion of the Graduate Advisor.

M.S. in Applied Statistics (M.S. project)

Code	Title	Credits
Core Courses		
MATH 644	Regression Analysis Methods	3
MATH 659	Survival Analysis	3
MATH 661	Applied Statistics [1]	3
MATH 662	Probability Distributions	3
MATH 664	Methods for Statistical Consulting	3
MATH 665	Statistical Inference	3
MATH 699	Design and Analysis of Experiments	3
Master's Project		
MATH 700B	Master's Project	3
Electives		
Select two of the following courses, or any other two related courses with the approval of the graduate advisor.		6

MATH 604	Mathematical Finance	3
MATH 605	Stochastic Calculus	3
MATH 611	Numerical Methods for Computation	3
MATH 630	Linear Algebra and Applications	3
MATH 654	Clinical Trials Design and Analysis	3
MATH 660	Introduction to statistical Computing with SAS and R	3
MATH 691	Stochastic Processes with Applications	3
MATH 698	Sampling Theory	3
MATH 763	Generalized Linear Models	3
MATH 768	Probability Theory	3
Total Credits		**60**

[1] MATH 661 Applied Statistics and MATH 663 Introduction to Biostatistics cannot both be used toward degree credits at NJIT. The requirements of MATH 661 Applied Statistics may, in individual cases, be substituted by MATH 663 Introduction to Biostatistics, at the discretion of the Graduate Advisor.

M.S. in Applied Statistics (M.S. thesis)

Code	Title	Credits
Core Courses		
MATH 644	Regression Analysis Methods	3
MATH 659	Survival Analysis	3
MATH 661	Applied Statistics [1]	3
MATH 662	Probability Distributions	3
MATH 664	Methods for Statistical Consulting	3
MATH 665	Statistical Inference	3
MATH 699	Design and Analysis of Experiments	3
Master's Thesis		
MATH 701B & 701B or MATH 701C	Master's Thesis and Master's Thesis Master's Thesis	6
Electives		
Select one of the following course, or any other one related course with the approval of the graduate advisor.		3
MATH 604	Mathematical Finance	3
MATH 605	Stochastic Calculus	3
MATH 611	Numerical Methods for Computation	3
MATH 630	Linear Algebra and Applications	3
MATH 654	Clinical Trials Design and Analysis	3
MATH 660	Introduction to statistical Computing with SAS and R	3
MATH 691	Stochastic Processes with Applications	3
MATH 698	Sampling Theory	3
MATH 763	Generalized Linear Models	3
MATH 768	Probability Theory	3
Total Credits		**60**

[1] MATH 661 Applied Statistics and MATH 663 Introduction to Biostatistics cannot both be used toward degree credits at NJIT. The requirements of MATH 661 Applied Statistics may, in individual cases, be substituted by MATH 663 Introduction to Biostatistics, at the discretion of the Graduate Advisor.

Electives are chosen in consultation with a departmental graduate advisor and consist of advanced courses in mathematics and statistics and advanced courses from engineering, computer science, and biology that have a significant statistics content. Students are encouraged to choose courses in application areas. Courses offered by appropriate departments at NJIT, RBHS, and Rutgers University-Newark can be used as electives within the limits of the NJIT transfer policy. All elective courses must be approved by the graduate advisor.