

# M.S. in Biostatistics

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## Degree Requirements

A minimum of 30 credits is required for the degree. Bridge courses, if any, will not count toward degree credits. The graduate curriculum consists of seven core courses in background statistical theory and biostatistics, as described in the curriculum below. The remaining courses are electives, chosen in consultation with a departmental graduate advisor and consist of topics courses in statistics, biostatistics, epidemiology and biology that have significant statistics content or/and applications thereof. Students will be 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. A masters project is optional, and is in addition to the minimum 30 approved credits, required for the degree.

### Core Courses

MATH 644	Regression Analysis Methods	3
MATH 654	Clinical Trials Design and Analysis	3
MATH 659	Survival Analysis	3
MATH 662	Probability Distributions	3
MATH 663	Introduction to Biostatistics <sup>1</sup>	3
MATH 665	Statistical Inference	3
MATH 699	Design and Analysis of Experiments	3

### Electives

Select at least three of the following illustrative list:		9
MATH 664	Methods for Statistical Consulting	
MATH 691	Stochastic Processes with Applications	
MATH 698	Sampling Theory	
MATH 707	Advanced Applied Mathematics IV: Special Topics (Advanced Applied Mathematics IV)	
MATH 763	Generalized Linear Models	
MATH 786	Large Sample Theory and Inference	
MATH 787	Non-Parametric Statistics	
RBHS	RBHS Courses	
Introduction to Epidemiology		

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**Total Credits** **30**

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