

BIOSTATISTICS MS

Degree Requirements

The following requirements are in addition to, or further elaborate upon, those requirements outlined in The Graduate School Policy Guide (<https://catalogs.northwestern.edu/tgs/academic-policies-procedures/>).

Master's

Required Courses: All Concentrations (6 units)

Course	Title
BIOSTAT 301-0	Introduction to Epidemiology
BIOSTAT 302-0	Introduction to Biostatistics
BIOSTAT 306-0	R Programming
BIOSTAT 401-0	Intermediate Epidemiology
BIOSTAT 402-0	Intermediate Biostatistics
BIOSTAT 561-0	Thesis
PUB_HLTH 441-0	Ethical Issues in Clinical Research

Additional Required Courses, Selectives and Electives

Concentration in Population Health Analytics

Course	Title
Required (5 units)	
BIOSTAT 305-0	Data Management and Analysis in SAS
BIOSTAT 446-0	Design, Conduct and Analysis of Clinical Trials
BIOSTAT 501-0	Advanced Epidemiology
BIOSTAT 560-0	Statistical Consulting
BIOSTAT 565-0	Clinical Database Management
PUB_HLTH 445-0	Writing and Peer Reviewing for Scientific Publication

Selectives

Choose 1 unit

PUB_HLTH 412-0	Infection Disease Epidemiology and Prevention
PUB_HLTH 524-0	Cardiovascular Disease Epidemiology
PUB_HLTH 525-0	Cancer Epidemiology

Electives

Choose 2 units

BIOSTAT 303-0	Introduction to Probability Theory
BIOSTAT 403-0	Statistical Inference
BIOSTAT 499-0	Independent Study
BIOSTAT 502-0	Advanced Biostatistics
BIOSTAT 527-0	Statistical Methods for Missing Data
BIOSTAT 529-0	Statistical Genetics and Genomic Data Analysis
PUB_HLTH 301-0	Behavior, Society & Health

Concentration in Statistical Bioinformatics

Course	Title
Required Courses (3.5 units)	
BIOSTAT 303-0	Introduction to Probability Theory
BIOSTAT 403-0	Statistical Inference
BIOSTAT 502-0	Advanced Biostatistics
BIOSTAT 529-0	Statistical Genetics and Genomic Data Analysis

Selectives

Choose 1 unit

BIOSTAT 305-0	Data Management and Analysis in SAS
HSIP 441-0	Health and Biomedical Informatics Methods I

Choose 1 unit

BIOSTAT 445-1	Introduction to Statistical Learning
BIOSTAT 522-0	Network Data Analysis

HSIP 442-0	Health Biomedical Informatics Methods II
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Electives

Choose 2.5 units

BIOSTAT 446-0	Design, Conduct and Analysis of Clinical Trials
BIOSTAT 499-0	Independent Study
BIOSTAT 521-0	Survival Data Analysis
BIOSTAT 527-0	Statistical Methods for Missing Data
BIOSTAT 560-0	Statistical Consulting
BIOSTAT 565-0	Clinical Database Management

Concentration in Statistical Methods and Practice

Course	Title
Required Courses (6.5 units)	
BIOSTAT 303-0	Introduction to Probability Theory
BIOSTAT 305-0	Data Management and Analysis in SAS
BIOSTAT 403-0	Statistical Inference
BIOSTAT 446-0	Design, Conduct and Analysis of Clinical Trials
BIOSTAT 502-0	Advanced Biostatistics
BIOSTAT 521-0	Survival Data Analysis
BIOSTAT 560-0	Statistical Consulting

Electives

Choose 1.5 units

BIOSTAT 445-1	Introduction to Statistical Learning
BIOSTAT 499-0	Independent Study
BIOSTAT 527-0	Statistical Methods for Missing Data
BIOSTAT 529-0	Statistical Genetics and Genomic Data Analysis
BIOSTAT 565-0	Clinical Database Management