QUANTITATIVE AND SYSTEMS BIOLOGY 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/).

Course Requirements

Total Units Required: 11

Course	Title
First Year	
Fall	
QSB 401-0	Research Techniques, Writing & Presentation
IBIS 410-0	Quantitative Biology
IBIS 402-0 or BIOL_SCI 361-0	Molecular Biology of Human Disease or Protein Structure and Function
IBIS 423-0	Ethics in Biological Research
Winter	
QSB 499-0	QSB Masters Research
BIOL_SCI 323-0 or STAT 465-0	Bioinformatics: Sequence and Structure Analysis or Statistical Methods for Bioinformatics and Computational Biology
Choose one from the following:	
BIOL_SCI 378-0	Functional Genomics
IBIS 406-0	Advanced Topics in Cell Biology
IBIS 407-0	Genetics & Epigenetics
STAT 465-0 or BIOL_SCI 323-0	Statistical Methods for Bioinformatics and Computational Biology or Bioinformatics: Sequence and Structure Analysis
Spring	
QSB 499-0	QSB Masters Research
IBIS 432-0	Statistics for Life Sciences
Choose one from the following:	
IBIS 401-0	Molecular Biophysics
IBIS 404-0	Principles and Methods in Systems Biology
BIOL_SCI 393-0	Human Genomics
Summer	
QSB 590-0	QSB Thesis Research
IBIS 421-0	Rigor & Reproducibility in Research *

*Optional

Other Degree Requirements

- Research: Students will perform laboratory research during three quarters over three academic quarters (QSB 499-0 QSB Masters Research (2X) and QSB 590-0 QSB Thesis Research)
- Master's thesis: Students must prepare and defend a master's thesis