Genetics and Genomics (MS)

Degree Requirements

Code	Title	Hours
Genetics and Genomics Core Courses		**14**
GN 701	Molecular Genetics	
GN 702	Cellular and Developmental Genetics	
or GN 735	Functional Genomics	
GN 703	Population and Quantitative Genetics	
GN 810	Special Topics in Genetics (Journal Club - taken twice)	
ST 511	Statistical Methods For Researchers I [1]	
Genetics & Genomics Data Analysis Elective [2]		**3**
Research Ethics Elective [3]		**1-3**
Advised Electives [4]		**6**
Thesis Research Courses		**6**
"Thesis Research Courses" will be determined in conjunction with the academic committee		
Total Hours		30-32

[1] Students can also take a more advanced statistics course, such as ST 512 Statistical Methods For Researchers II

[2] Other courses that do not appear on this list may be counted with the approval of the DGP. This course may not be a statistics or data science class that is not focused heavily on Genetics and/or Genomics data. Examples of potential courses are: BIO 562 Fundamentals of Bioinformatics, BIT 815 Advanced Special Topics (Deep Sequencing Analysis, GGS 771 Data Science for Genetics & Genomics, GN 756 Computational Molecular Evolution, GN 757 Quantitative Genetics Theory and Methods, ST 590 Special Topics (Bioinformatics II), ST 721/GN 721 Genetic Data Analysis

[3] Other courses that do not appear on this list may be counted with the approval of the DGP. Examples of potential courses are: GGS 840 Professional Development & Ethics in Genetics & Genomics, GES 5** Genetic Engineering and Society, PHI 816 Introduction to Research Ethics, TOX 820 Special Problems In Toxicology

[4] Students will work with their advisor to select Advised Electives appropriate for their academic and professional goals. At most 3 credits of research may be used in the Advised Elective category.