

Genetics and Genomics (MR)

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		12
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.