

# Math & Stat Courses

## List of Math Courses

<i>Course Number</i>	<i>Course Title</i>	<i>Units</i>
Math 20	Precalculus: Functions and their Graphs	(4)
Math 21	Elementary Analysis I	4
Math 22	Elementary Analysis II	4
Math 23	Elementary Analysis III	4

## List of Stat Courses

<i>Course Number</i>	<i>Course Title</i>	<i>Units</i>
Stat 114	Descriptive Statistics	3
Stat 115	Basic Statistical Methods	3
Stat 117	Mathematics for Statistics	3
Stat 121	Probability Theory I	3
Stat 122	Probability Theory II	3
Stat 124	Introduction to Programming	3
Stat 125	Applications Software & Software Packages	3
Stat 131	Parametric Statistical Inference	4
Stat 132	Nonparametric Statistical Inference	3
Stat 133	Bayesian Statistical Inference	3
Stat 134	Introduction to Scientific Writing for Statistics	3
Stat 135	Matrix Theory for Statistics	3
Stat 136	Introduction to Regression Analysis	3
Stat 138	Introduction to Sampling Designs	4
Stat 148	Introduction to Experimental Designs	4
Stat 142	Introduction to Computational Statistics	3
Stat 143	Survey Operations	3
Stat 147	Introduction to Multivariate Analysis	4
Stat 145	Introduction to Time Series Analysis & Forecasting	3
Stat 146	Introduction to Exploratory Data Analysis	3
Stat 149	Introduction to Categorical Data Analysis	3

# Math & Stat Electives

## List of Math Electives

Math 110.1 Abstract Algebra I  
Math 110.3 Abstract Algebra III  
Math 117 Elementary Theory of Numbers  
Math 122 Differential Equations & Applications  
Math 123.1 Advanced Calculus I  
Math 123.2 Advanced Calculus II  
Math 126 Real Analysis  
Math 128 Complex Analysis  
Math 140 Introduction to Modern Geometries  
Math 142 Elementary Topology  
Math 145 Modern Geometry  
Math 146 Introduction to Differential Geometry  
Math 147 Introduction to Algebraic Geometry  
Math 148 Introduction to Projective Geometry  
Math 162 Theory of Interest  
Math 164 Mathematics of Life Contingencies  
Math 165 Finite Differences  
Math 171 Introduction to Numerical Analysis  
Math 180.1 Operations Research I  
Math 180.2 Operations Research II

### NOTE:

A **Math Elective** is any Mathematics course numbered higher than Math 109 that is not equivalent to a required statistics course in the program.

A **Stat Elective** is any Statistics course numbered 191 to 197, except for Stat 195.

## List of Stat Electives

Stat 191 Special Topics in Biological and Medical Statistics  
Stat 191.1 Introduction to Biostatistics  
Stat 192 Special Topics in Business and Economic Statistics  
Stat 192.1 Statistics in Market Research  
Stat 192.2 Advanced Linear Models  
Stat 193 Special Topics in Industrial and Physical Science Statistics  
Stat 193.1 Introduction to Statistical Quality Control  
Stat 194 Special Topics in Social and Psychological Statistics  
Stat 197 Special Topics in Statistics

These Math/Stat electives may have their own prerequisites or corequisites, while some may only have Consent of Instructor (COI).