Bachelor of Science in Mathematics Probability and Statistics Option

COURSE	MATH credits	Other credits
Take **ONE** of the following programming courses: MATH 1376: Programming for Data Science *or* CSCI 1410, 1411 Introduction to programming	3	4
MATH 1401 – Calculus I	4	
MATH 2411 – Calculus II	4	
MATH 2421 – Calculus III	4	
MATH 3000 – Introduction to Abstract Math	3	
MATH 3191 – Applied Linear Algebra	3	
MATH 3382 – Statistical Theory	3	
MATH 3810 – Probability	3	
MATH 4310 – Introduction to Real Analysis I	3	
MATH 4779 – Math Clinic†	3	
MATH 4387 – Applied Regression Analysis	3	
Choose **ONE** Upper Division Probability or Statistics Course: MATH 4337 Statistical and Machine Learning *or* MATH 4388 Machine Learning Methods *or* MATH 4390 Game Theory *or* MATH 4394 Experimental Designs *or* MATH 4792 Probabilistic Modeling *or* ECON 4030 Data Analysis with SAS	3	
6 additional Credits (typically two courses) above 3000 excluding MATH 3195, 3511, 3800, 3999, and 4830.	6	
9 additional credits (typically 3 courses) countable towards a major in one of the following subjects: Biology, Business, Chemistry, Computer Science, Economics, Geography and Environmental Sciences, Health and Behavioral Sciences, Physics, Sociology. Other areas allowable with approval from the Undergraduate Committee.		9

† MATH 6330* Workshop in Statistical Consulting can be substituted for MATH 4779 for the Probability and Statistics option.
* Courses numbered MATH 5000 or above require instructor consent to register.

1. A C- or better is needed in each class towards your major and your grade point average must be at least 2.25 in these MATH classes.
2. The semester your graduate, you must:
   a. Complete the MFAT Exam and participate in an exit interview.
   b. Complete a senior survey.
   c. These requirements will be scheduled through the department Director of Undergraduate Programs.
3. You must satisfy the requirements of the College of Liberal Arts and Sciences (CLAS). Contact the CLAS advising office (303-315-7100) for details.
4. There are several residency credits that must be satisfied to graduate as a Mathematics major at CU Denver. Graduating students must:
   a. Take at least 15 upper division (3000 or above) MATH credits (5 classes) at CU Denver.
   b. Take a minimum of 30 hours of resident credit (letter grades received at CU Denver).
   c. 21 out of the last 30 hours must be taken in CU Denver CLAS courses.
   d. For the most current CLAS residency requirements, please visit https://clas.ucdenver.edu/advising/.
5. Students with at least a 3.5 upper-division major grade point average and at least 3.2 overall grade point average may qualify for honors and should contact a departmental advisor (math.advising@ucdenver.edu) for more details.

Last modified October 11, 2023