Minor in Mathematical Probability requirement checklist

This form is for your convenience and does not replace the bulletin.
Please complete this form for approval by a department adviser early in the semester of the expected graduation date; attach copies of emails approving transfers/substitutions/electives.

Personal information			
Last Name		Given name	
Preferred name		UNI	

☐ Columbia College   ☐ School of General Studies

☐ Dual degree program: _____

AP Credits

☐   0 Credits
☐   3 Credits: a score of 4 or 5 on the AP Calculus AB exam, a 4 on the AP Calculus BC exam, or a 6 on the IB Mathematics: analysis and approaches HL exam, upon completion of either Calculus 2 or Calculus 3 with a grade of C or higher.
☐   6 Credits: a score of 5 on the AP Calculus BC exam or 7 on the IB Mathematics: analysis and approaches HL exam, upon completion of Calculus 3 or Accelerated Multivariable Calculus with a grade of C or higher.
☐   Other, explain:

Please verify AP credits are correctly registered in SSOL; otherwise consult with your CC/GS advisor. See Credit for Previous College-level work.

Placement

In some situations (see Placement) students may be allowed to place out of Calculus 1 and/or 2 without receiving matching AP or transfer credits. In this case the missing credits have to be replaced by an additional approved course(s) (e.g. Math UN2000). If applicable, explain:

For questions on AP, transfer and placement for Calculus and Linear Algebra courses, please consult the Calculus Director.

Multivariable Calculus and Linear algebra sequence

[MATH UN1201 *or* 1205] + [Math UN2010 *or* 2015]
or Honors Math A + Honors Math B

Code	Course name	Term	Grade

Probability Theory

Math GU4155 *or* Stat GU4203 *or* IEOR E3658

Code	Course name	Term	Grade

Electives

2 courses (at least 6 points) selected from:
(A) Approved Math electives: MATH UN2030, 2500, 3028, 3050, MATH GU4061, 4062, 4156, and
(B) Approved cognate electives: COMS W3203, IEOR E3106, PHIL GU4561, PHYS GU4023, STAT GU4204, 4207, 4262, 4264,
including at least one Math elective (A).

Code	Course name	Term	Grade

Transfer

If applicable, please enter here courses taken at another institution used to fulfill a minor requirement.
All transfers have to be approved by departmental advisor(s) (Calculus director for Calc/Linear algebra/ODEs).
For study abroad, consult your departmental advisor in advance of registration.
Please verify that transfer credits are correctly entered in SSOL, and check with you CC/GS advisor regarding transfer credit limits. A maximum of 6 transfer credits may be counted towards minor requirements.

Code	Course name	Institution	Term	Grade

Prerequisites

Prerequisites for the courses in (1) Multivariable calculus and (2) Linear Algebra are as follows:

- MATH UN1201 CALCULUS III: requires MATH UN1101 CALCULUS I

- MATH UN1205 ACCELERATED MULTIVARIABLE CALC: requires MATH UN1101 CALCULUS I and MATH UN1102 CALCULUS II
- MATH UN2010 LINEAR ALGEBRA: MATH UN1201 CALCULUS III (strongly recommended)
- MATH UN2015 Linear Algebra and Probability: MATH UN1101 CALCULUS I (strongly recommended)

Prerequisites for the courses in (3) Probability Theory are as follows:
- MATH GU4155 PROBABILITY THEORY: MATH GU4061 INTRO MODERN ANALYSIS I (approved elective)
- STAT GU4203 PROBABILITY THEORY: At least one semester, and preferably two, of calculus. An introductory course (STAT UN1201 CALC-BASED INTRO TO STATISTICS, preferably) is strongly recommended
- IEOR E3658 PROBABILITY FOR ENGINEERS: Solid knowledge of calculus, including multiple variable integration

Grading

No course with a grade of D or lower can count toward the minor, with the exception of: any sporadic exception allowed by the COI (P in any class in SP20; one P in F20, SP21, F21; two Ps in SP24).

Double-Counting

See Departmental Major/double-counting. Calculus I to IV/Accelerated Multivariable Calc/Honors Math A-B/Stat 1201/COMS 1004 ('introductory courses') may be freely double-counted with another program (second major, or concentration/minor). In addition to these, a maximum of one course may be double-counted for the Mathematical Probability minor, subject to approval of all concerned departmental advisors (Math+department(s) offering the second program).
If applicable, record here a non-introductory course claimed for double-counting.

Code	Course name	Second program	Term	Grade

Additional comments and information (if needed)

Last revised: December 2024