

Major in Applied Mathematics 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	<input type="text"/>	Given name	<input type="text"/>
Preferred name	<input type="text"/>	UNI	<input type="text"/>
<input type="checkbox"/> Columbia College		<input type="checkbox"/> School of General Studies	
<input type="checkbox"/> Dual degree program:	<input type="text"/>		

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.

Calculus and Linear algebra sequence¹

Calculus I + Calculus II + Calculus III + Calculus IV+ Linear Algebra
or Calculus I + Calculus II + Accelerated Multivariable Calc + Linear Algebra
or Calculus I + Calculus II + Honors Math A + Honors Math B

Code	Course name	Term	Grade
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Analysis requirement

Select one of: Math UN2500 *or* GU4032 *or* GU4061. (This course does not count as an elective).

Code	Course name	Term	Grade
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Applied Math seminars

APMA E4901 (junior year) *and* APMA E4903 (senior year)

Code	Course name	Term	Grade
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Electives

18 points in electives, with at least 9 points in Track A electives, or at least 9 points in Track B electives. A maximum of 9 points may be selected from courses outside these tracks, with prior written approval from the Director of Undergraduate Studies.

Track A: MATH UN2500, 2030, [MATH UN3007 *or* MATH GU4065 *or* APMA 4204], [MATH UN3028 *or* APMA E3102 *or* APMA E4200], MATH GU4032, 4061, 4062, APMA E4100, 4101, 4150, 4300, 4301, 6301, 6302.

Code	Course name	Term	Grade
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

¹ 13-15 credits including AP credits

Track B: COMS W3203, 3261, 4231, 4261, MATH UN3050, [MATH GU4155 *or* IEOR E3658 *or* STAT GU4203], MATH GU4156, [IEOR E3106 *or* STAT GU4207], APMA E4008, 4306, ECON GU4415

Code	Course name	Term	Grade

Off-track electives (with prior written approval from the DUS); **or additional Track A/B electives:**

Code	Course name	Term	Grade

Transfer

If applicable, please enter here courses taken at another institution used to fulfill a major 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.

Code	Course name	Institution	Term	Grade

Grading

No course with a grade of D or lower can count toward the major, with the exception of: a P for the first course taken in the major; 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 two courses may be double-counted, subject to approval of all concerned departmental advisors (Math+department(s) offering the second program). If applicable, record here non-introductory courses claimed for double-counting.

Code	Course name	Second program	Term	Grade
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Additional comments and information (if needed)

Last revised: December 2024