ECONOMICS-MATHEMATICS MAJOR
Undergraduate Requirement Check List

Personal information		
Last Name	Given name	
Preferred name	UNI	

☐ Columbia College   ☐ School of General Studies

☐ Dual degree program:

General Notes

1) **This is a check list for your convenience only. It does not replace the bulletin. For details regarding the requirements below you must consult the bulletin.**

2) **You must receive a grade of C- or higher in any class taken for major credit. The ONLY exception is UN1105 Principles which you may take Pass/D/Fail and must receive a "P" grade for it to count towards the major. If you have taken a required class P/D/F, then you will be required to uncover the P. After receiving a P, you may not retake a course for a letter grade.**

3) **You must have all transfer credits for economics classes approved by the economics department. For information on what transfer courses will be accepted and how to obtain approval for transfer credits in economics, math and statistics, go to: http://econ.columbia.edu/transfer-credit-information.**

4) **Econ and Math AP/IB/GCE Credits - CC Students: said credits must appear in your SSOL transcript in order for the department to credit you with the completion of those core courses (*ECON UN1105, MATH UN1101-UN1102*). GS Students: Said credits must be noted in your student file in order for the department to credit you with the completion of those core courses.**

5) **You will not receive major credit for a course taken before the completion of its pre-requisites.**

6) **Please complete this form for approval by a Math department adviser early in the semester of the expected graduation date; attach copies of emails approving transfers/substitutions/electives.**

ECONOMICS Requirements

I. Core Courses
All core courses must be completed by the spring semester of your junior year. You may only take a core course during your senior year with written approval of the economics department.

_____UN1105 **Principles of Economics** *or* AP credits (you must have a grade of 9 or
                    10 on the AP exam) *or* IB credits (6 or 7 on the higher level exam)

_____UN3211 **Intermediate Microeconomics** *(Pre-reqs: ECON UN1105; MATH UN1201or UN1205
                    or UN1207)*
_____UN3213 **Intermediate Macroeconomics** *(Pre-reqs: ECON UN1105 and MATH UN1101;*
                    __*Co-Req*__*: MATH UN1201, or UN1205, or UN1207)*

_____UN3412 **Introduction to Econometrics** *(Pre-reqs: ECON UN3211 or UN3213; MATH UN1201
            or UN1205 or UN1207; STAT UN1201)*

List any **departmental approved substitution(s)**, including transfer credits, for above requirements.

_____

II. Electives

You must take 3 electives in economics at the 3000 level or higher. All electives in the department at the 3000 or 4000 level require BOTH UN3211 and UN3213 as pre-requisites (and some have additional pre-requisites). See the bulletin for information regarding which courses count as economics electives. Please consult the bulletin for pre-requisites for Barnard elective courses.

	Course No.	Title
1)	_____	_____
2)	_____	_____
3)	_____	_____

Rules for Barnard Electives, Transfer and AP Credits:

The joint major with Mathematics must take a minimum of **7** lecture courses in economics (this count does not include courses in math and statistics). Students are required to take a **minimum of 5 lecture courses in the department**. Credits from *Barnard 3000 level electives, departmental approved transfer credits, and AP/IB/ GCE* may be used to fulfill the requirements for the remaining **2** lecture courses.

List number of courses taken in the Economics Department: _____ (*minimum = 5*)

III. Seminar

One is required from the following: ECON GU4911 *Micro*, GU4913 *Macro*, GU4918 *Econometrics*, GU4921 *Political Economy*. *Barnard* seminars are *not* allowed to be taken to fulfill this requirement. All seminars have the following pre-requisites: UN3211, UN3213 and UN3412. GU4921 has an additional prerequisite of GU4370.

_____   _____

List any **approved substitution(s)**, including transfer credits, for above requirements.

_____
_____

Students who have questions about any of the above requirements should first consult the bulletin or the online **FAQ page** at: https://econ.columbia.edu/undergraduate/student-information/faq/

If after consulting the bulletin and the FAQ page you still have questions, then contact:
    econ-advising@columbia.edu.

MATH-STAT Requirements

Calc 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 sequence

Calculus I + Calculus II + [Calculus III *or* Accelerated multivariable calculus] + Linear Algebra
or Honors Math A + Honors Math B

Code	Course name	Term	Grade

Analysis requirement

Math UN2500 Analysis and Optimization

Code	Course name	Term	Grade

Statistics requirement

Stat GU4001 *or* [Stat GU4203 + Stat GU4204]

Code	Course name	Term	Grade

Note: if you take GU4203-4024, GU4203 also counts as one of three electives.

Electives

Three courses selected from: Math UN1202, Math UN2030, approved Math 3000+ courses.

Code	Course name	Term	Grade

Note: if you take Math UN1205 for multivariable calculus, you may not use as elective nor receive credit for Math UN1202.

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 (one P in F23; two Ps in SP24).

Double-Counting

See Departmental Major/double-counting. Calculus I to IV/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+Econ+department(s) offering the second program).
If applicable, record here non-introductory courses claimed for double-counting.

Code	Course name	Second program	Term	Grade

Additional comments and information (if needed)

Last revised: August 2024