

PROGRAM OVERVIEW

Economics is the science of decision making. The rigorous approach that typifies economics lends itself to a remarkably wide field of practical applications. Trained economists are employed by private businesses, banks, law firms, consulting firms, international corporations and agencies, public utilities, federal and local governments, and colleges and universities. These economists study a diverse array of issues such as the effects of government regulations on industries, the fairness and impacts of taxes, the effects of various policy tools in fighting inflation and unemployment, the causes of poverty, and the plight of the homeless, pollution, crime, and other social policy issues.

A solid training in the mathematical and statistical sciences is fundamental to optimally prepare economics students for graduate school. A dual degree in economics and mathematics will substantially increase program quality and career prospects for economics students, as well as enhance the reputation of the economics program at CU Denver. Similarly, a solid training in quantitative and qualitative economic principles offers significant benefits to mathematics majors who seek industrial and/or consulting positions.

ACADEMIC ADVISING

The College of Liberal Arts and Sciences (CLAS) supports students to graduation using a shared advising system. CLAS students have at least two academic advisors with whom they should meet regularly to discuss academic and degree progress: a CLAS Academic Advisor and a major advisor.

For questions related to CU Denver Core Curriculum, CLAS, general graduation requirements, university/college academic policies, or campus resources contact:

For questions related to major requirements, major course prerequisites, or evaluation of transfer coursework in your major contact:

CLAS Academic Advising

clas.advising@ucdenver.edu

Visit the CLAS Advising website [here](#)

North Classroom (NC) 1030
303-315-7100

Economics Major Advising

[CLAS Major Advisor Contact Information](#)

Visit the program website [here](#)

Lawrence Street Center (LSC) 470
303-315-2030

Mathematics Major Advising

[CLAS Major Advisor Contact Information](#)

Visit the program website [here](#)

Student Commons Building (SCB) 4000
303-315-1700

GENERAL GRADUATION REQUIREMENTS & POLICIES

All CU Denver CLAS students are required to complete the following minimum general graduation requirements to be eligible to apply for graduation:

1. Complete a minimum of 120 credit hours
2. Achieve a minimum 2.0 CU cumulative grade point average (GPA)
3. Complete a minimum of 30 upper-division (3000- to 4000-level) credit hours
4. Complete all CU Denver Core, CLAS, and major requirements
5. Complete a minimum of 30 CLAS credit hours with letter grades at CU Denver

*The following are **maximum** credit hours that can apply toward the minimum 120 hours required for graduation:*

- 16 credit hours Pass/Fail
- 12 credit hours of Independent Study/Directed Research
- 12 credit hours of internship credit
- 8 credit hours of physical education credit

PROGRAM REQUIREMENTS & POLICIES

Students are responsible for meeting with the major advisors to confirm major requirements. In addition to completing all CU Denver Core and CLAS requirements, students completing the Economics B.A. and Mathematics B.S. Dual Degree are required to complete the following minimum program requirements:

1. Students must complete a minimum of 72 credit hours with a minimum of 30 ECON credit hours and a minimum of 39 MATH credit hours.
2. Students must complete a minimum of 27 upper division (3000-level and above) ECON credit hours and a minimum of 27 upper division (3000-level and above) MATH credit hours.
3. Students must earn a minimum grade of C- (1.7) in all major courses that apply to the majors and must achieve a minimum cumulative GPA of 2.0 in ECON courses and a cumulative GPA of 2.25 in MATH courses. One ECON elective with a grade of D+, D, or D- will count toward major requirements. Courses taken using P+/P/F or S/U grading cannot apply to major requirements.
4. Students must complete a minimum of 18 ECON credit hours, including ECON 4811 Introduction to Econometrics, with CU Denver faculty. Once a student has enrolled at CU Denver, no more courses in the major can be taken outside the CU Denver Economics Department. This includes courses offered at Metropolitan State University. The department reserves the right to require a demonstration of competence for any core courses not taken from CU Denver faculty. Additionally, the Department of Mathematical and Statistical Sciences requires that at least 15 upper-division Mathematics credits must be taken at CU Denver.
5. In addition to the CLAS residence requirements, the Economics Department requires that all courses other than ECON 2012 and ECON 2022 require written department approval to be transferred in as satisfying major requirements.
6. A student who attempts the dual degree but who does not fulfill all requirements for the Mathematics BS will need to complete the requirements for the Economics BA as a stand-alone degree. A Mathematics elective will substitute for one of the six economics electives only if all requirements of the Mathematics major are met.

LYNXCONNECT RESOURCES

Are you interested in learning about internship, study abroad, career, and research opportunities for this program? Visit the CU Denver LynxConnect, located in Tivoli Student Union (TV) Suite 339, and browse the LynxConnect [website](#) for more information.



Degree Requirements	Credits	Notes
* Course prerequisites change regularly. Students are responsible for consulting advisors and the class schedule in the student portal for prerequisite information. *		
CU Denver Core Curriculum Requirements	34 - 40	CU Denver Core Curriculum Requirements
CLAS Graduation Requirements		CLAS Graduation Requirements
ECON Requirements	30	<i>Minimum ECON credit hours, 27 must be upper-division</i>
ECON Required Courses		
ECON 2012 Principles of Economics: Macroeconomics	3	<i>Course can fulfill CU Denver Core Social Science</i>
ECON 2022 Principles of Economics: Microeconomics	3	<i>Course can fulfill CU Denver Core Social Science</i>
ECON 4071 Intermediate Microeconomic Theory	3	<i>*Prerequisite: C- or higher in ECON2022 and ECON3801 (or MATH2411 or 2421 with B or better grade)</i>
ECON 4081 Intermediate Macroeconomic Theory	3	<i>*Prerequisite: C- or higher in ECON2012 and ECON3801 (or MATH2411 or 2421 with B or better grade)</i>
ECON 4811 Introduction to Econometrics	3	<i>*Prerequisite: C- or higher in ECON 3811 or MATH 3382</i>
ECON Electives: Take <i>six</i> ECON elective courses or <i>five</i> ECON elective courses plus one approved MATH elective course. <i>Any six three-credit ECON courses (four of them must be 4000-level) may satisfy this requirement except internships and independent studies.</i>	15	<i>ECON 3801 and ECON 3811 cannot be counted as electives. One of the following MATH courses can be counted as one ECON elective (it may also be counted as one MATH elective): MATH 3301, 3810, 4387, 4390, 4650, or 4733.</i>
MATH Requirements	39	<i>Minimum MATH credit hours, 27 must be upper-division</i>
MATH Required Courses		
MATH 1376 Programming for Data Science or CSCI 1410 & 1411 Fundamentals of Computing with Lab*	3-4	<i>*Prerequisite: C- or higher in MATH 1109 or MATH 1110 or MATH 1120 or MATH 1130 or MATH 1401 or MATH 2830 OR entry into the MA30 or MA01 Student Group OR ALEKS PPL score 61-100 (for MATH 1376) *Corequisite: CSCI 1410/1411</i>
MATH 1401 Calculus I	4	<i>*Prerequisite: C- or higher in MATH 1109, 1070, or 1110 and MATH 1120; or C- or higher in MATH 1130; or C- or higher in MATH 1401; or entry into the MA01 Student Group OR ALEKS PPL score 76-100. Course can fulfill CU Denver Core Mathematics</i>
MATH 2411 Calculus II	4	<i>*Prerequisite: C- or higher in MATH 1401 Course can fulfill CU Denver Core Mathematics</i>
MATH 2421 Calculus III	4	<i>*Prerequisite: C- or higher in MATH 2411 Course can fulfill CU Denver Core Mathematics</i>
MATH 3000 Introduction to Abstract Mathematics	3	<i>*Prerequisite: B- or higher in MATH 2411 - recommended *Corequisite: MATH 2421 OR MATH 3191</i>
MATH 3191 Applied Linear Algebra	3	<i>*Prerequisite: C- or higher in MATH 1401</i>
MATH 3200 Elementary Differential Equations	3	<i>*Prerequisite: C- or higher in MATH 2411 and Corequisite: MATH 3191</i>
MATH 3310 Introduction to Real Analysis I	3	<i>*Prerequisite: C- or higher in MATH 2421 OR *Prerequisite A- or higher in MATH 1401 and Corequisite: MATH 2411</i>
MATH 3382 Statistical Theory	3	<i>*Prerequisite: C- or higher in MATH 2421</i>
MATH 4779 Math Clinic	3	<i>*Prerequisite: C- or higher in MATH 3191, either MATH 1376 or CSCI 1410/1411, and 6 additional credit hours in upper-division MATH courses</i>
MATH Electives: Take <i>four</i> MATH elective courses or <i>three</i> MATH elective courses plus one approved ECON elective course. <i>Any four approved MATH electives (at least 12 credit hours) above 3000-level may satisfy this requirement except MATH 3041, 3195, 3511, 3800, and 4830.</i>	9	<i>One of the following ECON courses can be counted as one MATH elective (it may also be counted as one ECON elective): ECON 4030, 4110, 4150, 4320, 4430, 4550, 4610, 4740, or 4812.</i>
Estimated General Electives	11 - 17	<i>General Elective credit hours will vary. Students are highly encouraged to explore and complete additional programs including certificates, minors, double-majors, and dual-degrees. Consult with CLAS Academic Advisor.</i>
Total Minimum Credit Hours:	120	<i>30 credit hours must be upper-division</i>

SAMPLE ACADEMIC PLAN OF STUDY

The following academic plan is a *sample* pathway to completing degree requirements for this major. Students should tailor this plan based on previously completed college coursework (e.g., AP, IB, CLEP, dual/concurrent enrollment, and transfer credit), course availability, and individual preferences related to course load, schedules, or add-on programs such as certificates, minors, double-majors, or dual-degrees. **Students must meet with the Economics & Mathematics major advisors to create an individualized plan of study.**

Year 1 - Fall	CRS
ENGL 1020 – Core Composition I	3
CU Denver Core Mathematics – MATH 1401 ^{PE}	4
ECON 2012 ^C	3
MATH 1376 or CSCI 1410 & 1411 ^{PE}	3-4
CU Denver Core Arts / First-Year Seminar	3
Total Credit Hours	16-17

Year 1 - Spring	CRS
ENGL 2030 – Core Composition II	3
MATH 2411 ^{PE}	4
ECON 2022 ^C	3
CU Denver Core Humanities	3
General Elective	3
Total Credit Hours	16

Year 2 - Fall	CRS
MATH 2421 ^{PE}	4
MATH 3000 ^{PE}	3
ECON 4071 ^{PE}	3
CU Denver Core Nat/Phys Science with Lab	4
Total Credit Hours	14

Year 2 - Spring	CRS
MATH 3200 ^{PE}	3
MATH 3191 ^{PE}	3
ECON 4081 ^{PE}	3
CU Denver Core Behavioral Science	3
General Elective	3
Total Credit Hours	15

Year 3 - Fall	CRS
MATH 3382 ^{PE}	3
MATH 3310 ^{PE}	3
ECON Elective Course (<i>see ECON Advisor</i>)	3
General Elective	3
General Elective	3
Total Credit Hours	15

Year 3 - Spring	CRS
ECON 4811 ^{PE}	3
ECON Elective Course (<i>see ECON Advisor</i>)	3
MATH Elective Course	3
General Elective	3
General Elective	3
Total Credit Hours	15

Year 4 - Fall	CRS
MATH Elective Course	3
ECON Elective Course (<i>see ECON Advisor</i>)	3
ECON Elective Course (<i>see ECON Advisor</i>)	3
MATH/ECON Elective Course	3
CU Denver Core Cultural Diversity ^M	3
Total Credit Hours	15

Year 4 - Spring	CRS
MATH 4779 ^{PE}	3
ECON Elective Course (<i>see ECON Advisor</i>)	3
MATH Elective Course	3
ECON/MATH Elective Course	3
CU Denver Core International Perspectives	3
Total Credit Hours	15

^M Major Course Available ^C CU Denver Core Course ^{PE} Prerequisite Enforced ^{PR} Prerequisite Recommended