

ECONOMICS, BS

Banner Code: LA-BS-ECON

D150 Buchanan Hall
Fairfax Campus

Website: economics.gmu.edu/programs/la-bs-econ

Economics is about more than money and profits. It is a way of looking at the world through the lens of incentives, choices, and markets to help uncover new solutions to the persistent problems in our society. This economic perspective sheds light on important issues in the areas of production, education, crime, the environment, international trade, immigration, health care, economic growth, poverty, and more. The BS in Economics provides a stronger emphasis on quantitative analysis. Students prepare for a career as an analyst in government, consulting, trade associations, or other private sector positions, and for graduate school in economics or more quantitative business administration programs.

Admissions & Policies

Policies

Students pursuing this degree must complete a minimum of 59 credits of required coursework with a minimum GPA of 2.00. Students completing a concentration will complete additional credits.

For policies governing all undergraduate degrees, see AP.5 Undergraduate Policies.

Requirements

Degree Requirements

Total credits: minimum 120

Students should be aware of the specific policies associated with this program, located on the Admissions & Policies tab.

Some economics courses may fulfill the Mason Core requirement in global understanding. Check with the departmental advising office for more information. Economics majors can fulfill the Mason Core synthesis requirement with ECON 309 Economic Problems and Public Policies (Mason Core).

Core Courses without Concentration

Required Courses

| Code | Title | Credits |
|----------|---|---------|
| ECON 103 | Contemporary Microeconomic Principles (Mason Core) (with a grade of C or above) | 3 |
| ECON 104 | Contemporary Macroeconomic Principles (Mason Core) (with a grade of C or above) | 3 |
| ECON 306 | Intermediate Microeconomics | 3 |
| ECON 311 | Intermediate Macroeconomics | 3 |
| ECON 345 | Introduction to Econometrics | 3 |
| MATH 113 | Analytic Geometry and Calculus I (Mason Core) | 4 |

| | | |
|--------------------------------|--|-------|
| MATH 114 | Analytic Geometry and Calculus II | 4 |
| Select one from the following: | | 3-4 |
| IT 104 | Introduction to Computing (Mason Core) | |
| CS 112 | Introduction to Computer Programming (Mason Core) | |
| HNRS 353 & MIS 102 | Technology in the Contemporary World (Topic Varies) (Mason Core) and Spreadsheet Applications for Business | |
| Total Credits | | 26-27 |

Statistics

| Code | Title | Credits |
|---|--|---------|
| Select one from the following: ¹ | | 6 |
| STAT 250 & STAT 350 | Introductory Statistics I (Mason Core) and Introductory Statistics II | |
| STAT 344 & STAT 354 | Probability and Statistics for Engineers and Scientists I and Probability and Statistics for Engineers and Scientists II | |
| Total Credits | | 6 |

¹ With departmental permission, BUS 210 Business Analytics I and BUS 310 Business Analytics II may also be substituted for the two required courses in statistics; however, a two-course sequence of STAT 250 Introductory Statistics I (Mason Core) and STAT 350 Introductory Statistics II OR STAT 344 Probability and Statistics for Engineers and Scientists I and STAT 354 Probability and Statistics for Engineers and Scientists II is highly recommended for students who wish to pursue graduate study in economics.

Additional Course

| Code | Title | Credits |
|---------------|---|---------|
| ACCT 203 | Survey of Accounting | 3 |
| or STAT 362 | Introduction to Computer Statistical Packages | |
| Total Credits | | 3 |

Electives without Concentration

| Code | Title | Credits |
|--|-------|---------|
| Electives | | |
| Select 24 credits of electives from courses in economics at the 300 and 400 level ¹ | | 24 |
| Total Credits | | 24 |

¹ ECON 385 International Economic Policy may not be used to fulfill this requirement. If ECON 340 Introduction to Mathematical Economics is chosen as an elective, students need not take the 4-credit course MATH 114 Analytic Geometry and Calculus II; however, MATH 114 Analytic Geometry and Calculus II is strongly recommended for students considering graduate school in economics since it is required for admission to most graduate programs. An additional calculus course beyond MATH 114 Analytic Geometry and Calculus II is also advisable for students considering graduate study in economics.

Optional Concentrations

Students interested in a degree in economics with a concentration will complete the coursework for one of the concentrations below.

Available Concentrations

- Concentration in Managerial Economics (MECN)
- Concentration in Philosophy, Politics, and Economics (PPE)

Concentration in Managerial Economics (MECN)

Students who wish to focus their BS in economics for application in the business world may choose to pursue a concentration in managerial economics. They complete 62 credits, 10 of which may be used also to fulfill Mason Core requirements.

Required Courses

| Code | Title | Credits |
|---------------|--|---------|
| ECON 103 | Contemporary Microeconomic Principles (Mason Core) | 3 |
| ECON 104 | Contemporary Macroeconomic Principles (Mason Core) | 3 |
| ECON 306 | Intermediate Microeconomics | 3 |
| ECON 308 | Managerial Economics and Strategy | 3 |
| ECON 310 | Money and Banking | 3 |
| ECON 311 | Intermediate Macroeconomics | 3 |
| ECON 345 | Introduction to Econometrics | 3 |
| Total Credits | | 21 |

Statistics

| Code | Title | Credits |
|---|--|---------|
| Select one from the following: ¹ | | 6 |
| STAT 250 & STAT 350 | Introductory Statistics I (Mason Core) and Introductory Statistics II | |
| STAT 344 & STAT 354 | Probability and Statistics for Engineers and Scientists I and Probability and Statistics for Engineers and Scientists II | |
| Total Credits | | 6 |

¹ With departmental permission, BUS 210 Business Analytics I and BUS 310 Business Analytics II may also be substituted for the two required courses in statistics; however, a two-course sequence of STAT 250 Introductory Statistics I (Mason Core) and STAT 350 Introductory Statistics II OR STAT 344 Probability and Statistics for Engineers and Scientists I and STAT 354 Probability and Statistics for Engineers and Scientists II is highly recommended for students who wish to pursue graduate study in economics.

Required Courses in Math, Accounting, and Information Technology

| Code | Title | Credits |
|--------------------------------|--|---------|
| ACCT 203 | Survey of Accounting | 3 |
| Select one from the following: | | 3-4 |
| IT 104 | Introduction to Computing (Mason Core) | |
| CS 112 | Introduction to Computer Programming (Mason Core) | |
| HNRS 353 & MIS 102 | Technology in the Contemporary World (Topic Varies) (Mason Core) and Spreadsheet Applications for Business | |

| | | |
|---------------|--|-------|
| MATH 113 | Analytic Geometry and Calculus I (Mason Core) | 4 |
| MATH 114 | Analytic Geometry and Calculus II ¹ | 4 |
| Total Credits | | 14-15 |

¹ ECON 340 Introduction to Mathematical Economics may not be substituted for MATH 114 Analytic Geometry and Calculus II for the concentration

Two Required Courses in Business Writing

| Code | Title | Credits |
|---------------|--|---------|
| BUS 103 | Develop Professional Skills I: Foundational Elements | 3 |
| BUS 303 | Develop Professional Skills II: Advanced Elements | 3 |
| Total Credits | | 6 |

Electives in Economics

| Code | Title | Credits |
|--------------------------------------|---|---------|
| Select 9 credits from the following: | | 9 |
| ECON 321 | Economics of Labor | |
| ECON 370 | Economics of Industrial Organization | |
| ECON 390 | International Economics (Mason Core) | |
| ECON 412 | Game Theory and Economics of Institutions | |
| ECON 415 | Law and Economics | |
| ECON 420 | International Money and Finance | |
| ECON 421 | Financial Economics | |
| ECON 496 | Special Topics in Economics | |
| Total Credits | | 9 |

Additional Electives in Economics

| Code | Title | Credits |
|---|-------|---------|
| Select 6 credits of electives in economics from courses at the 300 and 400 level ¹ | | 6 |
| Total Credits | | 6 |

¹ ECON 385 International Economic Policy may not be used to fulfill this requirement.

Elective not in Economics

| Code | Title | Credits |
|---|---|---------|
| Select one elective from the following: | | 3 |
| BULE 303 | Legal Environment of Business | |
| FNAN 303 | Financial Management | |
| MGMT 303 | Principles of Management | |
| MKTG 303 | Principles of Marketing | |
| MIS 303 | Introduction to Business Information Systems (Mason Core) | |
| OM 303 | Operations Management | |
| Total Credits | | 3 |

Concentration in Philosophy, Politics, and Economics (PPE)

This is a high credit concentration for students interested in a program that explores the interdisciplinary connections between philosophy, political science, and economics.

Required Courses in Economics

| Code | Title | Credits |
|---------------|--|---------|
| ECON 103 | Contemporary Microeconomic Principles (Mason Core) | 3 |
| ECON 104 | Contemporary Macroeconomic Principles (Mason Core) | 3 |
| ECON 306 | Intermediate Microeconomics | 3 |
| ECON 311 | Intermediate Macroeconomics | 3 |
| ECON 345 | Introduction to Econometrics | 3 |
| ECON 412 | Game Theory and Economics of Institutions | 3 |
| Total Credits | | 18 |

Statistics

| Code | Title | Credits |
|---|--|---------|
| Select one from the following: ¹ | | 6 |
| STAT 250 & STAT 350 | Introductory Statistics I (Mason Core) and Introductory Statistics II | |
| STAT 344 & STAT 354 | Probability and Statistics for Engineers and Scientists I and Probability and Statistics for Engineers and Scientists II | |
| Total Credits | | 6 |

¹ With departmental permission, BUS 210 Business Analytics I and BUS 310 Business Analytics II may also be substituted for the two required courses in statistics; however, a two-course sequence of STAT 250 Introductory Statistics I (Mason Core) and STAT 350 Introductory Statistics II OR STAT 344 Probability and Statistics for Engineers and Scientists I and STAT 354 Probability and Statistics for Engineers and Scientists II is highly recommended for students who wish to pursue graduate study in economics.

Required Courses in Math and Information Technology

| Code | Title | Credits |
|--------------------------------|--|---------|
| Select one from the following: | | 3-4 |
| IT 104 | Introduction to Computing (Mason Core) | |
| CS 112 | Introduction to Computer Programming (Mason Core) | |
| HNRS 353 & MIS 102 | Technology in the Contemporary World (Topic Varies) (Mason Core) and Spreadsheet Applications for Business | |
| MATH 113 | Analytic Geometry and Calculus I (Mason Core) | 4 |
| MATH 114 | Analytic Geometry and Calculus II | 4 |
| Total Credits | | 11-12 |

Electives

| Code | Title | Credits |
|---|-------|---------|
| Select 18 credits of electives in economics at the 300 and 400 level ¹ | | 18 |
| Total Credits | | 18 |

¹ ECON 385 International Economic Policy may not be used to fulfill this requirement. If ECON 340 Introduction to Mathematical Economics is chosen as an elective, students need not take the 4-credit course MATH 113 Analytic Geometry and Calculus I (Mason Core); however, MATH 114 Analytic Geometry and Calculus II is strongly recommended for students considering graduate school in economics since it is required for admission to most graduate programs. An additional calculus beyond MATH 113 Analytic Geometry and Calculus I (Mason Core) is also advisable for students considering graduate study in economics.

Philosophy

| Code | Title | Credits |
|--------------------------------|--|---------|
| PHIL/GOVT 324 or PHIL/GOVT 327 | Modern Western Political Theory Contemporary Western Political Theory | 3 |
| PHIL 357 or PHIL 371 | Philosophy of the Social Sciences Philosophy of Natural Sciences | 3 |
| PHIL 358 | Ethics and Economics | 3 |
| PHIL 411 | Theories of Decision | 3 |
| Total Credits | | 12 |

Public and International Affairs

| Code | Title | Credits |
|---------------|--|---------|
| GOVT 103 | Introduction to American Government (Mason Core) | 3 |
| GOVT/PHIL 323 | Classical Western Political Theory | 3 |
| GOVT 422 | Constitutional Interpretation | 3 |
| GOVT 467 | Current Issues in Economic Policy | 3 |
| Total Credits | | 12 |

Capstone Experience Course

| Code | Title | Credits |
|---------------------------|--|---------|
| GOVT 469 or PHIL/ECON 460 | Philosophy, Politics, and Economics Senior Seminar in Philosophy, Politics, and Economics | 3 |
| Total Credits | | 3 |

Writing-Intensive Requirement

The university requires all students to complete at least one course designated as "writing intensive" in their majors at the 300 level or above. Students majoring in economics fulfill this requirement by successfully completing:

| Code | Title | Credits |
|--------------------------------|---|---------|
| Select one from the following: | | 3 |
| ECON 345 | Introduction to Econometrics | |
| ECON 355 | The Political Economy of Nonprofit Institutions | |
| ECON 365 | Topics in Economic History | |
| ECON 435 | Economics of Energy | |
| ECON 470 | Economics of Regulation | |
| Total Credits | | 3 |

Upper Level Requirements

Students seeking a bachelor's degree must apply at least 45 credits of upper-level courses (numbered 300 or above) toward graduation requirements.

Additional Electives

Any remaining credits may be completed with elective courses to bring the degree total to 120.

Mason Core

Note: Some Mason Core requirements may already be fulfilled by the major requirements listed above. Students are strongly encouraged to consult their advisors to ensure they fulfill all remaining Mason Core requirements.

| Code | Title | Credits |
|---------------------------------|--------------------------------------|-----------|
| Foundation Requirements | | |
| | Written Communication (ENGH 101) | 3 |
| | Oral Communication | 3 |
| | Quantitative Reasoning | 3 |
| | Information Technology and Computing | 3 |
| Exploration Requirements | | |
| | Arts | 3 |
| | Global Understanding | 3 |
| | Literature | 3 |
| | Natural Science | 7 |
| | Social and Behavioral Sciences | 3 |
| | Western Civilization/World History | 3 |
| Integration Requirements | | |
| | Written Communications (ENGH 302) | 3 |
| | Writing-Intensive ¹ | 3 |
| | Synthesis/Capstone ² | 3 |
| | Total Credits | 40 |

¹ Most programs include the writing-intensive course designated for the major as part of the major requirements; this course is therefore not counted towards the total required for Mason Core.

² Minimum 3 credits required.

Honors

Honors in the Major

Students pursuing departmental honors must complete 6 hours of ECON 495 RS: Honors Thesis in Economics culminating with an original work of research and an oral presentation. Requirements for departmental honors are in addition to the coursework required for the major. Students must complete ECON 495 RS: Honors Thesis in Economics with a grade of B or higher to receive departmental honors.

Economics majors who have completed 90 credits with an overall GPA of 3.50 and a GPA of 3.50 within the major are eligible to apply. Not all applicants who meet the minimum requirements are guaranteed acceptance.

Applications will be available starting May 1st of each year. Applications are due by August 1st.

To be accepted into the program and enroll in ECON 495 RS: Honors Thesis in Economics students must submit a research proposal. Research proposals can be developed independently or by completing ECON 494 Introduction to Independent Research in Economics with a grade of B or higher. Completion of ECON 494 Introduction to Independent Research in Economics is not required for departmental honors.

Accelerated Master's

The accelerated master's programs listed below specify the BS in economics as a feeder degree for their programs. It is important to note, however, that many accelerated master's programs are available for any bachelor's degree at Mason, including this one. See the full list of master's degrees with accelerated programs at George Mason.

Economics, BA or BS/Economics, Accelerated MA

Overview

Highly-qualified Mason economics majors may apply to the accelerated master's degree program. If accepted, students will be able to earn both a BA or BS and a MA in economics after satisfactory completion of 144 credits. Graduates are exceptionally well-prepared for professional school or a PhD program in economics or a related discipline.

For more detailed information, see AP.6.7 Bachelor's/Accelerated Master's Degrees. For policies governing all graduate degrees, see AP.6 Graduate Policies.

Application Requirements

Applicants to all graduate programs at George Mason University must meet the admission standards and application requirements for graduate study as specified in Graduate Admissions. For information specific to the accelerated MA in economics, see Application Requirements and Deadlines (<http://economics.gmu.edu/programs/application/LA-MA-ACEL-ECON>) on the departmental web site.

Accelerated Option Requirements

While undergraduate students, accelerated master's students will be required to complete two master's courses to be applied to the undergraduate degree as upper level credit. These two courses must be selected from the following five courses:

| Code | Title | Credits |
|--------------------------------|--------------------------------|----------|
| Select two from the following: | | 6 |
| ECON 535 | Survey of Applied Econometrics | |
| ECON 611 | Microeconomic Theory | |
| ECON 612 | Microeconomic Theory II | |
| ECON 615 | Macroeconomic Theory | |
| ECON 630 | Mathematical Economics I | |
| Total Credits | | 6 |

Once admitted to the accelerated master's pathway, students must maintain a minimum cumulative GPA of 3.25 in all course work and earn a grade of B or better (3.00 or higher) in course work applied to their major. Upon completion and conferral of the undergraduate degree in the semester indicated in the application, they submit the Bachelor's/

Accelerated Master's Transition Form and are admitted to graduate status.

As graduate students, accelerated master's students have an advanced standing. They must meet all master's degree requirements except for the two courses (6 credits) they completed as undergraduates. Students must begin their master's program the semester immediately following conferral of the undergraduate degree.

Reserve Graduate Credit

While undergraduate students, accelerated master's students may take an additional two master's courses as reserve graduate credit. These two additional master's courses must be selected from the following five courses:

| Code | Title | Credits |
|--------------------------------|--------------------------------|---------|
| Select two from the following: | | 6 |
| ECON 535 | Survey of Applied Econometrics | |
| ECON 611 | Microeconomic Theory | |
| ECON 612 | Microeconomic Theory II | |
| ECON 615 | Macroeconomic Theory | |
| ECON 630 | Mathematical Economics I | |
| Total Credits | | 6 |

These credits do not apply to the undergraduate degree. To apply these credits to the master's degree, students should use the Bachelor's/Accelerated Master's Transition Form.

The ability to take courses, including ones not listed above, for reserve graduate credit is available to all high achieving undergraduates with the permission of the department. Permission is normally granted only to qualified Mason seniors within 15 hours of graduation. See AP.1.4.4 Graduate Course Enrollment by Undergraduates.

BS (selected)/Statistical Science, Accelerated MS

Overview

Highly-qualified students in selected BS programs (see below) have the option of obtaining an accelerated Statistical Science, MS. Students in an accelerated degree program must fulfill all university requirements for the master's degree.

For more detailed information, see AP.6.7 Bachelor's/Accelerated Master's Degrees. For policies governing all graduate degrees, see AP.6 Graduate Policies.

Admission Requirements

Students enrolled in a BS degree in any one of the Volgenau School major areas, in the Mathematics, BS program from the College of Science, or in the Economics, BS program from the College of Humanities and Social Sciences may apply to this option if they have earned 90 undergraduate credits with an overall GPA of 3.00. Criteria for admission are identical to criteria for admission to the Statistical Science, MS program, which include successful completion of the following Mason courses each with a grade of C or better:

| Code | Title | Credits |
|----------|---|---------|
| MATH 113 | Analytic Geometry and Calculus I (Mason Core) | 4 |
| MATH 114 | Analytic Geometry and Calculus II | 4 |

| | | |
|-------------------------|---|---|
| MATH 213 | Analytic Geometry and Calculus III | 3 |
| MATH 203 or MATH 321 | Linear Algebra Abstract Algebra | 3 |
| STAT 250 or STAT 344 | Introductory Statistics I (Mason Core) Probability and Statistics for Engineers and Scientists I | 3 |
| STAT 346 or MATH 351 | Probability for Engineers Probability | 3 |

Accelerated Option Requirements

Students must complete all credits that satisfy requirements for the BS and MS programs, with 6 credits overlapping with grades of B or better in two 500-level STAT courses selected from STAT 544 Applied Probability, STAT 554 Applied Statistics I, and STAT 574 Survey Sampling I.

Degree Conferral

Students must apply the semester before they expect to complete the BS requirements to have the BS degree conferred. In addition, at the beginning of the student's final undergraduate semester, students must complete a Bachelor's/Accelerated Master's Transition form that is submitted to the Office of the University Registrar and Graduate Recruitment and Enrollment Services. At the completion of MS requirements, a master's degree is conferred.