# QUANTITATIVE ECONOMICS - BS

The Quantitative Economics major at St. Catherine University equips students to improve social issues and business decisions with a rigorous analytical toolkit rooted in economics, mathematics, statistics, and data science. This interdisciplinary program trains students to apply quantitative reasoning, coding, economic modeling, and data visualization to address real-world challenges in public policy, finance, business, and social advocacy.

The Quantitative Economics major at St. Catherine University equips students with the tools to address real-world challenges and make meaningful contributions to both business and society. Combining economics, mathematics, statistics, and data science, the program offers a rigorous analytical foundation for those interested in using data to inform public policy, guide ethical decision-making, and support community well-being.

This interdisciplinary curriculum emphasizes quantitative reasoning, coding, economic modeling, and data visualization. Students engage with pressing issues such as labor market outcomes, environmental sustainability, and economic development through coursework in econometrics, optimization, cost-benefit analysis, and forecasting. These classes are supported by advanced training in data science, computer science, and mathematical statistics.

Graduates are well prepared for roles as policy analysts, researchers, economic consultants, and data-informed decision-makers across sectors, including government, nonprofits, education, healthcare, economic consulting, business, and finance. Many also pursue advanced study in economics, public policy, data science, law, and related fields.

With an emphasis on evidence-based analysis, the major helps students develop the skills to lead in data-driven organizations and contribute to conversations about economic equity, sustainability, and inclusive growth. Through professional writing, data storytelling, and clear communication, students learn to translate technical findings into actionable insights.

Outside the classroom, students gain hands-on experience through internships and collaborative research with faculty on topics such as educational equity, housing policy, and international development. Majors regularly present at undergraduate research conferences, and recent internship placements include the Minneapolis Federal Reserve, Ramsey County, Aeon, Wells Fargo, 3M, Sun Country Airlines, and the Minnesota Department of Transportation.

The program develops skilled analysts, researchers, and advocates who are ready to lead with integrity and use economics to improve lives in an increasingly data-driven world.

This major is offered in the College for Women.

**Curriculum**

| Code | Title | Credits |
|---|---|---|
| **Prerequisite Course** | | |
| ECON 1090 | Statistical Analysis for Decision Making [1] | 4 |
| **Total Credits** | | **4** |

[1] Or equivalent statistics course

| Code | Title | Credits |
|---|---|---|
| **Required Courses** | | |
| ECON 1120 | Economics of Social Issues | 4 |
| ECON 2610 | Principles of Microeconomics | 4 |
| ECON 2620 | Principles of Macroeconomics | 4 |
| ECON 3050 | Quantitative Impact Evaluation: Applied Research Skills | 4 |
| ECON 3610 | Microeconomic Theory | 4 |
| ECON 3620 | Macroeconomic Theory | 4 |
| ECON 3650 | Cost-Benefit Analysis | 4 |
| ECON 4150 | Econometrics | 4 |
| ECON 4500 | Practicum | 4 |
| ECON 4850W | Theory to Action | 4 |
| **Total Credits** | | **40** |

| Code | Title | Credits |
|---|---|---|
| **Supporting Requirements** | | |
| ECON 3994 | Methods & Modeling in Economics | 4 |
| MATH 1130 | Calculus I | 4 |
| Choose one math course in consultation with advisor | | 4 |
| Choose two courses from the following departments in consultation with advisor | | 8 |
| | Statstics | |
| | Data Science | |
| | Computer Science | |
| **Total Credits** | | **20** |

| Code | Title | Credits |
|---|---|---|
| **Fall Term** | | |
| **Spring Term** | | |
| **Fall Term** | | |
| **Spring Term** | | |
| **Fall Term** | | |
| **Spring Term** | | |