Economics, MSAE

Program Director: Dr. Nicholas Jolly, Ph.D.
MS in Applied Economics website (http://business.marquette.edu/academics/msae/)

Degree Offered
Master of Science in Applied Economics, Plan B Professional Project option only.

Program Description
The master of science program in applied economics is designed for individuals seeking careers as economics, financial or marketing analysts in business, industry, government or the financial sector. The program provides students with the solid grounding in economic theory and the working knowledge of advanced quantitative methods needed to succeed as business economists, financial analysts, economic and marketing researchers, government staff economists or economic consultants. The program concentrates on developing and applying practical skills which can be used to solve real problems confronting business and government. The curriculum is designed to produce practitioners who can develop and interpret economic models. Courses emphasize the application of economic theory and the use of quantitative techniques rather than the derivation of their theoretical underpinnings. Communication skills are stressed through frequent written and oral presentations of results from applied research projects.

Prerequisites for Admission
Applicants are expected to have a baccalaureate degree with at least one course in each of the following areas: intermediate microeconomic theory, intermediate macroeconomic theory, statistical methods and calculus. Familiarity with personal computers is also required.

Specializations
Applied Economic Analysis, Business Economics, Business and Managerial Analytics, Financial Economics, Marketing Research

Application Requirements
Application requirements and the online application link are available through the GSM website (https://www.marquette.edu/business/graduate/ms-economics.php).

Note: Students may apply for regular degree, non-degree or temporary non-degree status. Non-degree applicants and temporary non-degree applicants must submit all required application materials, except the GMAT/GRE scores. Non-degree and temporary non-degree status are not available to international students. International applicants must apply for regular degree admission status.

Students are encouraged to complete all application materials and apply for degree status. Non-degree status and temporary non-degree status are valid for a term or a limited number of terms as approved by the program director. Students with non-degree or temporary non-degree status are not eligible to continue taking GSM classes beyond the time frame the approved term(s) without degree admission. Typically, non-degree admission is not recommended in the M.S.A.E. program.

Master of Science in Applied Economics (M.S.A.E)


The master of science in applied economics (M.S.A.E.) program requires a minimum of 30 credit hours of course work (at least 15 of which must be in 6000-level graduate courses), a non-credit master's professional project and an oral comprehensive examination.

Each student completes a specialization. Course work includes: 12 credit hours of required core courses in economic theory and quantitative analysis, 12 credit hours of course work relating to a chosen area of specialization and six credit hours of electives. Specializations include applied economic analysis (with a policy focus or self-directed focus), business economics, business and managerial analytics, financial economics, and marketing research. With the approval of the program director and appropriate extra work of graduate caliber, a student may apply toward the degree up to six credit hours of selected 5000-level upper-division courses. Also, with the approval of the program director, a student may substitute, for the usual elective requirements, up to six credit hours of course work in fields outside of economics and business administration.

The master's professional project consists of a careful application of newly acquired analytical skills to a particular issue or problem. The professional project is completed during the final term of the program and is often an extension of a previously completed course project. The outline for the M.S.A.E. Professional Project form is posted to the Graduate School of Management's website. Refer to the Academic Calendar (https://www.marquette.edu/central/registrar/calendars-exams-schedules.php) in this bulletin for the professional project outline and the professional project submission deadlines.

An oral comprehensive examination is administered in the student's last term of the program. This examination covers subject matter prescribed by the Department of Economics.
Program Details

Each student must choose one of the areas of specialization: applied economic analysis, business economics, business and managerial analytics, financial economics or marketing research. All specializations require a common set of core courses: two courses in quantitative analysis ECON 6560 Applied Econometrics and ECON 6561 Applied Time-Series Econometrics and Forecasting and two courses in microeconomic and macroeconomic theory ECON 6503 Microeconomic Theory and Applications and ECON 6504 Macroeconomic Theory and Applications. ECON 6560 Applied Econometrics is strongly recommended to be taken in the first term of course work.

Applied Economic Analysis

Within the applied economic analysis specialization, there are two focus areas available: policy focus and self-directed focus.

The policy focus is designed for students who are interested in careers in the public sector requiring policy analysis. The goal is to provide students training in technical and research skills needed by non-academic professional economists for applying basic economic theory to specific policy problems.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 6506</td>
<td>Industrial Organization and Public Policy</td>
<td>12</td>
</tr>
<tr>
<td>ECON 6510</td>
<td>Economics of the Public Sector</td>
<td></td>
</tr>
<tr>
<td>ECON 6512</td>
<td>Studies in Urban and Regional Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 6520</td>
<td>Studies in Labor Market Analysis</td>
<td></td>
</tr>
<tr>
<td>ECON 6522</td>
<td>Studies in Health Economics</td>
<td></td>
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<tr>
<td>ECON 5005</td>
<td>Sports Economics</td>
<td></td>
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<tr>
<td>ECON 5072</td>
<td>Behavioral Economics</td>
<td></td>
</tr>
</tbody>
</table>

12 credit hours chosen from the following:

6 additional credits from business, economics, computer science, mathematics, statistics or social sciences

Total Credit Hours: 18

The self-directed focus provides a more flexible option for students who wish to focus almost exclusively on economics courses. This focus requires the core course work plus: 12 credits in economics and 6 elective hours in economics, business administration, computer science, mathematics, statistics or social sciences.

Business Economics

The business economics specialization is suitable for individuals seeking careers in the private sector in industries such as utilities, services and manufacturing. It combines economics courses with such business courses as managerial accounting, marketing management and operations management to name a few.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACCO 6200</td>
<td>Managerial Accounting for Decision Making</td>
<td>3</td>
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</tbody>
</table>

Economics Courses

6-9 credit hours chosen from the following:

6-9 credit hours chosen from the following:

Total Credit Hours 18

Business and Managerial Analytics

The business and managerial analytics specialization is designed to provide the tools, structure and practice to help begin a career that focuses on investigation and analysis of big data to support data-driven business decisions. Students completing the specialization gain a practical set of skills across the entire range of analytics activities that can be applied to a wide variety of business tasks.
### Analytics Requirement - 3 credits

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>MBA 6100</td>
<td>Business Analytics</td>
<td>3</td>
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</tbody>
</table>

Graduate electives in economics 6 credits

9 credits chosen from the following, with no more than 6 credits in any one area:

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<thead>
<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>MARK 6160</td>
<td>Marketing Research</td>
<td></td>
</tr>
<tr>
<td>MARK 6165</td>
<td>Marketing Analytics</td>
<td></td>
</tr>
<tr>
<td>COSC 5610</td>
<td>Data Mining</td>
<td></td>
</tr>
<tr>
<td>COSC 6510</td>
<td>Data Intelligence</td>
<td></td>
</tr>
<tr>
<td>COSC 6820</td>
<td>Data Ethics</td>
<td></td>
</tr>
<tr>
<td>INSY 6159</td>
<td>Design and Management of Database Systems</td>
<td></td>
</tr>
</tbody>
</table>

**OR**

Three credits may be from GSM 1-credit skills classes chosen from the following:

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>BUAD 6112</td>
<td>Skills: SAS</td>
<td></td>
</tr>
<tr>
<td>BUAD 6113</td>
<td>Skills: SPSS</td>
<td></td>
</tr>
<tr>
<td>ECON 6114</td>
<td>R Programming</td>
<td></td>
</tr>
<tr>
<td>ECON 6118</td>
<td>Python Programming</td>
<td></td>
</tr>
<tr>
<td>ECON 6931</td>
<td>Topics in Economics</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours:** 18

### Financial Economics

The financial economics specialization is appropriate for those interested in a career in the financial services sector including commercial and investment banks, insurance companies and wealth management. It blends such economics courses as monetary theory and policy with courses in financial policy and advanced seminar in finance. Financial economics requires the core course work plus:

<table>
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<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACCO 6200</td>
<td>Managerial Accounting for Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>ECON 6580</td>
<td>Monetary Theory and Policy</td>
<td>3</td>
</tr>
<tr>
<td>FINA 6200</td>
<td>Advanced Financial Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Graduate level finance class 3 credits

Graduate electives in economics 6 credits

**Total Credit Hours:** 18

### Marketing Research

The marketing research specialization is designed for students interested in a career in marketing research and market analysis, working either for marketing research consulting companies or in marketing research departments of companies in the service, manufacturing or financial sector. It combines the applied econometric and forecasting courses taught in the economics core with courses in marketing management, marketing research and other traditional marketing areas. Marketing research requires the core course work plus:

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<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARK 6160</td>
<td>Marketing Research</td>
<td>3</td>
</tr>
<tr>
<td>MARK 6200</td>
<td>Marketing for Management Decision Making</td>
<td>3</td>
</tr>
</tbody>
</table>

Six credit hours from graduate MARK courses 6 credits

3 credits may be from GSM 1-credit skills classes (BUAD 6112, BUAD 6113); ECON 6114, ECON 6118, ECON 6931

Graduate electives in economics 6 credits

**Total Credit Hours:** 18

**Note:** Graduate School of Management courses may require appropriate prerequisites.

### Research Involving Humans or Animals

A student whose research either on or with humans or animals must receive written approval before undertaking such research. The approval forms for human or animal research may be obtained through the Office of Research Compliance. This approval form and any additional paperwork must be submitted to the Graduate School of Management. Additional information may be found at marquette.edu/researchcompliance. (http://www.marquette.edu/researchcompliance/)
MASTER’S DEGREE WITH THE BUSINESS AND MANAGERIAL ANALYTICS CERTIFICATE

The Graduate School of Management offers a business and managerial analytics certificate. If an applied economics master’s student chooses to earn the business and managerial analytics certificate, admission to both programs must be concurrent. The same courses may be used to satisfy the requirements of the master’s program and certificate, as outlined in the University Bulletin for each program. Students are expected to be admitted into all programs they intend to complete, although course work completed prior to admission may be allowed to apply toward program requirements. Note that Marquette Bulletin guidelines do not allow a student to complete a specialization and a certificate in the same area. Therefore, the business and managerial analytics certificate may not be combined with the applied economics business and managerial analytics specialization.

Details on the business and managerial analytics certificate can be found in this section (https://bulletin.marquette.edu/business-administration/business-managerial-analytics-certificate/#requirementstext) of the bulletin.

Accelerated BACHELOR’S–MASTER’S Degree Program

This five-year program allows students to earn both their master of science in applied economics (M.S.A.E.) and an undergraduate degree from the College of Arts and Sciences or the College of Business Administration. Undergraduate students may begin their graduate work in their junior year. A maximum of 9 credits may count for both the undergraduate and graduate degrees.

Should a student be denied admission to the M.S.A.E. program, the courses are counted toward the undergraduate degree only. A minimum grade of B is required for courses taken as a undergraduate student for graduate credit to apply toward graduate program requirements. Upon completion of the first term as a master’s candidate, the student must petition the appropriate Graduate School of Management program director to transfer the courses taken as an undergraduate to the master’s degree.

To be considered for admission to the five-year program, applicants must formally apply to the Graduate School of Management during their junior or senior year at Marquette University, complete all of the application requirements and indicate on the application that they are applying for the five-year program. For detailed information, contact the Economics Department by telephone (414) 288-7377.

University Policies

- Academic Censure - Graduate School of Management (https://bulletin.marquette.edu/policies/academic-censure/management/)
- Academic Integrity (https://bulletin.marquette.edu/policies/academic-integrity/)
- Academic Misconduct (https://bulletin.marquette.edu/policies/academic-misconduct-policy/)
- Academic Program Definitions (https://bulletin.marquette.edu/policies/academic-programs-defined/)
- Accelerated Degree Programs (https://bulletin.marquette.edu/policies/accelerated-degree-programs/)
- Attendance - Graduate School of Management (https://bulletin.marquette.edu/policies/attendance/management/)
- Awarding Diplomas and Certificates (https://bulletin.marquette.edu/policies/awarding-diplomas-certificates/)
- Background Checks, Drug Testing (https://bulletin.marquette.edu/policies/background-checks-drug-testing/)
- Class Rank (https://bulletin.marquette.edu/policies/class-rank/)
- Commencement (https://bulletin.marquette.edu/policies/commencement/)
- Conferral of Degrees and Certificates (https://bulletin.marquette.edu/policies/conferral-degrees-certificates/)
- Course Levels (https://bulletin.marquette.edu/policies/course-levels/)
- Credit Hour (https://bulletin.marquette.edu/policies/credit/)
- Credit Load - Graduate School of Management (https://bulletin.marquette.edu/policies/credit-load/management/)
- Faculty Grading (https://bulletin.marquette.edu/policies/faculty-grading/)
- Family Education Rights and Privacy Act-FERPA (https://bulletin.marquette.edu/policies/ferpa/)
- Grade Appeals (https://bulletin.marquette.edu/policies/grade-appeals/)
- Grading System - Graduate School and Graduate School of Management (https://bulletin.marquette.edu/policies/grading-system/graduate-management/)
- Graduation - Graduate School of Management (https://bulletin.marquette.edu/policies/graduation/management/)
- Immunization and Tuberculosis Screening Requirements (https://bulletin.marquette.edu/policies/immunization-and-tuberculosis-screening/)
- Last Date of Attendance/Activity (https://bulletin.marquette.edu/policies/last-date-of-attendance/activity/)
- Military Call to Active Duty or Training (https://bulletin.marquette.edu/policies/militarycall-active-duty-training/)
- Registration - Graduate School of Management (https://bulletin.marquette.edu/policies/registration/management/)
- Repeated Courses - Graduate School of Management (https://bulletin.marquette.edu/policies/repeated-courses/management/)
- Student Data Use and Privacy (https://bulletin.marquette.edu/policies/student-data-use-privacy/)
- Transcripts-Official (https://bulletin.marquette.edu/policies/transcripts-official/)
- Transfer Course Credit - Graduate School of Management (https://bulletin.marquette.edu/policies/transfer-course-credit-policy/management/)
- Withdrawal - Graduate School of Management (https://bulletin.marquette.edu/policies/withdrawals/management/)
Graduate School of Management Policies

- Academic Programs Overview - Graduate School of Management (https://bulletin.marquette.edu/business-administration/policies/academic-programs-overview/)
- Academic Review (https://bulletin.marquette.edu/business-administration/policies/academic-review/)
- Advising (https://bulletin.marquette.edu/business-administration/policies/advising/)
- Appeals (https://bulletin.marquette.edu/business-administration/policies/appeals/)
- Assistanships and Fellowships (https://bulletin.marquette.edu/business-administration/policies/assistanships-fellowships/)
- Certificate Concurrent Enrollment (https://bulletin.marquette.edu/business-administration/policies/certificate-concurrent-enrollment/)
- College of Business Administration Policies (https://bulletin.marquette.edu/business-administration/policies/)
- Communication (https://bulletin.marquette.edu/business-administration/policies/communication/)
- Conduct (https://bulletin.marquette.edu/business-administration/policies/conduct/)
- Confidentiality of Proprietary Information (https://bulletin.marquette.edu/business-administration/policies/confidentiality-proprietary-information/)
- Continuous Enrollment (https://bulletin.marquette.edu/business-administration/policies/continuous-enrollment/)
- Courses and Prerequisites (https://bulletin.marquette.edu/business-administration/policies/courses-prerequisites/)
- Cross-listed Courses (https://bulletin.marquette.edu/business-administration/policies/cross-listed-courses/)
- Deadlines (https://bulletin.marquette.edu/business-administration/policies/deadlines/)
- Dual/Joint Programs of Study (https://bulletin.marquette.edu/business-administration/policies/dual-joint-programs/)
- Graduate Credit (https://bulletin.marquette.edu/business-administration/policies/graduate-credit/)
- Independent Study Courses (https://bulletin.marquette.edu/business-administration/policies/independent-study-courses/)
- Intellectual Property (https://bulletin.marquette.edu/business-administration/policies/intellectual-property/)
- Inter-University Visitation (https://bulletin.marquette.edu/business-administration/policies/inter-university-visitation/)
- Law Student Consent to Take a GSM Course (https://bulletin.marquette.edu/business-administration/policies/law-student-consent-take-gsm-course/)
- Temporary Withdrawal from a Graduate Program (https://bulletin.marquette.edu/business-administration/policies/temporary-withdrawal/)
- Time Limitations (https://bulletin.marquette.edu/business-administration/policies/time-limitations/)
- Undergraduate Students in Graduate Courses (https://bulletin.marquette.edu/business-administration/policies/undergraduate-students-in-graduate-courses/)