# Master of Science in Quantitative Economics

**Graduate Coordinator:** Dr. Lisa Takeyama

## Program Learning Outcomes

1. Students will learn micro and macroeconomic theories at the appropriate level and will be able to use these theories to analyze economic problems and issues relevant to the local, state, national, or global economy. With this knowledge, students will be able to understand and critically assess scholarly economics articles and propose possible pathways for future research.

2. Students will learn practical skills in collecting, processing, interpreting and analyzing economic data with appropriate statistical and econometric techniques.

3. Students will be able to employ economic reasoning in analyzing real-world economic problems and effectively communicate their knowledge and findings both orally and in written formats.

## Admission to Program

For admission to the graduate program in economics, a student must meet, at a minimum, the general University requirements as stated in this Bulletin. To qualify for classified status, a student must satisfy the following criteria:

- Earn a 3.0-grade point average in an undergraduate major in economics (or equivalent);
- Complete courses in intermediate micro and macro theory (ECON 301 and ECON 302 or equivalents) with grades of B or better;
- Complete a semester of calculus (MATH 226 or equivalent) with a grade of B or better;
- Complete a semester-length course in Statistics (ECON 311 or equivalent) and in Econometrics (ECON 312 or equivalent) with a grade of B or better in each.

Students who do not have B grades in all of the above five courses, or who did not major in economics but earned an overall grade point average of 3.0 or better, may be admitted conditionally. Students admitted conditionally cannot apply courses taken to satisfy the program prerequisites toward their graduate program.

Students applying to the graduate program must submit the following materials:

- Transcripts from all colleges and universities attended;
- Two or more letters of recommendation, preferably from professors the applicant has taken one or more courses with; and
- Graduate Record Examination (GRE) scores for the general test or GMAT scores (note: this requirement is waived for all applicants holding degrees from an accredited U.S. institution of higher education).

For more detailed information about admission to the MS Program and how to apply, please visit the Economics Department graduate website: [http://cob.sfsu.edu/economics/graduate-programs](http://cob.sfsu.edu/economics/graduate-programs)

## Written English Proficiency Requirements

The University requires that graduate students must demonstrate both initial English proficiency (level one) upon entrance to graduate study and an advanced English proficiency (level two) prior to graduating.

### Level One

Prior to admission, students must satisfy at least one of the following an undergraduate degree from an institution located in a country in which the native language is English; a score of at least 4.0/6.0 on the GRE or GMAT Analytic Writing Assessment; a minimum score of 24/30 on the Writing section of the Internet-based test (IBT) TOEFL; or a score of at least 6.5/9.0 on the IELTS writing test, or a concordant score on the Pearson Test of English.

Students not meeting this requirement may be admitted conditionally upon completion of an appropriate English writing class during their first semester.

### Level Two

Demonstration of advanced level proficiency is an integral part of the Written Comprehensive Exam.

## Advancement to Candidacy

Besides meeting all general requirements for advancement to candidacy, students must earn a minimum of a B in all core courses and earn an overall minimum of 3.0-grade point average in all courses combined. No course taken toward degree completion may be taken on a CR/NC basis.

## Economics (M.S.) — 30 units

### Core Requirements (18 units)

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ECON 701</td>
<td>Seminar: Microeconomic Theory</td>
<td>3</td>
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<tr>
<td>ECON 702</td>
<td>Seminar: Macroeconomic Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 715</td>
<td>Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 731</td>
<td>Econometric Methods and Applications</td>
<td>3</td>
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<tr>
<td>ECON 825</td>
<td>Applied Time Series Econometrics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 830</td>
<td>Advanced Econometric Methods and Applications</td>
<td>3</td>
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### Electives (6-12 units)

A maximum of two courses may be taken outside the economics department in an applied field or interdisciplinary study upon advisement. No more than two electives may be upper-division undergraduate courses, and at least one elective must be a graduate course. All electives require prior approval from an advisor.

## Culminating Experience (0-6 units)

Students may choose either the Written Comprehensive Examination or the Master's Thesis and Oral Defense.

### Written Comprehensive Examination

A three-hour comprehensive written examination is required of all candidates not opting for the Master's Thesis. Examinations are conducted during the spring semester. No student is permitted to take the examination until they have completed, by the end of the spring semester during which the exam is taken, 24 units of the Advancement to Candidacy (ATC) with a B (3.0) average. ECON 701, ECON 702, ECON 715, and ECON 731 must be included in these 24 units. Students who choose the Written Comprehensive Exam for their culminating experience must...
also enroll in ECON 896EXM Culminating Experience Examination (0 units).

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<tr>
<td>ECON 896EXM</td>
<td>Culminating Experience Examination</td>
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**Students Opting for Master’s Thesis and Oral Defense**

Six units of graduate economics electives in addition to Thesis and Oral Defense.

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<th>Units</th>
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<tbody>
<tr>
<td>ECON 898</td>
<td>Master’s Thesis</td>
<td>6</td>
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