MASTER OF ARTS IN MATHEMATICS

Admission to Program

In addition to the general requirements for admission, applicants to the master’s program must have a 3.0 grade point average in the following three courses or their equivalents:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 325</td>
<td>Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 335</td>
<td>Modern Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 370</td>
<td>Real Analysis I</td>
<td>3</td>
</tr>
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Applicants who fail to satisfy this requirement but who are qualified in all other respects may be admitted on the condition that they bring their grades in these courses up to the 3.0 average during their first two semesters of graduate study (these three courses, however, may not be counted as electives toward the M.A. degree).

Program Learning Outcomes

a. Formulate and analyze mathematical conjectures, construct proofs in sound mathematical English, and use these skills to write proofs of statements in advanced linear algebra, abstract algebra, and real and complex analysis.

b. Use technological tools for computation, for locating and retrieving technical information and conducting literature searches, and for typesetting mathematical documents.

c. Achieve knowledge integration in content and practice by synthesizing various mathematical tools to understand mathematical phenomena, mathematical models, and solutions to mathematical problems.

d. Communicate effectively to a variety of audiences using oral, written, and visual modes.

Written English Proficiency Requirement

All students in graduate programs at SF State must demonstrate Level One (entry) and Level Two (exit) writing proficiency in accordance with University, departmental, and or programmatic guidelines.

Level One

• Prior to admission: Minimum score of 4.0 on the Analytical Writing Analysis (AWA) on the GRE test.

• Conditional Admission: Applicants who do not satisfy Level I prior to admission must pass SCI 614 or MATH 729 with a grade of B-minus or better not later than the second semester. (Students should note that SCI 614 can be taken only through the College of Professional & Global Education and may not count as units toward the degree. MATH 729 is only offered in spring semesters.)

Level Two

Satisfactory completion of the Master's Thesis (MATH 898), or take two comprehensive examinations and write an expository paper.

Upper-division courses acceptable on the Advancement to Candidacy form will be determined by the student with approval of the graduate coordinator.
least once, with additional attempts requiring the written approval of the graduate coordinators.

The expository paper is completed in two stages. First, students must complete a departmental proposal form, including: the title and abstract of the proposed paper, the what-why-how aspects of the research in question, a brief preliminary bibliography, and the approval of the proposal by a committee consisting of a faculty advisor and one additional reader from the Mathematics faculty. Once students have an approved proposal, they may begin work on the project under the guidance of the faculty advisor. Completion of the paper is subject to signed approval by all members of the committee.

Further information about these options can be obtained from the department website: http://math.sfsu.edu.