



# The Ohio State University

## Department of Mathematics

| Degree  | Required  | Strongly Recommended   | Minimum Requirements   | Other factors  |
|---|---|--|--|--|
| <b>Ph.D.<br/>Theoretical Mathematics<br/>Track</b>                  | <ul style="list-style-type: none"> <li>Evidence of strong preparations in Real Analysis and Abstract Algebra. Typically expected are one-year sequences at the baby-Rudin and Dummit-Foote level or comparable academic work.</li> <li>GRE Subject test in Math – may be waived with submission of a justification.</li> <li>3 Letters of Recommendation, Vita, and Statement.</li> </ul> | Additional upper division or graduate coursework in pure or applied math with solid grades.  | <p>Minimum undergraduate cumulative GPA of 3.0 on 4.0 grade scale.</p> <p>No minimum requirements for GRE test scores for admission.</p> | <p>Research experience not required but may make applications more competitive.</p> <p>Similar for graduate level coursework.</p>                        |
| <b>Ph.D.<br/>Applied Mathematics<br/>Track</b>                      | <ul style="list-style-type: none"> <li>Evidence of solid preparations in Real Analysis (one semester baby-Rudin, advanced Linear Algebra, and a computational science course).</li> <li>GRE Subject test in Math – may be waived with submission of a justification.</li> <li>3 Letters of Recommendation, Vita, and</li> </ul>   | <p>Additional upper division or graduate coursework in the mathematical sciences.</p> <p>Prior research experience is not strictly required but weighs more than for</p> | <p>Minimum undergraduate cumulative GPA of 3.0 on 4.0 grade scale.</p> <p>No minimum requirements for GRE test scores for admission.</p> | Graduate level coursework and exposure to other quantitative sciences with math applications contribute to the strength of an application in this track. |
| <b>Master Mathematical<br/>Sciences</b>                             | <ul style="list-style-type: none"> <li>Solid Bachelor level coursework in math -- particularly, advanced calculus, linear algebra (EDU), and differential equations (BIO&amp;CPS).</li> <li>3 Letters of Recommendation, Vita,</li> </ul>   | <p>Background/coursework in respective specializations (Computation, Biology, Education)</p> <p>GRE General Test</p>   | <p>Minimum undergraduate cumulative GPA of 3.0 on 4.0 grade scale.</p> <p>No minimum GRE test scores for admission.</p>                  | Relevant research experience for Bioscience track useful as well as coding background for computational track.   |
| <b>Master of Actuarial and<br/>Quantitative Risk<br/>Management</b> | <ul style="list-style-type: none"> <li>Solid Bachelor level coursework in advanced calculus, statistics &amp; probability, elementary economics.</li> <li>GRE general test or GMAT</li> <li>3 Letters of Recommendation, Vita, and Statement.</li> </ul>  | <p>Background/coursework in programming and Interest Theory.</p> <p>GRE Subject Test in Math</p>   | <p>Minimum undergraduate cumulative GPA of 3.0 on 4.0 grade scale.</p> <p>No minimum GRE test scores for admission.</p>                  | Relevant research experience for Bioscience track useful as well as coding background for computational track.   |

**Current Practice on Application Fee Waiver:**

Standard Application Fee for PhD and MMS degrees is only \$5. (Fee for the MAQRM is \$60).  
Please contact grad-info@math.osu.edu for more information on fee waivers for special programs through OSU.

**Financial Aid Information:**

- All PhD and MMS students are guaranteed Graduate Teaching Associateships provided good academic standing.
- Strong applicants with an undergraduate GPA  $\geq 3.6$  as well as minority students with undergraduate GPA  $\geq 3.2$  may be considered to compete for recruitment fellowships (without teaching duties) for one to three years.
- Limited additional funds are available for departmental fellowships for either applying or continuing students.
- MAQRM students are generally not supported and responsible for their own stipend and tuition.

Website:

<https://math.osu.edu/grad/future>