

Program in Mathematics Education (PRIME) Responsible Conduct of Research (RCR) Plan

In 2009 the Office of the Provost and the Office of the Vice President for Research and Graduate Studies required that all departments and programs involved in graduate education develop a Responsible Conduct of Research (RCR) Training Plan. Those plans were intended in part to respond to federal requirements for training set out in the “America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act.” Although the immediate concern was with federally funded projects, all academic units at MSU were expected to implement similar training, as teaching responsible practices in research, scholarship, and creative activities is fundamental to the integrity of every graduate program.

*This RCR plan applies to students who begin the mathematics education graduate program (PRIME) Fall 2017 or later. Students who entered prior to Fall 2017 will follow the previous PRIME RCR Plan at <https://prime.natsci.msu.edu/current-students/forms/>.

*Students who are supported by NSF grants may be required to complete additional specific training; they must meet the timeline and content requirements of training for that grant.

*Students engaged in research involving human subjects must complete MSU Human Research Protection/IRB Certification submitting IRB approvals.

Basic RCR Education

All PRIME graduate students must complete the following basic RCR requirements by the end of the second year in the program.

BASIC EDUCATION: Year 1

Within the first year of enrollment, students must complete the following online training components:

- Human Research Protection/ IRB Certification (found at <https://ora.msu.edu/train/>)
- The following 4 CITI online modules (found at <https://ora.msu.edu/train/programs/citi.html>):
 - Introduction to the Responsible Conduct of Research
 - Authorship
 - Plagiarism
 - Research Misconduct

All graduate students must also complete the following 3 hours of discussion-based training within their first year:

- One workshop in the Graduate School RCR Workshops series (1.5 hours; <https://grad.msu.edu/rcr>)
- 1.5 hours in MTHE 926, MTHE 927, or other doctoral courses

Completion of these requirements will be recorded by the program in GradInfo as “Initial” training.

BASIC EDUCATION: Year 2

Within the first 2 years of enrollment, students must complete 3 additional CITI online modules (<https://ora.msu.edu/train/programs/citi.html>) from the following list:

- Collaborative Research
- Conflicts of Interest
- Data Management
- Financial Responsibility
- Mentoring
- Peer Review

All graduate students must also complete the following 3 hours of discussion-based training within their second year:

- One workshop in the Graduate School RCR Workshops series (1.5 hours; <https://grad.msu.edu/rcr>)
- 1.5 hours in MTHE 954 or other doctoral courses

Completion of these requirements will be recorded by the program in GradInfo as “Annual” training.

Annual Refresher Training

Starting in Year 3, all doctoral students must complete 3 hours of refresher training each year. This training may include:

- online CITI “refresher” courses or course beyond those required for initial training in Years 1 and 2. *Each CITI module completed counts as .75 hours (45 minutes).*
- Additional workshops in the Graduate School RCR Workshops series (1.5 hours each)
- Discussion-based training in courses and research groups

Completion of these requirements each year will be recorded by the program in GradInfo as “Annual” training.

Documenting RCR Education

Students will record their online modules and discussion-based training experiences on PRIME’s [RCR Record and Annual Report](#). The student will submit this form in the spring of each academic year as part of PRIME’s annual review process. The student and their advisor will sign the report to confirm the RCR experiences. The report submitted each year will include RCR records from previous years so that it serves as a cumulative record of the student’s RCR training. When the report—signed by student and advisor—is received by the PRIME program office, the Graduate Secretary will record completion of the year’s requirements in GradInfo.