

Ph.D. Checklist

Checklist for the Doctorate (Ph.D.)

Science, Technology, Engineering and Mathematics Education (STEM) Program

1. Admission into Program
Attend orientation: Consult with graduate advisor and graduate coordinator about initial semester registration.
2. Begin coursework in consultation with your STEM ED Faculty Advisor.

| Se me ster | Recommended Coursework | Milestones |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 st ye ar Fall | <p>Required:</p> <p>Knowing and Learning in STEM ED (core requirement)</p> <p>Choose other courses based on the needs of your degree plan:</p> <ul style="list-style-type: none"> • Content course. <i>Note - Content requirements may be waived for students with pre-existing graduate degree in a STEM content area (not math or science education) no more than 6 years old.</i> • Research Methods course. • Possible concurrent core course. <i>Equity, Research on Teachers and Teaching, and Systemic Reform are offered every third semester. It is better to take these after Knowing and Learning and Curriculum History and Development, but one of them may have to be taken concurrently to fit it into your schedule.</i> • EDC 398T (if you plan to TA or AI in the future) | <p>-Consult with Grad Advisor or Grad Coordinator for spring registration approval and register for Spring courses.</p> <p>- Complete Institutional Review Board (IRB) required training for research involving human subjects. https://research.utexas.edu/ors/human-subjects/training/</p> |
| 1 st ye ar Sp ring | <p>Required:</p> <p>Curriculum History and Development (core requirement)</p> <p>Choose other courses based on the needs of your degree plan:</p> <ul style="list-style-type: none"> • Concurrent core course • Content course if needed • Research course • EDC 398T if not already taken • Advanced topics course • Independent study or related course work | <p>Begin thinking about a possible dissertation topic, and decide which faculty you might want to serve on your qualifying exam and dissertation committees. Talk to faculty; solicit feedback and foster relationships.</p> <p>Consult with Grad Advisor or Grad Coordinator for summer and fall registration approval and register for summer and fall courses.</p> |
| 1 st ye ar Su m mer | <p>Enroll in additional courses if needed</p> | <p>Consider attending, possibly presenting, at annual meetings of professional associations and learned societies (i.e. AERA, NARST, NCTM, PME, ASEE, ICLS etc.).</p> <p>It is often necessary to submit proposals and make plans to attend conferences the summer before the conference takes place. Most of these conferences take place in early to mid spring, but proposals to give talks are due the summer before.</p> |

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| 2 nd year Fall | <p>Required:</p> <p>3rd or 4th core course (Equity, Systemic Reform, or Research on Teaching)</p> <p>Choose other courses based on the needs of your degree plan:</p> <ul style="list-style-type: none"> • Research course • Content course if needed • Advanced topics course • Independent study or related course work | <p>Begin participating in research projects. Ask your faculty advisor for recommendations. Faculty members often have ongoing projects in which you can get involved.</p> <p>Consider using the core course projects to help you start to develop a research question for your dissertation.</p> <p>Join the appropriate professional organizations in your field. Add yourself to the listserv for the most appropriate professional organization (NARST, NCTM, etc.)</p> <p>Mentor incoming STEM ED graduate students.</p> |
| 2 nd year Spring | <p>Recommended:</p> <p>Complete core courses</p> <ul style="list-style-type: none"> • Consider forming a writing group with other graduate students and meeting at regular negotiated times to review each others work. <p>Choose other courses based on the needs of your degree plan:</p> <ul style="list-style-type: none"> • Research course • Content course if needed • Advanced topics course • Independent study or related course work | <p>Complete your Second Year Review and Program of Work (POW) template forms and begin entering coursework in the appropriate section for meeting degree requirements.</p> <p>This will be due at the end of your second year in the program. You will submit it electronically to the STEM ED Graduate Coordinator, and the STEM ED Faculty will review your paperwork. If there are any concerns, your STEM ED Faculty Advisor will schedule a meeting with you.</p> <p>Continue with research and continue to think about your own research interest.</p> |
| 2 nd year Summer | <p>Enroll in additional courses if needed</p> | <p>Submitting a proposal for presentation at annual meetings of professional associations and learned societies (i.e. AERA, NARST, etc.) is recommended. Consider working with a faculty member.</p> <p>Most proposal deadlines for these conferences occur in the late summer. Ask you faculty advisor about conference recommendations</p> <p>Start putting together your committee for qualifying exams. This consists of three STEM ED Graduate Studies Committee (GSC) members. Ask your faculty advisor for recommendations.</p> |
| Additional semesters | <ol style="list-style-type: none"> 1. Remaining core courses if needed 2. Remaining content courses if needed 3. Remaining research methods if needed 4. Remaining advanced topics courses if needed 5. Independent study/directed research | |

AFTER COURSE WORK IS COMPLETE:

1. Schedule and take **Doctoral Qualifying Examinations** after coursework has been completed.

Qualifying exams consist of two parts: The first part is a written four week take home exam and the second part is an oral defense based on the written exam. Refer to the STEM ED [Qualifying Examination](#) page for all the details of the process.

2. Qualifying exam committee submits to the STEM ED Graduate Coordinator one of the following recommendations:

- Advance
- Do not advance to candidacy until conditions are met
- Do not pass. (Student is eligible to take a 2nd qualifying exam at a later date)
- Recommendation to drop from program

3. Upon passing your qualifying exam, settle on dissertation topic (if you have not already); confer with your dissertation committee chair/supervisor regarding the scope of your dissertation, and the appropriate additional faculty to ask to serve on your committee (requires 4 individuals with chair/supervisor who is GSC member)

4. Complete the POW (Program of Work aka 60-line proposal) and start the approval process. Please refer to the Approval Process Flowchart (separate document).

5. Once your POW has been approved by the STEM ED GSC, you will submit the online Application for Doctoral Candidacy through the Office of Graduate Studies website: https://utdirect.utexas.edu/ogs/forms/candidacy/stu_appsList.WBX

The application gets routed electronically for approvals, as follows:

- Chair/Supervisor - approves your description of proposed dissertation
- STEM ED Graduate Advisor - verifies departmental standing
- STEM ED GSC Chair - certifies academic credentials
- Dean of Graduate Studies - approves topic and formally appoints members to your committee

6. Apply for approval from the IRB to conduct research with human subjects as soon as your research protocol is firm.

A. Log onto <https://research.utexas.edu/ors/human-subjects/irbaccess/>, the UT Human Subjects/IRB web site, to determine what forms are needed and to submit your proposal electronically.

B. If needed, obtain approval of the school or other entity where you intend to conduct research.

7. Register for STEM ED dissertation hours and conduct research and work to complete your dissertation. (6 hours minimum) Students must register for STM X99W in all semesters, from advancement to candidacy until graduation.

8. Formally defend your dissertation proposal to your dissertation committee.

- Find a date/time when your committee members may attend
- Schedule a room with staff in SZB 436

9. Amend approval to conduct research with human subjects (IRB) as needed.

10. During the semester you expect to graduate, download graduation information and forms from: <https://gradschool.utexas.edu/academics/graduation/deadlines-and-submission-instructions>

File *Degree Candidate* form with Graduate School at the beginning of semester you plan to finish. *Note: You must be registered the semester you intend to defend your dissertation*

11. Hold oral defense of the dissertation with **all** members of dissertation committee. *Request for Final Oral* form must be printed on pink paper. See the [Form Submission via DocuSign](#) page for more instructions on how to receive signatures from your committee and the Graduate Adviser.

A. Gain agreement of dissertation committee members on a time and date for oral defense; deliver draft of dissertation to committee at least two weeks prior to defense date; have all committee members sign the *Request for Final Oral* form, which has the date, time, and room number on it; then bring it to the Graduate Advisor for signature; the STEM ED Graduate Coordinator can help you get this signature. (Reserve a room with the SZB 406 receptionist).

B. Turn in to Graduate School (MAI 101) the *Request for Final Oral*, 1 copy of your abstract and 1 copy of your vita. The Doctoral Degree Evaluator will send an email to your dissertation committee formally notifying them of the date, time, and place of the oral defense.

C. After the defense, your dissertation committee members will need to sign two different signature sheets:

(1) The *Report of Final Oral* (goldenrod), which is sent to your committee chair along with the memo from the Graduate School, is usually signed by the committee at the conclusion of the oral defense. You or your committee chair will submit it to the STEM ED Graduate Coordinator. The STEM ED Graduate Coordinator will obtain signature of the GSC Chair. Then you will be notified to hand-carry the form to the Graduate School.

(2) The signature page for the dissertation itself can be signed at the conclusion of the defense, or, if extensive revisions are necessary, when those revisions are completed to the satisfaction of the chairperson and the rest of the committee. The means of obtaining these signatures varies with the specific situation. It is *your* responsibility to acquire these signatures.

12. Turn in the completed dissertation in electronic format (PDF), as well as the Signature Page, to the Graduate School (MAI 101) by the appropriate deadline.

Celebrate!!!