The University of Texas at Austin
Hildebrand Department of Petroleum and Geosystems Engineering
Cockrell School of Engineering

PhD Degree Requirements

Students admitted to the university as a graduate student must complete additional requirements to become a PhD candidate. Students have two options to track PhD courses.

(1) Master's Degree (in Engineering or a related field of study) **To PhD**
(2) Bachelor's Degree (in Engineering or a related field of study) **To Direct PhD**

MASTER'S DEGREE TO PhD Courses Track OPTION (24 semester credit hours beyond MS degree or 18 semester credit hours beyond MS degree)

- At least 15 of the semester credit hours must be PGE courses
- Exception: Students who already have an MS degree in petroleum engineering from an accredited US or Canadian university can reduce the PhD course requirements from 24 hours to 18 semester hours. The majority of the courses must be taken within the PGE department.
- Remaining semester credit hours can be PGE graduate courses or approved Science or Engineering courses
- Non-technical courses are not approved.
- 3 of the 5 basic core courses for the MS degree can be taken as preparation for the written PhD qualifying examination.
- All courses must be taken for a letter grade and supervising committee (research advisor) may require additional courses

BACHELOR'S DEGREE TO PhD Course Track OPTION (Direct PhD) (36 semester credit hours)

- Same as No Thesis No Report for MS degree option
- Students will not receive an MS degree - Students will only receive a PhD degree at the completion of all the requirements

ADDITIONAL PhD REQUIREMENTS FOR BOTH PhD OPTIONS:

- Students are responsible for satisfying the background course requirements in the academic program they submit.
- Undergraduate courses taken in fulfilment of background courses will not count towards the PhD degree.
- Graduate courses taken as background courses can count towards the PhD degree, with approval from the Graduate Advisor.
- The academic program must be approved by the GSC, although the coursework does not have to be completed to apply to candidacy.
- A student must maintain a minimum 3.5 GPA for all courses taken at UT Austin while in the PhD program.

PhD TO DO LIST:

SELECT A DISSERTATION TOPIC

- One or more PGE faculty members will supervise the research.
- Select a supervising committee with GSC approval. A committee will have 5 members. At least 3 members are PGE faculty on the GSC (Graduate Studies Committee). 1 member must be from outside the GSC and can be outside UT. The 5th member can be a non-GSC PGE faculty or faculty from another UT department or from industry. However, 4 PGE faculty are preferred.

PASS 3 SELECTED QUALIFYING EXAM GRADUATE COURSES

- Students can choose from these six qualifying exam courses: (1) Advanced Petrophysics, (2) Transport Phenomena, (3) Engineering Analysis, (4) Subsurface Machine Learning, (5) Advanced Geomechanics, and (6) Advanced Thermodynamics.
- New PhD students (those with an MS degree from anywhere other than UT PGE Department) who are eligible must take the qualifying exam courses the first time they are offered after being in residence in Austin, TX.
- Continuing PGE students (those obtaining an MS degree from UT Austin) must take the qualifying exam courses the first time they are offered after completion of the MS degree.
- Students must choose and pass 3 of the 6 specific qualifying exam courses in no more than two attempts to be considered for PhD candidacy.
- If a PhD aspirant fails to get a 3.3 GPA from the 3 selected qualifying exam courses of the PhD qualifying exams, one of the courses will need to be retaken to improve the GPA of the three classes to be 3.3 or above.

PASS AN ORAL PhD RESEARCH PROPOSAL EXAMINATION

- See PGE website for PhD proposal guidelines.
- https://pge.utexas.edu/graduate/degree-requirements