PhD Candidacy Examination Procedural Guide

Every PhD student must successfully complete a pass/fail Candidacy Examination after completing all required courses. The examination consists of a written component followed approximately two weeks later by an oral component, provided the written component is passed. Under the Doctoral Supervisory Committee (DSC) process, students are normally expected to complete their Candidacy Examination during the second December of their PhD studies, with the written component arranged separately and the oral component conducted during the annual December DSC meeting period. Scheduling adjustments may be made in consultation with the supervisor and Graduate Program Office to accommodate admission dates, individual circumstances, and applicable university and program requirements.

Doctoral Supervisory Committee (DSC) and Examination Scheduling

Under the DSC structure, students establish a Doctoral Supervisory Committee in consultation with their supervisor(s), using the PhD Supervisory Committee Approval Form. The DSC is normally comprised of the supervisor and any co-supervisor(s), together with at least two additional members who are not supervisors. The DSC must be established within the first year of PhD studies. Students are encouraged to hold an introductory meeting with their DSC during their first year to discuss the intended direction of their research. This meeting is informal, with minimal preparation requirements, and submission of a Supervisory Committee Update Report (SCUR) is optional. Regular annual DSC meetings are required and will normally take place in December, following the Fall examination period.

DSC members must be YSGPS faculty, typically from Aerospace Engineering; other eligible TMU members may participate, and external experts require Associate Chair (Graduate Studies) approval. Changes to DSC membership also require Associate Chair approval.

The oral component of the Candidacy Examination will normally be conducted as a Special DSC meeting during the annual December meeting period. The Candidacy Examination Committee will normally include members of the established DSC, subject to applicable examination requirements. A Candidacy Examination Scheduling Request Form must be submitted at least 15 business days before the written component.

Written Component and Research Proposal

The purpose of the Candidacy Examination is to assess whether the student is adequately prepared to undertake doctoral research that is expected to result in a defensible dissertation. The examination committee will consider the student's knowledge and preparedness in the proposed research area, the originality and significance of the proposed research, and the feasibility of the research plan and anticipated timeline. Students should demonstrate a sound understanding of the relevant literature, a well-developed research plan, and preliminary research activity, as appropriate. The extent of completed research may vary depending on the student's stage of study at the time of the examination.

For the Candidacy Examination, the supervisor-approved PhD research proposal replaces the Supervisory Committee Update Report (SCUR) normally required for an annual DSC meeting.

At least 10 business days prior to the date of the scheduled written component of the examination, the candidate must submit to the members of the Candidacy Examination Committee a comprehensive PhD research proposal which consists of not less than about 15 pages and not more than about 30 pages, and which has been reviewed and approved by the student's supervisor (and co-supervisors if applicable).

Subsequently, each committee member must submit to the committee chair a question based on the research proposal. Each question may consist of parts (a, b, c, etc.), it may be partly quantitative (i.e., involve analysis and/or calculations and/or diagrams) and partly qualitative (i.e., involve a written explanation) or completely qualitative (but not completely quantitative) in nature, and it should be answerable in a time of 150 to 180 minutes (i.e., 2.5 to 3 hours) divided by the number of committee members. (For example, if there are 3 committee members, each question should be answerable in 50 to 60 minutes.) The intent of this component of the examination is to determine both the scope of the candidate's technical knowledge of their area of specialization and their ability to communicate this knowledge in writing.

The committee chair will ascertain that the questions are appropriate (through discussion with the student's supervisor or co-supervisors, if necessary) and will invigilate the examination on the scheduled date. The student's answers will be delivered individually to the committee members, who must decide within a week whether or not the answers are satisfactory. If all committee members are satisfied, the oral component of the Candidacy Examination will proceed as scheduled. If two (or more) committee members are not satisfied, the oral component of the examination will not proceed and the student will be notified that they have failed the written component of the examination, which will be rescheduled (with possibly different questions).

Oral Component

The oral component of the Candidacy Examination will normally be conducted as a Special DSC meeting during the annual December meeting period, following successful completion of the written component. The oral examination is a formal pass/fail assessment and will follow the examination procedures outlined below.

i. The candidate will be asked to present their research proposal within a period of about 20 minutes, and then they will be questioned by each member of the examination committee.
ii. The questions posed by the committee members must be related (directly or indirectly) to the research proposal and may be extensions of those asked in the written component of the examination.
iii. With respect to the pass/fail evaluation at the conclusion of the oral component, the exam committee Chair will vote only if (a) the Chair is serving as an official examiner or (b) in the case of a tie.
iv. The Exam Chair may question the candidate whether or not they are an official examiner.
v. There is no specified time limit for the oral component of the examination; however, its duration should be between 2 hours and 2.5 hours.

After Successful Candidacy

Following successful completion of the Candidacy Examination, students will continue their doctoral research under the guidance of their Doctoral Supervisory Committee (DSC) and participate in required annual DSC meetings, normally held in December following the Fall examination period.

For each regular annual DSC meeting, students must submit a Supervisory Committee Update Report (SCUR) of no more than 10 pages to their DSC at least one week in advance. The DSC will document the student's research progress, provide feedback, and record recommendations to guide subsequent research activities.

As students approach completion of their doctoral research, the procedures leading to the final PhD Dissertation Examination will depend on the applicable examination pathway, as outlined in the PhD Dissertation Examination Procedural Guide.

Transitional Arrangements

The revised Doctoral Supervisory Committee (DSC) process applies to all PhD students, regardless of their date of admission or stage of study. All students are required to establish a DSC and participate in annual supervisory committee meetings, normally held in December following the Fall examination period. However, transitional arrangements for candidacy and dissertation examinations will depend on the student's stage of study and anticipated completion date.

1. **Students who began their PhD studies in Fall 2026 or later, and continuing students who were less than 12 months into their studies as of Fall 2026**

These students must establish their DSC within the first year of their PhD studies. An introductory meeting during the first year is encouraged but not required.

Students are normally expected to complete their Candidacy Examination during the second December of their studies. The written component will be arranged separately, while the oral component will take place as a Special DSC meeting during the annual December meeting period. Scheduling adjustments may be made in consultation with the supervisor and Graduate Program Office to accommodate admission dates, individual circumstances, and applicable university and program requirements.

Following successful completion of candidacy, students will continue to participate in required annual December DSC meetings.

2. **Continuing students who were at least 12 months into their PhD studies as of Fall 2026 and have not completed candidacy**

These students must establish their DSC by December 31, 2026, and hold their initial DSC meeting by the end of February 2027. The initial DSC meeting is intended to review the student's research direction and progress and does not constitute a Candidacy Examination. Following this initial meeting, students will participate in annual DSC meetings during the regular December meeting period.

Students in this category are strongly encouraged to complete their Candidacy Examination by the end of the Winter 2027 term. Students who are prepared to proceed earlier may arrange their Candidacy Examination in consultation with their supervisor and the Graduate Program Office, provided all applicable examination requirements are met. The Candidacy Examination is scheduled separately from the required initial DSC meeting.

Students who are unable to complete candidacy by the end of the Winter 2027 term should consult their supervisor and the Graduate Program Office to establish an appropriate examination schedule, subject to applicable university and program requirements.

3. **Continuing students who have already completed candidacy**

Students who have already successfully completed their Candidacy Examination are still required to establish a DSC and participate in annual supervisory committee meetings. For students who were at least 12 months into their PhD studies as of Fall 2026, the DSC must be established by December 31, 2026, with an initial meeting held by the end of February 2027.

Transitional Dissertation Examination Pathways

For continuing students who were at least 12 months into their PhD studies as of Fall 2026, the applicable dissertation examination procedure will depend on their anticipated final examination date, regardless of when they complete candidacy:

- **Final examination expected before September 2027**: Students will normally follow the existing Preliminary Dissertation Examination procedure, followed by the final PhD Dissertation Examination. However, students may elect to follow the revised DSC procedure instead.

- **Final examination expected in September 2027 or later**: Students will follow the revised DSC procedure, including a Research Completion DSC meeting, dissertation review by the committee, and the final PhD Dissertation Examination. A separate Preliminary Dissertation Examination will not be required.

Students should refer to the PhD Dissertation Examination Procedural Guide for further details regarding the applicable examination pathway.