

PH.D., MASTER'S AND CERTIFICATE PROGRAMS

General requirements for graduate degrees

A degree is earned only after payment of all tuition, fees and other charges to the university and after a student has fulfilled all requirements of the degree program including final submission of a successfully defended and approved dissertation, thesis, or summary of capstone or other final project (if required). Each graduate program in the School of Medicine has specific curricular requirements as described in other sections of the Bulletin.

Expectations for graduate students

All graduate students are expected to:

- Exhibit professional behavior and treat all faculty members, staff and fellow students with honesty, dignity, respect and fairness
- Be fully committed to and give full effort on all aspects of their training
- Work with graduate program directors, counselors and advisers to enroll in appropriate course work for their programs and strive to achieve all training benchmarks
- Register for nine to 15 credits in the fall and spring semesters and at least three credits in the summer session (if required) to be considered full-time
- As required by their programs, identify (with guidance) and work collaboratively with advisers for thesis, dissertation, capstone and other projects
- Maintain satisfactory academic progress
- Reach out for guidance, advice and input from program directors, advisers and others when needed
- Participate when possible in the recruitment of future School of Medicine graduate students
- Follow other guidelines, policies and expectations described in the VCU Bulletin, on the School of Medicine website, in the School of Medicine Professionalism Committee guidelines, on the VCU Student Conduct and Academic Integrity website and in program materials

Advisers for doctoral and master's students

A permanent adviser is required for students in all Ph.D. programs and for students in master's programs requiring a thesis. Other master's programs may also require a permanent adviser. Advisers play key roles in all aspects of graduate student training.

Graduate advisory committees

Graduate advisory committees are required for students in all Ph.D. programs and students in master's programs requiring a thesis. Graduate advisory committees serve two inter-related roles. One role is to regularly assess each student to ensure they are meeting all training benchmarks. The other role is to guide, advise and support each student to facilitate their efficient progression toward degree completion.

Comprehensive examinations and final defenses

Successful completion of comprehensive examinations and successful defenses of dissertations are required for all Ph.D. degrees. Successful defenses of theses are required for master's degrees in programs that

require them. A student must be making satisfactory academic progress to undertake a comprehensive examination or final defense.

Comprehensive examinations and final defenses are conducted by a student's graduate advisory committee (or other committee as determined by the program). Comprehensive examinations and final defenses must be scheduled at a time during which all graduate advisory or other committee members are available to participate. If a single committee member cannot participate in a previously scheduled examination or defense, the meeting can occur if approved by the adviser and the graduate program director. If two or more committee members cannot participate in a previously scheduled examination or defense, the meeting must be rescheduled. A student may present and defend their work via video conference with prior approval of their graduate advisory committee and program director, in which case the student is responsible for organizing all aspects of the video conference.

A student must provide their graduate advisory or other committee with a draft of their research proposal, dissertation or thesis at least 10 working days prior to the scheduled comprehensive examination or final defense.

A comprehensive examination has written and oral components that focus on foundational information in the area of the anticipated degree and the proposed dissertation research project.

A final dissertation (Ph.D.) or thesis (master's) defense requires the student to present their dissertation or thesis research in a public seminar and then defend their dissertation or thesis to their graduate advisory committee. During the defense, the graduate advisory committee will determine if the student has:

- Demonstrated mastery of the general research area
- Demonstrated mastery of the background information for their dissertation or thesis project and their completed studies, including all major analyses and interpretations
- Performed with appropriate technical and other care all experiments required for their dissertation or thesis project
- Constructed a draft of the dissertation or thesis document that appears will be suitable after being revised in response to comments from the graduate advisory committee

Each graduate advisory committee member must vote to pass or fail the student before the comprehensive examination or final defense is adjourned. A student passes the examination or defense if there is no more than one vote of fail. A student fails the examination or defense if there are two or more votes of fail. A student may be allowed to retake an exam per the guidelines of their program and with approval of the School of Medicine Graduate Programs Committee.

A student who has passed their final defense should expect to revise their proposal, thesis or dissertation before receiving final approval from their graduate advisory committee. The student and the graduate advisory committee should identify a specific scope of work and a reasonable timeline for the revisions, and should work collaboratively and expeditiously to complete the revisions.

Admission to candidacy

All doctoral students and students in master's programs requiring theses must be formally admitted to degree candidacy to continue in the program and complete the degree. Criteria for degree candidacy are determined by the Graduate School.

Individual development plans

All doctoral students are required to formulate an individual development plan prior to their third year of training or by the semester after they pass their comprehensive examinations, whichever comes first. The individual development plan is an explicit statement of the student's immediate and longer-term career goals, as well as a plan for achieving those goals. Each student should develop their individual development plans with their adviser and – at their discretion – share their individual development plans with their graduate advisory committee and their graduate program. Each student should update their individual development plan at least annually. The format of the individual development plan is governed by a student's graduate program. Students are welcome to visit the American Association for the Advancement of Science myIDP (<https://myidp.sciencecareers.org/>) site as a starting point for developing their individual development plans.

Students in master's programs are strongly encouraged to formulate individual development plans.

Directed research

All Ph.D. programs and all thesis master's programs require students to perform directed research under the guidance of an adviser and graduate advisory committee. The student's directed research efforts address their dissertation (Ph.D.) or thesis (master's) project. Directed research is a major component of all Ph.D. programs and all master's programs requiring a thesis. Students complete directed research in addition to didactic course work.

The scope, breadth and direction of the directed research project is established by the student's adviser, the student and the student's graduate advisory committee. Importantly, dissertation and thesis projects are original investigations and therefore it is difficult to precisely anticipate their duration or the time required to complete them.

Doctoral dissertations and master's theses

Students in all Ph.D. programs and all master's programs requiring a thesis must perform directed research toward construction of dissertations or theses.

The School of Medicine has no specific formatting guidelines for dissertations and theses. Students and advisers should follow the guidelines (<https://graduate.vcu.edu/current-students/electronic-thesis-and-dissertation/>) from the VCU Graduate School. In practice, advisers and students often also review several recently released dissertations or theses from students in the same graduate program (available in Scholars Compass (<https://scholarscompass.vcu.edu/etd/>)) to familiarize themselves with formatting conventions.

All theses and dissertations must contain the following sections:

- Title page
- Partial fulfillment statement
- Copyright statement
- Vita

Students must coordinate with their advisers, graduate advisory committees and graduate program guidelines regarding the scope and content of their dissertations and theses. Program guidelines for scope and content of dissertations and theses supersede the SOM guidelines below. If no program guidelines exist, dissertations and theses should at the minimum include the following sections in the indicated order:

- Title page
- Partial fulfillment statement
- Copyright statement
- Acknowledgements
- Table of contents
- List of tables
- List of figures
- List of abbreviations
- Statement of contributions
- Abstract
- Introduction chapter
- Methods, data or analysis chapter(s) including appropriate figures and tables
- Conclusions chapter
- References cited
- Vita

Inclusion of appendices for additional information such as protocols, small projects, etc. is optional.

Students can, with approval from their advisers and GACs, expand the above to accommodate unique features of dissertation and thesis research projects.