

Graduate Academic Policies and Procedures: Doctor of Philosophy

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Credits for Degree

The number of credits required for completion of doctor of philosophy degrees varies with the program and the level of entry into the program. Students holding a prior master's degree generally require a minimum of 60 graduate credits beyond the master's degree (which is assumed to have included at least 30 graduate credits beyond the bachelor's degree).

Students entering the doctoral program with a bachelor's degree and who do not wish to complete a master's degree while pursuing the doctoral degree will be required to complete a minimum of 84 graduate credits beyond the bachelor's degree for programs offered by the Newark College of Engineering and 78 graduate credits beyond the bachelor's degree for programs offered by the College of Science and Liberal Arts.

Doctoral program credit requirements for joint programs, for which the names of multiple universities appear on the diploma, are to follow the requirements of the program as approved by the universities, generally a minimum of 72 credits beyond the bachelor's degree. While not a joint program, the chemistry doctoral degree follows the credit requirements of

the Environmental Science doctoral degree, which is a joint degree in the same department. Students who enter an NJIT doctoral program with two or more master's degrees already completed or a large number of appropriate prior graduate credits may be considered for a reduction in the credits required at NJIT. The evaluation of the requirements will be made by the program advisor in consultation with the Dean of Graduate Studies. The minimum credit requirement at NJIT for the doctoral degree at NJIT is 36 dissertation research credits, regardless of any other requirement waiver.

In addition to overall credit requirements, each program includes the following minimal requirements:

- For both entry levels; baccalaureate or master's start-point, at least 12 credits of course work at the 700 level; no more than two independent study courses may be used to satisfy this requirement. Master's project or thesis cannot be used to satisfy this requirement.
- For those entering the program with master's degrees, 24 credits of course work beyond the master's degree of which at least 12 credits must be at the 700 level and none at the 500 level or lower. A reduced number of course credits may be allowed for some (generally) joint programs.
- 36 credits minimum of doctoral dissertation research for programs **not** offered jointly with other universities.
- 30 credits minimum of doctoral dissertation research for the programs offered by the College of Computing Sciences.
- Dissertation research credits in accordance with the program approval documents for programs offered jointly with other universities
- Seminar attendance each semester or as required by the program. Nominal credit values, if any, for registration in seminar do not count toward fulfillment of overall credit requirements.

Obtaining a Master's Degree while Pursuing the PhD

Students who wish to complete a master's degree while pursuing a doctorate in the same field must be approved for this by the doctoral department, the Dean of Graduate Studies, and the Director of Graduate Admissions, and satisfy all requirements for the master's degree, including any thesis or project requirement. In general, such permission is given only after passage of the research proposal exam or if the student is near completion of the doctorate. Students in doctoral programs initially, who terminate their studies at the master's level, will lose further eligibility for support.

Qualifying Examination

Students must pass a qualifying examination within two years of being admitted into doctoral programs. Exceptional students, having only the bachelor's degree when admitted into the doctoral program, must take the qualifying examination within one and one-half years of admission and must pass it within two years. Students are only permitted to take the examination twice. The passage of qualifying examinations is reported to the Office of Graduate Studies. Each department determines its own policies with regard to format, confidentiality, grading, and review of examinations by faculty and students. Students are, at their request, permitted to view their examination papers in the presence of a designated faculty member and to see correct examination answers.

Dissertation and Pre-Doctoral Research Credits

Students may register for doctoral dissertation credits (course number 790) only after passage of the qualifying examination. They may register for a maximum of 6 credits of pre-doctoral research (course number 792) prior to passage of the qualifying exam. These credits may count toward the required number of dissertation credits for the degree. Dissertation and pre-doctoral dissertation credits are graded as S or U except that P is assigned to the last registration for doctoral dissertation upon completion of the degree.

Dissertation Advisor, Dissertation Committee and Research Proposal

Doctoral students are required to have a dissertation advisor selected, a dissertation committee formed, and research proposal approved within one year of passage of the qualifying examination.

Department chairpersons or doctoral program directors are responsible for approving formation of dissertation committees. The committee consists of a minimum of five members, one of whom is external to the program or to NJIT. The majority of the committee members are tenured or tenure-track faculty from the student's program or department having research experience or developing research interests related to the dissertation research. The dissertation committee chairperson typically is the doctoral candidate's dissertation advisor, but other faculty may be selected, provided they are from the student's program or department. The dissertation committee chair must be a tenured or tenure-track faculty member in the program. Two committee members, including an external member, may serve as co-advisors. The advisor or at least one of the co-advisors must be a tenured or tenure-track faculty member from the program.

The other members of the dissertation committee, except for an external member from outside the university, must have faculty rank at the level of Assistant Professor, Associate Professor, Professor, Distinguished Professor, or Research Professor. Former students of any committee member, who are less than four years beyond doctoral completion, are specifically excluded from membership. Post-doctoral Associates, Instructors, Special Lecturers, Research and Teaching Assistants, or any other student category, are specifically excluded from membership. The external members should either have appropriate faculty rank elsewhere or have sufficient research expertise to warrant inclusion on the dissertation committee.

Part-time doctoral students pursuing the doctorate with industry collaboration should have at least one dissertation committee member from the participating industrial partner whose research credentials would otherwise be appropriate for a member of the university faculty. Committees for joint doctoral programs with other universities shall either follow these policies or the specific policies for the joint program consistent with the program approval and related documents.

Each doctoral program has specific requirements for preparing, presenting and accepting proposals. Research is expected to investigate or develop a unique contribution to science and technology. Research may be experimental, analytical, applied, or theoretical, provided it satisfies this criteria and is approved by the dissertation committee. It should be of a quality to warrant scholarly presentation or paper submission to reputable journals in accordance with program practice.

Doctoral Dissertation Format and Submission

Doctoral dissertations submitted for graduate degrees must follow a prescribed university format. The approved format is based on the Estrin/Roche manual: Guidelines for Scientific and Professional Theses. The manual is on reserve in the NJIT Library. The Office of Graduate Studies provides seminars, guidance documents, and continuing assistance for students. The office or its web site should be consulted for more information.

Office of Graduate Studies policies on number of copies, deadlines, fee payments, information documents, and grade submission for acceptance of the doctoral dissertation are to be followed. The Office of Graduate Studies provides guidance and assistance to students working on the final details of the doctoral dissertation. Students should contact the office for appointments early in the final semester. The review of format should proceed well in advance of final document approval and dissertation defense.

Progress towards Degree

Students may not register for doctoral dissertation credits until they arrange for a department- or program-approved faculty advisor to supervise the work. Continued registration for additional doctoral dissertation credits will be allowed as long as the advisor grades the work to show that there is satisfactory progress. Credits for which a U (unsatisfactory) grade is given are not counted as degree credits toward completion of the doctoral dissertation. Doctoral dissertation registration may be 3 credits during a summer session.

Doctoral dissertation registration must be at least 6 credits during a semester until the total dissertation credit requirement is reached, at which time 3 credit registrations are permitted unless exceptions are granted by the Dean of Graduate Studies for earlier registrations in 3 credits. Students must register for doctoral dissertation work within the deadlines established by the registrar. Maximum credit registration each semester is 12 credits for the doctoral dissertation. Additional credit registrations, beyond 12, for doctoral dissertations, will require approval of the dean of graduate studies.

Once a student has begun a doctoral dissertation, the student must register for these courses each semester until the doctoral dissertation is completed. Unapproved interruptions in doctoral dissertation may be subject to billing for omitted credits.

Students must be registered in doctoral dissertation in any semester or summer session in which completion is expected. The advisor for doctoral dissertation assigns a final grade when the Office of Graduate Studies confirms it has received all documents in final and approved form and all related bills have been paid.

Approval by the graduate program advisor and the Office of Graduate Studies must be obtained if the student wishes to interrupt the doctoral dissertation for a semester or more. Students may neither maintain registration, nor fail to register without notifying and getting approval from the graduate program advisor and the Office of Graduate Studies. The university complies with all state and federal laws related to military service.

No more than six years of registration for doctoral dissertation is permitted. Failure to complete a doctoral dissertation in this period will result in a final grade of F, and dismissal from the program.

Students who require additional time to complete a doctoral dissertation should appeal for an extension, in writing, to the graduate program advisor, the academic department, and the Office of Graduate Studies.

Residency

Doctoral candidates must spend at least one academic year in full-time residence. This requirement is sometimes waived with the approval of the dissertation committee and the Dean of Graduate Studies. Such waivers are granted when a candidate's dissertation research requires use of research facilities at an approved off-campus site. A typical example for a residency requirement waiver would apply in the case of part-time students in the collaborative doctorate option.

Doctoral Candidacy

Doctoral candidates are doctoral students who have completed all other requirements for the degree except for completion of the dissertation and the defense. This includes, as a minimum, passage of the doctoral qualifying examination, approval of the research proposal and completion of all course work. Status as a doctoral candidate does not imply candidacy for the degree. A degree candidate will be both near degree completion and have made a formal degree application for a particular graduation date.

Intellectual Property and Copyright Ownership

NJIT believes its role as an educational institution is best served by disclosing to the public all academic research and Doctoral Dissertations developed by students during the course of their studies or employment at the university.

Doctoral Dissertations created by students shall be governed by the following provisions as outlined in NJIT's copyright policy under "Ownership and Disposition of Copyrightable Materials":

A. Copyright ownership of Doctoral Dissertations generated by research that is performed in whole or in part by the student with financial support in the form of wages, salaries, stipend, or grant from funds administered by the University shall be determined in accordance with the terms of the support agreement, or in the absence of such terms, shall become the property of the University.

B. Copyright ownership of Doctoral Dissertations generated by research performed in whole or in part utilizing equipment or facilities provided to the

University under conditions that impose copyright restriction shall be determined in accordance with such restrictions.

C. Copyright in Doctoral Dissertations not within the provisions of Categories A and B of this policy shall be the property of the author. However, the student must, as a condition of a degree award, grant royalty-free permission to the University to reproduce and publicly distribute copies of the doctoral dissertation.

Requests for permission to publish Category A and B should be addressed to the Office of Intellectual Property.

In accordance with university policy, NJIT retains all right, title and interest to any and all intellectual property (i.e., inventions, discoveries, creative works, trade secrets and know-how) developed by NJIT students during the course of their studies or employment at the university or while using university facilities.

To protect against premature disclosure of an invention and/or publication of anything that may be of a proprietary nature, students must immediately report their intent to do so to the [Office of Technology Development](#). Students must neither publish nor discuss proprietary information with anyone other than the Office of Technology Development or members of the University's Intellectual Property Committee. When a doctoral dissertation covers material that is potentially proprietary, both the student and the advisor must report the existence of such material to the Office of Graduate Studies and the Office of Technology Development; so that the University may expedite its review of such material and determine whether or not it is proprietary and should be protected under the University's guidelines for protecting its Intellectual Property. If necessary, the Office of Graduate Studies and the Office of Technology Development will take steps to sequester patentable material in archival documents such as Doctoral Dissertations. If the University applies for a patent, the student will sign an appropriate assignment agreement. All income derived from such intellectual property will be shared between NJIT and the student in accordance with the University's published policy.

(see <http://www.njit.edu/research/officetech/inventors/inventors.php>)

For further information, call the Office of Intellectual Property, (973) 596-5825.