

# Ph.D. in Urban Systems

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## Ph.D. in Urban Systems

The Ph.D. Program in Urban Systems is jointly offered by New Jersey's two senior public research institutions: New Jersey Institute of Technology (NJIT) and Rutgers, The State University of New Jersey at Newark (RU-N). The program consists of three tracks: Technology at NJIT, Environment with a possible sub-specialization in Urban History at NJIT, and Global Urban Studies at RU-N. Students admitted to the Technology track or the Environment track must fulfill the requirements as specified in this catalog.

### Program Milestones

Each university follows its own timeline for candidacy and final defense. This includes:

The required coursework for the Ph.D. program and the (major part of the) qualifying exam must be completed successfully by the end of the second year in the program.

The dissertation proposal must be defended successfully either by the end of the third year in the Ph.D. program or four semesters after registering for the first time in the 792 pre-doctoral research course, whichever occurs earlier.

The dissertation must be defended successfully by the end of the sixth year in the Ph.D. program.

### RCR Requirement

In their first year in the program, Ph.D. students must register in the 0-credit online course INTD 799 Responsible Conduct of Research (RCR) and receive a satisfactory grade.

### Selection of Dissertation Advisor

Temporary advisors are assigned upon entry into the program. Students must select a dissertation topic and permanent advisor by the fourth semester in the program at the latest. Change of advisor requires the consent of the previous advisor and departmental approval. In cases where more than one advisor is directing the dissertation, the primary advisor must be on the core departmental faculty.

### Qualifying Examination

Students are required to take the Qualifying Exam (QE) at the end of their second year upon completion of all core courses. Should they fail the exam, they may take it once more in the fall semester of their third year. Should they fail the exam for the second time, they are dismissed from the program.

### Dissertation Committee

A dissertation committee must be formed and approved within one year of passage of the QE but no later than the end of the fifth semester. The committee consists of a minimum of five members, one of whom is external to the Ph.D. program or to NJIT or Rutgers. The majority of the committee members are NJIT/Rutgers Graduate 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. This chairperson 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 be members of NJIT/Rutgers Graduate Faculty. Former students of any committee member, who are less than four years beyond doctoral completion, are specifically excluded from membership. The external members should either have appropriate faculty rank elsewhere or have sufficient research expertise.

### Dissertation Proposal

Doctoral students must prepare a written research proposal and make an oral presentation for approval by their dissertation committee. The purpose of the dissertation proposal is to present a complete and well-developed outline of the research planned for the dissertation. The dissertation should present original research on a topic related to Urban Systems, which will be organized with a cohesive research theme/ topic outlining the following: research problem, theoretical or conceptual framework, literature review, and methods. Students would work closely with their dissertation advisor to determine the final format for the proposal.

### Dissertation Defense

The dissertation must be defended in a publicly announced oral defense. The dissertation defense is scheduled after the dissertation has been completed and approved by the student's Dissertation Committee. All members of the committee must be present to hear the defense. A successful defense of the dissertation is determined by vote of the dissertation committee. The Office of Graduate Studies policies on deadlines and submission of dissertation and abstracts are also to be followed. Every member of the dissertation committee must sign the approval page of the final dissertation document.

### Degree Requirements

To graduate, students in the Technology track or the Environment track must have an approved dissertation and complete a total of 51 credits, which consists of a 14-credit core curriculum, a 21-credit elective component, and a 16-credit dissertation research. Students need to get departmental approval for the courses they take for their degree requirements. In rare circumstances, highly-qualified students without a master's degree may be admitted and asked to take additional courses.

Code	Title	Credits
<b>Core</b>		<b>14</b>
Qualitative methods (3 Credits) <sup>1</sup>		
Quantitative methods (3 Credits) <sup>1</sup>		
Additional research methods or theory course (3 Credits)		
Additional research methods or theory course (3 Credits)		
Colloquium (2 Credits) <sup>2</sup>		
<b>Electives</b> <sup>3</sup>		<b>21</b>
<b>Dissertation Research</b> <sup>4</sup>		<b>16</b>
USYS 792	Dissertation Research (6 Credits)	
USYS 790	Dissertation Research (10 Credits)	
<b>Total Credits</b>		<b>51</b>

<sup>1</sup> Students pursuing a sub-specialization in Urban History within the Environment Track take research methods in architectural and urban history in place of the two core methods courses (i.e., qualitative methods and quantitative methods). Which courses would fulfill this requirement would be determined by the student's dissertation advisor.

<sup>2</sup> Ph.D. Students must register two semesters for 1 credit of colloquium (i.e., total 2 credits).

<sup>3</sup> Electives are chosen in consultation with the program director and, eventually, the student's dissertation advisor. No more than 6 credits may be USYS 725 Independent Study I or USYS 726 Independent Study II.

<sup>4</sup> Ph.D. students must register for 3 credits of pre-doctoral research (USYS 792) until they defend successfully the dissertation proposal.