This handbook includes information from the NC State Graduate School website. The website is updated more frequently than this handbook and space often does not allow complete reproduction of web descriptions. Students and faculty should always confirm information by checking the web.

College of Design PhD Program
NC State University
Raleigh, NC 27695
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Welcome

Welcome College of Design Doctoral Students:

I commend you for choosing the College of Design at North Carolina State University for your advanced studies in design. The College of Design has been an interdisciplinary environment intent on producing leaders in the design fields for over fifty years. My role as Director of the PhD in Design program is to work with our PhD faculty in helping you to reach your goals and successfully negotiate the academic environment of the college and university.

The College of Design Graduate Office is located in the Brooks Hall administrative offices, just off the main lobby. This office is responsible for maintaining graduate student files; facilitating admission, registration and graduation related processes; and disseminating information regarding Graduate School policies. Richard Corley is the Graduate Administrative Assistant and will be able to address many of your concerns and provide you with necessary forms and policy related information (515-8317, richard_corley@ncsu.edu). Please feel free to discuss with me any concerns regarding the progress of your advanced studies. I do not have all the answers, but I will do my best to direct you to someone who can assist you.

As a graduate student we assume that you will speak up when you have concerns, keep yourself informed with regard to what is expected, stay in touch with your faculty and program, and take maximum advantage of this unique opportunity. Please see the Graduate School Administrative Handbook section on expectations for more information.

Again, welcome to our community. I look forward to getting to know you and expanding my own understanding of design through our interaction.

Sincerely,

Soolyeon Cho, PhD
Director, PhD in Design Program
Associate Professor, School of Architecture
College of Design, NC State University
soolyeon_cho@ncsu.edu
(919) 513-8061
OVERVIEW OF THE PROGRAM

The mission of the Doctor of Philosophy in Design program in the College of Design at North Carolina State University is to advance knowledge in design through research and scholarship. This mission is built upon the recognition of fertile common ground between the design disciplines and on the need for specificity and depth within them. The PhD program, therefore, values a broad range of interests that aim to improve the human condition through design.

In order to fulfill the above mission, the PhD in Design program prepares students holding previous degrees in a design discipline for collaborative research in areas defined by the faculty as academic and research strengths of the program. They include:

1) Design for Health and Well-being
2) Design Methods
3) Design for Learning
4) Design for Sustainability
5) Design History and Criticism
6) Design and Technology
7) Design and the Urban Context

Curriculum content is determined by a faculty advising team for each student within the following framework:

- Research methods in design + an optional second methods course 6 cr.
- Research paradigms in design 3 cr.
- Statistics or philosophy (as advised) 3 cr.
- Colloquia (each spring for three years) 3 cr.
- Advised electives (including independent studies) 24 cr.
- Qualifying examinations and dissertation 18 cr.

Total: 57 cr.

Total of 72 credits are required in the PhD degree program, of which 18 credits are transferred from previous master’s study. The 54-credit curriculum can be completed in a minimum of three years (Note: 3 cr. for DDN 890-Preliminary qualifying exam does not count toward 54 doctoral credits required for graduation). Coursework requires two years of full-time registration in coursework, followed by a qualifying Preliminary Examination and Dissertation Proposal, and at least one year of dissertation work. The degree is conferred upon successful completion of the Final Oral Examination and submission of the approved dissertation.
RESEARCH INTEREST AREAS

The PhD program addresses issues for which there is a College of Design history of scholarship and instruction. Interdisciplinary groups of faculty advise students in coursework and research related broadly to seven (7) research interest areas. The following are descriptions of these areas and the names of the faculty who serve as advisors. Please be aware that faculty expertise varies within these areas and faculty not listed for a specific area may have backgrounds pertinent to particular research topics. These are guidelines to start from, NOT exclusive working groups. The purpose of this section is to introduce the main research interest areas that can be supported by the College of Design.

1) DESIGN FOR HEALTH AND WELL-BEING

The College of Design is interested in the research opportunities presented by growing public concern for the relationship between the built environment and human health, development, and well-being. The goals of this work are to:

- identify and calibrate associations between the design features or attributes of products and environments and the health and well-being outcomes for specific populations
- build a knowledge base about design strategies that counteract the health crisis of sedentary lifestyles
- empower healthcare professionals to make informed decisions about health-promoting design strategies
- inform citizens about the role of design in shaping products and environments that promote health and well-being

Effects of designed landscapes on child/family development - The research objective is to expand the depth and breadth of evidence supporting associations between designed settings (features and attributes) and health outcomes.

Healing and therapeutic environment - The research objective is to expand the depth and breadth of the current knowledge that natural environments can have a positive effect on human well-being.

Neighborhood design and health and well-being - The research objective is to produce findings that influence design codes and design practices related to activity-friendly built environments and to conduct detailed investigations of specific settings, spatial relationships, features, and affordances of environments for the physical activity of target user groups.

Universal design - The research objective is to discover ways in which the use of the designed products and environments can be responsive to the most number of people and, in particular, to examine products and institutional settings, including hospitals, serving aging adults.

Participating faculty: Haig Khachatoorian, Robin Moore, Perver Baran, Sharon Joines, Celen Pasalar, Jianxin Hu, Tsai Lu Liu, and Nilda Cosco.
2) DESIGN METHODS

The College of Design is engaged in research related to the investigation, creation, and validation of methods or processes used in the development of design concepts for communication, products, and environments. The goals of this work are to:

- study observational, physical, transactional, organizational, and informational tools and improve these tools in relation to the enhancement of user participation
- expand the role of users in the design problem solving process (moving them from users to co-creators)
- develop new strategies for understanding and describing user contexts and settings (physical and virtual)
- produce more humane and user-centered design

Participating faculty - Professors Haig Khachatoorian, Robin Moore, Art Rice, Cecilia Mouat Croxatto, Celen Pasalar, Sharon Joines, and Juan Coll-Barreu.

3) DESIGN FOR LEARNING

The College of Design is engaged in research related to design thinking and issues of learning and education. The goals of this work are to:

- improve the quality of teaching and learning in formal and non-formal education settings through design-based strategies
- improve the effectiveness of learning materials and environments through research into the relationship between design and students' learning preferences, ability and healthy development
- inform citizens of the role design plays in shaping learning communities and cultures
- empower educators and students to make informed decisions about environments, products, and communication

Early childhood environments - The research objectives are to help communities create stimulating, healthy early childhood environments for play, learning, and environmental education; to develop an understanding of how the design of these environments relates to early cognitive development.

Design thinking in education - The research objective is to help educators use the analytical and synthetic processes of design and the active learning strategies of design education to reform teaching, learning, learning environments, and learning products.

School and community learning environments - The research objective is to explore alternative design, technology, and assessment strategies for environments that support learning and innovation in preK-12 schools, while meeting the social and economic needs of communities.

Participating faculty: Meredith Davis, Robin Moore, Wayne Place, Art Rice, Nilda Cosco, Derek Ham, Helen Armstrong, and Celen Pasalar.

Research and extension center: The Natural Learning Initiative promotes the importance of the natural environment in the daily experience of all children.
4) DESIGN FOR SUSTAINABILITY

The College of Design is interested in balancing the relationship among the effects of population growth; the uses and re-use of natural resources; and the sustainability of the natural environment. In the knowledge economy, concepts of interdependency and sustainability may also serve as principles for the design of information systems. The goals of this work are to:

- address design strategies at the level of systems and their interrelationships with other systems
- expand design thinking to consider and measure the impact of life cycle choices about communication, products, and environments
- develop models of design response that manage complexity and anticipate forces of change from within and outside systems

Energy and materials use - The research objective is to understand how design can improve the energy efficiency of buildings through the use of solar radiation and natural ventilation to heat and cool buildings, the use of natural light to illuminate interiors, and the development of integrated building systems. It is also the intent of this work to research product development strategies that consider the lifecycle of products and materials in their design.

Land use systems - The research objective is to expand the understanding and alternative approaches to land use and site design with respect to meeting the diversity of human needs. At the same time, the objective is to preserve species diversity, protect sensitive lands, and restore hydrological systems.

Sustainable information systems - to study ecological systems as a paradigm for the development of sustainable, technologically-mediated information systems.


5) DESIGN HISTORY AND CRITICISM

The College of Design is engaged in research that addresses the study of the history of the design disciplines, theories of making and interpretation, and critical perspectives on design. The goals of this work are to:

- build knowledge about the interrelationships among design disciplines
- develop new interpretive perspectives and modes of inquiry across and within disciplinary boundaries

Participating faculty: Meredith Davis, Russell Flinchum, Kristen Schaffer, Burak Erdim, Cecilia Mouat Croxatto, Helen Armstrong, Juan Coll-barreux, and Tom Barrie.
6) DESIGN AND TECHNOLOGY

The College of Design is interested in research about the design of human-centered technology in the performance of communication, products, and environments. The goals of this work are to:

- build knowledge about the role design plays in people’s physical, cognitive, and emotional interactions with technology and technologically-mediated information and environments
- improve the quality of life of specific populations through research on technological products and environments that embed human-centered features and attributes in their design
- identify, describe, and measure the outcomes of technology design on social and cultural practices, including work, leisure, learning, access to the privileges of democracy, and commerce

Building technology - The research objective is to develop strategies for embedding human-centered values and concern for the quality of life in mass-produced building components and fixtures.

Modeling, simulation, and visualization - The research objective is to develop and measure the effectiveness and impact of technologically-mediated models, simulations, and visualizations in representing design concepts, rapid prototyping design solutions, and translating verbal and quantitative information in the work of the disciplines.

Participating faculty: Wayne Place, Soolyeon Cho, Robin Moore, Sharon Joines, Art Rice, Meredith Davis, Haig Khachatoorian, Perver Baran, Derek Ham, Jianxin Hu, Helen Armstrong, Dana Gulling, and Gene Bressler.

7) DESIGN AND THE URBAN CONTEXT

The College of Design believes that the city still retains vital importance in human affairs. The college is committed to research collaborations among the design and planning disciplines. The goals of this work are to:

- understand how urbanism and urban design processes affect the quality of people’s lives, perceptions of the city, and patterns of behavior
- measure how design and development decisions influence sustainability in urban contexts
- build knowledge about the impact of design planning and policy on urban development
- develop strategies for community participation in urban design

Urban morphology and spatial structure - The research objective is to study the relationship of urban spatial structure and city form to the quality of life in cities, including healthy lifestyles and social inclusion.

Perception and behavior - The research objective is to investigate how different user groups and populations perceive, use, and navigate the urban environment at all scales in the urban ecosystem. How do factors such as stage in the human life cycle, cultural background, and socio-economic status help explain user behavior? How does the designed environment constrain or afford specific behaviors? How do urban residents attach meaning to places? How are these meanings communicated and to whom?

Participating faculty: Professors Robin Moore. Associate Professors Perver Baran and Kristen Schaffer.

The College of Design has ongoing collaboration with the University of North Carolina/Chapel Hill faculty
in the Department of Urban and Regional Planning, Cecilia Mouat Croxatto, Robin Abrams, Celen Pasalar, Gene Bressler, and Burak Erdim.

CURRICULUM STRUCTURE

Working within the basic structure of the curriculum, the student develops a course of study in consultation with his/her mentor and committee. Course selection is guided by the student’s research interests and the area in which he/she has declared a focus.

Required courses common to all PhD in Design students

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDN 701</td>
<td>Research Methods</td>
<td>3 credits</td>
</tr>
<tr>
<td>DDN 702</td>
<td>Research Paradigms</td>
<td>3 credits</td>
</tr>
<tr>
<td>DDN 810</td>
<td>Colloquia (taken each spring)</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Other courses (some taken outside the College of Design)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Second methods class</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>Statistics or philosophy</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>Advised courses in design and related disciplines</td>
<td>24 credits</td>
</tr>
</tbody>
</table>

Dissertation related

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDN 890</td>
<td>Preliminary Examination</td>
<td>3 credits (not counted for graduation)</td>
</tr>
<tr>
<td>DDN 893</td>
<td>Supervised Research</td>
<td>6 credits</td>
</tr>
<tr>
<td>DDN 895</td>
<td>Dissertation Research</td>
<td>9 credits</td>
</tr>
</tbody>
</table>

Generally, the distribution of credits across three years of study is as follows:

First Semester (design intensive)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDN 702</td>
<td>Research Paradigms</td>
<td>3 credits</td>
</tr>
<tr>
<td>DDN 795</td>
<td>Special Topics (or Advised Elective)</td>
<td>3 credits</td>
</tr>
<tr>
<td>DDN 830</td>
<td>Independent Study (or Advised Elective)</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

Second Semester (design intensive)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDN 701</td>
<td>Research Methods</td>
<td>3 credits</td>
</tr>
<tr>
<td>DDN 795</td>
<td>Special Topics (or Advised Elective)</td>
<td>3 credits</td>
</tr>
<tr>
<td>DDN 830</td>
<td>Independent Study (or Advised Elective)</td>
<td>3 credits</td>
</tr>
<tr>
<td>DDN 809</td>
<td>Colloquium</td>
<td>1 credit</td>
</tr>
</tbody>
</table>
Third Semester (may include study outside the College of Design)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXX</td>
<td>Second methods course (optional)</td>
<td>3 credits</td>
</tr>
<tr>
<td>XXX</td>
<td>Statistics (philosophy)</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>Advised design elective or other doctoral course in design</td>
<td>3 credits</td>
</tr>
</tbody>
</table>

DECLARATION OF DISSERTATION COMMITTEE MEMBERSHIP

SUBMISSION OF GRADUATE PLAN OF WORK

Fourth Semester (may include study outside the College of Design)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDN 830</td>
<td>Independent Study (or Advised Elective)</td>
<td>3 credits</td>
</tr>
<tr>
<td>XXX</td>
<td>Advised elective</td>
<td>3 credits</td>
</tr>
<tr>
<td>DDN 809</td>
<td>Colloquium</td>
<td>1 credit</td>
</tr>
</tbody>
</table>

Fifth semester (design intensive)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDN 890</td>
<td>Doctoral Preliminary Exam</td>
<td>3 credits (does not count toward 54 credits required for graduation; must be passed before enrolling in DDN 895)</td>
</tr>
<tr>
<td>DDN 893</td>
<td>Doctoral Supervised Research</td>
<td>3-6 credits</td>
</tr>
<tr>
<td>XXX</td>
<td>Optional Advised Elective</td>
<td>0-3 credits</td>
</tr>
</tbody>
</table>

SUBMISSION OF DISSERTATION PROPOSAL (IRB APPROVAL IF NEEDED)

PRELIMINARY QUALIFYING EXAM

PARTICIPATION IN ELECTRONIC THESIS DISSERTATION WORKSHOP

Sixth Semester (design intensive)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDN 895</td>
<td>Dissertation Research</td>
<td>3-9 credits</td>
</tr>
<tr>
<td>DDN 809</td>
<td>Colloquium</td>
<td>1 credit</td>
</tr>
<tr>
<td>XXX</td>
<td>Optional Advised Elective</td>
<td>0-6 credits</td>
</tr>
</tbody>
</table>

DOCTORAL DISSERTATION DEFENSE
## REQUIRED MEETING WITH DISSERTATION ADVISOR IN GRADUATE SCHOOL

Subsequent semesters (continuous registration)

<table>
<thead>
<tr>
<th>DDN 899 Dissertation Preparation</th>
<th>1 credit (American citizens and international students in their last semester of study, with visa implications)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 credits (international students who do not anticipate completing a successful dissertation defense by published Graduate School date in this semester)</td>
</tr>
</tbody>
</table>
REGISTRATION

Registration for classes takes place around midterm of the preceding semester. All students should register online during this period through their MYPACK PORTAL. Access to registration is possible only after academic advisors have “released” students from their advising lists. This release follows a face-to-face consultation with the advisor regarding the next semester’s course plan. Registration after the deadline carries a $100 late fee and no guarantee of placement in courses. Please see the Graduate School Administrative Handbook section on Course Registration for more information.

CONTINUOUS REGISTRATION

After a student is admitted to the Graduate School and enrolls for the first time, he/she is required to maintain continuous registration. Continuous registration refers to a student’s enrollment each semester, excluding summer sessions, until he/she has graduated or his/her graduate program has been terminated. All students attending classes must be registered for either credit or audit. Students who have completed all coursework with the exception of the dissertation should register for DDN 899.

LEAVE OF ABSENCE

A student in good academic standing who must interrupt his/her graduate program for good reasons may request a leave of absence from graduate study for a definite period of time, not to exceed one year within a given graduate degree program. The student should initiate the request (in writing) with his/her chair of his/her advisory committee and have it approved by the program director who will then submit it to the Graduate School. The Graduate School should receive the request at least one month prior to the first day of the term involved. The time that the student spends on an approved leave of absence will be included in the time allowed to complete the degree, i.e. ten years for the doctoral degree. Time limits are not extended. Students doing field work outside the US may request a leave for that semester and the college will recommend approval to the Graduate School. Students on leave are not eligible for funding on the Graduate Student Support Plan.

WITHDRAWAL

Withdrawal during the registration period - Any student enrolled in a graduate program who is registered for a given semester or summer session and withdraws during the official registration period (typically the first 10 working days of a semester or 5 working days of a summer session) must obtain a leave of absence to meet the requirement for continuous enrollment.

Withdrawing after the registration period ends - Any student withdrawing after the official registration period does not need to obtain a leave of absence and will be considered by the Graduate School as having met his/her continuous registration.

Please see the Graduate School Administrative Handbook section on Withdrawal from the University for more information.
REGISTRATION IN SUMMER SESSIONS

Submission of dissertation and oral examinations - All students who take their final oral examination or submit their dissertation to the Graduate School during either summer session must be registered for either the first or second summer session. Those who wish to submit their dissertation or have their final oral examination after the last day of a semester or summer session, but before the next semester or summer session must have been registered in the semester or summer session that immediately preceded the date of submission or the date when the exam was held. This means that the students must have been registered in the previous semester to be eligible to schedule the final defense date which falls in after the previous semester has ended and before the following semester begins.

Those who wish to submit their dissertations (or to have their final examination) in the days between the semesters

Stipends and social security taxes - Graduate students are not required by the university to be registered during the summer. However, students who receive a stipend but who are not enrolled in the university during a period of five weeks or more are subject to social security tax withholding. In particular, this means that social security taxes will be withheld from the paychecks of Graduate Research Assistants who do not register in the summer. Specifically, social security taxes will be withheld in June for RAs who are not registered in summer session II. The source of funds that pays the stipend must pay the same amount of social security tax as is withheld from the student's paycheck during these months.

A special registration category has been created for Research Assistants who would not otherwise take courses in the summer: DDN 896 (Summer Dissertation Research) is one credit hour with registration for 10 weeks, beginning the first day of summer session I. Social security taxes will not be withheld from June or July paychecks of RAs who register for this course.

Students should not presume that faculty are available for summer instruction or advising. Students must confirm with their advisor and dissertation committee that the appropriate participants are A) in town for meetings with the student during the summer months, and B) willing to be involved in the advising process during times when they are not otherwise teaching.

INCOMPLETE GRADES

Students whose only remaining requirement for graduation is removal of an IN (incomplete) in a course are not required to be registered to remove the IN and graduate. Students who do not remove any remaining IN grade in the semester or summer session following the completion of all other requirements and are not registered during the same semester or summer session will have their programs terminated at the end of that semester or summer session due to non-compliance with the continuous registration policy. Please see the Graduate School Administrative Handbook section on Grades for more information.

FAILURE TO MAINTAIN CONTINUOUS REGISTRATION

Graduate students whose programs have been terminated because of failure to maintain continuous registration and who have not been granted a leave of absence during a fall or spring semester will be required to reapply for admission and pay the admission fee, if they wish to resume their studies at NC State (see discussion of readmission procedures on the Graduate School website, section 2.3.)
FULL-TIME/PART-TIME STATUS OF DOCTORAL STUDENTS

Full-time - Registration for 9 or more credit hours per fall or spring semester until the student completes all credit hour requirements for the degree, including research credits, and the oral preliminary examination (DDN 890), or 3 hours per semester of doctoral dissertation preparation (DDN 899) for students who have completed all credit hour requirements for their degree (including research credits and the oral Preliminary Examination) except for completing their research and/or writing and defending the dissertation. Students with an IN grade who have successfully completed all of the remaining degree requirements that are listed above are also eligible to register for 3 credit hours of DDN 899 and be considered full time.

Part-time - Registration for 3-8 credit hours per fall or spring semester, or one credit of DDN 899 for students who have completed all credit hour requirements for their degree (including research credits and the oral preliminary examination) except for completing their research and/or writing and defending the dissertation. Students with an IN grade who have successfully completed all of the remaining degree requirements that are listed above are also eligible to register for one credit hour of DDN 899 and be considered half time.

International students should check registration requirements related to their visas. Students employed under Research Assistantships must be registered for a minimum of 9 credit hours in order to be eligible to receive their stipend, tuition waiver, and insurance under the graduate student support plan.

REQUIREMENTS FOR RESIDENCE CREDIT

A student working toward a doctoral degree is expected to be registered for graduate work at NC State for at least six semesters beyond the Bachelor’s degree. The university has minimum residence requirements, as defined below; the College of Design requirements conform to those of the university.

Hours of graduate work - Doctoral residence credit is determined by the number of semester hours of graduate work carried during a regular semester.

<table>
<thead>
<tr>
<th>Semester credit hours</th>
<th>Residence credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 or more</td>
<td>1</td>
</tr>
<tr>
<td>6-8</td>
<td>2/3</td>
</tr>
<tr>
<td>Less than 6</td>
<td>1/3</td>
</tr>
</tbody>
</table>

At least two residence credits are necessary in continuous residence (registration in consecutive semesters) as a graduate student at NC State University, but failure to take courses in the summer does not break continuity.

Summer residency - Summer course work can only be used in partial fulfillment of the residency requirement. A single summer session is equal to one-half of the corresponding amount for a regular semester (e.g. six semester hours carried during a summer session will earn 1/3 of a residence credit; less than six credit hours will earn one-sixth of a residence credit.)
FINANCING GRADUATE EDUCATION

NC State offers graduate students a broad range of financial assistance options that help with tuition and living expenses while they are pursuing their advanced degrees. Graduate students may receive financial support through fellowships/traineeships, teaching assistantships, research assistantships, service assistantships, federal work-study programs, and loans.

A statement of tuition and fees is mailed to each student upon pre-registering through MYPACK PORTAL, and there are several payment options available. Students who fail to pay their fees or provide the financial aid information requested on their bills by the given deadline will have their registration cancelled and will have to prepay their tuition, fees, and a late registration fee prior to re-registering in MYPACK PORTAL at the beginning of the semester or session. New graduate students are required to pay their tuition and fees at registration and, therefore, are exempt from the late registration fee. Students in the Graduate Student Support Plan have their tuition paid directly by the plan. Students whose tuition is paid by the Graduate Student Support Plan (GSSP), the Financial Aid Office, or another source of financial assistance must still return the tuition and fees statement with the “sponsor” block filled in, along with a check for all fees not covered by their source of financial assistance.

REFUND OF TUITION AND FEES

A student who withdraws from the university on or before the end of the first two weeks of a semester (or within the first five days of a summer session) will receive a refund for the full amount, less an administrative fee of 5% of the total tuition, fees, room rent, and meal plan charges (not to exceed $100), which will be retained by the university. Refunds for official withdrawals from the university after the first two weeks of a regular semester or the first five days of a summer session are prorated. No refunds will be allowed for withdrawals that occur after 50% of the enrollment period has elapsed. Current refund information can be obtained through the university cashier’s office.

GRADUATE ASSISTANTSHIPS AND FELLOWSHIPS

Students admitted to the Graduate School may be awarded financial support in the form of an assistantship or fellowship. These programs provide financial support to enable students to focus their work on their degrees. Students’ assignments should be in the direct or general support of teaching, research, or extension missions of the university for the mutual benefit of the graduate student and his/her graduate program.

Eligibility - In order to be eligible for graduate assistantships and fellowships, students must be admitted to the Graduate School in full graduate standing and be enrolled in the fall and spring semesters. Students must also be in good academic standing (with a 3.0 grade point average or higher), unless granted an exception by the Graduate School. PhD in Design program consists of a three year curriculum. Regardless of the number of semesters for which students have received funding, students registered for the seventh semester or more are not eligible for funding through the PhD in Design program. However, students are still eligible for the GSSP support until the 8th semester by other means such as his/her advisor’s financial support via research fund if available. The funding limit of 8 semesters refers only to the PhD students. It does not include the semesters in master’s program.

The position of the Graduate School is that any graduate student holding a graduate research, teaching, or extension assistantship requiring 20 hours of work per week or more (i.e. half-time or greater) must, as a condition of such assistantship, maintain his/her status as a full-time student, and therefore, should not
otherwise be employed. International graduate students on F-1 and J-1 visas are limited to 20 hours of service work per week, from all sources combined.

Research or teaching assistantships, if awarded in the College of Design PhD program, require 12 hours of work per week and pay a monthly stipend. This stipend, funded from the program budget, allows students to receive health insurance and a tuition waiver funded through the Graduate Student Support Plan (GSSP). These appointments can be made at the time of admission and may be renewable in the second and/or third years of study, provided funding availability with the condition of the student remaining in good academic standing and making progress toward graduation. Students must reside in the United States during the semesters in which they receive an assistantship.

Assistantships are not scholarships. Recipients are expected to devote a number of hours per week to assisting their supervisors in research projects or teaching assignments. Some students enter the PhD program with financial support from other sources. Such students are not usually eligible for assistantships. Students are urged to explore additional sources of external support, especially for their dissertation research, which usually involves direct costs of field work, travel, etc. The PhD program does not have funding for students who extend their studies beyond the third year; it is the obligation of the student to secure resources for any additional semesters and planning for procurement of such support should begin early in the third year of study.

DEFINITIONS AND RESPONSIBILITIES OF ASSISTANTSHIPS

Graduate Teaching Assistant (GTA) - A student who is appointed in an academic department or program and A) directly participates in the teaching mission of the unit as an instructor of record, lab instructor, recitation leader, or lecture assistant, or has responsibilities in direct support of classroom instruction in the unit, such as setting up labs or working in an instructional computer lab; or B) provides general support to the teaching mission of the department or program.

All new GTAs are required to attend a university-wide Teaching Orientation, which is traditionally held in August, shortly before classes, and is sponsored by the Faculty Center for Teaching and Learning. International students whose responsibilities include significant interaction with undergraduates in the classroom or laboratory must be screened for oral English proficiency before they are permitted to assume these responsibilities. If the screening indicates that the teaching assistant needs to improve his/her spoken English significantly in order to communicate effectively with students, he/she must take FLE 400 (American English Pronunciation for International Students) or FLE 401 (Oral Communication and Teaching Skills for International Teaching Assistants) before being re-screened. Screening sessions are held in August, November, January, and April.

Graduate Research Assistant (GRA) - A student who is appointed in an academic department or program and A) directly participates in the research mission of the unit, on on-campus or off-campus organization that is affiliated with the unit, in the design of experiments, data collection, analysis, or reporting of research results in the student’s field of study, where research may, but is not required to, contribute directly to the student’s dissertation; or B) provides general support to the research mission of the unit or discipline.

The duties of the GRA may be independent of research activities that contribute to the requirements of the degree program.

Graduate Extension Assistant (GEA) - A student who is appointed in an academic department or program and A) directly participates in the extension, outreach, and engagement mission of the unit, or an on-campus or off-campus organization that is affiliated with the unit, in the design of projects, data collection, analysis, application, or reporting of results in the student’s field of study, where these activities may, but are not required to, contribute directly to the student’s dissertation; or B) supports the extension,
outreach, and engagement mission of the unit or discipline, including substantive interaction with individuals or groups beyond the university.

Graduate Services Assistant (GSA) - A student who is appointed to a position that serves the university outside of an academic department’s or program’s teaching or research mission.

Graduate Fellow - A student who is provided a stipend that has no corresponding service obligation. Stipends from graduate fellowships are based on academic scholarship and/or financial need criteria.

FINANCIAL SUPPORT FOR STUDENT PARTICIPATION IN SCHOLARLY GATHERINGS

A limited amount of funds are available in support of student participation in conferences and scholarly meetings during their doctoral study. Funded participation will prioritize paper presentations (peer-reviewed) and discussion panels over poster presentations.

Requests for support should be submitted to the program director (via email) for consideration and include the following:

1) Conference information (name, date, venue, and conference website)
2) Peer-review results (notification email or letter with review comments)
3) Published conference material (copy of submitted material)
4) Travel and expense budget itemized (registration fee, transportation, and lodging; no food)
5) Endorsement from the student’s mentor/advisor (email confirmation from advisor)
RESOURCES

WORKSPACES

PhD students and candidates share office space with the Natural Learning Initiative and the College of Design Research Administration offices in the ground floor of Leazar Hall. The space includes a shared kitchen and conference room that can be reserved through Pam Christie-Tabron (pfc@ncsu.edu). The offices are accessible 24 hours a day, however HVAC systems are subject to the university facilities operations’ schedule during the night time and on weekends. Students are assigned a desk for individual use or to share based on demand and usage. The PhD office space also includes five iMac workstations, each of which is partitioned for a windows operating system as well: software requests are taken at the beginning of the academic year. The PhD office space also includes bookshelves and filing cabinets that can be assigned as needed.

TECHNOLOGY

The William Keating Bayley Information Technology Laboratory in Brooks Hall 202 and 203 is the main computing facility for the college and home to the College of Design Office of Information Technology. The IT department also operates small cluster labs around the college in studio spaces. In all, there are approximately 160 computers available in labs and clusters. A wide variety of printers using the University's WolfPrint system are available through the College. In addition film, photo, and 3D printers are available by contacting the IT Staff.

The College requires most students to purchase their own computers. See the computer purchase requirement web pages for more information and recommendations on buying computer hardware and software. Students taking studio courses have access to a wired high-speed data network connection at their desks through StudioNet. Wireless networking is also available throughout the College. Audio-Visual, photographic, and computing equipment is available for checkout from the main IT lab in 203 Brooks. The telephone number for the IT Lab checkout window is 919.515.3160. A photographic studio and darkrooms, as well as laser cutters, are also available. Use of these resources is strictly limited to students currently enrolled in Design courses.

The Advanced Media Lab at NC State University College of Design is a multimedia facility housing the latest in digital hardware and software. The lab is maintained by Lee Cherry, Marc Russo, and Pat FitzGerald. The facility is used to support innovative and collaborative research projects between the design disciplines as well as the Graduate students and researchers in the Master of Art+Design program.

LIBRARIES

The NCSU Libraries includes nearly 5 million volumes as nearly 70,000 serial titles available for public use among five separate locations. The two main libraries include D.H. Hill Library on main campus and the James B. Hunt Library on Centennial campus. Branch libraries include the Veterinary Medicine School Library, the Natural Resources Library, and the Design Library. The Special Collection Research Center in D.H. Hill Library contains an extensive collection of archival material.

Both Hill and Hunt libraries have separate Graduate Student Commons for graduate students to use for studying with group seminar and study room available for reservation in four-hour time blocks. Digital
Media labs, production rooms, and workstations are available for student use, as well as music rooms and programming workstations. NCSU Libraries offers a variety of Graduate Student Services including workshops on research, technology, and instructional services in addition to individual consultation services and interlibrary loan.

There are a variety of additional digital collaboration spaces available in Hill and Hunt libraries. The Creativity Studio is a high-technology white-box room that can be configured for a wide variety of teaching, learning, and collaborative activities in many disciplines. It features high-definition projectors and moveable walls with dry-erase whiteboard surfaces. The Studio can be configured to host simulations, installations and virtual environments. The Game Lab supports the scholarly study of digital games, and also provides a place for students to take a break from their studies and play games for fun. The room is equipped with multiple gaming systems and a 20.3’ X 5’ Christie MicroTiles® touch-active display, which can be used as a single panoramic screen or divided into up to eight sections with varying inputs. The Teaching and Visualization Lab is a black-box room that offers 270-degree immersive projection on three walls / five screens for a total of 94 linear feet of high-definition display surface. The Visualization Studio is a collaborative environment for researchers that provides an ideal physical space for arranging visual information. The room contains 12 projectors (3 per wall) used to display the contents of a single, Windows computer screen 360-degrees across four walls. It also provides the infrastructure to tie in personal laptops, allowing four different users to project on the walls simultaneously. Because the Visualization Studio runs a standard desktop, it can support a wide range of applications and users from a variety of disciplines with varying levels of computer skills. Custom software is available to exploit the display space of the Visualization Studio, and the room enables video conferencing as well.

The Harrye B. Lyons Design Library supports the College of Design and has collection emphases in architecture, landscape architecture, graphic design, industrial design, and art and design. The library is open every day with limited hours on weekends. The collection includes books, periodicals, videos, a slide library, and various drawings pertinent to the study of the College disciplines. The library website includes research guides prepared by the college librarian specifically oriented to design students, as well as an extensive image collection.

COMMUNICATION

Email is the primary means of communication between the faculty and PhD students and between the Graduate Office and students. Check email regularly and use it to establish appointments with faculty. You must use your NC State email address to keep informed of issues that affect students. Faculty have phones in their offices, but it is common that they are in classrooms and not checking voicemail on a regular basis. Do not assume that a voicemail message will be returned in a timely manner. Always backup a voicemail message with email. You can also submit forms (e.g., preliminary and final oral exam request forms) via email to the director after signing on the form electronically or manually (scanned copy).
PROGRESS TO DEGREE

The curriculum in the PhD in Design program involves a variety of milestones, deliverables, and submissions. It is the responsibility of the student to become familiar with these requirements and to request further explanation when appropriate. Richard Corley is the liaison with the Graduate School on the submission of forms and maintains a calendar of deadlines on these requirements. Failure to meet these deadlines may result in a delay in progress to graduation. (see Appendices for forms and calendars)

MILESTONES IN THE PROGRESS TO DEGREE
(Click here to go to the MILESTONES diagram)

1st SEMESTER:
- Submission to the Graduate School of final transcripts for previously earned degrees at start of semester
- Submission of signed Patent Agreement to Graduate School at start of semester
- Development of one-year course of study plan with advising team (advisor and program director)

2nd SEMESTER:
- Participation in setting the agenda for the all-student colloquium
- Submission of updated CV to the PhD program director and updating website profile
- Development and presentation of Research Interest Area Paper (Introductory) to PhD faculty and students (May).

3rd SEMESTER:
- Update and presentation of Research Interest Area Paper (Final) to PhD faculty and students (September).
- Submission of Request for Appointment of Graduate Advisory Committee to Graduate School. Students work with their advisors to form their dissertation committee members.
- Submission of Proposed Plan of Graduate Work to Graduate School after 12 credits completed
- Assignment of Graduate School representative (after approval of Plan of Work)

4th SEMESTER:
- Participation in setting the agenda for the all-student colloquium
- Submission of updated CV to the PhD program director and updating website profile
- Finalizing of dissertation committee and beginning preparation of the proposal (a meeting with the committee is recommended to determine consensus on general direction of proposal)

5th SEMESTER:
- Preliminary Written Examination is managed by the dissertation committee chair (see page 20) Student may not undertake this process with incomplete in any course of the transcript
- Request to Schedule the Preliminary Oral Examination must be received by the Graduate School at least 10 working days (or two weeks) prior to the exam date
- Preliminary Oral Examination takes place after completion of all coursework - student schedules grades location and time in consultation with the advisory committee
- Report on the Outcome of the Preliminary Exam is filed by the faculty immediately after the exam
- Submission of Doctoral Dissertation Proposal for review and approval by Graduate Dissertation Committee (in a decision separate from the outcome of the Preliminary Examination)

SIXTH SEMESTER:
- Diploma Order Request Card submitted by end of third week of semester
- Request to Schedule Final Oral Examination must be received by Graduate School at least 10
working days (or two weeks) prior to the exam and no earlier than four (4) calendar months after passing the Preliminary Exam. The Final Oral Examination must be held in a public space and announced to the college by email and print in faculty mailboxes no less than two weeks before the date

- Report on Final Oral Examination is filed by faculty immediately after the exam
- Submission of dissertation to the Graduate School immediately after the examination is completed and by the graduation deadline for the semester (this requires a scheduled appointment with the Graduate School)

Receipt of materials in the Graduate School can be by campus mail, hand delivery, fax, or email as appropriate. Please do not expect Richard Corley to drive materials to the Graduate School that are due on the same day.

Updated CV ANNUAL REPORTS

At the end of each semester, students will submit an updated curriculum vitae to be uploaded on the PhD in Design website that includes updated information for advisors and committee members, research interests, courses taken including instructor, research activity (paper presentations, articles, talks), skills, and awards.

RESEARCH INTEREST AREA PAPERS AND PRESENTATIONS

All students will submit a Research Interest Area Paper and make a formal presentation to the PhD faculty. The purpose of the paper and presentation is to identify a general area of interest from which will guide the selection of future coursework and the dissertation proposal. The Research Interest Area paper is not the dissertation proposal, so it should be sufficiently open-ended in order to be informed by future coursework and discussion with faculty in the following year.

At the same time, it is important for the paper to demonstrate a focusing of interests to something from which “researchable questions” will arise. The paper should give faculty a concrete sense of the arena in which the student wishes to work and demonstrate his/her recognition of the types of investigations that are appropriate to that content domain. Students should be able to demonstrate qualifications to undertake research in this interest area by the types of issues raised, a critical perspective on those issues (as opposed to mere description), and the ability to cite references and a bibliography from reading in the research area.

Finally, the paper should address the question, “Why is this worth doing?” Because so little has been done in design research, in comparison to more mature research disciplines, the student’s choice of topic from all possible topics is important. The student will devote a significant portion of his/her education to this area and is likely to continue this work after graduation. The paper should address the value of research outcomes in this area to design and society, as well as to the student’s own professional opportunities. Students will be challenged by the faculty if the interest area is centered in disciplines outside the student’s expertise and preparation for doctoral study.

The format for the Research Interest Area Paper is open and should be negotiated with the faculty advisor. Students make formal presentations of their research interests to the full PhD faculty two times, which are required;

1) INTRODUCTORY - during the exam week at the end of the spring semester (early May) and 2) FINAL - beginning of the fall semester (early October before Fall break).

These presentations are 20 minutes in length and followed by 20 minutes of faculty discussion. Students
should identify their potential dissertation committee members, submit at least four faculty names, and invite them to the presentation. Student recorders will capture faculty comments in notes that are then shared with the presenter. The presentation should summarize highlights of the paper content and not be recitations of the paper itself. They should be supported by relevant visual material.

The content of the paper and presentation should address the following issues:

- **Description of research interest area**
  - What constitutes the range of issues within this topic area that interest you?
  - What has or has not been done with respect to research in this area (cite specific references)?
  - What is your critical perspective on the body of existing work related to this topic?
- **Why is it worth doing research in this area?**
  - What current conditions or scholarship make the need for research in this area apparent?
  - In what specific ways could research outcomes contribute more broadly to the discipline and/or profession of design and to society?
- **What are your qualifications to undertake research in this area (no personal histories)?**
  - Why and how does this topic fall within a design research domain?
  - What kind of additional, specific expertise is required for investigations in this area? (This should anticipate elective coursework that may be necessary to conduct your study, as well as faculty expertise from which you will draw support.)
- **Annotated bibliography**
  - What have you read and hope to read?
  - How are these books relevant to the topic?
  - What is the seminal literature in this area?

**DISSERTATION ADVISORY COMMITTEE / PLAN OF GRADUATE WORK (PoGW)**

By the beginning of the second year, each student forms a Doctoral Dissertation Advisory Committee by first selecting a faculty chair. The student’s mentor (assigned on admission to the program) may assume this responsibility if it is mutually agreeable to the student and faculty member. In some cases, the research interests may indicate that another faculty member is more appropriate. The chair of the committee must be a current PhD faculty member in the College of Design.

All members of the Doctoral Dissertation Advisory Committee (a minimum of 3 faculty + the chair) must be identified prior to the end of the first semester of the second year of study. This committee must be approved by the program director and the Graduate School through the submission of names and accompanying signatures on the Plan of Graduate Work (see discussion and form in appendix), which also details the remaining coursework to be undertaken by the student. The committee will include a member appointed by the Graduate School; if students wish to choose faculty from outside the college with whom they have worked, the program can recommend this member as serving as the Graduate School representative.

The primary function of the advisory committee is to advise the student during the process of writing the dissertation and to monitor and evaluate the student’s degree progress, most significantly through the Preliminary Examination and Dissertation Proposal. The committee certifies whether the student has met the NC State University standards for a doctoral degree through the Dissertation and Final Oral Examination. The committee and student are encouraged to meet in formal sessions at appropriate intervals to assess the student’s progress; such meetings may be requested by the student or by any member of the committee and should be scheduled sufficiently in advance to accommodate all participants. PhD work rooms in the Field House may be used for these meetings.
The policy that governs the establishment of the Doctoral Dissertation Advisory Committee is on the web version of the Graduate School Handbook. The College of Design uses the following criteria for the establishment of the committee:

- The committee chair must be a College of Design faculty member with full graduate faculty status and an appointment in the PhD program.
- The second member of the committee must be a College of Design faculty member with full graduate faculty status.
- The third member of the committee must be an NC State faculty member with full or associate graduate faculty status.
- The fourth member of the committee must be a faculty member from NC State University, the University of North Carolina at Chapel Hill, the University of North Carolina at Greensboro, or Duke University, with full or associate graduate faculty status in that faculty member’s respective institution, or can be a faculty member at another institution, as long as that person has been approved in advance by the NC State University Graduate School.
- A fifth member can be added with the advance approval of the NC State University Graduate School.

Graduate faculty from other schools - A member of the graduate faculty from the University of North Carolina at Chapel Hill, the University of North Carolina at Greensboro, or Duke University may serve as one of the members of the Doctoral Dissertation Advisory Committee. However, members of professional programs at these institutions, such as faculty at the School of Law or Medicine, cannot serve as automatic graduate faculty unless their appointments at their respective institutions explicitly state that they are on the graduate faculty. Should their appointments be for that professional school only, then special guidelines for External Members and/or Technical Consultants, set by the NC State Graduate School, must be followed.

Because external faculty are not already entered in the Graduate School Graduate Faculty database, a Graduate Advisory Committee Appointment Form for Inter-institutional Member must be completed.

If the program recommends the appointment of a committee member who is not an NC State Graduate faculty, it should be made clear to that person that he/she will be expected to participate in the oral examinations. The PhD in Design program will not support long-distance phone participation in committee meetings or presentations. Students may use iSight cameras and internet connections, such as Skype, to collaborate with faculty who are not on campus for meetings.

Changes in the composition of the Doctoral Dissertation Advisory Committee - Any changes in the committee membership should be submitted electronically by Richard Corley. Should the student, in consultation with his/ her advisor, wish to change any members of the committee, he/she must submit a revised Plan of Graduate Work. The new member(s) are indicated where appropriate on the form and signed by the chair of the committee and the program director indicating approval of the change.

Disagreements within the committee or between the student and a committee member over the quality of a student’s performance are not grounds for reconstituting the committee. If the student believes he/she has been unjustly or unfairly treated in efforts to resolve committee conflicts, he/she may make an appeal to the Associate Dean for Graduate Studies in the College of Design describing his/her grievance. The Dean may appoint a committee following the grievance procedures.

Circumstances occasionally occur making it necessary for members of the advisory committee to send substitutes to a committee meeting. The substitution of a committee member on an oral examination must be requested in advance of the examination and in writing. It is extremely important to have clear communication between committee members and substitutes, so that new expectations or concerns do not arise at the time of the final examination.
PRELIMINARY (QUALIFYING) EXAMINATION

This description provides general guidelines used in administering the Doctoral Preliminary Examination, which has written and oral components. The main purpose of the examination is to assess the PhD student’s knowledge in core academic areas of the doctoral curriculum, which cover epistemological theories, methods and paradigms of design research, as well as the specific content of the student’s research interest area and dissertation topic. While questions may be framed in terms of the dissertation topic, the exam should orient the student toward critical and reflective thought about the general academic work completed and the subject areas represented by the chair and members of the Dissertation Advisory Committee. Please see the Graduate School Administrative Handbook section on Comprehensive Exams for more information.

The exam consists of both written and oral components. The student must be registered for DDN 890/Doctoral Preliminary Examination during the semester in which the examination is taken. Students who successfully pass both the written and oral components of the exam are advanced to PhD Candidacy. From then on, students have 15 credit-hours remaining toward the dissertation.

To be eligible to take the exam, the student must have completed all coursework (i.e. 36 credit hours with at least a 3.0 total grade point average) and have no outstanding incomplete grades in any course. Ideally, this examination should occur prior to the end of the first semester of the third year, but may not take place before the end of the second year of full-time study.

Prior to scheduling the exam, the student prepares a Dissertation Proposal, a document that links the academic work completed in the general area of his/her dissertation research and minor, if applicable. The dissertation proposal suggests question areas and is intended to guide the committee in developing appropriate written questions for the exam. Therefore, the document should evolve in close consultation with the advisory committee.

Written examination - The written portion of the exam consists of questions prepared by members of the student’s advisory committee. The time allotted for the written examination is at the discretion of the committee, but is generally two weeks. The questions involved may cover any phase of the coursework taken by the student during graduate study or any subject logically related to an understanding of the subject matter in the major and minor areas of study. The questions are designed to measure the student’s mastery of his/her field and the adequacy of preparation for research. Failure to pass the written portion of the exam terminates the student's work at NC State University, unless the examining committee recommends a re-examination. No re-examination may be given until at least one full semester has elapsed, and only one re-examination is permitted. Requirements for written examinations in the minor field are left to the discretion of the program in the student’s minor, if applicable.

Upon completion of the written portion of the exam, the student and his/her advisory committee will meet to discuss the answers submitted or questions/concerns may be expressed to the candidate in writing. This is a meeting meant to aid the student in his/her pursuit of the degree, to answer questions the committee may have regarding the written examination, and where necessary, to request revisions to the answers to questions in the written part of the exam. If there are no concerns/questions, the committee may choose not to meet before the oral exam.

Oral examination - After successfully completing the written portion of the exam, and after satisfactorily making changes or additions requested by the advisory committee, the student will sit for an oral exam. In most cases, the oral exam involves the dissertation proposal.

A unanimous vote of approval by the members of the advisory committee is required for the student to pass both portions of the examination. Results are reported to the program director and Graduate School on appropriate forms. All committee actions may be appealed by written application to the Dean of the Graduate School. Successful completion of the written and oral portions of the exam advances the
student to PhD candidacy.

TYPICAL PROGRESSION OF EVENTS FOR THE PRELIMINARY EXAMINATION

<table>
<thead>
<tr>
<th>Event Description</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td>Advisory Committee chair contacts committee members to author examination questions.</td>
<td>2 weeks in advance of examination</td>
</tr>
<tr>
<td>Committee members return questions for review by committee chair; committee chair arbitrates overlapping or redundant content, publishes final compilation of questions to the committee.</td>
<td></td>
</tr>
<tr>
<td>Chair submits questions to student for response in writing, indicating typical length of responses and any specific requirements requested by the committee.</td>
<td></td>
</tr>
<tr>
<td>Student writes response to each question and returns to committee chair.</td>
<td>2 weeks from receipt of questions</td>
</tr>
<tr>
<td>Student also submits finished dissertation proposal to committee (may be submitted earlier to inform committee’s determination of questions).</td>
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</tr>
<tr>
<td>Chair distributes student responses to questions to committee members (typically, committee members review responses to their own question and one other); committee members submit comments to chair in writing. Chair discusses committee response with student, outlining issues to be addressed in future response.</td>
<td>1-2 weeks following submission on response to written examination</td>
</tr>
<tr>
<td>Student meets with committee for oral portion of the examination; written addenda to original responses may be sent to committee members in advance.</td>
<td></td>
</tr>
<tr>
<td>Committee considers Dissertation Proposal and is prepared for response in oral examination. The student may be asked to resubmit the proposal with changes.</td>
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</tr>
<tr>
<td>Committee chair reports outcomes of the examination to the program director and Graduate School; decisions on the Preliminary Examination and Dissertation Proposal are distinct and separate decisions, but may be made at the same time.</td>
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</table>

It is the responsibility of the committee chair to manage this process and the responsibility of the student to schedule rooms and equipment for the oral examination. Committee members must be committed to timely responses and to communication with the student through the committee chair.

Faculty generally are not under contract during the summer. Students should not presume faculty are available for preliminary examination or dissertation work during summer or non-class times.

THE DISSERTATION

The dissertation should be considered the student’s most comprehensive, original report. In light of this, it
is expected that the student will pursue a topic of some originality, propose a thesis or hypothesis to be tested (either empirically or theoretically), and will examine this thesis against previous work described in literature and his/her own investigations. It must be written in a manner consistent with the highest standards of scholarship. Please see the Graduate School Administrative Handbook section on Theses and Dissertations for more information.

While the dissertation may not be publishable immediately upon completion without significant editorial assistance, it is assumed that the student will write it with publication as an objective.

During the student’s candidacy, the student shall be enrolled in the following courses, constituting the last 16 hours of required credits:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
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<tbody>
<tr>
<td>DDN 809</td>
<td>Colloquium</td>
</tr>
<tr>
<td>DDN 890</td>
<td>Doctoral Preliminary Examination (not counted in the 54 credits for graduation or presented in Plan of Work)</td>
</tr>
<tr>
<td>DDN 893</td>
<td>Doctoral Supervised Research and/or DDN 895 Doctoral Dissertation Research</td>
</tr>
<tr>
<td>DDN 899</td>
<td>Doctoral Dissertation Preparation (registration for this class should be when no other courses are taken)</td>
</tr>
</tbody>
</table>

The Dissertations Research Proposal - The research proposal is submitted at the time of the Preliminary Examination and is aimed at positioning the student’s particular inquiry in a focused area of scholarly consideration in design. Normally a comprehensive literature review of work that will be used for comparison and reference should form the basis of arguments put forth in the document. This review should go beyond listing previous scholarly accomplishments in design inquiry by incorporating critical assessment of each relevant citation in terms of its support of the proposal. The components of the proposal are as follows:

<table>
<thead>
<tr>
<th>Dissertation proposal format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction and description of the problem area</td>
<td>This section introduces the problem or area of concern that you have selected for your research project. The paper should include a background discussion of the area; general purpose of the study; delimitation of the scope of the study; and significance and contribution of the expected outcomes to design theory and/or practice.</td>
</tr>
<tr>
<td>Literature review</td>
<td>The literature review provides an overview of prior empirical and/or theoretical research related to your topic. It should include discussion of how the sources reviewed will guide the study and judgments you have made regarding their relevance. It should include a visual map showing the relationship among sources and ideas.</td>
</tr>
<tr>
<td>Conceptual framework</td>
<td>Based on the sources reviewed, you will develop a conceptual framework for your study and propose research questions for investigation. This section should also discuss the theoretical perspective on which the conceptual framework and research questions are grounded and provide working definitions of key terms salient to your</td>
</tr>
</tbody>
</table>
study. The description of the conceptual framework should be accompanied by a diagram describing the whole and specific parts of the study.

Methodology

This section should discuss the research approach for the proposed study and focus on research design, data collection techniques (including sampling, if appropriate), and strategies for analysis. Discuss the rationale for making specific choices about methodology and evaluate the strengths and weaknesses of the proposed strategy. Also discuss quality considerations and what you have done to increase the probability of validity in your study.

Pilot study

A pilot study may serve as a modest test case of the research methods. You should include evaluation and conclusions arising from this study.

For more information about dissertation formats, refer to the websites:
https://grad.ncsu.edu/news/2016/07/trend-toward-research-article-dissertations/ &
https://grad.ncsu.edu/students/professional-development/tdss/dissertation-report/

If applicable, the study may require completion of an Institutional Review Board (IRB) Request.

Dissertation format - Information on the required format and organization of the final dissertation, in addition to other regulations, is presented in the University Thesis and Dissertation Guide. A number of appropriate writing style guides are available at the student bookstore. It is the obligation of students to supply faculty with printed and proofread drafts; it is inappropriate to expect the advisory committee to correct grammar.

The dissertation will be reviewed by all members of the advisory committee and must receive their approval prior to submission to the Graduate School. Students are cautioned to allow sufficient time for this review.

FINAL ORAL EXAMINATION

As with the Preliminary Examination, the chair of the student’s advisory committee is in charge of conducting the final oral examination. The student, through the PhD program director, submits a Request to Schedule the Doctoral Oral Examination found on the Graduate School Forms Website.

If the Graduate School Representative (GSR) has already been assigned to the student's committee, then the Graduate School responds to the request within five (5) working days of its receipt. If a Graduate School Representative must be assigned, the Graduate School may take up to ten (10) working days to respond to the request. The student has the responsibility of contacting the Graduate School Representative when scheduling the final examination.

The final oral examination is scheduled after the dissertation is complete except for such revisions as may be necessary as a result of the examination, but not earlier than four (4) calendar months after admission to candidacy and not before all required coursework has been completed or is currently in progress.

The scheduling of the exam determines the semester in which the student will graduate. Students should
consult the university calendar for deadlines to avoid paying additional tuition in order to graduate in the following semester. Students should not assume availability of faculty after the normal exam week of each semester or during the summer. Students should not schedule exams when the broader academic community cannot attend.

After the Graduate School has approved the scheduling of the final oral examination, the Records Unit mails the signed and dated request form to the committee chair, committee members, Graduate School Representative, and graduate student listed on the form. A file copy of the approved request form will be sent to the PhD program director. The student should be sure to include the most current title of the dissertation, as the Graduate School also mails information about the scheduled examination to the NC State Official Bulletin for publication.

The exam consists of a presentation by the student and defense of the methodology used and conclusions reached, as reported in the dissertation. The examination is conducted by the student’s committee and the Graduate School representative. The presentation is open to the university community and visitors may ask questions, however, it is the obligation of the committee chair to maintain a scholarly atmosphere that is in the best interests of the student. A portion of the discussion may be conducted in the presence of the student and committee only. The student is responsible for the following:

- Scheduling of a room of appropriate size for a public audience and necessary presentation equipment. As this is a public presentation, the room should be accessible.
- Public announcement of the dissertation time, location, and title no less than two weeks in advance of the examination. Students typically prepare a printed announcement for faculty mailboxes and inform Richard Corley to announce the exam on the web.

A unanimous vote of approval by the advisory committee is required for passing the final oral examination. Approval may be conditional, however, on the student meeting specific follow up requirements prescribed by the advisory committee. Failure of the student to pass the examination terminates his/her work at NC State University unless the advisory committee recommends a re-examination. No re-examination may be given until one full semester has elapsed and only one re-examination is permitted.

**DISSESSATON SUBMISSION PROCEDURES**

Please see the NCSU Graduate School website for [Electronic Theses and Dissertations (ETD)](http://www.ncsu.edu/graduate) for more information and up to date policies and procedures. At that site you will also find the comprehensive [ETD Guide](http://www.ncsu.edu/graduate), which should be read in full before starting dissertation writing.

**ETD Deadlines**

Doctoral student has 3 ETD deadlines to meet:

1. ETD Review Deadline. A choice of 2 review deadlines to pick from
   a. No Registration Required or
   b. Registration Required

2. Final Error Free ETD Deadline (For both No Registration Required and Registration Required)

3. Final Committee Approval Deadline (For both No Registration Required and Registration Required)

**Deadline Definitions**

- **NO REGISTRATION REQUIRED ETD REVIEW DEADLINE:** Date by which a thesis or dissertation student must unconditionally pass the final exam and have an ETD Review in order to avoid registering for the semester s/he is graduating in. Students meeting this deadline will not be allowed to register in the same academic program for any subsequent semester. The final ETD file is due to the ETD Editor by the Final ETD Editorial Approval Deadline and committee
approval must be completed by the Final ETD Committee Approval Deadline.

- **REGISTRATION REQUIRED ETD REVIEW DEADLINE**: Date by which a thesis or dissertation student must unconditionally pass the final exam and have an ETD Review while being registered for the semester s/he is graduating in. Students meeting this deadline will not be allowed to register in the same academic program for any subsequent semester. The final file is due to the ETD Editor by the Final ETD Editorial Approval Deadline and committee approval must be completed by the Final ETD Committee Approval deadline.

- **APPLY TO GRADUATE DEADLINE**: Date by which all graduate students must apply to graduate in a given semester. A student must apply to graduate in order to participate in the graduation exercises, have their transcript posted, and receive a diploma. Thesis and dissertation students must have also completed an ETD Review by this deadline; however, their graduation will still be contingent upon approval of the final ETD by the ETD Editor and Committee Approval by the respective deadlines. Students may apply to graduate in MyPack Portal. Students are advised to apply to graduate when the defense is scheduled, but application can be submitted at any time up until 5:00 p.m. on the Apply to Graduate deadline.

- **FINAL ERROR FREE DEADLINE (FOR BOTH REGISTRATION REQUIRED and NO REGISTRATION REQUIRED FINAL ETDS)**: Date by which a thesis or dissertation student must submit the final error free ETD to the ETD Editor in order to graduate at the end of the semester. Graduation will still be contingent upon approval of the final ETD by the student’s advisory committee before the expiration of the Final ETD Committee Approval Deadline.

- **FINAL COMMITTEE APPROVAL DEADLINE**: Date by which a thesis or dissertation student must submit and have the final ETD approved by the ETD Editor and all members of their advisory committee in order to graduate at the end of the semester.

- **GRADUATION DATE**: The date degrees are conferred. For fall and spring graduations, this is also the date of the graduation exercises (there are no summer exercises -- summer grads may participate in the fall ceremony).

<table>
<thead>
<tr>
<th></th>
<th>Fall 2016</th>
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<td>8/17/2016</td>
<td>1/9/2017</td>
<td>5/17/2017</td>
<td>8/16/2017</td>
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<td>11/15/2017</td>
</tr>
<tr>
<td>Final Committee Approval Deadline</td>
<td>12/2/2016</td>
<td>4/28/2017</td>
<td>7/30/2017</td>
<td>12/1/2017</td>
</tr>
</tbody>
</table>
SUBMIT DRAFT ETD IN ETD SYSTEM... FOR ETD REVIEW The ETD Editor reviews the ETD once for each student. Thus, each student is to submit a PDF ETD file to the ETD Editor two times only. The first ETD submission is for the ETD Review and the second ETD submission is to have the final error free file accepted by the Graduate School.

Within 24-hours (but before the deadline) of unconditionally passing the final oral exam, the student must submit the required pdf draft file via the ETD Submission System for the ETD Review. No emailed files are accepted. All ETD Review submissions should be within 24-hours of the student unconditionally passing the defense (or met conditions). 24-hours is Monday through Sunday, 7-days a week-including weekends.

Submission of a dissertation to the Graduate School must take place at least four weeks prior to the last day of classes in the semester or summer session in which the degree is to be conferred. Specific deadline dates are published at least one year in advance in the Graduate School calendar. At the time of submission, the student must also submit one copy each of the Survey of Earned Doctorate and University Microfilms International Agreement forms. The student must also complete a brief, standard questionnaire about his/her experience as a graduate student at NC State University.

Submitting copies to the Graduate School for review - The dissertation must be presented to the Graduate School for review prior to the graduation deadlines and after the unconditional pass of the final oral examination. See the Graduate School ETD Guide for more on this.

There will be no paper copies issued by the Graduate School. It is the student’s responsibility to determine if anyone requires a paper copy and to provide them. If bound paper copies are needed, Wolf X-press can produce them.

The ETD Editor cannot accept the final error free ETD until each doctoral graduate student submits the required forms and fee. The forms and fee are submitted in order to fulfill graduation requirements. The Graduate School cannot authorize the release of the diploma or the inclusion of the statement of the award of a degree on the permanent record from which transcripts are made until these form and fee have been received. The required forms and fee are on the ETD Website under the Doctoral Required Forms link.

1. Survey of Earned Doctorate (SED) *PhD only*
2. Doctoral Dissertation Agreement Forms *2 pages*
3. Microfilm Fee
4. Doctoral Graduation Attendance Notification (DGAN)
5. Application to Graduate

All of the forms and fee are available online and submitted electronically to the ETD Editor via email.

The university also requires that all doctoral dissertations be microfilmed by the University Microfilms International, Ann Arbor, Michigan, including the publication of the abstract in Dissertation Abstracts International. The cost of this service is to be paid by the student.
TIME LIMITS

All doctoral students must attain candidacy for the degree within 6 calendar years from the date of admission and complete all degree requirements within 10 calendar years. The time limit remains at 10 years even if the student was on approved leave of absence during the 10-year period. Please see the Graduate School Administrative Handbook section on Time Limits for more information.

The Graduate School may grant any reasonable exception to the above time limits prior to the expiration of the time limit. The dean will consider and evaluate the specific nature of the extenuating circumstances and the compelling reasons that prompted the advisory committee and the program, recognizing the significance of discipline and commitment in meeting deadlines, to make the request for the exception to policy.

A request for an Extension of Time Limit in order to complete degree requirements should include the following:

- A statement documenting the extenuating circumstances that justify the request for a time extension.
- A statement of impact that the proposed extension would have on the validity of the student’s coursework and program.
- Evidence of endorsement of the request from the student’s advisory committee and the program director.

The request must proceed from the committee to the director to the Graduate School.

If the Dean of the Graduate School denies an extension of the time limit, the program director may appeal the decision to the Administrative Board of the Graduate School.
PEOPLE

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B.A. Journalism: University of Iowa  
B.A. Art: University of Iowa  
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Yeo Beom Yoon  
Advisor: Soolyeon Cho
PhD ALUMNI

For more information, please visit the PhD in Design website.

Chronological Order

Jianxin Hu, 2003
Link: http://www.lib.ncsu.edu/resolver/1840.16/4835
Advisor: Wayne Place

Celen Pasalar, 2004
Dissertation: “The Effects of Spatial Layouts on Students’ Interactions in Middle Schools: Multiple Case Analysis”
Link: http://www.lib.ncsu.edu/resolver/1840.16/5083
Advisor: Henry Sanoff

Umut Toker, 2004
Link: http://www.lib.ncsu.edu/resolver/1840.16/3387
Advisor: Henry Sanoff

Eyyad Ahmad Al-Khalaileh, 2004
Dissertation: “Understanding Children’s Environments: The Effect of Outdoor Physical Environments on Children’s Activities and Quality of Life Within Al-Wihdat Palestinian Refugee Camp and Environs in Amman, Jordan”
Link: http://www.lib.ncsu.edu/resolver/1840.16/4512
Advisor: Robin C. Moore

Cynthia Fay Van Der Wiele, 2004
Link: http://www.lib.ncsu.edu/resolver/1840.16/5438
Advisors: Robin C. Moore and Shishir Rajan Raval

Dennis M. Puhalla, 2005
Link: http://www.lib.ncsu.edu/resolver/1840.16/5429
Advisor: Meredith J. Davis

Zeynep Toker, 2005
Dissertation: “Women’s Spatial Needs in Housing: Accommodating Gender Ideologies, Use Patterns, and Privacy”
Link: http://www.lib.ncsu.edu/resolver/1840.16/4651
Advisor: Henry Sanoff

Mine Hatun Hashas, 2005
Dissertation: “Residents’ Attachment to New Urbanist versus Conventional Suburban Developments”
Link: http://www.lib.ncsu.edu/resolver/1840.16/5741
Advisor: Henry Sanoff
Claudia Rebola Winegarden, 2005
Dissertation: "Visualizing Communication Structures of Nonverbal Information for Online Learning Environments"
Link: http://www.lib.ncsu.edu/resolver/1840.16/3570
Advisor: Haig Khachatoorian

Marcelo Pinto Guimaraes, 2006
Dissertation: "An Assessment of Understanding Universal Design Through Online Visual Resources and Role-playing Simulation Exercises"
Link: http://www.lib.ncsu.edu/resolver/1840.16/3300
Advisor: Robin Moore

Aydin Ozdemir, 2006
Dissertation: "An Exploratory Study of Interpersonal Distances and Perceived Spaciousness and Crowding in Four Shopping Malls Across Two Cultures"
Link: http://www.lib.ncsu.edu/resolver/1840.16/5416
Advisor: Fatih Rifki

Arleen Humphrey, 2006
Dissertation: "Physical Environmental Influences on the Physical Activity Behavior of Independent Older Adults Living in Continuing Care Retirement Communities"
Link: http://www.lib.ncsu.edu/resolver/1840.16/3297
Advisor: Robin Moore

K. Darryl Carrington, 2006
Dissertation: "A Photometric Characterization Methodology for Daylighting Fixtures"
Link: http://www.lib.ncsu.edu/resolver/1840.16/4815
Advisor: Wayne Place

Sudeshna Chatterjee, 2006
Dissertation: "Children's Friendship with Place: An Exploration of Environmental Child Friendliness of Children's Environments in Cities"
Link: http://www.lib.ncsu.edu/resolver/1840.16/5206
Advisor: Robin Moore

Evrim Demir, 2007
Dissertation: "The Influences of Site Design on Physical Activity and Social Interaction in Residential Planned Unit Developments"
Link: http://www.lib.ncsu.edu/resolver/1840.16/4415
Co-Advisors: Robin Moore and Perver Baran

Ryan Anthony Hargrove, 2008
Dissertation: "Creating creativity in the design studio: assessing the impact of metacognitive skill development on creative abilities"
Link: http://www.lib.ncsu.edu/resolver/1840.16/3048
Advisor: Art Rice

Magdy Ma, 2008
Link: http://www.lib.ncsu.edu/resolver/1840.16/4582
Advisor: Meredith Davis

Kristin Thorleifsdottir, 2008
Dissertation: "Neighborhood design: an investigation of associations between suburban neighborhood
morphology and children's outdoor, out-of-school, physical activities”
Link: http://www.lib.ncsu.edu/resolver/1840.16/3220
Advisor: Robin Moore and Rune Simeonsson

Yixiang Long, 2008
Dissertation: “The relationships between objective and subjective evaluations of the urban environment: Space Syntax, cognitive maps, and urban legibility”
Link: http://www.lib.ncsu.edu/resolver/1840.16/4411
Advisors: Perver Baran and Robin Moore

Orcun Kepez, 2009
Dissertation: “Effect of Space on Health and Well-Being: An Environmental Assessment for Home-like Long Term Care Settings”
Link: http://www.lib.ncsu.edu/resolver/1840.16/5424
Advisor: John Tector

Andrew Phillip Payne, 2009
Dissertation: Understanding Change in Place: Spatial Knowledge Acquired by Visually Impaired Users Through the Change in Footpath Materials.
Link: http://www.lib.ncsu.edu/resolver/1840.16/5024
Advisor: John O. Tector

Hyejung Chang, 2009
Dissertation: Mapping the Web of Landscape Aesthetics: A critical Study of Theoretical Perspectives in Light of Environmental Sustainability.
Link: http://www.lib.ncsu.edu/resolver/1840.16/3362
Advisor: Paul Tesar

Michael Roy Lane, 2009
Dissertation Title: Supporting Intergenerational Interaction: Affordance of Urban Public Space.
Dissertation Link: http://www.lib.ncsu.edu/resolver/1840.16/4834
Advisor: Henry Sanoff

Mohammed Zakiul Islam, 2009
Dissertation: Children and Urban Neighborhoods: Relationships between Outdoor Activities of Children and Neighborhood Physical Characteristics in Dhaka, Bangladesh
Link: http://www.lib.ncsu.edu/resolver/1840.16/3963
Advisors: Robin Moore and Perver Baran

Traci Rider, 2010
Dissertation: Exploring the Integration of Sustainability and Green Building Themes within Formal Architectural Education.
Link: http://www.lib.ncsu.edu/resolver/1840.16/6055
Advisor: Wayne Place

Amber Howard, 2011
Link: http://www.lib.ncsu.edu/resolver/1840.16/7023
Advisor: Meredith Davis

Deborah Littlejohn, 2011
Matthew Peterson, 2011
Dissertation: Comprehension with Instructional Media for Middle School Science: Holistic Performative Design Strategy and Cognitive Load.
Link: http://www.lib.ncsu.edu/resolver/1840.16/7272
Advisor: Meredith Davis

Cecilia Mouat Croxatto, 2012
Dissertation: The Discourse of the City in American and British Films between the 1930s and 1960s.
Link: http://www.lib.ncsu.edu/resolver/1840.16/7617
Advisor: Haig Khachatoorian

Zeynep Cigdem Uysal, 2012
Link: http://www.lib.ncsu.edu/resolver/1840.16/7522
Advisor: Kristen Schaffer

Tae Seo Koo, 2012
Link: http://www.lib.ncsu.edu/resolver/1840.16/7723
Advisor: Arthur Rice

James George Grady, 2012
Dissertation: A Simulation Tool Utilizing Parametric Primitives For Climate-Based Dynamic Daylighting and Energy Analysis.
Link: http://www.lib.ncsu.edu/resolver/1840.16/7708
Advisor: Wayne Place

Fariha Tariq, 2012
Link: http://www.lib.ncsu.edu/resolver/1840.16/8816
Advisor: Robin Moore

Joo Hee Huh, 2012
Dissertation: The Dynamic Interplay between Spatialization of Written Units in Writing Activity and Functions of Tools on the Computer.
Link: http://www.lib.ncsu.edu/resolver/1840.16/7816
Advisor: Meredith Davis

Dwane L. Jones, 2012
Dissertation: The Behavioral Impacts of Urban Street Modifications: A Case Study of East Blvd. in Charlotte, NC
Link: http://www.lib.ncsu.edu/resolver/1840.16/8072
Advisor: Robin Moore

Hyun Jee Kim, 2012
Dissertation: Researching Indoor Public Space Attributes: Enhancing the Interaction between Older Adults and Children.
Link: http://www.lib.ncsu.edu/resolver/1840.16/8158
Advisor: Sharon Joines
Adina Jeanne Cox, 2012
Dissertation: Shared-Use Pathways Located in Natural Settings within the Urban Context: A Multiple Case Study Exploring How Design Affects Use by Children.
Link: [http://www.lib.ncsu.edu/resolver/1840.16/8585](http://www.lib.ncsu.edu/resolver/1840.16/8585)
Advisor: Robin Moore

Aliaa Ali Elab, 2013
Dissertation: Physical and Social Factors in Neighborhood Place Attachment: Implications for Design.
Link: [http://www.lib.ncsu.edu/resolver/1840.16/8469](http://www.lib.ncsu.edu/resolver/1840.16/8469)
Advisor: Robin Abrams

Thomas Carter Crawford, 2013
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Advisor: Arthur Rice

Siwen Liu, 2013
Link: [http://www.lib.ncsu.edu/resolver/1840.16/8552](http://www.lib.ncsu.edu/resolver/1840.16/8552)
Advisor: Sharon Joines

Ladan Ghabad, 2013
Dissertation: Analysis of Daylighting Performance and Energy Savings in Roof Daylighting Systems
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Advisor: Wayne Place

George Dewey Hallowell, 2013
Link: [http://www.lib.ncsu.edu/resolver/1840.16/8414](http://www.lib.ncsu.edu/resolver/1840.16/8414)
Advisor: Perver Baran

Constanza Sofia Miranda Mendoza, 2013
Link: [http://www.lib.ncsu.edu/resolver/1840.16/8737](http://www.lib.ncsu.edu/resolver/1840.16/8737)
Advisor: James Wallace and Haig Khachatoorian

Jae Young Lee, 2013
Link: [http://www.lib.ncsu.edu/resolver/1840.16/9003](http://www.lib.ncsu.edu/resolver/1840.16/9003)
Advisor: Meredith Davis

Zahra Zamani, 2013
Dissertation: Affordance of Cognitive Play by Natural and Manufactured Elements and Settings in Preschool Outdoor Learning Environments.
Link: [http://www.lib.ncsu.edu/resolver/1840.16/9179](http://www.lib.ncsu.edu/resolver/1840.16/9179)
Advisor: Robin Moore

Luis Guilherme Pippi, 2013
Dissertation: Social Network Interaction and Behaviors on Recreational Greenways and Their Role in Enhancing Greenway Potential.
Wenjiao Wang, 2014
Dissertation: Older Adults & Home Medical Device Interaction: Interface Type Comparison, Display Design, and Touch Gesture Analysis.
Link: http://www.lib.ncsu.edu/resolver/1840.16/9184
Advisor: Arthur Rice

Vin Lim, 2014
Link: http://www.lib.ncsu.edu/resolver/1840.16/9271
Advisor: Sharon Joines

Yujia Zhai, 2014
Link: http://www.lib.ncsu.edu/resolver/1840.16/9335
Advisor: Haig Khachatoorian

Di Lu, 2014
Link: http://www.lib.ncsu.edu/resolver/1840.16/936
Advisor: Arthur Rice

Muntazar Monsur, 2014
Link: http://www.lib.ncsu.edu/resolver/1840.16/10040
Advisor: Robin Moore

Jong Seon Lee, 2015
Dissertation: The Association of Urban Form and Design with Children's Physical Activity and Active Travel.
Link: http://www.lib.ncsu.edu/resolver/1840.16/10260
Advisor: Robin Moore

Seyedehmahsan Mohsenin, 2015
Link: http://www.lib.ncsu.edu/resolver/1840.16/10427
Advisor: Jianxin Hu

Ahoo Malekafzali Ardakan, 2015
Dissertation: A Multi-Zone Electrochromic Window System Integrated with Light Shelf.
Link: http://www.lib.ncsu.edu/resolver/1840.16/10824
Advisor: Jianxin Hu
Appendices

ACADEMIC CALENDAR

Please be sure to keep up with the NCSU Calendar. There are several calendar important for planning your academic career.

- The Academic Calendar has important dates for the present semester.
- The Enrollment Calendar explains when various students groups are allowed to register for classes the following semester.
- The Exam Calendar shows the university designated exam periods.
- The Three Year Calendar is important for long term planning.
- Many important items are listed on the Graduate School Events Page.

DOCTORAL STUDENTS SHOULD CONSULT THE GRADUATE SCHOOL CALENDAR FOR KEY DATES RELATED TO DISSERTATIONS AND GRADUATE SCHOOL DEADLINES: http://www.ncsu.edu/grad/faculty-and-staff/academic-calendar.html

There are no exceptions to these Graduate School deadlines!!!!!

DIPLOMA ORDER REQUEST CARDS (DOR) - The DOR orders a diploma only. DORs are required to be submitted to the student’s respective department with the student’s final oral exam report. Final oral exam reports cannot be processed without a DOR and a DOR can not be processed without the final oral exam reports. Diploma printing is outsourced and it is imperative that the DOR is submitted with the final oral exam reports. DORs will be distributed by the student’s department and when completed, must be returned to the department.

EACH STUDENT HAS TWO ETD DEADLINES TO MEET:

1. Thesis review deadline - 2 options:
   1. No registration required thesis review deadline for students who do not need to register for classes in the semester of graduation - date by which a graduate student must 1) successfully pass the final oral exam, and 2) complete a thesis review with the Thesis Editor in order to graduate at the end of the current semester, without the necessity of registering for classes in the current semester. For students that meet this deadline, the final error free file is due by the Registration Required and No Registration Required Final ETD Deadline (see below).
   2. Registration required thesis review deadline for students who will register for classes in the semester of graduation - date by which a graduate student must 1) successfully pass the final oral exam and 2) complete a thesis review with the Thesis Editor in order to graduate at the end of the current semester. For students that meet this deadline, the final error free file is due by the Registration Required and No Registration Required Final ETD Deadline (see below).

2. Final ETD deadline
   a. Registration required and no registration required final ETD deadline - date by which a graduate student who is expecting to graduate at the end of the current semester, that met either the current semester’s no registration required review deadline or the registration required thesis review deadline, must submit the final, error free PDF file of his/her Electronic Thesis/Dissertation (ETD) in order to graduate at the end of the semester. UNLESS THE STUDENT IS AN INTERNATIONAL STUDENT WITH AN EARLIER DEADLINE.

International students - There could be serious immigration implications based on the date your final
electronic submission is accepted. You must meet with the OFFICE OF INTERNATIONAL SCHOLAR AND STUDENT SERVICES and be very clear about the date that your final is due and accepted.

Important Deadlines - ALL DEADLINES ARE AT 5:00 PM:
- No registration required thesis review deadline
- Registration required thesis review deadline
- Registration required and no registration required final ETD deadline
- Graduation date
Courses outside the College of Design (non-DDN courses)

These are courses outside the College of Design that our students have taken in the past.

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NORTH CAROLINA RESIDENCY

To qualify as a resident for tuition purposes, a person must become a legal resident and remain a legal resident immediately prior to classification. Thus, there is a distinction between legal residence and residence for tuition purposes. Furthermore, 12 months legal residence means more than simple abode in North Carolina. In particular, it means maintaining a domicile (permanent home of indefinite duration) as opposed to “maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education.” The burden of establishing facts which justify classification of a student as a resident entitled to in-state tuition rates is on the applicant for each classification, who must show his or her entitlement by the preponderance of the residency information.

Being classified a resident for tuition purposes is contingent on the student’s seeking such status and providing all information that the institution may require in making the determination.

Students should consult the university website for additional residency information related to: marriage, parent’s domicile, military personnel, grace period, minors, change of status, and transfer students.

HOW TO APPLY FOR IN-STATE RESIDENCY

Graduate students who wish to attain residency need to complete several “residiency acts” as soon as possible before they can begin the 12-month waiting period required before applying for NC residency. To begin this process it is necessary to:

<table>
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<tr>
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<td>NC Voter Registration</td>
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<tr>
<td>File:</td>
<td>Personal Property Taxes (automatic when car is registered)</td>
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<td>NC Income Taxes</td>
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<td>Convert:</td>
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<td>Club memberships</td>
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The Graduate School Residency Office has compiled detailed instructions to assist students in Residence-and-Tuition Status Application.

Resident aliens who are in possession of Form I-151 or Form I-551 (Alien Registration Receipt Card or "green card") must also complete the Residence State Supplemental Form and include a copy of the front and back of the Alien Registration Receipt Card. For married couples, if residency is to be based upon the spouse’s residiency acts, copies of spouse’s residiency acts and the marriage certificate must be attached.

International students in possession of an F-1, F-2, J-1, or J-2 visa are not eligible for NC residency for
tuition purposes. Instructions for submission of residency applications and an explanation of the effect on residency status of leaving North Carolina for 12 months or less are on the web.
GRADUATE PLAN OF WORK (GPOW)

Doctoral students are required to complete a GPOW in consultation with their advisory committees by the time they complete 12 hours of coursework. The GPOW outlines the courses to be undertaken in the student's program and the dissertation topic and must be approved by the program director prior to submission to the Graduate School.

The GPOW as a whole should be rationally unified, with all constituent parts contributing to an organized plan of study and research, and courses must be selected from groups embracing one principal subject of concentration, the major, with the option of designating courses in a cognate field, the minor. When a student elects to designate a minor, he/she should select the minor coursework from a discipline or field that, in the judgment of the advisory committee, provides relevant support to the major field.

REVIEW AND APPROVAL

The Graduate School will withhold approval of any doctoral student’s GPOW or Request to Schedule the Oral Examination, until all documents necessary to complete that student’s permanent file are received in the Graduate School.

If any materials are missing, the GPOW will be denied with the reason for the denial communicated to the program director. Typical missing items include transcripts for post-secondary work still undertaken at the time the applicant was admitted to the graduate program.

Each time a doctoral student submits a Request to Schedule the Doctoral Oral Examination (for the preliminary and then final oral examination), the appropriate Graduate School College Liaison will review the doctoral student’s file to verify that all requirements have been met to date. In this way, the Graduate School ensures that doctoral students have ample time prior to their anticipated graduation to make any adjustments necessary to fulfill all degree requirements.

CHANGES IN THE PLAN OF WORK

Once the doctoral GPOW has been submitted and approved, any substitutions of courses must be approved within the individual program and by the Graduate School. If there is any discrepancy between the GPOW and doctoral degree requirements, the Graduate School will notify the student’s program director so the GPOW can be adjusted accordingly. Otherwise, the Graduate School will approve the GPOW.

CONTENTS OF THE PLAN OF GRADUATE WORK

Whether optional or as part of the degree requirement, the GPOW must:

- include both a list of the coursework to be undertaken (in all programs) and the dissertation topic
- be developed by the student and his/her dissertation advisory committee
- be approved by the committee and the program director prior to submission to the Graduate School for final approval
- be submitted prior to completion of 12 hours of a doctoral program

The DDN 890 course for the preliminary examination is not counted in the credits presented in the GPOW.
### MILESTONES

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<td>Advised electives (6 cr)</td>
<td>Advised electives (6 cr)</td>
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<td>Colloquium (DDN 809, 1 cr)</td>
<td>Statistics (3 cr)</td>
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<tr>
<td>Dissertation</td>
<td>Take electives to explore research topics</td>
<td>Take electives to explore research topics</td>
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<td>Required: Interest Area Presentation - Introductory</td>
<td>Required: Interest Area Presentation - Final</td>
</tr>
</tbody>
</table>
| | (May 6, 2017)
 o Description of area, value of research, personal qualifications, annotated bibliography | (Sep. 9, 2017)
 o Interest areas, problems, literature review, precedents, and potential methodologies to solve problems |
| | Select dissertation committee |
| | 4 NCSU graduate faculty |
| | 1 graduate school rep. |
| Administrative | Submit final transcripts from previous degree (Master's) | Submit updated CV to the PhD program director by May 5. |
| | Set one-year plan w/ advisor and the PhD program director | Apply for NC residency 1 |
| | Sign Patent Agreement through MyPack Portal | Submit Graduate Plan of Work (GPoW) through MyPack Portal after 18 cr of coursework completed (usually after two semesters) |
| | Prepare for NC residency 1 | Update information/profile in CoD PhD website. |
| | | Apply for NC residency 1 |
| | | Submit Graduate Plan of Work (GPoW) through MyPack Portal after 18 cr of coursework completed (usually after two semesters) |
| | | Update information/profile in CoD PhD website. |
| | | Submit updated CV to the PhD program director by May 5. |
| | | Apply for graduation through MyPack Portal by end of 3rd week of semester |
| | | Update CV and website information |
| | | Submit dissertation |
| | | Complete dissertation and graduation forms 2 |
| | | Survey of Earned Doctorate |
| | | Dissertation agreement form |
| | | Microfilm fee |

1. Not counted towards 54 credit hours for graduation
2. See PhD in Design Handbook
3. For more information of Graduate Schools policies and procedures, see the Graduate School Handbook
5. Not applicable for international students. Applicable only for US citizens and US permanent residents (green card holders)