

**Degree Audit Information for the Interdisciplinary Doctoral Program
in Infrastructure and Environmental Systems (INES)**

January 2016

1. Core course requirements (12 hours total)
 - a. INES 8101 Environmental Systems (3 hrs), and _____
 - b. INES 8102 Infrastructure Systems (3 hrs), and _____
 - c. INES 8690 Seminar (3 x 1hr = 3 hrs), and _____
 - d. INES 8110 Acquisition and Analysis of Scientific Data (3 hrs), or _____
 INES 8090 (3hrs) cross-listed with graduate courses in the areas of data analysis,
 economics, public policy or management, as approved by the INES Director, or
 INES 8201 Environmental and Economic Assessment of Ecosystems (3 hrs), or
 INES 8113 Case Study (1-3 hrs).

2. Specialized course requirements (12 hours minimum)
 - a. INES 8090 courses cross-listed with graduate courses offered by the departments _____
 of civil and environmental engineering, geography and earth sciences, engineering
 management, economics or finance, architecture, biology, and chemistry. (9-12 hrs)
 - b. INES 8890 or other INES 8xxx classes except dissertation hours (0-3 hrs). _____

3. Dissertation research requirement (18 hours total)
 - a. INES 8999 (18 hrs max.) _____
 - b. INES 8998 (use this course for additional dissertation hours beyond 18, pass/fail) _____

4. Transfer of MS credit hours (30 hours maximum) _____
 - a. If less than 30 MS credit hours are approved for transfer into the INES Program,
 a student will be required to take additional graduate courses, as approved by the
 advisor, to make up the required hours.
 - b. Students with a BS degree will be required to take 30 hours of graduate courses,
 as approved by the advisor, at UNC-Charlotte to fulfill this requirement.

5. The INES program requires a minimum total of 72 hours including:
 - a. 12 hours from INES core courses, and
 - b. 12 hours from specialized electives, and
 - c. 18 hours from dissertation research (INES 8999), and
 - d. 30 hours from MS or equivalent courses.
 - e. More than half of this 72-hr total must be at the 8000 level.

6. Other non-course requirements (record the date of completion for each requirement)
 - a. Qualifying Exam Part I (written, INES 8101 and INES 8102) _____
 - b. Plan of Study _____
 - c. Appointment of Doctoral Dissertation Committee _____
 - d. Qualifying Exam Part II (written, specialized coursework & research) _____
 - e. Petition for Topic Approval (Dissertation title with extended abstract) _____
 - f. Qualifying Exam Part III (oral defense of dissertation research proposal) _____
 - g. Completion of Qualifying Exam Report _____
 - h. Candidacy Application _____
 - i. Application for Degree _____
 - j. Dissertation Defense _____
 - k. Completion of Defense Report _____
 - l. Title Page with Committee Signatures _____
 - m. ETD Signature Form _____
 - n. Survey of Earned Doctorates _____

Summary of Credit Hours Required for INES

Updated October 05, 2013	Credit Hours to Degree Required for Masters Entrants	Credit Hours to Degree Required for Bachelors Entrants
INES Core:		
INES 8101, INES 8102, INES 8690	9 Credit Hours	9 Credit Hours
INES 8110, INES 8201, INES 8113, or INES 8090 (data, economics, policy or management)	3 Credit Hours	3 Credit Hours
Specialized Electives		
INES 8090	9-12 Credit Hours	9-12 Credit Hours
INES 8890 or approved INES classes	0-3 Credit Hours	0-3 Credit Hours
Dissertation Research		
INES 8999	18 Credit Hours, max	18 Credit Hours, max
INES 8998	Varied	Varied
MS Equivalent		
By Transfer	30 Credit Hours Max.	None
Course Work at UNC-Charlotte	Varied	30 Graduate Credit Hours

Requirements for Qualifying Exams:

Each student must complete a three-part qualifying examination: two written parts and one oral part.

- The first written examination covers two INES core courses (INES 8101 and INES 8102).
- The second written examination covers specialized courses determined by the student's advisor and doctoral committee (some aspects of research areas can be included).
- The third examination is an oral examination and is administered by the student's doctoral committee and requires a presentation and defense by the student of his or her proposed research topic.
- Students who enter the Ph.D. Program directly from a baccalaureate program generally will sit for the two written examinations before the end of their third post-baccalaureate year in the program; students who enter from a master's degree program must sit for both written parts before the end of their second year in the program. To sit for these examinations, a student must have at least a 3.0 GPA and must have removed all conditional deficiencies upon admission.
- A student may attempt to pass each part of the qualifying exam no more than twice. Failure of any of the three parts a second time will result in termination of enrollment in the Ph.D. Program.