

Requirements for Master's Thesis Students

Master's Program Plan of Study (PPS): The student must complete the *Master's PPS* and obtain their advisor's signature by the midterm of the first semester. Signed forms must be submitted to gradforms@essie.ufl.edu for processing. **Students will have an advising hold until their first PPS has been submitted.**

Transfer Credits (if any): The request for the use of transfer credits toward the degree program must be made using the PPS.

Course Selection and Revision of PPS: If the student is selecting courses following the approved PPS, they can proceed with course selection on their own. If they would like to select courses not listed on the PPS, students must contact their advisor for approval of the proposed course selection before the registration periods of the upcoming semesters. They should also discuss with their advisor on revising the PPS. Submit revised PPS forms to gradforms@essie.ufl.edu for processing.

Supervisory Committee: A supervisory committee consisting of a minimum of two members (the advisor and at least one additional member) should be formed by the mid-term of the second semester. If a minor is designated, the committee must include a graduate faculty member from the minor department. The student will have an oral defense of their thesis in the graduating semester. A completed draft of the thesis should be submitted to the committee at least two weeks in advance of the oral defense. Additional requirements may be imposed by the Department of Civil and Coastal Engineering or the UF Graduate School; therefore, the student should consult the Civil and Coastal Engineering *Graduate Student Handbook* for additional information.

Graduate classes offered in Transportation Engineering are broadly grouped into three streams (a) Operations and Simulation, (b) Planning and Analytics, and (c) Networks, Safety, and Design. The courses offered under each stream are listed below:

Operations and Simulation

Instructor	Course No.	Title
Elefteriadou	TTE 6267	Traffic Flow Theory
Elefteriadou	TTE 6259	Urban Streets Simulation and Control
Washburn	TTE 5256	Traffic Engineering
Washburn	TTE 6205	Freeway Operations
Washburn	CGN 6905	Advanced Traffic Simulation*

Planning and Analytics

Instructor	Course No.	Title
Srinivasan	TTE 5106	Advanced Urban Transportation Planning
Srinivasan	TTE 6505	Discrete Choice Analysis
Zhao	EGN 5215	Machine Learning Applications in Civil Engineering
Zhao	CGN 6905	Transportation Data Analytics
Yan	CGN 6905	Applied Data Science in Civil and Environmental Engineering
Yan	CGN 6905	Sustainable Transportation and Public Transit

Networks, Safety, and Design

Instructor	Course No.	Title
Du	TTE 5305	Advanced Transportation Systems Analysis
Du	TTE 6606	Urban Transportation Models
Guo	TTE 6315	Highway Safety Analysis
Guo	TTE 5805	Geometric Design of Transportation Facilities

* This class will be offered in place of Freeway Operations occasionally.

The following are the course work requirements:

- Total Course Credits: At least 24
- Core Courses: 9 credits. Select one course from each of the three streams.
- Transportation Electives: At least 6 credits. Select at least two courses from any of the remaining nine Transportation courses.
- Other Electives: At most 9 credits (if total course credits are 24). Students are encouraged to choose electives from other branches of civil engineering and a variety of other disciplines including but not limited to: Industrial and Systems Engineering, Computer Science and Engineering, Urban and Regional Planning, Geography, and Statistics. Students must choose electives in consultation with their advisors. These are typically selected to support the student's thesis topic. The electives may also be chosen to obtain a minor in another discipline.
- A student may pursue internship during the graduate studies (with approval from the advisor). Up to 3 credits (EGN 5949) from the internship can count towards the degree. The internship will be considered under the "other electives" category
- A student may be able to transfer up to 9 credits from a previous degree with the approval of his/her advisor and per UF guidelines. These credits will count towards the category of electives unless the student can demonstrate that these transfer courses are equivalent to one or more of the core courses.
- UF also offers a variety of courses on written and spoken English¹. Students are strongly encouraged to take one or more such classes to enhance their communication skills in English. These classes will not count towards the credit requirements of the graduate degree.

- Thesis Credits: 6 (CGN 6971)
- Enrollment of 3 credit hours (Fall/Spring) or 2 credit hours (Summer) in CGN 6971 is required during the final/graduating semester.

Per the UF Graduate School Policy, students must have an overall GPA of 3.00 and an overall 3.00 GPA within the departmental courses to be eligible for graduation.

¹ <http://graduateschool.ufl.edu/admissions/international-applicants/english-language-programs/>