Transportation Engineering

Programs of Study
The Master of Science (M.S.) program is 32 hours, the Master of Engineering (M.E.) program is 30 hours, and the Doctor of Philosophy (Ph.D.) program is 64 hours. The specific course requirements are decided by the student in conjunction with the student’s committee chair and graduate committee. However, the following courses (or their equivalent) are considered core courses for all programs of study:

CVEN 617 (2-3) Traffic Engineering: Characteristics;
CVEN 672 (3-0) Engineering and Urban Transportation Systems;
CVEN 681 (1) Seminar in Transportation Engineering;
CVEN 618 (2-3) Traffic Engineering: Operations;

Master of Engineering (M.E.)
The Master of Engineering (M.E.) degree requires a minimum of 30 hours on the degree plan with approximately 9 of these hours being outside the student’s major area of study. The student can select any of the remaining transportation electives, other technical electives in the College of Engineering or College of Science or electives in other Colleges to complete their degree plan. There are some restrictions which limit the scope of technical electives that can be applied to the minimum 30 hour requirement but for the most part the student has a great deal of flexibility in choosing a program of study. Students who elect to pursue a M.E. are eligible for a Research Assistantship. The student’s committee chair determines if the student must (a) perform 2 to 4 hours of directed studies (CVEN 685) and then prepare and orally defend a report on the research done as part of this course or (b) can have 0 hours of CVEN 685 and/or not orally defend their M.E. report.

Master of Science (M.S.)
The Master of Science (M.S.) degree requires a minimum of 32 hours on the degree plan of which 4 to 8 hours can be research hours (CVEN 691). The student can select any of the remaining transportation electives, other technical electives in the College of Engineering or College of Science or electives in other Colleges to complete their degree plan. There are some restrictions which limit the scope of technical electives that can be applied to the minimum 32 hour requirement but for the most part the student has a great deal of flexibility in choosing a program of study. Students who elect to pursue a M.S. are eligible for a Research Assistantship.

Doctor of Philosophy (Ph.D.)
The Doctor of Philosophy (Ph.D.) degree requires a minimum of 64 hours on the degree plan of which approximately 34 hours are research (CVEN 691). The transportation core curriculum requires 13 hours to complete. There are basically no restrictions on which graduate courses can be chosen to fill the course requirements. Students who elect to pursue a Ph.D. are eligible for a Research Assistantship.

Note: An overriding requirement is that any courses on any degree plan be approved by the student’s committee and be “consistent with the student’s chosen field of study and commensurate with graduate study”. In addition, if a student can demonstrate that they have met some or all of the requirements in the core curriculum they would naturally have more flexibility in choosing alternative courses.