MASTER OF ENGINEERING IN TRANSPORTATION ENGINEERING

The Master of Engineering in Transportation Engineering is a coursework-only, professionally-oriented degree program that permit a concentration in preparation for engineering practice. With a Master of Engineering in Transportation Engineering degree, a student will be a qualified transportation planner, traffic engineer, and traffic safety engineer. Additionally, the student will be trained to understand and evaluate the socioeconomic impacts of transportation and infrastructure engineering projects. Up to 12 credit hours of 400-level undergraduate coursework may be included in the program with prior adviser approval. No thesis or comprehensive examination is required for completion of the degree.

Curriculum

Code	Title	Credit Hours
Required Courses		**(9-10)**
Select a minimum of three courses from the following with adviser consent:		9-10
CAE 523	Statistical Analysis of Engineering Data	3
CAE 543	Demand Models for Urban Transportation	3
CAE 544	Urban Transportation Planning	4
CAE 546	Public Transportation Systems	3
CAE 548	Transportation Systems Management	3
CAE 555	Transportation Systems Evaluation	3
CAE 575	Systems Analysis in Civil Engineering	3
MATH 525	Statistical Models and Methods	3
Elective Courses		**(20-21)**
Select 20-21 credit hours from the following: [1]		20-21
CAE 416	Facility Design of Transportation Systems	3
CAE 417	Railroad Engineering and Design	3
CAE 419	Introduction to Transportation Engineering and Design	3
CAE 430	Probability Concepts in Civil Engineering Design	3
CAE 508	Advanced Bridge Engineering	3
CAE 539	Introduction to Geographic Information Systems	3
CAE 541	Pavement Evaluation and Management	3
CAE 545	Traffic Operations and Flow Theory	3
CAE 547	Advanced Traffic Engineering	3
CAE 549	Transportation Economics, Development and Policy	3
CAE 568	Transportation Asset Management	3
CAE 574	Economic Decision Analysis in Civil Engineering	3
CAE 580	Intelligent Transportation Systems	3
CAE 581	Algorithms in Transportation	3
CAE 597	Special Problems	0-3
MATH 522	Mathematical Modeling	3
MATH 542	Stochastic Processes	3
MATH 563	Mathematical Statistics	3
MATH 564	Regression	3
MATH 565	Monte Carlo Methods	3
MATH 571	Data Preparation and Analysis	3
MATH 574	Bayesian Computational Statistics	3

Minimum degree credits required: 30

[1] If more than three courses from the required courses list are taken, those additional courses can be applied as electives