

**MASTER OF SCIENCE IN CIVIL ENGINEERING
TRANSPORTATION ENGINEERING**

Required Courses (all options)

	Hours
CE 774 Pavement Design	3
CE 775 Traffic Engg.	3
CE 786 Land Devt for CEs and Plnrs	3

Option Electives

Students should choose at least one course from each of the following areas, or 9-12 hrs. in one option area. Other option electives may be selected with the approval of the student's advisory committee.

Planning Option

CE 680 Econ of Des and Constr	3
CE 771 Travel Demand Modeling	3
CE 872 Transportation Safety	3
CE 874 Sustainable Transp. Asset Mgmt	3
CE 816 Advanced Topics	(Var)
ECON 631 Principles of Transp	3
GEOG 608 Geographic Info Systems II	3
IMSE 850 Ergonomics (Human Factors) Eng	3
STAT 704 Anal of Variance	3
STAT 705 Regression and Corr Anal	3
STAT 710 Sample Survey Methods	3

Design Option

CE 680 Econ of Des and Constr	3
CE 771 Travel Demand Modeling	3
CE 728 Adv Geotech Design	3
CE 751 Hydraulics of Open Channels	3
CE 822 Shear Str & Slope Stability	3
CE 844 Prestressed Concrete Des	3
CE 872 Transportation Safety	3
CE 874 Sustainable Transp. Asset Mgmt	3
CE 816 Advanced Topics	(Var)
IMSE 850 Ergonomics (Human Factors) Eng	3
STAT 704 Anal of Variance	3
STAT 705 Regression and Corr Anal	3
STAT 710 Sample Survey Methods	3

Operations Option

CE 680 Econ of Des and Constr	3
CE 771 Travel Demand Modeling	3
CE 816 Advanced Topics	(Var)
CE 872 Transportation Safety	3
CE 875 Traffic Flow Theory	3
CE 874 Sustainable Transp. Asset Mgmt	3
ECON 631 Principles of Transportation	3
IMSE 560 Intro to Op Res I	3
IMSE 850 Ergonomics (Human Factors) Eng	3
IMSE 881 Linear Programming	3
STAT 704 Anal of Variance	3
STAT 705 Regression and Corr Anal	3
STAT 710 Sample Survey Methods	3

Materials Option

CE 641 CE Materials I	3
CE 680 Econ of Des and Constr	3
CE 728 Adv Geotech Design	3
CE 741 CE Materials II	3
CE 773 Hot Mix Asphalt Design	3
CE 777 PCC Pavements	3
CE 822 Shear Str & Slope Stability	3
CE 802 Adv Mechanics of Materials	3
CE 828 Adv Soil Mechanics	3
CE 816 Advanced Topics	(Var)
CE 874 Sustainable Transp. Asset Mgmt	3
ME 862 Finite Elements	3
STAT 704 Anal of Variance	3
STAT 705 Regression and Corr Anal	3
STAT 710 Sample Survey Methods	3
STAT 720 Design of Experiments	3