

TRANSPORTATION ENGINEERING (CERT)

Graduate Certificate in Transportation Engineering (TRENCTE)

Unit: Speed School of Engineering (GS) (<https://engineering.louisville.edu>)

Department: Civil and Environmental Engineering (<https://engineering.louisville.edu/academics/departments/civil/>)

Academic Plan Code(s): TRENCTE, TRENCTEO

Program Information

This program can be completed 100% online (<https://engineering.louisville.edu/academics/graduate-programs/cert-in-transportation-engr/>).

The Civil and Environmental Engineering Department at the J.B. Speed School of Engineering offers an online graduate certificate program to help professionals gain proficiencies in the field of transportation engineering. This certificate provides an excellent educational opportunity for engineers with a BS in Civil Engineering who:

- May have received a job assignment that requires knowledge in transportation engineering;
- May have fundamental knowledge in civil engineering but may need additional skills and formal education in the field of transportation engineering;
- May need an alternative to a full master's degree; or
- May want to save time and money by choosing to complete a certificate program.

The Graduate Certificate in Transportation Engineering program is comprised of four courses (three required core courses and one elective) for a total of twelve (12) credit hours. The online program can be completed within one year.

Credits earned may be applied to a master's degree in Civil Engineering. Students must apply and be admitted to the master's degree program separately.

Admission Standards

The admission standards for the Graduate Certificate program in Transportation Engineering are as follows:

1. All admission applications for the Graduate Certificate program must include:
 - A completed graduate application (<http://louisville.edu/graduate/futurestudents/apply-materials/application/>) for the Graduate School,
 - An application fee, and
 - Official transcript certifying at least a bachelor's degree. All transcripts not in English must be certified as authentic and translated verbatim into English.
2. The minimum requirement for admission is a baccalaureate degree in Civil Engineering or its equivalent from an accredited institution.
3. The successful applicant will typically have an undergraduate grade point average of 2.75 or above (on a 4.00 scale).
4. International students whose primary language is not English must show English language proficiency. Applicants must either submit an official TOEFL, IELTS or Duolingo score, or demonstrate a

degree award from an acceptable English language institution. The successful applicant will typically have a total TOEFL score of 79 or higher, an overall IELTS score of 6.5 or higher or a Duolingo score of 105.

Students can enroll in a Graduate Certificate program either as a non-degree seeking student or as a student simultaneously enrolled in a graduate degree program and this graduate certificate program. Students who wish to earn a graduate degree must meet all admission criteria for the degree program.

All students enrolled in a graduate certificate program are expected to make steady and satisfactory progress toward the completion of the certificate. Students who are not enrolled for a period of more than 12 months will be considered to have withdrawn from the certificate program. Students who seek to return after such a period of time must contact the graduate program director.

Certificate Requirements

Code	Title	Hours
Core Courses		
CEE 560	Traffic Engineering	3
CEE 562	Geometric Design of Highways	3
CEE 664	Fundamentals of Intelligent Transportation Systems	3
Approved electives		
Students will choose one of the following:		3
CEE 660	Transportation Planning and Urban Development	
CEE 661	Environmental Analysis of Transportation Systems	
CEE 662	Airport Planning & Design	
CEE 663	Advanced Traffic Operations	
CEE 665	Pavement Design	
CEE 694	Special Topics in Civil Engineering (Transportation Safety)	
Minimum Total Hours		12

The certificate program of study must be completed with a 3.00 GPA or better for all graduate courses used to satisfy certificate requirements.

Graduate certificate students must take all certificate course work at the University of Louisville. No transfer credits will be accepted toward a Transportation Engineering graduate certificate.