**STRUCTURAL ENGINEERING (CERT)**

Graduate Certificate in Structural Engineering  
Unit: Speed School of Engineering (GS) ([https://engineering.louisville.edu](https://engineering.louisville.edu))  
Department: Civil and Environmental Engineering ([https://engineering.louisville.edu/academics/departments/civil](https://engineering.louisville.edu/academics/departments/civil))  
Academic Plan Code(s): STENCSE, STENCSEO

**Program Information**

This program can be completed in a traditional classroom format or entirely online ([http://louisville.edu/online/programs](http://louisville.edu/online/programs)).

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

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

The graduate certificate in structural engineering 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 the Master of Science in Civil Engineering. Students must apply and be admitted to the master's degree program separately.

**Admission Requirements**

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

1. All admission applications for the Graduate Certificate program shall include:
   a. A completed application ([http://louisville.edu/graduate/apply](http://louisville.edu/graduate/apply)) for the Graduate School,
   b. An application fee,
   c. Official transcript(s) for all previous post-secondary coursework. All transcripts not in English must be certified as authentic and translated verbatim into English.
2. The minimum requirement for admission is the 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 or IELTS score or demonstrate a degree award from an acceptable English language institution. The successful applicant will typically have a total TOEFL score of 80 or higher or an overall IELTS score of 6.5 or higher.

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**

The following certificate requirements are mandatory for all Graduate Certificate candidates:

1. The Certificate Program of Study must be completed with a 3.00 GPA or better for all graduate courses used to satisfy certificate requirements.
2. Graduate certificate students must take all certificate course work at the University of Louisville. No transfer credits will be accepted toward a graduate certificate.

**Program Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 522</td>
<td>Fundamentals of Prestressed Concrete</td>
<td>3</td>
</tr>
<tr>
<td>CEE 626</td>
<td>Masonry Design</td>
<td>3</td>
</tr>
<tr>
<td>or CEE 523</td>
<td>Timber Design</td>
<td></td>
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<tr>
<td>CEE 590</td>
<td>Current Topics in Civil Engineering (Bridge Design)</td>
<td>3</td>
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**Approved Engineering Electives (600 level)**

Students will choose one of the following:  

- CEE 523 Timber Design  
- CEE 626 Masonry Design  
- CEE 665 Pavement Design  
- CEE 694 Special Topics in Civil Engineering (Building Information Modeling)

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 graduate certificate.