ENGINEERING: RAILWAY ENGINEERING, MENG

for the Master of Engineering in Engineering, Railway Engineering Concentration

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overview of admissions & requirements: https://railwaymeng.engineering.illinois.edu/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply
department website: https://cee.illinois.edu/
program website: https://railwaymeng.engineering.illinois.edu/
department faculty: https://cee.illinois.edu/directory/faculty
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The MEng in Engineering, Railway Engineering Concentration is a professionally-oriented degree program for students whose primary intent is a career in industry or government. This degree differs from the Master of Science degree in that it is a terminal degree and not a pathway to a doctoral program. Other concentrations under the MEng in Engineering major include Aerospace Systems Engineering (http://catalog.illinois.edu/graduate/engineering/engineering-meng/aerospace-systems/), Autonomy and Robotics (http://catalog.illinois.edu/graduate/engineering/engineering-meng/autonomy-robotics/), Energy Systems (http://catalog.illinois.edu/graduate/engineering/engineering-meng/energy-systems/), and Plasma Engineering (http://catalog.illinois.edu/graduate/engineering/engineering-meng/plasma-engineering/).

This program is a collaborative effort between the Rail Transportation of Engineering Center (RailTEC) and the Railway Group at KTH Royal Institute of Technology in Stockholm, Sweden.

Admission Requirements

The Department of Civil & Environmental Engineering accepts applications for admission to the graduate program for both fall and spring semesters. Applicants must hold a bachelor's or master's degree in engineering or related fields equivalent to those granted by the University of Illinois at Urbana-Champaign with cumulative grade point average of at least 3.00 (A = 4.00). The Graduate Record Examination (GRE) (http://www.ets.org/portal/site/ets/menuitem.fab2360b1645a1de9b3a0779f1751509/?vgnextoid=b195e3b5f64f4010VgnVCM10000022f95190RCRD) is required.

Full details of admission requirements are on the Railway Engineering Concentration website (http://railwaymeng.engineering.illinois.edu/).

All applicants whose native language is not English are required to submit TOEFL (http://www.toefl.org/) or International English Language Testing System (IELTS) (http://www.ielts.org/) scores as evidence of English proficiency. Minimum admission requirements (https://grad.illinois.edu/admissions/instructions/04c/) are set by the Graduate College.

Financial Aid

Students in concentrations under the MEng in Engineering major are not eligible for Board of Trustees (BOT) tuition-waiver generating assistantships at the University of Illinois.

Other Graduate Programs in the Department of Civil & Environmental Engineering

degrees:

Information listed in this catalog is current as of 04/2022
Civil Engineering, MS (http://catalog.illinois.edu/graduate/engineering/civil-engineering-ms/)

optional concentrations:
- Computational Science and Engineering (http://catalog.illinois.edu/graduate/engineering/concentration/computational-science-engineering/)

Civil Engineering, PhD (http://catalog.illinois.edu/graduate/engineering/civil-engineering-phd/)

optional concentrations:
- Computational Science and Engineering (http://catalog.illinois.edu/graduate/engineering/concentration/computational-science-engineering/)

Environmental Engineering in Civil Engineering, MS (http://catalog.illinois.edu/graduate/engineering/environmental-engineering-civil-engineering-ms/)

optional concentrations:
- Computational Science and Engineering (http://catalog.illinois.edu/graduate/engineering/concentration/computational-science-engineering/)

Environmental Engineering in Civil Engineering, PhD (http://catalog.illinois.edu/graduate/engineering/environmental-engineering-civil-engineering-phd/)

optional concentrations:
- Computational Science and Engineering (http://catalog.illinois.edu/graduate/engineering/concentration/computational-science-engineering/)

joint programs:
- Civil Engineering, MS & Architecture, MARCH (http://catalog.illinois.edu/graduate/engineering_faa/joint-degree/architecture-march-civil-engineering-ms/)
- Construction Management or Structures
- Civil Engineering, MS & Urban Planning, MS (http://catalog.illinois.edu/graduate/faa/joint-degree/urban-planning-mup/)

Opportunity also exists for specializing in energy and sustainability engineering via the Energy and Sustainability Engineering (EaSE) Graduate Certificate Option (http://ease.illinois.edu/)

for the Master of Engineering in Engineering Railway Engineering Concentration

For additional details and requirements, please refer to the concentration's website (http://railwaymeng.engineering.illinois.edu/) and the Graduate College Handbook (http://grad.illinois.edu/gradhandbook/).

Concentration Requirements

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>CEE 409</td>
<td>Railroad Track Engineering</td>
<td>6</td>
</tr>
<tr>
<td>CEE 412</td>
<td>High-Speed Rail Engineering</td>
<td></td>
</tr>
<tr>
<td>Alternate Illinois course from approved list for students who have completed one or both of the required courses in previous degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEE 498</td>
<td>Special Topics (RTV, KTH SD2307, Rail Vehicle Technology)</td>
<td>12</td>
</tr>
<tr>
<td>CEE 498</td>
<td>Special Topics (TMS, KTH AK2036, Theory and Methodology of Science with Applications)</td>
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</tr>
<tr>
<td>CEE 598</td>
<td>Special Topics (ET, KTH EJ2400, Electric Traction)</td>
<td></td>
</tr>
<tr>
<td>CEE 598</td>
<td>Special Topics (RVD, KTH SD2313, Rail Vehicle Dynamics)</td>
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</tr>
<tr>
<td>Elective Courses from Illinois</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Railway Elective Courses from Approved List A, minimum 6 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Elective Courses from Approved List B, minimum 6 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Development courses from approved list</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

Other Requirements and Conditions (may overlap)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
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<tbody>
<tr>
<td>Minimum of 20 credit hours must be taken at the University of Illinois at Urbana-Champaign campus</td>
<td></td>
</tr>
<tr>
<td>Minimum of 12 500-level credit hours in the concentration with at least 8 credit hours in the core concentration</td>
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Information listed in this catalog is current as of 04/2022
No courses used to fulfill any degree requirement may be taken using the Credit/No Credit option.

| Minimum program GPA | 3.0 |