ENGINEERING: RAILWAY ENGINEERING, MENG

for the Master of Engineering in Engineering, Railway Engineering Concentration

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director of graduate studies: Jeffery R Roesler (jroesler@illinois.edu)

overview of admissions & requirements: https://railwaymeng.engineering.illinois.edu/admissions/
overview of grad college admissions & requirements: https://grad.illinois.edu/admissions/apply (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 (https://cee.illinois.edu/directory/faculty/)
college website: https://grainger.illinois.edu/
contact: Meg C Griffin (mgriffn@illinois.edu)
address: 1108 Newmark Civil Engineering Lab, 205 N Mathews Ave, Urbana, IL 61801
phone: (217) 333-3921
e-mail: meng-railway@illinois.edu

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/menutem.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:
  • Civil Engineering, MS (http://catalog.illinois.edu/graduate/engineering/civil-engineering-ms/)
    • optional concentrations for the MS:
      • Computational Science & Engineering (http://catalog.illinois.edu/graduate/engineering/concentration/computational-science-engineering/)
      • Data Science & Engineering (http://catalog.illinois.edu/graduate/engineering/concentration/data-science-engineering/)
  • Civil Engineering, PhD (http://catalog.illinois.edu/graduate/engineering/civil-engineering-phd/)
Engineering: Railway Engineering, MEng

- optional concentrations:
  - Computational Science and Engineering [link]
- Environmental Engineering in Civil Engineering, MS [link]
  - optional concentrations:
    - Computational Science and Engineering [link]
- Environmental Engineering in Civil Engineering, PhD [link]
  - optional concentrations:
    - Computational Science and Engineering [link]
- concentrations:
  - Railway Engineering (p. 1)
    - available for:
      - Engineering, MENG [link]

- joint programs:
  - Civil Engineering, MS & Architecture, MARCH [link], (Construction Management or Structures)
  - Civil Engineering, MS & Urban Planning, MS [link]

Opportunity also exists for specializing in energy and sustainability engineering via the

- Energy and Sustainability Engineering (EaSE) Graduate Certificate Option [link]

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For the Master of Engineering in Engineering Railway Engineering Concentration

For additional details and requirements, please refer to the concentration's website [link] and the Graduate College Handbook [link].

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

<table>
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<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>
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<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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<tr>
<td>No courses used to fulfill any degree requirement may be taken using the Credit/No Credit option.</td>
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<tr>
<td>Minimum program GPA</td>
<td>3.0</td>
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