

Transportation Engineering

the MS in Engineering program at Rowan University



Rowan University is located in Glassboro, NJ, 30 minutes from Philadelphia and one hour from the Jersey Shore. The College of Engineering at Rowan University is renowned for its multidisciplinary, hands-on approach to engineering education. The College has an excellent student to faculty ratio, allowing MS Students to receive significant individual attention from faculty.

The Transportation Engineering focus is available to graduate students in the Civil Engineering and Environmental Engineering programs. The sequence involves three semesters and one summer of interdisciplinary coursework, plus research that culminates in a Master's Thesis. Students pursuing this focus will develop a strong foundation in transportation engineering through 24 credit hours of coursework, complemented by research where the student works closely with one or more faculty members. Most projects are externally sponsored, allowing students to receive tuition scholarships and stipends, while working on cutting-edge topics. Depending on the chosen electives and research topic, this focus is appropriate for students interested in pavements, transportation, structures, or land development.

Recent graduates have gone on to careers in government and industry, or pursued doctorates.

Typical Course of Study

| | |
|-----------------|--------------------------------------|
| Fall Semester | |
| 3 cr. | Elective |
| 3 cr. | Elective |
| 3 cr. | Research |
| Spring Semester | |
| 3 cr. | Elective |
| 3 cr. | Elective |
| 3 cr. | Research |
| Summer | |
| 3 cr. | Engineering Applications of Analysis |
| 3 cr. | Strategic Engineering Management |
| Fall Semester | |
| 3 cr. | Elective |
| 3 cr. | Research |

Affiliated Faculty in Civil and Environmental Engineering (CEE), Chemical Engineering (ChE), Electrical and Computer Engineering (ECE), Geography and Mechanical Engineering (ME).

- Dr. Krishan Bhatia (ME) – Alternative powertrains
- Dr. T.R. Chandrupatla (ME) – FEA, optimization
- Dr. Douglas Cleary (CEE) – Reinforced concrete
- Dr. Ralph Dusseau (CEE) – Bridge engineering
- Dr. John Hasse (Geography) – Transportation planning
- Dr. Robert Hesketh (ChE) – Transportation emissions
- Dr. Kauser Jahan (CEE) – Environmental engineering
- Dr. Peter Jansson (ECE) – Sustainable design
- Dr. Shreekanth Mandayam (ECE) – Image analysis, NDE
- Dr. Yusuf Mehta (CEE) – Transportation engineering
- Dr. William Riddell (CEE) – Rail, Transportation safety
- Dr. Beena Sukumaran (CEE) – Geotechnical engineering

Electives offered in

- Bridge Engineering
- Fate and Transport of Organic Pollutants
- Finite Element Analysis
- Foundation Engineering
- Geographic Information Systems
- Metro Regional Planning
- Pavement Analysis and Evaluation
- Pavement Rehabilitation
- Transportation Operations and Planning
- Urban Planning
- Prestressed Concrete Design
- Sustainable design in engineering
- Principles of Non-Destructive Evaluation
- Automotive Engineering

Funding Opportunities

Research assistantships are awarded competitively, based on funded projects. For full consideration for a research assistant position, we recommend that your application is submitted by March 1st. Initial decisions on funding are typically made in April. However, additional offers are sometimes made later, as additional sources of funding are secured.

Recent Funded Projects

Compatibility of crossing gate arms and overhead catenary lines; Diesel retrofit technologies to reduce in-cabin particulate matter concentrations; Energy absorbing utility poles; Evaluation of modified binder; Evaluation of warm mix asphalt; Fatal Accidents Analysis; FEA analysis of flexible airport pavements; Identification of source of rutting in a pavement system; Mechanistic-empirical design of asphalt pavements; Motorcycle Crash Analysis; Performance of biodiesel blends in locomotives and airport ground support vehicles; Heavy metal contamination in highway marking glass beads, Subbase materials in airport runways.

For More Information:

<http://engineering.rowan.edu/> or contact Yusuf Mehta at Mehta@rowan.edu or at 856-256-5327.

Application Materials:

http://www.rowan.edu/graduateschool/prospective_students/grad_application/index.htm