Graduate Research Opportunities in

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.

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.

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. Chandrupatia (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

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