ABOUT THE PROGRAM

The Transportation Engineering (TRE) program exposes students to the process of alleviating transportation problems. The coursework and research in the area provide advanced knowledge in transportation planning and economics, traffic engineering, and the design of highways/pavements and other transportation facilities. Transportation Engineering students acquire advanced skills concerning the planning, design, operations, maintenance, rehabilitation, performance, and evaluation of transportation systems, including their economic and public policy aspects.

AREAS OF SPECIALIZATION

TRE offers two areas of specialization,
(a) Planning and Engineering
(b) Highways and Pavements

Under Planning & Engineering, students are trained on planning and logistics as well as traffic and safety. Among other topics, they are immersed to issues relating to transportation systems, urban/regional transportation analysis and planning methods, airport planning & design, and traffic engineering.

Students gearing for a specialization in Highways & Pavements take courses in design and operation as well as in management systems and maintenance. They are skilled in geometric design and highway safety, design/performance of highways and airport pavement as well as pavement management systems.

Current researches in Transportation Engineering cover transportation planning and economics, traffic engineering, traffic safety, and design of highways and pavements.
COURSE STRUCTURE

TRE field gives students an opportunity to explore the technological, safety, political/economic, and energy/environment dimensions of Transportation Engineering. In enhancing a holistic approach, they undertake courses such as Urban/Regional Transportation Analysis and Planning Methods, Airport Planning & Design, Design and Performance of Highway and Airport Pavement, Transportation Policy and Environmental Limits, and Planning for Traffic Safety and Injury Prevention. Coursework in other fields broadens students’ knowledge. Highly recommended are engineering mathematics, fundamentals of soil engineering, geographic information systems in civil engineering, and construction planning and scheduling.

ELIGIBILITY REQUIREMENT

For the regular Master’s program, an applicant must:
- hold a Bachelor degree (normally from a four-year program), or its equivalent, in an appropriate field of study from an institution of good standing acceptable to AIT;
- have undergraduate grades significantly above average; the minimum cGPA requirement for admission to the Master’s Program is 2.75 or equivalent, at the Bachelor degree level

For the regular Doctoral degree program, an applicant must:
- have strong academic records (both undergraduate and graduate) and normally hold a four-year bachelor’s degree, and a Master’s degree, preferably with a combination of course and thesis work, from an institution of good standing, acceptable to AIT. The minimum cGPA requirement for admission to the doctoral program is 3.50 or equivalent, at the Master’s degree level.
- submit a brief outline of dissertation research proposal (5-10 pages) including the required research facilities, if necessary.
- Two recommendation letters.

English Proficiency Requirement: AIT-EET:6 or IELTS-Academic:6 (writing 6) or TOEFL Paper: 550 (writing 59-61) or TOEFL CBT: 213 (writing 25-26); TOEFL IBT: 80 (writing 21-23);

PREFERRED BACKGROUND

Master Program:
Undergraduate degree in Civil Engineering; other engineering fields (e.g. urban and regional planning and systems engineering) are also considered

Doctoral Program:
Master degree in Transportation Engineering and other related engineering fields

CONTACT US

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