Master of Engineering Programme in Railway Transportation System (International Programme)
หลักสูตร   วิศวกรรมศาสตรมหาบัณฑิต สาขาวิชา ระบบขนส่งทางราง(หลักสูตรนานาชาติ)(ภาคปกติ)

Faculty of Engineering
คณะวิศวกรรมศาสตร์

Expected number of Students to be accepted all year round :   11 Students

Admission Requirements

A candidate must:
1. Plan A (A2)

1.1 Graduated (or expected to graduate prior to the applied semester) in a Bachelor Degree of Engineering, Science, or related fields from the institutes/universities that are certified by the Office of the Higher Education Commission

1.2 Earn a 2.50 GPA or higher. Special consideration may be granted for prospective students with a GPA below 2.50 on an individual basis.

1.3 Submit a certificate of English proficiency with minimum admission score:

- · IELTS   - at least 3   or
- · TOEFL INTERNET BASED - at least 32   or
- · TOEFL ITP (test arranged by Faculty of Graduate Study, Mahidol University) - at least 400 or
- · MU GRAD TEST (Computer based) - at least 36

Important Notes:

- English proficiency score must be taken within 2 years up to the admission date.
- Application without submitting a valid English certificate will NOT be considered.
- MU English Competence Standards: www.grad.mahidol.ac.th
- MU English proficiency tests, please contact the Language Center, Faculty of Graduate Studies. Tel. 0-2441-4125 ext. 221-222

1.4 Exceptions from the above requirements may be made by the Program Committee and the Dean of Faculty of Graduate Studies

2. Plan B

2.1 Graduated (or expected to graduate prior to the applied semester) in a Bachelor Degree of Engineering, Science, or related fields from the institutes/universities that are certified by the Office of the Higher Education Commission

2.2 Earn a 2.50 GPA or higher. Special consideration may be granted for prospective students with a GPA below 2.50 on an individual basis.

2.3 Have at least 3 years of working experiences relate to Railway Transportation System or related fields

2.4 Submit a certificate of English proficiency with minimum admission score:

- · IELTS - at least 3   or
- · TOEFL INTERNET BASED - at least 32   or
- · TOEFL ITP (test arranged by Faculty of Graduate Study, Mahidol University) - at least 400 or
- · MU GRAD TEST (Computer based) - at least 36

   Important Notes:

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2.5 Exceptions from the above requirements may be made by the Program Committee and the Dean of Faculty of Graduate Studies

Curriculum Structure

	Credit	
	Plan A (A2)	Plan B
Required Courses	15	15
Elective Courses no less than	9	15
Thesis	12	6
Total no less than	36	36

Required Courses

EGRS	501	Rail Transport System Seminar	1(1-0-2)
EGRS	502	Research Methodology for Railway Transportation	2(2-0-4)
EGRS	503	Rail Transportation Project Planning and Management	3(3-0-6)
EGRS	504	Railway System Components and Standards	3(3-0-6)
EGRS	505	Railway Signaling and Operations	3(3-0-6)
EGRS	506	Principle of Service and Maintenance Design for Rail System (RAMS)	3(3-0-6)

Elective Courses

EGRS	511	Applied Statistics and Simulation for Railway System Planning	3(2-2-5)
EGRS	512	Railway Planning and Timetabling	3(3-0-6)
EGRS	513	Railway Transport Economics	3(3-0-6)
EGRS	514	Public Transport System Planning	3(3-0-6)
EGRS	515	Travel Behavior and Demand Analysis	3(3-0-6)
EGRS	516	Freight Rail Transport and Logistics	3(3-0-6)
EGRS	517	Sustainable Transportation	3(3-0-6)
EGRS	518	Materials and Fabrication Processes in Rail Industry	3(3-0-6)
EGRS	519	Inspection and Evaluation for Maintenance of Metal Works in Rail Industry	3(3-0-6)
EGRS	521	Railway Track Engineering	3(2-2-5)
EGRS	522	Design and Construction of Railway Infrastructure	3(3-0-6)
EGRS	531	Interfacing Electrification and System Reliability	3(3-0-6)
EGRS	532	Railway Signaling and Control	3(3-0-6)
EGRS	533	Railway Traction Systems	3(3-0-6)
EGRS	534	Railway Electrification	3(3-0-6)
EGRS	541	Rolling Stock Engineering	3(3-0-6)
EGRS	542	Advanced Dynamic	3(3-0-6)
EGRS	543	Linear Control	3(3-0-6)
EGRS	551	Computer System Security for Rail System	3(3-0-6)
EGRS	552	Information Technology for Smart City	3(3-0-6)
EGRS591-595		Special Topic in Railway Engineering I-V	3(3-0-6)

Thesis

EGRS   698   Thesis   12(0-36-0)

Independent Study

EGRS   697   Independent Study   6(0-18-0)

* These may change in cases where there are suggestions for the improvened of the curriculum

Job option after graduation

1) Government Officer

2) Engineering Consultant

3) Mass Transit/Railway Operator Corporate.Employee

Application Process

Application is only available via online application at www.grad.mahidol.ac.th

Required Documents

Applicants must upload all documents via online admission system. All documents must be in PDF format (maximum size 2 MB). Photograph must be in JPEG format

- Recent photographs (1x1 inch in size)
- A copy of an applicant's degree certificate or a letter of graduation certification (for an applicant with a degree completion)
- A letter certifying that an applicant is currently in the final year prior to graduation (for an applicant seeking for a degree)
- A detailed transcript of a degree (for an applicant with a degree completion)
- A grade report with course names and grades received from the first to the current semester prior to graduation
- A copy of identification card
- A copy of house registration certification
- A copy of Certificate of English proficiency :
   IELTS / TOEFL INTERNET BASED / TOEFL ITP / MU GRAD TEST (Computer based)
- A copy of proof of payment.

Further information may be obtained from the Director of Graduate Studies,
Railway Transportation System

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Program Coordinator

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For more information please contact The Student Admission Section.
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