

Admission Number

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Master of Engineering Program in Civil Engineering (International Program)

หลักสูตร วิศวกรรมศาสตรมหาบัณฑิต

สาขาวิชา วิศวกรรมโยธา (หลักสูตรนานาชาติ) (ภาคปกติ)

Faculty of Engineering

คณะวิศวกรรมศาสตร์

Expected number of students to be accepted year round : 5 Students

Admission Requirements

A candidate must:

1. Holding or expecting a bachelor degree in Civil Engineering or related field from Thai or International institutions accredited by the Office of the Higher Education Commission.
2. Have a minimum grade point average of 3.00.
3. Have a TOEFL score of at least 480, TOEFL computer-based score of 157, TOEFL Internet-based score of 54, or IELTS score of 4.5 or pass the English Proficiency Examination arranged by the Faculty of Graduate Studies. For those who already hold a valid English score, please submit its certificate along with all application documents.

Curriculum Structure

	Credit
Required Courses	12
Elective Courses	not less than 12
Thesis	12

	Credit
Required Courses	
EGCE 523 Research Methodology for Civil Engineering	2(1-0-4)
EGCE 525 Building Systems	3(3-0-6)
EGCE 526 Infrastructure Systems	3(3-0-6)
EGCE 527 Economic and Finance of Project Investment	3(3-0-6)
EGCE 528 Seminar in Civil Engineering	1(1-0-2)
Elective Courses	
EGCE 502 Durability of Concrete and Structures	3(3-0-6)
EGCE 503 Destructive and Non-Destructive Testing	3(3-0-6)
EGCE 504 Repair and Maintenance of Reinforced Concrete	3(3-0-6)

EGCE	508	Advanced Cementitious Materials	3(3-0-6)
EGCE	510	Finite Element Method for Civil Engineering	3(3-0-6)
EGCE	511	Structural Analysis and Structural Dynamics	3(3-0-6)
EGCE	512	Advanced Design of Reinforced Concrete	3(3-0-6)
EGCE	513	Seismic Design and Rehabilitation	3(3-0-6)
EGCE	514	Advanced Design of Prestressed Concrete	3(3-0-6)
EGCE	515	Advanced Design of Steel Structures	3(3-0-6)
EGCE	517	Inverse Problem Analysis for Civil Engineering	3(3-0-6)
EGCE	518	Optimization Methods for Engineers and Scientists	3(3-0-6)
EGCE	550	Traffic Theory and Applications	3(3-0-6)
EGCE	551	Traffic Control and Management	3(3-0-6)
EGCE	552	Urban Transportation Planning	3(3-0-6)
EGCE	553	Travel Behavior and Demand Analysis	3(3-0-6)
EGCE	554	Intelligent Transportation Systems	3(3-0-6)
EGCE	555	Transportation, Energy, and Environment	3(3-0-6)
EGCE	560	Construction Planning and Control	3(3-0-6)
EGCE	563	Construction Techniques and Equipment	3(3-0-6)
EGCE	564	Construction Project Administrations	3(3-0-6)
EGCE	565	Law and Contract Administrations	3(3-0-6)
EGCE	566	Construction Cost, Economics and Finance	3(3-0-6)
EGCE	567	Construction Safety Management	3(3-0-6)
EGCE	568	Quality Control in Construction Projects	3(3-0-6)
EGCE	569	Construction Organizational Management	3(3-0-6)
EGCE	570	Geoinformatics System in Engineering	3(3-0-6)
EGCE	571	Applied Geoinformatics for Land Use Planning	3(3-0-6)
EGCE	572	Natural Disaster Engineering	3(3-0-6)
EGCE	573	Applied Geoinformatics for Watershed Management	3(3-0-6)
EGCE	574	Geoinformatics for Disaster Management and Mitigation	3(3-0-6)
EGCE	575	Geoinformation Technology Applications for Climate Change	3(3-0-6)
EGCE	576	Geoinformatics for Transportation Analysis	3(3-0-6)
EGCE	577	Hydrometeorology	3(3-0-6)

EGCE	580	Advanced Foundation Engineering	3(3-0-6)
EGCE	581	Engineering Properties of Soil	3(3-0-6)
EGCE	582	Excavations and Support Systems	3(3-0-6)
EGCE	583	Soil and Site Improvement	3(3-0-6)
EGCE	584	Determination of Soil Properties	3(3-0-6)
EGCE	585	Theoretical Soil Mechanics	3(3-0-6)
EGCE	586	Finite Element Method for Geotechnical Engineering	3(3-0-6)
EGCE	587	Geoenvironmental Engineering	3(3-0-6)
EGCE	588	Earth Structures	3(3-0-6)
EGCE	591	Selected Topics	3(3-0-6)
Thesis			
EGCE	698	Thesis	12(0-36-0)
* These may change in cases where there are suggestions for the improvement of the curriculum			

Additional Advantages of the Program

This program integrates knowledge from various disciplines in Civil engineering into a practical and comprehensive program. Students will gain a better understanding of the big picture and relationships among various disciplines throughout a civil engineering project, as well as project financial management. These enable graduates from the program to have the necessary technical knowledge and skills to work effectively.

Application Process

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

Required Documents

Prepare the following required documents to submit via online admission system or by mail:

- Recent photographs (1x1 inch in size) 2 copies
- A copy of an applicant's degree certificate or a certification letter of graduation (for an applicant holding a bachelor degree) 2 copies
- A letter certifying that an applicant is currently in the final year prior to graduation (for an applicant expecting a bachelor degree) 2 copies
- A formal transcript of a degree (for an applicant holding a bachelor degree)
- A grade report or transcript with course names and grades received from the first to the current semester prior to graduation (for an applicant holding a bachelor degree) 2 copies
- A copy of identification card 2 copies

- A copy of house registration certificate 2 copies
- A copy of Certificate of English score: TOEFL/IELTS/MU-Test (if any). See detail here: http://www.grad.mahidol.ac.th/grad/academicinfo/engstandard2553_th.php 2 copies
- A copy of proof of application fee payment 1 copies

Submitting documents via online admission system.

- All documents must be in pdf format (maximum size 2 MB)
- Recent photograph must be in jpeg format only (maximum size 2 MB)

Job Options after Graduation

- Civil engineer
- Academic or researcher in civil engineering field
- Business owner or technical sales engineer

For Further Information, Please Contact

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Program Coordinator

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Note For more academic information: www.grad.mahidol.ac.th

**For more information please contact the Student Admission Section.
 Tel . 0 2441 4125 ext. 208-210 , 0 2441 9129, E-mail : gradthai@mahidol.ac.th**