

Course Outline
EN001200 Statics
Academic Year of 2023, Second Semester

Section and Lecturers:

Sec	Time	Room	Lecturer	Program
1	TU/FRI 09:00 – 10:30	EN16505	Assist. Prof. Ampol Wongsu	TH
2	TU/FRI 09:00 – 10:30	EN16506	Assoc. Prof. Pongsakorn Punrattanasin	TH
3	TU/FRI 09:00 – 10:30	EN16507	Assist. Prof. Supakorn Tirapat	TH
4	TU/FRI 09:00 – 10:30	EN16407	Assoc. Prof. Korb Srinavin	International
5	TU/FRI 09:00 – 10:30	EN16405	Assoc. Prof. Preenithi Aksorn	International

Course Description:

Midterm Content		Final Content	
1.	Introduction to Statics & Dynamics 1.1 Fundamental concepts 1.2 Unit and numerical accuracy	5.	Structures in equilibrium 5.1 Truss (Section method and Joint method) 5.2 Frame and Machine
2.	Equilibrium of a particle in 2D and 3D 2.1 Forces 2.2 System of forces 2.3 Free body diagram 2.4 Equilibrium of a particle	6.	Beam 6.1 Internal Force 6.2 Shear and Bending Moment Diagram
3.	Force system resultant 3.1 Moment 3.2 Moment about a specified axis 3.3 Equivalent system	7.	Friction and its application 7.1 Friction 7.2 Applied friction
4.	Equilibrium of rigid body in 2D and 3D 4.1 Forces 4.2 System of forces 4.3 Free body diagram 4.4 Equilibrium of a rigid body	8.	Center of gravity and centroid
		9.	Virtual Work

Midterm Examination Period: 8 – 12 January 2024

Final Examination: 15 March 2024

Evaluation:

Topics	Marks
1. Midterm Examination (in English)	45
2. Final Examination (in English)	45
3. Attendance	5
4. Quiz and Homework	5
Total	100

Textbook

1. กลศาสตร์วิศวกรรม โดย รศ. ยิ่งศักดิ์ พรณเชษฐ์
2. Engineering Mechanics Statics by R.C. Hibbeler
3. Vector Mechanics for Engineers: Statics by Ferdinand P. Beer & E. Russell Johnston Jr.
4. Engineering Mechanics Statics by J. L. Meriam and L.G. Kraige

Class Attendance

- The attendance will be checked by teacher assistant (TA). If students attend the class **15 minute late**, students will be **missed** that class.
- The attendance will be checked during **26 November 2023 to 25 February 2024**
- Students who attend the class less than **80% or miss more than 6 times**, will not be eligible to attend the final examination. The coordinator of this subject, Assist.Prof.Supakorn Tirapat, will declare in e-learning courses EN001200: STATICS. If a student has a complaint. Contact the coordinator within 7 days after the announcement.

Homework

- Students can download homework from e-learning course **EN001200 : STATICS**

Examination

- The midterm and final examination will be published in **English**. However students can write an answer in Thai.
- Those students, who have missed the examination, request to take the exam. **Allowed to retest only** students with medical certificates clearly state that "**admitted to the hospital**" during the examination only.