

## ME 400 Mechanical Engineering II (TEPE)

Credit: 2(0-4-0) Semester 1 Year 2015

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Prerequisite: Pass ME 300, ME 322, ME 330 or permission from instructor or head of department

**Instructor:** Lecturer from Mechanical Engineering Department

**Coordinator:** Chainarong Chaktranond

**Teaching time:** 8.30 – 12.30, Tuesdays

**Consulting time:** Thru 13.30 – 16.30 or make an appointment via email

**Objectives:**

- To have knowledge and understanding in any measurement and basic tools in various topics, such as 1) Free and Forced vibration, Static and dynamic balancing, Strain gauge, Polariscope, Air Conditioning, Wind Tunnel, and Heat Exchangers.
- To able to apply the knowledge to real work.

**Course descriptions:**

Additional experiments in the fields of power plant engineering, heat transfer, automatic control system, mechanical vibrations and gas dynamics.

List of Laboratory, Instructors and room

Lab	Topics	Instructor	Place
1	Free and Forced Vibration	Assoc.Prof. Thira	Room 203 ME workshop
2	Static and dynamic balancing	Asst.Prof. Bunyong	Room 201/2 ME workshop
3	Strain Gauge	Asst.Prof. Chatchai	Room 207 ME workshop
4	Polariscope	Assoc.Prof. Dulyachot	Room 201 ME workshop
5	Air Conditioning	Asst.Prof. Isares	Room 206 ME workshop
6	Wind Tunnel	Dr. Jiraprabha	Room 106 ME workshop
7	Heat Exchangers	Asst.Prof. Monchai	Room 613 Eng Bld (FL 6)
8	Compressible flow in nozzles	Prof. Somchart	ME workshop FL2
9	Journal Bearing Apparatus	Dr. Jakkrapun	Room 613 Eng Bld (FL6)

Evaluation

Practice (attendant, discipline, punctuality) and reports

70 Pts

Final Examination

30 Pts

Total

100 Pts

Students must dress properly

Grade

Score	GRADE
$\geq 80$	A
76 – 79	B+
71 – 75	B
66 – 70	C+
61 – 65	C
56 – 60	D+
51 – 55	D
$\leq 50$	F

Material courses:

- Lab Sheet by instructor
- Graph, paper for report, calculator etc. by student