MECH2310 THERMODYNAMICS
(Fall of 2025/26)

Instructor: Prof. Yanguang Zhou (Office 2577A, Email: maeygzhou@ust.hk)

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Course Description:

Fundamental Concepts; Pure substance; Work and heat; Control volume; Ideal and real gases; First and second laws of thermodynamics; Entropy; Elementary power and refrigeration cycles.

Textbook:

Y.A. Cengel and M.A. Boles, *Thermodynamics – An Engineering Approach,* 8th Edition in SI Units, McGraw Hill, 2015.
(Presentation Materials can be downloaded from the Learning Management and Evaluation System web site: https://canvas.ust.hk)

Classrooms and Time Slots:

Lecture:	Tuesday	– 10:30 - 11:50 (Rm 6555)
	Thursday	– 10:30 - 11:50 (Rm 6555)
Tutorial:	Thursday	– 18:00 - 18:50 (Rm 5404)

Course Grading:

Final Exam:	50%
Mid Term:	35%
Homework:	15%

Schedule: (Times are subject to change)

Week 1:	Introduction - Some basic concepts
Week 2:	Introduction - Energy Analysis
Week 3:	Introduction - Energy Analysis
Week 4:	Properties of Pure Substance
Week 5:	Properties of Pure Substance
Week 6:	Work and heat
Week 7:	First law of thermodynamics
Week 8:	First law of thermodynamics and Mid Term Exam
Week 9:	Second law of thermodynamics
Week 10:	Second law of thermodynamics
Week 11:	Entropy
Week 12:	Entropy and more on Irreversibility
Week 13:	Review