

ME 101: Course Outline

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ME 101 : Introduction to Mechanical Engineering

<http://zahurul.buet.ac.bd/ME101/>



ME 101: Syllabus

[3.00 Credit Hours]

- Scope of mechanical engineering; Study of sources of energy – conventional and renewable; Environmental pollution.
- Major mechanical applications: Automobiles and I.C. engines; Gas turbine and jet engines; Fluid machinery – Fan, blower, compressor, pump; Steam generators and turbines; Refrigeration and air-conditioning systems.
- Electromechanical systems – Robotics, Mechatronics, MEMS, Bioengineering;
- Machine elements: Gears, bearings, spring, beam, column; Materials for mechanical engineers.
- Engineering codes and standards;
Engineering ethics and occupational safety.

⇒ Underlined topics will be covered by Prof. M. Mahbubul Alam (1 cr. hr.).



Tentative Lecture Plan of MZH (2 cr. hrs.) for 2022

Topics	No. Lectures
0. Introduction	1
1. Refrigeration and air-conditioning systems	4
2. Steam generators and turbines	4
3. Fluid machinery – Fan, blower, compressor, pump	4
4. Electromechanical systems – Robotics, Mechatronics, MEMS, Bioengineering	4
5. Machine elements: Gears, bearings, spring, beam, column; Materials for mechanical engineers	4

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