Aims:

1) Apply and integrate knowledge and understanding of mathematics, physics, engineering sciences, engineering problem-solving skills in various subjects, and available computer programs to solve real problems in industries, HVAC systems, and power plants to meet desired needs within realistic constraints.

2) Identify, formulate and solve basic engineering problems and use appropriate engineering techniques, skills and tools necessary for engineering practice and project management.

3) Assess the sustainability and environmental issues related to mechanical energy systems and consider the impacts of engineering solutions on society and the environment.

5) Work effectively within multi-disciplinary engineering teams and lead or supervise a group of engineers, technicians and workforce.

6) Design, operate and maintain fluid and energy transfer systems, heating, ventilation and air conditioning systems, internal combustion engines and steam engines, verify their performance and solve their basic operational problems.

7) Building innovative minds and geniuses, developing their national affiliation, and directing their abilities for this purpose.