The student:

1. has adequate knowledge on the Mathematics, Science and engineering subjects of their own fields, the ability to apply the theoretical and practical knowledge in these fields into the modelling and solving the engineering problems.
2. determines, identifies, formulates and solves the complicated engineering problems, and chooses and applies the suitable analysis and modelling methods for that purpose.
3. has the skill to design a complicated system, process, engine or product, under the real limits and conditions and to meet some certain criteria; and to apply the modern design methods for that purpose (The real limits and conditions contain the economy, environment problems, sustainability, reproducibility, ethics, health, security, social and political problems, in accordance with the qualification of the design).
4. develops, chooses and uses the modern techniques and tools which are necessary for the engineering applications; uses the information technologies effectively.
5. designs and carries out experiment, collects data, analyzes and evaluates the results for the examination of the engineering problems.
6. has the skill to effectively work in intra-disciplinary environment, and the skill to work individually.
7. effectively communicates in Turkish, written and orally, knows at least one foreign language.
8. is aware of the necessity for life-long learning, accesses to the information, follows the improvements in science and technology and continuous self-development.
9. is aware of professional ethics and responsibilities.
10. has the information of the applications in the business life such as project management, risk management, and awareness of the entrepreneurship, innovativeness, and sustainable development.
11. knows the effects of the engineering applications on health, environment and security in universal and social dimensions, and the matters of the age; is aware of the legal results of the engineering solutions.