Learning objectives for technology master programmes (“sivilingeniør”)

”The technology master is able to come up with innovative and sustainable technological solutions, for the benefit of the development of our society in a global perspective”

Knowledge

The technology master has:

(S-K1) Broad basic knowledge of mathematics, science, technology, and computational tools, as a basis for methodology and applications, as well as professional renewal and adjustment

(S-K2) Insight into parts of the social sciences, the historical and philosophical sciences, and other non-technical subjects of relevance for working within technology and engineering, and as a basis for developing a broad perspective on the role of the engineering disciplines and challenges within society

(S-K3) Broad scientific and engineering knowledge within the chosen discipline

(S-K4) Deep knowledge within a restricted field related to active research, and sufficient insight to take advantage of novel research results

Skills

The technology master can:

(S-F1) Define, model, and analyze complex engineering problems, and make well founded choices of relevant methods, and apply these

(S-F2) Work out integrated solutions to engineering problems, and develop solutions within a crossdisciplinary context

(S-F3) Assess analytical tools, methods, technical models, computations, and solutions independently and critically

(S-F4) Renew and adapt professionally, and take initiative to develop the professional competence

(S-F5) Complete an independent, limited scientific or engineering research or development project under supervision

General competence

The technology master:

(S-GK1) Understands the role of the engineering disciplines in a wide societal perspective, has insight into ethical requirements and considerations about sustainable development, and is able to analyze ethical problems related to working as an engineer

(S-GK2) Can cooperate and contribute to interdisciplinary interaction

(S-GK3) Can impart and communicate engineering problems and solutions, both to experts and nonexperts

(S-GK4) Can lead and motivate colleagues

(S-GK5) Has an international perspective on her profession and can develop the ability to act within an international community

(S-GK6) Can contribute to innovation