

CETOP 1 Basic Course – Hydraulics (BIKS is CETOP 2 Certified)

Hydraulics Course 1

Hydraulics Course 1 provides a basic introduction to hydraulics and is a natural foundation for operations and maintenance personnel who will maintain and operate hydraulic systems. You should be able to meet the requirement for hydraulics competence for those who will work with hydraulic equipment in accordance with the requirements in NORSO standard R-003N (2017).

Whether you are an operator and need an introduction to how a hydraulic system works, or you need a deeper understanding and documented knowledge.

BIKS is CETOP 2 certified by NFEA – Norwegian Association for Electrical and Automation.

NFEA takes over as the representative of CETOP in Norway (2024). The Hydraulics and Pneumatics Association in Norway (HPF) is incorporated into the Norwegian Association for Electrical and Automation.

NORWEGIAN LABOUR INSPECTION AUTHORITY (ARBEIDSTILSYNET)

Regulations on organization, management and employee participation No. 1355, Chapter 8 – Training requirements § 8-1

Regulations on the performance of work No. 1357 – § 10-1 & 10-2

§ 10-1 Requirement for documented safety training for work equipment that requires special caution in use.

When the employer, based on a risk assessment, finds that the work equipment requires special caution in use, it may only be used by employees who have documented safety training in accordance with § 10-2.

§ 10-2 Requirement for documented safety training when using work equipment.

LEVEL: Level 1 – CETOP 1

Personnel must be able to inspect and perform maintenance on hydraulic equipment. You should be able to carry out preventive maintenance in accordance with established procedures and the supplier's instructions for use, and be able to record irregularities such as high temperature, vibrations, and noise levels.

Course content

Basic principles of hydraulics

Pascal's law

Pressure and pressure drop

Flow: laminar and turbulent

Hydraulic power transmission

Practical understanding and calculation of forces, pressure, and volumetric flow

Component descriptions

Different types of valves

Symbols and schematic reading

System understanding

Pipes, hoses and couplings; the energy carrier in the hydraulic system; how it is dimensioned, and how to achieve leak-tight connections

Cleanliness / filtration and oils

How to prevent downtime and operational problems

Assignments and practical exercises on hydraulic equipment

Documentation

A CETOP 1 course certificate is issued upon successful completion of the course.