SE-O-2	2 CP	60 h	3	Yearly (WS)	2 Days
Courses Aspects of Design and Construction of Tunnels and other Subsurface Infrastructure in Practice			**Contact time** 2 h/week	**Self-study** 30 h	**Group size** 20 Students

Aspects of Design and Construction of Tunnels and other Subsurface Infrastructure in Practice

Learning outcomes

In this module, practical knowledge about planning, construction and management of current projects in tunneling and subsurface construction practice is offered through selected lectures of guest experts of by participation in on the worldwide largest conferences for tunneling, the STUVA conference. This module is offered every two years (in the uneven years) in cooperation with STUVA e.V.

Content

- The module deals with the extended practical knowledge of tunnel design, construction, operation and safety. Typical topics include:
- Tunnel construction and tunnel operation
- International projects
- BIM, monitoring, digitalization
- Technical alteration to national and international standards
- Combined construction techniques
- Mechanized tunneling
- Developments in segmental lining (tubbing)
- Artificial freezing of ground
- Tunneling in swelling soil
- Safety in road tunnels
- Tunnel planning, tunnel refurbishment
- Start of operation and energy saving
- Traffic tunnel and geothermic applications in tunneling

Teaching Methods / Language

Lectures and accompanying Trade Fair, Excursion / English or German

Modes of assessment

Seminar

Requirements for the award of credit points

Full time participation

Module applicability (in other study programs)

-

Weight of the mark for the final score

1.7 %

Module coordinator and lecturer(s)

Prof. Dr. M. Thewes
Other information