

Foreword to the professional situations of interdisciplinary professional competences

Modern buildings are complex systems in which a large number of technical installations are interconnected and influence each other. These include the building envelope, electrical installations, heating, ventilation and air conditioning systems, communication technology and building automation.

In order to construct and operate an energy-efficient and sustainable building, this networking should be taken into account during planning, construction and operation. For this reason, the players in all trades involved in the construction and maintenance of a building must be aware of these interrelationships.

The aim of the GeTinVET project is to identify the skills required for this and to develop cross-trade learning situations to teach these skills.

The following are two exemplary and concrete professional training situations from dual initial vocational training in Germany, which illustrate the networking described above. These practical situations are intended to serve as a stimulus for identifying further vocational action situations in the VET systems of the partner countries.

Questions for the identification of interdisciplinary professional competences

1. In which specific professional situations are interdisciplinary competences required? (networking between trades) => Identify and describe.
2. In which specific situations is sustainable professional competence required?

Examples:

	Professional disciplines	Professional action situation with interdisciplinary professional competences
1.	<ul style="list-style-type: none"> - Supply engineering - Electrical engineering - construction technology - Building automation - Information technology 	<p>Installation of solar thermal systems on the roofs of commercial buildings as well as detached houses and apartment blocks.</p> <p>Contains elements of:</p> <ul style="list-style-type: none"> ➤ Supply engineering: Installation, connection, and commissioning of solar thermal collectors. ➤ Electrical engineering: Installation and connection of pumps and electrical sensors. ➤ Construction technology: Opening of the roof to attach the collectors, openings for cable routing. ➤ Building Automation: Integration of measured parameters from the collectors into the heating control system. ➤ Information technology: Recording, processing and forwarding of measurement data and operating states, including to mobile end devices.
2.	<ul style="list-style-type: none"> - Supply engineering - Electrical engineering - construction technology - Building automation - Information technology 	<p>Troubleshooting in building systems and building installations as ordered by the customer. The customer reports a cold room.</p> <p>Contains elements of:</p> <ul style="list-style-type: none"> ➤ Supply engineering: Checking the heating technology and the operating status. ➤ Electrical engineering: Check the energy supply of the building system. ➤ Construction technology: Checking the building envelope for possible damage or cold bridges.

		<ul style="list-style-type: none"> ➤ Building Automation: Check the operating status of the central control system. Check the correct parameterisation. ➤ Information technology: Check the temperature sensors, check the transmission lines and the (radio) signals
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