

Structuring and preparation of a lesson: **EAB module 4 (Construction and design of adhesive joints)**

time	Theme, core information, statements or questions	Learning objectives ¹	Methods (e.g. presentation/ discussion/group work)	Media/ training material
1 h	<p>Design principles</p> <p>Different types of bonded joints (lap, butt and bead peel joints)</p> <p>Types of stresses on bonded joints (tensile, shear, peel)</p> <p>Influencing factors (overlap length, stiffness of adherends, adhesive layer thickness)</p>	<p>Interpret the fundamental principles of design of bonded joints. (1)</p> <p>Identify the most common joint geometries (lap, butt and bead peel joints). (1)</p> <p>Analyse usual applications and differences of the different joint geometries. (2)</p> <p>Manufacture adhesive joints of different geometries with a minimum of guidance. (2)</p> <p>Name different types of stress that are present in an adhesive joint. (1)</p> <p>Summarize the different factors that can influence the performance of adhesive joints. (1)</p>	<p>Discussion about the types of bonded joints used in industrial applications.</p> <p>Discussion about the types of bonded joints produced in the practical course exercises.</p> <p>Practical demonstration (e.g. production and testing of joints with different geometries and/or different materials).</p>	<p>White board.</p> <p>Slides presentation.</p> <p>Demonstration objects (e.g. bonded joints with different geometries).</p> <p>Laboratory equipment to manufacture and test adhesive joints.</p>

¹ (1) Know and understand, (2) transfer and practically apply, (3) analyze and assess; (0) no learning objective; additional information