Structuring and preparation of a lesson: **EAB module 6 (Durability of Adhesively Bonded Joints)**

time	Theme, core information, statements or questions	Learning objectives [1]	Methods (e.g. presentation/ discussion/group work)	Media/ training material
2 h	Introduction of durability factors on the bonded joints with emphasis on : • thermal effects (thermal expansion, thermal degradation and temperature limits) • moisture effects (migration of water in adhesive joints, strength degradation, improvement of joint durability) • chemical effects (often encountered chemical agents, chemical resistance of adhesives by chemical family, chemical resistance of common adherends, • mechanical stress effects on adhesive joint durability (creep and fatigue effects) • combined effects (temperature-moisture-mechanical stress) basics of weathering and ageing effects and its testing.	Outline basic durability factors: moisture, chemical, mechanical thermal and weathering influences on bonded joints (1). List most common weathering and ageing effects on bonded joints (1). Describe simple durability assessments and life prediction for bonded joints (2). Identify most common combined effects temperature-moisture-mechanical stress on bonded joints (1).	Theory presentation. Presentation of an overview of practical measures against durability factors. Presentation of an overview of durability tests.	White board. Slides presentation. Video of durability assesments.

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