

Composite Structural Engineering Technology (CSET) Course

Length: ~80 hours (not including prerequisite or lab). Hours represent an estimate for a classroom version of the course

Course Components

1. Prerequisite

Basic knowledge of composite materials and structures technology. An independent study with assessment examination. May take 5-10 hours (not included in total course length).

2. Content Outline

- Introduction
- Challenges of Composite Applications (2 hrs)
- Design, Material and Fabrication Development (32 hours)
- Proof of Structure (32 hours)
- Quality Control of Composite Manufacturing Processes (4 hours)
- Maintenance Interface Issues (4 hours)
- Additional Considerations (6 hours)

3. Laboratory

The laboratory will illustrate course principals and consequences of process deviations, such as common composite fabrication tasks, damage, repair, inspection and coupon test methods.