



COMPOSITES TRAINING COURSE



<http://ecre.ulster.ac.uk/home>

Engineering and Composites Research Centre
(ECRE)
School of Engineering
University of Ulster
Jordanstown campus

Shore Road
Newtownabbey
Co. Antrim
BT37 0QB
+44 28 90366670

COMPOSITES TRAINING COURSE
PROVIDING A FUNDAMENTAL
UNDERSTANDING OF
COMPOSITE MATERIALS AND
THEIR APPLICATION
IN ENGINEERING.

COMPOSITES TRAINING COURSE

The aim of this course is to provide a fundamental understanding of composite materials and their application in engineering.

During the course the attendee will develop a clear knowledge of the mechanisms and thought processes associated with the selection and use of composite materials. It will create a base understanding of the concepts involved in the formation, development, use and performance of composite materials. It delivers an awareness of composite materials, manufacturing methods, tooling and inspection from theory and design through to practical manufacturing issues and testing.

The course develops the importance of concurrent engineering, enabling each job function to measure the impact of a change on their area of expertise.

Modules available:

The course would be suitable for any professional requiring a better understanding of this important class of material. Professionals have attended from: Design, Manufacturing, Tooling, Materials and Process, R&D, Stress, Quality, Procurement, Maintenance, Repair and CAA/EASA.

- Introduction to composites
- The Matrix/resin
- Fibres and textiles
- Composites manufacture
- Composite post fabrication, joining and inspection
- Design guidelines
- Structural analysis
- Advanced structural analysis
- Composites testing
- Pre-Preg manufacture
- Liquid moulding
- Tooling

Hands on modules available:

- Advanced structural analysis
- Composites testing
- Pre-Preg manufacture
- Liquid moulding

Further modules available on request i.e:

- Short fibre reinforcement
- GRP
- Composite spray-up
- Pultrusion

Additional modules and bespoke courses are available on request.



Previous course attendees

Bombardier Belfast staff (950 trainees to date)

"Overall an excellent course, very well presented."

"The facilities, course work and visits were great, and was probably one of the best courses I have been on."

"It was very informative, well presented with a good mix of theory, invited representatives talking about their departments and team activities. I particularly thought the site visits worthwhile for people who've never had any dealings with this material."

CAA/EASA Auditors

SOFE team (Bombardier, Montreal)

"I gained a lot of knowledge for the relatively short time for such a huge domain. Most importantly I got a good first appreciation of the amount of expertise in Belfast and Ulster University."

The classes will be delivered by the team led by Dr Edward Archer and Dr Alistair McIlhagger at the Engineering Composites Research Centre (University of Ulster) or at your preferred venue.

For further information contact:

Engineering and Composites Research Centre (ECRE)
School of Engineering
University of Ulster
Jordanstown campus
Shore Road
Newtownabbey
Co. Antrim
BT37 0QB

+44 28 90366670

a.mcilhagger@ulster.ac.uk

<http://ecre.ulster.ac.uk/home>

