**COMPOSITES REPAIR COURSE**

**Course Overview**

This course will provide trainees with a recap of composite panel construction and in depth knowledge of composite repair theory, including reinforcements, core structures, ancillary materials and procedures. Delegates will also look at identifying typical defects and the process of non destructive evaluation (NDE) in view to deciding the appropriate repair technique. Delegates will gain practical experience in various repair methods following current structural repair manuals.

**Delivery Style**

Classroom and workshop based learning

**Who should attend?**

The course is aimed at trainees who already have a basic composite knowledge or are currently in a composite role within the industry, as well as other industry personnel who are looking for a broader composites understanding such as design engineers and supervisors/inspectors.

**Objectives & Aims**

Delegates will be able to identify the type of structural damage, select the appropriate repair technique and interpret the correct SRM. Delegates will gain practical experience of various methods of composite repairs following current structural repair manuals with the aim to be able to confidently repair a variety of structural damages. Delegates will also gain experience in working with various core materials, pre-pregs, dry fibres, air tools, hot bonding and more.

**Course Duration**

4 day

**Course Content:**

* Composite sandwich panel construction
* Monolithic panel construction
* Non-destructive evaluation (NDE) and quality assurance
* Interpretation of structural repair manuals (SRMs)
* Correct material handling procedures
* Surface preparation techniques
* Gel coat repair
* Wet layup repair
* Single and double sided pre-preg repairs
* Foam and honeycomb core material cutting and repair
* Step, scarf and patch repair
* Hot bonding under vacuum
* Vacuum bagging
* Moisture and contaminant removal
* Selection of appropriate tooling for each repair