

# Light Aircraft - Design for Efficient Manufacture



- Understand how to analyse a product design for its economic manufacture.
- Understand the product design features and techniques that facilitate economic assembly.
- Be able to apply the Lean principles and methodology.

This one day course has been designed in partnership with the LAA and Coventry University. It will develop learners' understanding of the processes involved in analysing a product design and preparing for its manufacture. The course will identify the key factors that need to be considered in the design of a product for manufacture. This will include a wide selection of lean methods for manufacture and assembly and the importance of applying the methodology, including specified tolerances and dimensions for products and components.

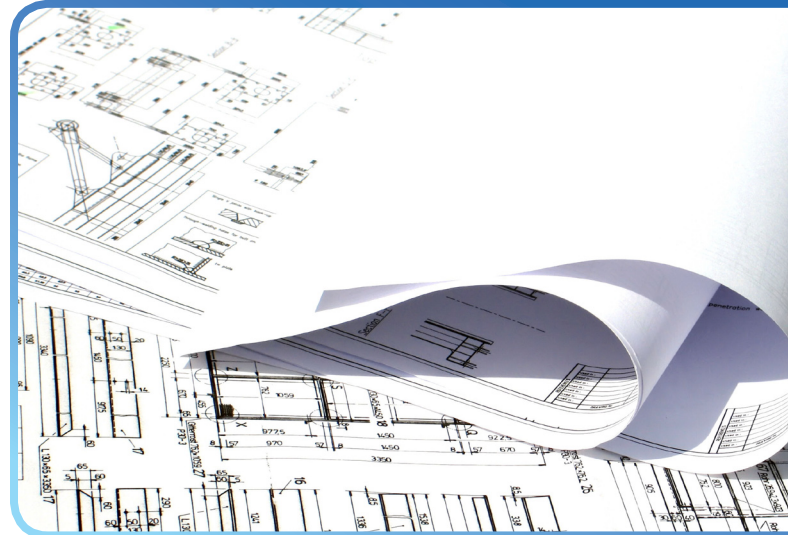
## Who should attend?

Anyone with an interest in light aircraft design, build and flight. This course does not require previous qualifications, although prior knowledge of light aircraft is recommended.

## Course content

This course will include:

- How to analyse a product's design for its economic manufacture.
- An exploration of the advantages and disadvantages of standardisation.
- Looking at the application of preferred number methods for detection and standardisation - including the advantages of using standard parts for design, development, tooling, planing, choice, labour and ease of replacement.
- An overview of Lean and implementing the 5's.



- Techniques to select the most appropriate method of assembly, eg cost saving techniques.
- An exploration of the single minute exchange of dies (SMED).
- Looking at the automated methods of economic manufacture, including the ability to feed and assemble components automatically, unidirectional component location, ease of handling, positioning and analysis.
- Introduction to measurement and its effects on the result. Including a look at accuracy, precision, error and uncertainty, instrumentation techniques and strategies, design, manufacture and verification.

## Location

This course will be held in Coventry University's new £55m Engineering & Computing building. Based in Coventry City Centre, there is ample parking and easy access from the train station.

## Delivery

The course will be delivered by academic experts with industry experience from Coventry University.

Please check [www.lightaircraftassociation.co.uk](http://www.lightaircraftassociation.co.uk) to book on the next scheduled course.

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