

**Objective:**

MSC Apex is a contemporary FEA platform, that enables revolutionary, often patented, technology in a user-environment that is both straightforward and enjoyable to use. The powerful functionality within MSC Apex offers new thinking in how to define a strategy for understanding structural response, from simple components through to complex assemblies with many parts.

The course (taught over two days for classroom or 12-16 hours online) develops your understanding of the toolset and the many concepts it supports, allowing you to become productive with Apex's functionality very quickly. You'll become familiar with key workflows, improved modeling strategy and the analysis benefits achievable with this new paradigm that Apex offers.

To allow you to maximise your engagement with MSC Apex, we've developed an interactive course, which can be taught in a classroom or online environment. This covers the background to Apex's fundamentals, while engaging you in interesting and meaningful user-focused tutorials, all of which are relevant to the types of FEA task you would find in an industrial setting.

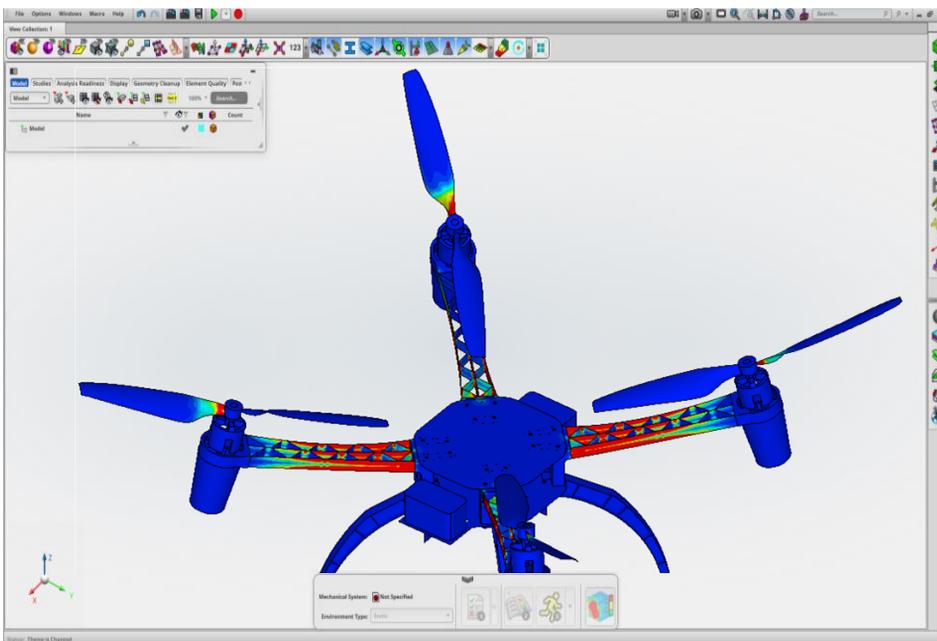
All the taught and tutorial content is built around a real-world CAD representation of a UAV/drone air vehicle, which, through the progression of eight discrete topics, will advance your understanding from simple modeling tasks, through to looking at complex assemblies, model verification and using Apex as part of an external FEA workflow.

**Content:**

The learning experience is underpinned with a combination of instructor-led explanation and demonstration, in parallel with interactive user tutorials, which develop in involvement through the course.

The course is taught through eight discrete topics, each approximately 90 minutes long.

These include;



- 01.Introduction
- 02.Model Build (1D/2D)
- 03.Model Build (3D)
- 04.Model Attribution
- 05.Model Connections
- 06.Assembly Modeling
- 07.Analysis
- 08.External FEA Workflow

**Topic Format:** Each topic follows a consistent teaching format, which includes;

**1. Overview**

How does this topic relate to your modeling and analysis process?

**2. Topic Detail**

What are the key features that enable this?

**3. Tutorial Overview**

We show you this in action through a worked tutorial.

**4. Worked Tutorial**

Your turn to put these concepts into practice.

**5. Tutorial Review**

We review your tutorial and further work.

**Evotech Background :**

This course is developed and delivered by Evotech CAE Ltd, an MSC UK Business Partner. As Director and Lead FEA Engineer of UK-based Evotech CAE Ltd, Dr Steffan Evans has over 20 years' experience of the practical usage of advanced FEA techniques in diverse industrial settings.

This has included the development and delivery of many training courses and programs covering FEA fundamentals, industry application of the technology, alongside direct teaching in how to get the most from your commercial FEA software.



“Evotech’s Apex training course delivers a great learning experience. The presentation is excellent, guiding the user through a series of well thought out, realistic workshops with subassemblies building to a complete model. Highly recommended for both new and existing users.”

Darrel Sinclair, Senior Technical Consultant, MSC Software

“I just completed the online course and I’ve been impressed by the quality of the course. It is very well structured and very well presented. Very easy to understand and it permits to take the control of MSC Apex in just a few hours.”

Dominique Madier, FEA Analyst/Trainer/Author, FEA Academy

“Just completed the Evotech ‘Introduction to FEA with MSC Apex’ course. I think this is an excellent introduction to model build, and to solution with the inbuilt solver, or externally in Nastran. Excellent tuition from Dr Steffan Evans.”

Colin Binks, Principal Stress Engineer, Marshall Aerospace



**Pre-Requisites:** A basic knowledge of strength of materials and CAD modeling is highly recommended. No previous knowledge of FEA is required.

Duration: 12–16hrs (online), 2 days (class)

Price: On request

[info@evotechcae.com](mailto:info@evotechcae.com) for more information

