

Fusion Intermediate

Training course outline

Building on the basics, intermediate-level Fusion training teaches existing users how to utilise the full power that Fusion offers.



Course summary

Sessions cover:

- Configurations
- 2D drawing template creation
- Solid, surface, T-Spline and mesh modelling
- Rendering
- Animation
- Simulation fundamentals.

Hands-on exercises representing real-world, industry-specific design scenarios are carried out under guidance.

Duration

Two days.

Prerequisites

You should have a good working knowledge of Fusion, i.e. be familiar with the topics taught in our [Fusion Essentials course syllabus](#).

Windows or Mac

Fusion works similarly running on a Windows computer or Mac, and our course is suitable for users of both platforms.

If you attend a course in-class, you can choose to use a Windows computer or a Mac to practice the techniques taught.

In-class or live online

You can attend in-person at our centres, or participate live online from your place of work or home.

To read about our approach to online training, see armada.co.uk/liveonline.

General information

Armada is a long-standing Autodesk authorised Training Centre (ATC), and our courses are accredited by Autodesk.

Courses are hosted by Autodesk Certified Instructors (ACIs) with vast experience of using the application professionally.

Course materials and certificate

You'll receive:

- A comprehensive training guide and practice files.
- An e-certificate confirming successful completion of an accredited *Fusion Intermediate* course.

Method of delivery

Training is designed for the busy professional, being short and intensive and combining lecture and demonstration. Practical exercises carried out under guidance help you learn the techniques taught.

You have ample opportunity to discuss specific requirements with the trainer.

After course support

Following training, you're entitled to 30 days' email support from your trainer.

Further information

See: armada.co.uk/course/fusion.

Course syllabus

See over.

Follow-on courses

- [Fusion CAM and CNC](#) (2 days).
- [Fusion Sheet Metal Design](#) (1 day).

Course syllabus

Session	Topics
Configurations	- Single component configuration - Small assembly configuration - Large assembly configuration - Best practice
2D Drawing Template Creation	- Simple border and title block - Text fields - Attributes from assemblies - Components - User input fields - Logos - Industry-standard template - Tolerance 3rd and 1st angle symbols - Scale - Material - Finish - Company information - Copyright
Solid, Surface, T-Spline and Mesh Modelling	- Overview of the four model states - Solid modelling workflow and example - Surface modelling workflow and example - T-Spline modelling workflow and example - Mesh modelling workflow and example - Working with and between the model states
Rendering	- Using an existing assembly without material or appearance - Creating a material and an appearance

Session	Topics
Rendering (continued)	- Adding material/appearance, texture mapping and a decal to the assembly - Lighting and environment control - Custom environments - Cameras and views - Local vs cloud rendering
Animation	- Bringing a rendered assembly into the Animation Workspace - Creating an exploded view - Timeline editing - Keyframes - Camera control - Motion - Generating video - Adding an exploded view to a drawing using a 2D Drawing Template
Simulation Fundamentals	- Simulation overview and workflow - Preparing your model for simulation - Simulation simplification - Static stress - Thermal - Buckling - Dynamic event - Keeping the components small and simple