

Fusion Additive Manufacturing

Training course outline



Autodesk Fusion provides an end-to-end additive manufacturing workflow, integrating design, simulation and slicing within one platform.

This course covers all additive manufacturing workflows supported in Fusion, including hybrid manufacturing processes.



Course summary

Sessions typically include:

- Introduction to additive manufacturing
- Slicing
- Types of additive in Fusion
- Process simulation
- Hybrid manufacturing
- Post processing
- Design considerations

Client's requirements for additive manufacturing workflows are varying, and often complex. As such, we arrange for you to have a conversation with our instructor, then recommend the tailored training required to achieve your desired outcomes.

Note: This course is not to users of FFF/FDM extrusion printers or SLA printers.

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 *Fusion Additive Manufacturing* course is accredited by Autodesk.

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

Course materials and certificate

You'll receive:

- Training materials and video content recommendations.
- An e-certificate confirming successful completion of an accredited *Fusion Additive Manufacturing* course.

After course support

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

Further information

See [armada.co.uk/course/fusionadditive](#) or scan the QR code above.

Course syllabus

See over.

Other Fusion courses

- [Fusion Essentials](#) (2 days).
- [Fusion Intermediate](#) (2 days).
- [Fusion Advanced](#) (2 days).
- [Fusion CAM and CNC Essentials](#) (2 days).
- [Fusion CAM and CNC Advanced](#) (2 days).
- [Fusion Sheet Metal Design](#) (1 day).
- [Fusion Technical Drawings](#) (1 day).
- [Fusion Simulation and FEA Stress Analysis](#) (1-3 days).
- [Fusion Generative Design](#) (2 days).

Course syllabus

Below is a list of topics typically covered in our additive manufacturing course. This isn't a rigid syllabus. Depending on each client's requirements, we may not necessarily cover all topics, and additional topics can be included if requested.

Session	Topics
Introduction to Additive Manufacturing	Overview of additive manufacturing in Fusion Additive vs Subtractive considerations Typical use cases for additive workflows
Slicing	Introduction to the print setting library Body presets Basic additive settings Positioning your part 2D and 3D arrangement of parts for printing Adding supports Types of support Simulation of additive toolpaths
Types of Additive in Fusion	Filament extrusion (FFF/FDM) Stereolithography (SLA) Power Bed Fusion Selective Laser Sintering (SLS) Directed Energy Deposition (DED) Multi-Jet Fusion Others

Session	Topics
Process Simulation	Introduction to process simulation Creating a study Interpreting results
Hybrid Manufacturing	Combining Manufacturing processes in Fusion Additive + Milling Workflow Settings for optimal hybrid manufacturing Probing
Post Processing	Introduction to post processors Exporting G-code for your CNC machines Exporting designs for external slicers Exporting 3MF and machine build code Viewing print statistics Setup sheets Simulating existing code
Design Considerations	Design considerations for additive manufacturing Manufacturing orientation considerations and tools Repairing and preparing geometry for printing