Fusion CAM
3 Day** Training Course

Overview
The Autodesk® Fusion CAM Introduction to Parametric Modeling learning guide provides you with an understanding of the parametric design philosophy using the Autodesk® Fusion 360™ software. Through a hands-on, practice-intensive curriculum, you will learn the key skills and knowledge required to design models using the Autodesk Fusion 360 software.

Prerequisites
- It is recommended that delegates are Microsoft Windows proficient.
- As an introductory, no prior knowledge of any 3D modelling or CAD software is required.
- Experience with cad designing, or 3D parts is recommended for this course.

Software
- Autodesk Fusion 360

What’s Included?
- Course Notes & Stationery*
- Computer and software for the duration of course*
- Coffee, Tea & Delicious Lunch*
- WiFi Access*
- Autodesk Certified Instructor
- Internationally recognized Autodesk Authorized Training Certificate

* Pertains to in-class training only
** In-class training typically occurs over a 3 day period, customised training may differ
Course Content

SESSION 1 - BASICS OF MODELLING
- Learn how to create simple sketches and features to aid in the design of work holding.
- Learn how to include work holding in your CAM design.
- Understand how Fusion 360 structures components and assemblies.
- Isolate parts from an assembly to machine.

SESSION 2 - CAM USER INTERFACE
- Experience how simple the standardised interface is to use across multiple strategy types.
- Review the Tool, Geometry, Heights, Passes and Linking tabs.
- Learn how to access Setups, Strategies, Simulation and the Tool Library.

PART AND STOCK SETUP
- Learn how to specify your stock size and orientation.
- Differentiate between work holding and the machined part.

TOOL LIBRARY MANAGEMENT
- Create your own tool library.
- Create new tools.
- Copy and edit existing tools.
- Create a form tool.
- Edit default feeds and speeds.

2D ROUGHING (ADAPTIVE VS POCKET)
- Explore the difference between 2D adaptive clearing and pocket clearing.
- Learn about contour selection and defining boundaries.

2D FINISHING
- Build an understanding for the various tool path types and when to use them.
- Use rest machining to decrease machining time.

2D FEATURES
- Learn to use engrave, slot, contour, thread, bore and other operations to create features using 2D milling strategies.

SESSION 3 - 3D ROUGHING (ADAPTIVE VS POCKET)
Explore the difference between 3D adaptive clearing and pocket clearing.
- Understand how stepdown works with 3D adaptive clearing.
- Learn about contour selection and defining boundaries.
- Use rest machining to limit air cutting and re-machining when roughing and semi finishing.

3D FINISHING
- Take an in depth look at the available machining strategies and gain an understanding of when each strategy type should be employed.
- See the sort falls of using the wrong strategy on the wrong geometry and how to remedy it.

DRILLING
- View the drilling strategies and associated settings.

PRODUCTIVITY TIPS
- Find out how to use a template of pre-defined operations and setups to speed up repetitive jobs.
- Use patterns to program one part and machine multiple.
- Compare options between operations to fault find and quickly change settings.
- Duplicate or derive from existing operations to save time re-setting up each operation.
- Create multiple setups using G54, G55.

SIMULATION
- Preview each operation with a full 3D simulation of the tool cutting away at the stock.
- Change settings to troubleshoot errors or gain a view on more information.
- Get information on expected machining time, machining distance, part and stock volumes as well as operation statistics.

POST PROCESSING
- Review how to post process your code and where to find a post processor for your machine.
Course Registration Form

Please complete, sign and return together with proof of payment to mgfxsales@mgfx.co.za or fax 086 694 9404

Student Details

<table>
<thead>
<tr>
<th>Name</th>
<th>Cell No</th>
<th>Email address</th>
<th>Dietary requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Course Attending

Mark Course Type & Venue with X

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course Type</th>
<th>Course Venue</th>
<th>Course Date</th>
<th>Course Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fusion CAM</td>
<td>Essentials</td>
<td>Cape Town</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Port Elizabeth</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Durban</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Invoicing Details

<table>
<thead>
<tr>
<th>Invoice Date</th>
<th>Vat no.</th>
<th>Company Name</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Address</th>
<th>Fax</th>
<th>Account Contact</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Micrographics SA (Pty) Ltd

Bank Details

ABSA Newton Park | Branch: 632005 | Account: 4093 847 926 | Reference: invoice number

Terms & Conditions:

1. Above Pricing Excludes VAT.
2. Students are to be at the training venue by 08h00 in preparation for a 08h30 start time.
3. Bookings can only be considered confirmation on receipt of payment.
4. Bookings may be changed up to three weeks in advance of the course. A fee of 20% will be levied to cover charges.
5. For full day courses, we will supply you with the relevant training material. A desktop computer to use for the training (where applicable) tea/coffee and a full lunch for full day InClass training hosted at the training center only. Catering is not included for OnSite training and laptop is available for hire at an additional cost if required.
6. Cancellation or rescheduling requests must be in writing and reach us at least 5 (five) working days prior to the course commencement date. Full course fees may be retained for no shows or requests within 5 working days prior to commencement.
7. Although we go to great lengths to ensure that all training proceeds as scheduled, we reserve the right to cancel or postpone dates if we require to do so and undertake to inform clients in writing and telephonically of these changes.
8. We suggest clients wait until a week prior to course commencement that a course has been confirmed to go ahead as scheduled before booking flight and accommodation. We are NOT responsible for cost associated with cancellation of classes such as flight and accommodation for clients.
9. Full training fees will apply if the above condition is not complied with.

Signed & Accepted

Name

Location

Autodesk Gold Partner

Authorized Training Center