

# We solve problems.

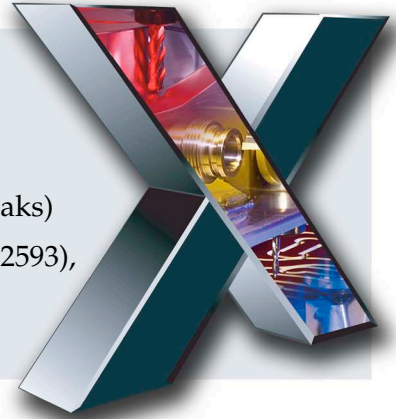
# RMU CARES

Center for Applied Research in Engineering and Science

## MASTERCAM X2 HANDS-ON TRAINING

- WHEN:** Wednesday–Saturday, Jan. 2–5, 2008, 8 a.m.–4 p.m.
- WHERE:** John Jay Center, Robert Morris University  
6001 University Boulevard, Moon Township, PA 15108
- COST:** \$985 for four days (includes all materials, lunch and coffee breaks)
- REGISTRATION:** Submit the attached registration form via mail or fax (412-397-2593), call 412-397-3692 or e-mail [cares@rmu.edu](mailto:cares@rmu.edu)

*Enrollment is limited to 15 participants.*



### OVERVIEW

This intensive four-day training conducted by a certified Mastercam instructor will introduce you to very powerful 3D CAD/CAM software. The new MASTERCAM X2 suite of CAD/CAM products is designed with real-world programming needs at the forefront, making your work easier and faster than ever before. It offers two- through five-axis milling and routing, turning, wire EDM, artistic relief, 2D and 3D design, surface, and solid modeling.

#### Ten Reasons to Learn MASTERCAM X2:

1. **Streamlined.** Work with a new interface that will get you cutting parts quickly.
2. **Customizable.** Adjust the appearance and functionality to your preferences.
3. **Comprehensive.** Get the highest quality, most robust toolpath generation system available.
4. **Fast.** Do more with fewer interactions.
5. **Accurate.** Adjust attributes to existing “live” geometry and toolpaths to change them on the fly.
6. **Robust.** Control all aspects of tool motion to boost productivity.
7. **Powerful.** New toolpaths deliver maximum quality and accuracy.
8. **Flexible.** Import virtually any CAD source file and choose add-in utilities tailored to your needs.
9. **Support.** Work with the most professional, knowledgeable reseller network in the industry.
10. **Confident.** Partner with the creators of programmers’ preferred CAM software worldwide.

### WHO SHOULD ATTEND

This hands-on intensive training is design for technicians, engineers and machinists interested in learning modern CAD/CAM software and improving productivity of the design and manufacturing processes.

#### Prerequisites

- Windows experience: Copying, deleting and editing files, moving through directories
- Mouse and keyboard familiarity

### PROGRAM

#### Mastercam 2D Training

Learn the functionality of Mastercam Mill Level 1

- GUI (Graphical User Interface): Configure Settings, Tool Bar States
- 2D Geometry Creation
- Modify, Transform and Delete Functions of Geometric Entities
- Facing, Contour, Pocket
- Toolpath Verification
- Backplot, Associativity, Operations Management, Material Assignment, Defining Tools

#### Mastercam 3D Training

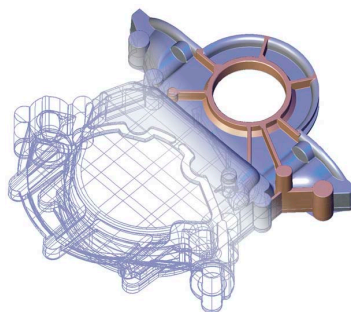
Learn the functionality of Mastercam Mill Level 3

- 3D Wireframe Construction and Manipulation
- 3D Surface Construction and Manipulation: Multi-Surface Filletting, Multi-Surface Trimming, Multi-Surface Offsets
- Multi-Surf Toolpath Creation and Manipulation: Cutting Multiple Surfaces, Drive Check Surfaces, Multi-Surf Roughing and Finishing, Trimming and Projecting
- Surface Associativity

#### Mastercam Lathe Training

Learn the functionality of Mastercam Lathe

- 2D Geometry Creation
- Roughing, Finishing, Threading, Grooving Toolpaths
- Backplot, Defining Tools



**ROBERT MORRIS UNIVERSITY**  
1921

Center for Applied Research  
in Engineering and Science

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## WORKSHOP REGISTRATION FORM MASTERCAM X2 HANDS-ON TRAINING

Jan. 2–5, 2008

### FOUR WAYS TO REGISTER

**By Fax:** 412-397-2593  
**By E-mail:** cares@rmu.edu  
**By Web:** www.rmu.edu/cares  
**By Mail:** RMU-CARES  
Robert Morris University  
6001 University Boulevard  
Moon Township, PA 15108

### ATTENDEE INFORMATION

First Name \_\_\_\_\_  
Last Name \_\_\_\_\_  
Position \_\_\_\_\_  
Organization \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_  
Phone \_\_\_\_\_  
Fax \_\_\_\_\_  
E-mail \_\_\_\_\_

### PAYMENT INFORMATION Total Due: \$985

P.O. Number \_\_\_\_\_  
 Check Enclosed (*made payable to Robert Morris University*)  
 Credit Card:  Visa  MasterCard  Discover  
Account No. \_\_\_\_\_  
Name on Card \_\_\_\_\_  
Expiration Date: \_\_\_\_\_  
 Invoice  
Send invoice to (*if different from attendee*):  
First Name \_\_\_\_\_  
Last Name \_\_\_\_\_  
Position \_\_\_\_\_  
Organization \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_  
Phone \_\_\_\_\_  
Fax \_\_\_\_\_

### TERMS AND CONDITIONS

#### Payment

Payment in full must be received no later than 10 business days before the start of the workshop to secure your place. Late registration will be considered subject to availability. Registrations within 10 days must be accompanied with payment. Course fees include materials.

#### Cancellations

A full refund is available for cancellations received in writing at least 10 days prior to the start of the workshop. Cancellations received within 10 business days will be subject to a 15% administration fee. The registration fee is nonrefundable 48 hours before the workshop begins. Robert Morris University reserves the right to cancel courses due to insufficient registrations or conditions beyond its control. Robert Morris University will not be responsible for any travel or accommodation costs incurred. If Robert Morris University cancels the workshop, a full refund will be provided.

#### Confirmation

Upon receipt of your registration, a confirmation letter will be sent. Robert Morris University reserves the right to withdraw your registration if payment is not received in accordance with our payment terms. Venue details will be included in your confirmation letter and can be found on our website at [www.rmu.edu/cares](http://www.rmu.edu/cares).

Please note that the views and opinions expressed by the presenter/s may not be in accordance with the official views and opinions held by Robert Morris University.

#### Privacy

When registering for this event, we may collect personal information about you. This will be used to provide you with a high level of customer service. We may also use this information for the promotion of RMU-CARES products and services. If you do not wish to receive this information, please check the box below.

I do not wish to receive promotional material from RMU-CARES.

I am an authorized officer of the company and I agree with the terms and conditions outlined above.

Signature \_\_\_\_\_ Date \_\_\_\_\_

For more information, call 412-397-3692 or visit [www.rmu.edu/cares](http://www.rmu.edu/cares).