



## January to December 2008

Learn Something new! Discover something you didn't know.

There is more to know! Whether you are just getting started with WorkNC or if you've used WorkNC for years. The structured training programs developed by WorkNC's Technical Engineers are designed to help you develop basic skills to get a job running all the way through advanced user levels. Learn the skills you need to use features you probably don't know even exist and are at your fingertips.

Note: All classes will be using the new G3 interface introduced in WorkNC Version 19. If you require classes with the pre-V19 interface, it can be individually arranged through your sales representative.

### Course Descriptions

#### **WorkNC V19 G3 Training**

**Price: \$425 Duration: 1 day**

**G3 Interface**, tool path creation, tool path simulation, tool path progressive display, toolpath edition. Status symbols, holder collision checking, stock model, rest material model, views, pointsets, curve creation. Working in a CAM/CAD Environment.

**WorkNC V19** toolpath enhancements, Global roughing, pocket mode in planar finish, new flats machining, New2D machining options, new 5-axis cutterpaths

**2008 dates:** 01/17, 02/14, 03/11, 03/27, 05/13, 06/19, 07/15, 08/14, 09/16, 10/16, 11/14, 12/09 – Southfield Facility  
Akron Area 04/01 and also 04/02 – Identical class each day  
Cincinnati Area 04/08 and also 04/09 – Identical class each day  
Grand Rapids 04/14 and also 04/15 – Identical class each day Milwaukee, WI 04/18

#### **WorkNC Basic Training I**

**Price: \$425 Duration: 1 day**

**Content:** Introduction to WorkNC – Getting started with WorkNC – WorkNC License server – Defining a machining strategy – Visualizing and editing toolpaths with VisuNC – Post Processing the toolpaths – Batch Processing – Open Forum

\*\*\*\*\* **Promotion:** Take Basic 1 and Basic II together for only \$750 \*\*\*\*\*

**2008 dates:** 01/15, 02/12, 03/12, 05/14, 06/17, 07/16, 08/12, 09/17, 10/14, 11/12, 12/10

#### **WorkNC Basic Training II**

**Price: \$425 Duration: 1 day**

**Content:** WorkNC menu functions – Machining sequences – Axis systems – Boundary curve creation – VisuNC display options – IGES – WorkNC translation of curves, points and surfaces – Open Forum

\*\*\*\*\* **Promotion:** Take Basic 1 and Basic II together for only \$750 \*\*\*\*\*

**2008 dates:** 01/16, 02/13, 03/13, 05/15, 06/18, 07/17, 08/13, 09/18, 10/15, 11/13, 12/11

#### **WorkNC Advanced Training I**

**Price: \$450 Duration: 1 day**

**Content:** WorkNC menu functions – Machining sequences – WorkNC status symbols – Merged Surfaces – Masking data – Stock Model – VisuNC toolpath editing – Machining Window, View, boundary and plane – Batch Mode calculation – setting up default parameters – VisuNC shortcuts/display options – Machining with Rotary heads and tables – Holder Library – Tool Holder Collision checking – Surface Lists – Open Forum.

\*\*\*\*\* **Promotion:** Take Advanced 1 and Advanced II together for only \$800 \*\*\*\*\*

**2008 dates:** 01/23, 02/20, 03/18, 05/20, 06/25, 07/22, 08/19, 09/24, 10/21, 11/19, 12/16

#### **WorkNC Advanced Training II**

**Price: \$450 Duration: 1 day**

**Content:** WorkNC High Speed Machining for roughing and finishing – High Volume Roughing – Tool Library – Rest Material Functions – using alternate axis systems – Curve Machining cutterpaths, Tangent to curve, Curve re-machining, on curve engraving, pocketing, drilling, hole boring, tapping – Machining STL data – Internal scaling factor – advanced post processor options – open forum

\*\*\*\*\* **Promotion:** Take Advanced 1 and Advanced II together for only \$800 \*\*\*\*\*

**2008 dates:** 01/24, 02/21, 03/19, 05/21, 06/26, 07/23, 08/20, 09/25, 10/22, 11/20, 12/17

## WorkNC 5-Axis Machining

**Price: \$500 Duration: 1 day**

**Content:** 5-axis toolpaths – 5 axis VisuNC – 5-Axis toolpath editor – 5-axis collision checking – virtual machine simulation for 3 axis, 3+2 axis and 5 axis – detection of collisions and limits for varying machine configurations in addition to the tool and tool holder – Auto5 module for deep parts. Students are encouraged to bring their own parts and machine design for their own use and customization. Open Forum

**2008 dates:** 01/25, 02/19, 03/20, 05/22, 06/24, 07/24, 08/21, 09/23, 10/23, 11/18, 12/18

## WorkNC-CAD for Machinists Training

**Price: \$850 Duration: 2 days**

**Content:** Viewing files – dynamic pan, rotate and zoom – Zoom Window – OpenGL analysis, curvature, draft, sections, elevation and planar/vertical areas – Workplane grid – object snaps – Wireframe creation – Lines by: 2 points, continuous, rectangular, polygon, start angle end, tangent two arcs, perpendicular, continue tangent – Points input – Circles and Arcs, center and radius, 2 points, 3 points tangent, close arc, continue tangential, arc center start end, arc 2 points, arc 3 points, semi circle – Spline curves, open and closed, through points or control points, blend spline, rib curve – Wireframe editing, extend trim curves, extend trim corner, clean curve, smash curve, merge curves, break curves, lengthen, project to surface – Surface Creation, Planar, irregular planar, linear sweep, surface from part line, Tangent plus length, angle plus length, ruled, coons, lofted, blend surface, extrude along path, extrude cross section, sweep, N-sided blend, complementary surface, fill surface, drafted surface – Surface edition, trim to cutter, untrim, trim to surfaces, extend surfaces – Transformations, move, scale, rotate, mirror geometry with and without copies – Mold Functions, core cavity separation, electrode creation, pocket, inserted element, section cuts, part line – Derived elements, offset curves, offset surfaces, fillets, exploding surface edges, exploding text – Connecting to WorkNC, create workzone, add geometry to zone, coordinate systems – Die Functions, sorting fillets, adjusting fillets – Open Forum

**2008 dates:** 01/29-30, 02/26-27, 04/29-30, 05/28-29, 07/8-9, 08/27-28, 10/28-29, 12/2-3

## WorkNC-CAD for Tool Designers

**Price: \$975 Duration: 3 days**

Contains all of the data from the WorkNC-CAD for Machinists class plus: Dimensioning, curve dimensions, continuous dimensions, comments, angular dimensions, arc length, coordinate dimension, XYZ dimensioning – Change Style, modify dimensions, modify units, modify decimal places – Cross hatching – Additional Mold Function – Bounding Box – 3D grid – Automatic Drafting – Coolant lines – bill of material – File Comparison – OPEN Forum - Note third need not be taken continuous with the first two days.

**2008 dates:** 02/26-28, 04/29-05/01, 07/8-10, 10/28-30, 12/2-4

## Feature Recognition

**Price: \$1800 Duration: 1 day**

This is a custom class done at the customer site due to the customization necessary from shop to shop. During the one day on-site class, you will start to create a specialized tool list for feature recognition. You will apply strategies to different sized holes based on your own preferences. You can modify the post processor for canned cycle output. Speak with your WorkNC sales representative to get more information on having a class to start you on the way to utilizing this powerful piece of WorkNC functionality.

**All classes are from 8:00am to 4:00pm unless noted otherwise.**

**To register, please call our office at 248-351-9300.**

**\*\*\*\* Refreshments will be provided by SESCOI \*\*\*\***

**Lunch not included, SESCOI can recommend many local lunch locations.**

**Unless noted otherwise, all classes are held at:**

**SESCOI Inc. 2000 Town Center, Suite 1730 Southfield, MI 48075**



\* Training costs are per student, per day and in U.S. funds. Actual topics of discussion subject to change due to the acceptance of suggestions, audience participation, audience preference and allotted time. Payment or P.O. due upon registration or prior to training. Unless otherwise noted, classes are held in Southfield, MI.