



**Mid-South**  
Community College

Workforce Technology Center  
2000 West Broadway  
West Memphis, AR 72301



HAAS AUTHORIZED  
TRAINING CENTER



Mid-South Community College Presents

# Metal-Cutting Application Engineering Course

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**February 12–14, 2008**  
(Register before January 20, 2008)

# Metal-Cutting Application Engineering Course



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Class is limited to 20 participants | \$1000 per participant

This course is designed to provide the working engineer with a thorough knowledge of the engineering principals behind the selection criteria used in the practice of metal-cutting tool engineering. Engineering principals are presented and discussed relative to (1) mechanics of metalcutting, (2) cutting edge materials, (3) operating conditions, and (4) failure analysis. Presentations are designed to provide insight into the impact of design changes in metalcutting tools. Focus is on processes, techniques and work piece materials.

## Processes discussed will include:

**Milling** Course emphasis is placed on tool selection, tool path, operating conditions and expected failure mechanisms. Tool selection concentrates on design concepts relative to both the workpiece material as well as the intended process. Processes discussed include end milling, face milling, 3D and Z-Axis milling as well as techniques for controlling surface finish, flatness and waviness. Productivity and cost control are covered throughout the course.

**Holemaking** Creating the hole as well as controlling the size, roundness, straightness and surface finish of the hole is discussed. Productivity and tool life are key topics of discussion.

**Turning** Turning and boring presentation develop a thorough understanding of chip groove geometries for controlling cutting forces, direction of chip flow, chip control and tool life. Grades and the use of edge prep and operating conditions are major topics of discussion.

## Who Should Attend

This three-day course is intended to enhance the skills and knowledge of working engineers in the metal-cutting industry.

## Instruction and Facilities

Instruction, where applicable, will include lecture-style presentations, workshop laboratories, and machine demonstrations. Participants will be furnished with notes and text materials on the topics presented.

## To register

call: 870-733-6853 or  
e-mail: [training@midsouthcc.edu](mailto:training@midsouthcc.edu)

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