



**Alabama
Technology
Network**

The University of Alabama in Huntsville

Cellular/Flow Manufacturing

Description

Through the arrangement of people and equipment into efficient, process-based cells, cellular manufacturing creates a smooth flow that shortens the lead time for delivery while supporting low inventory production, space saving and continuous improvement.

Learn how to link and balance manufacturing operations to reduce lead times, minimize work in process, optimize floor space usage and improve productivity. The workshop emphasizes the five-step process for designing and implementing work cells in both assembly and machining applications. Topics include product family definition, takt time, total work content, work balancing, task/operator standardization, machine/operator optimization, cell layout, flexible staffing and teamwork.

Objectives/Topics

- Definition of cellular manufacturing
- Five-step cell design process
 - Group products
 - Measure demand; establish takt time
 - Review work sequence
 - Combine work to balance process
 - Design layout
- Cellular design tools
- Layout considerations

Simulation

This class features a hands-on simulated factory where participants will experience the benefits of cellular/flow manufacturing by applying the lecture concepts in cell design, comparing cellular flow to both mass production and kanban systems and measuring the impact.

Course Length

4 hours

Class Size

10-20 participants

Cost

- \$2500 to hold at client's facility
- \$175 per person for open enrollment, plus a \$20 per person consumables fee.