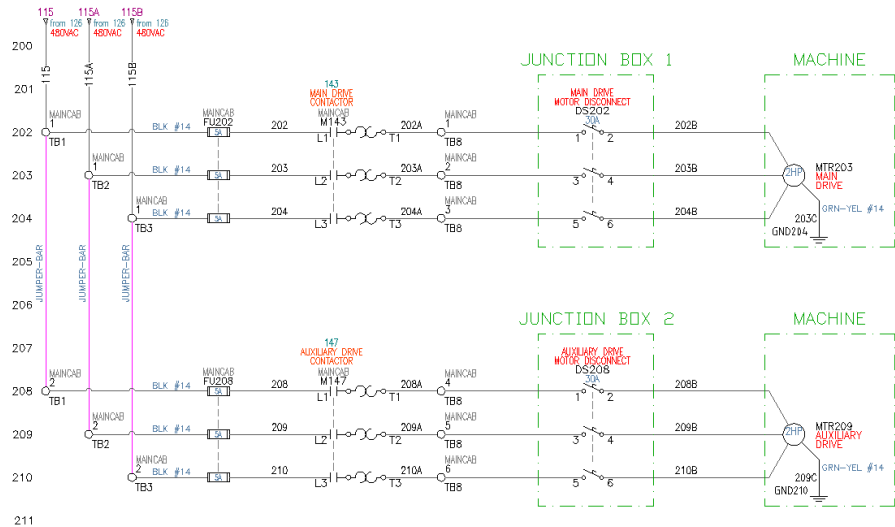


# AutoCAD® Electrical Work-Flow-Based Training Course Syllabus (JIC/NFPA version)

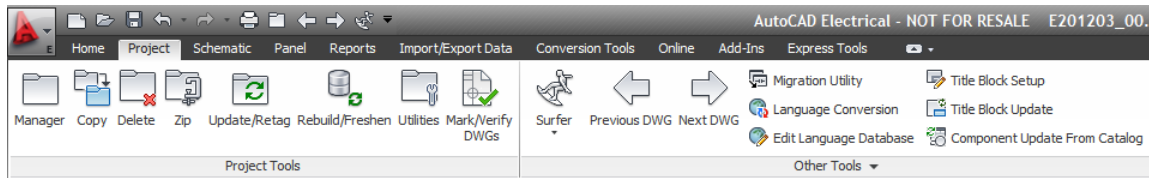


## Day One:

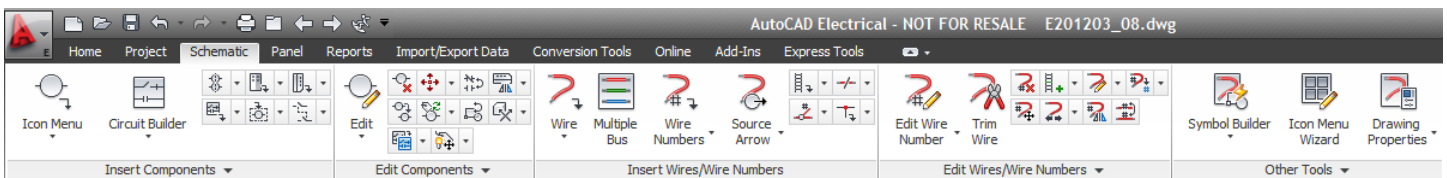
- Basic hands-on functional overview of AutoCAD Electrical
- Program Infrastructure
- Working in a network environment
- Configuration
- Customization
- Creating the "Smart" Border Template with pre-loaded design rules, wire types, and mapped for title block update



## Day Two:

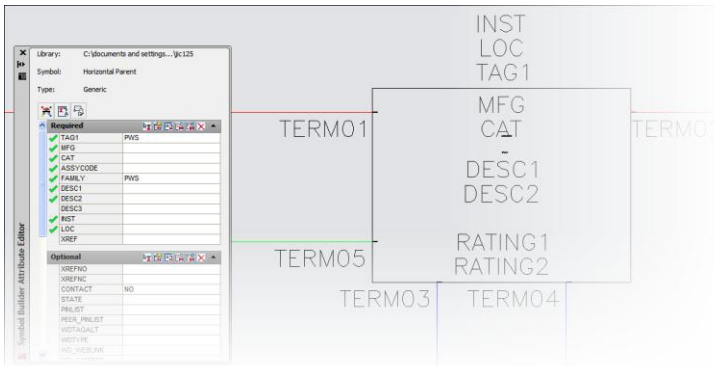


- Project Management
- Manage ladders and wires
- Insert a terminal strip
- Edit attribute location, size, visibility
- Work with 3-phase parametric devices
- Scoot a device symbol along a wire
- Manage the pin list database for automated terminal/pin assignments
- Move a component to a new location with intelligent Move
- Define a wiring sequence
- Define a subassembly using the Multiple Catalog option
- Advanced attribute management
- Advanced use of the Scoot command
- Creating a control circuit





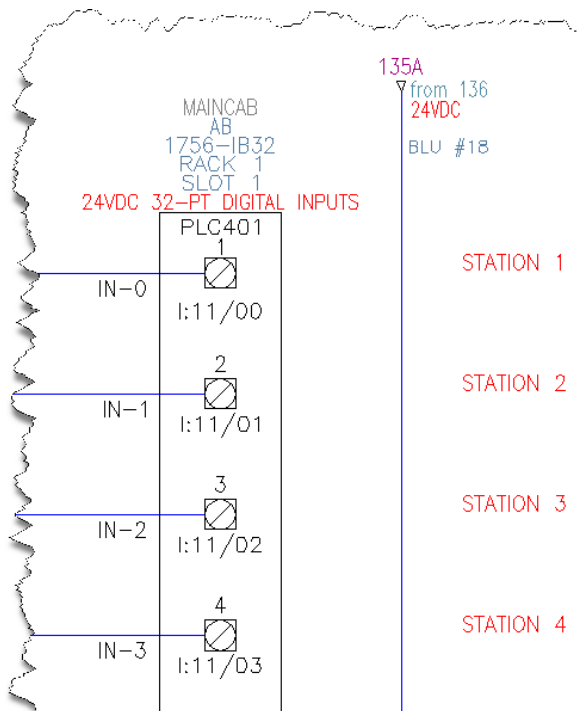
## Day Three:



- Create a custom schematic symbol
- Add a new symbol to the icon menu
- Add a new submenu to the icon menu
- Add a new vendor part number to the catalog database
- Create a subassembly using an Assembly Code
- Automatic cross-referencing
- Use the Schematic Surfer for a design review/analysis
- Assign wire numbers automatically
- Create a 3-phase motor circuit
- Insert location boxes (working with Installation and Location codes)
- Insert a terminal strip across multiple wires automatically
- Creating and using saved circuits
- Creating power buses
- Renumber a terminal strip automatically



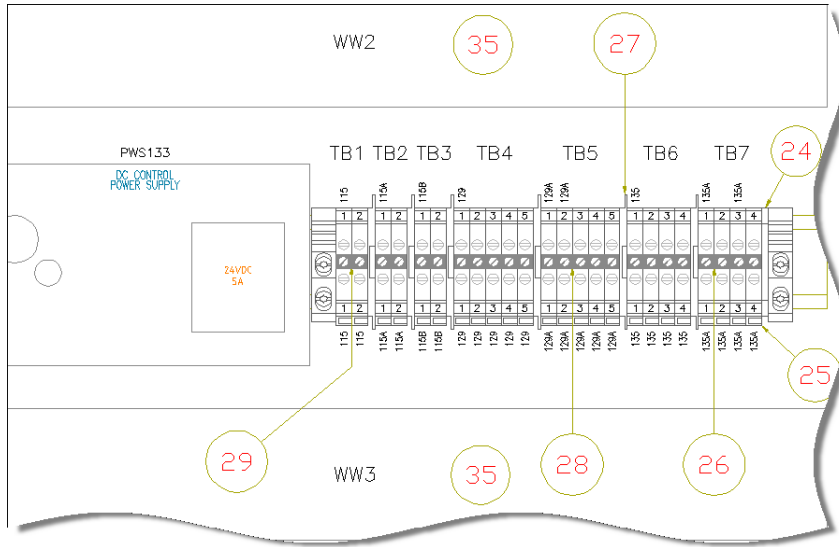
## Day Four:



- Insert a parametrically built PLC input module
- Insert multiple component symbols automatically
- Swap a Block
- Using the align tool
- Using the find/edit/replace editing tool
- Editing and updating schematic data using Microsoft® Excel
- Move all I/O address descriptions simultaneously
- Insert a parametrically built PLC output module
- Insert a Form-C control relay and contacts with automatic terminal/pin assignments and cross-referencing
- Insert a selector switch
- Insert a connector using the parametric Connector Builder



## Day Five:



- Create a Panel Layout from a list of schematic components
- Managing the footprint lookup database
- Automated nameplate insertion
- Bi-directional updates
- Assign item numbers automatically
- Inserting balloons
- Create a custom panel layout symbol (footprint)
- Annotating footprints with wire numbers
- Managing DIN rails and wire-ways
- Inserting graphical terminal strips

- Inserting multiple footprints at once
- Error analysis in preparation for release
- Automatic Report Generation

WIRE NO.	WIRE TYPE	FROM LOCATION	FROM COMPONENT	TO LOCATION	TO COMPONENT
L1	BLK_10AWG_MTW	MAINCAB	TB0:L1	MAINCAB	DS105:1
L2	BLK_10AWG_MTW	MAINCAB	TB0:L2	MAINCAB	DS105:3
L3	BLK_10AWG_MTW	MAINCAB	TB0:L3	MAINCAB	DS105:5
105	BLK_10AWG_MTW	MAINCAB	CB110:1	MAINCAB	DS105:2
105	BLK_14AWG_MTW	MAINCAB	CB110:1	MAINCAB	FU107
105A					
105A					
105B					
107					
108					
110					
110A					
110B					
115					
115A					
115B					
115C					
115D					
115E					
115F					
115G					
115H					
115I					
115J					
115K					
115L					
115M					
115N					
115O					
115P					
115Q					
115R					
115S					
115T					
115U					
115V					
115W					
115X					
115Y					
115Z					

ITEM	TAG(S)	QTY	MFG	CATALOG	DESCRIPTION
1	LT140 LT144 LT148	3	AB	800T-P16G	GREEN PILOT LIGHT - STANDARD, NEMA 4/13 30.5mm 120VAC XFMR PLASTIC LENS
2	LT140 LT144 LT148 PB139 PB139A PB143 PB143A PB147 PB147A SS143 SS147 SS602	12	AB	800T-X59E	Name Plate 800T Half Round Gray Custom Text
3	PB139 PB143 PB147	3	AB	800T-B1D1	PUSH BUTTON - MOMENTARY, NEMA 4/13 30.5mm EXTENDED GREEN 1 NO
4	DS105	1	AB	194E-A32-1753	IEC LOAD SWITCH 3 POLE 194E - LOAD SWITCH 32AMPS

**Note:** Day 2 of this course begins a “from scratch” design simulation and builds upon the infrastructure developed on Day 1. It is important that attendees not miss even one day of this class. The course is workflow-based so the attendees will experience each phase of a new design while exploring the many automated and semi-automated tools available in AutoCAD® Electrical. If you only have time and finances to attend one AutoCAD Electrical training course, this is the one to attend. The instructor has been designing PLC-based control systems to meet NFPA/UL and DIN/IEC standards since 1988, with an installed base numbering into the thousands globally. He is available for onsite startup support if you want to be sure you have everything configured properly to start your first project. Advanced training and phone/e-mail support is also available. An optional Process Assessment is available by request. The assessment report helps us define a methodical implementation plan uniquely appropriate to meet your specific needs.