

Electrical CAD Course using AutoCAD Electrical

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Abstract:

Teaching AutoCAD to electrical and electronic technology students has been a course with only an occasional curricular change. Today's AutoCAD Electrical productivity enhancement package threatens to change the way the course is taught and give students a new perspective in CAD work.

AutoCAD Electrical is included in the Autodesk package sent to most schools so the software is readily available. Autodesk supports the package and encourages its use. The Electrical add-ins to the basic AutoCAD package can generate enhanced symbols readily useable as AutoCAD symbols. Using the standard symbols of the Electrical package plus the use of enhanced features of this package give the student a greater insight into how an electrical design package can be successfully implemented quickly. Autodesk has enjoyed a great deal of success with the sale and acceptance of this new enhancement to its product line.

The use of AutoCAD Electrical encourages the use of writing script to further enhance the package and productivity of the student. Whether using AutoLisp or Visual Basic (VBA), support is included to enhance the package to further automate the desired result. Links exist in the package to Excel as well to quickly generate large numbers of drawings for PLC layouts and other devices. Reports of to-from wiring as well as bills of material are also produced automatically with the package when fully utilized.

The paper will lay out a suggested course complete with subjects covered and objectives realized. Also suggested will be possible texts from which the teacher may choose. Also an argument will be given why to jump to the new AutoCAD Electrical package from the traditional AutoCAD approach.