

# A Guidance Portal - Plan your career:

## PLAN YOUR CAREER

Get Career Guides to plan your Career!

Start Yours >>>

The most common question, since we were kids, has been "What do you want to be when you grow up?" Though an answer always came readily then, now when it is time to pursue your desired career – it's time for confusion. To ease your confusion, we present to you our newest feature – "PLAN YOUR CAREER" – A guidance portal just for you. CADD Centre Guidance Portal is special because it is uniquely designed just for budding engineers.

Plan your Career is a page where you can use the tool provided to chart out your own career map. The module will inform you of the qualifications and skills you need to pursue a career of your choice. The user-friendly module will also provide you the narrowed down options of courses pertaining to your degree. This is a trusted guidance portal because it is backed by CADD Centre's years of experience.



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Test dates: 8, 9 & 15, 16th February 2014

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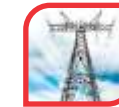


# CADDZOOM

MONTHLY NEWSLETTER

your CAD / CAM highway

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## Features That Power AutoCAD Electrical

AutoCAD Electrical design software is AutoCAD for electrical controls designers. It includes all the functionality of AutoCAD software plus a complete set of electrical CAD features, including comprehensive symbol libraries and tools for automating electrical design tasks.

AutoCAD Electrical includes all functionality in AutoCAD software, plus electrical engineering features such as symbol libraries, bill of materials (BOM) reporting, and PLC I/O design that make controls design fast and efficient.

AutoCAD Electrical automates common tasks and facilitates drafting productivity. Engineers can dynamically generate rules-based electrical control circuits; extract a list of electrical schematic components for panel layout drawings; run

multiple reports with the simple, customizable report generation tool; generate and update customizable reports; collaborate with customers and suppliers by sharing AutoCAD drawings with them.

What makes AutoCAD Electrical more powerful in terms of increasing design productivity are the options to create folders to organize drawings; flexible drag-and-drop file organization; smart electrical panel layout drawings, and rich content library of electrical symbols, among other intuitive software interfaces.

The feature of automatic wire numbering/component tagging helps engineers reduce errors. They can use marking menus to shorten editing time. The best part is the circuit designs generated using AutoCAD Electrical are made available for reuse.



The addition of marking menu, the easy-to-use tool puts eight tools at your fingertips and is intelligent to the objects within AutoCAD Electrical - giving you only the most important tools for the tasks at hand. Simply create any Electrical object and right click.

The marking menu replaces the linear context menu for AutoCAD Electrical objects. As with context menus, the marking menu contains commands specific to the cursor location, or selected objects. You can perform a selection using one of two basic ways (or modes):

- ◆ Menu Mode - Right-click in the graphics window over an AutoCAD electrical object. Menu items surround the cursor. To dismiss the marking menu, click once again in the center of the menu display. Do not press the Esc key as this may cancel a command in progress.
- ◆ Mark Mode (also called gesture behavior) - Draw a mark. To enter this mode, press and hold the right mouse button and immediately move the cursor in the direction of the desired menu

## AutoCAD Electrical 2013 - What's new?

item. A trail follows the cursor. Release the mouse button to select and execute the command that corresponds to the direction of movement of the cursor.

If you want to disable the marking menu tools, the system variable AEMM will disable it, OR change the settings to show just the icon, just text, or both. (Zero for off or 1, 2, or 3 respectively).

Another enhancement to Electrical is the ability to add folders to the project manager window. This is a great way to keep complicated drawings organized within a space. Note that the subfolders within the Project Manager do not have to exist within Windows. Simply right click inside the Project Manager and choose Add Subfolder, then drag and drop your files into the space.

Another major change to the interface, which is more related to changes made to AutoCAD than those made in Electrical, is the command line enhancement. It now floats over the drawing area and is transparent when not in use. It also has the ability to click on the sub options within the commands.

For example, if you start the Circle command, the 3P, 2P, and Ttr options can be selected by picking on them. You can still dock the command line by clicking and dragging the left edge to the bottom of the screen where it will revert back to functioning like it did in 2012.

Finally, one of the most common enhancements from version to version within AutoCAD Electrical is the additions to the libraries featuring more than:

- ◆ 18,000 parts for Allen-Bradley
- ◆ 17,000 parts for ABB
- ◆ 21,000 parts for Schneider Electric
- ◆ 71,000 part entries for Siemens.

This allows AutoCAD Electrical users to be more productive, more efficient, and more complete with their designs.

“

A prime example is the increasing energy consumption associated with the World Wide Web. Staggeringly, the web already consumes 5% of global electricity and it is set to double in complexity every two years.

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## Why Electrical Engineering Holds Great Promise?

Electrical engineering is a field of engineering that generally deals with the study and application of electricity, electronics, and electromagnetism. This field first became an identifiable occupation in the latter half of the 19th century after commercialization of the electric telegraph, the telephone, and electric power distribution and use. It now covers a wide range of subfields including electronics, digital computers, power engineering, telecommunications, control systems, RF engineering, and signal processing.

The demand for electrical engineering courses has been reportedly slowed down, as currently there seems to be not enough jobs available in the market for electrical engineers. However, we have to understand that job opportunities for a particular profession are affected by the economic cycle the sector undergoes.

A career choice should be made based on

- a) the aptitude of students and
- b) the maturity of the discipline.

If you like hardware aspect of computer and intrigued by voltages and currents, electrical engineering is a good choice of education. In electrical engineering, you will get to learn various common engineering courses like engineering mathematics, physics, engineering drawing and fundamentals of computing. You will also about thermodynamics, introductory electronics, signal processing and instrumentation, signals, systems and electric networks, microelectronics, control systems, communication systems, power systems, electromagnetic systems, electrical machines, and power generation techniques.

Electrical engineering is a highly established sector and the contribution of electrical engineers is going to be more in the coming years. Normally electrical engineers deal with radio-electronics, particularly anywhere electricity and magnetism, is involved. However, electrical engineers are

uniquely positioned to provide technical solutions to many globally critical research challenges.

The demand for electrical engineers is going to increase in the near future, as world-class electrical engineering research is driven by the challenge of reducing electrical energy consumption. A prime example is the increasing energy consumption associated with the World Wide Web. Staggeringly, the web already consumes 5% of global electricity and it is set to double in complexity every two years. There is research demand, driven by predicted global food and water shortages caused by over population and global warming. Similarly, there is lot of multidisciplinary research for developing electric vehicles with great funding and scope all over there world.

Broad education is the new B.E - in addition to learning electrical engineering, you can focus on allied subjects like electronics, if you will. There are new ultra-niche specializations like agri-electronics which is about using electrical technology to improve farming yields and to reduce waste in the food supply chain. Know that, upon landing your first job as an electronic engineer, you are highly likely going to be asked to spend at least one or two years training and specializing, before you can choose which areas you specialize.

Another important aspect is CAD knowledge. Electrical engineering has to work extensively with CAD in circuit design. Engineers should be open to learning AutoCAD Electrical and O r C A D . P r e p a r e yourself for a lifetime of designing, developing a n d constantly creating new and exciting products.



## Job Opportunities in India

In Electrical Engineering industry and higher education, there are good opportunities for getting jobs in India as well as abroad. There is a lot of multi-disciplinary research for developing electric vehicles with great funding and scope across the world.

Some of the important companies that offer electrical engineering include:

- ◆ ABB
- ◆ Bajaj International Private Ltd.
- ◆ Bharat Heavy Electricals Limited (BHEL)
- ◆ Centre for Electronics Design and Technology
- ◆ Crompton Greaves Limited (CGL)
- ◆ Siemens Ltd.
- ◆ Reliance power Ltd.
- ◆ Wipro Lighting

The average salary: Rs 3 to 3.5 lakh Indian rupees. All IITs, NITs, deemed universities and almost all State Universities and private engineering colleges offer electrical engineering courses. Electrical technology is transforming our world, changing the way we work and play. It's redefining fields of human endeavour as diverse as healthcare, engineering and government. Electrical engineering will provide the technical solutions for climate change via the research and development of renewables, energy storage systems and clean technology.

