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# What's New in AUTOCAD 2019

CAD technology introduces features and techniques that revolutionizes the way we work with software and product development. With the introduction of AutoCAD 2019, users will be able to enjoy better work optimization and enhanced performance with toolset add-ons.

Below are some of the enhanced toolset features, which the 2019 version will bring about.

### Architectural toolset

The architectural toolset will help designers in composing intelligent and eye appealing designs. This added feature of AutoCAD 2019 allows the designer to make use of specialized building design features and 8000 plus intelligent architectural object-styles to speed up their architectural drawing and documentation.

### Mechanical toolset

AutoCAD 2019 lets the users to integrate their ideas and thoughts in one part of their drawing with this improvised mechanical toolset. Users can use specialized mechanical design features and 700,000+ intelligent manufacturing parts, features, and symbols to speed up their design process.

### Electrical toolset

The electrical toolset is an enhanced

feature of this AutoCAD 2019 version. This helps in efficient electrical documentation control and quick modification with its industry specific features. It also enables users to make the best use of specialized electrical design components and 65,000+ intelligent electrical symbols for enhanced productivity.

### (MEP) Mechanical, Electrical & Plumbing toolset

With MEP toolset in place, users will be able to redefine their design process on the whole. The MEP toolset features specific MEP engineering features and 10,500+ intelligent mechanical, electrical, and plumbing objects, which will enable the designers to draft, design, and document building systems in no time.

### Plant 3D toolset

This, specialized plant design and engineering toolset enables the user to efficiently produce

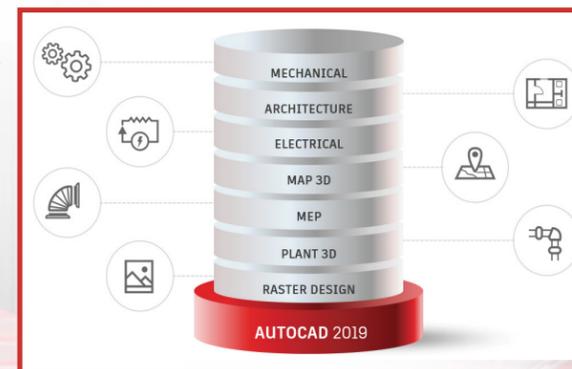
P&IDs and then integrate them into a 3D plant design model. It also aids in quick creation of schematic diagrams, plant layouts, and other drawings.

### Map 3D toolset

Map 3D toolset allows user to map features to incorporate GIS and CAD data to assist in planning, design, and data management. The feature also allows to access spatial data stored in files, databases, and web services, and aggregate it with the AutoCAD design data.

### Raster Design toolset

Raster design toolset is enhanced to support edit-scanned drawings and convert the raster images into DWG objects. This is made possible with the quick to edit, cleanup, transform images, and manipulate raster entities features.



Compared to the other version, AutoCAD 2019 has a lot of promising features, which lets one develop designs in the way they have visualized and thought of. This new version also showcases industry specific toolset, which will redefine the whole process of designing and conceptualization.

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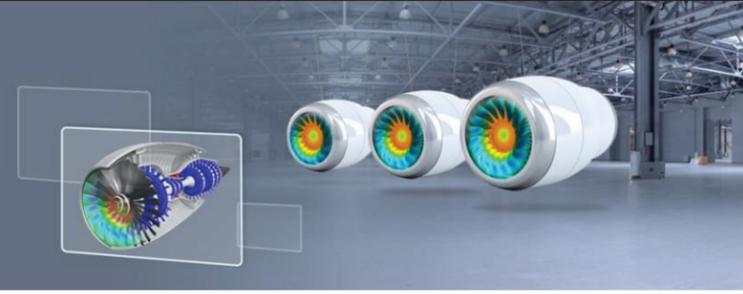


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## TECHNOLOGY INNOVATION COULD ENABLE BUILDING DIGITAL TWINS — ON YOUR OWN —



With open source solution integrating Industrial Internet of Things (IIoT) and deploying efficient run-time becomes simple. One such innovation is the ANSYS Twin Builder, which aids in determination of ideal maintenance program, performance optimization, and generation of insightful data to improve products which are next in line through the following features.

### ❖ Building

In the recent trends, open source technology has come up with a workable solution to overcome the design and building challenges encountered in the field of product engineering. As per the insights of researches it is expected that ANSYS Twin builder will allow the users to go in for multiple modeling which will have domains and languages, extensive OD application-specific libraries, and third-party tool (including 1D) integration.

This feature, will also allow for reduced 3D order modeling (ROM) creation, product

composition through its embedded software integration process and other accurate physics-based twin twice components.

### ❖ Validation

Initially, building a digital twin was a complicated and challenging process. The ANSYS Twin Builder has changed the above situation and combines everything into a packaged and fluid work flow with intuitive interface features. Through this, users will be able to validate an accurate representation of their real-life products and optimize product performance up to 25 percent by using multi-domain simulation with post-processing, rapid human-machine interface (HMI) prototyping, system optimization, and XiL (model-in-the-loop/software-in-the-loop) integration.

### ❖ Deployment

Through deployment users will be able to quickly connect to supported IIoT platforms and will be able to export/deploy generated

models in a timely fashion. Through this, users will be able to improve their operations with a 10 - 20 percent reduction in their maintenance costs.

### Implications:

Compared to the other technological innovation, the ANSYS Twin Builder allows engineers to quickly build, validate and deploy these digital representations of physical products without any hassle. This new trend will also lower the technical and financial costs involved in product maintenance.



## NANO TECHNOLOGY The Engineer's New Frontier design

Nanoscale energy transport is a new day working concept, that can redefine the whole engineering field.

Below listed are technological aspects that define the future outlook of Nano Technology:

### ➤ Unlimited Possibilities:

Nano engineering mainly concentrates on material and design processing. With so many advances over the last decade, Nano engineering, will become the new face of engineering and technology. Soon, there will be endless opportunities for manufacturing, microfluidics, robotics, biomedicine, energy, heat transfer, storage and much more.

### ➤ Interdisciplinary outlook:

Nano engineering is so popular and integrated that, soon it will become the interdisciplinary branches for science and technology which requires the knowledge of mechanical engineering, chemical engineering, electrical engineering, biology, physics, photonics, material science and other fields working on product and design management.



### ➤ Advanced usage:

Nano technology will start to play an important role in research fields like Nano scale technology, energy transport, conversion, storage, electromechanical systems, Nano materials and alternative energy systems (Including solar photo voltaic devices) can be used to the maximum extent.

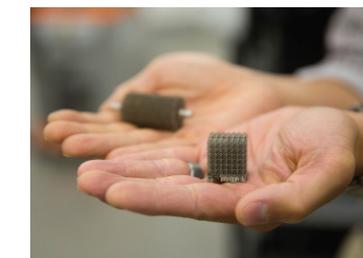
### ➤ Interconnected to well being and longevity:

In the upcoming years, Nano technology will start to play a major role in enhancing mankind's life and well being. It will become so possible that, chemically modified Nano material will start having huge impacts on biochemical sensing and human health.

### ➤ Improved and Diversified Mechanical Engineering:

Through Nano technology it will become possible for mechanical engineers to start expanding their toolbox. Through Nano engineered materials, biochemical sensitivity, mechanical strength, selective transport, thermal/electrical conductivity and optical properties usage can be enhanced to a large extent.

Like any other technology, Nano engineering will soon revolutionize the way we see of work with systems, products and designs. It may be also possible for users to apply their understanding and see how individual atoms and molecules are controlled and composed of.



## SKILLS WHICH EVERY ENGINEER SHOULD HAVE

For those who want to enhance their personality/outlook and to impress their supervisors, make use of these tips and make this task a less daunting one.

### Humility

Always be humble. Acting like a know-it-all could strike the wrong chord during negotiations or any discussion. Humility is important at all points of life and also the best way to connect with others and drive conversations in different directions.

### Personal Identity

Create your very own brand and work towards improving the same. It can go a long way in enhancing your career and professional outlook. Personal identity is the best style to express oneself and his or her working style.

### Positivity

Any engineer would be expected to show utmost resilience at all points of time. Instead of focusing on negativity, if one chooses to believe in positivity, their overall personal and professional outlook will become better and widespread.

Apart from the skills, your superiors, colleagues, peers or anyone with whom you work will try to associate you with the way you communicate or express yourself with them. So, take things on an easy and work on the essentials before you can come to any conclusion.

## ELI ZERO'S REPLACES THE NEED FOR ADDITIONAL CAR REQUIREMENTS LATEST ELECTRIC CAR



Electric-vehicle manufacturer Eli Electric, has invented a compact and urban friendly car Eli Zero for easy transportation and on the go mobility.

Some of the special features of this ambitious Eli vehicles are:

- ⚡ The car can power up to a speed range of 25 miles to 55 miles per hour.
- ⚡ It can be used as standard road car.
- ⚡ Traditional car molds features are nil in this gen next car.
- ⚡ It comes with versatile urban and suburban features.
- ⚡ Features side by side seating for added comfort and leg space.
- ⚡ Equipped with USB fast-charging port for on the go mobile or device charging.

As per the latest news, the company plans to have the first Eli vehicles on the road by the start of 2019. The company is also planning to introduce 100 vehicles for a start. Experts also predict that, once, Eli zero's is introduced into the market, the need for additional car requirement will not be felt by modern day urban families.

