NANDHA ENGINEERING COLLEGE
(AUTONOMOUS)

Department of
Mechanical Engineering

Volume 10

TECHNICAL MAGAZINE

ACADEMIC YEAR 2021 – 22

ABOUT DEPARTMENT

Volume: 10

The Department of Mechanical Engineering was established in the year 2005. At present, the department offers Graduate Programme – B.E., in Mechanical Engineering, Post Graduate Programme – M.E, in Engineering Design and Doctorate Programme – Ph.D., in Mechanical Engineering. The department has been accredited by National Board of Accreditation (NBA) in the year 2013. It is reputed for producing Engineers as Professionals, Researchers and Entrepreneurs. Many of its alumni play key roles in Industries and Institutions in India as well as in abroad. The department is proud to be collaborated with well-known Industries and Institutions in the emerging fields of Mechanical Engineering.

With a right combination of theory, practical, projects (hands-on) and industrial training in the areas such as Design, Thermal, Manufacturing and Energy Engineering, this programme has well placed itself as a well-known preference for the students

VISION

To be a premier centre for learning in Mechanical Engineering in the country.

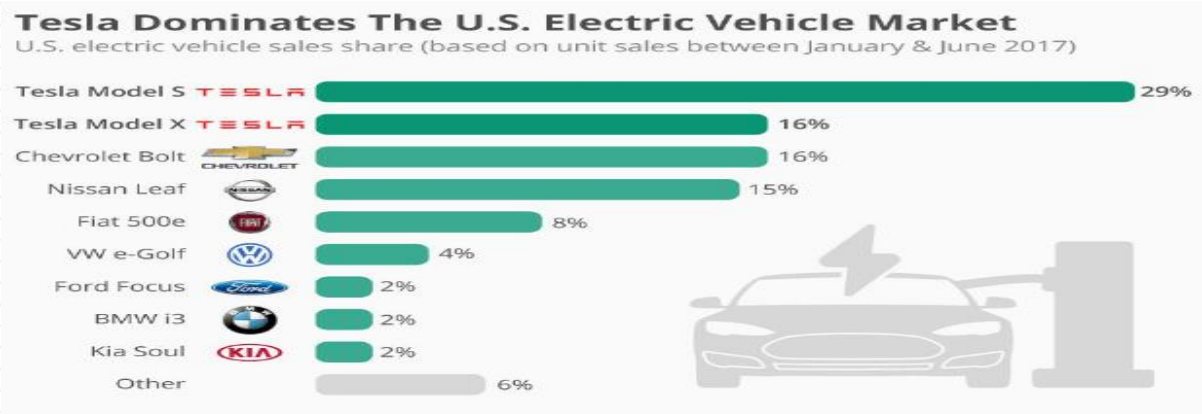
MISSION

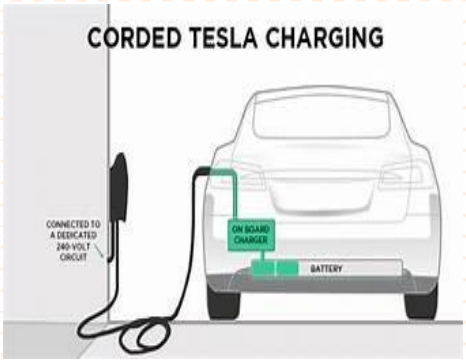
- To offer state-of-the-art undergraduate, postgraduate and research programmes in engineering.
- To develop skilled and employable graduates to meet the challenges in emerging fields of Engineering.
- To prepare the students for prosperous career in Engineering / Entrepreneurship by inculcating the leadership qualities with professional and ethical responsibilities for the benefit of the society.
- To encourage Research & Development in the thrust areas of Engineering.

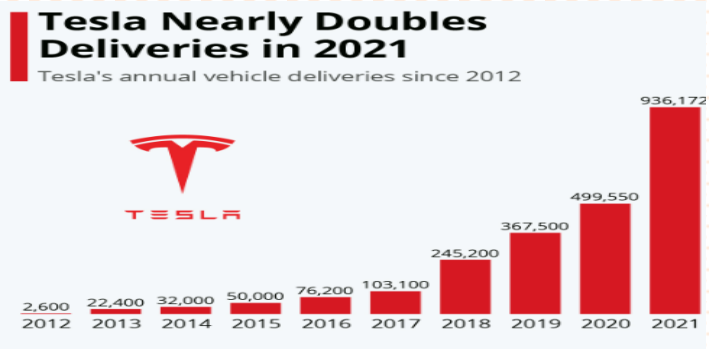
STUDENTS' ARTICLES

ACCELERATING TOWARDS A NEW TRANSFORMATION ARTIFICIAL INTELLIGENCE (AI) CARS BY TESLA

Today in the fast-growing world, where computer is playing an essential role for data storage. The future for all types of complex decision-making is on artificial intelligence usage. The present world of automobile is seeing the version of self-driving cars or driverless cars which use Al as the major source of satisfying the customer. Tesla, Inc. (formerly Tesla Motors, Inc.) an American company formed in 2003 which manufactures electric vehicles at Palo Alto in California has decided to make accelerating transformation towards artificial intelligence in cars with its Vision as Quicken the world's progress from carbon creating fuel-controlled vehicles to vitality effective electric vehicles







According to the research on self driving cars, it is mentioned that they will be saving the economy of $488 billion in the economy in the yearly saving by reduction in accidents and $158billions by reduction in fuel cost. The chart shows the data from 2012 to 2019.Tesla is the highest rated car manufacturing company for self-driving cars today. The high performance of the self-driving cars or also called as autonomous. Tesla cars have proven to be good and high on standards by the customer's feedback.

By
MERLIN ABINAYA D V
II-MECH

FUTURE TRENDS IN UX/UI DESIGN

The user must come first in digital design, and human-centered design must address the issues of now and tomorrow. Because of this, the future of design is centered on user experience (UX) and user interface (UI) design.A web or app developer will subsequently construct the high fidelity deliverable that the UI designer created using the frameworks and prototypes.

You can understand why UX and UI designers are in such high demand when you think about the state of the world today. Nowadays, a firm needs to have a strong user experience as well as a fantastic brand experience in order to survive.

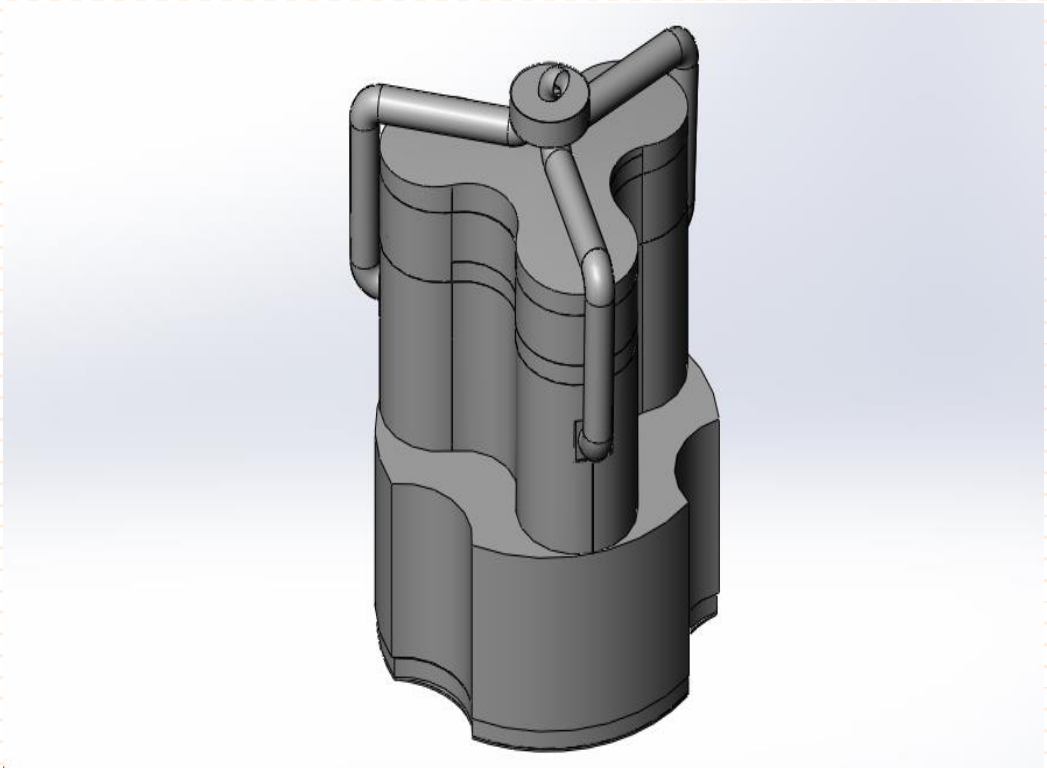
Design will continue to evolve in the future, with an emphasis on fusing elegant aesthetics with a positive user experience. Design will continue to be important as long as businesses prioritise serving the user.This desire is not going away any time soon, according to us. In fact, we anticipate it will increase and spread as new technologies are developed. Five UX/UI design trends for 2019 and the future of design are listed below.

- Screens and displays will continue to be the center of UX/UI design.
- The secret to a linked, cross-platform user experience is UX/UI design.
- Although designers must maintain their flexibility, UX/UI roles will grow increasingly specialized.
- Well-designed internal tools are required because what's inside matters as well.

By
SARANKUMAR M
IV-MECH

BRITANNICA ENGINE

(MODIFIED IRON DUKE ENGINE)



This Design model is based on a Britannica revolver.In this Engine design,pistons are arranged radially with common crankshaft. The engine will be produced three power stokes in two cycles. This type of Engine Three-cylinder engines is more fuel-efficient less expensive to own, but is typically noisier and less power than larger engines. A 3-cylinder engine is a type of gasoline engine that has three cylinders. This type of engine is often used in small cars because it is more fuel-efficient than a 4-cylinder engine is compact multi-cylinder engine. The three pistons layout is common for diesel tractor engines, such as the Perkins AD3.152. This engine was used in the Massey Ferguson 35 and Fordson Dextra tractors, as well as for marine and stationary applications.In general, a 3 cylinder engine is cheaper to maintain and run. With one cylinder less, the total parts functioning in the engine are lesser. This means there are a lesser number of parts being used in the engine. So, the automatically incurs lesser wear and tear compared to a 4 cylinder engine.

By
YATHISHPRASANNA M
II-MECH

MONO BIKE

"Have you ever thought about the bike running on one wheel." People from the Mechanical Engineering Department at Nandha Engineering College (Autonomous), Erode 52, created this mono bike out of waste-rebuilt tyres and worn-out waste tires. In this case, we reduced the bike's size to make it easier to drive as a single person, as in compact size. It can easily be driven by every person.

By
SINIVASAN.P
PRANAVKEERTHI.P
KALAIVANAN
NAVANEETHAN. M
I-MECH