



NANDHA ENGINEERING COLLEGE (AUTONOMOUS)

Department of Mechanical Engineering



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TECHNICAL MAGAZINE

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ABOUT DEPARTMENT

Volume: 9



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

Theme: **SAVE TO SUSTAIN (Fuel usage Control)**



By
KIRUTHIKA M
III-MECH

RISE OF ELECTRIC VEHICLES

The world is now embracing the rise of electric vehicles. The global market for electric vehicles (EVs) is projected to reach over \$802.81 billion by 2027, with a compound annual growth rate of 22.6%. Currently, Asia-Pacific is the highest contributor, with its revenue projected to reach about \$357.81 billion by 2027. It is closely followed by North America, with an estimated revenue contribution of over \$194.2 billion. The rapid growth of the EV market is partly due to various developments from other closely linked sectors. For example, some governments have introduced policies that aid the production and development of electric vehicles through grants, subsidies, and even tax rebates. These developments led to the major adoption of electric cars within the last decade. In 2010, it was estimated that there were only over 17,000 EVs globally. Today, there are over 8 million units on the road. This number is expected to grow to a staggering 115 million within the next decade. To better understand the development of the electric vehicle industry, one can take a closer look at the patents granted to EV manufacturers. Patent trends are significant as they can paint a clear picture of how the industry is changing — from new products invented, to research and development, up to dissemination and market development.

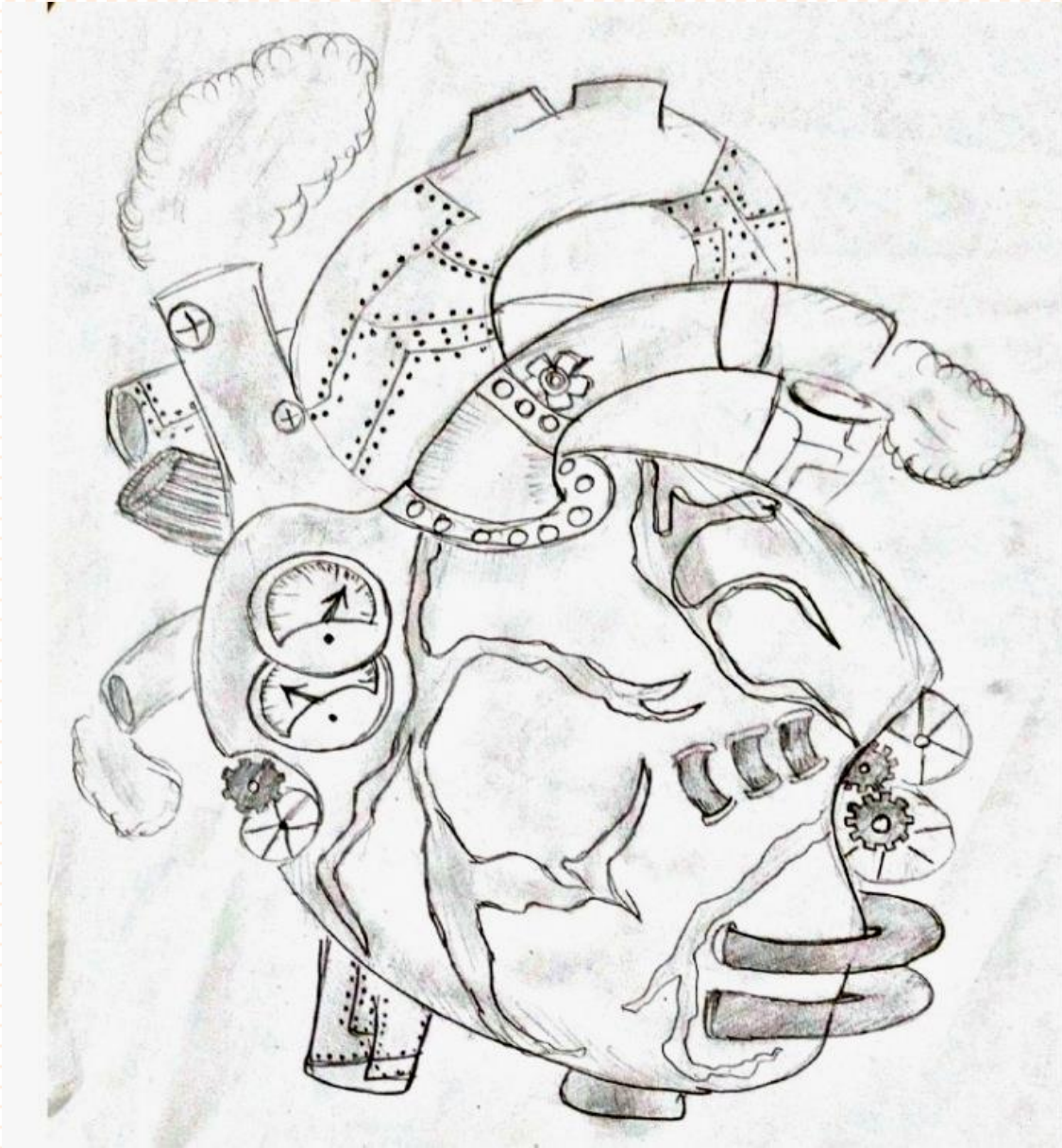
By
**KISHOR A
III-MECH**

WOMEN EMPOWERMENT

- Behind every successful Women
Is a Tribe Of?
Other Successful Women
Who Have Her Back
- “I Do Wish Women
To Have Power over Men;
But Over Themselves“.
- Feminine Isn’t About Making
Women Strong .Women Are
Already Strong .It’s about
Changing the Way the World
Perceives That Strengths.



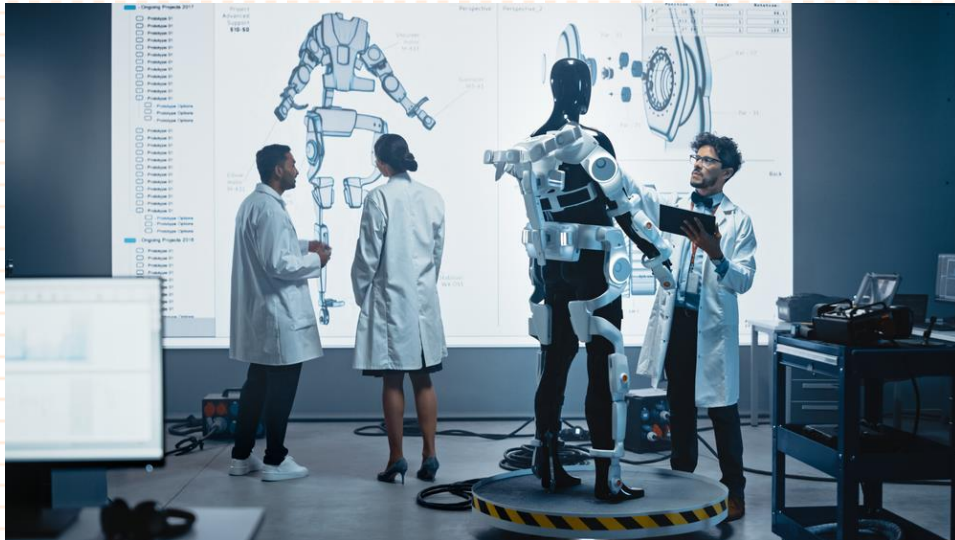
By
**Nivetha .V
I MECH**



By
ANSAR MUBEEN M
III-MECH

ROBOTICS

Robotics is an interdisciplinary branch of computer science and engineering. Robotics involves design, construction, operation and use of robots. The goal of robotics is to design machines that can help and assist humans. Robotics integrates fields of mechanical engineering, electrical engineering, information engineering, mechatronics, electronics, bioengineering, computer engineering, control engineering, software engineering, mathematics, etc.



Robotics develops machines that can substitute for humans and replicate human actions. Robots can be used in many situations for many purposes, but today many are used in dangerous environments (including inspection of radioactive materials, bomb detection and deactivation), manufacturing processes, or where humans cannot survive (e.g. in space, underwater, in high heat, and clean up and containment of hazardous materials and radiation). Robots can take any form, but some are made to resemble humans in appearance. This is claimed to help in the acceptance of robots in certain explicative behaviors which are usually performed by people. Such robots attempt to replicate walking, lifting, speech, cognition, or any other human activity. Many of today's robots are inspired by nature, contributing to the field of bio-inspired robotics.

By
PUGAZHENTHI. V
II MECH