Mechanical Engineering is getting "SMART" with Artificial Intelligence!

Mechanical Engineering is at the heart of all physical movements, from light to heavy load. It deals with converting a source of energy, which may be electric, thermal, conventional or renewable into Mechanical energy. These mechanical movements need to be done with high speed and precision for mass production. In such cases, the system requires elements, which are said to "automate" the process. Popularly, it has believed that Automation is a system, which accomplishes tasks without human intervention. However, it also needs to check for errors and have fail-proof systems in place for safety of human, machine and the work output. Drives like Hydraulics, Pneumatics, Electric and Mechanical achieve this.

With the recent advent of the "SMART" era with a Smartphone in every hand ready to control and monitor the automation technologies the 4th industrial revolution has arrived.



From simulation to rapid prototyping with additive manufacturing technologies all that can be imagined can be manufactured with modern Mechanical Engineering, the opportunities are growing exponentially. It is not far when every machine will have embedded in them the best of human traits – "intelligence". The Engineers have to equip them with new sets of skills and knowledge. Contrary to popular belief, Mechanical Engineering is no longer the traditional streams concentrating just on improving the economies of scale through high productivity of resources. Becoming industry ready through hands-on projects with latest technologies is helping youth confidence to face real-life workplace develop challenges. The practical fundamentals of interfacing the various physical hardware and programming the same with intelligent data analysis is a part of the manufacturing technology. Learning is more fun with the applications of augmented reality, enhanced real life utility software and proficiency development opportunities.

SVKM's NMIMS University has always been in the forefront of introducing new engineering courses under the aegis of Mukesh Patel School of Technology Management & Engineering (NMIMS), especially with first of its kind integrated programs. The 6 year B.Tech. Integrated program in Mechanical Engineering now offers students to gain the knowledge, skills and mind-set to adapt to futuristic Automation technologies through its specialisation in "Artificial Intelligence". Students having a penchant for the cutting edge digital technology can start their journey right after 10th standard. NMIMS Bosch Rexroth Center of Excellence in Industrial Automation facility led by industry certified internationally recognised superlative faculty trainers offers world class pedagogy bridging the industry-academia gap.

-Sawankumar Naik