

## **DIPLOMA IN MECHANICAL ENGINEERING**

*Traditionally, mechanical engineers and technicians have to deal with concepts such as mechanics, thermodynamics, robotics, kinematics, structural analysis, fluid mechanics and many others. Mechanical engineers and technicians contribute in the development, testing, maintenance and manufacturing of various engines, power plant equipments, heating and cooling systems etc. Nowadays their horizon expands to robotics, nanotechnology, development of composite materials, biomedical applications, environmental conservation, etc.*

*Mechanical engineering is finding more and more applications these days in other areas of engineering also. The most significant of these is the field of robotics. Robotics has become an important area of study due to the fact that more and more processes are getting automated these days. Mechanical engineers are handed the task of manufacturing assembly lines of robots for different operations and controlling them through pre-written programs to make the process of manufacture less human dependant, and more efficient and economical.*

### **Development of machines for the production of goods**

*The high standard of living in the developed countries owes much to mechanical engineering. The mechanical engineer invents machines to produce goods and develops machine tools of increasing accuracy and complexity to build the machines.*

*The principal lines of development of machinery have been an increase in the speed of operation to obtain high rates of production, improvement in accuracy to obtain quality and economy in the product, and minimization of operating costs. These three requirements have led to the evolution of complex control systems.*

