

Energy and Power:

Design an innovative model or a future technology that can come up as an economic and eco-friendly alternative to the existing technologies. Ideas can be related to the non-conventional energy sources and innovative technologies to use them to maximum efficiency and preserve the exhaustible ones. If conventional sources of energy are to be considered, participant should come up with new ways to harness them in desirable areas with maximum efficiency.

Robotics and Automation:

With the advancing robotics, the possibility to replace mechanical machines and human effort with robotic employees is increasing. Design the future technologies or modify the existing ones to cater the future needs. Designs may be integrated with functioning mechanisms or algorithms. Participants may come up with the technologies which can be used on industrial scales as well. One may design the robots or machines such that they are compact and easily modularised or un assembled or transformed.

Automobile:

Participants need to come up with the mobility innovations or solutions to the current mobility problems and the problems associated with the machinery in them. Transmission, handling and dynamics related problems may also be addressed. Automation can be integrated with future mobility. More economic and recyclable automobile technologies may also be come up with.

Military:

The design should be made such that the prototype or model can be a contributing factor to the optimisation in the military technologies. The design may be of a weapon or a fighting tank or any of the technologies used in military. The application of automated or self- driven tanks or fighter jets or submarines etc or digitally controlled military weapons may also be designed. The solutions resulting to increased mechanical efficiency can also be addressed.

Healthcare:

Participants need to present solution to healthcare in rural or backward areas of the world. The economic and easy technologies need to be designed. Some innovative and advancing technologies with advanced pneumatics and hydraulics may also be presented.