

Entering in the world of Electronics & Communication....

Electronics & Communication Engineering **in** itself is a broad term to explain. It includes different terms like Consumer Electronics, Embedded System, Power Electronics and Communication System.

IEEE (Institute of Electrical & Electronics Engineering) is one of the most important organizations for Electronics Engineer. Directly or indirectly electronics engineers **contribute** in the society. The **best engineering college in Pune** promotes the students to excel in field of Electronics & Communication. Contribution of EC in the development of the sector of communication is **remarkable**.

- **Everything that has contributed in human development** and made revolution **in his life** like, telephone, radio, satellite communications, internet, and most importantly the mobile phone.
- Now the latest 4G mobile technology is offering the possibility of real time high quality video.
- Wireless system like broadband and DSL provide increased capacity of fetching the information.
- Reductions in the cost of long-distance data transmission are provided by wavelength-division multiplexing schemes.



These all developments have been fulfilled by communication technology. In the digital world everything has new **protocols**, new coding schemes, and new ways to represent video, images and speech as data. New addition means there is change

in the transformation of information via cable, fiber, and increasingly via radio are constantly being emerged.

In the era of globalization and knowledge, economy propelled by the phenomenal growth in IT, a significant growth has been witnessed in the Electronics and IT sector. Unlike most developing countries, India is expected to gain from the 'emerging Digital Economy' to Digital economy.

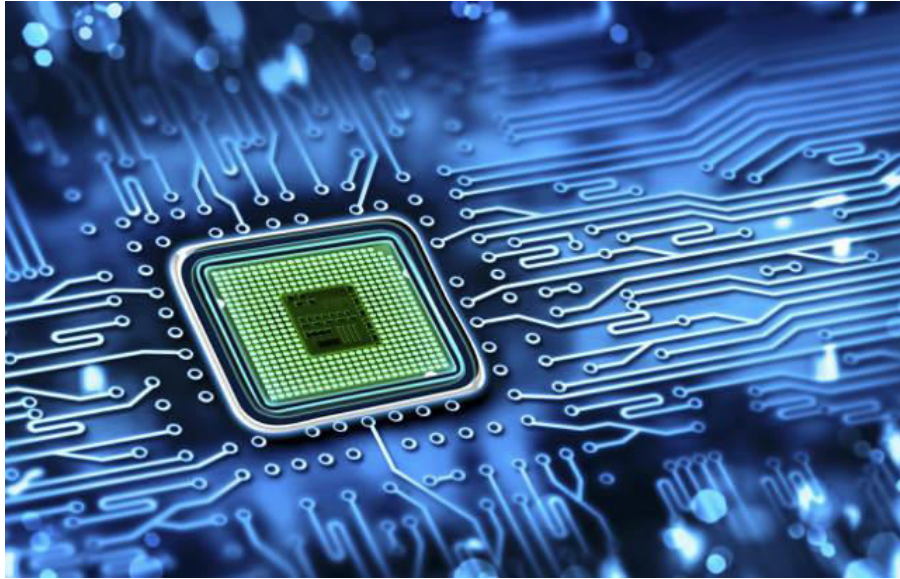
Below are some of the areas of application:

Automation & Process Control: *Automation and process control are generally used for the display and Process control systems.*



Agro-Applications: *Agro-instruments like fertilizer testing kit, soil and grain moisture indication instruments, soil nutrient measuring instruments, rice polish measurement system. Under Microprocessor Application programming, various infrastructural sectors like water treatment, irrigation and road were addressed.*

Microelectronics: *To improve the yield of semiconductor devices with manufacturing technologies semiconductor devices has been developed. Other important results of R&D efforts in this area are development of Optical fiber, nanotechnology, optical communications, optical receiver module etc.*



Power Electronics: Hardware and software for state-of-the-art Digital Control and Protection System have been indigenously developed. In addition, lightning protection unit, ATE for UPS also have been designed and developed.

Other Applications:

- Online Railway Reservation and online Freight Operation Information System
- Biometrics system i.e. Finger Print Identification System
- On-line retail banking system

Electronics and Communication **have** crawled down in human life in the era of computers revolution. It is now an everyday part of human life, from your pocket FM radio to televisions, computers, mobile phones and even the high-end satellites.

This was just an overview on Electronics & Communication, but after going through this you all will have quite an in-depth knowledge of what an **Electronics & Communication Engineering** does and the way it treats the path in the near future.

Today's world is coming up with new technological researches every day. The initiative of new developments is taken by the engineers turned scientists. In depth knowledge is required for such tasks and this further divides EC into various sub fields.

There is huge demand of competent and bright engineers in the field of electronics to cope this demand in technology. An electronic engineer can find a job in Consumer electronics manufacturing, Telecommunication & IT industries, Health care equipment manufacturing, Mobile communication, Internet technologies, Power Electronics, and other industries like steel, petroleum and chemical industry, directing control and testing production process etc.

There is another field in India emerging very fast; Biomedical instrumentation, in this you have to work with computers and electronic equipment in the medical, manufacturing, industrial control, telecommunications, aeronautical and military fields. EC Engineers also have several job openings & good pay-packages as compared to other branches.

As there is demand in market for Electronics engineers, it is the responsibility of our institute to promote students to do research and excel in this field.