# **IJARSCT**



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 4, March 2025

# Trending Business in Field of Electronics and Telecommunication Engineering

Mayur Rajendra Ahire, Ujwal Sunil Mandhan, Om Lalchand Vishwakarma, Gaurav Jadhav Guru Gobind Singh Polytechnic, Nashik, Maharashtra, India

**Abstract:** There are various fields which have business trending, among those fields electronics and telecommunication engineering field have a promising future. The electronics industry includes producing electronic equipment and components. Some popular goods you can see daily are smartphones, televisions, CCTV, etc. Those could be developed by basic electronic components such as microprocessors, microcontroller, sensors etc. Currently, businesses that are related to electronics offer great potential, especially after the COVID-19 pandemic. The rapid development of this sector is due to the high demand for computing devices and peripherals in emerging market economies.

By taking advantage of this opportunity, many electronics businesses are launching in the rising wave of the global electronics industry. With the popularity of online shopping, many online start-ups were established and had many successes. According to Region And Segment Forecasts, the global e-commerce electronics market's value was USD 641.2 billion in 2021. However, before launching, it is necessary to carefully choose the most suitable electronic business ideas, which will be covered in this paper.

**Keywords:** business trending

# I. INTRODUCTION

There are various start-up ideas/opportunities in electronic and tele-communication field. Here are some potential entrepreneurship and start-up opportunities in Central India:[1]

# 1. Internet Of Things (IoT) Solutions

IoT is rapidly gaining popularity, and Central India has a vast market potential for IoT solutions. Entrepreneurs can focus on creating innovative IoT devices and software solutions for smart homes, healthcare, and agriculture.

## 2. Telecommunications

The telecommunications sector in Central India is booming, and there is a growing demand for new technologies and services. Entrepreneurs can explore opportunities to develop new telecom equipment and software solutions or provide value-added services to telecom operators.

## 3. Embedded Systems

With the rise of automation and IoT, there is a growing demand for embedded systems, which are at the heart of many modern devices. Entrepreneurs can focus on developing innovative embedded systems for a wide range of applications, including industrial automation, transportation, and healthcare.

#### 4. Electronic Product Design

There is a growing demand for electronic product design services in Central India, and entrepreneurs can tap into this market by offering services such as PCB design, firmware development, and testing and validation.

#### 5. E-Commerce

The e-commerce sector in Central India is growing rapidly, and there is a huge demand for electronic products and components. Entrepreneurs can focus on creating an online marketplace for electronic products or offer e-commerce services to existing retailers in the region.

Scope in The field: Electronics and Communication Engineering (ECE) is a field that deals with the design, development, and application of electronic devices, circuits, communication systems, and software. The scope of ECE is vast and expanding as technology continues to advance rapidly. Here are some of the areas where Electronics and Communication Engineering plays a crucial role, and similarly, you can find the best colleges in mp for ECE.:[1.2]

DOI: 10.48175/IJARSCT-24045

ISSN 2581-9429 IJARSCT

# **IJARSCT**



#### International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Impact Factor: 7.67

Volume 5, Issue 4, March 2025

#### 1. Telecommunications

The telecommunications industry is a significant consumer of ECE professionals. ECE graduates can work on developing new communication technologies, such as 5G and beyond, satellite communication, and wireless networks.

# 2. Electronic Design And Manufacturing

ECE professionals can work in the design and manufacturing of electronic devices, such as microprocessors, microcontrollers, sensors, and other electronic components. They can work on developing new designs, testing prototypes, and optimizing manufacturing processes.

## 3. Computer Engineering

ECE graduates can work on developing and designing computer hardware and software systems. They can work on developing new processors, memory systems, input/output devices, and software applications. The best colleges in MP for ECE include the reputed Bansal Institute.

## 4. Embedded Systems

Embedded systems are electronic systems that are integrated into other products or systems to perform specific tasks. ECE professionals can work on developing embedded systems for a variety of applications, including consumer electronics, transportation, healthcare, and industrial automation for which you can find the best colleges in mp for ECE.[3]

#### 5. Research And Development

ECE professionals can work on conducting research and development in a wide range of areas, such as nanotechnology, robotics, artificial intelligence, and quantum computing.

#### 6. Entrepreneurship

ECE professionals can start their own businesses and develop new technologies or products. They can create start-ups in areas such as IoT, robotics, automation, and telecommunications.

In summary, Electronics and Communication Engineering offers a broad range of opportunities for professionals, including research and development, design and manufacturing, telecommunications, computer engineering, embedded systems, and entrepreneurship. To excel in this field, you can find the best colleges in mp for ECE. The scope of ECE is ever-expanding, and with the rapid pace of technological advancement, there is a continuous need for ECE professionals.[2]

Central India has a potential ECE start-up environment. Innovation and development are abundant in the area due to its increasing economy, infrastructure, and young population. ECE specialists may create businesses in IoT, telecommunications, embedded systems, electronic product design, and e-commerce. You can find the best colleges in mp for ECE. ECE covers telecommunications, electronic design and manufacturing, computer engineering, embedded systems, research and development, and entrepreneurship. ECE specialists are needed due to fast technological innovation.

#### Various electronics business ideas-

- a) Mobile Repair- mobile repair can be a perfect business idea in this field if you focus on repairing mobile devices. In addition, you can also offer additional services such
- as software download, upgrades, backup data, etc.
- b) Battery Manufacturing- According to statistics, the world battery market is about to grow with a rate of 16.03% expected from 2023 to 2032. Based on the numbers provided by research, battery manufacturing could be one of the most profitable electrical business ideas in the next ten years.
- c) Computer repair and maintenance- According to market study global increase in electronic repair and maintenance will increase by 3.6% to year 2031.
- d) E-waste recycling- According to research every year about 50 to 60 million tons of e-waste is generated via old computers, printers, TVs, chips, mobiles, old clocks, batteries, electronic equipment etc. Thus e-wate recycling could be a promising field for new start-up business.
- e) Online electronic store- Via online electronic equipment business customer can purchase products whenever and wherever they want. This new business idea can access broad customers without limitations

Copyright to IJARSCT www.ijarsct.co.in

DOI: 10.48175/IJARSCT-24045

# **IJARSCT**



#### International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Impact Factor: 7.67

#### Volume 5, Issue 4, March 2025

- f) Inverter manufacturing- This business idea will lead to future demand of wide variety of machines maintenance departments.
- g) Security system installation business- Security problems can be identified by using cameras and security devices, especially CCTV cameras.
- h) Solar installation business- The fast growth in solar power industries and government's positive environmental impact ideas leads to this start-up business idea.
- i) Electronic component retailer- A store business of distributors, sells electronic components etc.
- j) LED manufacturing- According to recent research the LED lighting market would grow by 11% over upcoming years.

Along with all such ideas computer and device training services, computer assembly business, air compressor manufacturing, low cost chip manufacturing, chip designing, robotics, embedded systems, electronic panel manufacturing etc are few business ideas.

#### II. CONCLUSION

In conclusion with above content, we have covered almost all fields related to electronics and tele-communication engineering trending business ideas. We hope our research will provide new ideas of start-up and help upcoming entrepreneurs.

#### REFERENCES

- [1] Madhavendra Richharia Mobile Satellite communications Principles and Trends Book.
- [2] Sandesh Achar, Kumar Vijayendra, Sanwal Hussain, Aditya Kejriwal and Anurag Kejriwal Journal of Engineering Research and Reports Volume 23, Issue 12, Page 328-338, 2022
- [3] Saida Zainurossalamia ZA, Ishan Tricahyadinata, Robiansyah Robiansyah, Dio Caisar Darma, Gusti Noorlitaria Achmad Budapest International Research and Critics Institute Journal Robiansyah volume 4, No 3, August 2021, Page 3836-3842

DOI: 10.48175/IJARSCT-24045

