

MINOR DEGREE - INDUSTRIAL AUTOMATION

Admissions Open 2022-23



About the Institution

- Accredited with "A+" Grade by NAAC
- QS I-Gauge Diamond Rating for Teaching Quality and Employability
- Fourth in India to be awarded 4 stars by QS World Top University Rankings
- Awarded All India 5 Rank under Swachh Campus Ranking 2019 by AICTE
- All the Engineering, Architecture and Design Programmes are accredited by NBA
- Scholarship & Fee concession for deserving candidates
- Best in class Infrastructure, Cafeteria & Sports Facilities



About the Department

- Accredited by NBA
- Sophisticated Industry standard Equipment
- Interaction with Industries to promote Research & Development
- Excellent Placement Record
- Department has a Industry standard Calibration Centre
- Affiliate faculty from Foreign Universities and Industries
- Programmes offered - B.Tech. Electronics & Instrumentation Engineering, & Minor degree in Industrial Automation



About the Programme

What is Industrial Automation?

Industrial automation is the use of control systems, such as computers or robots, and information technologies for handling different processes and machineries in an industry to replace a human being.

Why Industrial Automation?

1st Industrial Revolution

The First Industrial Revolution began in the 18th century through the use of steam power and mechanization of production. What before produced threads on simple spinning wheels, the mechanized version achieved eight times the volume in the same time. Steam power was already known. The use of it for industrial purposes was the greatest breakthrough for increasing human productivity.

2nd Industrial Revolution

The Second Industrial Revolution began in the 19th century through the discovery of electricity and assembly line production. Henry Ford (1863-1947) took the idea of mass production from a slaughterhouse in Chicago that used to hung animals from conveyor belts and each butcher performed only a part of the task of butchering the animal. Henry Ford carried over these principles into automobile production and drastically altered it in the process. While before one station assembled an entire automobile, now the vehicles were produced in partial steps on the conveyor belt - significantly faster and at lower cost.

3rd Industrial Revolution

The Third Industrial Revolution began in the 20th century through partial automation using memory-programmable controls and computers. Since the introduction of these technologies, we are now able to automate an entire production process - without human assistance. Known examples of this are robots that perform programmed sequences without human intervention.

4th Industrial Revolution (Industrial Automation)

We are currently implementing the Fourth Industrial Revolution. This is characterized by the application of information and communication technologies to industry and is also known as "Industry 4.0". Industry 4.0 has the potential to deliver some incredible advances in factory environments. Examples include machines which can predict failures and trigger maintenance processes autonomously or self-organized logistics which react to unexpected changes in production.

In short, Industry 4.0 is a game-changer, across industrial settings. The way that goods are made and distributed, and how products are serviced and refined. On that basis, it can truly lay claim to represent the beginning of the fourth industrial revolution.



Programme Contents

- Sensors and Transducers
- Control System
- PLC and SCADA
- DCS and Computer Networks
- Piping and Plant Engineering
- Mini Project

Eligibility

Students admitted from 2020 in the following B.Tech. programmes

- Computer Science & Engineering
- Computer Science & Engineering (Artificial Intelligence and Data Science)
- Computer Science & Engineering. (Cyber Security)
- Computer Science & Engineering (IoT)
- Electronics & Communication Engineering
- Information and Technology
- Mechanical Engineering
- Aeronautical Engineering
- Automobile Engineering
- Polymer Engineering
- Civil Engineering
- Biotechnology

Career Opportunities

The Industrial sectors include

- Steel Plant
- Cement manufacturing companies
- Thermal and Nuclear Power Plant
- Oil & Natural Gas Industry
- Food processing Industry
- Automobile & Pharmaceutical Industry

For Admissions Contact:

Head of the Department
Dept. of Electronics & Instrumentation Engineering
Email id: hodeie@crescent.education
Mobile: +91 9444774486, +91-44-22759239
www.crescent.education