

Course: EE02000

AUTOMATION and ELECTRONICS TECHNICIAN



Course duration
750 hours

Course Modules

EE01010
Introduction to
Electrical Engineering

EE01020
Introduction to
Electrical Machines

EE02010
Electronics Essentials

EE02020
Digital Electronics

EE03010
Control Systems
and Automation

EE03020
Programmable Logic
Controllers (PLC)

GE01010
General Engineering
Knowledge

EE01040
Safety at Work
with Electricity

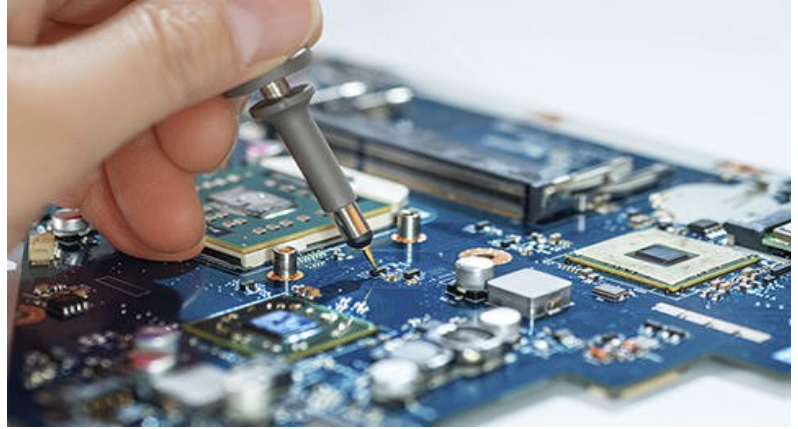
Why is a profession in Automation and Electronics fantastic ?

Automation is a field of technology and science that appeared relatively recently, in the 20th century. Automation deals with the issues of controlling various processes, where human participation is limited to the maximum. In recent years, it has had a huge impact on areas such as industry, automotive, medicine and many more. Automation is more and more common in everyday life and in human work, thanks to which a device and machine have been invented. Simply, to make life easier (eg car wash) to speed up production processes in industry or for greater accuracy in medicine. Examples could be multiplied. Today it is hard to imagine a production hall without machines with fast moving production lines. Automation Technicians deal with the fact that such machines work without any problems. They design control systems for machines to be designed for specific purposes.





Electronics applications are used everywhere in everyday life in our modern world. We have many electronic devices in our homes, at work places, and in every walk of life. So as you can see life without electronics will be very hard nowadays.



Why is an Automation and Electronics Technician a good profession ?



Automation and robotics are the directions of development of production and manufacturing processes, which are the natural direction of change. These are relatively young, with great potential for development and are very popular among those applying to technical schools.

A graduate of the Automation Technician Course is prepared to perform tasks such as assembly, commissioning, operation, inspection and diagnostics of automation equipment and installations, such as:

- assembly of control systems for devices and electrical machines
- design and modernization of systems for automation of technological processes
- assembly of control systems installation
- programming and operating industrial controllers and numerical machines
- supports and programming modern smart home systems
- locating and removing faults in installations and automation systems
- controlling the operation of devices through operating panels and mobile devices

WE CREATE YOUR FUTURE



What are your opportunities as an Automation Technician on job market ?

After completing the Automation Technician course, the graduate will have knowledge in the field of automation, pneumatics and hydraulics, knowledge of machines and devices, the ability to analyze production processes in order to choose methods of process automation, technical knowledge in the field of machine operation, as well as control systems or maintenance issues movement. It will also be prepared

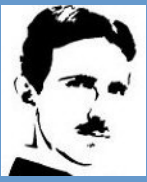


to participate in testing prototypes, for assembly and installation of new or modified devices and automation systems, troubleshooting and determining their causes and carrying out repairs in accordance with specific standards and technical documentation.

Currently, almost all branches of industry are strictly automated, so the Automation Technician should not have much trouble finding a job. Automation technicians perfectly find themselves in the corresponding technological and design departments. They are usually production and service companies that use solutions in the field of automation and industrial robotics on the production and assembly lines, or dealing with its comprehensive design, production, commissioning and servicing.



As **Electronics Technician** you can work in aerospace, automotive, energy, IT and telecommunications are just some of the many sectors you can work in with a degree electronic engineering. As an electronics specialist, you can find a job in many places. You can work as maintenance staff. You can design and install electronics systems. You can work in electronics service, repair damaged equipment and swap on new ones, etc.



What yet ?

In TESLA INSTITUTE school model, we focus more on practical knowledge and usable skills in future work. We base on the best experience from German's industry and German's service companies.

We can give you maximum knowledge and more skills in shorter time in comparison to regular and formal colleges.

We will teach you the most basic knowledge, what you really need to be able to do the best work, besides we will teach you the latest knowledge from German



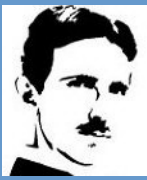
industry. You will acquire knowledge, skills and feel more comfortable working in the international environment. We guarantee that your course of studying and practising will be extremely practical and useful for you. We help you to fulfill your dreams and passions. Help you open the big door for the future of your life. You will be able to study in your own country at a reasonable cost (only 1/25 if you have to go to Germany).

In your country but you will learn and work with a teacher with the expert experience that you really have to respect. Formerly managing Bosch's advanced auto system; Siemens; Teaching German and Finnish technical colleges.

With less expensive tuition fees than your extra classes in Maths and Literature in your local school yet, you will have access to advanced science and extremely practical to help you stand on your own feet.

We look forward to helping you with your dream. Let us build and develop your knowledge !

WE WILL SAVE YOUR TIME AND MONEY !



How we teach ?

- ✓ Necessary theory lectures
- ✓ Educational videos
- ✓ Practical exercises
- ✓ Experiments in a Virtual Laboratory
- ✓ Actual circuits in Laboratory
- ✓ Actual projects



Specialized laboratories are one of the most important parts in the teaching process of the Automation Technician profession - they enable the students of our school to gain practical knowledge and skills. Classes are held in small groups of classes, so that it allows students to get acquainted with the studied systems and measuring equipment at the disposal of the laboratory. For the profession of Automation Technician, our school has specialized laboratories.

Who is this course for ?

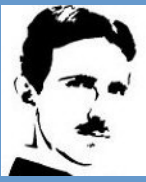
No matter who you are and how old you are. You can be a student of secondary school, high school, university or you can be already an employee, who thinks about a new better job. If you want to get a new profession or change the current one, this course is exactly for you. You do not need any special starting knowledge. We will teach all what you need in it.

But you have to know this course is not for all. You must be a person who likes the technique and is interested in it. You like and want to tinker. You always wanted to know how things work and how they are built. You can think logically and draw correct conclusions. Mathematics and physics did not scare you at school. You like to solve technical problems. If you think that you meet the criteria above, **this course is for you.**

Professional predispositions

The candidate for the profession Automation Technician should have a technical and constructive sense, the ability of abstract thinking, the ability to do science, such as mathematics and physics, good memory. Accuracy and regularity are necessary. Automation Technician must also keep up to date with technical innovations.

Automation Technician should be characterized by meticulousness, patience, ingenuity, creativity. These features are very useful, for example in the creation of machine designs or in the preparation of design concepts.



Check whether this profession is for you

Answer the following questions:



- ✓ Do you like science subjects such as physics and mathematics ?
- ✓ Is the accuracy of your strong point ?
- ✓ Do you like working alone ?
- ✓ Are you an ingenious person ?
- ✓ Are you characterized by perseverance in finding solutions to problems ?
- ✓ Do you like to follow the instructions ?
- ✓ Are you interested in the technique ?
- ✓ Do you like to tinker ?
- ✓ Would you like to work with modern machines and devices ?
- ✓ Is design work, coming up with something new interesting for you ?

Calculation of results

You receive 1 point for each YES answer. Count your points and find out if this is the profession for you.

Scoring 7-10

Your predisposition indicates that this is a profession that you can take into account in your choices.

Scoring 6-4

You can consider this choice, but think about it - there may be professions better suited to your abilities and predispositions.

Scoring 3-0

Work on your skills or talk with a career counselor about which job you would feel best at.

TAKE YOUR NEW FUTURE NOW !