IMT School (I Make Technology School) is not a place where you can take some courses; it is a place in which you practice technology. We believe that listening to someone speaking about something is not a good way of learning, so, “Do it yourself” is our way. Our learning methodology totally depends on hands on labs that transfers the knowledge you get from being just information to be an experience. Our staffs are engineers from leading companies in the same field. In other words, if you want to go Professional, IMT School is your destination! Let’s meet the experts, let’s practice technology.

Contact us

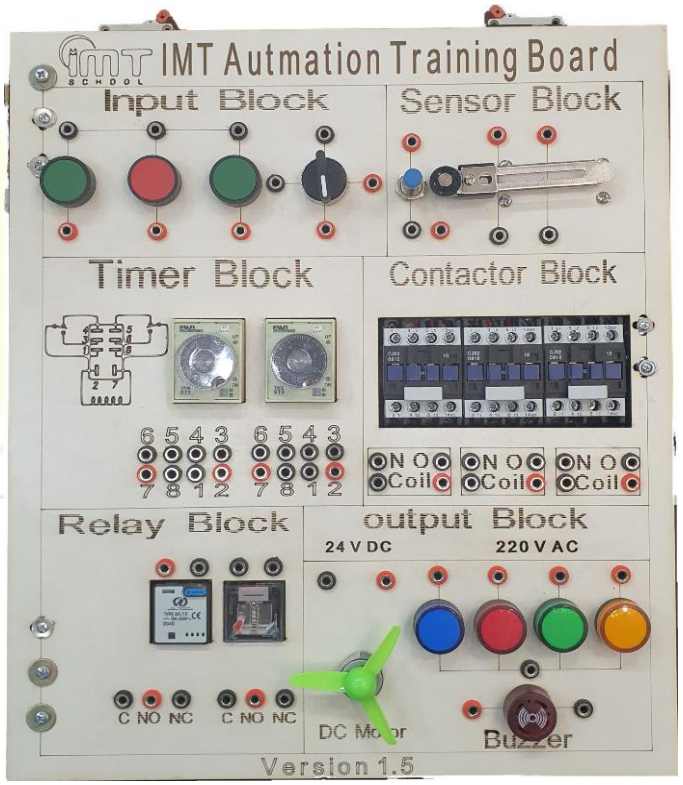
Mob: *+20 101 998 6337*

Facebook: *imaketechnologyschool*

Website: www.imtschool.com

Automation Systems Diplom

IMT is offering professional Automation Systems diploma. The automation industry is one of the leading industries in Egypt. Many international and national companies are working in this field nowadays.



In this course, we will learn about the challenges and limitations of the automation systems. We will dig into the basic electrical concepts, PLC programming and motor driving. We will also explore the different sensors and protection circuits that must exist in most of the automation systems.

Our instructors have a wide experience in this field. They are already working in multinational companies in this field and they also have a wide experience in teaching. The most amazing part in this course is the practical part. Each student would get a kit includes many components such as Timers, Relays, DC Motor, Lamps, Power supply, Selectors, and much more. They will also have an access to a modern lab that includes PLC, 3 Phase motors, inverters and much more. This lab exists in our branch in Dokki and the students can access it remotely from any place in the world.

.

Course 1

Introduction to Electrical Systems – 8 hours

Lectures	Outline	Hours
Lecture 1	• Fundamentals Of Electricity • Distribution Of Electricity • Circuits • Power Generations	4 hours
Lecture 2	• ATS • Phase sequence protection • Over under voltage protection • Power factor correction	4 hours

Course 2

Classic Control – 24 hours

Lectures	Outline	Hours
Lecture 1	• Switches types • Short Circuit Protection • Over Load Protection • Contactors	4 hours
Lab 1	• Kit Training	4 hours
Lecture 2	• Solid State Relays • Start Stop 3 Phase Induction Motor • Reverse Direction Motors • Timers	4 hours
Lab 2	• Kit Training	4 hours
Lecture 3	• Starting Methods of 3 Phase Induction • Reverse Direction of Single Phase Motor • DC motor	4 hours
Lab 3	• Kit Training	4 hours

Course 3

Autocad Electrical & Panel Design – 8 hours

Lectures	Outline	Hours
Lecture 1	• Reading a schematic and understanding symbols • Basics of control panel design • Designing a layout • Exploring AutoCAD user interface	4 hours
Lecture 2	• Manage files and the projects • Tools and commands in AutoCAD electrical • Use PLC symbols in AutoCAD electrical	4 hours

Course 4

PLC Basics – 20 Hours

Lectures	Outline	Hours
Lecture 1	• Introduction to PLC • Selection of PLC • Connection of PLC • Ladder programming language	4 hours
Lab 1	• Ladder programming language • Using logixpro software • Examples of programs	4 hours
Lecture 2	• Timers and counters in PLC • Introduction for TIA software 10 • function block programminng language	4 hours
Lab 2	• PLC applications)	4 hours
Lecture 3	• Hardware of PLC • Different versions of Siemens ,Schneider, Delta, • Allen Bradley and LG PLCs • Introduction for safety instrumented system (SIS) • Fail safe concept	4 hours

Course 5

Sensors – Pneumatic - Hydraulic Systems – 12 Hours

Lectures	Outline	Hours
Lecture 1	• Connection sensor to PLC • Types of proximity sensors • Types of level sensor • Different types of limit switches	4 hours
Lecture 2	• Compressors & Pumps • Types of cylinders • Types of directional valves • Proportional valves • How to connect between PLC and pneumatic circuit	4 hours
Lab 1	• PLC Applications	4 hours

Course 5

Drives – 8 Hours

Lectures	Outline	Hours
Lecture 1	• Synchronous Motor • 3 Phase induction Motor • Motor drive selection • Connection of 3 Phase motor drive • Operational panel of motor drive • Frequency reference selection • Stopping methods	4 hours
Lecture 2	• ACC and Dec time • Dc injection • Torque compensation • V/f Curve • Digital inputs • Multi speed • Digital out • troubleshooting	4 hours

Course 6

Final Project – 20 Hours

Students would select between different systems to implement as a final project in our lab.