become a
Mechatronics Technician

Mechatronics

Vietnamese - German Development Cooperation in TVET
Mechatronics has become a key to many different products and processes. Modern systems have reached a level of sophistication, which would have been hard to imagine using traditional methods. Mechatronics integrates the classical fields of mechanical engineering, electrical engineering and computer engineering known as information technology.

Mechatronics Technicians are engaged in the assembly and maintenance of complex machines, plant and systems in the mechanical engineering sector or in organizations which purchase and operate such mechatronic systems.

Mechatronics Technicians carry out their work at various places, mainly at plant assembly sites, in workshops and in connection with service operations. They are qualified to work autonomously on the basis of technical documents and instructions and carry out their work in compliance with the relevant provisions and safety regulations. They often work in teams. They coordinate their activities with upstream and downstream operations.

Under the provisions of the Prevention of Accidents Regulations, Mechatronics Technicians are deemed to be specialists in the electrical and electronic engineering field.

Tasks and activities:

• plan and control work processes, monitor and evaluate the results and apply quality management systems;
• process mechanical parts and assemble sub-assemblies and components into mechatronic systems;
• install electrical sub-assemblies and components;
• measure and test electrical values;
• install and test hardware and software components;
• install and test electrical, pneumatic and hydraulic control systems;
• install and test mechatronic communication networks and bus systems;
• program mechatronic systems;
• assemble, dismantle, secure and transport machinery, systems and plant;
• set up, test and adjust the functioning of mechatronic systems;
• commission and operate mechatronic systems;
• maintain and repair mechatronic systems.
• deliver mechatronic systems to clients and provide instruction for their operation;