

Branch: Computerised mechanical production occupations



Code: COMEPO

Option: Computerised mechanical production occupations

Level : BEP

Prerequisites: BEPC and/or CAP

Opportunities :

In industry, in all types of companies manufacturing mechanical parts (automotive industry, aeronautics, machine tool manufacturers). However, the BEP does not generally give direct access to the job market and it is strongly recommended that you continue your studies.

Description

To manufacture mechanical parts (engine piston, pulley, cardan shaft, etc.) or small tools (moulds, cutting tools) by machining. Machining means shaping a part by removing chips, by moulding, using machine tools which may be manually operated, numerically controlled or integrated into automated systems. These parts are used in a variety of mechanisms, such as hydraulic lifting systems, vehicle engines, medical or surgical devices, etc.

By transforming blocks of raw or moulded materials (steel, aluminium alloys, brass, plastics). This transformation can be done using a milling machine to obtain a flat surface or a combination of surfaces (milling operation) or a lathe to

shape cylindrical, conical or spherical parts by giving them a rotating movement. To set up and control machining and measuring equipment, whether tools or numerically controlled machines.

Quality and competences :

The students who are destined for this BEP do not have to show dexterity as such, but method and care in carrying out the work. They show curiosity about the mechanisms and machines they have had the opportunity to encounter. In mathematics, it is desirable that the pupil has a good understanding of the units of measurement, that he/she masters the four operations, that he/she knows how to appreciate the plausibility of a result, that he/she is not put off by geometry. They must be able to move from a two-dimensional representation to a spatial representation.

This training makes extensive use of computer tools in the manufacturing process of mechanical parts. Numerically controlled machine tools (e.g. robots) are increasingly replacing manually controlled machines, which considerably improves the efficiency and comfort of the mechanic's work.