

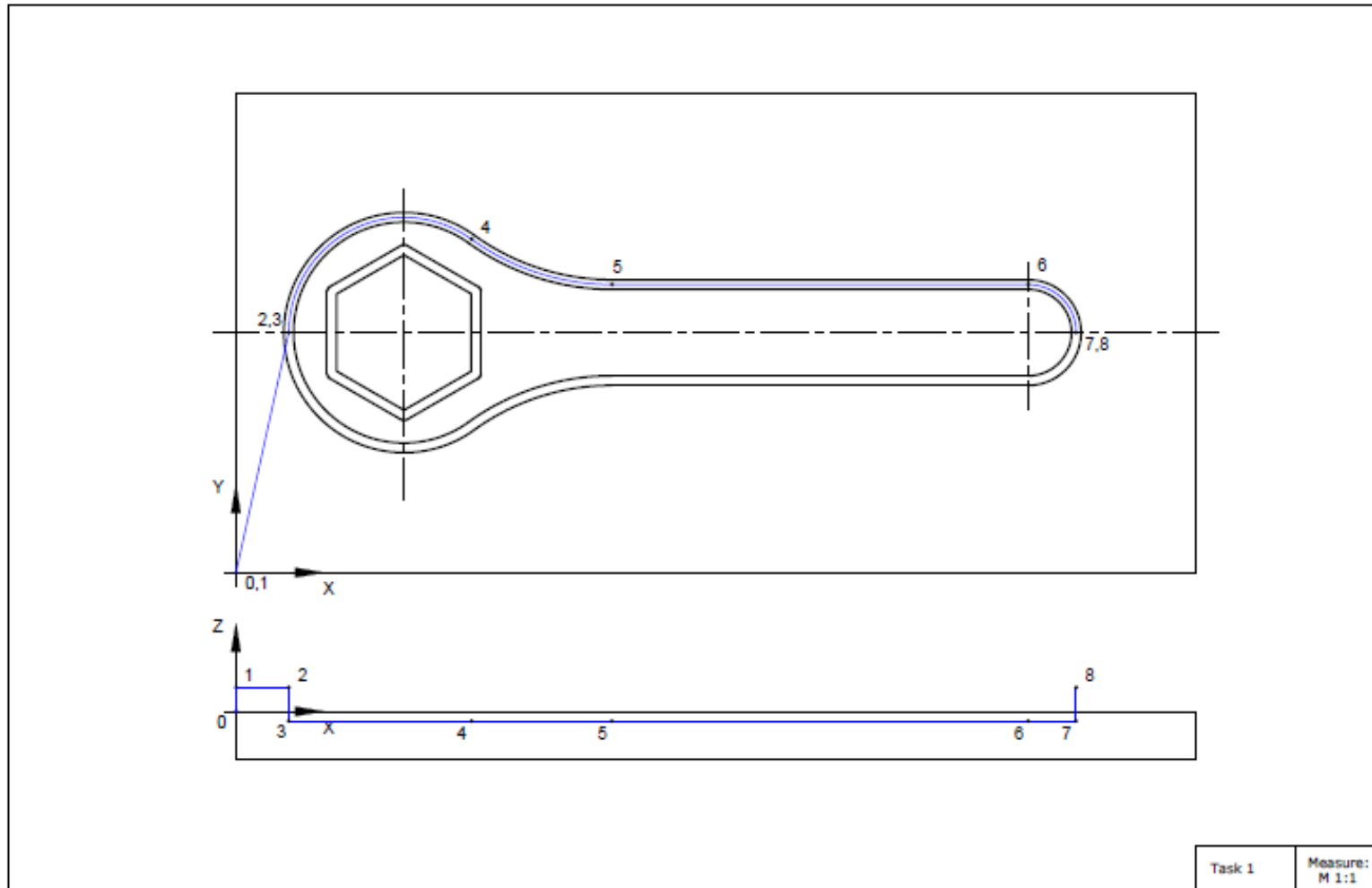
Field of education:  
**Mechanical engineering**

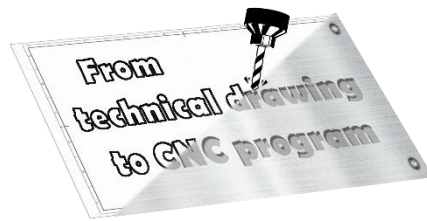
Professional qualification:  
**CNC operator**

Exercise:  
**Programming of CNC machine  
(solution)**

Variant:  
Task 4 – Wrench 2.1.

Solution:





**Required written code that should be inserted into the control unit:**

G1 Z5  
G0 X11 Y50  
G1 Z-2  
G2 X49,047 Y69,459 R24  
G3 X78,313 Y60 R50  
G1 X165  
G2 X175 Y50 R10  
G1 Z5  
M30

**Explanation of the G-code:**

% Setting the coordinate system  $x=0$ ,  $y=0$ ,  $z=0$ ; point 0  
G1 Z5 %Lifting of tool; point 1  
G0 X11 Y50 %Positioning at the starting point; point 2  
G1 Z-2 %Tool entry into material; point 3  
G2 X49,047 Y69,459 R24 %Radial milling; point 4  
G3 X78,313 Y60 R50 %Radial milling; point 5  
G1 X165 %Straight milling; point 6  
G2 X175 Y50 R10 %Radial milling; point 7  
G1 Z5 %Lifting of tool; point 8  
M30 %End of program