



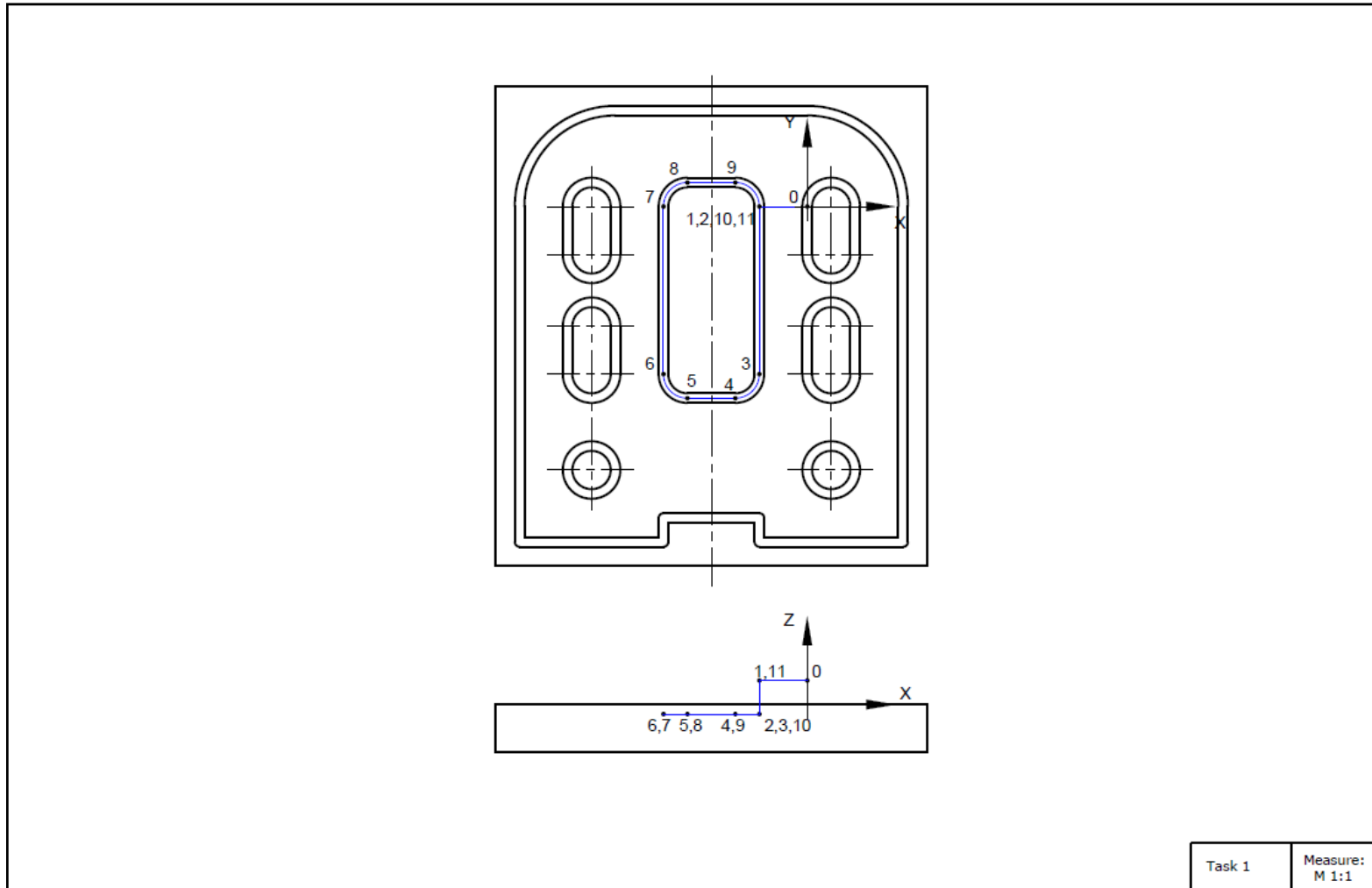
Field of education:
Mechanical engineering

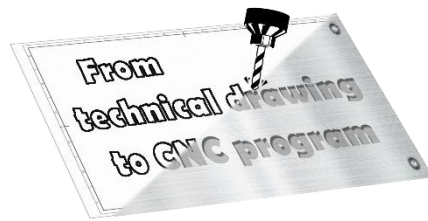
Professional qualification:
CNC operator

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

Variant:
Task 36 – Support plate 5.6.

Solution:





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

G0 X-10
G1 Z-2
Y-35
G2 X-15 Y-40 R5
G1 X-25
G3 X-30 Y-35 R5
G1 Y0
G3 X-25 Y5 R5
G1 X-15
G3 X-10 Y0 R5
G1 Z5
M30

Explanation of the G-code:

%Setting the coordinate system x=0, y=0, z=5 point 0
G0 X-10 %Positioning at the starting point; point 1
G1 Z-2 %Tool entry into material; point 2
Y-35 %Straight milling; point 3
G2 X-15 Y-40 R5 %Radial milling; point 4
G1 X-25 %Straight milling; point 5
G3 X-30 Y-35 R5 %Radial milling; point 6
G1 Y0 %Straight milling; point 7
G3 X-25 Y5 R5 %Radial milling; point 8
G1 X-15 %Straight milling; point 9
G3 X-10 Y0 R5 %Radial milling; point 10
G1 Z5 %Lifting of tool; point 11
M30 %End of program