(cf. RNCIS: http://www.rncis.ro/portal/page?_pageid=117,70218&_dad=portal&_schema=PORTAL)

Title and name of qualification

Graduation title	Engineer				
Name of qualification	**Robotics**	Qualification code	**L20703025020**	Contact person	Contact ACPART - ACPART

Identification elements related to qualification

Education level:	Bachelor Studies
Fundamental domain of study:	Engineering sciences
Branch of science:	Mechanical engineering, mechatronics, indutrial engineering and management
Domain-based ranking:	Mechatronics and robotics
Domain of study:	Mechatronics and robotics
Study programme:	Robotics
Total number of credits:	240
Length of study:	4 years
Prerequisites:	
Details:	

Summary of qualification

Professional competences:

Aplying the general technical culture and speciality fundamental knowledge for solving technical problems that are particular to the Mechatronics and Robotics field

Developing and using schematics, structural and functional diagrams, graphical representations and specific technical documents for the Mechatronics and Robotics field

Execution of local automation applications in mechatronics and robotics using components and partially standard and non-standard assemblies and also CAD resources

Design and execution of partial assemblies for robotics by medium level 2D and 3D aided design, components dimensioning and verifying, selecting and verifying the actuating systems and integrating the required sensors and transducers

Design and execution of the general assembly for Industrial Robots (IR), "perirobotic" systems (PRS), transport feeding systems, transfer (TFST) and conex systems (CS) used in robotic applications, implementing 3D aided modelling and IR, PRS, TFST, CS functional modelling, in specific applications for execution of various technological processes

3D aided synthesis of a general assembly for robotic industrial applications particular to various technological processes, programming and individual control of industrial robots (via teaching), behaviour modelling through finite element (MEF) of mechanical structures (beginner level) and application of the CAD-CAM and 3D rapid prototyping techniques (beginner level)

Cross- disciplinary competences:

Acomplishing of the professional tasks with exact identification of the achievable objectives, available resources, final conditions, work stages, work time and respective execution times

Responsible execution of pluridisciplinary team tasks by asuming roles at different hierarchical levels

Identifying the need for continuous improvement and efficient use of the informational sources and of the communication resources and assisted professional development (internet portals, specialized software applications, data bases, on-line courses etc.) both in Romanian language and an international language