

Guidelines for the development of new teachers' modules

1. Take the core work processes of your case/project that you can use for development of modules for students. Prepare the list of these work processes by following the logics and sequence of their execution, as well as the progression of complexity (from simple to more complex).
2. For each of the work processes describe the work and learning tasks¹ (e.g., designing, assembling, testing) by indicating the following information:

The title of the task			
Content of the task: What should be done by the student in accomplishing the task?			
What competences, related to the Industry 4.0 in mechatronics and electronics are developed by executing this task? ²	→ This information is important for understanding the meaning and relevance of chosen work and learning task.		
The criteria of competent performance of student in executing task.			
What kind of theoretical knowledge and information is needed for the execution of task? What are the possible resources of such information and how to access them?			
What are the specific requirements for organisation of the work of students in executing the task (e.g., individual work or teamworking, time management requirements, sequence of execution, etc.)?			
What kind of pedagogical support could be provided to the students by the teacher /trainer? At which particular moments / fields of task execution such support can be needed?			
The competences of teacher/trainer needed for the training and learning processes in executing the	Professional-subject related competences (professional	Didactic-methodical competences needed for the execution of the supervision of work and	Transversal and key competencies

¹ 1 process = 1 task

² The VET4.0 competence matrix for mechatronics and electronics can be used as a reference for identifying these competences (see IO1 Competences Profile).

task. What teacher/trainer should be able to do in working on this task together with students? ³	knowledge and skills from the fields of mechatronics and electronics).	learning and provision of pedagogical support to students.	
Methodical recommendations for teachers and trainers on working with the work and learning task. ⁴	How to guide and support the student in the application of the theoretical knowledge of the technological processes related to Industry 4.0 in executing this task?		
	How to foster and support the creative and inventive thinking skills and abilities of student in solving this task?		
	How to foster the reflective thinking of students and their abilities to reflect critically the work and technological process in executing this task?		
	How to support the development of autonomy of student in executing this task, as well as development of teamworking skills?		
	What are the possibilities of the variance (variability) of this task? Are there possibilities to introduce the changes in the execution of the task and it's requirements? If so, what kind of changes can be introduced?		

³ The competences can be identified by using the prepared competence profile for teachers and trainers as a reference. However, it should be taken into consideration that particular work and learning tasks may require the competences that are not listed in the profile

⁴ Provided questions are only for guidance in drafting the recommendations. It is not necessary to answer all provided questions. Only those questions that are the most relevant for the described work and learning task should be answered.