

BEM Micro-credential



BEM content (for all partners)	Title/name of the credential	Installer of lighting fixtures		
	Function of the micro-credentials / purpose	The purpose of the micro-credential program is to train participants to independently perform work on the selection, control and installation of lighting fixtures according to the design and technical documentation. Most often, he works in the field of installation works in construction, respecting the current regulations in the field of lighting fixtures.		
	Possible target groups	unemployed persons, persons who want to retrain		
	Branch/sector of application	electrical engineering, construction, industry, cultural institutions, sports		
	Fields of application / work environment	residential, business, industrial, public space, sports facilities		
	Typical work/professional tasks	installation of electric light sources according to the design and technical documentation		
	Learning outcomes (personal and job related)	<p><i>Knowledge</i></p> <ul style="list-style-type: none"> • lists measures of safety, health and protection at work and environmental protection • knows the basic terms and definitions of electrical installations • knows graphic symbols in electrical installations • knows the standards governing the area of electric lighting • knows basic photometric quantities • state the division of electric light sources • differentiate between old (traditional) light sources (with filament and with electric discharge) • list the ballast devices • describe the role of ballasts • explain the working principle of the LED light source • list the advantages and disadvantages of LED light sources • knows OLED lighting • list the component parts of the lamp • list the types of LED strips 	<p><i>Skills</i></p> <ul style="list-style-type: none"> • uses design and technical documentation for the installation of the lighting fixture • prepares the workplace, the necessary tools, devices, instruments and accessories for installing the lighting fixture • mounts the housing of the lighting fixture according to the design and technical documentation • mounts different profiles as well as covers of different materials for receiving LED strips according to the place of installation • mounts the LED strip within a specific profile • connects the power source and ballasts to the lighting source connection • controls the operation of the lighting fixture • replaces ballasts in case of their failure • Installs LED lighting panels, LED lighting chains and LED lighting fields • fills in the documentation, keeps records of the completed task according to 	<p><i>Competences</i></p> <ul style="list-style-type: none"> • application of design and technical documentation for the assembly of the lighting fixture • preparing the workplace for mounting the lighting fixture • selection and installation of a suitable lighting fixture • control and elimination of faulty lighting fixtures • application of regulations, standards and measures of safety, health and protection at work and environmental protection

		<ul style="list-style-type: none">describes the four basic white colors of the LED stripnames the basic components of the LED lighting stripknows basic manipulations when working with LED stripknows different profiles for LED strip acceptanceknows the components as well as ways to control the level and color of the LED strip lightsexplain LED lighting fields, LED lighting chains and LED lighting tilesexplain the power supply of the LED lighting panel in relation to the power supply of other LED lighting sourcesknows the basic criteria that will determine the application of other LED lighting sources in relation to LED strips	<p>the work order and prepares a report on the mounted lighting fixture</p> <ul style="list-style-type: none">applies and checks the application of rules and measures of safety and health at work as well as environmental protection before and during the installation of the lighting fixturereads and understands professional instructions from various catalogs of manufacturers of lighting fixtures	
	Validation	<p><i>Criteria</i></p> <ul style="list-style-type: none">reliability; (compliance of the assessment with established, public and precise assessment criteria);validity; (the evaluation shows the effects of learning - achievement of the results, engagement and progress of the students);variety of assessment methods:(selection of appropriate and applicationdifferent methods and techniquesevaluation to ensure validity, reliability andobjectivity of grades);assessment without discrimination and selection on any basis;	<p><i>Procedures</i></p> <ul style="list-style-type: none">formation of the exam roomcommissions;determining the list of tasks for the exam;extracting work tasks;competence check by creating assignments;examination records;awarding of certificates;	
	Recognised/accepted (documented by MoU)	Johnson Electric d.o.o. Nis, Serbia		
	Provider(s)	Vocational secondary schools Publicly recognized organizers of educational activities (JPOA)		
Additional information (if needed)	Entry level / prerequisites	NOKS level 1 - primary education and upbringing, primary adult education, primary ballet education and upbringing and primary music education and upbringing		
	Possible duration (recommendation)	120		
Specific content (national) (if needed)	Position in the chain of educational programmes	Informal training		
	Reference to NQF	3rd level of NOKS; 3rd level EOK		
	Credits	5		