Module title: **Parts of Fiber Optics and Cabling**

Level: Intermediate EQF 3

Duration: 4 weeks

Learning Goals:

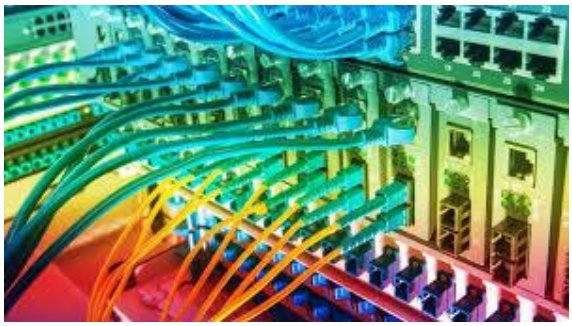
- The student will be introduced to fiber optics and cabling in theory and practice.
- The module is a variation of theoretical lesson and application of theory in the school and company workshops.
- International students will work alongside Latvian students.
- By the end of the module, the student is able to work with twisted pair and fiber optic cable, plan and construct a small office network.

Module elements:

- safety at work;
- tools and materials;
- techniques of designing a wire computer network;
- techniques of Installing a wire computer network.

Form:

- Week 1: Introduction to the module themes (twisted pair cable and fiber optic network)
- Weeks 2–4: Practical assignments on twisted pair cable and fiber optic network

Pre-module qualifications:	
• can speak and read English at level A2 (European reference); • knows basics of EN 50173-2 Information technology - Cabling installation-Part 2: Installation planning and practices inside building; • identifies cable categories; • knows the principles of fiber optics; • understands test results..	

Assessment:			
	Knowledge	Skills	Competence
	The student is able to: • using drawings and diagrams, is able to find out about the functioning of telecommunications devices; • independently, is capable of interpreting technical information; • is able to prepare written reports as requested and to present him-/herself in different media if needed.	The student can: • is able to carry out cabling and the installation of terminal devices on the basis of the documents given; • independently, is capable of carrying out the measurements of the cablings and of fixing any potential faults on the basis of the measurements; • independently, is capable of realising a LAN network using optical fibres and of determining the functionality of the installation by measurement; • independently, is able to install and take into use the alarm device and camera surveillance system of a small site.	The student can: • independently plans the assignments for which he/she is responsible; assesses the success of the work; • works independently according to the plan, or by modifying or applying the plan; • masters the work as a whole; is able to work independently and with high quality; • works independently, economically and briskly; • expresses him-/herself clearly; presents different viewpoints in a constructive way; • speaks fluently by using occupation related technical vocabulary; • ensures safety and reports on the dangers and risks observed.
Levels of assessment:	• Excellent. • Good. • Satisfactory. • To be developed.	• Excellent. • Good. • Satisfactory. • To be developed.	• Excellent. • Good. • Satisfactory. • To be developed.