

## **ALLEGATO E**

### **Profili professionali**

**Progetto:** *“Work Training on Web”*

#### **The Information and Telecommunications Technician**

- has specific competencies in the field of information systems, in processing information, in web applications and technologies, in networks and communications equipment;
- according to the plans of single schools, has competencies in the analysis, design, installation and running of information systems, databases, networks, multimedia systems and signal transmission equipment;
- has competencies in applications of service-oriented managerial software and dedicated "built-in" systems; (e.g. ARDUINO)
- uses his/her competencies in planning the activities of systems production, where he/she uses his/her interaction and communication skills, both oral and written;
- has B1/B2 (CEFR) level in general use of English language;
- has effective level of knowledge of specific technical English language in order to communicate in a professional environment; uses user's manuals
- has competencies in use of tools of individual productivity (e.g. MS-OFFICE / OPEN-OFFICE)
- has competencies in Web Design, Web Programming (PHP, MySQL, XAMPP ), Computer Programming (JAVA, C++, PYTHON) Computer Maintenances, Network Device Maintenances

**Progetto: “Electronics and Electrotechnology Upgrade”**

**The Electronic and Electrical technician:**

- has specific competencies in the field of materials and building technologies of electronic systems and electrical machines, in generating, processing and transmitting electrical and electronic signals, converting and carrying electrical energy and in the related distribution plants;

- In production contexts, uses his/her own competencies in designing, building and testing electronic systems and electrical plants; he/she is able to program controllers and microprocessors :

- Mastery of computer systems ( CAD - CAE ), Specific Sector for Planning and ' automation with PLC
- Design and development of simple devices with the use of microcontrollers ( PIC16F84 ) and with Arduino .
- Use of simulation programs Orcad Multisim and as an aid to the design .
- Use of measuring instruments for laboratory tests and measurements.
- Design , development and testing of electronic printed circuit boards .
- Analyzes and sizing electrical low voltage .
- It analyzes , sizing and integrates electrical systems with alternative energy sources .

works in the organization of services and in the management of electrical and electronic systems;

- is able to develop and use data reception systems, devices, circuits electronic machines and equipments;

- knows the conversion processes of electrical energy, including alternative sources, and their control, in order to optimize the consumption of energy and adapt devices to safety regulations;

- is able to use his/her competencies, within current regulations, in maintaining safety in workplaces and environmental protection;

- Is able to plan the production of designed systems; describes and working plans and performed activities and user's manuals; knows and uses effective communication tools and team working in order to work in organized context.

- has B1/B2 (CEFR) level in general use of English language;

- has effective level of knowledge of specific technical English language in order to communicate in a professional environment; uses user's manuals

- has competencies in use of tools of individual productivity (e.g. MS-OFFICE or OPEN-OFFICE)