SEnDIng

DTIS Design & Technology of Integrated Systems in Nanoscale Era 2019

Co-funded by the Erasmus+ Programme of the European Union

Sector Skills Alliance for the design and delivery of innovative VET programmes to Data Science and Internet of Things professionals (SEnDIng)

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http://sending-project.eu



Greek Computer Society (GCS) Profile

- A non-profit organization
- Representing Greek scientists and professionals engaged in activities relevant to
  - Computer Science,
  - Information Technology,
  - Telecommunications and other relevant scientific areas.
- Established **in 1977** to become a world-class organization for Information and Communication Technologies.
- Currently numbers more than **5,500 members** including professionals, academics and students.
- www.epy.gr

GCS Objectives (1)

- Promote **the use of Information Technology** to the public
- Development of Information Technology w.r.t
  - scientific research
  - education
- Establish synergies between research and education practice
- Support the **professional development of Information Technology professionals**

GCS Objectives (2)

- Develop professional codes of practice for Information Technology professionals
- Provide technical consultancy on Information Technology to the State
- **Contribute to IT standardisation processes** in collaboration with national, European and international standardisation Bodies
- ***Disseminate*** the results of scientific research to scientists, professionals, students

Sending Project overview

- **Program**: Erasmus+ KA2: Cooperation for innovation and the exchange of good practices - Sector Skills Alliances
- **Call ID**: EACEA-04-2017
- **Lot**: Lot 2, SSA for Design and Delivery of VET
- **Project Number**: 591848-EPP-1-2017-1-EL-EPPKA2-SSA
- **Grant Agreement Number**: 2017-3184/001-001
- **Project Coordinator**: University of Patras
- **Duration**: 36 months
- **Number of Partners**: 12
- **EU grant**: 982.537 €
- **Start Date**: 1st December 2017
- **End Date**: 30th November 2020

Consortium

ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΑΤΡΩΝ
UNIVERSITY OF PATRAS

OLYMPIC Training & Consulting

BASSCOM Bulgarian Association of Software Companies

ESI European Software Institute Center Eastern Europe

ΕΠΥ
ΕΛΛΗΝΙΚΗ ΕΤΑΙΡΙΑ ΕΠΙΣΤΗΜΟΝΩΝ ΚΑΙ ΕΠΑΓΓΕΛΜΑΤΙΩΝ ΠΛΗΡΟΦΟΡΙΚΗΣ ΚΑΙ ΕΠΙΚΟΙΝΩΝΙΩΝ (ΕΠΥ)
GREEK COMPUTER SOCIETY (GCS)

Μηχανογραφική CONSULTING SERVICES

Nemetschek BULGARIA

CODE RUNNERS

UNICERT Universal Certification Solutions

Πανεπιστήμιο Κύπρου University of Cyprus

universal learning systems

Needs and challenges

- **Address the skills' gap** of Data Scientists and IoT engineers.
- Contribute to the **increased demand for highly-qualified Data Scientists and IoT Engineers** in various sectors (ICT, banking, energy, logistics).
- Provide the Data Scientists and IoT engineers with
  - skills and competences,
  - **transferable and recognizable** among European countries.
- Make the provided trainings (more) relevant to the actual needs of labor market.

Key objectives (1)

- Define the learning outcomes of the vocational trainings targeting Data Scientists and IoT engineers.
- Design a common reference scheme of knowledge, skills and competences for Data Scientists and IoT engineers in accordance to European standards and frameworks
  - eCF (e-Competence Framework)
  - ESCO (European Skills, Competences, Qualifications and Occupations).
- Design two modular learning outcome-oriented VET curricula taking into consideration the principles of
  - ECVET (European Credit system for Vocational Education and Training)
  - EQAVET (European Quality Assurance in Vocational Educational Training).

Key objectives (2)

- Design a framework for the certification of skills and competences provided to learners.
- Make recommendations for the validation, certification & accreditation of the VET programs and their alignment with NQFs, EQF and ECVET.
- Delivery of vocational trainings into three phases
  - e-learning
  - face-to-face
  - work-based learning

Target Groups

- IT professionals and associations
- VET providers
- Certification bodies
- Higher Education Institutes
- Companies & SMEs
- Policy-makers

Main results (1)

- Learning outcomes of Data Science and IoT VET programs
- A reference scheme of knowledge, skills and competences for Data Scientists and IoT professionals.
- Two modular learning outcome-oriented vocational curricula
  - **Modularity:** each curriculum is divided into educational modules and each module into training units at three levels of proficiency (introduction, core, advanced)
  - **Personalized learning:** different learning path according to the learner's occupational profile.
- A MOOC for the online training phase of VET programs
- Open Educational Resources.

Main results (2)

- A training methodology incorporating online training, face-to-face training and work based learning
- A framework for the certification of skills, knowledge and competences.
- A survey for the validation, certification & accreditation of provided VET programs and their alignment with NQFs, EQF and ECVET.
- A set of exploitation toolkits for Higher Education Institutes, VET providers and enterprises.
- Workshops organized at Greece, Cyprus and Bulgaria.
- One conference organized at Greece.

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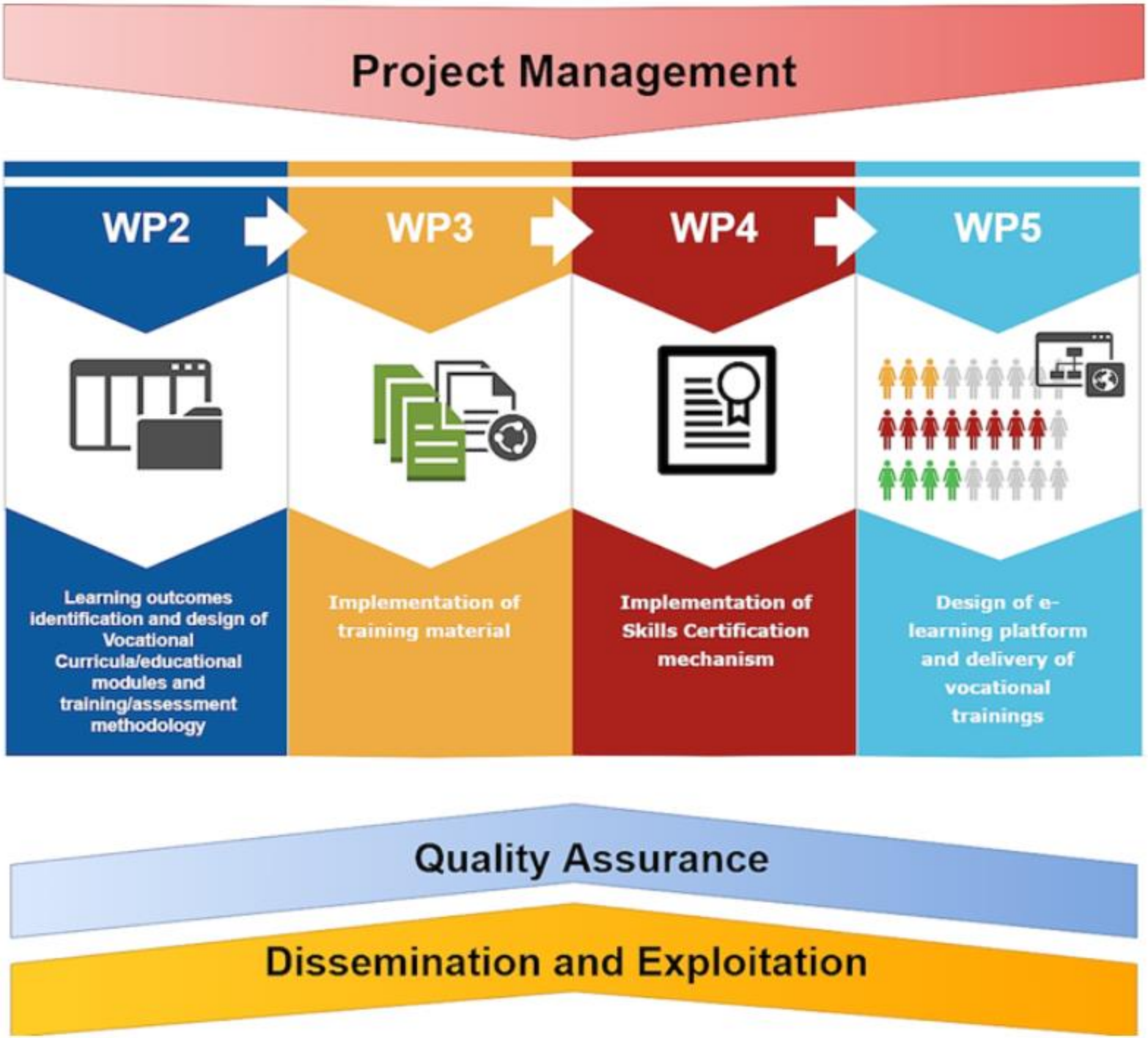
Work Breakdown



Useful links for project content

- Work based learning http://ec.europa.eu/education/policy/vocational-policy/doc/alliance/work-based-learning-in-europe_en.pdf
- EU Skills Panorama http://skillspanorama.cedefop.europa.eu/en
- ESCO https://ec.europa.eu/esco/home
- European Skills Councils http://ec.europa.eu/social/main.jsp?catId=1415&intPageId=5062
- ECVET http://ec.europa.eu/education/policy/vocational-policy/ecvet_en.htm
- ECVET pilot projects http://www.ecvet-projects.eu/
- EQAVET http://ec.europa.eu/education/policy/vocational-policy/eqavet_en.htm
- Network "Work-based Learning and Apprenticeships" http://www.net-wbl.eu/ including TOOLKIT - http://www.wbl-toolkit.eu

Thank you!

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