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GREECE
Technological Educational
Institute of Epirus
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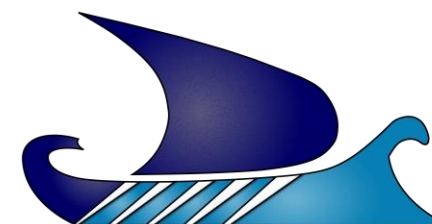
UNIVERSITÀ DEGLI STUDI DI NAPOLI
FEDERICO II



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Erasmus Plus

Cooperation for innovation and the exchange
of good practices
Key Action 2: Strategic Partnerships
Strategic Partnerships for higher education
Development of Innovation



TIPHYS
Industry 4.0

**Social Network based doctoral
Education on Industry 4.0**

TIPHYS

www.tiphys.eu

Project Number 2017-1-SE01-KA203-034524

September 2017 – August 2020

ABOUT THE TIPHYS PROJECT

Tiphys is a 3-years project, founded by a consortium of Universities in 6 European countries involved in the third level education on Industry 4.0. In a nutshell, it aims at developing an **innovative training model** and offering a **training platform** and **program** useful for PhD students, factory technicians and managers willing to master new technologies of Industry 4.0.

PARTNERS' LOCATIONS



CONTEXT & MOTIVATION

PhD students are usually a small group of individuals, everyone with a personal and specific learning history. From these students, particular training needs arise which cannot be satisfied by the training offered at each University.

Therefore, every PhD student usually is involved in a different study topic. Consequently, get engaged in shared learning activities and establish consistent **teamwork** it is difficult.

PROJECT AIMS

- Develop an **Open Networked Platform** for the learning of Industry 4.0 themes dedicated to PhD students. The platform is dynamic: its content evolves and is enriched by the collaborative contribution of the students themselves.
- Increase the **cooperation** among educational institutions in EU to increase the quality of PhD courses connected with Industry 4.0.
- Boost the **creation of teams**, composed by students belonging to all the European countries, and establishing interaction among the different teams.
- Improve the **effectiveness of teaching and learning** by adopting modern learning strategies (Social Network-Based Education – **SNE** – and Constructive Alignment – **CA**) and by exploiting innovative ICT technologies (the Massive Open Online Courses – **MOOC** - platforms and the virtual reality).
- Increase the synergic use of **up-to-date technologies**, such as virtual reality, in an integrated way, with a team work approach and personal development.
- Increase the opportunity for **distance learning**.
- Upgrade and innovate existing **didactic tools**.

EXPECTED OUTPUTS

- **Ontological framework** is based on Constructive Alignment for the representation and composition of educational units. The Ontological framework model will define "**constructively aligned**" course modules including a single Intended Learning Outcome (ILO) and its related Teaching and Learning Activities (TLA) and Assessment Task (AT).
- The **Open Access Platform** will consist of specific modules to support learning activities, including simulation modules, virtual reality modules, decision support modules and user-interfaces. The modules will be "docked" on the learning platform with the ontology-based models as integrating elements.
- **Collaborative creation of learning material** by teams of students through a participative learning approach following the precepts of Education 3.0.
- **Virtual model** of a reference Industry 4.0 factory: a variety of training material and wiki to be used for dissemination activities of TIPHYS project.
- **Continuous improvement** and **increase of platform content** based on user interaction and on smart exploitation of user experience.

