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|  | **2018** |
|  | ***Strategic Partnership for Industry 4.0 innovation advanced Training*** |



**Strategic Partnership for Industry 4.0 innovation advanced Training**

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| **training courses –**  **common parts** |
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Document History

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| --- | --- | --- | --- |
| Version | Date | Author (Partner) | Remarks |
| v.1 | 21/11/2018 | UNIPI | Training courses - Common parts |
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Introduction

This document contains the framework for the common part of the training courses. It contains the elements to include when preparing the training materials.

During the Barcellona meeting the partnership established the duration of the common part as around 4 hours. In order to respect this timing, the common part of the course will be composed by 6 sections.

In the following paragraphs it will be listed the sections of the course, the duration, the training methodology, a short description, the learning outcomes, and the partner that will be responsible to realize the training materials.

Details of the common course

**Section 1**

Introduction about enterprise 4.0

**Duration**

1 hour

**Short description**

This section will make an introduction of Industry 4.0. It includes the definition of Industry 4.0 and Enterprise 4.0, and it will describe the most important technologies that are part of the Fourth Industrial Revolution and that can be applied. Also the context is important, so it will be presented, considering also the environment related problems (low wifi connection, etc.). In this part we will also explain the problems of industry and giving the students an overview about how I4.0 could solve those problems.

**Training methodology**

Frontal lecture

**Learning outcomes**

Students will be able to define Industry 4.0 and Enterprise 4.0 and will have an overview both on technologies and digitalization process.

**Partner responsible (training materials)**

BIBA

**Section 2**

360 degrees of digitalization

**Duration**

30 minutes

**Short description**

The focus of this section will be the digitalization process in all its aspect and, how it impacts in all the functions of a company. It will be treated by four point of view: product, client, organization and process. It will be presented problems related to each section of the value chain, explaining how technologies could solve problems in each of them.

**Training methodology**

Frontal lecture

**Learning outcomes**

Students will gain competencies on how a company can digitalize itself and which are the drivers of digitalization.

**Partner responsible (training materials)**

URL

**Section 3**

Use cases on Industry 4.0

**Duration**

3 x 20 minutes

**Short description**

In this part the three universities will describe case studies related to their specific field. Cases will be real cases, in order to show the students the actual applications of the theoretical concepts learned. Each university will talk about at least 4 case studies that will be as heterogeneous as possible. As agreed during the meeting, Intooition and TOI will provide some real cases to be added to this section.

**Training methodology**

Frontal lecture

**Learning outcomes**

Students will be able to understand practical application of Industry 4.0 technologies. They will have a more practical view of Industry 4.0

**Partner responsible (training materials)**

UNIPI (LEAD), URL, BIBA, TOI, Intooition

**Section 4**

Market and business model understanding

**Duration**

30 minutes

**Short description**

Industry 4.0 is not only technology. It is also about market and business model understanding. Technologies will be able to open to new markets and can be used to analyse new markets and new opportunities. This market oriented approach is finalized to understand how the technologies are fitting the needs of the market and companies

**Learning outcomes**

Students will learn how technologies can change companies business model, or create complitely new business models. They will also understand how technologies can be used to "listen" the market needs

**Partner responsible (training materials)**

Intooition

**Section 5**

Audit methodology

**Duration**

30 minutes

**Short description**

Often companies don't know how to approach to Industry 4.0. They may don’t know what is exactly Industr 4.0, or they don’t know where to invest in order to gain more advantage. This sections is dedicated to methodologies used to measure the level of digitalization of a company and to understand which investment they should do. In this section the audit methodologies realized during the IO1 will be explained to the students.

**Training methodology**

Frontal lecture

**Learning outcomes**

Students will have a tool to use when they will work with a company that need to understand what it really need. They will be able to analyse a company and understand which are its strengths and weaknesses.

**Partner responsible (training materials)**

UNIPI

**Section 6**

Why should I implement a specific technology?

**Duration**

30 minutes

**Short description**

This section is dedicated to a role playing exercise that will make understand to the student the reasons why a company should implement a specific technology

**Training methodology**

Role playing exercise

**Learning outcomes**

Students will be able to define pros and cons of a technology and which are the drivers that companies uses to take a decision

**Partner responsible (training materials)**

URL

Recap

To have a quick and clear view of this part of the training course and of the responsibilities related to the preparation of the training materials, below there is a table that summarise these elements:

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| **Topic** | **Partner responsible for the preparation of training materials** | **Duration (up to 4 hours)** | **Training methodology** |
| 1. Introduction about enterprise 4.0 | BIBA | 1 hour | frontal |
| 2. 360 degrees of digitalization | URL | 30 minutes | frontal |
| 3. Use cases on Industry 4.0 | UNIPI (LEAD), URL, BIBA (with TOI and Intooition contribution) | 20 minutes | frontal |
| 20 minutes | frontal |
| 20 minutes | frontal |
| 4. Market and business model understanding | Intooition | 30 minutes | frontal |
| 5. Audit methodology | UNIPI | 30 minutes | frontal |
| 6. Why should I implement a specific technology? | URL | 30 minutes | Role playing exercise |