



**INSPIRING REVOLUTIONARY
EDUCATIONAL CREDENTIALS**

Module 13





1506
UNIVERSITÀ
DEGLI STUDI
DI URBINO
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ABOUT THE PROJECT

OBEC (2020-1-SE01-KA204-077803) is a KA2 Strategic Partnership co-funded by the Erasmus+ of the European Union. Led by Swideas in Sweden, the project gathers partners in Croatia (Regional Development Agency of Sisak-Moslavina County - SIMORA), Italy (LAI-MOMO Società Cooperativa Sociale & Università degli studi di Urbino Carlo Bo), Belgium (EURADA - Association Européenne Des Agences Développement).

OBEC is an innovative project that aims to explore the potentials of Blockchain technology to promote competency development and recognition of skills and qualifications by creating an innovative system to issue and validate learning credentials on a trial basis. Through this effort, the project's goal is to encourage the professional and academic integration of migrants, exchange students, and individuals with informal and non-formal learning backgrounds.

By contributing to the educational and economic integration of these targeted groups, OBEC envisions to benefit individuals with migrant background, students, teachers, education institutions, and employers. Focusing on the key issue of lack of uniformity and transparency in systems of validation of credentials, it is expected that this effort will result in positive effects in the working context, promoting employability, empowerment, and accessibility to the labour market.



Synopsis Module 13

Indications for teaching the module.

Slide 1: Title.

Slide 2: Introduction to the module.

Slide 3: Contents of the module.

Slide 4-9: Introducing the concept of problem identification in technology. Emphasis is put on the difference between pseudo and real problems. A further distinction is made between relevant and irrelevant problems. Examples are made throughout the explanation to help the students to better understand the concepts involved.

Slide 10-11: The concept of Artificial Intelligence is introduced.

Slide 12: Table explaining the major ethical problems related to AI. Emphasis should be placed on the fact that those are ethical problems produced by the existence of AI and are not related to the construction of AI algorithms that are actually ethical. This second problem will be dealt with later.

Slide 13-18: The problem of privacy and surveillance is introduced and discussed. Slide 14 contains a video report in which the topic of social credit is discussed with its advantages and disadvantages. During slide 18 the students should discuss the topics and explain their position. Active participation is mandatory.

Slide 19-23: The problem of behaviour and knowledge manipulation is introduced and discussed. Slide 22 contains the link to a website that generates faces of non-existing persons. During slide 23 the students should discuss the topics and explain their position. Active participation is mandatory.

Slide 24-28: The problem of the opacity of AI and machine learning systems is introduced and discussed. During slide 28 the students should discuss the topics and explain their position. Active participation is mandatory.

Slide 29-34: The problem of machine bias is introduced and discussed. During slide 34 the students should discuss the topics and explain their position. Active participation is mandatory.

Ideally, this should cover the first six hours of the module.

Slide 35-36: The problem of building ethical machines is introduced.

Slide 37: The approach of building ethics through laws is discussed.

Slide 38: The stamp collector problem is discussed, highlighting how from simple laws, unexpected behaviours might arise.

Slide 39-44: Explanations on what a moral artificial agent is are given, moreover, suggestions on how it might be possible to build one are provided. During slide 42 and 44 the students should discuss the topics and explain their position. Active participation is mandatory.

Slide 45-49: The problem of super-intelligence and of the advent of the singularity is introduced. Both positions that think we should worry about the singularity and those that think that we should not bother are discussed.

Slide 50-61: Potential risks created by a potential singularity are discussed. Solutions to those potential risks are discussed throughout. Students are also asked to be actively participate during all those discussions.

Ideally, this should cover the second batch of six hours of the module.

Slide 62-63: The topic of machine autonomy is introduced.

Slide 64-86: Fundamental questions about machine autonomy are highlighted and potential answers to such questions are presented. Students are asked to discuss those answers. Students are also asked to prepare some presentations concerning the topic and discuss them with their peers. A final comprehensive debate is organised to give the students the chance to discuss all the topics covered during the module.

All the activities put together should cover the third batch of six hours of the module, completing it.