



# **E<sup>3</sup>UDRES<sup>2</sup> Ent-r-e-novators**

## **and developing competencies with online courses and research**

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Erasmus+ Programme  
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# E<sup>3</sup>UDRES<sup>2</sup>

Engaged and Entrepreneurial European University as  
Driver for European Smart and Sustainable Regions

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European University  
Alliance

<https://www.eudres.eu/>

Open Practices



# THE HIGHER EDUCATION INSTITUTIONS IN E<sup>3</sup>UDRES<sup>2</sup>



\*Joining E<sup>3</sup>UDRES<sup>2</sup> from Autumn 2023



St. Pölten University of Applied Sciences

Lead



Polytechnic Institute of Setúbal



Hungarian University of Agriculture and Life Sciences



UC Leuven-Limburg University of Applied Sciences



Politehnica University Timișoara



Vidzeme University of Applied Sciences



Saxion University of Applied Sciences

New



Fulda University of Applied Sciences

New



Jyväskylä University of Applied Sciences

New

## #GoOpen

From content, to infrastructure, to policies,  
many individuals and organizations work to  
make open content for all a reality

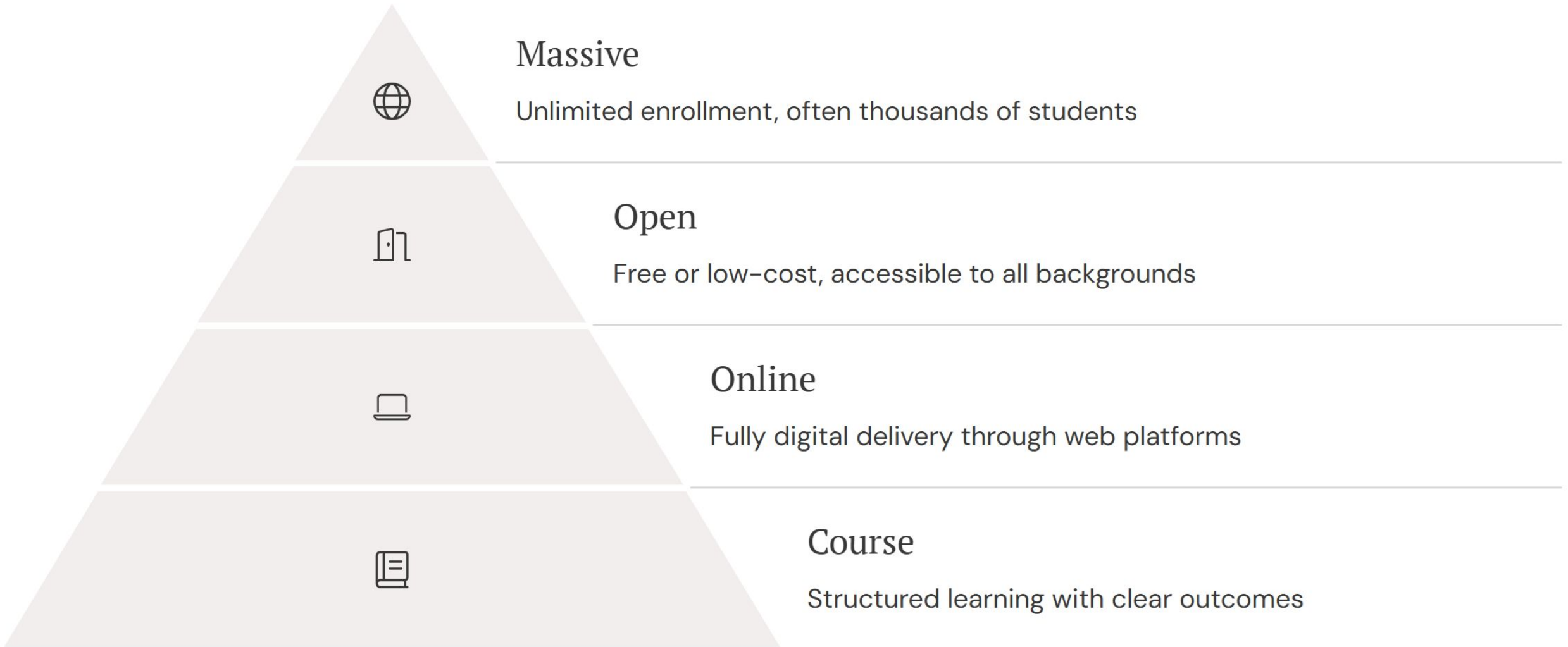
# E<sup>3</sup>UDRES<sup>2</sup>

Engaged and Entrepreneurial European University as  
Driver for European Smart and Sustainable Regions

## European University Alliance



# What is a MOOC?



# Massive Open Online Courses



## DigiCulture OPEN BADGES



<https://digidculture.eu/>

## Flipped classroom with OERs and MOOCs

- ✓ **Inverted Learning Model:** Students absorb lecture content via MOOCs at home before class.
- ✓ **OER Integration:** Free, adaptable Open Educational Resources supplement MOOC materials.
- ✓ **Collaborative Activities:** Class time shifts to problem-solving and peer learning.
- ✓ **cMOOCs Approach:** Connectivist MOOCs foster knowledge creation through social networks.
- ✓ **Global Classroom:** International partnerships create diverse learning communities.



# E³UDRES² Ent-r-e-novators Foundations of Open Practices

- Open
  - Accessible to all from E3UDRES2
  - MOOCs style courses
  - Self-paced, non-facilitated, based on activities completion
  - Earn a Open badge and certificate
  - Integrated in ARENA
- 
- Open Education
  - Open Science
  - Open innovation



<https://arena.eudres.eu/learnin>

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# Arena Learning Hub



## Ent-r-e-novators

Ent-r-e-novators Search courses



### EUDRES<sup>2</sup> Ent-r-e-novators project

Advancing Research, Innovation, and Education for Smart and Sustainable Regions

Welcome to the information page for the EUDRES<sup>2</sup> Ent-r-e-novators project. This space provides access to key project details, courses, learning materials, and information about associated educational activities.

#### Project Overview

EUDRES<sup>2</sup> Ent-r-e-novators includes, interacts, and collaborates with a diverse range of innovative and ambitious individuals, academic institutions, regional authorities, businesses, European research and innovation networks, and regional innovation ecosystems. EUDRES<sup>2</sup> Ent-r-e-novators is committed to scientific excellence and research integrity within its key transdisciplinary and cross-sectoral research and promotes (future) competencies, skills, resources, methods, training, services, and management in research and innovation for collaborative research and open innovation for smart and sustainable regions.

More information about the mission, vision, and core objectives of the EUDRES<sup>2</sup> Ent-r-e-novators project can be found [HERE](#).

We encourage you to visit the official project website (<https://www.entrenovators.eu/>) for comprehensive information about the EUDRES<sup>2</sup> Ent-r-e-novators initiative.

#### Educational Resources and Training on the EUDRES Arena.

This page is a gateway to educational content and opportunities generated within the EUDRES<sup>2</sup> Ent-r-e-novators framework. We aim to provide access to **courses, training materials, webinars, and results relevant to the project's focus areas.**

#### Featured Event:

##### EUDRES<sup>2</sup> – Ent-r-e-novators PhD Summer School 2025 – Open Practices in Higher Education

We are pleased to announce the upcoming **EUDRES<sup>2</sup> – Ent-r-e-novators PhD Summer School in June 2025** in Timisoara, focusing on "Open Practices in Higher Education". This event directly aligns with the project's commitment (Objective 3) to promote Open Science and Open Education.

- **Focus:** Exploring and implementing open practices within the academic environment.
- **Audience:** PhD students, researchers, and academic staff interested in advancing open methodologies.
- **Resources:** Relevant pre-reading materials, course schedules, and outcomes related to the Summer School will be made available through this platform.

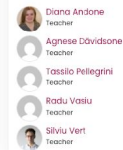
More details and registration information can be found [HERE](#).



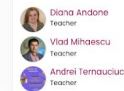
**Learning and Open Licensing**  
Managing university Politehnica University of Timisoara  
Education/Training level: Intermediate  
Course language: EN  
Course target group: academic  
This course aims to offer an overview of regulations, copyright legislation and open licensing possibilities in science and education in particular. The module will develop the understanding of current international and European legislation surrounding the protection of data and of copyright laws.



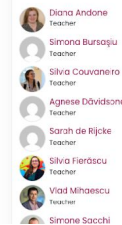
**Open Access & Open Science**  
Managing university Politehnica University of Timisoara  
Education/Training level: Intermediate  
Course language: EN  
Course target group: academic  
This course offers an overview of the principles and practices of Open Access publishing and Open Science. It develops your understanding of models of open access, open licenses, transparency and reproducibility, FAIR data, open peer review, and tools and platforms supporting open science across disciplines.



**Open Education**  
Managing university Politehnica University of Timisoara  
Education/Training level: Intermediate  
Course language: EN  
Course target group: academic  
In this course, you will explore how openness transforms education by making knowledge accessible, shareable, and co-created. You will learn about the history and philosophy of openness, practical ways to use and create Open Educational Resources (OERs), and how innovative approaches such as Artificial Intelligence or MOOCs can reshape learning and teaching.



**EUDRES<sup>2</sup> – Ent-r-e-novators PhD Summer School 2025**  
Course language: EN  
Politehnica University of Timisoara, as part of the EUDRES<sup>2</sup> – Ent-r-e-novators project, together with all members of the EUDRES<sup>2</sup> European Universities Alliance, organizes the EUDRES<sup>2</sup> – Ent-r-e-novators PhD Summer School 2025 with the theme Open Practices in Higher Education.



**Open Innovation**  
Course language: EN



**Final Course**  
Course language: EN

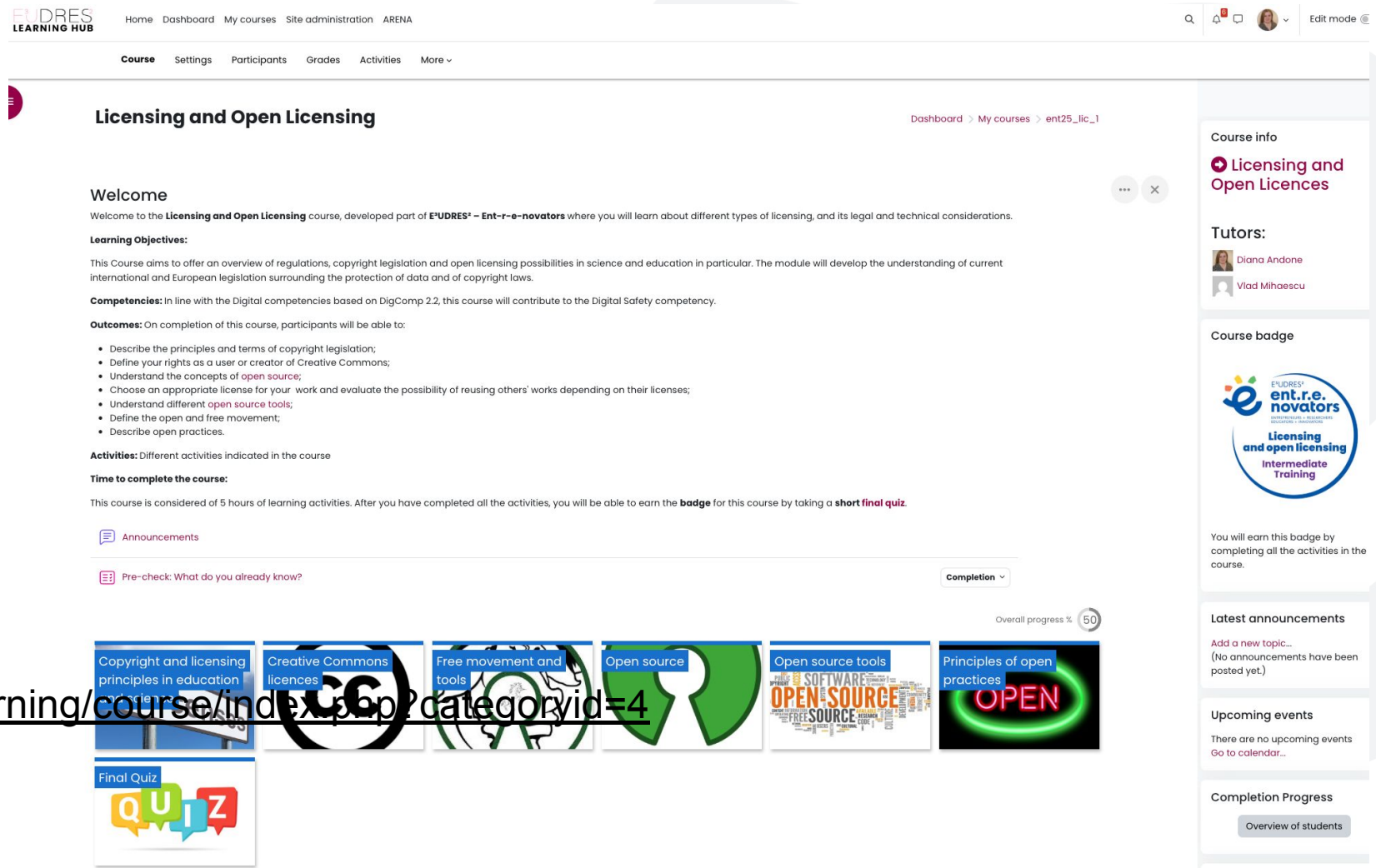
<https://arena.eudres.eu/learning>

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# WP4 – Embracing Open Science, Open Innovation and Open Education

## Foundations for OE/OA/OS/OI MOOCs In ARENA



The screenshot shows the course page for 'Licensing and Open Licensing' on the ARENA Learning Hub. The page includes a navigation menu, a course title, a welcome message, learning objectives, competencies, outcomes, and activities. It also features a progress bar showing 50% completion and a list of course modules.

**Licensing and Open Licensing**

Dashboard > My courses > ent25\_lic\_1

**Welcome**

Welcome to the **Licensing and Open Licensing** course, developed part of **E³UDRES² – Ent-r-e-novators** where you will learn about different types of licensing, and its legal and technical considerations.

**Learning Objectives:**

This Course aims to offer an overview of regulations, copyright legislation and open licensing possibilities in science and education in particular. The module will develop the understanding of current international and European legislation surrounding the protection of data and of copyright laws.

**Competencies:** In line with the digital competencies based on DigComp 2.2, this course will contribute to the Digital Safety competency.

**Outcomes:** On completion of this course, participants will be able to:

- Describe the principles and terms of copyright legislation;
- Define your rights as a user or creator of Creative Commons;
- Understand the concepts of open source;
- Choose an appropriate license for your work and evaluate the possibility of reusing others' works depending on their licenses;
- Understand different open source tools;
- Define the open and free movement;
- Describe open practices.

**Activities:** Different activities indicated in the course

**Time to complete the course:**

This course is considered of 5 hours of learning activities. After you have completed all the activities, you will be able to earn the **badge** for this course by taking a **short final quiz**.

**Announcements**

Pre-check: What do you already know?

Completion 50%

**Course info**

**Licensing and Open Licences**

**Tutors:**

- Diana Andone
- Vlad Mihaescu

**Course badge**

**Licensing and open licensing Intermediate Training**

You will earn this badge by completing all the activities in the course.

**Latest announcements**

Add a new topic... (No announcements have been posted yet)

**Upcoming events**

There are no upcoming events  
Go to calendar...

**Completion Progress**

Overview of students

**Course Modules:**

- Copyright and licensing principles in education
- Creative Commons licences
- Free movement and tools
- Open source
- Open source tools
- Principles of open practices
- Final Quiz

<https://arena.eudres.eu/learning/course/index.php?categoryid=4>

## WP4 – Embracing Open Science, Open Innovation and Open Education

### Foundations for OE/OA/OS/OI MOOCs In ARENA

Metric	Details	Duration	Number of participants	Number of badges awarded
Total Modules Launched	4 self-sustained online courses			
Course Topics	1. Licensing and Open Licensing	5 hours of self-paced activities	199	137
	1. Open Education	24 hours (1 ECTS) self-paced learning	75	25
	1. Open Access and Open Science	15 hours of online learning activities	101	64
	1. Open Innovation	8 hours of online learning activities	16	5
Total Estimated Learning Hours	2 ECTS	49 hours minimum (5h + 24h (1 ECTS) + 15h (0.5 ECTS) + 8h)		
Access Condition	Freely available to all E³UDRES² students and staff, to anyone with EUDGAIN account			
Primary Credential	Foundations of Open Practices Certificate			5

### Foundations of Open Practices

open, free, flexible, online programme  
four self-sustained, non-facilitated courses

# Artificial Intelligence in Open Education



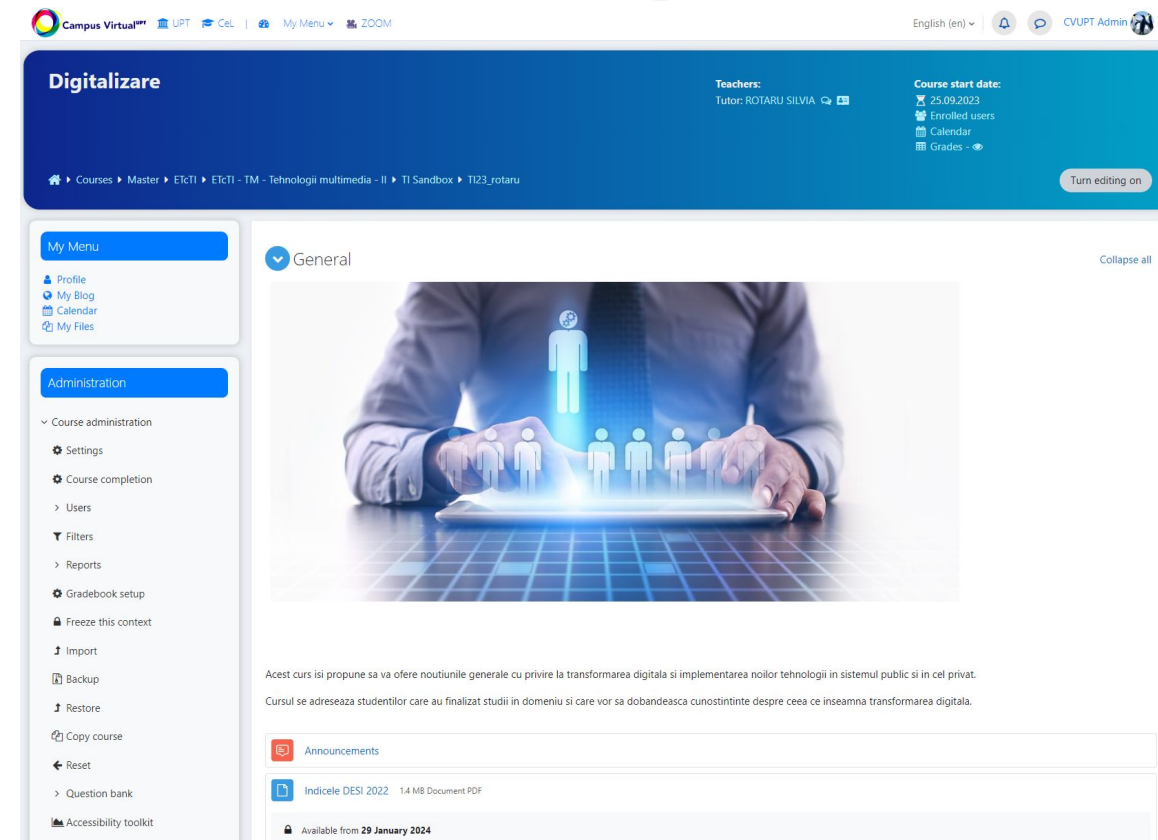
# AI and open education case studies

# Artificial Intelligence and Open Educational Resources

## OER Content Development

## Course activity in Instructional Technologies with students from the Multimedia Technologies Master in 2023, 2024

To develop course syllabus, 1 module (text, multimedia, interaction, assessment) with AI Analyse with their development Critically evaluate



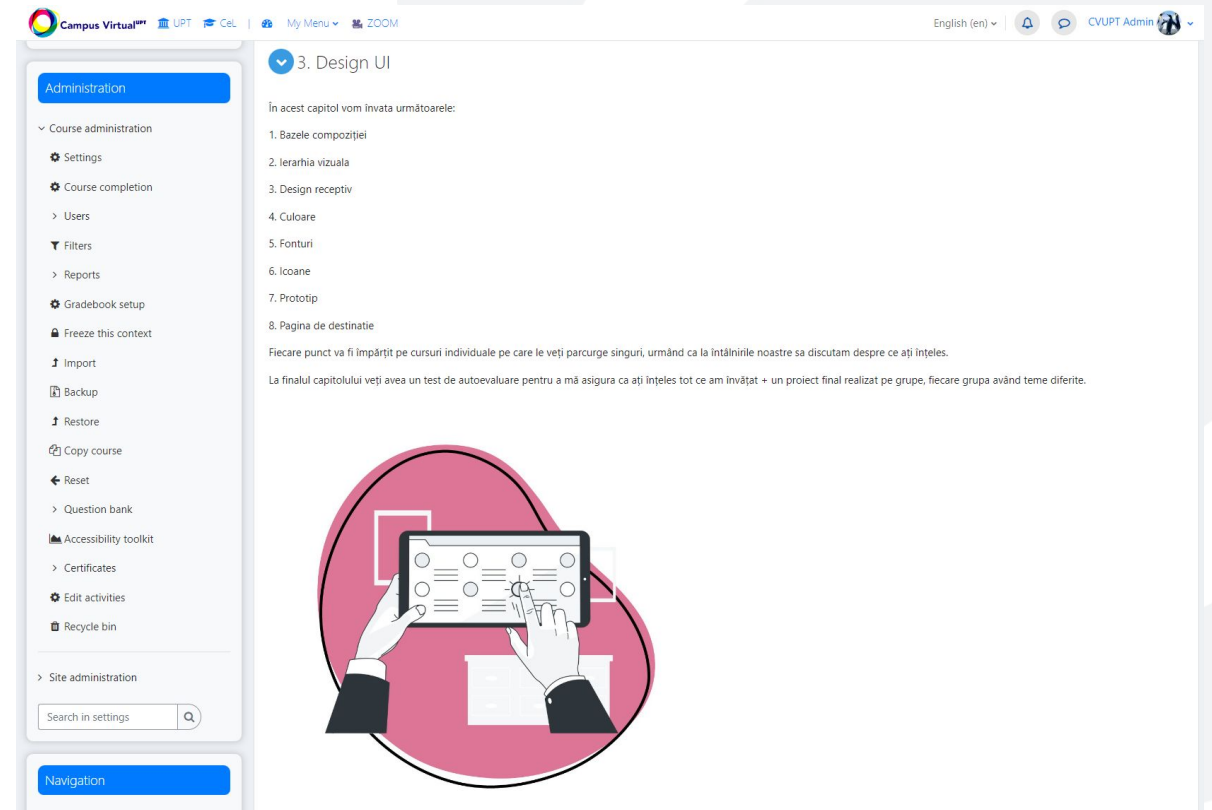
The screenshot shows a Moodle course page for 'Digitalizare'. The page is in English and is managed by Tutor ROTARU SILVIA. The course start date is 25.09.2023. The page features a navigation menu on the left with options like 'My Menu', 'Administration', and 'Course administration'. The main content area is titled 'General' and contains a large image of a person's hands interacting with a tablet displaying digital figures. Below the image, there is a text block in Romanian: 'Acest curs isi propune sa va ofere noutiunile generale cu privire la transformarea digitala si implementarea noilor tehnologii in sistemul public si in cel privat. Cursul se adreseaza studentilor care au finalizat studiul in domeniu si care vor sa dobandeasca cunostintele despre ceea ce inseamna transformarea digitala.' There is also an 'Announcements' section with a document titled 'Indicele DESI 2022' (1.4 MB Document PDF) available from 29 January 2024.

# Artificial Intelligence and Open Educational Resources

## OER Content Development

## Course activity in Instructional Technologies with students from the Multimedia Technologies Master in 2024

Students used 11 different tools  
Some Open AI tools  
Developed 17 OERs



The screenshot shows a Moodle course interface. On the left is a navigation sidebar with categories like 'Administration', 'Course administration', 'Users', 'Filters', 'Reports', 'Gradebook setup', 'Import', 'Backup', 'Restore', 'Copy course', 'Reset', 'Question bank', 'Accessibility toolkit', 'Certificates', 'Edit activities', 'Recycle bin', and 'Site administration'. The main content area is titled '3. Design UI' and lists eight topics: '1. Bazele compozitiei', '2. Ierarhia vizuala', '3. Design receptiv', '4. Culoare', '5. Fonturi', '6. Icoane', '7. Prototip', and '8. Pagina de destinatie'. Below the list, there is a paragraph of text in Romanian: 'Fiecare punct va fi împărțit pe cursuri individuale pe care le veți parcurge singuri, urmând ca la întâlnirile noastre sa discutăm despre ce ați înțeles. La finalul capitolului veți avea un test de autoevaluare pentru a vă asigura ca ați înțeles tot ce am învățat + un proiect final realizat pe grupe, fiecare grupa având teme diferite.' An illustration of hands holding a tablet with a UI design is overlaid on the bottom right of the screenshot.

# Artificial Intelligence and Open Educational Resources

## OER Translation and Localization

millions OERS are in EN

Automated translation tools powered by AI

Automated translation and text to voice

Personalisation and adaptation

MOOC integration

<https://digitallibrary.io/>



Google Translate



ChatGPT





# Artificial Intelligence and Open Educational Resources

## OER Translation and Localization

## Spotlight Heritage Timisoara

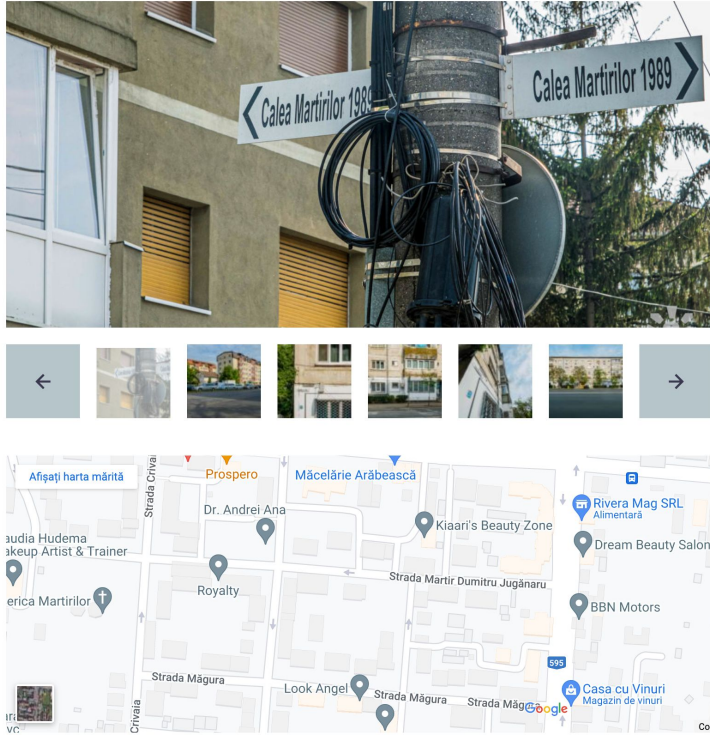
Integration of OpenAI API Voice-text for translation and voice on website

Co-created by students at Multimedia Technologies Master

Developed in October – December 2023 by a group of Master students - Valentin Sorescu, Lucian Muresan, Ana Cainiceanu

The Voice on text is for English and Romanian Language

<https://spotlight-timisoara.eu/>



The screenshot displays the website interface for 'Spotlight Heritage Timisoara'. At the top, there is a navigation menu with items like 'Repere', 'Secvențe', 'Comunitate', 'Happenings', 'Expoziții', 'Mobil/AR/VR/NFT', 'International', 'Evenimente', and 'Știri'. Below the menu, the main content area features a large image of a street sign for 'Calea Martirilor 1989' with a satellite view overlay. To the right of the image, there is a text box with the title 'Calea Martirilor și Revoluția din 1989' and a short paragraph: 'Calea Martirilor din Timișoara reprezintă un loc important în memoria colectivă despre Revoluția din Decembrie 1989.' Below the main image is a carousel of smaller images. At the bottom, there is a map of the area with various landmarks and a search bar. The map shows streets like 'Strada Măgura' and 'Strada Martirilor 1989'. Below the map, there are tabs for 'ISTORIC', 'SECVENȚE', and 'COMUNITATE'. A 'Download' button and a 'Playback speed' control are visible in the bottom left corner of the map area. The bottom right corner of the page shows the text 'Comunismul s-a născut pe Neva și a murit pe Bega.' Timișoara este primul oraș liber de Video.

# AI Voice on Spotlight Heritage website

In Romanian language the numbers and years are not automatically read properly (the years are read on EN style) – a special program was developed to break numbers and all years on separate digits, and in digits pair, so the text-to-voice can be generated correctly

Students increased the number of characters to be read more than 4096 for the mp3

Listen to the audio version.

▶ 0:00 / 1:49

**The Baroque-style Union Square (Domplatz)**, which appears as a sketch on the 1733 plan, was later finished, but larger in size than specified in the above plan. The unusually large dimensions of the square, compared to the size of the fortress, served to highlight **baroque style** of this space. The representative buildings located on the four sides of the square offer a suggestive image of the Timișoara architecture from the 18th century, even if over time these buildings have undergone changes. The strong points of this Baroque heritage are **the Roman Catholic Dome**, on the east side; the Serbian Orthodox Episcopal Cathedral on the west side; **The Baroque Palace** (headquarters of the Banat Country Administration in the 18th century), on the south side, and the typical 18th-century buildings on the north side of the square.

In the central part of the square is the monument of the Holy Trinity. Banat administration councilor Johann Anton Deschan von Hansen commissioned this statue to commemorate the 1738-1740 plague epidemic. The statue was sculpted in Vienna in Baroque style and then transported on the Danube, the Tisza, and the Bega waterway and mounted in the Transylvania Gate Square on November 21, 1940. Somewhere between 1755 and 1758, the statue was mounted in Union Square.

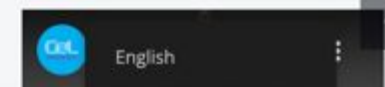
Video

**Union Square and the Holy Trinity monument**



Video

**Monument of the Holy Trinity 3D**

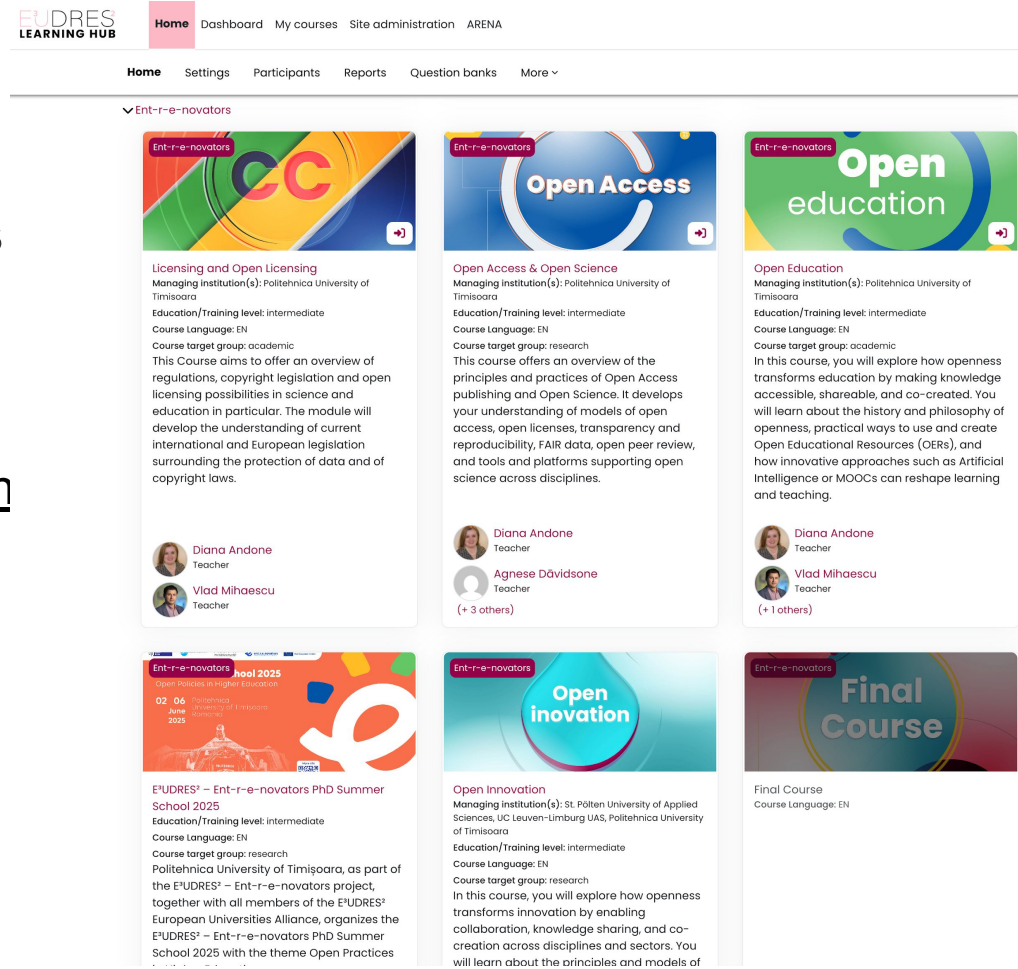


# MOOC courses in Open Practices

Using AI for translation

Co-creation with students

<https://arena.eudres.eu/learn>

The screenshot shows the 'E³UDRES² LEARNING HUB' interface. The top navigation bar includes 'Home', 'Dashboard', 'My courses', 'Site administration', and 'ARENA'. A secondary navigation bar has 'Home', 'Settings', 'Participants', 'Reports', 'Question banks', and 'More'. The main content area is titled 'Ent-r-e-novators' and displays a grid of course cards:

- Licensing and Open Licensing**: Managing institution(s): Politehnica University of Timisoara. Education/Training level: intermediate. Course Language: EN. Course target group: academic. Description: This Course aims to offer an overview of regulations, copyright legislation and open licensing possibilities in science and education in particular. The module will develop the understanding of current international and European legislation surrounding the protection of data and of copyright laws. Teacher: Diana Andone, Vlad Mihaescu.
- Open Access & Open Science**: Managing institution(s): Politehnica University of Timisoara. Education/Training level: intermediate. Course Language: EN. Course target group: research. Description: This course offers an overview of the principles and practices of Open Access publishing and Open Science. It develops your understanding of models of open access, open licenses, transparency and reproducibility, FAIR data, open peer review, and tools and platforms supporting open science across disciplines. Teacher: Diana Andone, Agnese Dăvidsone (+ 3 others).
- Open Education**: Managing institution(s): Politehnica University of Timisoara. Education/Training level: intermediate. Course Language: EN. Course target group: academic. Description: In this course, you will explore how openness transforms education by making knowledge accessible, shareable, and co-created. You will learn about the history and philosophy of openness, practical ways to use and create Open Educational Resources (OERs), and how innovative approaches such as Artificial Intelligence or MOOCs can reshape learning and teaching. Teacher: Diana Andone, Vlad Mihaescu (+ 1 others).
- Open Access and Open Science**: Managing institution(s): Politehnica University of Timisoara. Education/Training level: intermediate. Course Language: EN. Course target group: research. Description: Politehnica University of Timisoara, as part of the E³UDRES² – Ent-r-e-novators project, together with all members of the E³UDRES² European Universities Alliance, organizes the E³UDRES² – Ent-r-e-novators PhD Summer School 2025 with the theme Open Practices.
- Open Innovation**: Managing institution(s): St. Polten University of Applied Sciences, UC Leuven-Limburg UAS, Politehnica University of Timisoara. Education/Training level: intermediate. Course Language: EN. Course target group: research. Description: In this course, you will explore how openness transforms innovation by enabling collaboration, knowledge sharing, and co-creation across disciplines and sectors. You will learn about the principles and models of
- Final Course**: Course Language: EN.

Join and follow

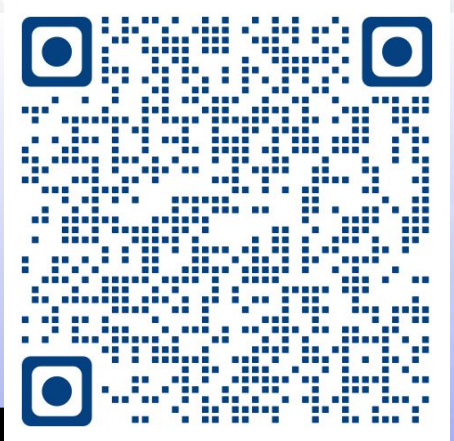
# IEEE Education Society Conferences

The screenshot shows the IEEE Education Society website. At the top, there is a navigation bar with links for 'About', 'Activities', 'Awards', 'Conferences', 'Membership', 'Publications', 'Technical Education', and 'Search'. Below this is a sub-navigation bar with 'Conferences', 'About Conferences', and 'Financially Sponsored Conferences'. The main content area is titled 'Financially Sponsored Conferences' and features a section for 'Upcoming Financially Sponsored Events'. This section contains four event cards:

- TALE 2024**: IEEE International Conference on Teaching, Assessment and Learning for Engineering 2024. Dates: 9 Dec 2024 - 12 Dec 2024. Location: Bengaluru, India. Status: Financially Sponsored.
- EDUNINE 2025**: IEEE Engineering Education World Conference 2025. Dates: 23 Mar 2025 - 26 Mar 2025. Location: Montevideo, Uruguay. Status: Financially Sponsored.
- EDUCON 2025**: IEEE Global Engineering Education Conference 2025. Dates: 22 Apr 2025 - 25 Apr 2025. Location: London, United Kingdom. Status: Financially Sponsored.
- FIE 2025**: IEEE Frontiers in Education Conference 2025. Dates: 2 Nov 2025 - 5 Nov 2025. Status: Financially Sponsored.



<https://iee-edusociety.org/>



## IEEE Education Society Financially Sponsored Conferences

<https://iee-edusociety.org/conferences/about-conferences/financially-sponsored-conferences>

# 2026 IEEE DEMOcon Digital Education

2026 IEEE DEMOcon Digital Education incorporates the legacy of the IEEE Learning with MOOCs (LWMOOCs) conference with

**EMOOCs European MOOCs Stakeholders**

 **Dr. Diana Andone**  
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**Director**

**Digital Education**

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[@diando70](https://twitter.com/diando70)

<https://www.linkedin.com/in/dianaandone/>

**IEEE Education VicePresident for Conferences**

IEEE Romania Education Chair

IEEE Education Board of Governors

IEEE Computer Society, TCLT Open Chair

IEEE Education and Women in Engineering

EUA Digital Transformation Steering committee

EDEN Fellow 2011, Senior Fellow 2021

EDEN Vice-president (2017-2021)

**Elearning.upt.ro**

**cv.upt.ro**

**Unicampus.ro**

