

# The e-NEWSLETTER

## **Modernisation and Internationalisation of Iranian HEIs via collaborative TEL-based curriculum development in engineering and STEM/UNITEL**

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



WEBSITE: <https://unitelproject.net/>



### *Editorial*

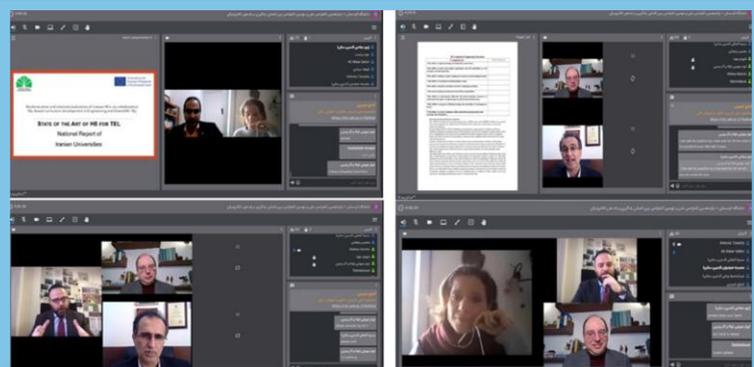
We are pleased to provide you with the second “UNITEL project” e-newsletter. There has been so much happened in 2022, including successful collaborations with the 9th International Conference on e-Learning and e-Teaching (ICeLeT 2022) which was held in Kurdistan University (Iran) in a joint collaboration with the Iranian Association of e-Learning (YADA). Much progress in the project work packages, several virtual meetings, official attendance in social media, and also face-to-face visit in Rome and much more are reported in this issue.

We hope this newsletter provides a better dissemination of the project. We appreciate any comment and also more reports on your activities.

*UNITEL e-newsletters to be produced every 12 months, describing progress on the project and project topics. The e-newsletter contains information related to the project and similar projects and events concerning the main issues.*

### OVERVIEW:

- *Editorial*
- *UNITEL collaboration with YADA, ICeLeT 2022, and ICeLeT 2023*
- *Under the Spotlight*
- *E-course is ready*
- *Successful face-to-face meeting in Rome*
- *UNITEL project is now available on social media*
- *Looking into the Future*



## ➤ UNITEL collaboration with YADA, ICeLeT 2022, and ICeLeT 2023

### ❖ Collaborative Technology Enhanced Learning (TEL) in STEM: The European Erasmus+ UNITEL Project, at the 9th international and 15th national conference on e-Learning and E-Teaching (9-10 March 2022)

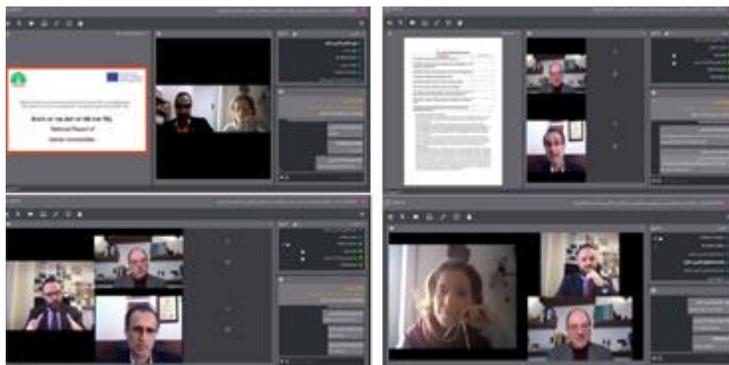
#### The Aims of this panel were:

- To shortly introduce the project and its consortium
- To express the related experiences from some European and Iranian Universities
- To receive comments from other experts
- To initiate a list of some other interested universities who would like to collaborate with this consortium in future

#### Panel members:

- Prof. António M. Teixeira (Lisbon, 1965), Universidade Aberta, Portugal
- Prof. Matteo MARTINI, Università Telematica Guglielmo Marconi, Italy
- Prof. Shahram Mohanna, University of Sistan and Baluchestn, Iran
- Prof. Hamid Reza Marateb, University of Isfahan, Iran
- Prof. Gholamhossein Rahimidoost, Shahid Chamran University of Ahvaz, Iran

Chair: Prof. Ali Akbar Safavi, Shiraz University, Iran



### ❖ Presentation on “Quod non fecit COVID, fecerunt Athenaea: from online synchronous lessons to virtual and remote laboratories” by Prof. Matteo Martini at the 9th international and 15th national conference on e-Learning and E-Teaching, 9 March 2022

Dr. Matteo Martini is an associate professor at “Univ. Degli Studi Guglielmo Marconi,” associate researcher at the “Frascati National Laboratories,” INFN, holder of the “General Physics” course of the Civil Engineering Course at “Univ. Degli Studi Guglielmo Marconi” and holder of the “Risk and Safety for High Risk Plants” course at “Univ. Degli Studi Guglielmo Marconi”.

The 9th International and the 15th National Conference on E-Learning and E-Teaching  
ICeLeT 2022

**Quod non fecit COVID, fecerunt Athenaea: from online synchronous lessons to virtual and remote laboratories.** With Q & A

**Prof. Matteo Martini**  
Presentation Time: March 9th, Wednesday 10:30-11:00

Dr. Matteo Martini is an associate professor at “Univ. Degli Studi Guglielmo Marconi”, associate researcher at the “Frascati National Laboratories”, INFN, holder of the “General Physics” course of the Civil Engineering Course at “Univ. Degli Studi Guglielmo Marconi” and holder of the “Risk and Safety for High Risk Plants” course at “Univ. Degli Studi Guglielmo Marconi”

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Please enter:  
<http://meet.icelet.ac.ir/ib0adet>  
Then join as guest and enter your full name.

ISC IEEE

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International Association of Universities  
International Association of Universities

### ❖ Signing MoU with YADA

YADA (i.e., The e-Learning Association of Iran) is the most well-known and most active Iranian association in e-learning and Technology Enhanced Learning (TEL). As the strategy and responsibility of YADA is to promote TEL in Iran and to expand international collaborations on these regards, and on the other hand, UNITEL aims at promoting TEL in Iranian Higher Education Systems, an MoU was recently signed by both sides. The MoU is available on the link below:

<https://unitelproject.net/>

### ❖ UNITEL helps in organizing ICeLeT 2023

Having a good experience with ICeLeT 2022, and also the recent MoU with YADA, UNITEL managing team is fully involved in organizing ICeLeT 2023. Having some members in organizing committee, some in the scientific committee, organizing some special panel discussions and keynote speeches to UNITEL activities are parts of these collaborations. See ICeLeT 2023 website for more information:

<https://icelet.ir/>

## ➤ Under the Spotlight

Here some of the important activities are reviewed:

- UNITEL Equipment Progress Meeting, 12-01-2022
- UNITEL project meeting, March 16th 2022
- UNITEL First Study Visit, 13 April 2022
- UNITEL project operative meeting, May 9th 2022
- UNITEL Progress online meeting 20 July 2022
- UNITEL project meeting 14 September 2022

## ❖ Equipment Progress Meeting 12-01-2022

WP2 THE DEVELOPMENT OF UNI-TEL TRAINING PATH (E-COURSE)

FEEDBACK ON MODULES AND TOPICS & SELECTION OF TOPICS

January 12<sup>th</sup>, 2022  
P2 – UTU, Finland

### SELECTION OF TOPICS (1/2)

- EU Partners are leaders of the modules
  - Responsible for their "team"/module
  - Taking care of coordinating between topics inside the module to reach a coherent course
- Every HEI partner (not P4 and P12) will produce four topics
  - Video lessons
  - Supporting materials (such as Powerpoints, assignments, references)
- The preferences are indicated with an Excel spreadsheet (Ilaria's message on Tuesday 10<sup>th</sup> 2022)
  - <https://drive.google.com/drive/folders/1Hamec15b1OyKqil2v01SjioH0ysq77b> (If the link doesn't open, please copy and paste it in the browser)

MODULE 6: Modernization of teaching

6.1. Strategies and policies supporting development	- Getting to know the university level strategies and policies from ban and E
6.2. Quality assurance (QA) standards of e-learning	- Getting to know different standards of e-learning
6.3. Degree evaluation	- How universities are evaluating the learning results of students and how students are evaluating teaching on degree level?
6.4. How to utilize feedback as a source of development	- How the results of different evaluations are utilized by the teachers, departments and by the university
6.5. Curriculum development	- The strategies and methods for curriculum development (using the results of work)
6.6. Staff development as a tool for development	- Staff development in the strategies and policy documents - Different ways of staff development: training, mentoring, self-study, peer-learning

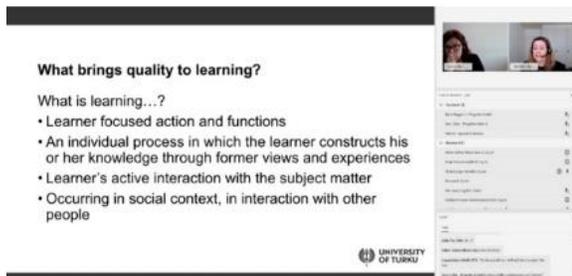
## ❖ UNITEL project meeting, March 16th 2022

- WP7 Financial and administrative issues and remarks - USGM:
  - equipment (Equipment list validation),
  - tranche of funding
- UNITEL Training path development – UTU:
  - Update of the e-course's development and next (virtual) study visits action plan: dates,
  - Presentation of the draft content of each topic/module (all partners) - Round table overview,
  - Update on Selection of professors (e-course: 15-16 participants per Iranian HEI) and selection of tutors (3 per Iranian HEI)
- WP2 – e-course /OBS training session – USGM
- UniTel e-course on Moodle Platform / Task Development of the Virtual learning Environment – Prisma

The image shows two screenshots. The top one is a Moodle course page titled 'UNITEL E-COURSE' with a list of topics and a sidebar with navigation options. The bottom one is a Zoom meeting grid showing several participants in a virtual meeting.

## ❖ UNITEL First Study Visit, 13 April 2022

- **Welcome, overview of the agenda, P1 – USGM**
- **Prof. Francesco Claudio Ugolini (USGM):** Distance Education, e-learning, Emergency Remote Teaching. Theoretical and historical background + Q&A
- **Prof. Domenico Morreale (USGM):** Innovative educational technologies and design for e-learning (video presentation)
- **Education Coordinator, Project Manager Heli Brander (UTU):** How to design high quality and learner-centered e-learning – Presentation and discussion
- **Senior Coordinator Matti Lappalainen (UTU):** UNITEL Course materials’ templates
- **Questions & Answers and Conclusions of the meeting**



## ❖ UNITEL project operative meeting, May 9th 2022

### SUMMARY:

This meeting had the purpose to recap the current situation of the active WPs and set up an agreed list of detailed deadlines for each deliverable/task.

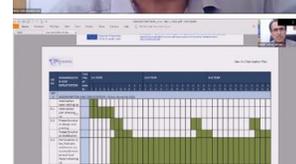
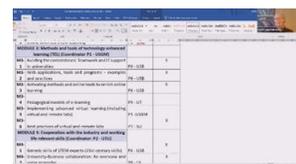
I. Reggiani on behalf of USGM explained the aims of the meeting. She explained that all the partners should have an overview of all the “in progress” activities and all the expected results in the next few months.

USGM will share the updated action plan to the EU Project Officer (PO). They will have a meeting with the Project officer in the next few days. It will be important to show to the Project Officer a realistic scheduling and all the specific deadlines for each deliverables.

The EU project Officer will make an ongoing assessment, he is unfortunately entitled to reduce the funding in case of not satisfactory or not completed outcomes.

The intention is to be all ready for the first official progress report (interim report) which is due at the 21th month and for which all partners will receive precise information about time frame and list of requested documents.

As concerns the meeting in Rome, USGM will circulate a Doodle among all the partners in order to arrange the final dates.



Deliverable/Task	Deadline	Who
<b>WP1</b>		
Dev 1.1 Comparative analysis (State of the Art of HEIs in Engineering and STEM studies)	31/05/2022	Shahid Chamran Uni + UTU
Dev 1.2 Guidelines for modernising HEIs engineering and STEM studies curriculum integrating new pedagogical and digital learning approaches	31/05/2022	Shahid Chamran Uni + UTU
Dev 1.3 Roadmap on industry-relevant Skills and competences	31/05/2022	Shahid Chamran Uni + UTU
<b>WP2</b>		
Finalization of PPTs and Lecture Notes + including ongoing review made by the Module Leaders	03/06/2022	All the partners
Finalization of lessons recordings	17/06/2022	All the partners
USGM Post-production	01/07/2022	USGM
Finalization of the Platform with lessons uploaded	15/07/2022 to be confirmed after UTU-Prisma meeting (12/05/2022)	Prisma
Delivery of the e-course	From 16/07 until Mid-September 2022 – to be confirmed	Iranian partners with EU support
<b>WP5</b>		
Final version of the Q&E Plan (with peer review process and tools + contingency updated procedure +1 <sup>st</sup> Quality report for the products) Dev 5.1	20/05/2022	Universidade Aberta
- Terms of Reference for the contractualization of the External Evaluator (collection of at least three quotations/offers + selection of the person + Contract)	20/05/2022	Universidade Aberta
Quality report for the project management (M11) Deliverable 5.2	20/05/2022	Universidade Aberta
1 <sup>st</sup> Quality report for the products (e-learning environment/platform)	15/06/2022	Universidade Aberta
E-course participants' expectations questionnaire	15/06/2022	Universidade Aberta
<b>WP6</b>		
Feedback to Shiraz University on the newsletter, website and valorisation plan saved in the Drive folder. WP6 Dissemination	13/05/2022	All the partners
Ongoing dissemination of UNITEL project at Institutional/national and international levels	ongoing	All the partners – Shiraz university coordination

## Actions in the middle:

### WP2 :

- Shiraz Uni and USGM will meet to arrange M3.5 and M5.5 to avoid overlapping

### Wp7 :

- Shiraz Uni and USGM will test RobinRoom
- Iranian partners will meet to discuss internally PJ Managers and institutional turnovers
- USGM and Teheran University will meet on the 10th of May, then UTU will be updated and will meet bilaterally with Teheran in order to arrange WP2 activities
- USGM will circulate a Doodle with different options for the next Meeting that will take place in Rome

## ❖ UNITEL Progress online meeting 20 July 2022, 9.30 CET time - LINK Robin room

### Main Points Discussed and the Next Actions:

- IKIU and SCU will send the passport numbers of the new persons added that will have to receive the invitation letters from USGM.
- USGM will send the individual invitation letters for the Rome meeting with the specification of the Erasmus Plus Program project.

3. USGM will send the complete list of invited persons to the Italian Embassy and it will be forwarded to the partners.

4. USGM will send an information email on the travel costs and financial rules.

5. All Iranian partners confirm that they have/have not received the appointment for the VISA issuing - by the 5th of August.

6. USGM will send the Equipment list revised to the Project Officer and he will send a feedback/confirmation - hopefully by the end of July 2022.

7. USGM will make its best to speed up the equipment process and the 2nd tranche transfer.

8. WP2: videos ready and uploaded on Google Drive - by end of July, 15th of August at the latest.

9. Follow, Like, in general engage with the Social Media pages Dr Safavi (SU) has created, he has sent an email on this yesterday 19.07.2022.

10. Dr Safavi (SU) will send a communication on the ICeLeT 2023 conference.

UNITEL e-course modules and topics: Slight modifications in titles still possible after discussions with Module coordinator		
MODULE 1: Orientation to the course and modern concepts of learning (Coordinator: P2 - UTU)		Responsible partner
M1-1	Orientation to the course	P2 - UTU
M1-2	The current state of Iranian higher education - Lessons learnt from the UNITEL Project survey (WP1)	P8 - UI
M1-3	The concept, models and implementations of e-learning	P10 - SCU
M1-4	Designing quality e-learning	P9 - UT → USGM
M1-5	Process of e-Learning Design	P9 - UT → USGM
M1-6	Concluding remarks (topic discussed in more detail with the partners of the module)	P10 - SCU

<b>MODULE 2: Student-centered learning in practice and in STEM (Coordinator: P3 - UAb)</b>		
<b>M2-1</b>	How to build learner-centered e-learning	P10 - SCU
<b>M2-2</b>	Engaging and motivating students with real-world problems in STEM teaching	P5 - IKIU
<b>M2-3</b>	Student engagement and motivation through voluntary subject choice and flexibility in STEM teaching	P5 - IKIU
<b>M2-4</b>	Building and utilizing community and collaboration in e-learning	P2 - UTU
<b>M2-5</b>	Case example(s) of online implementations of STEM	P5 - IKIU
<b>M2-6</b>	Open educational resources (OER) and MOOCs in online oriented STEM teaching	P3 - UAb
<b>MODULE 3: Methods and tools of technology enhanced learning (TEL) (Coordinator P1 - USGM)</b>		
<b>M3-1</b>	Building the cornerstones: Teamwork and IT support in universities	P6 - USB
<b>M3-2</b>	Web applications, tools and programs – examples and practices	P6 - USB
<b>M3-3</b>	Activating methods and online tools to enrich online learning	P6 - USB
<b>M3-4</b>	Pedagogical models of e-learning	P9 – UT → USGM
<b>M3-5</b>	Implementing advanced virtual learning (including virtual and remote labs)	P1 -USGM
<b>M3-6</b>	Best practices of virtual and remote labs	P7 - SU
<b>MODULE 4: Cooperation with the industry and working life relevant skills (Coordinator: P2 - UTU)</b>		
<b>M4-1</b>	Generic skills of STEM experts (21st century skills)	P6 - USB
<b>M4-2</b>	University-Business collaboration: An overview and some examples	P8 - UI
<b>M4-3</b>	University's Technology Transfer (TT) strategies and ecosystems in European and Iranian universities	P2 - UTU
<b>M4-4</b>	Embedding Enterprise in the Curriculum I: Internships, alumni speakers, company visits etc.	P2 - UTU
<b>M4-5</b>	Embedding Enterprise in the Curr. II: Joint Masters' thesis at companies, project assignments etc.	P7 - SU
<b>M4-6</b>	Cooperation in engineering (The title can be modified)	P7 - SU

<b>MODULE 5: Assessment and feedback as a part of teaching and learning (Coordinator: USGM)</b>		
<b>M5-1</b>	Lessons learnt from the national survey in Iran: Student opinions (WP1) on the role assessment	P10 - SCU
<b>M5-2</b>	(A framework for digital assessment) including Self-evaluation and peer evaluation	P3 - UAb
<b>M5-3</b>	Plagiarism detection	P8 - UI
<b>M5-4</b>	Learning analytics	P1 -USGM
<b>M5-5</b>	Electronic exams	P1 -USGM
<b>M5-6</b>	Automatization of feedback	P1 -USGM
<b>MODULE 6: Modernization of teaching (Coordinator: P3 - UAb)</b>		
<b>M6-1</b>	Strategies and policies supporting development	P5 - IKIU
<b>M6-2</b>	Quality assurance (QA) standards of e-learning	P3 - UAb
<b>M6-3</b>	Degree evaluation	P3 - UAb
<b>M6-4</b>	How to utilize feedback as a source of development	P8 - UI
<b>M6-5</b>	Curriculum development	P7 - SU
<b>M6-6</b>	Staff development as a tool for development	P9 – UT → UTU

## ❖ **UNITEL project meeting 14 September 2022**

- **Welcome, overview of the agenda, (P1 – USGM)**
- **WP2: UNITEL Training path development (P2 UTU)**
  - Update of the e-course materials development (video lessons, assessment, PPTs)
  - Rescheduling of the delivery starting with the 1st introductory webinar
  - Selection of professors (e-course: 15-16 participants per Iranian HEI) and selection of tutors
- **Update on the Development of the Virtual learning Environment (P4-PRISMA)**
  - Update of the VLE developments
- **WP6 Dissemination and Exploitation (P7-SU)**
  - Update on dissemination activities and next steps
- **WP5 Quality Assurance (P3 UAb)**
  - Update on Quality activities and next steps
- **WP7 Financial and administrative issues and remarks (P1-USGM)**
  - Mid-term report administrative documents/deadlines
  - Equipment tendering procedures requirements + relevant documents

## ➤ E-course is ready! (November 2022)

The developments of the e-course of above table are now ready and the workshops will be started soon.

## ➤ Successful face to face meeting was held in Rome: 14th - 18th November 2022.

### • Venue

UNIVERSITA' DEGLI STUDI GUGLIELMO MARCONI (Conference Hall – Ground Floor) VIA PLINIO, 44 00152 ROME

### • Participants

P1 - USGM, Università degli Studi Guglielmo Marconi, Italy  
P2- UTU, Turun Yliopisto, Finland  
P3 – UaB, Universidade Aberta, Portugal  
P4 – PRISMA, Prisma Electronics ABEE, Greece  
P5 – IKIU, Imam Khomeini International University, Iran  
P6 – USB, University of Sistan and Baluchestan, Iran  
P7 – SU, Shiraz University, Iran  
P8 – UI, University of Isfahan, Iran  
P10 – SCU, Shahid Chamran University of Ahvaz, Iran  
P12 - NAMVARAN P&T COMPANY, Iran

After great efforts from the UNITEL management team and very good planning of each partner institution, we came all together in Rome with 5 days valuable plans. In this meeting, first, each member had a presentation (1) to briefly introduce his/her organisation and (2) to explain how each has disseminated /embedded (or will do in the future) the UNITEL project in your organisation (this was in particular for Iranian partners). The rest of the activities can be seen in the agenda.

### • AGENDA

#### Monday 14th November 2022

- 9:30 – 13:30 - Bilateral Meetings with partners (on request)
- 9:30 – 10:30 - Bilateral meeting UTU – USGM
- 10:30 – 11:30- Bilateral Meeting SCU – USGM
- 12:00 – 13:00 - Bilateral Meeting NAMVARAN - USGM

#### Tuesday 15th November 2022

- 9:30 – 9:45 - Registration of Participants
- 9:45 – 10:00 - Welcome and Introduction to the Agenda of the meeting and study visit  
Project Coordinator, USGM
- 10:00 - 11:15 - Presentation from each Partner Organisation/State of the Art of UNITEL Project at Institutional level (10/15 minutes each)  
P2- UTU, Turun Yliopisto  
P3 – UaB, Universidade Aberta  
P4 – PRISMA, Prisma Electronics ABEE  
P5 – IKIU, Imam Khomeini International University  
P6 – USB, University of Sistan and Baluchestan
- 11:15 - 11:30 - Coffee break
- 11:30 - 12:30 - Presentation from each Partner Organisation/State of the Art of UNITEL Project at Institutional level  
P7 – SU, Shiraz University  
P8 – UI, University of Isfahan  
P10 – SCU, Shahid Chamran University of Ahvaz  
P12 - NAMVARAN P&T COMPAN
- 12:30 – 13:00 - WP7 Management and Financial Issues  
Project Coordinator, USGM
- 13:00 – 14:00 - Lunch Break
- 14:00 - 14:30 - Overview of the most important USGM Research Challenges funded by the European Commission under the framework of the Horizon 2020 program.  
The University's contribution to the development of the renewable energy technologies, the backbone of the EU energy system by 2030 and 2050.  
Prof. Enrico Bocci, Full Professor of "Electrochemical and Thermochemical Conversion Systems", "Advanced Traction Systems Management", "Electrical Engineering". Director of the Laboratory of Applied Science & Technology at Guglielmo Marconi University
- 14:30 – 15:30 - Visit the USGM Laboratory of Applied Science and Technology  
(Split the group in 3 small groups)

#### Wednesday 16 November 2022

- 9:30 – 13:00 - WP7 Management and Financial Issues (Focus on Progress Report)  
Project Coordinator, USGM  
WP2 UNITEL Training path development  
UNITEL e-course: From plan to reality!  
WP Leader: P2 UTU  
WP2/ Update on the Development of the Virtual learning Environment  
Act. Leader P4 PRISMA

WP3: UNITEL training delivery  
 WP Leader P4 PRISMA  
 WP4: UNITEL curriculum modernization  
 WP Leader P1 USGM  
 WP5 Quality Assurance  
 WP Leader P3 UaB  
 WP6 Dissemination and Exploitation  
 WP Leader P7 SU

- 13:00 – 14:00 - Lunch Break
- 14:00 - 15:30 - Visit to the USGM Marconi Studios (Via Vittorio Colonna 11) 15 minutes walking distance from Via Plinio, 44. Registration of Interviews with the contribution of some Partners.

**Thursday 17th November 2022**

**Workshop on e-Learning current and next challenges (9:30-13:30 CET time)**

- Welcome and registration of the participants
- Developing and implementing innovation training projects: why innovation can't happen without standardization  
 Dr. Arturo Lavalle, Head of Research & Development Department
- Online Teaching: evolution, pandemic, laboratories and other stuff  
 Prof. Matteo Martini, Professor at Engineering Science (DSI) Department
- Coffee break
- Prof. Guia Venturoli, Professor, expert in Instructional and Educational Design
- Academic Virtual Laboratories for Distance Learning  
 Prof. Ernesto Grande, Professor at Engineering Science (DSI) Department
- Open Discussion & Conclusions of the Workshop

**Friday 18th November 2022**

- 9:30 – 13:30 - Bilateral Meetings with partners (on request)
- 09:30 – 10:30 - Bilateral Meeting University of Isfahan

**• Gallery**



## ➔ Follow UNITEL on social media



Instagram:

[https://instagram.com/unitel\\_project?igshid=YmMyMTA2M2Y=](https://instagram.com/unitel_project?igshid=YmMyMTA2M2Y=)



ResearchGate:

<https://www.researchgate.net/profile/Unitel-Project>



LinkedIn:

<https://www.linkedin.com/company/unitel-project/>

## ➔ Looking into the Future

After successful meeting in Rome and with the accomplishment of e-course development we are looking forward to the following:

- Starting Dissemination events at partner universities
- Starting e-Course Workshops
- Contributing to ICeLeT 2023 with reports, papers, and speeches
- Planning the next meeting

## ➔ PARTNERS



Università degli Studi  
Guglielmo Marconi - USGM



University of Turku (UTU)



Universidade Aberta (UAb)



PRISMA ELECTRONICS SA  
(PRISMA)



Imam Khomeini  
International University  
(IKIU)



University of Sistan and  
Baluchestan (USB)



Shiraz University (SU)



University of Isfahan (UI)



University of Teheran (UT)



Shahid Chamran University of Ahvaz  
(SCU)



Namvaran Pazhouesh va Tose-ae  
(NPT)

## ➔ VALORIZATION TEAM SETTING UP

The Valorization team has been setting up as follows:

Prof. Ali Akbar Safavi (SU)

A/Prof. Ghasem Salimi (SU)

A/Prof. Mohammadsaber Khaghaninejad (SU)

Ms. Mehrnoosh Soltanian (SU)

Ms. Fatemeh Rezaeian (SU)

Ms. Fatemeh Mirghafari (SU)