



Erasmus+: Cooperation partnerships in higher education

Collaborative e-platform for innovation and educational enhancement in medical engineering

CALLME Training – Report

Project Title	Collaborative e-platform for innovation and educational enhancement in medical engineering 2022-1-RO01-KA220-HED-000087703									
Output	CALLME – Training									
Date of Delivery	November 2024.									
Author(s)	Velibor Isailovic									

















1. Description of CALLME Project

CALLME Project Overview and Objectives

The CALLME project is designed to introduce an innovative educational framework known as the New Educational Methodology (NEM), which integrates STEM (Science, Technology, Engineering, and Mathematics) principles into the field of medical engineering education. This novel methodology will be seamlessly incorporated into existing educational structures, enhancing multiple academic curricula and courses as part of the project's outcomes. A key deliverable of the project will be the development of an open e-platform, E-COOL, aimed at fostering collaboration, knowledge exchange, and cross-disciplinary partnerships. The platform will serve as a critical tool for the application of NEM, facilitating the formation of a molecular network that connects various stakeholders within the "triangle of knowledge," which includes business professionals (from biomedical companies), innovation hubs, and higher education institutions. Additionally, the platform will promote the continuous improvement of existing curricula and the creation of new educational programs at higher education institutions.

Project Objectives

The core objectives of the CALLME project are as follows:

• Establishment of a Collaborative Network:

To create a comprehensive network for medical engineering and education that fosters collaboration and knowledge exchange primarily between higher education institutions, businesses, and governmental entities. This network will encourage interdisciplinary partnerships and drive innovation in the biomedical engineering field.

• Integration of NEM and STEM Principles:

















The project aims to embed the New Educational Methodology (NEM) and STEM principles into current educational materials, providing a solid foundation for the development of future curricula at both higher education institutions and in the business sector.

Development of the E-COOL Platform:

A pivotal component of the project is the creation of the E-COOL Smart Content Management System, an advanced web platform designed to integrate the established network and facilitate the creation of courses based on NEM and STEM methodologies. This platform will support the dissemination of educational content and resources in an accessible and interactive format.

Promotion of Network Access and Long-term Sustainability:

The project seeks to increase access to the collaborative network and NEM approach, ensuring that its impact is sustained through the effective use of the E-COOL platform and other available resources. This objective emphasizes the long-term development and sustainability of the initiatives initiated by the project.

Project Consortium

The realization of the CALLME project is being led by a consortium of institutions, including:

- Technical University of Cluj-Napoca, Romania (Project Coordinator)
- University of Nis, Serbia
- Technical University of Riga, Latvia
- University of Dublin, Ireland
- University of Kragujevac, Serbia
- G.M Eurocy Innovations LTD, Cyprus

















2. Summary of the CALLME training

The second training session related to the CALLME project was conducted at the Faculty of Engineering, University of Kragujevac. The session was attended by a group of students who expressed interest in specializing in biomedical engineering. The training aimed to introduce the participants to the core components of the CALLME project, the innovative educational methodology, and the E-COOL web platform.

Training Structure and Content

The training consisted of the following key sections:

• Introduction to the CALLME Project:

The training began with an introduction to the goals and objectives of the CALLME project. Participants were familiarized with the concept of integrating New Educational Methodology (NEM) and STEM principles into biomedical engineering education. Emphasis was placed on the molecular (atomic) learning concept, which serves as the foundation for the project's innovative approach to medical engineering education.

• Demonstration of the CALLME Web Platform:

In the second part of the training, the entire CALLME web platform was presented. This included a walkthrough of the platform's functionalities, such as user registration and login processes, as well as how to navigate the platform. Participants were shown the available teaching materials and courses accessible through the platform, and were introduced to the concept of e-centers, which enable networking among stakeholders from academia, business, and the public sector.

















Utilizing E-Centers and Networking:

The session also included a demonstration on the use of e-centers for fostering collaboration among various stakeholders involved in the project. The attendees were shown how e-centers facilitate knowledge exchange, enabling professionals from diverse sectors to network and collaborate on multidisciplinary projects.

Discussion and Feedback

The final part of the training consisted of an open discussion. During the discussion, attendees raised several questions regarding the implementation and functionality of the web platform. A significant portion of the participants also expressed keen interest in the available courses and teaching materials offered through the platform. Some attendees provided valuable feedback, suggesting that the application should not be limited to biomedical engineering alone. They proposed expanding the platform's scope to encompass other fields, leveraging the versatility of e-centers to bring together professionals from various disciplines who are involved in multidisciplinary projects.

















3. Attendance

A training session was held at the Faculty of Engineering with a group of students from the Department of Computer Technique and Software Engineering, who expressed interest in specializing in biomedical engineering. During this training, the attendees were provided with an overview of the CALLME project, its objectives, and its educational impact on the field of biomedical engineering.

The session included a detailed presentation of the project's web platform, highlighting the available courses and teaching materials, as well as demonstrating the functionalities of the platform. Additionally, the concept and usage of e-centers were discussed, emphasizing their role in fostering networking and collaboration among stakeholders, including academia, industry, and the public sector.







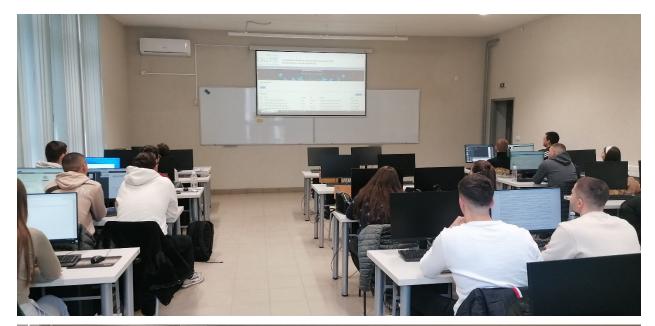














Below is a list of students who attended the session where is presented the C1 course – Personalized bone implants design and manufacturing, that was created as a result of the project.







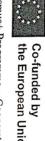












the European Union

Erasmus+ Programme – Cooperation partnerships
Project No.: 2022-1-RO01-KA220-HED-000087703
Title of the activity: Training
Starting date: 06.11.2024.
End date: 06.11.2024.

Place:

Faculty of Engineering, University of Kragujevac
ATTENDANCE LIST

Training activity

19.	18.	17.	6.	5.	14.	13.	12.	71.	20	0	8,	, t	o.	S	'n	Ç	N	2	No.
Lazze Jaconfieric	Alexsandar Dokić	Luka Vicijević	Place Watherfunt	trunia Thyorapholit	Гована Раконац	Cosa DMM+PURSUL	Mynia ByroB	I Sekca Quint	Dajana Theanobyt	Antela Standinović	Anerca MUNEHKOBHT	Chnjen Obradović	Mary Jearth	Mesosopo Mercara	Miday Nedic	Vilter Redosculjević	Luka Rafailovic	Nemas Estavić	Participant name
raculty of Engineering Sorbia, Krogy jours	71-	Faculty of Engincening	faculty of Engineering	Faculty of Engineering	FACULTY of Engineering	FACUCY of Expinenting	Faculty of Engineering	Faculty of Fuguerering	Foculty of Engineering	Faculty of Engineering	Faculty of Engineering	Faculty of Engineering	Foculty of Engineering	Faculty of Engineering	Faculty of curin evincy	totalto of mainporting	faculty of engineening	faculty of engineering	Sending organisation name
Serbia, Kragy jovac	- -	Serbia, Krag viewac	Serbia, Frayyvac	Serbia Maguinac	Sestion, Kracy jeur	Soba, Kragujovac	Serbia, Kraznjeva C	Serbia, Kraga jevac	Sechia Vacquievac	Serbia Laguiciac	Sorbia, King wievac	Serbia, Kragujevac	Serbio, Wagujerac	Serbia, Kragijemic	Sou ba, Linguage	YOMIZ , KROWEUZC	Serbia, Kragujevac	School Knochaena	Sending organisation address (city, country)
Dogwood	A. Fount	"Auricus"	Hoga Marunt	H. Office and the	1	Cilman	Uning Ryrolo	Jt. Baluk	OF STATE OF	d tworquidant	Anerica Musei Lobus	CEDEN Courgelant Co	Trake Jebunit	JONEUNT MESSION	Medic	wind Reservation	Mika Judourslent	いからしたいのできた	Participant signature













Insert the logo of the organisation







Marions Jesevic Faculty of Engineering hagywas, Surbia Insert the logo of the organisation Mercenuk

for this event, you give your consent to be filmed and/ or photographed for the reasons mentioned above. and dissemination of results from projects funded by the Erasmus+ Programme. The materials will not affect your personal or institutional image. By registering such data. During the event, photos/ screenshots and/ or video recordings will be taken for use by the Velibor Isailovic for purposes related to the promotion Parliament and of the Council of 22 October 2018 on the protection of individuals with regard to the processing of personal data and on the free movement of European Commission. They will be stored and processed by Velibor Isailovic in accordance with the provisions of Regulation (EU) 2018/1725 of the European All personal data provided for registration for this event is collected during the implementation of the Erasmus+ Programme according to the regulations of the

















4. Conclusion

As outlined in the previous section, the CALLME project aims to introduce an innovative educational approach known as the New Educational Methodology (NEM), which integrates STEM (Science, Technology, Engineering, and Mathematics) principles, particularly within the context of biomedical engineering education. The project's objective is to enhance existing educational frameworks by introducing these new methodologies to foster advanced learning in the biomedical engineering field.

Additionally, the CALLME project seeks to establish a virtual network—referred to as eCenters—that facilitates collaboration and knowledge exchange. This network will primarily connect higher education institutions, business entities, and public institutions, promoting interdisciplinary cooperation and advancing the field of medical engineering.

The second training session related to the CALLME project was held at the Faculty of Engineering, University of Kragujevac. This session was attended by a group of students interested in specializing in biomedical engineering.

The training was structured into several key sections:

- Introduction to the CALLME Project: The attendees were familiarized with the goals and objectives of the CALLME project, providing them with an understanding of its broader educational and collaborative impact.
- Web Platform Content Demonstration: A comprehensive demonstration of the web platform's content was presented, showcasing its educational resources and tools.
- Course Demonstration: Attendees were shown the various courses available within the platform, highlighting how they are structured to integrate NEM and STEM principles.
- E-Center Usage Demonstration: A demonstration of how to use e-centers was provided, illustrating how the platform facilitates networking and collaboration among stakeholders in academia, industry, and public institutions.

















Comprehensive Discussion: The session concluded with a thorough discussion, allowing
participants to ask questions and provide feedback on the project's implementation and
the platform's functionalities.











