

**Technical University of Cluj-Napoca** ROMANIA, www.utcluj.ro



**JAMK University of Applied Sciences** FINLAND, www.jamk.fi



University of Jaén SPAIN, www.ujaen.es



Integración Sensorial y Robótica SPAIN, www.isr.es



Valmet Technologies Oyj FINLAND, www.valmet.com



**Robert Bosch SRL** ROMANIA, www.bosch.ro



# ernational Cooperation Framewor **Students** www.nextgeng.eu **Next Generation**



NextGEng

## **Contact:**

University of Jaén (Spain): Silvia Satorres Martínez, email: satorres@ujaen.es José Ignacio Jiménez González, email: jignacio@ujaen.es

Technical University of Cluj Napoca (Romania): Ciprian Lapusan, email: ciprian.lapusan@mdm.utcluj.ro

**JAMK University of Applied Sciences (Finland):** Anneli Kakko, email: Anneli.Kakko@jamk.fi



# www.nextgeng.eu





# NextGEng

**International Cooperation Framework for Next Generation Engineering Students** 



# **ABOUT PROJECT**

The International Cooperation Framework for Next Generation Engineering Students project, NextGEng, is an international consortium with the aim of creating new international teaching models in close collaboration with companies. It comprises three types of activities:

- Training. Experts in pedagogy and teacher training sustain the skill improvement of HEIs partners in new/innovative teaching methods.
- Team Teaching. Upgrade a set of engineering courses, belonging to the HEI partners curricula, in close collaboration with companies' partners.
- **CEL projects.** Type of projects where students learn by doing in an international and multidisciplinary environment.



In the course of the NextGEng, 6 CEL projects will be developed in two rounds. The schedule of the project follows the academic semesters in all HEIs

# Cases of Experiential Learning **CEL** projects

CEL projects focuses on bringing students, HEI staff and companies to work together. The idea is that students from different study programs and nationalities are brought together to form mixed groups in order to solve a research or industry topic.

During implementation of a CEL project, three groups of students compete in solving the proposed topic over one academic semester. Their work is supervised by teachers from participant universities and representatives from the company or research groups. The work on problem solving involves one intensive week at the start of the project and distance working and virtual meetings during the semester. At the end of the project virtual seminars are organized where the three student groups present their results to the company/research group representative and academic supervisors. After the presentations the winning solution is chosen and students receive grades for the activity.

One CEL Project → At	t least <b>25</b> participants

At least one Company or research group supervisor

6 supervisors from HEIs (2 UJA + 2 IAMK + 2TUCN)

	INTERNATIONAL & MULTIDISCIPLINARY TEA			
			_	
NTS	Group-A	Group-B	Group-C	
TUDE	UJA UJA	UJA UJA	UJA UJA	
8 ST	JAMK JAMK	JAMK JAMK	JAMK JAMK	
	TUCN TUCN	TUCN TUCN	TUCN TUCN	













### Selection of the project topic

A list of potential topics for the CEL projects is created at the beginning of each round. The potential topics are collected by all partner HEIs by contacting the partner companies and HEI research groups in their universities. After contacting and having meetings, a report of the offered CEL proposals is created and the topics are analysed. From the proposal list, the partner HEIs choose together three companies or research groups and their CEL proposals for the first-round projects. The selected companies or research groups nominate a contact person, who tutors the student teams, answers their questions and analyse the final reports. The company/research group tutor also participate in the final seminar and chooses the winning team. Rejected CEL project proposals are reserved for future use in the second round.

### **Description of a CEL project**

A CEL project description should include:

- Topic (CEL project name)
- **Project Objectives**
- Methodologies
- Working hours estimation
- Students and supervisors profiles
- Potential activities for the intensive week. Topics for the seminars and expected results after the intensive week.

#### Schedule for the first round

Activity	Start	End
List of CEL projects	03/2023	07/2023
Detailed plan for the first round	08/2023	12/2023
Participants selection	01/2024	02/2024
Intensive weeks (TUCN, JAMK, UJA)	03/2024	03/2024
Distance working, reports and evaluation	03/2024	07/2024

The second round follows the same schedule

Starting date: 08/2024

End date: 07/2025