Universidad Europea

NEWSLETTER
UE STEAM SCHOOL

NO 08

31 12 2023

ESCUELA DE ARQUITECTURA, INGENIERÍA Y DISEÑO

# UE STEAM SCHOOL

# NEWSLETTER

# INDEX

## RETROSPECTIVE



## PROSPECTIVE



## ALUMNI



## CLUBS


## FIFTH EDITION EUROPEAN PROJECT-BASED LEARNING

In November, the School held the fifth edition of the European Workshop on Project-Based Learning, which this year was attended by four graduates, already immersed in the world of work, from European universities that stand out for the degree of implementation of the PBL methodology, Edward Zammit from Delft University of Technology, Juan Manuel Alameda from the European University of Madrid, Susana Figueroa from the University of South-Eastern Norway and Aitziber Iglesias from the University of Mondragón.In this conference they have told us about the most outstanding projects in which they have participated in their universities, what has given them academically, the advantages that they have found in their professional career as a result of having studied their careers using the PBL methodology and the areas of improvement that they would apply in this methodology.

As advantages in their academic career, they have coincided in highlighting the transversal skills they have acquired with the methodology, such as teamwork, communication and leadership skills, creativity, critical analysis and resilience, which has helped them to address the different challenges that have arisen in the university environment.

In their professional career, they have detected some possible proposals to improve and/or enhance the PBL methodology. It is worth highlighting "Put in practice", learning by solving problems that are useful, if possible, in real cases and in collaboration with companies to understand how the concept object of learning affects real life.

The project-based learning methodology is the differential element of the School, articulated in an exceptional faculty, state-of-the-art facilities and a close relationship with the professional sector. Events such as this workshop allow us to extract lessons learned that help to continuously and intentionally improve the methodology, so that the School grows as an authentic organization open to learning. The lessons learned are incorporated into the School's Knowledge Map, so that they reach all teachers and result in a better education for students.

A day that has provided many lessons to apply improvements and/or enhance some aspects of the PBL methodology.>>

## ARCHITECTURE SHOWCASES

On Thursday, October 26, the exhibition "Showcase of Architectures: Performative Models, Prototypes and Material Definitions Made by Architecture Students of the Universidad Europea" was inaugurated at the Official College of Architects of Madrid, COAM, curated and designed by our professor Carlos Arroyo.

With this new exhibition cycle, the STEAM School of the Universidad Europea and the COAM show, at the headquarters of the College of Architects, models of projects by architecture students to collegiate architects and society, making them visible in three of its shop windows towards Hortaleza Street, which thus acquire a new meaning.

They are three unique windows open to the citizens of Madrid and passers-by on Hortaleza, Street who can see and learn first-hand about the projects of our students, the future Architects, who will intervene, in a few years, in cities and territories.

We would like to thank the Official College of Architects of Madrid (headed by Sigfrido Herráez, Dean, Pablo Olalquiaga, Vice-Dean and Miguel Lasso de la Vega Zamora, Manager of the COAM Foundation), for their support for this initiative of our School, which reinforces and values the training of future members, and, above all, makes Architecture and its processes. >>

"THE STEAM SCHOOL AND THE COAM SHOW CITIZENS, IN THREE SHOP WINDOWS ON HORTALEZA STREET, MODELS OF PROJECTS BY THE ARCHITECTURE STUDENTS OF THE UNIVERSIDAD EUROPEA".


## MR. GOKULAKRISHNAN SRIRAM VISIT

On October 13th, Mr. Gokulakrishnan Sriram, Member of the Board of Trustees of the Chennai Institute of Technology (India), visited us. A very fruitful meeting, followed by another on December 11, a follow-up meeting took place in which we made progress in different lines, including the possibility of bringing in a visiting professor expert in artificial intelligence, training them in project-based learning, and collaborating in research in that methodology.»

"VISITS FROM UNIVERSITIES SUCH AS THE CHENNAI INSTITUTE OF TECHNOLOGY ENRICH THE EUROPEAN UNIVERSITY BY SHARING EXPERIENCES".


## CYCLE REFERENCES: ELVIRA LINDO

Elvira Lindo joined us on Wednesday, October 11th, for the fourth meeting of the cycle References of the STEAM School of the Universidad Europea, which was moderated by Pedro Lara. The guest explained that her new work is the result of the stories she has lived throughout her life, because, as she recalled, "a book is not born from one idea, but from the explosion of several ideas". And, as she said, "we all leave ghosts of ourselves in every place and in every important place in our lives". A meeting of great pedagogical, human, and emotional value for the students. >>

## PROFESSOR ALAIN DE RYCK VISITS

At the School we were able to enjoy the visit of the Physicist and Researcher of the RAPSODEE Centre, IMT School of Mines of Albi (University of Toulouse and CNRS) of France, Alain de Ryck. For several days, our students had the opportunity to learn about the lines of research and the work they are doing at the University of Touluose. It was a luxury for our students to be able to count on their experience during those days and a great opportunity for the School to continue advancing in the Degree in Physics.>>


## HACKROCKS, TECH FACTORY'S INDUSTRIAL PARTNER FOR CYBERSECURITY

Enrique Serrano, CEO and founder of Hackrocks, participated in the official signing ceremony of this industrial partnership between his company, which specialises in cybersecurity training, and the STEAM School, associated with our TechFactory. In this laboratory, students from careers such as computer science, data science or telecommunications, among others, will be able to receive training, practice with the challenges that the Hackrocks platform offers them and organize contests and challenges such as CTF (Capture The Flag), which will surely be very interesting for them.

The event was attended by the director of the School (Alberto Sols), the degree coordinators (Ana Corrales and Luis Gracia) and the deputy director of the area of Computing and Technology (Pedro Lara). In the photo, the smiling and excited members of the Cybersecurity team (HackNet) of the Computer Club (C_INT) who will undoubtedly be the ones who will get the most out of this new collaborator.»

## ARQUIMEA, STEAM'S NEW INDUSTRIAL PARTNER IN THE AREA OF COMPUTING

Arquimea, a technology company with a focus on sectors such as Aerospace, Defence, Science Industry, Biotechnology and Fintech, has been a new industrial partner since last November to collaborate with the School in the training of our students. Rubén Criado, General Director of Arquimea Research Center (ARC) was in charge of signing the agreement. The ARC is an applied research centre with more than 70 researchers that is currently working on some twenty projects from which 7 patents have already been issued that are already being used, or will be used shortly, in industry. Once again, the Tech Factory has been the space chosen to carry out the different activities covered by the agreement. These activities range from training in some of the products developed by Arquimea, such as Volinga, to the supervision of some final degree projects that use ARC products or develop or test some functionalities associated with some of Arquimea's products. Thanks to Rubén, Sofía Alfaro and Emilio Ramiro for their willingness to collaborate with the School."»

"THE AIM OF THE SCHOOL IS TO BRING TO ITS FACILITIES WHAT IS HAPPENING OUTSIDE.“



## INDUSTRY 4.0 AND TECH-FACTORY WILL HAVE CT INGENIEROS AS AN INDUSTRIAL PARTNER

With the aim of defining training activities related to the mobilerobots of the Industry 4.0 laboratory and the digital twins, whose technology is available in the tech-factory, CT engineersand the EU STEAM School signed an industrial partner agreement. The signing agreement was made on December 14 and we had the presence of Jose Evelio Jiménez, Country Manager for Spain.

During the presentation, students from the Bachelor's Degree in Industrial Engineering and the Bachelor's Degree in Mathematics Applied to Data Analysis had the opportunity to tell what these relationships with the industry mean to them.

To make this new relationship possible, CT engineers and teachers from the STEAM school have worked on a list of projects that will be the seed of the activities and projects that the students of the School's degrees will be able to develop with the support of CT engineers.»

## OESIA. A NEW INDUSTRIAL PARTNER FOR THE INDUSTRY 4.0 SPACE

On December 14th, the company OESIA signed the agreement as an Industrial Partner in the Industry 4.0 space. The implementation of an automatic guidance system for our robotic dog, based on the image sensors it has, will be the activity in which we will collaborate together.

OESIA, a Spanish engineering multinational dedicated to technological innovation, will undoubtedly be a great partner that will provide us with its great experience to be able to train our students as future professionals.

The Industry 4.0 space allows for practical training in which companies can bring the reality of the industry closer to real cases.

The mobile robots, that are part of the laboratory, make it possible to think of different applications and carry them out by programming them with autonomy. It is important that the applications are in an environment as close to a real environment as possible, so that the learning period they will address in the company is as short as possible and in this way they can start working as soon as possible.»


## THIRD YEAR OF FORMULA UEM AT MADRID MOTOR STUDENT

Our students from the FormulaUEM club participated for the third consecutive year in MadridMotorStudent. This event, organized by the Official College of Graduates and Industrial Technical Engineers of Madrid (COGITIM), celebrated its third edition with thirteen teams from eight Madrid universities, made up of more than 500 students from different branches of engineering and other university careers. These teams, together with our FormulaUEM team had the opportunity to show the prototypes they have designed to compete.

This event was attended by around 2500 Madrid students of Vocational Training (Technology branch) and Technological Baccalaureate. Within the scheduled activities there were challenges created by the different universities that attended the event. The challenge that UEM proposed to the attendees of the event was to guess the weight of last year's chassis just by lifting it. José Antonio Galdón Ruiz, Dean of COGITIM, Luis Collado, President of AECIM and José Luis Gross Iribas, Director General of Economic and Industrial Promotion of the Community of Madrid spoke during the event.»

## SERC RESERARCH REVIEW 2023

The School was present at the Research Review held in November in Washington, D.C., by the Systems Engineering Research Center (SERC), on the fifteenth anniversary of its creation. The SERC is a University-Affiliated Research Center of the U.S. Department of Defense, leading the research and systems engineering efforts of faculty, researchers, and students from more than 20 universities. Learning from the best is always an extraordinary opportunity to continue growing. SERC's lines of research in multiple disciplines, such as artificial intelligence and systems engineering, and its close relationships with the industrial sector, were an important source of inspiration. Dr. Dinesh Verma, Executive Director of SERC, who visited us in the spring, was very open to exploring opportunities for collaboration with the School. »

"SERC'S RESEARCH ACTIVITIES ARE A TRUE SOURCE OF INSPIRATION."

**THE CONTEST CLEVERLY INCLUDED"**

Tne "Sma try Included" contest' is an initiate e o' tne STEEN Scnool o' the Universidad Europea in the Canary Islands(UEC), Nadrid (UEN) and Valencia (UEV), to promote greater accessibility and inclusion in the society of the 2tst century, through the innovation, creativity and effort of our students, non-teaching staff, teachers and researchers. The comoetition is ooen to all mem9e s 0' tne uni e sity community. 0m the teaching point of view,"Smartly Included!", aims to contribute to the de elooment o' tne humanistic I awning o' ou students tn ougn ExDe iential Lea ning and deeoly contact ‹ itn comoanies, NGOs and otne institutions. On tne otne nand, "Sma try" is a contest tnat ecognizes, tn ougn tne issuance o' ce ti'icates o' oa ticioation and an exni9ition 0' ooste s «tn tne a ooosals, tne e"0 ts 0' tne sems-finalist, finalist and award-winning teams. Another important feature is that the finalist teams have a modest budget to be able to promote their a ooosals. In addition, all tnose inclusion and accessibility o«s ca«ied out by our teachers, researchers and non-teaching staff who wish to show their proposals and results are invited to the poster exhibition, out of competition.

Tn the first edition (202t/22 academic year) 33 proposals (teams) were initially registered, led by t5 teachers from the UEC, UEM and UEV, grouping 55 students. The second edition, which has just concluded, started during the 2022-2023 academic year. Initially, 43 proposals were registered, led by t5 professors from the UEC, UEM and UEV, grouping t29 students. Eleven of these proposals went on to the second phase of tne comoetition and ‹ e e e aluated by an ente nau (um e sity) U y tnat declared four projects as semi-finalists and seven projects as finalists. 'IT ally, aT ente Ta l U y, made ua o' entities collauo ating ‹ itn tne comoetition, e aluated tne 'i e 'inalist o ooosals and selected tne 'est three prizes: First Prize: "IAI0" Project (UEV). This advanced project aoolies of to mare tecnnology mo e a"o daule 'o orde oeoole so tnat they can stay in touch with their families and loved ones. It also serves as a olat'o m to mare it easie 'o nealtn o o'essionals to ca e 'o tnis sector of the population. Students: Alex De Naria Espiritusanto, Naria Celeste Arrilla Timofte, Pedro Torrijos Adiego, Nario Calleja Godson Tutor: Héctor Espinós Norato European University of Valencia Second Prize: Project "Biomedical Engineering Workshop against School Failure" (UEN). This workshop aims to bring university education closer to secondary schools

In order to promote talent in two ways: support for gifted students and the fight against school failure. The students carried out a workshop deconstructing their award-winning projects in the contest "X PROJECT CONTEST OF THE SCHOOL OF ARCHITECTURE, ENGINEERING AND DESIGN (STEAN School)" and providing professional guidance, first-hand as students of the second year of Biomedical Engineering, to the students of 4th year of ES0. Students: Clara Aibar Àlvarez and Naría Nàrquez Luquin. Tutors: Víctor Nanuel Padrón Nàpoles, Naría José Terrón López and Paula Egido Iglesias. European University of Nadrid Third Prize: "aiBeat" Project (UEN). This Telemedicine project is aimed at increasing the options when it comes to carrying out Cardiac Rehabilitation, trying to break the digital divide and bring telemedicine to tne innaoitants o' u al a eas and tne elderly. The project "IoTizes" an approved holter allowing the acquisition of biosignals in real time. Tnese biosignals 'eed a macnine Tea ning model 'o tne o ediction o' cardiovascular events. Student: Clara Aibar Àlvarez Tutors: Paula Egido Iglesias and Juan Antonio Guevara Gil.

In addition, Smartly nas se ed as a snob case 'o otne e y inte esting initiati es, among ‹ men ‹ e can nignlignt a ooosals to a omote tne cncula economy a ound co"ee a oduction in some communities in B azil, tne de elooment o' anoo t and ecycling a o ects in Côte d'f zone, a ooosals to improve body health using smart cushions, the development of training cente s 'o assistance dogs, initiati es to a omote osycnological ca e 'o tne population, among many, many others. During these two editions, we have had the nonou and a i alege o' na ing tne 'ollo‹ ing collaoo ating entities: CERNf (Spanish Committee of Representatives of People with Disabilities), Sigfox. (IoT Service Provider). IBN, TONI WORLD (Leading company in inclusion and accessibilità within the framework of Smart Cities), ONCE Foundation. Association o' iends o' tne An Nuseum (UNI), ENT Nad id. Senso Economy Fo um. (Tnin Tan , a Dionee in tne analysis o' tne Senso Economy inat D^o/Ides extensl/e Consulting sez/ICes on Ine Senlo^ EConomy and nel/ tecnnologies) and tne Talentum Foundation. Sma tly fncluded o‹ es a tot to many oeoole and ta es tnis oooo tunity to tnan , 'nstly, tne students and teacne s ‹ no na e aa ticioated oy sending tnen a ooosals and ca«ying tnem out, secondly, tne collaoo ating entities o' tne contest and tne oeoole ‹ no eD esent tnese entities, tne D 0'eSS0 S o' tne a i0uS SCn00IS and 'aCultieS ‹ no olunta ily aa ticioate as an inte nal U y, to tne Dnecto ate o' STERN Schools ofthe UEN, UEC and UEV. »

## BACHELOR'S DEGREE IN PHYSICS – ASTRONOMICAL OBSERVATION

The Bachelor's Degree in Physics organized a first astronomical observation meeting at the Villaciosa de Odón Campus in order to promote interest in Physics and Astronomy among all the students of the University. The event was organized by professors Marcos López Caniego and Miguel Aparicio Resco, who teach subjects in this degree

Not surprisingly, the Bachelor's Degree in Physics will offer a degree in Astrophysics and Cosmology starting from the second semester of the current academic year 2023-2024. This program will cover diverse aspects, including Astronomy, Galactic and Extragalactic Astrophysics, the Standard Cosmological Model, and Observational Cosmology. Additional observations, similar to the one mentioned above, will be conducted as part of this program.

Among the main objectives of the meeting was to acquaint students with the operational principles of a telescope, instructing them on how to align it and aim it at significant astronomical objects, including the moon and planets of the Solar System such as Jupiter and Saturn.

link » https://universidadeuropea.com/grado-fisica-madrid/

The students highlighted the usefulness of putting into practice the knowledge acquired in subjects in this area, as well as the incredible visual beauty of the Cosmos. »

Public Domain Images
.Saturno: NASA/JPL/Space Science Institute
Luna: Gestrgangleri (Wikipedia user)
Júpiter: NASA/JPL-Caltech/SwRI/MSSS/Kevin M. Gill

## ROUND TABLE ON INTRODUCTION TO UNDERGRADUATE RESEARCH IN PHYSICS

The Physics Program of the School of Architecture, Engineering, and Design organized the round table "Introduction to Research" with the goal of enhancing collaboration between various research centers and our faculty and students. The round table featured four experts in their respective fields, addressing scientific issues in diverse areas: Biophysics in Medicine, Biotechnology and Biomedicine, Modeling in Physicochemical and Biological Systems, and Electronic Transport in Crystalline Solids.

The researchers who participated were:

Manuel Ga. VELARDE, STEAM UEM and IP-UCM: Electron transport problems in crystalline solids.

Jean BRAGARD, Department of Physics and Applied Mathematics, University of Navarra: Problems of biophysics in medicine.

Michael STICH, Department of Applied Mathematics, Materials Science and Engineering, and Electronic Technology, Universidad Rey Juan Carlos: Modeling problems in physicochemical and biological systems.

Iván LOPEZ, Pluridisciplinary Institute, Complutense University: Problems of biophysics for biotechnology and biomedicine.

They conveyed the importance and the most relevant problems in their fields, leaving the door open for both students and teachers to join any of their research lines. It is a real privilege to have these references, to gain insights through their experience, and perhaps to discover a passion for research.»

## GABRIEL MARÍN INTERVIEWED ON RADIO 5

Dr. Gabriel Marín, director of the Master's Degree in Artificial Intelligence at Universidad Europea, comments in an interview broadcast on Radio 5 on the importance of this new reality to which we have to adapt. The STEAM School professor explains the importance of regulating this powerful tool: "There needs to be a legal framework and ethical coordinates that regulate the power of Artificial Intelligence (AI).»"

For more information visit the link // October 2023 » link

"THERE NEEDS TO BE A LEGAL FRAMEWORK AND ETHICAL GUIDELINES THAT REGULATE THE POWER OF ARTIFICIAL INTELLIGENCE."


## ENRIQUE PUERTAS IN THE SIXTH AND FOURTH

The expert in Artificial Intelligence and Big Data at the Universidad Europea, Dr. Enrique Puertas, talks to Cuatro al Día, Cuatro's program, to analyze the functionality of Artificial Intelligence in applications such as Tinder or Badoo. The STEAM School professor also took part last November in the La Sexta Research Team program to talk about the problem of the possible inappropriate use of ChatGPT by students).»"

For more information visit the links // October 2023 on Cuatro » link
November 2023 in "Equipo de Investigación" on La Sexta » link

## SERGIO BEMPOSTA ON RTVE

Sergio Bemposta, an expert in Robotics at Universidad Europea, talks to the Desafío Digital program broadcast on Radiotelevisión Española to analyze the role that robots play in today's society and to see how they help us in different areas. The STEAM School professor points out that "humanoid robots are used a lot to interact, as are mobile robots and industrial robots".»

For more information visit the link // October 2023 on RTVE » link

## CLUB AIR DIVISION – ROCKET LAUNCH

Our Air Division Club students successfully launched their first rocket of the year, named 'Astraeus I' in honor of the Greek deity related to the winds. The launch, carried out in Cuenca in November, allowed the team to obtain the L1 certification with SpainRocketry

The project stands out for its direct application of the Project Based Learning (PBL) methodology that characterizes our STEAM School, as well as for being an inspiring example of the challenges that our students decide to undertake in their extra-curricular life, expanding their knowledge and reinforcing skills as relevant in the professional field as communication and teamwork

The team designed and built the rocket, successfully passing the Level 1 certification exam of launching a rocket to a height of nearly 300 meters, deploying a parachute and recovering it without structural damage.

The ultimate goal of the Club is to be able to participate in the European Rocketry Challenge (EuRoC), the first rocket launching competition for European university teams .»

In the left photograph, the 'Astraeus I' rocket. In the right photo, students Ana Paredes and Diego Muñoz, managers of Club AirDivision

link » https://www.linkedin.com/feed/update/urn:li:activity:7136806698735874048/

## FORMULA UEM PARTICIPATION IN IFEMA METALMADRID

The FormulaUEM club, among its different activities, also seeks relationships with companies that allow them to sponsor the project. The FormulaStudent competition was created under the concept of generating a company (group of university students) for the project of developing a single-seater. It is the closest thing to opting for a public competition, with rules, deadlines and milestones that will position each university in a ranking. Among these milestones, two of them are: the cost and the business plan, which make up 175 points of the total of 325 static test points.

Knowing how to find funding, having a good marketing plan and understanding the concept of a business plan means differentiating yourself from the competition in those items and accumulating points. On this occasion, two companies, BOSSARD and HEXAGON, gave them the opportunity to have visibility at METALMADRID 2023, a leading event in manufacturing, machining and material processing with 600 exhibitors and more than 12600 visitors.

At the event, they had the opportunity to talk to other sponsors and look for new collaborations. »



link » https://www.instagram.com/p/Cz6oCbQrFna/?img_index=1

**CRISTINA GUERRERO, SELECTED FOR THE WONNOW AWARDS, AN INITIATIVE OF CAIXABANK AND MICROSOFT IBERIA.**

Cristina Guerrero, a student of the Double Degree in Computer Engineering and Mathematical Engineering applied to data analysis, has been selected from among more than 1000 candidates as a beneficiary of a scholarship from the 6th edition of the WONNOW Awards, jointly convened by CaixaBank and Microsoft Ibérica. These awards are aimed at female students of Science, Technology, Engineering and Mathematics degrees, with the aim of promoting gender equality and recognizing academic excellence, as well as the professional and social performance of STEM degree students.

For Cristina, this achievement symbolizes a breakthrough in her academic and professional career. Every step she has taken, from studying the double degree in Computer Engineering and Mathematical Engineering to participating in volunteer projects in Italy and Poland on sustainability, as well as her work experiences as a waitress and basketball instructor, has been supported by this scholarship. It fills you with gratitude, enthusiasm and motivation to know that all your effort and dedication has been recognized.

The scholarship includes remuneration to work at CaixaBank, as well as participation in a mentoring program provided by Microsoft. In an interview published on the Universidad Europea news website, Cristina discusses how she decided to apply for this award: "I found out through college. I got an email and decided to apply. And the day I found out that I was one of the selected ones I was very happy, I called my mother... But it was a contained emotion because although it was one of the shortlisted, it might not be definitive. When they finally said yes, I was beaming.“

"I HAVE BEEN SELECTED FROM MORE THAN 1,000 CANDIDATES AS A SCHOLAR OF THE WON-NOW ".

Cristina not only feels privileged and proud, but also grateful to these entities for giving her the opportunity to participate and also to her mothers who have worked and sacrificed a lot for her to be there right now.

The scholarship consists of an internship at Caixabank (started on October 2nd) for 6 months. At the moment, his boss is introducing him to the subject and explaining everything he doesn't understand, for which he is very grateful. Basically, it is responsible for monitoring customers' commercial actions.»


## EU TALENT DAY ARRIVED AT THE SCHOOL

Universidad Europea's TalentDay, organized by the Employability & Entrepreneurship Unit of the Office of the Vice-Rector for Students, was an event held on November 15, 2023 dedicated to connecting the talent of our students with the professional world. It was a day with activities in three venues at the same time, Madrid, Valencia and the Canary Islands, and streamed to reach all our students. The day began with LinkedIn and its Top Voices, who explained the usefulness of this network for job search and personal brand enhancement.

The other roundtables held were "Artificial Intelligence: enemy or ally of employment?", "Creativity as a profession", "New professionals in the area of health and their impact on progress. scientists" and "Online Work and Studies: The Future Has Arrived".

In the photo are the members of the panel on AI, Alicia Richart (Afinity), Javier Martin (Dulce Chacón Library), Enrique Puertas (UEM) and Juanjo Ordás (Job Hunter at Universidad Europea).

We were visited by more than 50 companies, with recruiters interviewing students in speed recruting. In addition, they took their professional photo for their CV or professional profile and, thanks to The Adecco Group, they played in an escape room to identify their competencies.»

## AGREEMENT WITH SERCO FOR COLLABORATION IN THE PROJECT "DEVELOPMENT AND CONSTRUCTION OF THE 3U CUBESAT
"

Last November, the agreement between the EU and SERCO Gestión de Negocios S.L.U. was finalized and signed. The purpose of this agreement is to collaborate on the project titled "Development and Construction of the 3U Cubesat." Specifically, the collaboration involves the construction of a picosatellite by students of the EU STEAM School, which is scheduled to be launched into space in 2024.

The agreement stipulates the transfer of essential materials by SERCO for the project's development. These materials will be utilized by students pursuing a Degree in Aerospace Engineering in the construction of the picosatellite. The construction will be carried out following the guidance provided by Professor Julio Gallegos, who holds a PhD in Aerospace Control Systems and a PhD in Astrophysics.

Among the donated materials are: (i) a reaction flywheel-based attitude control subsystem for both the engineering model and the flight model, (ii) a pair-based attitude control subsystem for both the engineering model and the flight model, (iii) a three-unit Cubesat structure, (iv) an on-board computer, (v) a communication system for both the engineering model and (vi) an electrical power control system for both the engineering model and the flight model, along with batteries. »

We would like to express our gratitude to Michel G. Breitfellner, General Manager of Serco Gesión de Negocios S.L., and Julio Gallegos, Professor of the Bachelor's Degree in Aerospace Engineering at the STEAM School, for bringing this project to fruition. This initiative will provide our students with integrated, motivating.

Public Domain Images
By Rick Kohnert, CC BY-SA 3.0,


## HANDSTHINKING IN 2023

Universidad Europea held a new edition of HandsThinking, the festival of Architecture, Engineering and Design, with workshops and activities on design, architecture, art, technology and science. The HandsThinking initiative always highlights the academic model with which Universidad Europea students learn. That is, with real projects, multidisciplinary teams, thinking with our hands and experimenting with new technologies to discover infinite possibilities when creating

The goal is clear; show that you can learn differently. Of course, there is also learning beyond the classroom and books, outside the conventional roles of teacher and student. And also, that multidisciplinary work is the greatest advantage of being in a great team.

A true festival of STEAM disciplines, which returns every year in full force, celebrating the meeting points between Architecture and Computer Science, between Video Games and Mathematics, or between Physics and Design, among many other degrees. »


## SCHOOL'S NEXT SCI-TECH DAY UNDERWAY

On March 6, 7 and 8, 2024, we will celebrate our third edition of SciTech Day. A conference with talks, workshops and presentations on Science and Technology specially designed for students with interests in computing, physics, data science, AI, space or cybersecurity, among others. A few days to live informal learning experiences that complement the formal training that students receive in their degrees. This year we hope to have new speakers, new companies and new workshops that will attract as much or more people than in previous years. We will soon publish the program and the registration link for all those who want to participate.»

## NEW EDITION OF "ENGINEERING WITH HEART" 2024

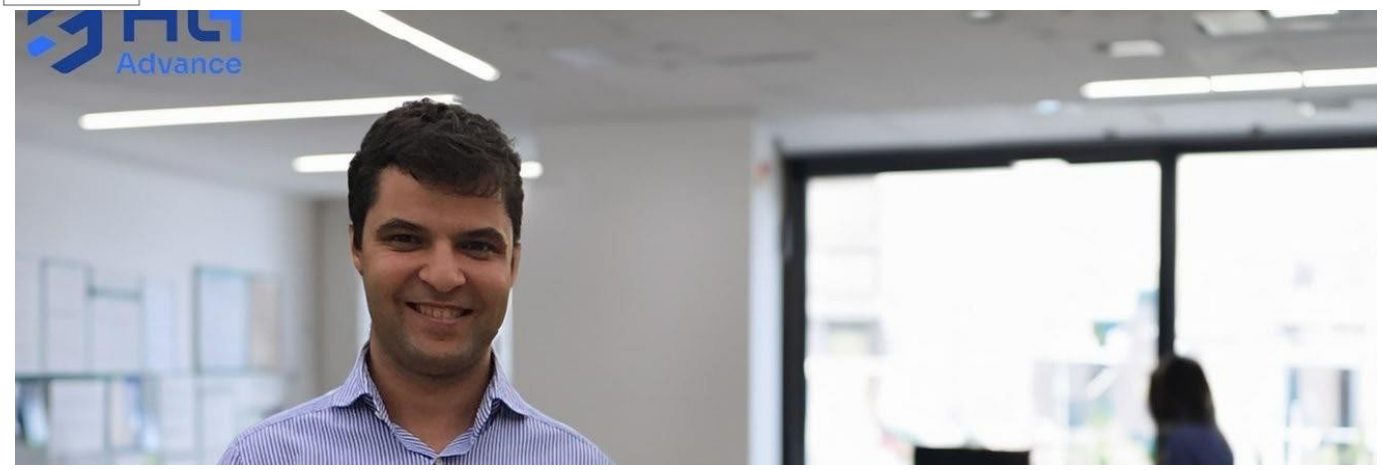
One more year, during the month of March, we will hold the III Conference of "Engineering with Heart". A conference that will allow us to reflect on the role of engineering in activities linked to improving people's quality of life. There is a tendency to see engineering as an area of knowledge linked to large companies and economic profits. We will discover the transformative power of engineering beyond economic profit.»

**MIKE SCHLAICH AND ENRIQUE AZPILICUETA AT THE ARCHITECTURAL TECHNOLOGY EVENT**

The highly regarded civil engineer Mike Schlaich, Associate Professor at the Technical University of Berlin, Faculty VI, Institute of Civil Engineering, in the field of design and construction – solid construction, and one of the managing partners of the engineering office Schlaich Bergermann und Partner (sbp GmbH) based in Stuttgart, and branches in Berlin, New York, São Paulo, Paris and Shanghai, and the also very relevant architect Enrique Azpilicueta, also with a double facet of free professional practice and teaching at the ETSAM.»

**SECOND MEETING OF THE OBSERVATORY OF ARTIFICIAL INTELLIGENCE IN HIGHER EDUCATION**

In February, the second meeting of the Observatory of Artificial Intelligence in Higher Education will take place, which will be dedicated to making a foresight of what the university could be like in the near future, once artificial intelligence is fully developed and implemented. It will be a valuable exercise, which will allow us to draw up a desirable roadmap from the current situation. Following the first report, issued in February 2023, which analysed the potential impact of AI on higher education as it is currently being developed, this second report will seek to give insights into how higher education can be reorganised with the full implementation of AI. This will make it possible to establish roadmaps for an adequate, orderly and planned transition that, due to the enormous uncertainty that exists, will have to be continuously reviewed and updated. »




**ALBERTO HERNÁNDEZ GALLARDO, CEO IN HGADVANCE**

Alberto Hernández studied a Bachelor's Degree in Computer Engineering and a Bachelor's Degree in Business Management at UEM. Additionally, he has completed a Master's Degree in Big Data and Visual Analytics. He is currently CEO and founder of HGadvance, a company dedicated to the development of technology for the educational field. In addition, he collaborates as a teacher with the STEAM school of the Universidad Europea, teaching classes and maintaining contact with students to whom he can transmit his vision from a practical perspective and focused on the professional world.

HGadvance is a project with the goal of developing technology and solutions to facilitate and improve the experience of students and teachers in the university environment. It is currently made up of a team of 10 people who provide service in more than 11 different countries. The knowledge acquired during my stay at UEM, allowed me to have a solid base both at a technical level, as well as focused on projects and aligned with the needs demanded by the market. This technical knowledge together with the experience of the Degree in DICRE allowed the landing on this project to be easier and are part of its success, without forgetting the large number of excellent professors who have helped to make this training a great success.»

**RODRIGO SANAVRIA, CIVIL ENGINEER**

After completing my entire university life at UEM, where I studied a degree in Civil Engineering and a Master's degree in Civil Engineering, I had the opportunity to join Sacyr. It was clear to me that I preferred to go to the construction site, so I agreed to start in the Mularroya Transfer Tunnel (Zaragoza) as an Assistant Site Manager. After 8 months, I was asked to take another step in my career: to be a production manager. A year later, and after finishing the Salamanca project, I moved to Oviedo, more specifically to one of the last ones that will formalize the arrival of the AVE to Asturias: Adaptation of accesses in the Pajares Tunnels. This small work of 16 million euros was made up of many and very diverse actions (execution of galleries, works on railway track, extension of an underpass...) in a very tight deadline. After almost 3 years at Sacyr, I have just changed my project, and right now I am in Barcelona. Together with other companies, Sacyr will carry out the extension of L8 of the Barcelona metro. Possibly, if you see a construction booth in Plaza España, it will be us».

## FORMULA UEM

On December 22nd, our own FUEM unveiled the design of their brand new prototype at their event, *New Era.* This will be the sixteenth vehicle in the club's history, with which they will participate in the different Formula Student competitions next summer on international circuits, facing the best technical schools in Europe. FUEM XVI is the chosen name for this design, and it is now that the car's manufacturing and optimization stages begin.

The team consided the event a complete success, with a full auditorium of family, friends, university staff, and partners. Additionally, the attendees enjoyed a snack to celebrate the launch of the new season alongside an on-track showcase of last year's race car (FUEMXV) to demonstrate the performance and speed of a prototype of these characteristics.

During the presentation of the design, available in the team's Instagram account (@fuem83), Javier Quirós —Team Leader— explained, alongside the various department managers, Daniel Romero, José María García, Michele Ambrosini, Jacobo Sureda, Mario Martín, Ainara Rodríguez, and Arian Mejía, the upgrades obtanied this new season, not only in technical aspects but also in organization and communication of the FUEM brand. The team also had the chance to illustrate their way of working, objectives, and values, always focused on shaping the best possible professionals.

Formula UEM has notably grown these last three years after the pandemic, both in numbers and in ambition. It is in events like the one from the past 22nd of December that this improvement is portrayed in the form of tangible results. The next few months until the end of the season will be long and hard, but FUEM will keep on working the same way they have been, growing as a team and as individuals, aiming to achieve success along the way. »

"WE WANT TO DEVELOP THE FASTEST, SAFEST, AND MOST RELIABLE PROTOTYPE YET"