

ANNUAL REPORT

2024 –2025



Annual Report

2024 – 2025

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A. Organization & Management

Introduction

General

Civil Engineering covers a wide range of engineering applications from dams, tunnels, pipelines, and highways to buildings. Civil Engineering is distinguished as being one of the earliest engineering disciplines. Throughout the ages, it has provided creative and feasible solutions to many of the basic human needs and problems, and it continues to take pride in being a fundamental building block of civilization

Mission

The mission of the Department of Civil Engineering at EPOKA University is the education of the student to their fullness potential and service to the public through professional activities. Through our programs in bachelor, master and doctoral studies we lead our students to become professional engineers and leaders in the civil engineering field. On the other hand, our department gives importance on research in national and international level as an important mean to contribute to humanity and particularly to Albania.

We aim to:

- educate the next generation of engineering leaders to formulate and solve complex problems of importance to society, to collaborate as productive team members, to engage in life-long learning, and to act professionally and ethically;
- extend engineering knowledge across the breadth of the discipline and beyond through creative, innovative research ranging from the fundamental to the applied;
- facilitate the understanding and use of new ideas, technologies, and practices for the betterment of society through service and leadership in local, state, national, and international communities.

Study programs offered by the Department

1. The Bachelor

The Bachelor Program in Civil Engineering is composed of three years of full-time academic study.

The first year of the degree program presents a broad, practical overview of the field of Civil Engineering. During this first year, the presentation of the course material is primarily delivered at a foundational level with engineering fundamentals stressed and reinforced across the curriculum. A strong understanding of practical and physical principles is fostered and promoted, and an abundance of learning opportunities is provided to apply these fundamentals to the solution of real-world design scenarios that would be encountered by both technologists and engineers. Throughout the program, opportunities are presented to students to strengthen their graphical, written, and oral communication skills. A significant amount of time is directly related to hands-on training in material testing, surveying, manual and computer-aided drafting, and instruction in the use of engineering software tools.

The second and third years are mainly composed of basic engineering courses involving the study and application of the principles of geotechnical engineering (behavior of soils, design of foundations), structural engineering (analysis and design of reinforced concrete and steel structures), hydraulics engineering (flow of water in pipes, open channels, water resources), and the general systems approach to engineering problems. The final two years of the degree program are academically rigorous, with a thorough investigation of the theoretical foundations of civil engineering science and design topics. At the same time, the practical application of civil engineering knowledge is presented and applied through course assignments and project work. Additionally, the student is challenged to view the engineer's role from an interdisciplinary and multidisciplinary perspective. The role of engineering as a manager is also developed. In the final two years of the program, the student's educational experience is enriched through a series of liberal studies courses. To further develop engineering skills for professional practice, the degree concludes with the completion of summer practice.

In the second semester of the third year, students whose GPA is higher than 3.0 have the chance to choose between a Graduation Project or the Final Comprehensive Exam. Students whose GPA is below 3.0 are obliged to enter the Final Comprehensive Exam.

2. Professional Master

The Professional Master of CE Program offers a year of advanced study for graduate students with previous professional degrees in Civil Engineering (or equivalent with a strong background knowledge). This Professional Master's degree program is an interdisciplinary program of study with a concentrated time for completion. The program is intended for qualified students who already have professional work experience. Students without professional experience after completion of the professional degree may be admitted, depending on the quality of their work. Students must demonstrate evidence of high-quality work and potential for development based on their grade-point average and letters of recommendation. Classes generally take place in the evenings (5:15 pm – 9.00 pm). The program's goals are to further train professionals in civil engineering who are able to work effectively in teams across a large range of scales and with well-developed knowledge. The program offers a unique blend of courses in different areas. Students will share working methods, acquire additional skills, and explore new avenues of professional development under the supervision of an interdisciplinary group of faculty members in the Department of Civil Engineering at EPOKA University.

Curriculum

The Professional Master's degree combines a core curriculum with the opportunity to take elective courses tailored to a student's particular areas of interest. These courses typically relate to the student's field of interest and are selected by the student in consultation with the department advisor. To earn the Professional Master's degree, students must complete one year in residence, 60 ECTS credits of coursework, and the core curriculum.

Course Structure

The program is taught in English. Therefore, Albanian and international applicants from countries in which the official language is not English are required to submit official evidence of English language proficiency.

3. Master of Science

Our practice-oriented Master of Science in Civil Engineering (MSc) program builds upon an undergraduate education and facilitates more advanced study in one of the branches of civil engineering. The program consists of 120 ECTS, and all graduate courses are offered in the late afternoon or evening.

Mission Statement

The Master of Science in Civil Engineering (MSc) program is intended to serve graduate students who have a Bachelor of Civil Engineering or closely related undergraduate degree to strengthen their knowledge and understanding of civil engineering principles and practices. The program is primarily intended for students who currently are, or intend to become, practicing civil engineers, and thus focuses on applying these principles and practices to real-world problems encountered by professional civil engineers.

Another purpose of the program is to facilitate applied research on relevant civil engineering topics. Such research should 1) serve societal needs by addressing contemporary issues, 2) contribute to the professional development of both students and faculty and 3) provide preparation for further academic study and research for those students who wish to pursue a Ph.D.

Educational Objectives

Graduates of the MSc program should have:

1. A knowledge of engineering principles sufficient to understand the bases and applicability of standard analysis, design, and implementation practices within their emphasis area.
2. The ability to conduct engineering analyses and to develop and implement designs and problem solutions that conform to applicable codes and standards of practice.
3. An understanding of the various technical and non-technical factors that impact the feasibility and implementation of civil engineering projects, including technical feasibility, multi-party involvement, environmental assessment, financial/economic planning, owner/public works administration, owners' strategic plans, and socioeconomic/equity issues.
4. The foundation needed to develop engineering judgment via professional practice and to effectively identify, consider, and account for multiple and competing objectives.
5. The technical knowledge and skills needed to pursue lifelong learning with the ability to independently extend personal knowledge and understanding of engineering topics and practices by conducting literature searches, consulting with others, and using other similar techniques.
6. Knowledge and skills necessary to pass specialty license examinations in their respective emphasis areas.

Curriculum

The **Master of Science** in Civil Engineering offers the students the possibility of specializing in four profiles **Structural Engineering, Construction Management, Construction Materials, and Water Resources Engineering**. It combines a core curriculum with the opportunity to take elective courses tailored to a student's particular areas of interest. These courses typically relate to the student's thesis topic and are selected by the student in consultation with the department advisor. To earn the MSc degree, students must complete 120 ECTS credits from their coursework and a Master's thesis.

Curriculum:

Structural Engineering

Construction Management

Construction Materials

Water Resources Engineering

Course Structure

The program is taught in English. Therefore, Albanian and international applicants from countries in which the official language is not English are required to submit official evidence of English language proficiency.

Master Thesis

Thesis topics are developed individually by the student in consultation with the department advisor. To prepare for their thesis research and writing, students must complete a course that offers instruction in research methods and academic writing. Thesis committees consist of three members, usually department members of Civil Engineering at EPOKA University. Students can also invite an outside reader to partake in the thesis committee.

A preliminary thesis proposal is prepared during the fall semester and presented to the department after the winter break. The thesis project is substantially developed during the spring semester in close collaboration with the academic advisor. The thesis is typically finalized during the summer and formally presented in front of the jury. (Although MSc students are strongly encouraged to complete their written

thesis during the summer, students have the option of going on filing fee for an extra semester and finalizing their written thesis during the fall semester.)

4. PhD (Doctorate)

The objective of the doctoral study program is the advancement of analytical and/or experimental knowledge through a combination of specialized courses and a research thesis under the supervision of an experienced researcher forms the main component of the doctoral program. Where possible, research of interest to industry is encouraged. CE-PhD Program in Civil Engineering is necessary for the formation of academicians in various fields of research in Civil Engineering. The program also gives opportunities to qualified students from various academic disciplines for further education at an advanced level in Civil Engineering. The PhD study program for full-time students lasts for a minimum of six semesters (three academic years), up to a maximum of eight semesters (four academic years), and for part-time students, it lasts for a minimum of six semesters (three academic years), up to a maximum of twelve semesters (six academic years). The first year is devoted to the core courses. Formal work on the dissertation begins in the second year; students are encouraged to get the start on their thesis by research and writing.

B. Resources

Department Staff

Prof. Dr. Hüseyin Bilgin is a full-time Professor in the Civil Engineering Department at EPOKA University, Tirana Albania. He is actively taking part in teaching, research, and the practice of structural and earthquake engineering, with emphasis on the response, analysis and design of reinforced concrete and masonry structures.

He teaches the compulsory core courses Engineering Mechanics and Mechanics of Materials for second-year students and, he is the coordinator of the elective courses Introduction to Structural Dynamics, Supervised Independent Study and Research, and Introduction to Earthquake Resistant Design in the 7th and 8th semesters of the area of structural engineering specialization. He also teaches the graduate courses Structural Dynamics and Earthquake Engineering.

His main research interests are related to the response of structures to extreme loads focusing on the areas of structural and earthquake engineering with the emphasis on problems of non-linearity and performance evaluation of members, connections, and structures.

He has been involved in several research projects in these areas and has worked as an expert consultant on numerous engineering projects mostly made of reinforced concrete, but also of other structural materials. He has also participated in various national and international scientific activities related to structural and earthquake engineering.

He has supervised PhD, MSc and undergraduate students studying in the above fields.

Assoc Prof. Dr. Miriam Ndini. She is an Associated Professor in the Department of Civil Engineering at EPOKA University. Her research and teaching focuses on water, she is a hydrologist.

With a background in Civil Engineering- Hydraulics, she has been working as a researcher on the field of Hydrology. This work consists on estimation the water resources in the watershed, evaluating the flow parameters, measuring the data from the hydrologic network, elaboration and analyzing them.

Actively she is involved in projects dealing with effects of climate changes on water resources and its impact on different sectors.

All through research, she is involved in teaching. From the year 2000 she is teaching on the courses as Fluid Mechanics; River Mechanics; Water Resources Engineering and Hydrology.

She is also the Head of the Department of Civil Engineering.

Dr. Julinda Keçi is a faculty member of the Civil Engineering Department at EPOKA University, Albania. She has a Master of Science degree in Structural Engineering from Polytechnic University of Tirana, and a PhD in Civil Engineering, specializing in Construction Management. Her research interests include construction management and technology, project planning, risk management, and economic assessment of engineering projects. One of the primary foci of her work is the implementation of sustainable methods in projects management and building performance. She was involved in international projects and in the organization of several international Civil Engineering conferences. She has published works on risk management, construction management, project planning, building optimization through geotechnical and earthquake design, etc.

Dr. Armando Demaj is a full-time lecturer at the Department of Civil Engineering at EPOKA University. He holds a degree in Master of Second Level in Civil Engineering (Structural Engineering) and has been conferred the PhD degree in Civil Engineering by the Instituto Superior Tecnico, Universidade de Lisboa, in Portugal, on June 19, 2023. He has been teaching Introduction to Computers and C Programming, Foundation Engineering, Soil Mechanics, Structural Analysis, Structural Mechanics etc. During the Spring Semester of the 2022-2023 academic year, he has supervised 8 students at the course CE 500- Master Thesis. Moreover, he has been involved in several activities such as: Open Forums, Workshops, Site Visits, and Laboratory experiments organized at EPOKA University. He has good command of English, different Programming Languages, SAP2000, Etabs, Zeus NL, Perform 3D, Microsoft Office, Google sheet, Matlab, USEE, Nonlin, Photoshop, Illustrator, etc.

Dr. Marsed Leti is a full-time lecturer in the Civil Engineering Department at EPOKA University, Tirana, Albania. He holds a Master of Science degree and a Doctoral Degree in Structural Engineering from EPOKA University. Therefore, his main research interests are related to the response of reinforced concrete structures under static and dynamic loading conditions conducted mainly by the non-linear analysis methods. He has been dynamically taking part in teaching, research, and student activities. He has been teaching and assisting in: Civil Engineering Drawing, Introduction to Computers and c Programming, Structural Mechanics, Structural Analysis, Surveying, Principles of Transportation, Traffic Engineering and Computer Application in Civil Engineering. At the graduate studies, he has supervised a lot of students in the courses CE 507- Supervised Independent Study and Research and CE 500- Master Thesis. Moreover, he has been involved in several activities such as: Open Forums, Workshops, Site Visits, Laboratory experiments etc. organized at EPOKA University during 2014-2019 academic years. He has good command of English, Civil Engineering, AutoCAD, SAP2000, Etabs, Zeus

NL, Perform 3D, Stereo Statika, Microsoft Office, Google sheet, Matlab, USEE, Nonlin, Photoshop, Illustrator, After effects etc.

Dr. Anila Xhahysa

Anila Xhahysa earned a PhD in Structural Engineering from a university in Turkey and holds a Master of Science degree in Civil Engineering with a specialization in Structural Engineering from EPOKA University. Her academic and professional trajectory has centered on seismic research and structural resilience, contributing extensively to the understanding of seismic hazards in Albania and the broader region.

Between 2015 and 2018, Anila served as a Structural Engineer at the Construction Institute of Albania, applying structural engineering principles to revise local infrastructure projects.

Subsequently, from October 2021 to October 2024, she was appointed Head of the Seismology Department at the Institute of Geosciences, Polytechnic University of Tirana. In this capacity, she was responsible for the development and oversight of research agendas aligned with institutional strategies and national resilience policies. This role involved intricate budget management, administrative oversight, and the formulation of departmental policies to ensure regulatory compliance and operational efficiency. Furthermore, Anila led the establishment and management of collaborative research partnerships both nationally and internationally.

Her technical contributions are substantial and grounded in rigorous analysis of strong motion seismic data. Key achievements include enhancing the characterization of ground motion in Albania, contributing to the development of elastic response spectra for integration into the Eurocode Design Code Annex specific to Albania, and leading the country's Seismic Hazard Project. This project, conducted in partnership with the Global Earthquake Foundation, culminated in the delivery of seismic hazard maps to the Ministry of Infrastructure and Energy, providing critical data for national seismic risk assessment and mitigation efforts.

Additional research activities encompass satellite imagery analysis to validate GNSS-derived velocity fields, assess subsidence risks along crucial infrastructure corridors such as the TAP pipeline, and ongoing investigations into site-specific seismic wave amplification using dense seismic arrays as part of the ANTICS project.

Anila is integrally involved in multiple high-profile international research initiatives, including ANTICS, which investigates continental subduction processes beneath Albania in collaboration with the Karlsruhe Institute of Technology and the German Research Centre for Geosciences. She has contributed to

ADRIARRAY, a multinational seismic network project examining active tectonics in the central Mediterranean region, by evaluating ground motion prediction equations. The RESEAL project represents a significant effort to strengthen Albania's disaster risk management capabilities post the 2019 earthquake, with Anila and her team overseeing the installation of new permanent seismic monitoring stations.

Her leadership extends to co-coordinating MAPALBA, an innovative project leveraging Synthetic Aperture Radar Interferometry and GNSS data to produce high-resolution crustal deformation maps across Albania. Additionally, she coordinated the Albanian team within GEM's initiative to update probabilistic seismic hazard models, integrating European and national expertise to refine earthquake risk assessments.

Through these multifaceted roles, Anila Xhahysa has substantially advanced seismic hazard science and resilience strategies in Albania, fostering interdisciplinary collaboration and enhancing the scientific framework underlying national and regional earthquake preparedness.

MSc. Bredli Plaku- is a full-time Assistant Lecturer in the Department of Civil Engineering at EPOKA University. After joining as a Teaching Assistant in 2022, he advanced to his current role, bringing dynamic energy to engineering education. He holds a Master of Science in Civil Engineering with a specialization in Structural Engineering from EPOKA University (2023). His research focuses on structural engineering and concrete behavior, complemented by expertise in graphic design and programming. His recent publication in *Structural Durability & Health Monitoring* examines confined concrete models and their impact on RC frames' seismic response. Beyond academics, Plaku serves as the adviser of the Future Engineers Club, organizing workshops that bridge theoretical knowledge with practical applications. His teaching portfolio encompasses core engineering courses including Construction Materials, Soil Mechanics, Programming, Mathematics, and Technical Drawing.

Part time Academic Staff
MSc. Margarita Seitllari
MSc. Entela Kapllani

Academic Visitors (2024-2025)

Dr. Armando Demaj participates at CLBMCS 2024 and Construction 2024 Congress in Lisbon

Lisbon, Portugal – November 2024 — The 5th Luso-Brazilian Congress on Sustainable Construction Materials (CLBMCS 2024), held jointly with the Construction 2024 Congress, brought together leading voices in the field of civil engineering and sustainable construction from November 6–8, 2024, at the Instituto Superior Técnico, University of Lisbon, Portugal. Among the distinguished contributors was Dr. Armando Demaj, who participated with his latest research on the seismic strengthening of ancient masonry structures.

Dr. Demaj's paper, titled "Seismic strengthening of ancient brick masonry walls using NSM steel bars: experimental and numerical investigation", drew considerable attention from both academic and industry professionals attending the congress. His work explores innovative methods to reinforce historical brick masonry walls using Near-Surface Mounted (NSM) steel bars—an approach that combines sustainability with enhanced structural resilience, particularly in seismic-prone regions.

The dual congress, promoted by the Department of Civil Engineering, Architecture and Environment (DECivil) at Instituto Superior Técnico, served as a hub for knowledge exchange between Portuguese, Brazilian, and other international experts. The event continued a tradition that began in 2014, aiming to tackle the environmental and technological challenges in the construction sector by promoting the development and implementation of sustainable materials and construction techniques.

In line with the themes of the congresses, Dr. Demaj's research bridges historical preservation and modern engineering innovation. His experimental and numerical investigation not only contributes to the seismic safety of aging infrastructure but also aligns with broader goals of sustainable development by extending the lifespan of existing buildings using resource-efficient retrofitting solutions.

As global focus intensifies on sustainable development, Dr. Demaj's participation reaffirmed the vital role of research in advancing practical solutions that serve both present and future generations. His work is expected to influence ongoing and future projects aimed at preserving historical architecture while meeting modern safety standards.

Assoc. Prof. Dr. Miriam Ndini Represents Albania in Technical Delegation to Japan on Dam Engineering

Assoc. Prof. Dr. Mirjam Ndini, Head of the Department of Civil Engineering at EPOKA University, recently took part in a professional exchange visit to Japan as part of a distinguished technical delegation from the Albanian Committee on Large Dams (ALBCOLD). The visit was graciously hosted by the Japanese Committee on Large Dams (JCOLD), in a joint effort to foster international collaboration and share expertise in the field of dam engineering and water resource management.

Strengthening Bilateral Expertise

The delegation was warmly received at the JCOLD headquarters in Tokyo by prominent members including Dr. Hideki Hirai (President), Mr. Takashi Tada (Vice President), Dr. Masayuki Kashiwayanagi (Managing Director), and Dr. Hiroaki Niguchi (Secretary General). The meeting served as a platform for exchanging knowledge on dam safety protocols, seismic resilience, environmental sustainability, and regulatory frameworks.

The Albanian delegation contributed with a series of insightful presentations:

- Large Dams and Reservoirs in Albania – Assoc. Prof. Dr. Mirjam Ndini
- Large Dams and Earthquakes in Albania – Prof. Dr. Llambro Duni
- Albanian Power Corporation and Drini River Cascade – Ing. Ermal Nuri

Institutional Dialogue with Japan’s Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

The group held an engaging session with Japan’s MLIT, joined by Prof. Dr. Tetsuya Sumi, Vice-President of the International Commission on Large Dams (ICOLD). Discussions centred around Japan’s national energy strategy, innovations in dam governance and disaster management, and the integration of smart technologies in dam operations.

Site Visits to Exemplary Dam Infrastructure

Three technically significant dam sites were visited during the delegation’s time in Japan:

Amagase Dam: A dome-shaped concrete arch dam renowned for its seismic resilience and multifunctionality.

Kisenyama Pumping Storage and Dam: A hybrid rockfill and embankment dam demonstrating advanced pumping and storage techniques.

Hiyoshi Dam: A gravity dam noted for its integration with the urban landscape and inclusion of recreational public spaces and real-time monitoring systems.

Cultural Exchange and Appreciation

In addition to technical engagements, the delegation experienced aspects of Japan’s rich cultural heritage, including a traditional tea ceremony and visits to historic temples—deepening cross-cultural understanding and professional bonds.

Looking Ahead

Reflecting on the visit, Assoc. Prof. Dr. Ndini remarked that the experience has significantly enriched professional knowledge and opened pathways for future collaboration. The lessons drawn from Japan’s advanced practices will contribute to the evolution of Albania’s dam engineering standards and practices. EPOKA University commends Assoc. Prof. Dr. Ndini for her active role in promoting international academic and professional cooperation and congratulates ALBCOLD and JCOLD for their continued partnership in advancing global expertise in large dam systems.

Visit of Croatian Professors Under the CEEPUS Program

This week, our Civil Engineering Department had the distinct pleasure of hosting Prof. Dr. Ivanka Netinger Grubeša from University North, Croatia and Prof. Dr. Sandra Juradin from the University of Split, Croatia as part of the CEEPUS (Central European Exchange Program for University Studies) academic exchange initiative.

During the visit, Prof. Netinger Grubeša delivered a thought-provoking presentation showcasing her latest research in the fields of:

- Self-healing concrete technologies
- Sustainable construction through the use of agro-waste materials
- Enhancement of concrete durability

Her research not only highlighted innovative solutions for the future of sustainable and resilient construction but also sparked stimulating discussions among faculty and students alike. The visit provided a valuable opportunity to explore mutual interests and lay the groundwork for future academic and research collaborations between our institutions.

We extend our sincere thanks to all participants for their active engagement and thoughtful contributions during the event. Moments like these strengthen our academic community and inspire continued advancement in civil engineering.

SoSE 2025 Conference Explores Climate Variability and Flood Risk in the Vjosa River Basin

On 8-11 June, the 20th International Conference on System of Systems Engineering (SoSE 2025), held under the theme “SoSE for Sustainable Development,” gathered experts and researchers from around the world to address pressing challenges in disaster risk reduction and climate resilience.

Assoc. Prof. Dr. Mirjam Ndini from the Department of Civil Engineering at EPOKA University contributed to the conference with a research presentation titled “Climate Variability and Flood Risk in the Vjosa River Basin.” Her study examined the impact of climate variability on flood risk in the Vjosa basin, focusing particularly on the observed rise in frequency and intensity of precipitation. Using historical disaster data and the DesInventar methodology; a standardised framework for disaster loss data collection developed by UNISDR; the research provided a comprehensive assessment of the municipalities most vulnerable to flooding.

The findings highlighted the multifactorial nature of flood risk in the region, demonstrating how physical, social, economic, and environmental vulnerabilities intersect to increase exposure. The analysis points to a clear trend of rising flood risk, attributed to shifting climate conditions and more intense precipitation events.

Participation in SoSE 2025 offered an opportunity to situate this research within a broader systems engineering perspective, supporting interdisciplinary dialogue on sustainable solutions for disaster risk management.

The Department of Civil Engineering extends its thanks to the conference organisers and all participants for their valuable contributions and collaborative spirit.

Scientific Forum on Seismic Hazard and Mitigation Brings Together Regional Experts

Professor Huseyin Bilgin from the Department of Civil Engineering at EPOKA University took an active role as both moderator and presenter at the recent scientific forum “Seismic Hazard and Its Mitigation.” The event was organised by the Albanian Academy of Sciences in partnership with the Polytechnic University of Tirana, the Institute of Construction, and with the support of SDC.

The forum brought together experts from Albania, Kosovo, North Macedonia, and Italy, all focused on finding practical ways to understand and reduce seismic risk across the region. Sessions highlighted the importance of working together across disciplines and borders, given that earthquake risks are a shared challenge for many countries.

Professor Bilgin’s presentation, “Seismic performance assessment of masonry buildings with vertical additions,” addressed the urgent need to assess and adapt existing buildings in cities affected by earthquakes; a topic that remains highly relevant as urban areas continue to grow and change. His role as moderator also helped guide discussions on seismic modelling, building vulnerability, civil protection, and broader social impacts.

We thank everyone involved for their efforts to strengthen collaboration and share knowledge, with the shared goal of building safer and more resilient communities.

Participation in International Staff Week 2025 at Università degli Studi di Napoli Federico II

Dr. Julinda Keçi, Lecturer at the Department of Civil Engineering, recently took part in the International Staff Week 2025 held from June 23-27, 2025 at the Università degli Studi di Napoli Federico II in Naples, Italy. This year's theme was "Sustainability and Inclusion in Mobility and Research," aligning closely with the department's ongoing focus on innovation in education and research collaboration. Organized by the university's Erasmus+ and International Mobility Office, the program brought together participants from across Europe and beyond. The agenda featured institutional presentations, workshops on best practices, gender equality panels, and site visits, including a tour of the university's historic museum collections. The event provided a valuable platform for networking and initiating potential academic partnerships under Erasmus+ KA171 and other EU frameworks.

Department Activities (2024-2025)

Department of Civil Engineering hosts Orientation Session for New Students

The Department of Civil Engineering at EPOKA University recently organized an informative and engaging Orientation Session to welcome the incoming class of freshmen students.

The event brought together academic and administrative staff with the new students, offering an opportunity to introduce the department, its academic programs, and expectations for the upcoming years. A dedicated Q&A session allowed students to engage with faculty, clarify their academic paths, and gain insights into the opportunities within civil engineering at EPOKA University.

This Orientation Session marks the beginning of an important academic journey for the new students, setting the foundation for their studies and future careers in civil engineering. The department looks forward to a productive and enriching three years ahead, filled with academic growth, collaboration, and innovation.

Academic Forum on Disaster Risk Assessment and Management of Cultural Heritage Concludes Successfully

The Academic Forum on Disaster Risk Assessment and Management of Cultural Heritage in Albania and the Southwestern Balkans, hosted at Academy of Sciences of Albania, concluded with great success, marking a crucial moment in addressing the challenges faced by cultural heritage in the region. This significant event brought together a diverse group of scholars, practitioners, policymakers, and

stakeholders to engage in meaningful discussions and propose innovative solutions to safeguard our invaluable heritage.

A Platform for Knowledge Exchange

The forum served as a collaborative platform to explore the risks posed by natural disasters, climate change, and human activities to cultural heritage sites. It emphasized the critical need for interdisciplinary approaches and evidence-based strategies to mitigate these risks.

Keynote speakers and panelists included prominent experts in the fields of disaster management, cultural heritage preservation, and engineering, who shared their knowledge and experience through engaging presentations and case studies. Discussions highlighted the importance of regional cooperation, policy development, and the integration of traditional and modern methodologies to protect the unique cultural legacy of the Southwestern Balkans.

Highlights of the Event

Research Presentations: Participants presented their research and methodologies related to disaster risk assessment and heritage preservation, sparking discussions among attendees.

Networking Opportunities: The forum promoted collaboration among institutions, opening avenues for future projects and joint initiatives.

Acknowledgments

The organizers extend their heartfelt gratitude to all participants, speakers, and sponsors who contributed to the success of this event. Their commitment and shared vision have laid the groundwork for long-term collaboration and progress in this vital field.

As we reflect on the outcomes of this forum, we reaffirm our dedication to protecting the past for future generations. Together, we can ensure that the cultural heritage of Albania and the Southwestern Balkans remains a source of pride and identity for years to come.

Department of Civil Engineering welcomes Future Engineers on Open Day

The Department of Civil Engineering at EPOKA University was delighted to participate in the university's recent Open Day, which saw an impressive number of registrations from prospective students and their families. The event offered attendees an opportunity to explore the unique offerings of our department and learn about the exciting academic and professional paths we provide.

Visitors had the chance to tour the facilities of the Department of Civil Engineering, Faculty members and staff were available to provide personalized insights into our academic programmes and career prospects in the dynamic field of civil engineering.

With a strong focus on preparing students for the demands of today's job market, our undergraduate and postgraduate programmes are tailored to meet industry needs. Attendees also learned about EPOKA University's merit-based scholarships, offering financial support to high-achieving students throughout their studies.

The high turnout of registrations reflects the growing interest in civil engineering as a field and highlights the department's reputation for academic excellence and innovation. The Open Day reaffirmed our commitment to shaping the next generation of leaders in construction, infrastructure, and sustainable development.

For more details about our programmes, research opportunities, and scholarships, visit the Department of Civil Engineering's webpage or contact us directly. We look forward to welcoming you to our community of future engineers!

Future Engineers Club Organizes the First Session of Excel Workshop

The Future Engineers Club, in collaboration with the Department of Civil Engineering, organized the first session of its Excel Workshop series today. Aimed at helping students build practical skills in data organization and analysis, the workshop welcomed participants of all skill levels, from beginners to those seeking to refine their expertise.

The interactive session allowed students to engage with real-world applications of Excel, highlighting its importance in academic and professional settings. The turnout was impressive, reflecting the growing interest among students to enhance their abilities.

This session marks the beginning of a series, with more workshops planned in the coming weeks. The Future Engineers Club invites all interested students to join the upcoming sessions and continue building valuable skills for their future careers.

Environmental Stewardship - Empowering Future Engineers for Sustainable Albania

On Monday, 20 January 2025, Dr. Begmyrat Kulmedov, in collaboration with first- and second-year students, hosted a vibrant Poster Session focused on pressing environmental challenges and innovative solutions in the field of Civil and Environmental Engineering.

Held on the ground floor of the A-Building, the event provided a platform for students to present their research and ideas addressing environmental issues in Albania. The session attracted both staff and students, who actively engaged with the projects on display.

Attendees had the opportunity to discuss the realities of environmental challenges and explore creative proposals for sustainable development.

Adding an interactive twist to the exhibition, two engaging quiz sessions were conducted, and the top three participants were rewarded with exciting prizes.

The event successfully promoted awareness and dialogue on environmental topics, leaving a lasting impression on all who attended.

The exhibition remains open, offering more opportunities to delve into these thought-provoking projects. Don't miss your chance to experience the creativity and dedication of our students – visit the A-Building and be inspired.

Second Microsoft Excel Workshop Focuses on Data Visualization

Continuing its mission to encourage practical engineering skills, the Future Engineers Club recently hosted its second Microsoft Excel workshop, turning the spotlight on data visualisation. This hands-on session offered students the chance to explore how best to convey information in civil engineering contexts, with participants learning to select the most effective chart types for specific problems, refine chart elements for clarity, and employ vital statistical tools and conditional formatting.

Attendees delved into real-world scenarios and shared tips on interpreting complex datasets, ultimately walking away with a newfound confidence in showcasing data in visually engaging formats. The workshop also provided valuable networking opportunities, encouraging students to exchange insights and collaborate on future projects.

With enthusiasm running high, participants left eager to apply their enhanced Excel skills to both academic challenges and professional settings, reflecting the Future Engineers Club's commitment to bridging theory with hands-on experience.

First-Year Civil Engineering Students Visit Maccaferri Balkans Manufacturing Plant

On April 3, first-year students from the Civil Engineering Department at EPOKA University visited the [Maccaferri Balkans](#) manufacturing plant in Albania as part of their CE 104 *Geology for Civil Engineers* course, led by Dr. Anila Xhahysa.

The students were warmly welcomed by Mr. Robert Masha, Managing Director of Maccaferri Balkans, along with members of the company's technical and administrative staff.

The visit began with an engaging presentation highlighting Maccaferri's 130-year history and its global role in developing innovative solutions for civil, geotechnical, and environmental engineering projects. The session delved into the company's expertise in geology and hydrology, including advancements in underwater construction works. Real-world examples from projects implemented in Albania helped bridge the gap between theoretical concepts and practical application.

Students also had the opportunity to explore the company's showroom, where they were introduced to various products used in slope stabilization and ground reinforcement. This hands-on experience allowed them to closely examine materials and systems discussed during lectures.

The tour concluded with a walkthrough of the manufacturing facility, offering insights into each stage of the production process. Observing how raw materials are transformed into engineered systems deepened students' understanding of the technical and operational aspects behind the products. The company's strong emphasis on workplace safety was also noted and appreciated.

Throughout the visit, students actively participated by asking questions and engaging in discussions. Many expressed that the experience was both insightful and inspiring, providing a clearer picture of how their classroom learning translates into real-world engineering practice.

Dam Safety Workshop Brings International Experts to EPOKA University

ALBCOLD and EPOKA University welcomed engineering professionals and researchers today for an International Workshop on "Monitoring of Dams and Deep Foundations".

The morning session kicked off with welcome remarks at 09:30, followed by ALBCOLD Chairman Arjan Jovani's presentation on dam monitoring importance in Albania. Jovani detailed the country's major dam infrastructure, including the Fierza, Koman, Moglica, Banja, and Ulez facilities, while presenting new ALBCOLD guidelines for dam operation, maintenance, and monitoring.

"These new guidelines will help standardize our safety practices," Jovani told attendees.

Daniel Naterop from Huggenberger AG and SISGEO Srl then delivered an extensive presentation on embankment dam safety, introducing Swiss risk management concepts to the Albanian engineering community. His systematic approach to monitoring planning drew particular interest from local professionals attending the workshop.

Before the coffee break, Stefano Priano of SISGEO Srl explored new monitoring technologies for earth dams, using "The Earth Dam Iceberg" concept to illustrate hidden complexities in dam structures. Workshop participants engaged actively with his technical explanations about instrumentation challenges.

After refreshments, Priano returned to discuss geotechnical safety monitoring instruments, providing hands-on demonstrations of equipment capabilities.

The morning concluded with Skënder Allkja, Director of ALTEA & GEOSTUDIO 2000, who presented on monitoring applications for deep foundations. Drawing from ALTEA Geostudio's extensive experience in Albanian geological projects, Allkja emphasized the critical importance of understanding local geological conditions when implementing foundation monitoring systems.

"Albania's complex geology requires specialized monitoring approaches," Allkja explained, highlighting cases where traditional monitoring methods needed adaptation for local conditions.

Extended discussions wrapped up the workshop at 13:30, with participants exchanging contacts and exploring potential collaborations. The event successfully brought together industry partners including Huggenberger AG, SISGEO Srl, ALTEA, and GEOSTUDIO 2000 with Albanian engineering professionals.

"This workshop showed how international expertise can help solve local challenges," noted one participant during the closing discussions."

Looking ahead, the Faculty of Geology and Mining announced their upcoming GENRE 2025 conference (1st International Conference on Geosciences, Energy, Natural Resources, Environment) scheduled for

November 21-22, 2025, in Tirana. The faculty has extended an invitation to everyone to participate in this significant event, further strengthening academic collaboration in geosciences and engineering fields.

First Autodesk Revit Workshop Held at EPOKA University

On 19 May 2025, the Future Engineers Club successfully conducted its first Autodesk Revit workshop at EPOKA University. Held in PC Lab 2 (E-011), the event welcomed students from engineering and architecture eager to explore the essentials of digital design.

Participants were introduced to the fundamental features of Autodesk Revit, including the user interface and basic modelling tools. Through hands-on activities, students developed practical skills in creating simple architectural and structural models. The interactive session encouraged active participation and discussion.

At the end of the workshop, certificates of attendance will be awarded to all participants in recognition of their engagement and dedication.

Stay connected for news about upcoming events and continued learning with the Future Engineers Club.

Civil Engineering Students Explore ALUMIL Albania's Factory and Showroom

On 22 May 2025, students from the Department of Civil Engineering at EPOKA University visited ALUMIL Albania to gain first-hand insight into the design and production of modern construction materials. The visit was organised by the Future Engineers Club in collaboration with ALUMIL Albania. The day began with a guided tour of ALUMIL's factory, where students observed the full production process. They also visited the company's showroom, seeing up close a variety of innovative façade.

Throughout the tour, ALUMIL engineers and staff shared their expertise, discussing the latest manufacturing technologies, quality control procedures, and how architectural concepts are transformed into real-world products. Students took the opportunity to ask questions about technical processes and career paths in the construction industry.

This experience forms part of the Department's ongoing efforts to link academic learning with practical experience and to introduce students to the realities of the construction sector. ALUMIL Albania's openness to student engagement, as well as their internship and employment opportunities, were especially appreciated.

The Department of Civil Engineering and the Future Engineers Club thank ALUMIL Albania for their invitation and warm hospitality. We look forward to continuing this valuable collaboration in the future.

Master's Thesis Defences at the Department of Civil Engineering

The Department of Civil Engineering is pleased to announce that several Master of Science students have recently defended their theses, marking the completion of an important stage in their academic journey.

Under the supervision of Prof. Dr. Hüseyin Bilgin, Agjelos Gjana, Deni Sula, and Mikaela Çela each presented their research to the examination committee. Aron Ara completed his thesis under the guidance of Prof. Dr. Ahmet Öztaş. The group supervised by Dr. Marsed Leti included Andi Gjoçi, Hamide Duka, and Jon Stërmasi, while Jurgen Sina worked under the supervision of Dr. Begmyrat Kulmedov. Teo Mati also successfully defended his thesis, with Dr. Julinda Keçi as supervisor.

The Department congratulates all students and their supervisors for reaching this significant academic milestone. These successful defenses highlight the dedication of both candidates and academic staff and represent the final requirement for the MSc degree in Civil Engineering at EPOKA University.

We extend our best wishes to all graduates as they move forward in their professional and academic careers.

CYPE Presents BIM Software Proposal to Department of Civil Engineering

On 8 July 2025, a representative from CYPE, a European company specializing in the development of BIM software for engineering, architecture, and construction, visited the Department of Civil Engineering at EPOKA University. The visit was organized to introduce CYPE's suite of BIM software and to discuss potential collaboration opportunities for academic and research purposes.

Mr. Zamir Rira, the official representative of CYPE in Albania, presented an overview of the software's features and possible applications within teaching and research. The session also included participation from CYPE engineers in Spain, who joined online to answer technical queries and share insights into international trends in BIM and digital construction technologies.

The event provided a platform for discussion between CYPE and the department, exploring ways in which such software solutions could contribute to the development of practical skills among students

and the advancement of research. Further discussions are expected regarding the possibility of future collaboration.

Administrative Staff

Amelia Bullari holds a Bachelor’s degree in Business Informatics and a Master of Science degree in Business Administration, from the Faculty of Economics and Administrative Sciences, EPOKA University. She has been the Coordinator of Civil Engineering for the last five years.

Finance

Income and Expenditure Summary

- *Bachelor in Civil Engineering*

-Income and various financing for **BA in Civil Engineering** Study Program during the 2023-2024 academic year:

Income (in Euro)	2023-2024
Tuition fees for and during studies	336,151.58
TOTAL	336,151.58

-Expenditures for **BA in Civil Engineering** Study Program during the 2023-2024 academic year:

	2023-2024		
Expenditures (in EURO)	Salaries	Expenditures	Investments
Tuition and other student fees	249,503.08	38,682.35	24,312.97
Total	249,503.08	38,682.35	24,312.97

- ***Master of Science in Civil Engineering***

-Income and various financing for **Msc in Civil Engineering** Study Program during the 2023-2024 year:

Income (in Euro)	2023-2024
Tuition fees for and during studies	71,543.83
TOTAL	71,543.83

-Expenditures for **Msc in Civil Engineering** Study Program during the 2023-2024 academic year:

	2023-2024		
Expenditures (in EURO)	Salaries	Expenditures	Investments
Tuition and other student fees	83,817.44	12,994.85	8,167.64
Total	83,817.44	12,994.85	8,167.64

IT Resources, Physical Infrastructure and Library Resources

ICTC Office Services:

The Information and Communication Technologies Coordinating Office (ICTCO) provides informatics services needed in the University. It plans the informatics infrastructure of the University, provides its security and ensures the continuation of its functions. ICTCO works on the project for effective, legal and extensive usage of the informatics services for students and personnel and provides the following services:



Chart 1: ICTCO Services

Teaching Services:

- **Turnitin** software helps users to understand and avoid plagiarism and develop their understanding of how to cite sources as part of an academic argument. ICTC office manages the users and trains the staff about how to use Turnitin.
- **Learning Management System (LMS)** – A service based on Moodle offered for students and instructors in order to access, coordinate and organize course materials online. Students and instructors can login to LMS using the provided official email account.
- **Library Automation System (Koha)** - Koha is an open-source Integrated Library System in use today by hundreds of libraries worldwide. Koha is web based, so there is no software to install on desktop computers. Users can check the books online and reserve them via web. Its features are more than enough to manage the Epoka Library effectively and efficiently.
- **DSpace**– The institutional repository of Epoka University: DSpace is an open source repository software package typically used for creating open access repositories for scholarly and/or published digital content. The proceedings of the conferences which are organized by Epoka University can be accessed from this repository. Epoka University is the only university who has digital repository in Albania (<http://repositories.webometrics.info/en/Europe/Albania>). We also give services to other international journals to publish their publications (<http://dspace.epoka.edu.al/handle/1/1378>) in our digital repository.

Google Services:

- **Webmail (Google account)** –Epoka University is using Google Apps for Education services and all students and academic and administrative staff are provided with an email address under epoka.edu.al domain which is a Google account. Beside official communication, which is done through this email address, this account can be used for authentication to other online systems offered by university.
- **Google Classroom** – A more interactive service offered by Google as part of Google Apps for education in order to access, coordinate and organize course materials on cloud. By using Google Classroom, course materials can be integrated with other Google services where assigned users can collaborate. Students and instructors can access this service using the provided account.

Education Information System (Curriculum) – a website containing information related to study programs, curriculum and course syllabuses.

Smart Card: All students and staff are provided with Smart Card identification cards. The Smart Card is put as an e-ID application at three buildings, two PC labs, one Electronics Lab, and campus gate entry turnstiles and barriers. The e-wallet application is active for staff but has not started yet for students.

Help Desk: ICTCO is also responsible for the maintenance of personnel and PC Lab computers in respect to software and hardware. Its staff monitors the personal computers within the frame of distribution of duty and authority and brings the issues to a conclusion. At the same time, ICTCO plans servers and cabling services of the University. Staff can open ticket via help.epoka.edu.al for their ICTCO related problems and follow the process from here. You can share your opinions on every subject related to information technologies and informatics with help@epoka.edu.al and you can also write your complaints and suggestions for a better campus life.

Software Opportunities

Epoka University has a subscription of Microsoft Program which is called Dream Spark. It supports technical education by providing access to Microsoft software for learning, teaching and research purposes. Epoka University also provides Office 365 accounts to all staffs and students which includes all office applications for free.

Network:

- **Wireless:** Epoka University provides wireless internet connection to all Epoka members in the campus. As ICTCO, we ensure that the wireless signal is strong and covers everywhere in campus.
- **Wired:** Besides wireless, there are three PC labs, one Civil Engineering lab, one Electronics lab, one PhD study room and a library where PCs serve students and staffs with wired internet. In the Epoka Library and one of the classrooms, there are plug and use stations next to each table where students and staff can use for wired internet and electricity for their laptops.
- **Digital Signage:** There are four TVs in campus, which are used to inform Epoka members about latest news and announcements.

Epoka Interactive Systems (EIS)



Chart 2: Epoka Interactive Systems (EIS)

Recognizing the needs of campus community, Epoka has made a strategic decision to replace its aging, cumbersome, and vendor-supported student, instructors, and staff systems with a modern, nimble and effective internally built system that includes admissions, enrolment, registration, financial aid, student, instructor, and staff accounts, and advising in one platform.

EIS is developed by ICTCO at Epoka University. From the user interface, EIS is an online interactive system where users can log in using the provided official email account. It is a modular system organized by roles and respective units at the university and the information is stored in a centralized database. All users have access to their personal information, can update general details and CV and they can manage job related tasks and activities according to their role and job position.

- **Students:** Students in their profile can access their personal information and information related to their study program. Course registration is done through the system and after that, students can view the ongoing academic activity of the registered courses during the semester. They can check attendance, exam dates, interim grades and final grades. Also, in the system, they can access the program curriculum, transcript, grade calculation, weekly schedule, requests and notifications. The EIS prompts students when they are in the “warning zone” for financial or academic issues. It empowers students to create course plans to ensure timely graduation.
- **Instructors:** Academic staff including full-time and part-time lecturers can have access to their courses assigned in the current semester and can also view previously assigned courses. Lecturers can update the syllabus, complete student attendance, assign and finalize grades. Advisor lecturers can have access to academic information of the students assigned for advisory and they can approve student course registration.

- **Coordinators:** The opening of courses according to course appointment in each semester is done by department coordinators and approved by faculty coordinators. Coordinators can monitor the academic activity of the lecturers under respective department.
- **Admissions and Registrar’s Office:** Admissions Office enters all pre-registered student information and assigns scholarships. After the student has completed the registration, all the related information entered by Admissions office, is managed by Registrar’s office.
- **Finance:** Finance office can manage and follow up all student financial information related to tuition fees and scholarship.
- **Human Resources:** Human resources office can manage all staff information data and assigns roles and job position for each staff.
- **Curriculum:** a website containing information related to study programs, curriculum and course syllabus.

All users have access to their personalized reports according to their roles and respective units. Faculties and units are liberated from tedious manual tasks. EIS supplies them with new and most updated information that will empower them to make informed decisions based on data.

EIS can be continuously updated with new modules according to the university needs. EIS can be accessed via: <https://eis.epoka.edu.al> and users can log-in by their Epoka Mail account credentials.

Measurable indicators:

Table 1: Numbers on Tools and Equipment

Number of PCs for students	217
Number of PC furnished labs for students	9
Number of PCs for academic staff	88
Number of PCs for administration	53
Number of printers	19
Number of photocopying machines	19
Number of head projectors	1
Number of video-projectors	30
Number of scanners	19
Number of TV Screen	10

Infrastructure in Service of Study Programs, Logistics, and Other Services for the Community



Figure 17: Library

The EPOKA University Library, located on the first floor of A-Building in the Rinas Campus, was founded to support the education and research activities of the university by providing and organizing the necessary documents.

With its 100-seat capacity, our library has a 400 square meter area of use. Our University Library is composed of an entrance, administrative office, research center, bookshelves, and a reading hall. In the entrance, there is a checkout desk. Periodicals, including the exhibition of new arrivals, are also shelved in this section. The reading hall is equipped for students to study and do research.

Epoka University is a member of the Balkan Libraries Union, which was founded on July 29, 2009, with the participation of 10 institutions from 6 Balkan countries.

Our library collection is enriched by purchases and donations. The books to be purchased are chosen in accordance with the needs and requests of the students, administrative, and academic staff. Under the Department of Library and Documentation, the library has a total of about 25,000 printed books.

Digital Databases:

Epoka University has full membership in JSTOR, a shared digital library created in 1995 that includes more than 2,000 academic journals. JSTOR was founded to help libraries and academic publishers transition their activities from print to digital operations, expand access to scholarly content around the world, and preserve it for future generations.

Every member of Epoka staff can access JSTOR's collections by visiting <http://www.jstor.org/> and searching or browsing for content. They can download several articles periodically.

- **Library Automation System (Koha)** is an open-source Integrated Library System used today by hundreds of libraries worldwide. Koha is web-based, so there is no software to install on desktop computers. Users can check the books online and reserve them via the web. Its features are more than enough to manage the EPOKA Library effectively and efficiently.

Using the Library

Library has a special program that is used only for bookkeeping needs, which includes check-ins and check-outs, and various bookkeeping reports. Our library works on the open shelf system, enabling users to reach the books directly. The books in the open shelves are topically sorted in the book hall according to the LC classification method. To find the book you are looking for, users should follow these steps:

1. Through the catalog search computers in the library, users can search author's name, book name, publisher, topic, or keyword areas. Users can also search for books at (<http://lib.epoka.edu.al/>)
2. To get the book, users can go to the shelves with the classification and location numbers of the books appearing on the screen as a result of the user's search.

Example of an LC number for the book "Exchange Rates and International Finance" by Laurence S. Copeland, Financial Times, 2008, **HG 3821/ C78 /2008**

The first part of the LC number is "HG," represents the category of the book by its topic. In the LC system, the first letter H" stands for the **Social Science** class. Each subsequent letter indicates the next level of subcategories of the main topic. In the given example, G" stands for **Finance**, 3821" indicates subcategories included between 3810-4000 (Foreign exchange, International finance, International monetary system), C78" indicates the first letter of the author's surname, 2008" **indicates the book's** publication year.

Regulations:

Students of Associate Degree, Bachelor's Degree, Master's Degree, PhD Degree, and academic and administrative personnel are members of the library. They can borrow library materials in accordance with the Library's rules of the Library.

Researchers coming from outside the university are not lent books; they are only allowed to use the materials in the library. Readers in this group are requested to fill out the related Lending Service form.

Table 16: Circulation Rules

Resource	Patron	Loan period(days)	Maximum number of check-outs(items)
Book	Pre-undergraduate/Undergraduate students	15	3
	Graduate students	15	5
	Staff	20	5
Bound Journal	Graduate students Staff	5	2
Visual/Audio Resources	Pre-undergraduate/Undergraduate students Graduate students Staff	3	3

Source: (<http://library.epoka.edu.al/cat-regulations-484.html>)

C. The Curriculum

Undergraduate Teaching

Faculty of Architecture and Engineering															
Department of Civil Engineering															
FIRST YEAR															
First Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				Epo ka	Semestral Lecture and studying hours						ECT S
Code	Course Name			The ory	Pra ct.	L ab	Tota l	Cred its	Lec t.	Pra ct.	La b.	Site W.	Oth er	Tot al	
MTH 101	Calculus I	A	Compulsory	3	2	0	5	4	48	32	0	0	95	175	7
PHY 101	General Physics I	A	Compulsory	3	2	0	5	4	48	32	0	0	95	175	7
CHM 103	General Chemistry	A	Compulsory	3	0	0	3	3	48	0	0	0	52	100	4
CE 101	Introduction to Civil Engineering	B	Compulsory	2	0	0	2	2	32	0	0	35	33	100	4
CE 121	Civil Engineering Drawing	B	Compulsory	2	2	0	4	3	32	32	0	0	36	100	4
ENG 103	Development of Reading and Writing Skills in English I	D	Compulsory	3	0	0	3	3	48	0	0	0	52	100	4
Semestral Total				16	6	0	22	19	256	96	0	35	363	750	30
FIRST YEAR															

Second Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				Epo ka Cred its	Semestral Course and studying hours						ECT S
Code	Course Name			The ory	Pra ct.	L ab	Tota l		Lec t.	Pra ct.	La b.	Site W.	Oth er	Tot al	
CE 132	Engineering Mechanics I	B	Compulsory	2	2	0	4	3	32	32	0	10	76	150	6
CE 122	Materials Science	C	Compulsory	2	2	0	4	3	32	32	0	10	26	100	4
MTH 102	Calculus II	A	Compulsory	3	2	0	5	4	48	32	0	0	95	175	7
ENG 104	Development of Reading and Writing Skills in English II	D	Compulsory	3	0	0	3	3	48	0	0	0	52	100	4
CEN 104	Introduction to Computers and Programming	D	Compulsory	2	2	0	4	3	32	32	0	0	61	125	5
CE 104	Geology for Civil Engineers	C	Compulsory	3	0	0	3	3	48	0	0	32	20	100	4
Semestral Total				15	8	0	23	19	240	128	0	52	330	750	30
SECOND YEAR															
Third Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				Epo ka Cred its	Semestral Lecture and studying hours						ECT S
Code	Course Name			The ory	Pra ct.	L ab	Tota l		Lec t.	Pra ct.	La b.	Site W.	Oth er	Tot al	
MTH 201	Differential Equations	A	Compulsory	3	0	0	3	3	48	0	0	0	77	125	5
CE 223	Introduction to Construction Materials	B	Compulsory	3	0	2	5	4	48	0	32	45	50	175	7
CE 213	Mechanics of Materials I	B	Compulsory	2	2	0	4	3	32	32	10	0	101	175	7
MTH 205	Probability and Statistics for Engineers	A	Compulsory	2	2	0	4	3	32	32	0	0	61	125	5
CE 233	Engineering Mechanics II	B	Compulsory	2	2	0	4	3	32	32	0	0	86	150	6
Semestral Total				12	6	2	20	16	192	96	42	45	375	750	30
SECOND YEAR															
Fourth Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				Epo ka Cred its	Semestral Course and studying hours						ECT S
Code	Course Name			The ory	Pra ct.	L ab	Tota l		Lec t.	Pra ct.	La b.	Site W.	Oth er	Tot al	
	*Elective	C	Elective	3	0	0	3	3	48	0	0	0	77	125	5
CE 214	Mechanics of Materials II	B	Compulsory	2	2	0	4	3	32	32	0	0	86	150	6
CE 240	Engineering Hydrology	B	Compulsory	2	2	0	4	3	32	32	0	36	0	100	4
CE 260	Structural Mechanics	B	Compulsory	3	2	0	5	4	48	32	0	20	50	150	6

CE 284	Surveying	C	Compulsory	2	2	0	4	3	32	32	0	36	25	125	5
	Non-technical elective	C	Elective	3	0	0	3	3	48	0	0	0	52	100	4
Semestral Total				15	8	0	23	19	240	128	0	92	290	750	30
THIRD YEAR															
Fifth Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				Epo ka	Semestral Lecture and studying hours						ECT S
Code	Course Name			The ory	Pra ct.	L ab	Tota l	Cred its	Lec t.	Pra ct.	La b.	Site W.	Oth er	Tot al	
CE 301	Summer Practise I	D	Compulsory	0	0	0	0	0	0	0	0	70	5	75	3
CE 311	Engineering Economics	C	Compulsory	2	2	0	4	3	32	32	0	0	61	125	5
CE 381	Principles of Transportation and Traffic Engineering	B	Compulsory	3	2	0	5	3	48	32	0	10	60	150	6
CE 395	Structural Analysis	B	Compulsory	3	0	2	5	4	48	0	32	30	40	150	6
CE 361	Soil Mechanics	B	Compulsory	3	1	1	5	4	48	16	16	20	25	125	5
CE 341	Fluid Mechanics	B	Compulsory	2	2	0	4	3	32	32	0	32	29	125	5
Semestral Total				13	7	3	23	17	208	112	48	162	220	750	30

THIRD YEAR															
Sixth Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				Epo ka	Semestral Course and studying hours						ECT S
Code	Course Name			The ory	Pra ct.	L ab	Tota l	Cred its	Lec t.	Pra ct.	La b.	Site W.	Oth er	Tot al	
CE 332	Reinforced Concrete Fundamentals	B	Compulsory	3	2	0	5	4	48	32	0	20	25	125	5
CE 322	Construction Engineering and Management	B	Compulsory	3	2	0	5	4	48	32	0	20	25	125	5
CE 382	Foundation Engineering	B	Compulsory	2	2	0	4	3	32	32	0	36	25	125	5
CE 326	Hydromechanics	B	Compulsory	3	2	0	5	4	48	32	0	20	25	125	5
CE 348	Fundamentals of Steel Design	B	Compulsory	2	2	0	4	3	32	32	0	36	25	125	5
CE 388	Graduation Project	E	Compulsory	0	0	0	0	0	16	59	0	0	50	125	5
CE 366	Final Comprehensive Exam	E	Compulsory	0	0	0	0	0	16	0	0	0	109	125	
Semestral Total				13	10	0	23	18	240	219	0	132	284	875	30

Graduate Teaching

1. Structural Engineering Curricula

FIRST-YEAR															
First Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA Credits	Semestral Lecture and studying hours						ECTS
Code	Name			Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other	Total	
CE 423	PROJECT PLANNING	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 435	REINFORCED CONCRETE STRUCTURES	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 548	INTERMEDIATE STRUCTURAL DYNAMICS	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE XXX	TECHNICAL ELECTIVE	C	Elective	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
Semester Total				8	8	0	16	12	128	128	0	200	294	750	30

FIRST-YEAR															
Second Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA Credits	Semestral Lecture and studying hours						ECTS
Code	Name			Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other	Total	
CE 442	ADVANCED NUMERICAL METHODS	A	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 454	ADVANCED CONSTRUCTION MATERIALS	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 555	EARTHQUAKE-RESISTANT DESIGN OF STRUCTURES	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 562	COMPUTER APPLICATION IN CIVIL ENGINEERING	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
Semester Total				8	8	0	16	12	128	128	0	200	294	750	30

SECOND-YEAR															
Third Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA Credits	Semestral Lecture and studying hours						ECTS
Code	Name			Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other	Total	
CE 503	RESEARCH METHODS	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 507	SUPERVISED INDEPENDENT STUDY RESEARCH AND	B	Compulsory	4	2	2	8	6	64	32	32	100	147	375	15
CE xxx	TECHNICAL ELECTIVE	C	Elective	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
Semester Total				8	6	2	16	12	128	96	32	200	294	750	30

SECOND-YEAR															
Fourth Semester															

COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA	Semestral Lecture and studying hours					ECTS	
Code	Name			Theory	Prac	Lab	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other		Total
CE 400	PROFESSIONAL PRACTICE	D	Compulsory	0	0	0	0	0	0	0	0	300	0	300	12
CE 500	MASTER THESIS	E	Compulsory	0	0	0	0	0	0	0	0	450	0	450	18
Semester Total				0	0	0	0	0	0	0	0	750	0	750	30

List of Elective Courses:

Elective Courses		Weekly Course Distribution				Epoka	Semestral Course and studying hours					ECTS	
		Theo	Pract	lab	Tot	Credits	Lec	Prac	Lab	Sit W	Other		Totl
CE 584	Admixtures for Concrete	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 543	Advanced Concrete Technology	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 540	Advanced Materials Science	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 591	Advanced Structural Analysis	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 419	Building Construction Estimating	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 538	Composite Materials	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 437	Computational Fluid Dynamics	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 443	Construction Contracts	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 417	Construction Site Techniques	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 459	Durability of Concrete	2	0	2	4	3	32	32	0	73.5	50	187.5	7.5
CE 484	Earthquake Disaster Mitigation	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 449	Economics of Sustainability	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 463	Fundamentals of River Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 451	Groundwater Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 478	Hydraulic Structures	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 464	Intermediate Fluid Mechanics	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CEN 436	Introduction to Remote Sensing for Earth Observation	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
ARCH 451	Landscape Perspectives in DRM & FS	2	0	2	4	3	32	32	0	73.5	50	187.5	7.5
CE 413	Legal Aspects In Construction Works	2	2	0	4	3	32	0	32	73.5	50	187.5	7.5
CE 469	Life Cycle Assessment Sustainable Construction	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 587	Masonry Structures	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 544	Materials Testing and Measurements	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5

CE 520	Modeling In Hydrology	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 416	Risk Management in Construction	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 455	River Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 533	Soil Improvement Techniques	2	0	2	4	3	32	32	0	73.5	50	187.5	7.5
CE 532	Soil Structure Interaction	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 549	Special Concretes	2	0	2	4	3	32	32	0	73.5	50	187.5	7.5
CE 452	Statistical Techniques In Hydrology	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 547	Supplementary Cementing Materials	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 526	Water Resources Engineering	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5

2. Construction Management Curricula

FIRST-YEAR															
First Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA	Semestral Lecture and studying hours					ECTS	
Code	Name			Theory	Prac	Lab	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other		Total
CE 423	Project Planning	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 435	Reinforced Concrete Structures	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 419	Building Construction Estimateing	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
	Technical Elective	C	Elective	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
Semester Total				8	8	0	16	12	128	128	0	200	294	750	30

FIRST-YEAR															
Second Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA	Semestral Lecture and studying hours					ECTS	
Code	Name			Theory	Prac	Lab	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other		Total
CE 442	Advanced Numerical Methods	A	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 454	Advanced Construction Materials	B	Compulsory	2	0	2	4	3	32	0	32	50	73.5	187.5	7.5
CE 416	Risk Management in Construction	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 562	Computer Application in Civil Engineering	B	Compulsory	2	0	2	4	3	32	0	32	50	73.5	187.5	7.5
Semester Total				8	4	4	16	12	128	128	0	200	294	750	30

SECOND-YEAR															
Third Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA	Semestral Lecture and studying hours					ECTS	
Code	Name			Theory	Prac	Lab	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other		Total
CE 503	RESEARCH METHODS	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5

CE 507	SUPERVISED INDEPENDENT STUDY AND RESEARCH	B	Compulsory	4	2	2	8	6	64	32	32	100	147	375	15
CE xxx	TECHNICAL ELECTIVE	C	Elective	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
Semester Total				8	6	2	16	12	128	96	32	200	294	750	30

SECOND-YEAR															
Fourth Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA	Semestral Lecture and studying hours					ECTS	
Code	Name			Theory	Prac	Lab	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other		Total
CE 400	PROFESSIONAL PRACTICE	D	Compulsory	0	0	0	0	0	0	0	0	300	0	300	12
CE 500	MASTER THESIS	E	Compulsory	0	0	0	0	0	0	0	0	450	0	450	18
Semester Total				0	0	0	0	0	0	0	0	750	0	750	30

List of Elective Courses:

Elective Courses		Weekly Course Distribution				Epoka	Semestral Course and studying hours					ECTS	
		Theo	Pract	lab	Tot	Credits	Lec	Prac	Lab	Sit W	Other		Totl
CE 584	Admixtures for Concrete	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 543	Advanced Concrete Technology	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 540	Advanced Materials Science	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 591	Advanced Structural Analysis	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 538	Composite Materials	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 443	Construction Contracts	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 417	Construction Site Techniques	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 459	Durability of Concrete	2	0	2	4	3	32	32	0	73.5	50	187.5	7.5
CE 484	Earthquake Disaster Mitigation	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 555	Earthquake Resistant Design of Structure	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 449	Economy of Sustainability in Construction	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 463	Fundamentals of River Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 476	Hydraulic Structures I	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 477	Hydraulic Structures II	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 548	Intermediate Structural Dynamics	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CEN 436	Introduction to Remote Sensing for Earth Observation	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
ARCH 451	Landscape Perspectives in DRM & FS	2	0	2	4	3	32	32	0	73.5	50	187.5	7.5

CE 413	Legal Aspects In Construction Works	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 469	Life Cycle Assessment-Sustainable Construction	2	2	0	4	3	32	0	32	73.5	50	187.5	7.5
CE 587	Masonry Structures	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 544	Materials Testing and Measurements	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 455	River Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 473	River Hydraulics	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 533	Soil Improvement Techniques	2	0	2	4	3	32	32	0	73.5	50	187.5	7.5
CE 532	Soil Structure Interaction	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 549	Special Concretes	2	0	2	4	3	32	32	0	73.5	50	187.5	7.5
CE 452	Statistical Techniques in Hydrology	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 547	Supplementary Cementing Materials	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 523	Waste Water Treatment Plants	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 526	Water Resources Engineering	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 483	Water Supply System	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5

3. Construction Materials Engineering Profile

FIRST-YEAR																
First Semester																
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA Credits	Semestral Lecture and studying hours						ECTS	
Code	Name			Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other	Total		
CE 423	Project Planning	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5	
CE 435	Reinforced Concrete Structures	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5	
CE 459	Durability of Concrete	B	Compulsory	2	0	2	4	3	32	0	32	50	73.5	187.5	7.5	
CE XXX	Technical Elective	C	Elective	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5	
Semester Total				8	6	2	16	12	128	128	0	200	294	750	30	

FIRST-YEAR																
Second Semester																
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA Credits	Semestral Lecture and studying hours						ECTS	
Code	Name			Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other	Total		
CE 442	Advanced Numerical Methods	A	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5	
CE 454	Advanced Construction Materials	B	Compulsory	2	0	2	4	3	32	0	32	50	73.5	187.5	7.5	
CE 555	Earthquake Resistant Design of Structure	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5	
CE 562	Computer Application in Civil Engineering	B	Compulsory	2	0	2	4	3	32	0	32	50	73.5	187.5	7.5	
Semester Total				8	4	4	16	12	128	128	0	200	294	750	30	

SECOND-YEAR																
Third Semester																
COURSES		Course Type		Weekly Course Distribution				EPOKA	Semestral Lecture and studying hours						ECTS	
				Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other	Total		

Code	Name		Compulsory /Elective	Theory	Prac	Lab	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other	Total	
CE 503	RESEARCH METHODS	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 507	SUPERVISED INDEPENDENT STUDY AND RESEARCH	B	Compulsory	4	2	2	8	6	64	32	32	100	147	375	15
CE xxx	TECHNICAL ELECTIVE	C	Elective	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
Semester Total				8	6	2	16	12	128	96	32	200	294	750	30

SECOND-YEAR
Fourth Semester

COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA	Semestral Lecture and studying hours						ECTS
Code	Name			Theory	Prac	Lab	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other	Total	
CE 400	PROFESSIONAL PRACTICE	D	Compulsory	0	0	0	0	0	0	0	0	300	0	300	12
CE 500	MASTER THESIS	E	Compulsory	0	0	0	0	0	0	0	0	450	0	450	18
Semester Total				0	0	0	0	0	0	0	0	750	0	750	30

List of Elective Courses:

Elective Courses		Weekly Course Distribution				Epoka	Semestral Course and studying hours						ECTS
		Theo	Pract	lab	Tot	Credits	Lec	Prac	Lab	Sit W	Other	Totl	
CE 584	Admixtures for Concrete	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 543	Advanced Concrete Technology	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 540	Advanced Materials Science	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 591	Advanced Structural Analysis	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 419	Building Construction Estimating	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 538	Composite Materials	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 437	Computational Fluid Dynamics	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 443	Construction Contracts	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 417	Construction Site Techniques	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 484	Earthquake Disaster Mitigation	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 449	Economics of Sustainability	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 463	Fundamentals of River Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 451	Groundwater Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 478	Hydraulic Structures	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 464	Intermediate Fluid Mechanics	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5

CE 548	Intermediate Structural Dynamics	2	2	0	4	3		32	32	0	73.5	50	187.5	7.5
CEN 436	Introduction to Remote Sensing for Earth Observation	2	2	0	4	3		32	32	0	73.5	50	187.5	7.5
ARCH 451	Landscape Perspectives in DRM & FS	2	0	2	4	3		32	32	0	73.5	50	187.5	7.5
CE 413	Legal Aspects In Construction Works	2	2	0	4	3		32	0	32	73.5	50	187.5	7.5
CE 469	Life-Cycle Assessment-Sustainable Construction	2	2	0	4	3		32	32	0	73.5	50	187.5	7.5
CE 587	Masonry Structures	2	2	0	4	3		32	32	0	73.5	50	187.5	7.5
CE 544	Materials Testing and Measurements	2	2	0	4	3		32	32	0	73.5	50	187.5	7.5
CE 520	Modeling In Hydrology	2	2	0	4	3		32	32	0	73.5	50	187.5	7.5
CE 416	Risk management in Construction	2	2	0	4	3		32	32	0	73.5	50	187.5	7.5
CE 455	River Engineering	2	2	0	4	3		32	32	0	73.5	50	187.5	7.5
CE 533	Soil Improvement Techniques	2	0	2	4	3		32	32	0	73.5	50	187.5	7.5
CE 532	Soil Structure Interaction	2	2	0	4	3		32	32	0	73.5	50	187.5	7.5
CE 549	Special Concretes	2	0	2	4	3		32	32	0	73.5	50	187.5	7.5
CE 452	Statistical Techniques In Hydrology	2	2	0	4	3		32	32	0	50	73.5	187.5	7.5
CE 547	Supplementary Cementing Materials	2	2	0	4	3		32	32	0	50	73.5	187.5	7.5
CE 526	Water Resources Engineering	2	2	0	4	3		32	32	0	50	73.5	187.5	7.5

4. Water Resources Engineering Profile

FIRST-YEAR																
First Semester																
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA Credits	Semestral Lecture and studying hours						ECTS	
Code	Name			Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other	Total		
CE 423	Project Planning	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5	
CE 435	Reinforced Concrete Structures	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5	
CE 452	Statistical Techniques in Hydrology	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5	
CE	Technical Elective	C	Elective	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5	
Semester Total				8	8	0	16	12	128	128	0	200	294	750	30	

FIRST-YEAR																
Second Semester																
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA Credits	Semestral Lecture and studying hours						ECTS	
Code	Name			Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other	Total		
CE 442	Advanced Numerical Methods	A	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5	
CE 454	Advanced Construction Materials	B	Compulsory	2	0	2	4	3	32	0	32	50	73.5	187.5	7.5	
CE 463	Fundamentals of River Engineering	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5	

CE 562	Computer Application in Civil Engineering	B	Compulsory	2	0	2	4	3	32	0	32	50	73.5	187.5	7.5
Semester Total				8	4	4	16	12	128	128	0	200	294	750	30

SECOND-YEAR
Third Semester

COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA Credits	Semestral Lecture and studying hours					ECTS	
Code	Name			Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other		Total
CE 503	RESEARCH METHODS	B	Compulsory	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 507	SUPERVISED INDEPENDENT STUDY AND RESEARCH	B	Compulsory	4	2	2	8	6	64	32	32	100	147	375	15
CE xxx	TECHNICAL ELECTIVE	C	Elective	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
Semester Total				8	6	2	16	12	128	96	32	200	294	750	30

SECOND-YEAR
Fourth Semester

COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA Credits	Semestral Lecture and studying hours					ECTS	
Code	Name			Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other		Total
CE 400	PROFESSIONAL PRACTICE	D	Compulsory	0	0	0	0	0	0	0	0	300	0	300	12
CE 500	MASTER THESIS	E	Compulsory	0	0	0	0	0	0	0	0	450	0	450	18
Semester Total				0	0	0	0	0	0	0	0	750	0	750	30

List of Elective Courses:

Elective Courses		Weekly Course Distribution				Epoka Credits	Semestral Course and studying hours					ECTS	
		Theo	Pract	lab	Tot		Lec	Prac	Lab	Sit W	Other	Totl	
CE 584	Admixtures for Concrete	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 543	Advanced Concrete Technology	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 540	Advanced Materials Science	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 591	Advanced Structural Analysis	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 419	Building Construction Estimating	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 538	Composite Materials	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 525	Computational Fluid Dynamics	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 443	Construction Contracts	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 417	Construction Site Techniques	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 459	Durability of Concrete	2	0	2	4	3	32	32	0	73.5	50	187.5	7.5
CE 484	Earthquake Disaster Mitigation	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 555	Earthquake Resistant Design of Structures	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5

CE 449	Economics of Sustainability	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 463	Fundamentals of River Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 451	Groundwater Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 478	Hydraulic Structures	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 476	Hydraulic Structures I	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 477	Hydraulic Structures II	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 464	Intermediate Fluid Mechanics	2	2	0	4	3	32	0	32	73.5	50	187.5	7.5
CE 548	Intermediate Structural Dynamics	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CEN 436	Introduction to Remote Sensing for Earth Observation	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
ARCH 451	Landscape Perspectives in DRM & FS	2	0	2	4	3	32	32	0	73.5	50	187.5	7.5
CE 413	Legal Aspects In Construction Works	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 469	Life-Cycle Assessment-Sustainable Construction	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 587	Masonry Structures	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 544	Materials Testing and Measurements	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 520	Modeling In Hydrology	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 416	Risk Management in Construction	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 455	River Engineering	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 473	River Hydraulics	2	2	0	4	3	32	32	0	50	73.5	187.5	7.5
CE 533	Soil Improvement Techniques	2	0	2	4	3	32	32	0	50	73.5	187.5	7.5
CE 532	Soil Structure Interaction	2	2	0									

Professional Master Curricula

FIRST-YEAR															
First Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA Credits	Semestral Lecture and studying hours					ECTS	
Code	Name			Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other		Total
CE 423	PROJECT PLANNING	A	Compulsory	2	2	0	4	3	32	32	0	93.5	30	187.5	7.5
CE 435	Reinforced Concrete Structures	B	Compulsory	2	2	0	4	3	32	32	0	93.5	30	187.5	7.5
CE 419	Building Construction Estimating	B	Compulsory	2	2	0	4	3	32	32	0	93.5	30	187.5	7.5
CE XXX	Technical Elective	C	Elective	2	2	0	4	3	32	32	0	93.5	30	187.5	7.5
Semester Total				8	8	0	16	12	128	128	0	374	120	750	30

FIRST-YEAR

Second Semester															
COURSES		Course Type	Compulsory /Elective	Weekly Course Distribution				EPOKA Credits	Semestral Lecture and studying hours					ECTS	
Code	Name			Theory	Prac	Lab	Total		Lect.	Pract.	Lab.	Site W.	Other		Total
CE 420	Term Project	E	Compulsory	1	4	0	5	3	16	64	0	73.5	34	187.5	7.5
CE 454	Advanced Construction Materials	B	Compulsory	2	0	2	4	3	32	0	32	73.5	50	187.5	7.5
CE 470	Professional Practice	D	Compulsory	1	4	0	5	3	16	64	0	64	43.5	187.5	7.5
CE XXX	Elective	C	Elective	2	2	0	4	3	32	32	0	93.5	30	187.5	7.5
Semester Total				6	10	2	18	12	96	160	16	214	157.5	750	30

List of Elective courses:

	Elective Courses	Weekly Course Distribution				Epoka Credits	Semestral Course and studying hours					ECTS	
		Theory	Pract.	Lab.	Total		Lect.	Pract.	Lab.	Site W.	Other		Total
CE 584	Admixtures for Concrete	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 543	Advanced Concrete Technology	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 540	Advanced Materials Science	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 591	Advanced Structural Analysis	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 419	Building Construction Estimating	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 538	Composite Materials	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 437	Computational Fluid Dynamics	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 562	Computer Application in Civil Engineering	2	0	2	4	3	32	0	32	73.5	50	187.5	7.5
CE 443	Construction Contracts	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 417	Construction Site Techniques	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5

CE 484	Earthquake Disaster Mitigation	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 449	Economics of Sustainability	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 463	Fundamentals of River Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 451	Groundwater Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 478	Hydraulic Structures	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 548	Intermediate Structural Dynamics	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
ARCH 451	Landscape Perspectives in DRM & FS	2	0	2	4	3	32	0	32	73.5	50	187.5	7.5
CE 413	Legal Aspects In Construction Works	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 587	Masonry Structures	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 544	Materials Testing and Measurements	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 520	Modeling In Hydrology	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 416	Risk management in Construction	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 455	River Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 459	Durability of Concrete	2	0	2	4	3	32	0	32	73.5	50	187.5	7.5
CE 549	Special Concretes	2	0	2	4	3	32	0	32	73.5	50	187.5	7.5
CE 452	Statistical Techniques In Hydrology	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5

CE 547	Supplementary Cementing Materials	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5
CE 526	Water Resources Engineering	2	2	0	4	3	32	32	0	73.5	50	187.5	7.5

PhD Curricula:

Year I - First Semester		T	P	C	ECTS
CE 8xx	ELECTIVE COURSE	3	0	3	7.5
CE 8xx	ELECTIVE COURSE	3	0	3	7.5
CE 8xx	ELECTIVE COURSE	3	0	3	7.5
CE 8xx	ELECTIVE COURSE	3	0	3	7.5
Total:		12	0	12	30

Year I - Second Semester		T	P	C	ECTS
CE 8xx	ELECTIVE COURSE	3	0	3	7.5
CE 8xx	ELECTIVE COURSE	3	0	3	7.5
CE 8xx	ELECTIVE COURSE	3	0	3	7.5
CE 8xx	ELECTIVE COURSE	3	0	3	7.5
Total:		12	0	12	30

Year II+III		T	P	C	ECTS
CE 800	PhD Thesis	0	0	0	120
Total:		0	0	0	120

D. Teaching, Learning, Assessment & Research

Undergraduate Students' List of Graduation Project

1. *Ilirjan Ljuljduraj*, "Assessing Structural Vulnerability: A Pushover Analysis Of a 3-story RCC Building in CSI SAP2000", *Msc. Bredli Plaku*
2. *Fjora Dragjoshi*, "Design of the Internal Water Supply for a Two-Story Residential Building in Albania.", *Assoc. Prof. Dr. Mirjam Ndini*
3. *Kevin Kosta*, "Fire Resistance of Steel Structures.", *Prof. Dr. Hüseyin Bilgin*
4. *Xhulio Pano*, "Design of the Internal Water Supply for A Two-Story Residential Building in Albania.", *Assoc. Prof. Dr. Mirjam Ndini*
5. *Birgit Betoja*, "Soil Type Impact in Structural Detailing Case Study: Foundation System Optimization.", *Dr. Anila Xhahysa*
6. *Sara Gërguri*, "Estimation of Costs for a Two-Story Residential Villa.", *Dr. Julinda Keçi*
7. *Eri Ndrejoni*, "Nonlinear Pushover Analysis of a Three-Story Structure Using SAP2000: Performance Assessment and Seismic Response." *Msc. Bredli Plaku*
8. *Frensis Mukaj*, "Effect of Differential Lateral Force Resisting Systems in the Seismic Performance of Structures Designed for Highly Risked Seismic Zones". *Dr. Anila Xhahysa*
9. *Franc Arapi*, "Time Estimation For a 2-story Residential Villa". *Dr. Julinda Keçi*

Graduate Students' List of Theses

1. *Mikaela Çela*, "Post-Earthquake Assessment of URM Buildings in Albania: Analytical Modelling and Field Comparison". *Prof. Dr. Hüseyin Bilgin*
2. *Jurgen Sina*, "Impact of Urban Development on Flood Risk in Durrës, Albania: A Case Study of Drainage Infrastructure Capacity". *Dr. Begmyrat Kulmedov*
3. *Dariel Koskija*, "Seismic Vulnerability Assessment of Load-Bearing Masonry Structures: A Comparative Study of Retrofitting Techniques". *Dr. Armando Demaj*
4. *Deni Sula*, "Comparative Evaluation of Seismic Response in Symmetrical and Asymmetrical Reinforced Concrete Buildings Using SAP2000 and CDSWIN: Implications for Structural Engineering Practice in Albania". *Prof. Dr. Hüseyin Bilgin*
5. *Kristi Latifi*, "A Comparative Analysis of Green Building Certification Systems in Albania:

- LEED, BREEM, EDGE, And DGNB Projects”. *Prof. Dr. Ahmet Öztaş*
6. *Aron Ara*, ” Influence of Plastic Hinge Reinforced on the Seismic Response of RC Structures,”
Prof. Dr. Ahmet Öztaş
 7. *Teo Mati*,” Comparative Analysis of Traditional VS Technology-Driven Construction
Methods in Albania”. *Dr. Julinda Keçi*
 8. *Andi Gjoçi*,” The effect on Different slab Types on the Structural behavior of a 10-story RC
Building”. *Dr. Marsed Leti*
 9. *Hamide Duka*,” Seismic Performance Assessment of a 5-Story RC Building Using Time
History and Pushover Analyses”. *Dr. Marsed Leti*
 10. *Agjelos Gjana*, “Comparative study of Eurocodes 8 and KPT-N.2-89 Seismic Design for A
multistory Building in Tirana”. *Prof. Dr. Hüseyin Bilgin*
 11. *Jon Stërmasi*,” Nonlinear Seismic Performance Evaluation of two URM Buildings in Tirana,
Albania from 1970s: 3MURI Analysis”. *Dr. Marsed Leti*

Research Areas and Research Groups

Research Area: Structural/Earthquake Engineering

The goal of our research group in structural/earthquake engineering is to improve the seismic resiliency of societies through improved engineering and management tools for critical infrastructure systems including reinforced concrete, masonry as well as steel structures. Graduates courses are available in static/dynamic analysis and structural design theory.

Failures of structures during severe earthquakes are responsible for losses and casualties in seismic regions around the world including our region. Most of the structural failures can be attributed to poorly detailed/constructed components of the buildings systems (e.g. columns, beam-column joints, masonry walls). Recent research has proven the effectiveness of various innovative strengthening techniques at enhancing the performance of such substandard components, it is still necessary to develop design guidelines that lead to more cost-effective solutions.

Potential MSc/PhD topics include assessment, retrofit/strengthening of Reinforced Concrete, steel and masonry structures as follows:

- Use of Fiber Reinforced Polymers (FRP) for strengthening,

- Use of hybrid strengthening solutions for rehabilitation,
- Testing techniques for seismic performance assessment,
- Seismic analysis and design of buildings equipped with energy dissipative devices,
- Vulnerability assessment and upgrading of existing infrastructure,
- Fragility based assessment of existing infrastructure,
- Performance based evaluation of the existing infrastructure,

Another research area is related with the stability and dynamics of the historical masonry buildings constructed during the Post-Byzantine period on massive Roman vaulted structures. Using the methods of Heyman's limit analysis approach, load bearing mechanism and collapse analysis of these structures will be investigated. Based on the findings, seismic safety of the these monumental structures will be explored.

Research area: Water Resources Engineering

This research area deals with research and practical applications of hydrology and hydraulics as an integral part of the civil engineering. Water is the key element and a valuable resource for human development which depends on the availability of water resources. It is of great importance a comprehensive understanding of the fundamental force of water to be capable to deal with its consequences—such as flooding—manage the increasing demands for water, managing the water in a sustainable way, and utilize hydraulic energy. Due to climate change impact, population growth

and increasing water demand, the importance of research on water issues is going to increase in the future. Hydrology and hydraulics are two of fundamental sciences providing the basic knowledge for the development and controlling of water resources.

Hydraulic structures for flow controls are important elements of application and their designs, involves the interaction between structure and flow. Engineering studies include the analysis of

flows, the ways in which the water regime and the flow pattern are affected by the structure and the environment responds to these changes.

The most prominent hydraulic structures are dams for water storage. They are indispensable structures for the watershed-based development. The planning, design, construction and operation of dams are vital parts of a variety of water uses: water supply for domestic, irrigation and industrial uses; protection of life and property from flooding; hydro-electric energy generation and storage of large amounts of energy for economic growth, etc. But all these uses involve systems of other structures as well and all these elements comprise structural analysis, materials science and the technology of structures. The types of structures and their design have evolved, and new challenges come from applying new construction technologies and from the application of value engineering and probabilistic design to provide economically balanced solutions.

The research of hydraulic engineering group will contribute to these challenges not just to give an understanding of the processes but recommending effective measures for practical solutions.

3. Research Area: Sustainability in Civil Engineering

This research area deals with the contribution of civil engineering and related disciplines in the creation of a sustainable living environment. Sustainability in civil engineering means, performing construction and management activities without any reduction of resources or causing any harmful effect to the environment. In this context the Department of Civil Engineering at Epoka University is dedicated to work and contribute for building a better future for the next generations by conducting research on:

- **Assessing the structural integrity of civil engineering structures and develop retrofitting methods and techniques for a more secure built environment.**

Old buildings, bridges or historical monuments are part of people's daily life. In many countries hundreds of casualties are reported because of lack of assessment and maintenance of these structures. For that reason, they need to be assessed for structural integrity and retrofitted in case of improper conditions.

- **Solutions related to the reuse of underused facilities or reuse of structural members of these facilities.**

In Albania there are many industrial sites or buildings which for the moment are underused. On the other hand, many infrastructure projects cannot be implemented, or people cannot afford the cost of brand-new houses. These underused facilities may be totally or partially reused to construct low budget infrastructure or houses.

- **Recycling of industrial and demolition wastes in the production of construction materials.**

The production of many construction materials is responsible for the release of high amounts of wastes and consumption of unbelievably large amounts of natural resources. On the other hand, industrial by products such as slag, fly ash, silica fume etc. or demolition wastes are becoming serious problems for occupying large areas of land and causing serious environmental problems, for that reason the reuse and recycling of these wastes has become an emergency for many countries including Albania. So, by developing efficient and sustainable techniques we aim to offer to our society a cleaner and more livable environment.

- **Development of innovative and high-performance materials for safer and more comfortable structures.**

Traditional materials used in the construction offer many advantages to the construction industry, but beside these advantages there are also some deficiencies of these materials which need to be improved or sometimes even produce innovative materials to withstand better their conditions of service. The development of innovative and high-performance materials for safer and more comfortable environment rises as a necessity for a more sustainable living.

- **Integration of sustainability principles in the design and management of construction projects.**

Construction projects involve activities such as: use of materials from various sources, machineries, demolition of existing structures, use of green fields, cutting down of trees etc. All of these processes affect the environment in different ways like generation of waste materials, emissions from vehicles, machineries, noise pollution due to use of heavy vehicles and construction machineries, consumption of natural resources etc. Sustainability assessment of construction projects is essential to the fact that it does not create any harmful effects on the living ecosystem while optimizing the cost of construction. In order to ensure the availability of resources for the future generations and build affordable and manageable structures, it is very important to integrate the sustainability principles in the design and management of construction projects.

List of Publications

No	Name Surname	Scientific Publications and Academic Activities
1	Hüseyin Bilgin	Resilient heritage: Harnessing technology for sustainable conservation. Res. Eng. Struct. Mater., 2024
2	Hüseyin Bilgin	Thermal imaging for void detection and quantification in precast grouted structures using computer vision. Alexandria Engineering Journal. Vol. 114, 2025, Pages 608-620.
3	Hüseyin Bilgin	Investigating the Seismic Performance of RC Buildings Using Nonlinear Incremental Dynamic Analysis. 33rd International Conference on Organization and Technology of Maintenance (OTO 2024).
4	Begmyrat Kulmedov	Modeling Water Age and Chlorine Reduction Effects on Water Quality in the Distribution Network of the Lower Usuma Dam Using EPANET. Water Resour Manage (2024).
5	Marsed Leti	Investigating the Seismic Performance of RC Buildings Using Nonlinear Incremental Dynamic Analysis. 33rd International Conference on Organization and Technology of Maintenance (OTO 2024)
6		
7		
8		

Participation of Academic Staff in Academic Events

1. Dr. Marsed Leti attended the NET4AGE- FRIENDLY COST ACTION in Brussels, Belgium. The international conference was held at the Odisee Campus, Brussels, Belgium, from October 01-04.2024.
2. Dr. Armando Demaj to attended the 5th Luso-Brazilian Congress on Sustainable Construction Materials (CLBMCS 2024). The international conference was be held in Lisbon, Portugal from November 04-08.2024.
3. Assoc. Prof. Dr. Mirjam Ndini attended the technical visit in Japan. This technical visit was organized by the Japan Commission on Large Dams during March 24-28.2025.
4. Dr. Julinda Keçi attended the Circular Business On-Site Training School for Professionals at Riga Technical University of Riga, Riga, Latvia. The 2nd Training School was held from 8 to 10 September 2025.
5. Dr. Julinda Keçi attended the International Staff Week 2025 held from June 23-27, 2025, at the Università degli Studi di Napoli Federico II in Naples, Italy.
6. Professor Huseyin Bilgin took an active role as both moderator and presenter at the recent scientific forum “Seismic Hazard and Its Mitigation.” The event was organised by the Albanian Academy of Sciences in partnership with the Polytechnic University of Tirana, the Institute of Construction, and with the support of SDC.
7. On 8-11 June, the 20th International Conference on System of Systems Engineering (SoSE 2025), held under the theme “SoSE for Sustainable Development,” gathered experts and researchers from around the world to address pressing challenges in disaster risk reduction and climate resilience. Assoc. Prof. Dr. Mirjam Ndini from the Department of Civil Engineering at EPOKA University contributed to the conference with a research presentation titled “Climate Variability and Flood Risk in the Vjosa River Basin.

Office Holders

The department would like to thank the following for their valuable contribution to teaching, administration and management over the past year:

Assoc. Prof. Dr. Miriam Ndini

Prof. Dr. Hüseyin Bilgin

Dr. Julinda Keçi

MSc. Armando Demaj

MSc. Marsed Leti

MSc. Bredli Plaku

Department Coordinator Amelia Bullari

Acknowledgments

In addition to the Office Holders listed above, the department would like to thank the following for their collaboration to make this department offer all the facilities needed for the students.

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