EPOKA UNIVERSITY | Department of Civil Engineering

ANNUAL REPORT

2023 –2024

Annual Report

2023 –2024

Contents

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

Understanding of the fundamentals of science and engineering so that they can develop solutions to Civil Engineering problems and enhance their computing, communication, and research skills. It aims to emphasize teamwork, independent and innovative thinking, and leadership qualities. In particular, the Civil Engineering Program aims to:

- Train the students to have a theoretical background in basic sciences and engineering and to be equipped with the necessary technical skills,
- Develop students' competency in reading, writing, and oral communication,
- Provide practical experience that will enable students to utilize and enhance their engineering knowledge,
- Promote students' self-discipline and self-assurance and the ability to learn on their own,
- Encourage teamwork, collaboration, and development of interpersonal skills,
- Motivate the students towards contributing to the progress of science and technology,
- Teach the importance of ethical behavior in social and professional life,
- Produce graduates for the engineering and business communities who are observant, inquisitive, and open to new technologies for developing better solutions,
- Produce graduates for the engineering and business communities with integrity, determination, judgment, motivation, ability, and education to assume a leadership role to meet the demanding challenges of society.

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 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 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.

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

Prof. Dr. Ylber Muçeku
MSc. Izet Mehmetaj
MSc. Margarita Dajko
MSc. Entela Kapllani

Academic Visitors (2023-2024)

Orientation Session for freshman students

On September 27, 2023, the Department of Civil Engineering welcomed the freshman students to the orientation sessions organized by Epoka University.

In a warm welcome address to the incoming students, the Head of the Department of Civil Engineering, Assoc. Prof. Dr. Mirjam Ndini, emphasized the exciting intellectual journey that awaits them in the Civil Engineering Program. Highlighting the diverse career opportunities within the field, from designing large-scale projects to

research and teaching roles, professor Ndini encouraged students to embrace the transformative power of education. She urged students to step out of their comfort zones, to question, explore, and take intellectual risks. The faculty members were introduced as invaluable guides on this educational voyage, eager to engage in discussions and open doors to new possibilities. The Head of the Department assured students of the department's unwavering support and expressed anticipation for the fresh perspectives and energy they bring to the campus. They also encouraged students to partake in the vibrant campus life, filled with enriching activities and opportunities for personal growth. Finally, professor Ndini took pride in Epoka University's standing as the top university in Albania, urging students to make the most of this esteemed educational environment. The heartfelt address concluded with a resounding welcome to the newest members of the university community.

Explore the challenges of studying and working in the United Kingdom

Department of Civil Engineering at Epoka University, in collaboration with the Engineers and Architects Alumni Association (EAAA), organized an event titled "Explore the challenges of studying and working in the United Kingdom" on December 1, 2023. The session aimed to enrich students' comprehension of the intricacies related to studying and working in the United Kingdom.

The featured speaker for this occasion was Miss. Klara Ferati, an esteemed alumna of Epoka University who has achieved significant milestones since completing her bachelor's degree. Klara generously shared her post-graduate journey, offering valuable insights into her experiences, particularly as she pursued a master's degree in UK.

The event was designed to foster a more informal and engaging atmosphere, providing students with the opportunity for a peer-to-peer dialogue. Klara's guidance encompassed navigating the intricate path of applying for a Master's Degree, reflections on academic pursuits, and nuances associated with job applications. The discourse extended beyond the formalities, creating a dynamic setting filled with camaraderie, humor, and lively discussions.

The collective enthusiasm and curiosity of the attendees were palpable throughout the event. Klara's wealth of experiences allowed her to address a diverse range of questions, further enriching the exchange of insights and wisdom. The session served as a motivational platform, inspiring attendees to strive for excellence and pursue their aspirations with unwavering determination.

EPOKA University organized 'EPOKA OPEN DAY' to explore educational and scholarships opportunities

On December 16, EPOKA University's Department of Civil Engineering participated in the successful 'EPOKA OPEN DAY.' This event was a unique opportunity for prospective students to immerse themselves in the vibrant world of civil engineering and discover what makes EPOKA University a leader in this field.

During the open day, the Department of Civil Engineering showcased its cutting-edge research projects, and the impactful work of our students and faculty. Visitors had the chance to engage with current students and esteemed faculty members, gaining insights into the dynamic curriculum and innovative teaching methods that set our program apart.

The department provided detailed information about the courses, hands-on learning opportunities, and our strong industry connections that pave the way for exciting career prospects.

Moreover, our team was on hand to discuss the specifics of the Erasmus+ program, offering insights into how students can enhance their education with international experiences. Prospective students were also informed about the various scholarships available specifically for those interested in civil engineering.

Attending EPOKA OPEN DAY is the best way to experience the unique atmosphere, energy, and character of our Department of Civil Engineering. It's an opportunity not just to see, but to feel what it's like to be part of our innovative and supportive community.

We eagerly await the opportunity to welcome new faces to our department and are excited to guide the next generation of civil engineers. Don't miss your chance to be part of something extraordinary.

Open Lecture with Dr. Aledia Bilali: From EPOKA to BMW

EPOKA University recently had the honor of hosting Dr. Aledia Bilali, a distinguished alumna and a current Business Analyst at BMW Group, for an inspiring guest lecture. Dr. Bilali, with her unique blend

of academic prowess and professional excellence, engaged students and faculty in a deeply motivational session, sharing her journey and valuable insights.

The lecture began with Dr. Bilali reminiscing about her time at EPOKA University. She spoke fondly of the university's role in shaping her early academic and personal growth, praising its nurturing environment and supportive community. Dr. Bilali emphasized how her experiences at EPOKA laid a robust foundation for her future endeavors.

Delving into her time abroad, Dr. Bilali described her transition to studying in a foreign country. She shared anecdotes of adapting to different cultural norms and learning new ways of thinking. This part of her journey, marked by an eagerness to embrace change and overcome barriers, was particularly inspiring for students contemplating international education.

The core of her lecture revolved around her impressive tenure at BMW Group. Here, Dr. Bilali detailed how she juggled the demands of completing her PhD while excelling in a challenging role at one of the world's most prestigious automotive companies. Her narrative highlighted the skills of time management, perseverance, and strategic planning.

Further, Dr. Bilali offered insights into the dynamic world of business analysis, shedding light on the skills and mindset required to succeed in this field. She provided real-world examples from her work at BMW, illustrating how theoretical knowledge is applied in a practical, corporate setting.

In the concluding part of her lecture, Dr. Bilali opened the floor for a question-and-answer session, where she addressed the students' queries with thoughtful and informative responses. Her practical advice and encouragement left a lasting impression on the attendees.

Study & work beyond borders! Netherlands & UK

On December 21, 2023, Epoka University's Civil Engineering students gathered for an insightful event, "Beyond Borders, Diverse Stories: Perspectives on Studying and Working in Netherlands & UK," organized by the **Engineers and Architects Alumni Association (EAAA)** in collaboration with **Department of Civil Engineering**. Guests Fiori Isufi and Pranvera Progni shared experiences, highlighting challenges and opportunities for civil engineers abroad.

Guest speakers shared their experiences, shedding light on challenges and opportunities for civil engineers abroad. The session aimed to inspire students, offering valuable insights to help them approach

future studies and careers with a renewed mindset. Emphasizing global challenges and adaptability in engineering, the event encouraged students to consider new horizons for their academic and professional pursuits.

As the event concluded, the call to join the EAAA resonated—connect with professionals, access alumni networks, and unlock collaboration and career opportunities.

AutoCAD Workshop with High School Students

Future Engineers Club, in collaboration with the Department of Civil Engineering at EPOKA University, is excited to announce the successful completion of our recent AutoCAD Workshop. This event marked a significant milestone in our continuous effort to bridge the gap between high school education and university-level engineering studies.

The one-day workshop provided high school students with a unique opportunity to delve into the world of civil engineering. It was an immersive experience, allowing them to not only learn about essential engineering concepts but also to get a real taste of life on a university campus. This exposure is invaluable in helping students make informed decisions about their future academic pursuits.

A key focus of the workshop was the instruction in AutoCAD, a critical tool in the field of modern engineering. Through this hands-on experience, students gained practical skills and insights into the applications of this important software in various engineering scenarios.

An integral part of the event was the interactive coffee break session. Here, participants engaged in meaningful conversations with EPOKA students and academic staff. This exchange of ideas and experiences provided a rich learning environment, fostering a sense of community and shared passion for engineering.

The workshop culminated in the presentation of certificates to all participants. This acknowledgment served not only as a token of their hard work and dedication but also as a symbol of the knowledge and skills they had acquired. It was a proud moment for everyone involved, highlighting the successful completion of the workshop.

In closing, we extend our deepest gratitude to the members of the Future Engineers Club for their tireless dedication and effort in organizing this event. Their hard work was instrumental in its success and is greatly appreciated.

We are excited about the future activities and learning opportunities at EPOKA University and look forward to continuing our mission of fostering educational excellence and innovation in the field of engineering.

Stay connected for more updates and opportunities that promote learning and growth in engineering.

Future Engineers Club, in collaboration with the Department of Civil Engineering at EPOKA University, is excited to announce the successful completion of our recent AutoCAD Workshop. This event marked a significant milestone in our continuous effort to bridge the gap between high school education and university-level engineering studies.

The one-day workshop provided high school students with a unique opportunity to delve into the world of civil engineering. It was an immersive experience, allowing them to not only learn about essential engineering concepts but also to get a real taste of life on a university campus. This exposure is invaluable in helping students make informed decisions about their future academic pursuits.

A key focus of the workshop was the instruction in AutoCAD, a critical tool in the field of modern engineering. Through this hands-on experience, students gained practical skills and insights into the applications of this important software in various engineering scenarios.

An integral part of the event was the interactive coffee break session. Here, participants engaged in meaningful conversations with EPOKA students and academic staff. This exchange of ideas and experiences provided a rich learning environment, fostering a sense of community and shared passion for engineering.

The workshop culminated in the presentation of certificates to all participants. This acknowledgment served not only as a token of their hard work and dedication but also as a symbol of the knowledge and skills they had acquired. It was a proud moment for everyone involved, highlighting the successful completion of the workshop.

In closing, we extend our deepest gratitude to the members of the Future Engineers Club for their tireless dedication and effort in organizing this event. Their hard work was instrumental in its success and is greatly appreciated.

We are excited about the future activities and learning opportunities at EPOKA University and look forward to continuing our mission of fostering educational excellence and innovation in the field of engineering.

Stay connected for more updates and opportunities that promote learning and growth in engineering.

Future Engineers Club is organizing AutoCAD Workshop for High School Students

We are pleased to extend an invitation to you for a captivating one-day AutoCAD Workshop. This event is a collaborative effort between the Future Engineers Club and the Department of Civil Engineering at EPOKA University. It presents a unique opportunity for you to immerse yourself in the university atmosphere and gain insightful exposure to the field of Civil Engineering.

Furthermore, we are delighted to inform you that transportation arrangements have been made for your convenience. The EPOKA Bus will be available for boarding at 08:30, located behind the Opera Building in Tirana Centre. Post the conclusion of the workshop, the bus will depart from the campus at 13:45.

We encourage you not to forget this distinctive chance to enhance your learning, discover new horizons, and establish meaningful connections. Participation certificates will be conferred upon all attendees. We eagerly anticipate your presence at this event.

Microsoft Excel Workshop Concludes Successfully

After an intensive four-week program, the Future Engineers Club successfully concluded its Excel Workshop this past Monday, 4 March. Participants engaged in a final project, applying their newly acquired skills in a practical and challenging environment. Those who demonstrated proficiency and met the established criteria have been awarded certificates, signifying their commitment and mastery of Excel.

The workshop covered a range of essential Excel skills, from basic functions and formulas to more advanced data analysis and visualization techniques. Throughout the sessions, students were guided by experienced instructors who provided hands-on training and valuable insights into real-world applications of Excel.

The final project served as a capstone to the workshop, allowing participants to showcase their understanding and ability to use Excel effectively in a practical context. This project tested their technical skills and encouraged problem-solving and critical thinking.

We extend our heartfelt congratulations to all the achievers for their dedication and hard work. Your

efforts have paid off, and you are now better equipped with highly valued skills in both academic and professional settings. We are excited to see how you will apply these skills in your future endeavors.

EPOKA Summer League 2024: Civil Engineering Triumphs

On Monday, May 20, the final match of the EPOKA Summer League 2024, organized by the Sports Club, took place with great anticipation and excitement. The representative team from our department, the second-year Civil Engineering students (CE 2), faced off against the third-year Business Informatics students (BINF 3) in a thrilling contest.
The match was intensely competitive from the start. The first half ended in a 1-1 draw, demonstrating the skill and determination of both teams. The second half mirrored the intensity of the first, concluding with a score of 2-2. As the game progressed into additional time, the tension was palpable. In the final minutes, CE 2 managed to score a decisive goal, securing a 3-2 victory and clinching the league title. We are immensely proud of our students for their dedication and teamwork. Congratulations to the CE 2 team for their hard-earned victory and commendable performance throughout the tournament. Your success is a testament to your hard work and sportsmanship.

Civil Engineering Department Celebrates Graduation Ceremony for Class of 2024

EPOKA University successfully organized the Graduation Ceremony for the Class of 2024, marking the culmination of years of hard work and dedication for its students. This momentous event was filled with unforgettable emotions shared among faculty, family members, and graduates.

The Civil Engineering Department participated and celebrated the achievements of its students during this significant occasion. Renowned presenter and radio moderator, Mr. Blendi Salaj, hosted the ceremony. The Rector, Prof. Dr. Ahmet Öztaş, delivered a heartfelt welcoming speech, congratulating the students on their achievements and emphasizing that this graduation is just the beginning of their lifelong journey. He expressed the university's commitment to remaining a part of their lives and witnessing their future successes.

The ceremony featured several distinguished guests, including the Deputy Governor of the Bank of Albania, Dr. Natasha Ahmetaj, who encouraged the graduates to pursue their dreams and positively impact their respective fields.

Approximately 3,000 people, including students, their families, and other guests, attended the ceremony. The highlight of the event was the moment when the graduates received their diplomas and joyfully

threw their caps in celebration. Adding to the special atmosphere, the famous Albanian artist Eneda Tarifa performed some well-known musical pieces. To conclude the ceremony, a cocktail reception was organized, providing an opportunity for the participants to gather and reminisce about the students' accomplishments and successes throughout their academic journey.

The Civil Engineering Department extends its heartfelt congratulations to all the graduates and wishes them continued success in their future endeavors.

Civil Engineering Master Students Complete Thesis Defenses

Last week, the Civil Engineering Department at EPOKA University celebrated the successful presentation and defense of Master of Science theses by its students. The students, after months of dedicated research and collaboration with their supervisors, presented their findings, highlighting the depth of their work. The topics covered in the presentations reflected the diverse areas of expertise in civil engineering.

The Civil Engineering Department extends its congratulations to all the students for their hard work and achievements. Their success is a testament to the strong academic foundation and the supportive learning environment at EPOKA University. We wish these graduates the very best as they move forward in their careers, confident that their contributions will make a significant impact in the field of civil engineering.

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 four 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
Tution 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
Tution 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**				**Epoka**	**Semestral Lecture and studying hours**						**ECTS**
Code	**Course Name**			Theory	Pract.	Lab.	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other	Total	
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				Epoka	Semestral Course and studying hours						ECTS
Code	Course Name			Theory	Pract.	Lab.	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other	Total	

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				Epoka	Semestral Lecture and studying hours						ECTS
Code	Course Name			Theory	Pract.	Lab.	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other	Total	
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				Epoka	Semestral Course and studying hours						ECTS
Code	Course Name			Theory	Pract.	Lab.	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other	Total	
	*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				Epoka	Semestral Lecture and studying hours						ECTS
Code	Course Name			Theory	Pract.	Lab.	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other	Total	
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				Epoka	Semestral Course and studying hours						ECTS
Code	Course Name			Theory	Pract.	Lab.	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other	Total	
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	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 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	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	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	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:

		Weekly Course Distribution				Epoka	Semestral Course and studying hours						ECTS
Elective Courses		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 Assesment - 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:

		Weekly Course Distribution				Epoka	Semestral Course and studying hours						ECTS
Elective Courses		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 Assesment-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	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 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	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 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	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:

		Weekly Course Distribution				Epoka	Semestral Course and studying hours						ECTS
Elective Courses		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 Assesment-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	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 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	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 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		Weekly Course Distribution	EPOKA	Semestral Lecture and studying hours	ECTS

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:

		Weekly Course Distribution				Epoka	Semestral Course and studying hours						ECTS
Elective Courses		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 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 Assesment-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	Semestral Lecture and studying hours						ECTS
Code	Name			Theory	Prac	Lab	Total	Credits	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	Semestral Lecture and studying hours						ECTS
Code	Name			Theory	Prac	Lab	Total	Credits	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:

		Weekly Course Distribution				Epoka	Semestral Course and studying hours						ECTS
	Elective Courses	Theory	Pract.	Lab.	Total	Credits	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

Professional Master in "Disaster Risk Management and Fire Safety in Civil Engineering" 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 431	Project Planning, Management and Coordination	A	Compulsory	2	2	0	4	3	32	32	0	93.5	30	187.5	7.5
CE 447	Structural Fire Safety	B	Compulsory	2	2	0	4	3	32	32	0	93.5	30	187.5	7.5
CE 473	Flood Risk Assessment	C	Compulsory	2	2	0	4	3	32	32	0	93.5	30	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				**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	Semestral Lecture and studying hours						ECTS
Code	Name			Theory	Prac	Lab	Total	Credits	Lect.	Pract.	Lab.	Site W.	Other	Total	
CE 454	Risk Analysis in Decision-making Process	B	Compulsory	2	2	0	4	3	32	32	0	93.5	30	187.5	7.5
ARCH 428	Evaquation Calculation Modeling	B	Compulsory	2	0	2	4	3	32	0	32	93.5	30	187.5	7.5
CE 476	Supervised Independent Study	E	Compulsory	2	2	0	4	3	32	32	0	93.5	30	187.5	7.5
CE 470	Professional Practice	D	Compulsory	1	4	0	5	3	16	64	0	67.5	40	187.5	7.5
Semester Total				**7**	**8**	**2**	**17**	**12**	**112**	**128**	**32**	**374**	**120**	**750**	**30**

List of Elective Courses:

FIRST-YEAR													
Second Semester													
COURSES		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 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 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 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
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	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 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. *Anxhela Gjini,"* Analysis of a Three-Story Timber Structure*" Prof. Dr. Huseyin Bilgin*
2. *Arkis Voshi* "Structural Design of a Reinforced Concrete Five-Storey Building" *MSc. Bredli Plaku*
3. *Ergi Çakmashi* "Structural Design of A 4- Storey Reinforced Concrete Building" *Dr. Armando Demaj*
4. *Erisa Lleshi* "Time Estimation of A Residential Villa" *Dr. Julinda Keçi*
5. *Gerald Zeqaj* "Design of a Multistorey Building by Hand-calculations According to Eurocode 2 "*Dr. Armando Demaj*
6. *Ilir Islamaj* "Conceptual Design Principles for Earthquake Resistant Design" *Prof. Dr. Huseyin Bilgin*
7. *Juneida Nela* "Optimizing the Mathematical Model Of RC Structures for ZEUS-NL" *Dr. Marsed Leti*
8. *Rinald Sula* "Vlerësimi i Performancës së Aparatit Reynolds" *Assoc. Prof. Dr. Mirjam Ndini*
9. *Regi Ajdini* " Cost Estimation For a Residential Villa" *Dr. Julinda Keçi*

Graduate Students' List of Theses

1. *Klea Kasa "*2D Vs 3D Models For The Seismic Response Assessment Of Reinforced Concrete Framed Structures" *Prof. Dr. Hüseyin Bilgin.*
2. Daklea Hyraj "Sustainability In Heritage Building Retrofits: A Case Study Of The Polytechnic University Of Tirana, Albania" *Prof. Dr. Hüseyin Bilgin.*
3. *Gerta Isufaj* "Application of Incremental Dynamic Analysis for Seismic Performance

Assessment of a Premodern RC Template Building in Albania" *Dr. Marsed Leti.*

4. *Gledis Shuaipi* "Assessing the Seismic Performance of a Five-Story Premodern RC Template Building in Albania using Pushover and Time History Analyses" *Dr. Marsed Leti.*
5. *Xheni Balla* "Theoretical study On the influence Of openings and Openings shapes In load-bearing Masonry walls on Structural Integrity" *Dr. Armando Demaj.*
6. *Joana Biba* "Seismic Performance Evaluation of a Five-story RC Template Building in Albania Through Nonlinear Analysis" *Dr. Marsed Leti.*
7. *Endri Myftaraj* "Resilience of Supply chain in Albanian Construction Industry" *Dr. Julinda Keçi.*
8. *Ambra Hasku* "Comparative Life-Cycle Cost (LCC) Study of Green And Traditional Residential Buildings: Case Study in Tirana, Albania" *Dr. Julinda Keçi.*
9. *Jozefina Sterkaj "*Seismic Assessment And Retrofitting Strategies For A Prominent Masonry Structure Affected By Earthquake*" Assoc. Prof. Dr. Mirjam Ndini.*

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 theses 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	Dr. Armando Demaj	Shear performance of brick masonry walls reinforced with twisted steel bars."
2	Prof. Dr. Huseyin Bilgin	Influence of Confined Concrete Models on the Seismic Response of RC Frames. Structural Durability & Health Monitoring.
3	Prof. Dr. Huseyin Bilgin	Field Reconnaissance and Earthquake Vulnerability of the RC Buildings in 2 Adıyaman during 2023 Türkiye Earthquakes
4	Prof. Dr. Huseyin Bilgin	Investigation of seismic performance of a premodern RC building typology after November 26, 2019 earthquake. Structural Engineering and Mechanics
5	Prof. Dr. Huseyin Bilgin	Observed failure modes in existing URM buildings after earthquake in Albania.
6	Prof. Dr. Huseyin Bilgin	Effects of near - fault and far -fault ground motions on nonlinear dynamic response and seismic damage of masonry structures
7	MSc. Bredli Plaku	Influence of Confined Concrete Models on the Seismic Response of RC Frames. Structural Durability & Health Monitoring.
8	Dr. Marsed Leti	Investigation of seismic performance of a premodern RC building typology after November 26, 2019, earthquake
9		

10		
11		
12		
13		
14		
15		
16		
17		
18		
19		

Participation of Academic Staff in Academic Events

1. Prof. Dr. Huseyin Bilgin attended the China-CEEC Conference on Technology Cooperation and Exchange. The conference was held on October 16-22.2023 in Nanjing, China.
2. Dr. Julinda Keçi attended the Erasmus+ Staff Mobility for Teaching. The international staff mobility event was held at the Polytechnic University of Bari from December 18 - 22. 2023.
3. Prof. Dr. Hüseyin Bilgin attended as a keynote speaker at the International Student Conference of Civil Engineering (ISCCE 2024). The international conference was held at the Faculty of Civil Engineering at the University of Prishtina, from April 25-27.2024.
4. Dr. Marsed Leti attended the International Student Conference of Civil Engineering (ISCCE 2024). The international conference was held at the Faculty of Civil Engineering at the University of Prishtina, from April 25-27.2024.

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. Hűseyin 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.

Department of Civil Engineering

Epoka University
Rr. Tirane- Rinas, Km. 12 , 1039, Tirane/Albania
Phone: +355 4 2232 086
Fax: +355 4 2222 117
Email: info@epoka.edu.al