

GET INSPIRED

AND JOIN THE MOST INNOVATIVE WINTER PROGRAM IN EUROPE!

Algebra's International Winter School 2022
Zagreb, Croatia



ABOUT ALGEBRA UNIVERSITY COLLEGE

Your time spent in higher education should not be just a short break between the innocence of youth and the responsibilities of adulthood. Education is always an opportunity, a step forward, and it should be taken seriously. That is why we are here to help you navigate this road and why we continuously work on improving and perfecting our programs.

We want you to reach your full potential while at Algebra, regardless of whether you are attending an undergraduate or graduate study program, or our short summer or winter course. We are glad when our peers recognize our efforts, but our number one mission is to justify the trust you put in us. We choose our lecturers very carefully.

Our mission is to give you useful, current and applicable knowledge that will shape you into a true expert with bright career prospects. Each course is envisioned as a small but significant step towards that goal. Our mission is to help people discover what they love doing and steer them towards greatness in their chosen field of digital technologies.

**“Join us and let's create
digital future together!”**
Algebra

DID YOU KNOW?

Algebra is the biggest private education provider in Croatia! Algebra University College offers top quality professional study programs according to the Croatian Agency for Science and Higher Education. From 2014, Microsoft has listed Algebra among 3200 of the best education providers in the world. This January, experience Algebra through our International Winter School and find out why we are the number one choice for your higher education!



OUR STUDY PROGRAMS

Our students can choose between 14 undergraduate and graduate study programs/specializations. All our graduate level programs are held exclusively in English, even for Croatian students, so that exchange and international students can choose any course or program. As of 2021, students can also apply to study in English at select undergraduate study programs!

Undergraduate Professional Study Programs/Specializations (Bachelor)

- Software Engineering
- System Engineering
- Multimedia Computing
- Digital Marketing
- Visual Communications Design
- 3D Modeling

Specialist Graduate Professional Study Programs/Specializations (Master)

- Software Engineering
- System Engineering
- Data Science
- Game Development
- Digital Marketing
- Internet of Things and Artificial Intelligence (with Epitech, France)
- Design and Communications Management
- e-Leadership MBA

Learn more at www.algebra.university

WHY JOIN THE INTERNATIONAL WINTER SCHOOL PROGRAM?

Would you describe yourself as creative, curious and open-minded? Are you interested in spending four weeks in January learning all about the latest developments in the digital world at Croatia's number one private higher education institution while adding skills to your CV and meeting people from around the world?

If your answer is yes, then you have discovered the perfect formula for an unforgettable winter experience at Algebra's International Winter School! Winter is the perfect time to get inspired and learn about cutting-edge innovations happening at the forefront of the digital world. Algebra offers you a choice of three exciting courses to apply for and spend four weeks in Zagreb acquiring new knowledge and skills, while getting to know new people and cultures. Generations of students from around the globe have already traveled to Croatia and gathered lifelong memories from the International Winter School experience through studying, networking and exploring the natural and historical wonders of Croatia. The program is designed to offer our students a well-balanced mix of work & play. Our courses are creative and suitable for students from all backgrounds, so don't get discouraged if you are just making your first steps in the digital world! There is no better way to spend your winter than traveling and discovering new places, and there is no better destination than Croatia! Did you know that every winter our capital city of Zagreb turns into a true winter-wonderland? And you can experience that and much more over four weeks! Get to know Croatia though studying in Zagreb and enjoying our weekend field trips.

Now that you know what it takes to have an unforgettable winter adventure, it is time to pack your bags and head to Croatia! You have until 30 November (or 15 October if you want to catch the early bird applications) to apply for Algebra's International Winter School. The best winter of your life is one-step away; don't miss it!

At Algebra's International Winter School, you will meet students from all corners of the world, make friends for life and have the chance to join dozens of young people in creating a digital future! Meet us in Zagreb from 10 January to 4 February 2022 and discover why we are the most unforgettable winter school in Europe.

#GetMoving

Algebra International Crew

CHOOSE YOUR WINTER COURSE

EARN 7 ECTS POINTS PER COURSE

CYBER SECURITY

THE FORCE IS STRONG
WITH THIS ONE

DIGITAL MARKETING

NEW WAYS OF
COMMUNICATION

IOT & AI

DEVELOP SMART IOT
SYSTEMS THROUGH
THE APPLICATION OF
AI

INTERNATIONAL

STUDENTS CAN EARN
ADDITIONAL 3 ECTS
POINTS

CROATIAN LANGUAGE AND CULTURE

DON'T LET CROATIAN
CATCH YOU BY
SURPRISE





CYBER SECURITY

**THE FORC3 IS STRONG
WITH THIS ONE**

Get to know the “dark side” of security and how to use “the force” in the right way. In this course, you will learn how to use the computer without exposing it to most of the threats, whether this is simple Internet browsing, usage of publicly available Wi-Fi or usage of “secure” corporate networks.

Cyber security is an ever-evolving field with opportunities for everyone with an affinity to learn more and develop their skills in this interesting and demanding field. This course will demonstrate the basic steps that most of the hackers would go through while compromising the victim's computers. Also, it will define some well and less known attack vectors and protection against them.

You will not only have a chance to compromise many vulnerable machines by using different attack vectors, but you will also acquire knowledge that will help you

protect computers and networks against attacks. The course will also cover some of the latest attacks and methods used in the wild.

The prerequisite for this course is an understanding of the basics of operating systems, network and web applications. Nevertheless, the important concepts will be delivered during the class as a refresher. Everyone brave enough to step into this class will be rewarded with the knowledge that is heavily sought after not only in the military/government sector, as also in any security-aware corporation/company.

INTERNATIONAL STUDENTS WHO APPLY FOR THIS COURSE CAN TAKE OUR ADDITIONAL COURSE FOR FREE AND EARN EXTRA 3 ECTS POINTS

CROATIAN LANGUAGE & CULTURE

The Croatian Language and Culture course will help you learn the very basics of Croatian and offer an excellent insight into Croatian culture. You will learn to read and write some of the most important Croatian words, as well as learn key conversational phrases. You will also learn tidbits about famous Croats and Croatian history, geography, cuisine and more.

Don't let Croatian catch you by surprise. Expect the unexpected!



DIGITAL MARKETING

NEW WAYS OF COMMUNICATION

The course will introduce students to digital marketing strategies and user behavior, from content marketing, search, social to analytical tools used to track the success of digital campaigns.

The digital revolution completely changed the way organizations approach their core business, from creating products and services, managing customers to marketing and sales. Digital platforms introduce new ways of communication with customers allowing companies to tailor products and services to customer's needs in a more agile manner. In a way, digital marketing changed traditional marketing, making it faster, more precise, real-time and data driven. The tools that digital marketing experts use every day allow us to execute digital campaigns targeting audiences across the world much more efficiently and with smaller budgets than in traditional marketing.

In this course, we are going to examine the basic concepts of digital strategy, starting from understanding a company business model, products, customers, markets and business goals as well as how to accomplish marketing goals on digital platforms.

The topics covered by the Digital Marketing course include understanding the consumer, grasping cross-platform communication, goals and metrics, web optimization, user research techniques such as SEO, advertising on Google Ads and YouTube, measuring success with Google Analytics as well as using social media channels to position a brand in the digital world.

INTERNATIONAL STUDENTS WHO APPLY FOR THIS COURSE CAN TAKE OUR ADDITIONAL COURSE FOR FREE AND EARN EXTRA 3 ECTS POINTS

CROATIAN LANGUAGE & CULTURE

The Croatian Language and Culture course will help you learn the very basics of Croatian and offer an excellent insight into Croatian culture. You will learn to read and write some of the most important Croatian words, as well as learn key conversational phrases. You will also learn tidbits about famous Croats and Croatian history, geography, cuisine and more.

Don't let Croatian catch you by surprise. Expect the unexpected!



IoT & AI

**DEVELOP SMART IoT SYSTEMS
THROUGH THE APPLICATION OF AI**

The concept of Internet of Things has been around for a while. Now, thanks to advancements in AI, it is stepping up to a completely new level with smart IoT devices capable of local processing and decision-making. Learn how it all works through theory and hands on experience from simple signal pattern recognition on a small microcontroller, to image processing and all the way up to autonomous driving.

The course will start with an introduction to the basics of IoT architectures (embedded concepts of microcontrollers, peripherals, sensors, actuators) and their applications before progressing to more complex topics such as IoT wireless standards and communication protocols used in the global industry today.

Students who decide to join this course will discover the latest innovations in artificial intelligence through key technologies, demystification and the understanding of popular tools and frameworks connected with AI. Through theory and practical work, students will learn all about TinyML – the cutting-edge field that applies the transformative power of machine learning models to resource-constrained devices such as edge gateways and IoT sensor nodes with the aim of offloading

communication channels and reducing the amount of data through local processing.

The course will also focus on the fundamentals of computer vision and machine learning through image processing and AI modelling using specialized hardware. Students will have a chance to apply the acquired knowledge and skills to solving complex challenges such as autonomous driving, recognition of traffic signs and obstacles in real time inference. Finally, students will also develop a cloud service that can collect, store and visualize telemetry data.

In this course, students will have a chance to participate in designing an IoT system and learn to implement algorithms and models on hardware and popular development tools and languages.

INTERNATIONAL STUDENTS WHO APPLY FOR THIS COURSE CAN TAKE OUR ADDITIONAL COURSE FOR FREE AND EARN EXTRA 3 ECTS POINTS

CROATIAN LANGUAGE & CULTURE

The Croatian Language and Culture course will help you learn the very basics of Croatian and offer an excellent insight into Croatian culture. You will learn to read and write some of the most important Croatian words, as well as learn key conversational phrases. You will also learn tidbits about famous Croats and Croatian history, geography, cuisine and more.

Don't let Croatian catch you by surprise. Expect the unexpected!



CROATIAN LANGUAGE AND CULTURE

**DON'T LET CROATIAN
CATCH YOU BY SURPRISE**

As part of Algebra's International Winter School 2022 program, students can choose to apply for our Croatian Language and Culture course as a standalone course and spend four weeks immersed in all things Croatian!

Students will acquire the basic knowledge and skills that will bring the Croatian Language and Culture closer to them. The benefit of the course is the strengthening of students' cultural competence, taking into account different cultural circles that intersect at the territory of Croatia. Moreover, the course will also add a practical value in terms of enabling students to use the language in social activities and when interacting with locals during their stay in Croatia. All in all, the course aims to prepare students for everyday basic communication, as well as introduce them to Croatian customs, culture and history.

The main teaching material used is a reader with integrated workbook, which offers a compilation of short conversations with related tasks, illustrations and the glossary at the end. Other teaching materials include quizzes,

short videos, songs and presentations. Since the course is designed to combine fun with learning, teaching methods are highly interactive. Different interaction patterns are used in various activities, so students have a chance to work on their own, in pairs and in a team, competing against each other.

Having completed the course, students will acquire basic grammar and vocabulary skills, as well as a selected array of conversational functions and thus form a solid basis for further developing and practicing their language skills. Students will also remember historical, cultural and geographical facts about Croatia. The prerequisite for receiving the ECTS credits is the oral assessment – a project about a historical/cultural/linguistic concept that students have to do and present in pairs or small groups of three.



RECOMMENDATION FOR STUDENTS ATTENDING THE ONSITE WINTER SCHOOL PROGRAM

After the successful migration of our International School programs to virtual teaching in 2020, we are excited to get moving once again and welcome students back to Algebra's campus in Zagreb, Croatia. However, during the ongoing global coronavirus disease (COVID-19) pandemic, the health and safety of our students, lecturers and staff remains our primary concern. Therefore, students travelling to Croatia for the purpose of attending Algebra's four-week International Winter School program are strongly advised to follow the Covid travel rules issued by the Government of the Republic of Croatia.

Persons travelling for study purposes should have the following:

- Certificate that they have received two doses of vaccine used in the EU Member States (Pfizer, Moderna, AstraZeneca, Gamaleya, Sinopharm) not older than 210 days, provided that 14 days have passed since they received the second dose, or a certificate that they have received one dose of the vaccine, not older than 210 days, if the vaccine is administered in a single dose (Janssen/Johnson&Johnson), provided that 14 days have passed since they received the single dose,
- Certificate showing that they have recovered from COVID-19 and have received one dose of vaccine within six months from contracting the disease, provided that the vaccine was administered less than 210 days from their arrival at the border crossing point.

QUICK FACTS APPLICATION

The Winter School application process is carried out by completing the online application form at the official website: www.winter.algebra.university. Applications are reviewed on a rolling basis, once you submit your application the admissions team will contact you to schedule an online interview. Applications must be submitted before 30 November 2021.

We work in small groups and places are limited, so make sure to apply on time.

APPLY FOR SCHOLARSHIP

Check out all of the scholarship opportunities at www.winter.algebra.university. If you need any additional information, send us an e-mail at international-office@algebra.university

STUDENT PROFILE

Highly enthusiastic and motivated students interested in the field of technology, applied science, social sciences and humanities, as well as art students who aspire to personal growth and an effective start to their career.

STUDENT PROFILE English

The Winter School program is intended for students with at least a pre-intermediate level of English (B2) and it is not suitable for beginners or students with an elementary level of English.

DATES

10 January – 4 February 2022

TUITION FEES

	Main course	Croatian language and culture course
	7 ECTS	3 ECTS
Full Tuition Fee	EUR 2100	EUR 900
Early bird Tuition Fee*	EUR 1785	EUR 765

* for students enrolling before 15 October, 2021

Ask for information about special prices for groups and partner universities.

STUDENTS WILL BE AWARDED 7 ECTS POINTS PER MAIN COURSE AND WILL BE ABLE TO TAKE OUR CROATIAN LANGUAGE AND CULTURE COURSE FOR FREE AND EARN ADDITIONAL 3 ECTS POINTS.

THE TUITION FEE ALSO INCLUDES:



CULTURAL VISITS: quirky museums, historical sightseeing, field trips



ADDITIONAL FREE COURSE
(Croatian language and culture)



Morning refreshment (tea or coffee)



CROATIAN CUISINE: lunch during week days





ACCOMMODATION

**Recommended
price = 600 €**

Accommodation is NOT INCLUDED in the tuition fee.

The recommended price for accommodation during the four-week International Winter School program is approximately EUR 600 if you stay at hostels in Zagreb in multiple bed dorms. All premises facilitate the student life to the fullest and allow students to have an unique experience. Most hostels are modern & urban, located at the heart of Zagreb.

If you do not wish to stay in the hostel, you can alternatively look for private accommodation on your own. Although prices of private accommodation in Zagreb may vary depending on the city area, the size and amenities that apartments include, we would be happy to assist you in the process of finding a flat by providing helpful links to various rental agencies that offer short-term apartment rental.

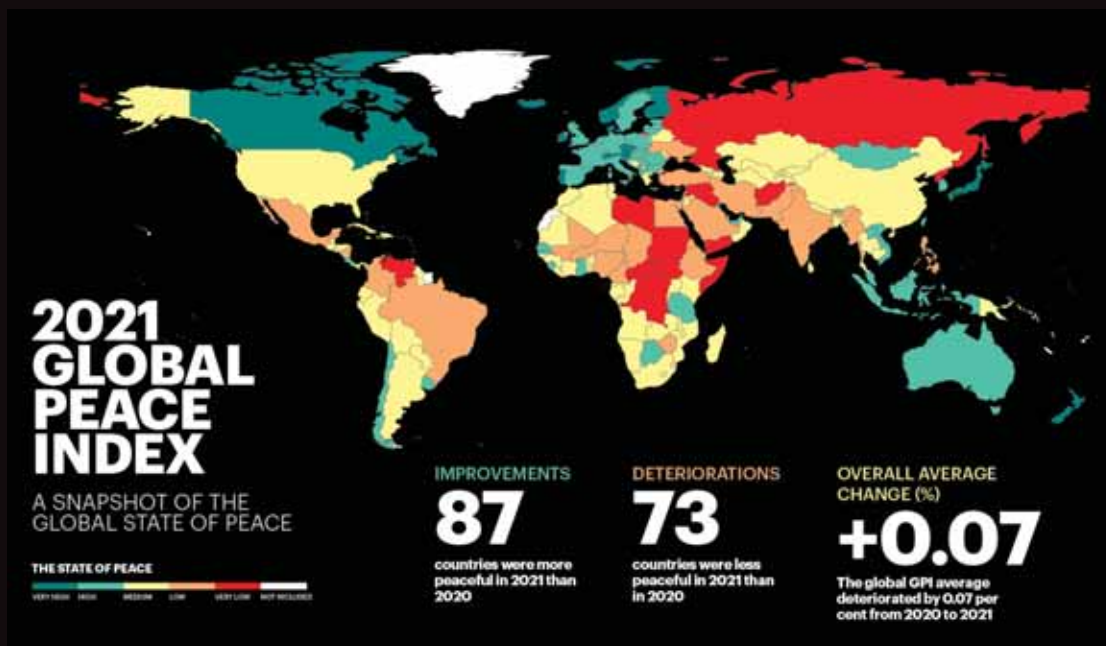


**We recommend you book
your accommodation before
30 November, 2021.**

CROATIA

YOUR “LIVE AND LEARN” DESTINATION

Croatia is considered one of the safest countries in the world according to the Global Peace Index 2021 produced by Institute for Economics and Peace (IEP), ranking 17 among 163 countries!



Even though Croatia is widely known for its beautiful coast, sunny islands and great football, we are also a land of innovators and a home to inventions that have transformed human existence. Several of these are used daily around the world, such as: the tie, the ball-point pen (Penkala pen), the alternating electrical current, electrical transformers, power lines, the parachute and many others. Croatia is also the birthplace of Nikola Tesla, Marko Polo and many more outstanding individuals.

Croatia – a small home of the World's Greatest Technological Innovators

Aside from the beautiful coast, great cultural and historical heritage, Croatia has been recognized for its contribution in the area of innovations and global reference projects. We are an exporter of the best business-technological practices, and home to many individuals who have been recognized for their skills and expertise all over the world.





City of Zagreb

Zagreb, one of the oldest European cities, is not only the administrative but also the economic, diplomatic and cultural capital of Croatia, with a population of almost one million people. Zagreb is also a university center with forty higher education schools and over 85,000 students. It is a city that is proud of its long history of excellence in education - Zagreb had its first University in the mid-16th century!

As the capital of Croatia, Zagreb is a great place to be all year round, with its numerous squares, parks and historic quarters, but winter is the most magical season in the city! The festive street decorations inspire a true holiday spirit in all those who find themselves in Zagreb's winter wonderland. The city lights up with thousands of lights, colorful decorations and music, all blending together and creating an unique holiday ambience. With a rich cultural program including concerts, exhibitions and a range of other outdoor festivities, you will surely find something of interest.

A great atmosphere and friendly local people are the greatest treasures you will discover in Zagreb.

DID YOU KNOW?

Zagreb – the best Christmas Market in Europe in 2016, 2017 and 2018!

The sound of Christmas bells, the scent of gingerbread, mulled wine and various other delicacies... come meet us at the best Christmas Market in Europe – the Advent in Zagreb.

In Zagreb, even the most demanding visitors will find a variety of events to their liking. There is plenty of fun, excellent food, unique events, art, but also a genuine Christmas atmosphere, on the streets of Croatia's capital. Let's share the joy and warmth of this special time of year together!





ZAGREB

Algebra Campus



ALGEBRA

**INTERNATIONAL
SCHOOL**

International Office

Ilica 242, HR-10000 Zagreb

Croatia – Europe

E-mail: international-office@algebra.university

Phone 00 385 1 5809 313

Fax 00 385 1 2222 183

More information:

www.winter.algebra.university

Every effort has been made to ensure that the information in this brochure is accurate and up-to-date. However, some changes, for example to programs, courses, facilities or fees, may become necessary due to legitimate staffing, financial, regulatory and academic reasons. In such circumstances, Algebra will: (i) endeavor to keep any changes to a minimum; (ii) take all reasonable steps to minimize disruption to students; and (iii) keep students informed appropriately by e-mail advising where to seek further information if required. If you require further information or confirmation of any matter, please contact us at international-office@algebra.university.



Algebra International School



Algebra International School



Algebra_University



Algebra University College