
ALGEBRA
UNIVERSITY
COLLEGE
I KNOW HOW
TO BUILD MY
OWN WORLD.

DARK.

LIGHT THE SPARK.

LIGHT

Creating digital future for 21 years

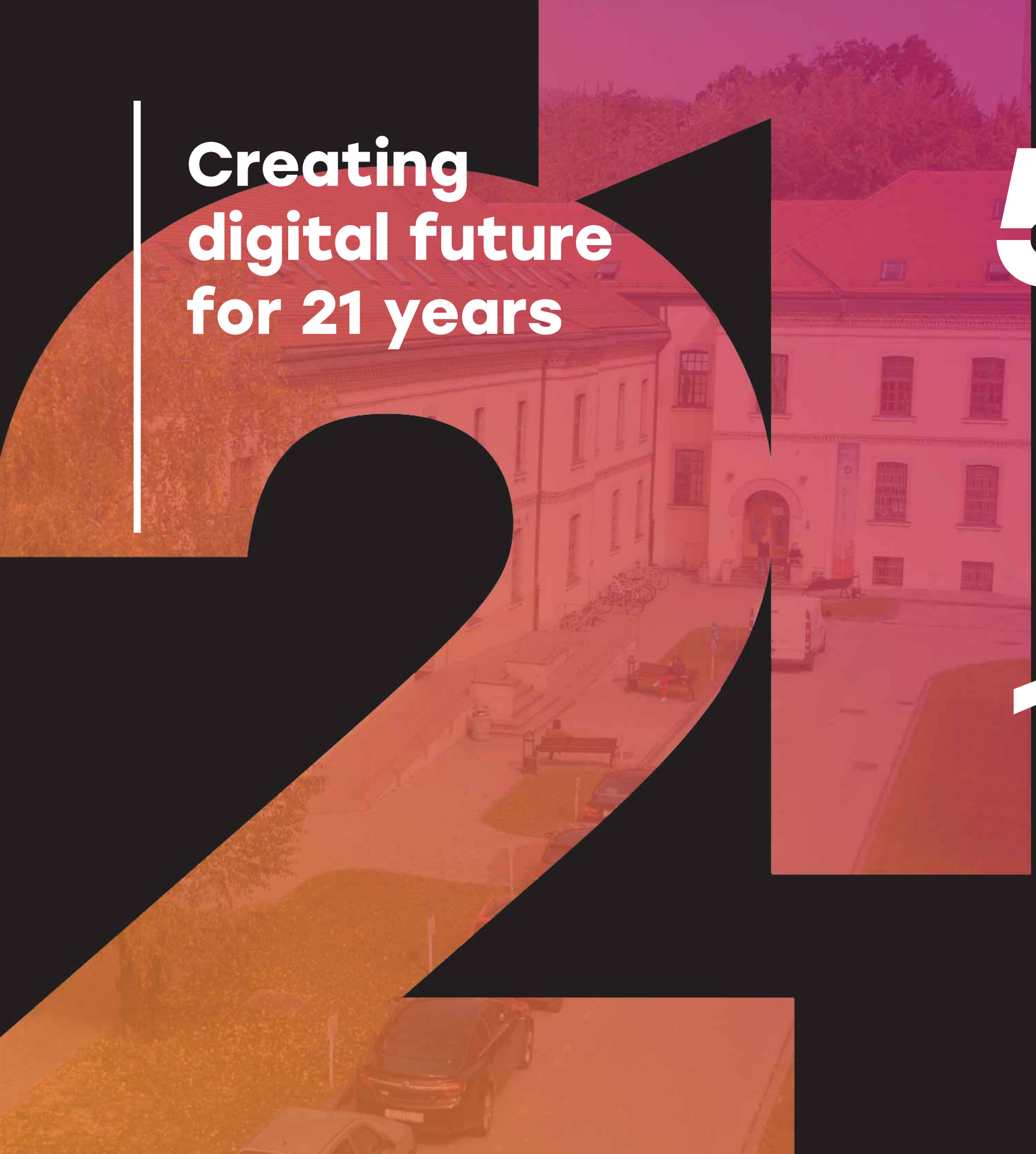
5 undergraduate study programs/ specializations

graduate study programs/ specializations **7**

students in higher education

1300

140 professors and associate teachers



MESSAGE FROM THE DEAN

Allow me to introduce you to our study programs and digital industry so you can choose your educational institution and career based on relevant facts.

First of all, I would like to point out that digital technologies are one of the fastest growing areas of the industry, one that records a strong growth in revenue and number of employees in Croatia and globally. In other words, by choosing a career in a propulsive and growing digital industry, you are guaranteed to have a head start. The same applies to digital marketing, a new concept of business that uses digital channels to present products or services in a creative and mindful way. Digital Marketing is the future of marketing and probably the most exciting and creative area of economics today. Our design study programs on bachelor and master levels have a strong digital background and are considered to be an excellent choice for creatives who want to start their career in fast growing markets of digital media, gaming industry, marketing, and product and interface design. Finally, in our MBA study program, lectured by teachers from the Kelley School of Business, the fifth best business school in the U.S. which has been providing its MBA program for more than a 100 years, you will find a unique blend of digital technology, business management and leadership. Our study programs are focused on the acquisition of practical and applicable knowledge required by the industry. The acquired knowledge from our study programs is additionally confirmed by international IT certification, ensuring high visibility and employability to each alumni. We continually improve our educational programs and teaching approach in line with the labor market changes, technological trends and the needs that the future will create.

I firmly believe that this brochure will provide you with invaluable insights into our educational programs, our staff and experts from the industry, and international certifications that helped us become a top professional higher education institution unsurpassed in the Croatian educational system.

At the end of the day, it does make a difference which career you choose and where you create it. Therefore, allow us to take you towards the digital future.

Assist. Prof. **Mislav Balković,** PhD
University College Dean

A WORD FROM OUR ALUMNI

“Most of the knowledge gained at Algebra University College could be used directly in practice and studying and working at the same time proved to be an ideal solution. In short, I recommend the Algebra University College to all the people who are looking for quality education.“

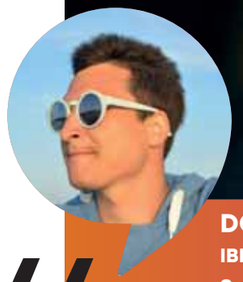
ŠIME ZAGORAC,
Norwegian Cruise Line, Norway
System Engineering

“The study was full of up to date topics, indeed, almost everything that was done, taught and practiced were things that are immediately applicable in the real world as a knowledge.“

DANIJEL STUDEN,
Amazon Data Services, Ireland
System Engineering

“The knowledge gained during the study itself has been of great help to me. Even when it is not a question of directly applicable knowledge, during my studies I gained an understanding of some of the computer science segments without which I would be a much weaker team mem-ber today.“

DOMAGOJ KRPAN,
Cateia Games, Croatia
Multimedia Computing



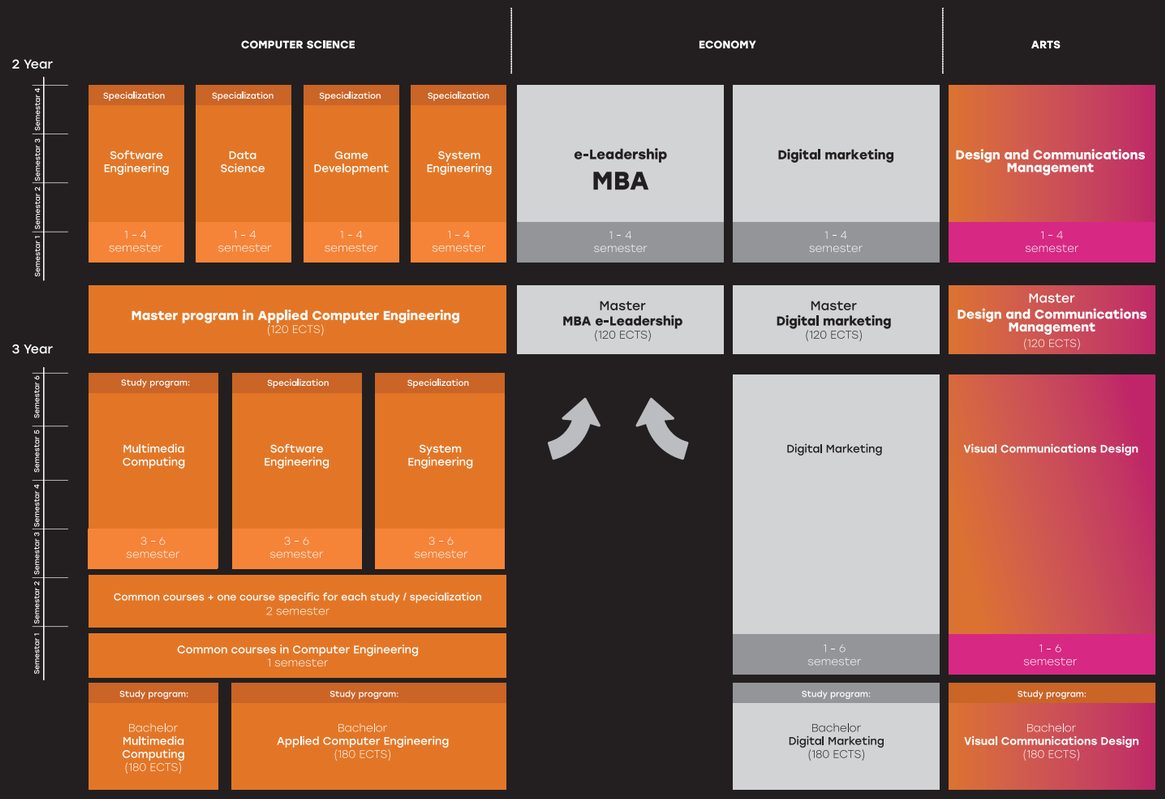
“All the subjects I had at Algebra University College were a very good foundation for further professional development.“

DOMINIK ANTOLKOVIĆ,
IBM, Czech Republic
System Engineering

OUR STUDY PROGRAMS

At Algebra University College, you can choose between 12 study programs/specializations on bachelor and master level. All our master level programs are organized exclusively in English, even for Croatian students. So, if you are an exchange or international student, feel free to join any program or course.

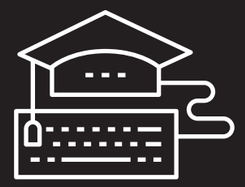
Our bachelor programs are organized both in Croatian and English, all available bachelor level courses delivered in English are listed on our web for each upcoming semester.



UNDERGRADUATE PROFESSIONAL STUDY PROGRAMS/ SPECIALIZATIONS

(Bachelor)

- **Applied Computer Engineering – specialization in Software Engineering**
- **Applied Computer Engineering – specialization in System Engineering**
- **Multimedia Computing**
- **Digital Marketing**
- **Visual Communications Design**



SPECIALIST GRADUATE PROFESSIONAL STUDY PROGRAMS/ SPECIALIZATIONS

(Master)

- **Applied Computer Engineering – specialization in Software Engineering**
- **Applied Computer Engineering – specialization in System Engineering**
- **Applied Computer Engineering – specialization in Data Science**
- **Applied Computer Engineering – specialization in Game Development**
- **Digital Marketing**
- **Design and Communications Management**
- **e-Leadership MBA**

UNDERGRADUATE PROFESSIONAL STUDY PROGRAMS

If you are considering enrollment in a higher education institution, you have already made the right decision. Choose one of five studies / specializations in the digital area and thus create a digital future for yourself. Over the course of your studies we will also organize a tailor-made work placement at some of the best companies in Croatia and in the EU. Work experience will not only help you write your final thesis, but it will also be a great opportunity to get to know the future working environment and gain valuable professional acquaintances.

- Software Engineering
- System Engineering
- Multimedia Computing
- Digital Marketing
- Visual Communications Design

UNDERGRADUATE PROFESSIONAL STUDY PROGRAM

Applied Computer Engineering, specialization in SOFTWARE ENGINEERING

STUDY PROGRAM DURATION:
6 semesters (3 years)

SEMESTER DURATION:
15 weeks of active teaching
+ 5 examination weeks

TOTAL NUMBER OF ECTS POINTS:
180

WHY STUDY SOFTWARE ENGINEERING?

The time has come to jump on the bandwagon of one of the most sought-after professions in computer engineering and become a key player in the digital domain playground.

Our undergraduate study program stands ready to offer you a program tailored and suited to the latest industry trends and internationally recognized standards. This means that with a diploma from Algebra, you will be ready to sail into corporate waters in Croatia and abroad almost immediately.

Upon receiving your diploma, you will know everything you need to know about software engineering, you will master the dominant object-oriented .NET and JAVA languages, learn how to program, develop and manage complex apps and IT systems. Wherever you see your future, Agebra's diploma is bound to put the wind in your sails.

IN-DEMAND OCCUPATION
Did you know that over the past ten years software engineering jobs comprise 50% of total employment in Croatia? Choose a dynamic and interesting career that can only grow more in demand in the future.

NUMEROUS BENEFITS
During your studies you will have the possibility to learn and obtain internationally recognized certificates and you will also get a DreamSpark Premium subscription to over 160 Microsoft products.

WHAT ARE THE TAKEAWAYS FROM THIS STUDY PROGRAM?

This study program aims to equip you with skills and knowledge to prepare you for a career at home or abroad. Here is a snapshot of what you will be studying:

BASIC CONCEPTS OF COMPUTING
You will get to know the basic concepts, structure and principles of processors, computer systems, computer networks and their components.

WEB TECHNOLOGIES
You will learn the basics of HTML and CSS, the JavaScript programming language and program web apps in the .NET framework.

MOBILE PROGRAMMING
You will learn how to plan and develop interactive applications and mobile games, as well as become proficient in designing adapted interfaces for Android devices.

INTRODUCTION TO COMPUTER NETWORKS
Understand the basic concepts, structure and principles of computer networks and their components.

OBJECT-ORIENTED PROGRAMMING
You're worth the number of languages you speak. This is especially important in the world of programming and software engineering. Learn how to work with object-oriented languages such as .NET, C#, C++, Python.

DATA PROTECTION AND SECURITY
Learn all there is to know about key elements of data protection such as encryption, managing decipher keys, access control, data classification, monitoring databases and hiding data.

COMPLEX DATABASES
Gain understanding and learn methodology of development, programming and security on Microsoft and Oracle database technologies.

BUSINESS ADMINISTRATION AND MANAGEMENT
Learn how modern-day companies function in a free-market economy and how to manage human resources issues with application of specific decision-making techniques.

PROJECT MANAGEMENT
Discover tested and proven methods of managing project teams and how to lead projects from idea inception to overall execution with an emphasis on effective access to resources and systematic reporting.

ADAPTABILITY
Develop a style of thought and focus on how best to adapt to various situations and challenges. Be ready to conquer the demands of the digital world.

STANDARDS SUCH AS COBIT, MOF, ITIL
Understand development, planning and managing IT systems in line with modern technologies, paradigms, frameworks and protocols.

WORK IN A DYNAMIC ENVIRONMENT
Forget monotonous and boring jobs. Projects often evolve and change on a daily basis. We'll teach you how to maintain control over a fluid situation.

PROJECT TEAM WORK
With large and complex business applications being developed, there is usually a larger number of experts involved. We'll teach you how to be a part of that team and how to maximize efficiency.

EXAMPLES OF JOBS WE'RE PREPARING YOU FOR

DEVELOPMENT OF COMPLEX COMPUTER APPLICATIONS FOR DESKTOP AND WEB
You will be developing applications and turning user requests into functionalities from market analysis to product development.

DEVELOPMENT OF COMPUTER APPLICATIONS FOR MOBILE DEVICES
Thousands of new ideas are being developed each day for that one perfect mobile app. Be a part of the new Instagram, WhatsApp or Twitter.

DEVELOPMENT AND MANAGEMENT OF INFORMATION SYSTEMS
The perfect job awaits those who get excitement from solving problems in a dynamic environment. You will oversee the installation and functioning of complex systems and take part in strategic planning and quality control.

MANAGE APPLICATION DEVELOPMENT PROJECTS
You will manage development teams and make sure that all pieces of these complex systems fall into place and in line with the client's wishes.

DEVELOPMENT OF BUSINESS INFORMATION SYSTEMS
High quality information systems can greatly enhance business competitiveness and their development requires specialist experts in the field of software engineering.

Certifications

Certifications available to students within the curriculum:

1. ECDL Standard

2. Microsoft Certified Professional MCP): Querying Microsoft SQL Server 2012/2014

3. Programming in C# Specialist: Programming in C#

4. Oracle Certified Associate – OCA

5. IT SMF – ITIL Foundation

The best time to decide to study this exciting and highly in-demand branch of computing is now! Join us and become a leader on the digital playground.

ĐANI PAŠIĆ, Croatia
studied Software Engineering at Algebra University College

He enrolled in Algebra as a part-time student, and having achieved a brilliant result at the entrance exam, he received a fully funded scholarship. Today, Đani works as a software engineer in one of the leading ICT companies Ericsson Nikola Tesla, in research and development department.

"Software engineering is one of the most exciting branches of the entire business industry. People from all around the world are looking for challenging tasks which will drive the entire industry. Software engineering is not only about writing a programming code, but about connecting various business disciplines into an integrated solution to real-world problems.
As a part of that world, I can't be more satisfied with my life decision. As an expert in the field of software engineering, I think I can be a part of major changes that are bound to happen."

Lecture Plan
Undergraduate Professional Study Program in Applied Computer Engineering, specialization in SOFTWARE ENGINEERING

1. YEAR

FIRST YEAR, SEMESTER 1		
Courses	**Hours**	**ECTS**
English for IT	45	4
Physical Education 1	30	3
Mathematics 1	60	6
Fundamentals of Digital Electronics	60	5
Programming	75	6
Computer Support for Office Administration	45	4
Introduction to Computer Networks	60	5

FIRST YEAR, SEMESTER 2		
Courses	**Hours**	**ECTS**
Computer Architecture	60	5
Physical Education 2	30	0
Mathematics 2	60	5
Operating systems	60	5
Fundamentals of Business Economics	45	4
Data Structures and Algorithms	60	6
Introduction to Databases	60	5

2. YEAR

SECOND YEAR, SEMESTER 3		
Courses	**Hours**	**ECTS**
Authentication Systems and Databases	45	4
Object-Oriented Programming	75	6
Database Development	60	5
Fundamentals of Business Communication	60	5
Standards in Internet Technology Application	60	5
Probability and Statistics	60	5

SECOND YEAR, SEMESTER 4		
Courses	**Hours**	**ECTS**
Object-Oriented Programming - lab in .NET environment	60	5
Java Programming 1	75	6
Project Management	45	4
Project Approach to Applications Development	45	4
Development of Web Applications	60	6
Security of Information Systems 1	60	5

3. YEAR

THIRD YEAR, SEMESTER 5		
Courses	**Hours**	**ECTS**
Organization and Management	45	4
Accessing Data from Program Code	60	5
Software Engineering	60	5
Management of Information Systems	45	4
Application Development for Mobile Devices	60	6
Java Programming 2	60	6
Decision-Making Support Systems	60	6

THIRD YEAR, SEMESTER 6		
Courses	**Hours**	**ECTS**
Information Systems in Business Administration	45	4
Interoperability of Information Systems	60	5
Designing and Developing a Complete Application Solution	60	6
ICT Tools in Project Management	60	5
Java Web Programming	60	5
Final Thesis		10

UNDERGRADUATE PROFESSIONAL STUDY PROGRAM

Applied Computer Engineering, specialization in SYSTEM ENGINEERING

STUDY PROGRAM DURATION:
6 semesters (3 years)

SEMESTER DURATION:
15 weeks of active teaching
+ 5 examination weeks

TOTAL NUMBER OF ECTS POINTS:
180

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WHY STUDY SYSTEM ENGINEERING?

The study program is a perfect choice if you love to think outside the box, come up with solutions to complex problems or simply create order out of chaos. Upon receiving a diploma, you will know everything necessary for the implementation and maintenance of complex IT systems based on all the cutting-edge technologies available today.

The three-year undergraduate System Engineering study program aims to equip you with the skills and knowledge that will enable you to build a career in the real world of IT system engineering anywhere in the world.

THE WHOLE IS GREATER THAN THE SUM OF ITS PARTS

Maybe you are not aware, but the work of system engineers is what enables you to read this text and use internet services like Google, Facebook, Instagram, Twitter, YouTube and many others that we all use today to connect to other people. Over the course of your entire study, you will have more and more understanding of the technologies that are behind every successful business. You will learn all the basic concepts used in IT systems and how IT systems are designed and built, why they are designed and built in a certain way, how operating systems, server hardware, virtualization, network, and security are combined to become the IT system YOU want to create. Here is a snapshot of what you will be studying:

IN-DEMAND OCCUPATION
Did you know that over the past 10 years Systems Engineers have been one of the most sought-after occupations amongst IT professionals in Croatia? Choose a dynamic and interesting career for which demand is only bound to grow in the future, boosted by Cloud Computing infrastructure and ever-increasing focus on security.

NUMEROUS BENEFITS
During the study you will have the possibility to learn and obtain internationally recognized certificates and you'll also get a Dreamspark Premium subscription to over 160 Microsoft products.

COMPUTER ARCHITECTURE

The first thing you will learn is how computers are built and what the bits and pieces that comprise hardware are. You will learn about internal logic and architecture of computers, arithmetic and logic instructions, number system and codes, complex combinational logic circuits, motherboards, single and multicore processors, different types of memory and much more.

COMPUTER NETWORKS

This is one of the core concepts in our System Engineering study program. Computer network enables communication inside and between IT systems, this is the glue that binds everything else. After a very interesting and rewarding journey, you will become adept in implementing even the most complex networks that are used today in modern IT systems.

OPERATING SYSTEMS

Today, as you probably already know, everyone is using some form of operating system to do their work. Operating systems are like a brain that does all the calculations and makes all the decisions. At the end of your study, you will use YOUR brain and all of the skills and knowledge you will have acquired to deploy and tune operating systems infrastructure of modern companies and keep it up and running in perfect condition.

SECURITY

Security is a very important part of the IT system and it is your responsibility as a system engineer to maintain a high level of security in an IT system under your control. Once you finish all the required courses, you will be able to implement various security technologies in wired and wireless networks, hardening of operating systems and using next-generation firewalls to build secure tunnels over the public network and enable remote users to securely connect to companies' headquarters.

DATABASES

Your task as a system engineer will be installation, maintenance, and protection of this vital part of the IT system. Without databases nothing would be answered, not even your login would work. In this part of your studying, you will learn about databases and their role in the IT system. Knowledge and skills that you acquire will be highly sought-after on the labor market

INFORMATION SYSTEMS IN BUSINESS ADMINISTRATION

If you have lots of data and even extract information and gain knowledge from that data, the organization has little use of it, if any, if you do not know how to organize all that in a meaningful way for your customers. That is why you will learn about how ERP, CMS, and CRM systems are implemented and how they work to support business decision making.

SOFT SKILLS

If you think that soft skills are not important in today's dynamic and diverse world you are sorely mistaken. For you, as a system engineer, it is of utmost importance to be able to clearly communicate and present your solution in a way that your customers and your partners can understand. This is necessary in order for you to be efficient in the execution of your proposals. This is what makes the difference between the technician and a full-stack maverick system engineer.

EXAMPLE OF JOBS WE'RE PREPARING YOU FOR

INFORMATION SYSTEMS SECURITY ADMINISTRATOR

Take control of running security for the entire system including planning, installation and maintenance.

DEVELOPMENT AND ADMINISTRATION OF INFORMATION SYSTEMS

This is an ideal role for those wishing to solve problems in a dynamic environment. You will supervise installation and operation of complex systems as well as take part in strategic planning of quality control.

PROJECT MANAGEMENT IN IT

Experts with thorough knowledge of project methodology are an important factor in managing a vast range of projects in the field of IT.

DEVELOPMENT OF BUSINESS INFORMATION SYSTEMS

High quality information systems can greatly enhance business competitiveness and their development requires specialist experts in the field of system engineering.

Certifications

Certifications available to students within the curriculum:

1. **ECDL Standard**
2. **Microsoft Certified Solutions Associate – MCSA**
3. **Red Hat Certified System Administrator – RHCSA**
4. **Cisco Certified Network Administrator – CCNA**
5. **IT SMF – ITIL Foundation**
6. **CNWP - Certified Wireless Network Professionals**

System engineers are the second most sought after group of IT experts in Croatia and the EU. Should you choose to embark on this career, there is a demanding and challenging multidisciplinary profession waiting for you.

JOSIP STANEŠIĆ, Croatia
System Engineering student at Algebra University College

Josip Stanešić is an excellent undergraduate student of System Engineering currently writing his final paper and enrolling in a graduate study program at Algebra University College. He participated in 2019 WorldSkills competition in Kazan and returned with a prestigious award - the Medal of Excellence for taking part in the most challenging and complex competition in network technology! Algebra University College helped Josip prepare for the competition by providing all the necessary resources, such as servers, virtual machines and network equipment.

"I probably would not have been able to prepare for such a challenging competition if I had not already been very familiar with all the concepts and technologies through the three years of my studies. However, I had to and wanted to go through certification programs and exams to perfect my knowledge. During my studies, I have been living with Linux, Microsoft, networks – and all of it was a big help."

Lecture Plan
Undergraduate Professional Study Program in Applied Computer Engineering, specialization in SYSTEM ENGINEERING

1. YEAR

FIRST YEAR, SEMESTER 1

Courses	Hours	ECTS
English for IT	45	4
Physical Education 1	30	0
Mathematics 1	60	6
Fundamentals of Digital Electronics	60	5
Programming	75	6
Computer Support for Office Administration	45	4
Introduction to Computer Networks	60	5

FIRST YEAR, SEMESTER 2

Courses	Hours	ECTS
Computer Architecture	60	5
Physical Education 2	30	0
Mathematics 2	60	5
Operating systems	60	5
Fundamentals of Business Economics	45	4
Computer Networks 2	60	6
Introduction to Databases	60	5

2. YEAR

SECOND YEAR, SEMESTER 3

Courses	Hours	ECTS
Administration of Operating Systems	60	5
Authentication Systems and Databases	45	4
Fundamentals of Business Communication	60	5
Open Source Operating Systems	60	5
Computer Networks 3	75	6
Probability and Statistics	60	5

SECOND YEAR, SEMESTER 4

Courses	Hours	ECTS
Project Management	45	4
Security of Information Systems 1	60	5
IT Networks Security	60	5
Operating Systems - Network Infrastructure and Services	60	5
Advanced Administration of Open Source Operating Systems	60	6
Virtualization of IT Infrastructure 1	60	5

3. YEAR

THIRD YEAR, SEMESTER 5

Courses	Hours	ECTS
Wireless Computer Networks	60	5
Collaboration Systems	45	4
Organization and Management	45	4
Planning of Advanced Infrastructure	60	6
Management of Information Systems	45	4
Backup and Recovery of IT Systems	60	5
Security of Information Systems 2	60	5
Implementation of Information Systems	60	5
IT Infrastructure Virtualization 2	60	5

THIRD YEAR, SEMESTER 6

Courses	Hours	ECTS
Information Systems in Business Administration	45	4
Wireless Computer Networks	60	5
System Engineering - Practicum	60	6
ICT Tools in Project Management	60	5
Implementation of Computing in the Cloud	60	5
Industrial Computing Networks	60	5
Final Thesis		10

UNDERGRADUATE PROFESSIONAL STUDY PROGRAM

MULTIMEDIA COMPUTING

STUDY PROGRAM DURATION:
6 semesters (3 years)

SEMESTER DURATION:
15 weeks of active teaching
+ 5 examination weeks

TOTAL NUMBER OF ECTS POINTS:
180

WHY STUDY MULTIMEDIA COMPUTING?

Do you wish to come on board and become an architect of the digital age?
During your studies you will be acquainted and ushered into the world of digital content creation in 2D and 3D animation, audio and video material. We will teach you how to develop web pages and how to design user interfaces.
Upon obtaining your diploma you will know how to incorporate media technologies into every project and how to master best practices in creating multimedia content. You are bound to become a user focused design guru and will be ready to meet all the challenges of this dynamic career in Croatia and abroad.

WHAT ARE THE TAKEAWAYS FROM THIS STUDY PROGRAM?

The three-year Multimedia Computing study program aims to equip you with the skills and knowledge to prepare you for a career in the real world, whether at home or abroad. Here is a snapshot of what you will be studying:

IN-DEMAND OCCUPATION
Did you know that multimedia computing has been breaking records daily in terms of users and employment growth rates? Choose a dynamic and fascinatingly interesting career for which demand will only grow in future years.

NUMEROUS BENEFITS
During your studies you will have the possibility to study and obtain internationally recognized certificates, you will also get a DreamSpark Premium subscription to over 160 Microsoft products and a possibility to use video and audio equipment and studio for your projects.

USER INTERFACE DESIGN
Discover best practices in development of the most important element of every web page and application, the user interface.

MULTIMEDIA IMPLEMENTATION
Research the tested and proven methods and solutions for implementing multimedia solutions in social media, organizations and businesses.

DEVELOPMENT OF MULTIMEDIA SYSTEMS
Understand the principles of system development, which include various fields of IT competencies.

2D ANIMATION
Learn everything there is to know about ‘traditional animation’, manipulating objects in two dimensional spaces. You will be able to use the acquired skills in creating advertisements in film, TV shows, computer games and web pages.

CREATION OF NEW BUSINESS SOLUTIONS
Learn how to focus your creative energy and use your knowledge of user interface design on creating new business solutions.

PROCESSING OF DIGITAL PHOTOGRAPHY
Perfect the use of all various tools required to process digital photos, whether it’s simple photo editing, advanced manipulation or working on that perfect masterpiece.

SOUND PROCESSING
Master the modern audio workstations for sound processing including advanced processing and creative manipulation of sound signals.

VIDEO POST PRODUCTION
Learn how to turn raw video material into a professional product with creative editing of image sound and graphics.

PRIORITIZATION
Master the delicate skill set required for balancing and prioritizing tasks. Learn to keep your cool and enhance efficiency.

EXAMPLES OF JOBS WE’RE PREPARING YOU FOR

ENGINEER FOR DEVELOPMENT OF 3D MODELS, ANIMATION AND VISUALIZATION
True experts in this field are hard to come by and are very highly sought-after.

MANAGER FOR MULTIMEDIA PROJECTS
Become a leader of a multidisciplinary team and manage project execution.

WEB DESIGNER
Every web design project needs a UI designer and other roles with skills and knowledge we will transfer to you.

EXPERT ON DIGITAL AND AUDIO MASTERING
The quality of the final end product will rest on your shoulders.

Certifications

Certifications available to students within the curriculum:

1. ECDL Standard

2. Adobe Certified Associate – (Video Communication with Adobe Premiere Pro)

3. Google AdWords Qualified Individual

4. Zend Certified PHP Engineer

5. Android Certified Application Developer

6. IT SMF – ITIL Foundation

If your passion lies in discovering new technologies and if you dream of an exciting career during which you will develop and apply the latest cutting-edge solutions in a creative way, then the Multimedia Computing study program is the right option for you.

EMANUEL MILIČEVIĆ, Croatia
Screen designer – Infinum

Nearly 80 employees, 3 offices and over 10 years of developing exceptional software. Multimedia Computing study program equipped Emanuel for such a challenging job. As a screen designer at Infinum, he applies a lot of knowledge he has already gained in the first year of the undergraduate study.

"I had already been enrolled in a study program that did not meet my expectations, so I realized that Algebra University College was my first choice after analyzing the courses and comparing them to other studies. After a conversation in the Career Center, I made the final decision to enroll, and I haven't regretted it as today I am acquiring knowledge and skills in various fields that I am interested in – design, video, photography and 3D modeling. Algebra's greatest advantages are definitely my colleagues from various areas of computing and professors who have both teaching and practical experience."

Lecture Plan
Undergraduate Professional Study Program in MULTIMEDIA COMPUTING

1. YEAR

FIRST YEAR, SEMESTER 1

Courses	Hours	ECTS
English for IT	45	4
Physical Education 1	30	0
Mathematics 1	60	6
Fundamentals of Digital Electronics	60	6
Programming	75	6
Computer Support for Office Administration	45	4
Introduction to Computer Networks	60	5

FIRST YEAR, SEMESTER 2

Courses	Hours	ECTS
Computer Architecture	60	5
Physical Education 2	30	0
Mathematics 2	60	5
Operating systems	60	5
Fundamentals of Business Economics	45	4
Applied Physics	60	6
Introduction to Databases	60	5

2. YEAR

SECOND YEAR, SEMESTER 3

Courses	Hours	ECTS
Visual Communications Design	60	5
Electroacoustic and Professional Audio Equipment	45	4
Standards in Internet Technology Application	60	5
Introduction to Administration of Operating Systems	60	6
Introduction to Marketing and Media Communications	75	6
Multimedia Publishing	45	4
Management of Information Systems	45	4

SECOND YEAR, SEMESTER 4

Courses	Hours	ECTS
Project Approach to Development of Video Games	45	4
Web and User Interface Design	60	5
Introduction to Object-Oriented Programming	60	7
Project Management Methodology	45	4
Sound Processing	60	5
Security of Information Systems	60	5
Introduction to Digital Photography and Processing	60	5

3. YEAR

THIRD YEAR, SEMESTER 5

Courses	Hours	ECTS
Advanced Web Design	60	5
Fundamentals of Business Communication	75	6
PHP Programming	60	6
Introduction to Video Production	45	4
Vector 2D Animations	60	5
Web Server Technologies	45	4

THIRD YEAR, SEMESTER 6

Courses	Hours	ECTS
3D Modelling and Texturing	60	5
Internet Marketing	45	4
Content Management Systems	45	4
Application Development for Mobile Devices	45	5
Postproduction of Digital Video	60	5
Final Thesis		12

UNDERGRADUATE PROFESSIONAL STUDY PROGRAM

DIGITAL MARKETING

STUDY PROGRAM DURATION:
6 semesters (3 years)

SEMESTER DURATION:
15 weeks of active teaching
+ 5 examination weeks

TOTAL NUMBER OF ECTS POINTS:
180

4

WHY STUDY DIGITAL MARKETING?

Digital marketing is fast becoming one of the most sought-after fields of economy meaning that this degree is likely to shorten your job search significantly.

The Digital Marketing undergraduate study program

- gives students extensive knowledge of all parts of marketing, with special emphasis on technology, digital communication channels and all the changes and disruption they create on innovation, product and service development, development of companies and digital transformation and enhanced user experience.
- allows students to start their action-packed and creative career even after only three years of undergraduate program in all kinds of companies and institutions.
- enables students to join University College's digital agency Digital Talents and experience real world under the mentorship of most prominent marketing experts in Croatia.

IN-DEMAND OCCUPATION
Did you know that digital marketing professionals are very highly sought-after in Croatia and abroad? Choose an interesting and dynamic career for which demand will only grow in the future.

NUMEROUS BENEFITS
During your studies you will have the possibility to learn and obtain internationally recognized certificates and you will also get a DreamSpark Premium subscription to over 160 Microsoft products.

- gives students a wide and solid knowledge base but very specific and deep in terms of digital skills at the same time. This allows students to join different teams and agencies and be prepared for what awaits in the real world.

WHAT ARE THE TAKEAWAYS FROM THIS STUDY PROGRAM?

The Digital Marketing undergraduate study program aims to equip you with the skills and knowledge to prepare you for a career in the real world, whether at home or abroad. Here is a snapshot of what you will be studying:

UNDERSTAND MARKETING
Advertising is just a small part of Marketing and here you are going to learn all P's and C's of Marketing!

MANAGING ADVERTISING CAMPAIGNS
Learn how to effectively connect advertising material with users via social media, advertising networks and search engines.

PSYCHOLOGY AND CONSUMER BEHAVIOUR IN REAL AND DIGITAL ENVIRONMENTS
Human behavior is comprised of various patterns which affect our decision making. You will learn how to assist users with making everyday decisions in line with your own goals!

CREATIVE COMMUNICATIONS CONCEPTS
Familiarize yourself with verbal and visual channels. Your creativity and your understanding of marketing, consumer psychology and market segmentation will prove invaluable.

SECRETS OF THE USER INTERFACE
Understand how a functioning UI can make the end user's life simpler and how to make the world of Internet a better place.

DIGITAL TOOLS FOR STRATEGIC MANAGEMENT OF DIGITAL CAMPAIGNS
You will learn how to use business and technological tools to evaluate and create campaigns. You will become proficient in creating reports, analyses and strategies, and know how to overview campaigns on various communication channels.

GLOBAL TRENDS IN DIGITAL MARKETING
The study program follows all the latest industry trends. Nowadays this means artificial intelligence, blockchain technology, private marketplace, but who knows what the future has in store in just a couple of years, so we tend to change very fast!

MANAGING DIGITAL PROJECTS AND AGENCY
Master the rules of the game and have a try in app and content development for internet and mobile devices.

MARKET RESEARCH AND USER RESEARCH
Hone your skills and familiarize yourself with online tools for market research in order to better understand consumers and their needs, analyze user behavior and apply different user testing methods.

EXAMPLES OF JOBS WE'RE PREPARING YOU FOR

ONLINE MEDIA PLANNER
You need to have good planning skills and excellent digital advertising knowledge to plan how to achieve your client's goals.

ONLINE ACCOUNT MANAGER
Media agencies are hungry for digital experts and our students fit in their perspective.

DIGITAL MEDIA / MARKETING SPECIALIST
You can fit in flawlessly in any digital marketing and advertising agency.

EXPERT FOR SOCIAL MEDIA
The number of SMEs who are realizing how important social media management is for their business is growing rapidly.

WEB BASED PROJECT MANAGER
Every project requires a responsible and conscientious person who knows all the project development phases like the back of their hand. They need you!

EXPERT FOR DIGITAL COMMUNICATIONS
Professionals with this acquired skill set are in high demand in major international companies.

Certifications

Certifications available to students within the curriculum:

1. ECDL Standard

2. Google AdWords Individual Qualification (Fundamentals, Search, Display, Video, Mobile, Shopping)

3. Google Analytics Individual Qualification

Make a giant leap for your future in the world of digital marketing with a diploma from Algebra that will open many doors for you, in Croatia and abroad.

ANTONIA ŠAKIĆ, Croatia
Online Media Account Manager
@ Universal McCann

One of our alumni Antonia Šakić has already started working as an online media planner assistant at Universal McCann (UM).

"I have always set the bar high for myself, both personally and academically. Therefore, digital marketing is my dream come true. This study program gave us a strong base for further professional development and prepared us for real life tasks in the agency. We are using skills gained over the course of our studies on a daily basis: from writing a brief, determining target groups and conducting research to setting up and optimizing digital campaigns. We started connecting theory to practice early in the second year and that significantly helped us prepare for the future career."

Lecture Plan
Undergraduate Professional Study Program in DIGITAL MARKETING

1. YEAR

FIRST YEAR, SEMESTER 1		
Courses	**Hours**	**ECTS**
Introduction to Marketing and Media Communications	75	7
English for IT	60	6
Mathematics 1	60	6
Computer Support for Office Administration	45	4
Physical Education 1	30	0
Fundamentals of Economics	75	7

FIRST YEAR, SEMESTER 2		
Courses	**Hours**	**ECTS**
Statistics	75	6
Project Management Methodology	60	6
Customer Behavior	75	7
Visual Communications Design	60	5
Sales and Negotiation	60	6
Physical Education 2	30	0

2. YEAR

SECOND YEAR, SEMESTER 3		
Courses	**Hours**	**ECTS**
Market Research	75	7
Digital Advertising	60	6
Computer Tools in Visual Communication	60	6
Standards in Application of Internet Technology	60	5
Public Relations	60	6

SECOND YEAR, SEMESTER 4		
Courses	**Hours**	**ECTS**
Design of Interaction Systems	60	6
Legal Regulation and Self-Regulation	60	6
Interaction Analysis in Digital Marketing	60	6
Marketing on Search Engines and Advertising Networks	60	6
Social Media and Social Networks	60	6

3. YEAR

THIRD YEAR, SEMESTER 5		
Courses	**Hours**	**ECTS**
E-commerce - Customer Relationship Management	60	6
Content Marketing	60	6
Integrated Marketing Communication	60	6
Creativity and Creative Expression	60	6
Psychology of User Experience	60	6
Digital Projects Development and Team Management	60	6
Project: Project in Cooperation with the Industry - Situation Analysis with Digital Marketing Approach Plan	10	6

THIRD YEAR, SEMESTER 6		
Courses	**Hours**	**ECTS**
E-business - Integrated Comercial Projects	60	6
Entrepreneurship	60	6
Integrated Marketing	60	6
Organization of Digital Agencies	60	6
Psychology In Marketing Communications	60	6
Development and Management of Multimedia Contents	60	6
Final Project in Cooperation with the Industry - Digital Marketing Strategy		6

UNDERGRADUATE PROFESSIONAL STUDY PROGRAM

VISUAL COMMUNICATIONS DESIGN

STUDY PROGRAM DURATION:
6 semesters (3 years)

SEMESTER DURATION:
15 weeks of active teaching
+ 5 examination weeks

TOTAL NUMBER OF ECTS POINTS:
180

WHY STUDY VISUAL COMMUNICATIONS DESIGN?

Become a part of a new generation of creative and innovative designers who transform their ideas and knowledge into exciting projects in the field of market communications! Use the latest digital technologies, engage in all aspects of visual design, brand design, print design and more. Explore design as a part of marketing campaigns and get involved in numerous projects for social and commercial needs!

At the time of graduation, you will understand the cultural and artistic dynamics and context in which the design is created. Through your active participation in different projects you will be able to steer through constant technological/digital evolution in design. While creating new value for the end users you will also be able to influence them and all those on the receiving end in the field of communications and marketing.

You will become a master of user-oriented design, ready for all career challenges in design studios, creative agencies, production studios and marketing departments anywhere in the world.

VALUE FOR MONEY
You will have access to the DreamSpark Premium subscription that includes over 160 Microsoft products. Besides, you will be working with designers' tools such as Adobe Illustrator and Adobe Photoshop and get certificates for these.

WHAT ARE THE TAKEAWAYS FROM THIS STUDY PROGRAM?

The three-year undergraduate Visual Communications Design study program aims to equip you with skills and knowledge necessary for a career in design studios, creative agencies, production studios or marketing departments in different companies. The study program is designed taking into account the latest trends in the field of art and design. It significantly enhances creativity and creative thinking while at the same time being based on the concepts of teamwork and "design thinking".

VISUAL DESIGN
How to develop good visual identity and branding? How to create a logotype and a book of standards? How to ensure creative and functional visual communication of a product which enables it to be seen and recognized? These are some of the elements of the Visual Design study program.

TYPOGRAPHY
Knowledge of the evolution of letters and typography, anatomy of characters and their interrelationships, styles of type families, as well as the introduction to typographic terminology will encourage conscious and rational selection of styles and letters in creative projects.

PHOTOGRAPHY
You will learn how to take a good photo, in-depth look at camera features, how to make a photo for promotional purposes or how to fine-tune the lighting using professional photographic equipment.

INTERACTIVE SYSTEMS DESIGN
You will learn how to analyze the interaction between people and technology and how to design a web page or application interface while providing the best user experience and attractive design.

WEB DESIGN AND USER INTERFACE DESIGN
You will study approaches and best practices in the design of the most important part of any application or website – user interface.

INTRODUCTION TO VIDEO PRODUCTION
YouTube is one of the fastest growing communication channels of today and the quantity and quality of video content on the internet is growing steadily. Learn how to make use of it by independently developing a promotional video or other video material.

ANIMATED GRAPHICS
You will acquire knowledge about the animation of objects and characters in two-dimensional space and you will master the key tools of modern digital animation. This will enable you to create attractive solutions in offline or online projects or when creating video material.

EXAMPLES OF JOBS WE`RE PREPARING YOU FOR

DESIGNER, ART DIRECTOR
A true master Art Director or Designer is a multitasking genius that juggles between marketing, visual communications, arts and applied arts and has a strong insight into newest digital trends. The profession is highly in demand and it is not easy to find experts.

UI AND UX DESIGNER
Every web project needs a good UI and UX designer to put creative ideas, user-friendly interface, and quality content into great shape. Not to mention that those jobs are in very high demand today and are considered to be the jobs of the future.

DIGITAL PHOTOGRAPHY AND VIDEO EXPERT
There are billions of images out there in the world and hours and hours of video content uploaded online every second. You will learn how to make it attractive, appealing, clickable, organic and fun to use.

CREATIVE PROJECTS ACCOUNT
Creatives are not easy to handle, especially in the digital world. They may have great ideas but often lack business sense. You will learn how to combine these two in the best manner – how to get the most out of the creatives and how to sell it in the real world.

Certifications

Certifications available to students within the curriculum:

1. Adobe Certified Associate - Photoshop

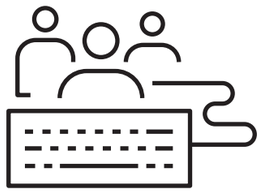
2. Adobe Certified Associate - Illustrator

We will not tell you which way you have to go. But, we will give you tools and skills to enable you to make your own decisions and find your own way. And to shine like no one before!

MARTA PUNTIJAR, Croatia
Graphic Designer

”The Visual Communications Design study program has opened many doors of the world in graphic design for me and enabled me to find employment effortlessly. It also helped me start my own business, studio shushe.”

Over the course of your studies, you will participate in a series of individual and group designs, as well as art projects, together with other students, teachers and actual clients, participate in a series of individual and group design and art projects. This way you will master the overall creative process; from understanding the consumer needs and behavior to setting the communication goals and all the way to specifics of various media of visual communication and digital interaction.



Lecture Plan
Undergraduate Professional Study Program in
VISUAL COMMUNICATIONS DESIGN

1. YEAR

FIRST YEAR, SEMESTER 1

Courses	Hours	ECTS
Drawing 1 - Receptive and Perceptual Drawing	45	4
English Language 1	30	3
Informatics - Computer Application	30	3
Marketing 1	30	3
History of Communication Design	30	3
Psychology of Communication 1	30	2
Contemporary Society 1	30	3
Teamwork and Conflict Management	30	3
Visual Design 1 - Artistic Thinking	45	4
Drawing and Illustration - Art Exercises 1	30	2

FIRST YEAR, SEMESTER 2

Courses	Hours	ECTS
Drawing 2 - Conceptual Drawing	45	4
English Language 2	30	2
Creative Process	45	3
Marketing 2	30	3
Quantitative Research Methods	30	3
Psychology of Communication 2	30	3
Contemporary Society 2	30	2
Typography 1	30	3
Visual Design 2 - DTP	45	4
Drawing and Illustration - Art Exercises 2	30	3

2. YEAR

SECOND YEAR, SEMESTER 3

Courses	Hours	ECTS
Drawing 3 - Digital Illustration	30	3
DTP	30	2
English Language 3	30	2
Film/Video/TV - Introduction to Video Production	30	3
Photography 1	30	3
Qualitative Research Methods	30	2
Typography 2	30	3
Print and Color	30	2
Visual Design 3 - Logotypes and Book of Standards	45	4
Web and Screen Design 1 - Interactive Systems Design	45	4
Drawing and Illustration - Art Exercises 3	30	2

SECOND YEAR, SEMESTER 4

Courses	Hours	ECTS
3D Design 1	30	3
Drawing 4 - Digital Illustration	30	3
English Language 4	30	2
Film/Video/TV - Video Production and Post-Production	30	3
Photography 2	30	3
Culture and Aesthetics of Market Communications	30	3
Multimedia	30	3
Visual Design 4 - Visual Identity and Brand	45	4
Web and Screen Design 2 - Standards in the Application of Internet Technology	45	4
Drawing and Illustration - Art Exercises 4	30	2

3. YEAR

THIRD YEAR, SEMESTER 5

Courses	Hours	ECTS
3D Design 2	30	3
Animated Graphics	30	3
Film/Video/TV - Post-Production	30	3
Photography 3	30	3
Practicum	2	4
Management of Market Communication Design Processes 1	30	3
Visual Design 5 - Packaging	45	4
Web and Screen Design 3 - Web Design and User Interface Design	45	4
Multimedia Publishing	30	3

THIRD YEAR, SEMESTER 6

Courses	Hours	ECTS
City Design - Public Communication Design	30	3
Presentation Techniques	30	2
Management of Market Communication Design Processes 2	30	3
Visual Design 6 - Individual Project	45	4
Web and Screen Design 4 - Application Interfaces	45	4
Interaction Design	30	2
Final Thesis	150	12

SPECIALIST GRADUATE PROFESSIONAL STUDY PROGRAMS

Choose how you want to upgrade the foundations created at the undergraduate level or boost your leadership career at our MBA study! Choose a study program / specialization that you are most interested in and release your full potential.

The following programs are organized exclusively in English, for Croatian and international students alike.

Software Engineering

System Engineering

Data Science

Game Development

Digital Marketing

Design and Communications Management

e-Leadership MBA

SPECIALIST GRADUATE PROFESSIONAL STUDY PROGRAM

Applied Computer Engineering, specialization in SOFTWARE ENGINEERING

STUDY PROGRAM DURATION:
4 semesters (2 years)

SEMESTER DURATION:
15 weeks of active teaching
+ 5 examination weeks

TOTAL NUMBER OF ECTS POINTS:
120

WHY STUDY SOFTWARE ENGINEERING?

The software engineering study program is one of four specializations in the applied computer engineering graduate professional (master) study program.

The time has come to decide how you wish to build on your undergraduate foundation. Choose a specialization in the field that interests you the most and become a true expert.

We have ensured a work placement internship for you with one of the well-known industry players in Croatia or the EU. Use that experience as part of your final thesis and also maximize the opportunity to meet and network with industry professionals.

IN-DEMAND OCCUPATION
Did you know that over the past 10 years software engineers are the second most sought-after group of IT professionals in Croatia? Choose a dynamic and interesting career for which demand will grow in the future.

NUMEROUS BENEFITS
During the study program you will have the possibility to learn and obtain internationally recognized certificates and you'll also get a Dreamspark Premium subscription to over 160 Microsoft products. Also, you can use our private cloud to work on your study or research projects or our research facilities, accelerator / coworking to setup your business idea and / or startup.

Upon receiving the diploma, you will be a specialist for the most in-demand segment in software engineering. They range from internet programming, app development for mobile devices, advanced programming techniques and development of business intelligence. Furthermore, you will be acquainted with computer cryptography, e-commerce, robotics, Internet of Things and computer game development.

WHAT ARE THE TAKEAWAYS FROM THIS STUDY PROGRAM?

Graduate studies allow you to further perfect your know-how of your favorite field. We will acquaint you with the latest industry trends, insights and skills that employers demand. Here is a snapshot of some of them:

EXPERTISE IN JAVA, C# AND Python LANGUAGES
Hone your programming languages skill set in Java, C# and Python as well as development tools and usage of object-oriented methodology.

ANALYSIS AND CRITICAL THINKING
Develop precise mathematical approaches to solving unusual, partly defined problems with contradictory requirements. This will enable you to solve complex problems more easily and also user challenges/requirements after the study.

ADVANCED MODELLING
Learn how to analyze and recognize patterns, learn all about data mining and BI through use of stochastic models.

INTERNET OF THINGS AND ROBOTICS
Learn how to independently develop an IoT product of service. You will be immersed in a world of computer robotics, learn a lot about selecting the right platform, sensor and microcontroller, the concept of Cloud services, and programming client solutions based on IoT.

SOFTWARE SOLUTIONS ANALYSIS AND DESIGN
You will master the analysis and design of software solutions, learn how to implement IT into systems based on the interoperability of distributed programming solutions, and research complex aspects of computer application security and data encryption.

COMPREHENSIVE UNDERSTANDING
Gain a deeper understanding of analysis and design of software solutions, learn how to implement IT systems and complex computer networks and deep dive into all aspects of software solutions security.

INDEPENDENCE
Adopt and absorb competencies such as accountability and high professional standards, which are required for operating independently at the highest levels possible.

BEST PRACTICE
Learn how to come up with innovative solutions utilizing critical analysis and understanding of contemporary trends and practices.

INDEPENDENT BUSINESS VENTURE
Ultimately, you will learn how to realistically assess a business idea and determine an efficient way to realize and finance it in appropriate business and organizational conditions. Like many of our students, you might already start your own business during the study.

EXAMPLES OF JOBS WE'RE PREPARING YOU FOR

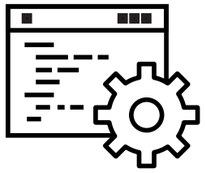
Depending on your field of interest, you will work with databases and mobile or web applications, or you will implement business solutions and develop their architecture.

BUSINESS INFORMATION SYSTEMS PROJECT SPECIALIST
Take part in development of vital information systems that companies heavily rely on.

INTERNET APPLICATION DEVELOPER
Whether it's a specialist for .NET or Java, your skills will definitively fit the job description.

MOBILE APP DEVELOPER
Thousands of new ideas for that perfect mobile app are being developed each day. Be a part of the new Instagram, WhatsApp or Twitter.

DATABASE DESIGN
Expert for databases responsible for all phases of development including design, development and programming.



Certifications

Certifications available to students within the curriculum:

1. ITIL Foundation

2. AndroidTM ATC – Android Certified Application Engineer

Upon receiving your well-deserved diploma, you will be a specialist in the highly sought-after fields of software engineering.

VEDRAN MANDIĆ, Croatia
Mogy startup co-funder and CTO

Vedran is currently broadening his knowledge and career in the ABC accelerator in Ljubljana through his project Mogy, a piece of software designed for personal trainers to manage their clients and exercise plans which is currently winning investors.

”Studying at Algebra helped me successfully pass my first major job interview. It lasted two hours, and the employer thoroughly examined my knowledge on web applications and the MSFT .NET framework that I had learned about during the study. This was all possible because of the expertise and openness of Algebra’s lecturers throughout the study. A well planned and clear study program helped me carefully plan my activities, study and prepare for the exams.“

Lecture Plan
Specialist Graduate Professional Study Program in Applied Computer Engineering, specialization in SOFTWARE ENGINEERING

1. YEAR

FIRST YEAR, SEMESTER 1		
Courses	**Hours**	**ECTS**
Entrepreneurship	45	5
Negotiation and Conflict Resolution	45	4
Data Warehouses and Business	60	6
Software Development for Industrial and Mobile Robotics	60	5
Advanced Development of User Applications for Mobile Devices	60	5
Computer Games Development	45	5
Data Warehouses and Business Intelligence	60	6

FIRST YEAR, SEMESTER 2		
Courses	**Hours**	**ECTS**
Creativity and Critical Thinking	45	3
Management of Innovation	60	6
Advanced Application Development Based on Development Templates	60	6
Internet of Things	60	6
Discovering Knowledge from Databases	60	6
Cryptography	45	4

2. YEAR

SECOND YEAR, SEMESTER 3		
Courses	**Hours**	**ECTS**
Management of Information Services	45	3
e-Business	60	6
Advanced Programming Paradigms	60	5
Advanced Information Systems Interoperability	60	5
Advanced Client - Side Scripting	60	6
Development of 3D Games	60	5
Business Process Modelling	60	6

SECOND YEAR, SEMESTER 4		
Courses	**Hours**	**ECTS**
Graduation Thesis		30

Don’t forget to play!

SPECIALIST GRADUATE PROFESSIONAL STUDY PROGRAM

Applied Computer Engineering, specialization in SYSTEM ENGINEERING

STUDY PROGRAM DURATION:
4 semesters (2 years)

SEMESTER DURATION:
15 weeks of active teaching
+ 5 examination weeks

TOTAL NUMBER OF ECTS POINTS:
120

2

WHY STUDY SYSTEM ENGINEERING?

System engineers are the builders of foundations for any modern business. Networking, operating systems, security, and automation are essential parts of any IT system today. Your task as a system engineer is to create and maintain the best IT system for specific business needs. This requires great understanding of the available technologies in the context of business goals, needs of modern business, problem-solving and communication skills. This is the goal we had in mind when we created our study program. Upon receiving a diploma you will be adept in interpreting customer business needs and understand what is possible to achieve using technologies and resources available while making sure that the project is executed in a timely manner in the most efficient way.

IN-DEMAND OCCUPATION

Did you know that over the past 10 years software engineers are the second most sought-after group of IT professionals in Croatia? Choose a dynamic and interesting career for which demand will grow in the future, booseted by Cloud Computing, and growing focus on IT security.

NUMEROUS BENEFITS

During the study program you will have the possibility to learn and obtain internationally recognized certificates and you'll also get a Dreamspark Premium subscription to over 160 Microsoft products. Also, you can use our private cloud to work on your study or research projects or our research facilities, accelerator / coworking to setup your business idea and / or startup.

WHAT ARE THE TAKEAWAYS FROM THIS STUDY PROGRAM?

During your study, you will be learning about how modern IT systems should be designed and built and how to choose the right equipment and technologies that will ensure the most robust, resilient, secure and efficient IT system. Also you will learn how to secure the IT systems by hardening them and using various security solutions like for example next-generation firewalls. Understanding how the business functions is one of the essential parts of being a system engineer so you will learn about that, especially because all of the services that you need to implement and secure are dependent on the business needs and goals.

Of course every business has lots of data to store and keep available and that is why you will learn about storage systems and redundancy, as well as data security and forensic. As you are already aware, things that you are going to do after graduating are very complex and that is why you will learn about automation and scripting, as well as cloud computing.

There will also be opportunities for you to learn about wireless networks, QoS, IP telephony and advanced concepts in service provider networks and one of the most important things you will learn is how to troubleshoot this complex world of IT systems. Besides technology topics you will learn some of the most valuable skills in today's world like critical thinking, problem-solving, managing innovation and entrepreneurship.

Last but not least, depending on your preferences and the career path you choose you will have the opportunity to obtain some of the most valuable certifications in the industry like Fortinet NSE4, CISCP, ITIL, RHCE, MS 70-744 or MS AZ-103.

EXAMPLES OF JOBS WE'RE PREPARING YOU FOR

INFORMATION SECURITY ANALYST
Taking measures to protect company's sensitive and mission-critical data, staying one step ahead of cyber attackers.

CYBER SECURITY CONSULTANT
Assessing software, computer systems and networks for vulnerabilities, then designing and implementing the best security solutions for organization's needs.

COMPUTER FORENSIC ANALYST
- recover lost or manipulated data from the digital environment for private companies or government organizations in context of „cybercrime".

CYBER SECURITY ENGINEER
Working alone or in a team with a goal of designing, developing and implementing secure network solutions to defend against advanced cyberattacks, hacking and persistent threats.

PENETRATION TESTER
(a.k.a. Pen Tester or Ethical Hacker)
Probes for and exploits security vulnerabilities in web-based applications, networks, and systems. Simply put, you get paid to hack legally.

IT SYSTEM ADMINISTRATOR
Responsible for the daily management, upkeep, and configuration of computer systems of an organization or business. This includes installing and managing desktop and laptop computers, servers, networks, IT security systems and other critical components of an organization's IT infrastructure.

IT SYSTEM ENGINEER/ARCHITECT
A systems architect is a technology professional who develops and implements computer systems and networks for an organization and defines the architecture of a system in order to fulfill certain requirements as well. Defining the architecture could mean breaking down the system into components, defining component interactions and interfaces, and/or deciding on the technologies and resources to be used in the design.

Certifications

Certifications available to students within the curriculum:

1. Fortinet NSE1 – Network Security Associate - The Threat Landscape

2. Fortinet NSE2 – Network Security Associate - The Evolution of Cybersecurity

3. Fortinet NSE3 – Network Security Associate - Fortinet Products and Solutions

4. Fortinet NSE4 – Fortinet Network Security Professional

5. CISSP – Certified Information Systems Security Professional

6. RHCE – RedHat Certified Engineer

7. MS 70-744 – Securing Windows Server 2016

8. MS AZ-103 – Microsoft Azure Administrator

9. CNWP - Certified Wireless Network Professionals

Upon receiving your well deserved diploma, you will be a specialist with a broad knowledge base in system engineering, ready to implement and maintain the most complex computer systems.

VOLKAN YILMAZ, Turkey
System Engineering student at Algebra University College

Volkan Yilmaz finished his bachelor's degree in Turkey and came to Algebra to do his master's in System Engineering.

"After completing my bachelor's degree in Electronic and Communication Engineering, I chose System Engineering for my master's because I think it is the profession of today and tomorrow. Since I heard that Algebra is a very good choice for studying system engineering, I decided to enroll. During my time at Algebra University College I learned so much and improved myself in many ways. Professors at Algebra are keeping up with current trends in the industry, they are professional, well prepared for the class and always helpful. With the support of professors and colleagues, studying at Algebra is an incredible experience."

Lecture Plan
Specialist Graduate Professional Study Program in Applied Computer Engineering, specialization in SYSTEM ENGINEERING

1. YEAR

FIRST YEAR, SEMESTER 1

Courses	Hours	ECTS
Entrepreneurship	45	5
Security of Operating Systems	60	6
Data Storage Systems	45	3
Architecture and Design of IT System	45	4
Incidents Management in IT Systems	60	6
Voice Over Internet Protocol	60	6
Managing Quality in IT Projects	45	6
Introduction to Cyber Security	60	6

FIRST YEAR, SEMESTER 2

Courses	Hours	ECTS
Development Trends in IT Infrastructure	45	4
Creativity and Critical Thinking	45	3
Advanced Scripting	60	5
Penetration Testing	60	6
New Generation Firewalls	60	6
Identity Management	60	6
Management of Innovation	60	6
High Availability Using Open Source Operating Systems	60	6

2. YEAR

SECOND YEAR, SEMESTER 3

Courses	Hours	ECTS
Containers, Security and Microsegmentation	60	6
Computer Forensics	60	6
Redundancy of IT Services and Applications	60	6
Implementation of Wireless Local Area Networks	60	6
Management of Information Services	45	3
Discovering and troubleshooting problems in IT systems	45	3
Quality of Network Services	60	6
Advanced Protocols for Service Providers	60	6
Cloud Computing Security	60	6

SECOND YEAR, SEMESTER 4

Courses	Hours	ECTS
Graduation Thesis		30

SPECIALIST GRADUATE PROFESSIONAL STUDY PROGRAM

Applied Computer Engineering, specialization in GAME DEVELOPMENT

STUDY PROGRAM DURATION:
4 semesters (2 years)

SEMESTER DURATION:
15 weeks of active teaching
+ 5 examination weeks

TOTAL NUMBER OF ECTS POINTS:
120

WHY STUDY GAME DEVELOPMENT?

We know that you want to put your imagination into practice. You just need those extra few skills to turn your ideas into amazing digital adventures.

The computer games development study program will give you just that. If you love gaming, but you also find yourself wondering during game play of ways to refine or improve some elements of it, then this is the perfect place for you.

We'll learn how to develop games on all platforms and we'll look at modern and future trends in order to best equip your skill set to be in line and ahead of the development curve. Upon receiving the diploma, you will be on your way to making a real career in game development, whether independently, in a small private studio or one of the giants of the industry.

WHAT ARE THE TAKEAWAYS FROM THIS STUDY PROGRAM?

This graduate study program will transform you into a professional game-developer. You will understand not just the tools and techniques, but also the process of making a video game, from start to finish. We will transfer skills and modern-day knowledge that employers demand. Here is a snapshot of some of them:

DEVELOPMENT OF COMPUTER GAMES
Learn how to look at things holistically. From initial concept and planning to detailed scenario development, game flow and monetization, distribution and licensing issues.

3D MODELS
Learn 3D topology and different modelling and texturing techniques. Create entire scenes and evaluate models and textures and the way they perform in game environment.

PHYSICS APPLIED TO GAMING
Learn how forces of physics are introduced and applied to game environment. VR Learn how games are adapted and designed for VR and augmented reality.

MULTIPLAYER GAMING
Understand everything about the 'hot seat' and local and distant networks and all the way to online worlds supported by the gaming masses.

BEST PRACTICES
Learn how to come up with innovative solutions utilizing critical analysis and understanding of contemporary trends and practices. Think like a Producer, a Director or a Technical Lead.

IN-DEMAND OCCUPATION
Did you know that the computer games industry generates $100 billion annually, which surpasses even the untouchable cinema industry? Choose an interesting and dynamic career where the demand of employers is by far outpacing the supply of candidates.

EXAMPLES OF JOBS WE'RE PREPARING YOU FOR

DEVELOPMENT OF 3D (AND 2D GAMES)
Perhaps you will take part in developing the latest international hit game!

VR AND AUGMENTED REALITY DEVELOPMENT
These techniques have been popular for some time and are being perfected almost daily. Become a creator for the future of interactive media.

GAME DEVELOPMENT BASED ON NARATION
Team work based on interesting, dynamic and very challenging assignments.

NARRATIVE-DRIVEN GAME DEVELOPMENT
Put your team work skills in practice with interesting, dynamic and very challenging assignments.

TECHNICAL DIRECTION FOR GAMES
Making wind, explosions, water or other real-time FX was never easy, but you will master the elements and create inspiring effects that will last forever. Not into explosions? Master the code and content pipelines and become a central character in any team!

Certifications

Certification available to students within the curriculum:

1. Unity – Unity Certified Developer

Lecture Plan
Specialist Graduate Professional Study Program in Applied Computer Engineering, specialization in GAME DEVELOPMENT

1. YEAR

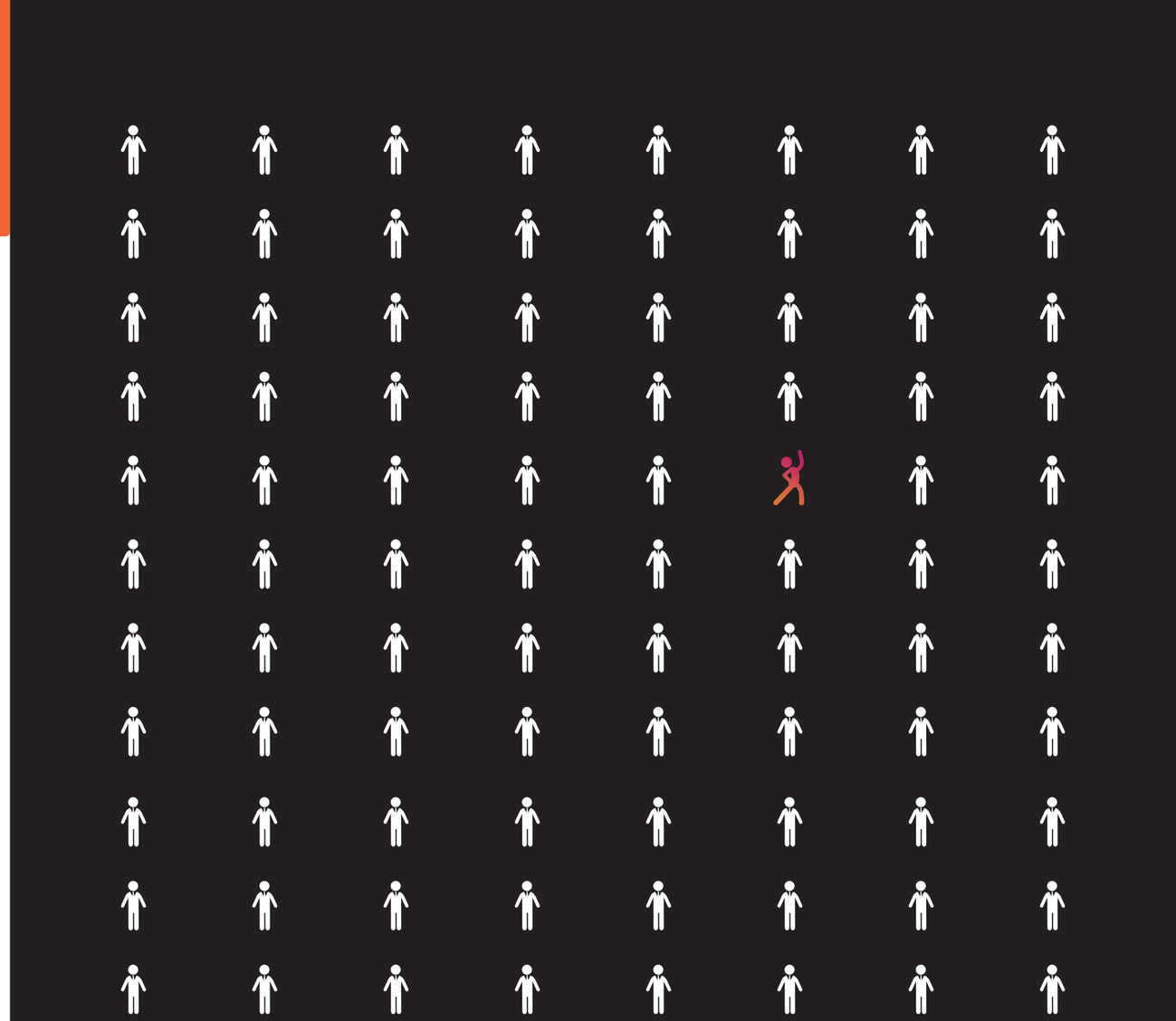
FIRST YEAR, SEMESTER 1		
Courses	**Hours**	**ECTS**
Physical Concepts in Computer Games	45	6
Creativity and Critical Thinking	45	3
Computer Game Planning	60	6
Computer Games Development	60	6
Management of Information Services	45	3
Monetization of Computer Games	60	6

FIRST YEAR, SEMESTER 2		
Courses	**Hours**	**ECTS**
Developing Computer Game Scenario	60	4
Development of 3D Games	60	5
Development of Multiplayer Games	60	5
Advanced Development of Computer Games	60	5
Entrepreneurship	45	5
Marketing of Computer Games	60	6

2. YEAR

SECOND YEAR, SEMESTER 3		
Courses	**Hours**	**ECTS**
Effects in Computer Games	45	5
Practice: Development of Computer Games	60	6
Application of Virtual and Expanded Reality	60	5
3D Modeling and Texturing in Computer Games	45	4
Negotiation and Conflict Resolution	45	4
Computer Games Structure	60	6

SECOND YEAR, SEMESTER 4		
Courses	**Hours**	**ECTS**
Graduation Thesis		30



LIGHT THE SPARK.

SPECIALIST GRADUATE PROFESSIONAL STUDY PROGRAM

Applied Computer Engineering, specialization in DATA SCIENCE

STUDY PROGRAM DURATION:
4 semesters (2 years)

SEMESTER DURATION:
15 weeks of active teaching
+ 5 examination weeks

TOTAL NUMBER OF ECTS POINTS:
120

4

WHY STUDY DATA SCIENCE?

The Data science specialization is one of four professional graduate programs in the field of applied computer engineering. Together with compulsory program courses that deal with data analysis, you will be able to choose electives in particular fields that interest you such as data visualization, data engineering, machine learning, statistical analysis, various domain expert knowledge workshops and data product management. Apart from the fundamentals, you will learn how to use those skills to create a “product” based on data (“data driven business”).

Contextualizing based on data, also called “storytelling” is considered to be one of the most important skills today. It is recommended as a universal skill each of us should strive to perfect. Our society is based on stories that form the base for our way of communicating, living and dreaming. Upon receiving the diploma, you will become a true specialist for data science.

This is an inter-disciplinary field, which the industry calls the ‘Fourth Paradigm’ of science. You will learn how to analyze and process large amounts of data and to extrapolate information required for sound business operations.

IN-DEMAND OCCUPATION
Experts for analysis and data processing are highly sought-after in Croatia and abroad. Choose a dynamic and interesting career for which demand will grow in the future.

WHAT ARE THE TAKEAWAYS FROM THE DATA WHAT ARE THE TAKEAWAYS FROM THIS STUDY PROGRAM?

Graduate studies allow you to further perfect your know-how of your favorite field. We’ll transfer the latest industry trends, insights and skills that employers demand. Here is a snapshot of some of them:

EVALUATING COMPLEX PROBLEMS
You will hone your skills in using applied mathematics and information theory for analyzing and evaluating complex and insufficiently defined problems.

WORK AND PLAY WITH DATA
You will learn how to apply appropriate methodology, recommend and select best solutions for queries in data integration, normalization and discretization.

PROTECTING DATA PRIVACY
You will adopt an analytical approach to provisions of ethical codes that protect rights to privacy.

SOCIAL NETWORKS ANALYSIS
Understand what social network analysis is and what its goals are and how to rank the basic functionalities of social network analysis software.

HIGH PERFORMANCE COMPUTING
Understand HPC opportunities as well as how to apply parallel computing to solve business problems.

WORK AND PLAY WITH BIG DATA SETS
Find out how to rate product quality through analyzing big data chunks and re-evaluating its potential.

IMPACT OF ARTIFICIAL INTELLIGENCE DRIVEN TECHNOLOGIES
Learn how to recognize the impact of AI technologies on the business environment and learn to spot new emerging trends.

UNDERSTANDING DATA PRODUCTS
Understand, interpret and scope data products.

EXAMPLES OF JOBS WE’RE PREPARING YOU FOR

DATA ANALYST
A wide array of tasks awaits you, from developing IT support, accessing data from various sources and preparing databases.

SPECIALIST FOR BUSINESS INTELLIGENCE (BI)
You will be implementing analytical and integrated data storage and business decision support systems.

DATA SPECIALIST
A true expert for discovering and extracting knowledge from hidden data and their interpretation and visualization.

DATA ENGINEER
A very dynamic job, depending on the specialization, it can include anything from data preparation and effective data architecture, all the way to its interpretation and sophisticated analysis.

IT PROJECT MANAGER
A responsible position overseeing planning and execution of projects involving implementation of database for analytical systems.

Certifications

Certifications available to students within the curriculum:

1. Introduction to Programming Using Python

2. Tableau Desktop Qualified Associate

3. IT SMF – ITIL Foundation

Our team of scientists won the Big Data Hackathon organized by Eurostat in 2017.

DID YOU KNOW?
Most of the prospective students have limited knowledge in the data science field, so it is difficult for them to follow our program at the graduate level of studies. To tackle this issue, before the start of the academic year you can enroll in our online preparation modules such as Python, SQL, Data Preparation and Statistics and get ready for the year ahead. To complete each of the preparation modules, you will need around 20 hours of individual work/ studying and 2-3 hours of work for the final project. To complete each module, you will have to pass an online exam in English.

KATERYNA LELAS, Ukraine
Data Science student at Algebra University College

Kateryna Lelas is a Data Science student at Algebra University College. After completing her undergraduate degree in Business with excellent results, Kateryna moved from Poland to Croatia to do her master's degree. Also, she participated in Algebra's International Winter and Summer School and is the current International Student Representative at Algebra.

"Algebra University College and their new graduate program in Data Science gives students with different study backgrounds the opportunity to advance their skills and become professionals in specialized areas of data science according to their preferences. The program is broad but flexible, so students can try many different applications of data science and then choose one or a few which they plan to implement in their future work. Moreover, Data Science program emphasizes practical and innovative approach which allows students to try many new techniques, meet the right people and choose the path for the future. Being an international student at Algebra University College, I can most certainly say that I made the right choice."

Lecture Plan
Specialist Graduate Professional Study Program in Applied Computer Engineering, specialization in DATA SCIENCE

1. YEAR

FIRST YEAR, SEMESTER 1

Courses	Hours	ECTS
Entrepreneurship	45	5
Negotiation and Conflict Resolution	45	4
Data Preparation	60	6
Data Warehouses and Business Intelligence	60	6
Introduction to Data Science	45	3
Disruptive Technologies	60	6
Managing Quality in IT Projects	45	6

FIRST YEAR, SEMESTER 2

Courses	Hours	ECTS
Social Network Analysis	60	6
Creativity and Critical Thinking	45	3
Quantitative Methods of Data Processing	60	6
Machine Learning Methods	60	4
Security, Privacy and Ethics of Digital Data	60	5
Internet of Things	60	6
Management of Innovation	60	6

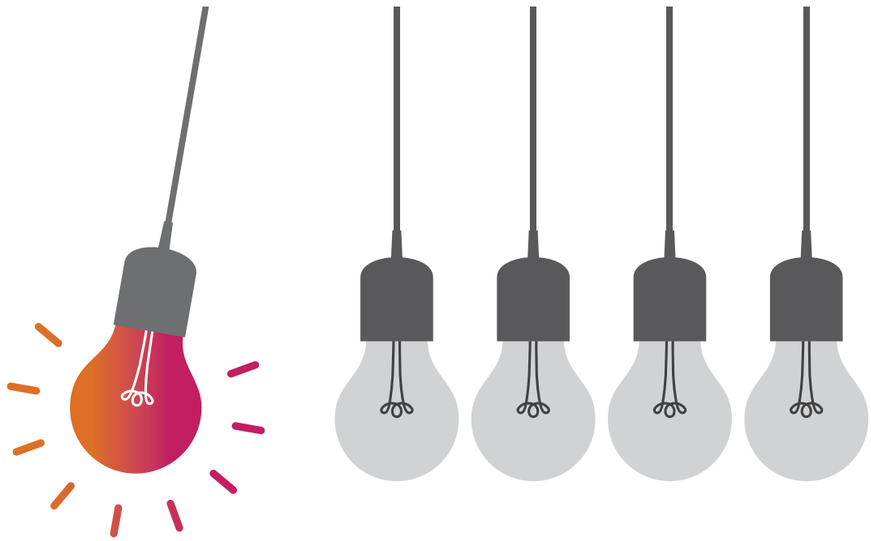
2. YEAR

SECOND YEAR, SEMESTER 3

Courses	Hours	ECTS
Affective Computing	60	6
Analytical Techniques Based on Large Data Sets	60	6
Advanced Machine Learning Methods	60	6
Management of Information Services	45	3
Visualisation and Analytical Software Tools	45	3
Cloud Analysis	60	6
Structured Analytical Techniques	60	6

SECOND YEAR, SEMESTER 4

Courses	Hours	ECTS
Graduation Thesis		30



SPECIALIST GRADUATE PROFESSIONAL STUDY PROGRAM

DIGITAL MARKETING

STUDY PROGRAM DURATION:
4 semesters (2 years)

SEMESTER DURATION:
15 weeks of active teaching
+ 5 examination weeks

TOTAL NUMBER OF ECTS POINTS:
120

5

WHY STUDY DIGITAL MARKETING?

Digital Marketing Professional Graduate Study Program:

- Gives students ability to think strategically and have broader picture on all aspects of marketing and data driven decision making.
- Teaches students how to use data as the base of all decision making processes with different applications both practically and strategically
- Enables students to think outside the box through critical and design thinking courses. The International Marketing enables them to think outside the boundaries of their country.
- Enables students to make decisions and innovate on products, services and business models with application of disruptive technologies
- Prepares students for more advanced roles in marketing teams and agencies.

IN-DEMAND OCCUPATION
Did you know that specialists for digital marketing are very sought-after in Croatia and abroad? Choose a dynamic and interesting career for which demand will grow in the future.

NUMEROUS BENEFITS
During the study program you will have the possibility to learn and obtain internationally recognized certificates and you'll also get a Dreamspark Premium subscription to over 160 Microsoft products. Also, you can use our private cloud to work on your study or research projects or our research facilities, accelerator / coworking to setup your business idea and / or startup.

WHAT ARE THE TAKEAWAYS FROM THIS STUDY PROGRAM?

Graduate studies allow you to further perfect your know-how of your favorite field. We'll transfer the latest industry trends, insights and skills that employers demand. Here is a snapshot of some of them:

SOCIAL NETWORK ANALYSIS
Learn how to analyze social networks and use social metrics.

DIGITAL MARKETING STRATEGY
Design and implement digital marketing solutions at a strategic level, understanding strategic marketing as a whole.

APPLICATION OF GAME THEORY
Learn how to apply game theory in marketing and business but also your everyday decisions.

BUSINESS ANALYSIS
Hone you interpersonal and business analytical skills in digital marketing.

BUSINESS INTELLIGENCE SYSTEMS
Learn how to develop early warning systems, values for client's current and future budgets, CRMs and recommendation systems.

DATA ANALYSIS
Get into the crux of data analysis such as signals connection, events, monitoring and observation.

EXAMPLES OF JOBS WE'RE PREPARING YOU FOR

SPECIALIST FOR STRATEGIC DIGITAL MARKETING
Be the person responsible for all questions from budget preparation, choice of channel and campaign preparation.

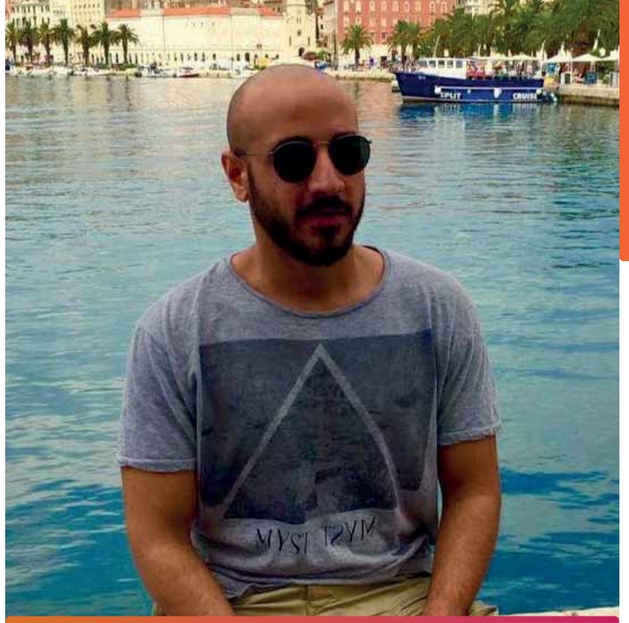
MARKETING STRATEGIST FOR SOCIAL NETWORKING
A wide spectrum of activities awaits you regarding the most important marketing channel, where competition is increasing at breakneck speed.

SPECIALIST FOR SOCIAL NETWORKING ANALYSIS
The balance of success rests on this professional's recommendation regarding digital campaigns on social media.

SPECIALIST FOR DATA VISUALIZATION
You will be working on demonstrating complex data in a smart and applicable way.

SPECIALIST FOR BIG DATA IN MARKETING
This is an expert who contributes to sound business decision making, discovering unknown connection, market trends, customer wishes and those hidden patterns in large data chunks.

Upon receiving your well-deserved diploma, you will be prepared to work in digital marketing on the strategic and tactical levels – from analyzing social networks to pushing the boundaries of new and existing solutions in digital marketing through research and experiments as well as with use and understanding of data and innovation.



MOHAMED HAFEZ, Egypt
Digital Marketing student at Algebra University College

Mohamed Hafez is currently in his final year of Digital Marketing study program. He moved to Croatia from Egypt for his master's degree and was already an experienced PR, Data analysis and Marketing expert. His previous professional experience encouraged him to specialize in Digital Marketing and get on board with the process of digital transformation.

"Since I have a passion for marketing and I chose to build a career in this field, I decided to do my master's degree in digital marketing. We can all relate to the digital transformation around us, nearly in all aspects of our daily life this transformation has an effect on our purchase cycle as customers and how we search, decide, purchase and promote any product or service, so as marketing specialists we need to be aware of these rapid changes. As a marketing specialist I understood the importance of learning how to manage and benefit from big data, and how to be able to design and execute a digital marketing strategy. Studying digital marketing at Algebra had a remarkable effect on my skills and knowledge expansion, the graduate study program is very rich and will definitely help you dig deeper into the world of digital marketing."

Lecture Plan
Specialist Graduate Professional Study Program in DIGITAL MARKETING

1. YEAR

FIRST YEAR, SEMESTER 1		
Courses	**Hours**	**ECTS**
Behavioral Economics	60	4
Digital Data in Marketing	60	5
Disruptive Technologies	60	4
Creativity and Critical Thinking	60	5
Strategic Management of Digital Campaigns	60	6
Brand and Reputation Management	60	5

FIRST YEAR, SEMESTER 2		
Courses	**Hours**	**ECTS**
Network Analysis and Social CRM	60	5
Quantitative Methods in Marketing	60	6
Marketing Strategies Based on Data Sets	60	5
International Marketing	60	5
Application of Game Theory in Marketing	60	4
Security, Privacy and Ethics of Digital Data	60	5

2. YEAR

SECOND YEAR, SEMESTER 3		
Courses	**Hours**	**ECTS**
Digital Transformation	60	7
Innovation Management	60	5
Communication and Presentation Skills	60	6
Alternative Marketing Channels and Future Technologies	60	6
Analytical Software Tools in Marketing	60	6
Nonprofit Marketing	60	6
Visualization Software Tools in Marketing	60	6

SECOND YEAR, SEMESTAR 4		
Courses	**Hours**	**ECTS**
Graduation Thesis		30

SPECIALIST GRADUATE PROFESSIONAL STUDY PROGRAM

DESIGN & COMMUNICATIONS MANAGEMENT

STUDY PROGRAM DURATION:
4 semesters (2 years)

SEMESTER DURATION:
15 weeks of active teaching
+ 5 examination weeks

TOTAL NUMBER OF ECTS POINTS:
120

6

WHY STUDY DESIGN & COMMUNICATIONS MANAGEMENT?

We live in a time inspired by technology which presents us with new challenges and requires new ways of dealing with increasingly complex problems. Of course, these challenges need to be understood and adopted on a daily basis. Specialist professional graduate study program in Design & Communications Management prepares you exactly for this kind of situations. The knowledge you will acquire will help you become a part of a digitally transformed world, where only constant commitment to innovation ensures success.

Managing teams composed of a wide variety of experts and managing your own business are just some of the skills you will learn and adopt in this study program. Today, technology is a requirement for business success, but technology is nothing without the people who understand and develop it. We want to show you the importance of technology in today's business environment, but also teach you how to manage people who use this technology. In addition, you will gain insight how to understand and communicate with those who need to become fond of the products and services managed by yourself in order to buy them and remain faithful to them.

Our task is to show you how to start, manage, evaluate and finalize the most demanding projects across a wide variety of industries. We believe that, at the end of the study program, you will be able to manage marketing campaigns and make important business decisions.

WHAT ARE THE TAKEAWAYS FROM THIS STUDY PROGRAM?

The two-year graduate Creative Market Communications Management course will introduce you to knowledge and skills necessary for success in the increasingly complex world of design and marketing communications. Many people think they know how to communicate, but a few know how to communicate successfully and – effectively. Our study program will prepare you for a career of a successful and efficient designer; a member or a leader of creative teams in advertising or in any other industry.
The study program is designed through the interaction of the latest artistic, social and technological knowledge. We believe that only such a broad and comparative approach can be the basis for a successful career in the world of design and market communications.

INTEGRATED MARKETING COMMUNICATION AND MARKET TRENDS
Mastering integrated marketing communication and its managing processes. Complete understanding of all elements of the marketing mix and their correlation. Understanding changes and trends in international socio-economic relations, ability of synergy adjustments and finding optimal communication solutions.

IDEA MANAGEMENT IN MARKET COMMUNICATIONS
Understanding the processes of generating a "big idea" – a complex creative tool that through the interaction of emotional and rational stimuli provokes the potential consumer and leads to a moment of enthusiasm for a particular service or product. Communication platforms are the initiator and support of every successful brand.

CREATIVE METHODS AND TECHNIQUES IN MARKET COMMUNICATIONS
Creativity and design that are not effective are not commercially useful. The expectations of the client/customer of a particular design should be recognized and interpreted. The balance between market expectations and creative processes is a precondition for successful communication. Through this course you will learn how to be creative and "yourself" in demanding, market-conditioned and unpredictable circumstances.

CONSUMER BEHAVIOR
Learn how to understand the behavior of consumers in increasingly complex conditions of the fourth industrial revolution. The usual consumer segmentation and "persona" recognition is no longer good enough today. The consumer can be found in the most unexpected places, in the digital space that runs out of control, changes and goes through everyday transformations. The "things to be done" concept as a way of understanding consumer behavior is increasingly replaced by traditional demographic bases for market segmentation.

BRANDING – CORPORATE IDENTITY
Understanding the brand and its significance is one of the crucial conditions for survival in the market game which is strongly linked to design. By acquiring knowledge about creating relationships between products and consumers, we gain insight into human desires, needs, motives, expectations, perceptions and rational and irrational impulses that condition our experience of a particular brand.

PROCESS MANAGEMENT IN MARKET COMMUNICATIONS
Learn about the importance of managing the processes of designing and creating market communications as well as about the problems and necessities of an organized, procedural way of organizing work. Consider thoroughly the analytical, procedural model of optimization and documentation of business processes.

ADVANCED PRESENTATION SKILLS
Presentation skills are often a crucial tool for the success of a project. Many ideas would never have become successful projects without the knowledge of presentation techniques and without a good command of professional terminology.

BUSINESS ETHICS IN MARKET COMMUNICATIONS
Adopt the knowledge of fundamental concepts in the field of ethics, especially in the context of the business world. Learn to differentiate the conceptual categories of ethics, morals, descriptive ethics, casuistry and business ethics. In short, learn how to do business the right way!

EXAMPLES OF JOBS WE'RE PREPARING YOU FOR

CREATIVE DIRECTOR
The creative director's position is indispensable in advertising, media, publishing and every other industry that requires visual design of creative concepts. Creative director is a key person in creating integral marketing campaigns, equally skilled in dealing with textual and visual content.

Certifications

Certifications available to students within the curriculum:

1. Adobe Certified Associate - Photoshop

2. Adobe Certified Associate - Ilustrator

MARKETING DIRECTOR

An exceptionally responsible position in which you need to know how to develop a marketing strategy, including various economic indicators; from competitive analysis to detailed budget development and planning. Your decisions will have far-reaching consequences for products and services managed by yourself and beyond them – you are creating consumer trends and affecting the purchasing habits of a large number of people.

CLIENT SERVICE DIRECTOR

Client relationships are often a crucial element for the success of a company, as well as for the success of any project, service, idea or product. The person who oversees and manages relationships with clients must possess both negotiating and marketing skills in addition to highly developed organizational abilities. An analytical mind and understanding of human interactions are essential for success in this business.

ELIZABETH BORYSIUK, Ukraine
Design & Communications Management student at Algebra University College

Elizabeth Borysiuk is a 1st year student of Design & Communications Management. After finishing her undergraduate degree in International Tourism in Poland and working in marketing, Elizabeth decided to move to Croatia and explore her creativity at Algebra. She participated in Algebra's International Summer School where she excelled at improving her art and technology skills through the Digital Sculpting Fundamentals course

"This study program has given me a great chance to work among some of the biggest hot shots in our industry. Their expertise gave me knowledge and tools needed to better set up my personal and professional objectives. All this has shown me that our own creativity needs to be organized so we could be even more successful and competitive in our highly demanding working environment."

Lecture Plan
Specialist Graduate Professional Study Program in DESIGN & COMMUNICATIONS MANAGEMENT

1. YEAR

FIRST YEAR, SEMESTER 1

Courses	Hours	ECTS
Integrated Marketing Communication	45	4
Creative Economics	30	4
Creative Tools 1 - Design of Presentations	30	4
Practicum 1	105	4
Idea Management in Market Communications	45	6
Process Management in Market Communications	30	4
Multiculturalism and Identity	30	4
Business English in Market Communications 1	30	4

FIRST YEAR, SEMESTER 2

Courses	Hours	ECTS
Branding - Corporate Identity	45	6
Creative Methods and Techniques in Market Communications	45	4
Creative Tools 2 - User Interface Design	30	4
Leadership	30	4
Consumer Behavior	30	4
Practicum 2	105	4
Business Ethics in Market Communications	30	4
Business English in Market Communications 2	30	4

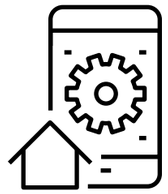
2. YEAR

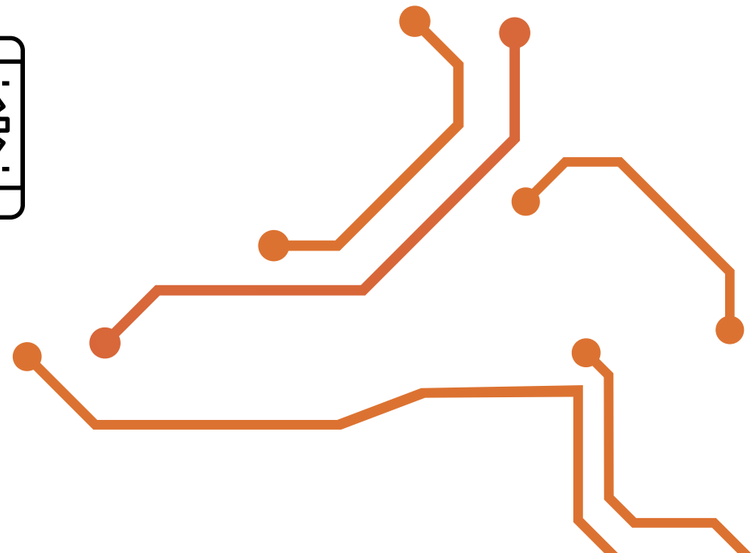
SECOND YEAR, SEMESTER 3

Courses	Hours	ECTS
CRM - Customer Management	30	6
Multicultural Design	30	4
Creative Tools 3 - Interactive Media	30	4
Lateral Marketing	30	4
Practicum 3	105	4
Project Management in Market Communications	30	4
Film Ideas in Market Communications	30	4
Photography Ideas in Market Communications	30	4

SECOND YEAR, SEMESTER 4

Courses	Hours	ECTS
Graduation Thesis		30





e-Leadership MBA

In a technology dominated world, the lack of e-leadership education is striking. Algebra is among the top higher-education institutions in Europe that have developed and accredited an e-Leadership MBA Program.

In a nutshell, e-Leadership MBA program curriculum is made in BDS design (business + digital + strategic) and structured around three main standard MBA content competencies: most of the core business MBA (GMP), several of the core technology MBA (ICT) and some key strategic Executive MBA (Leadership) modules. It's meant to provide the best breed of MBA experience (traditional & advanced technology & strategy oriented e-Leadership).

The program is carried out in cooperation with faculty members from the Kelley School of Business, Indiana University, USA, one of the oldest and most renowned, constantly top-ranked international business schools. In partnership with the faculty of Algebra University College, they combine the strengths and experiences in executive education with one working at the frontiers of business and management.

Many bring with them professional expertise, obtained on the job or through consulting engagements with industry.

MBA

The two-year e-Leadership MBA program consists of 18 (17 + 1 Introductory) modules exercised in the duration of 40 lecturers' led contact hours + 20 hours of pre-reading and case studies each. Students have to deliver a start-up business project in the first year and an individual Master's Thesis at the end of the program.

The two year program worth 120 ECTS actually acts as a framework in contemporary business management, digital technology, social media, business intelligence, design thinking and modern leadership, thus following the key EU e-Leadership Initiative recommendations.

18
MODULES

60
HOURS PER MODULE

2
YEARS

120
ECTS

ACCREDITED STUDY PROGRAM

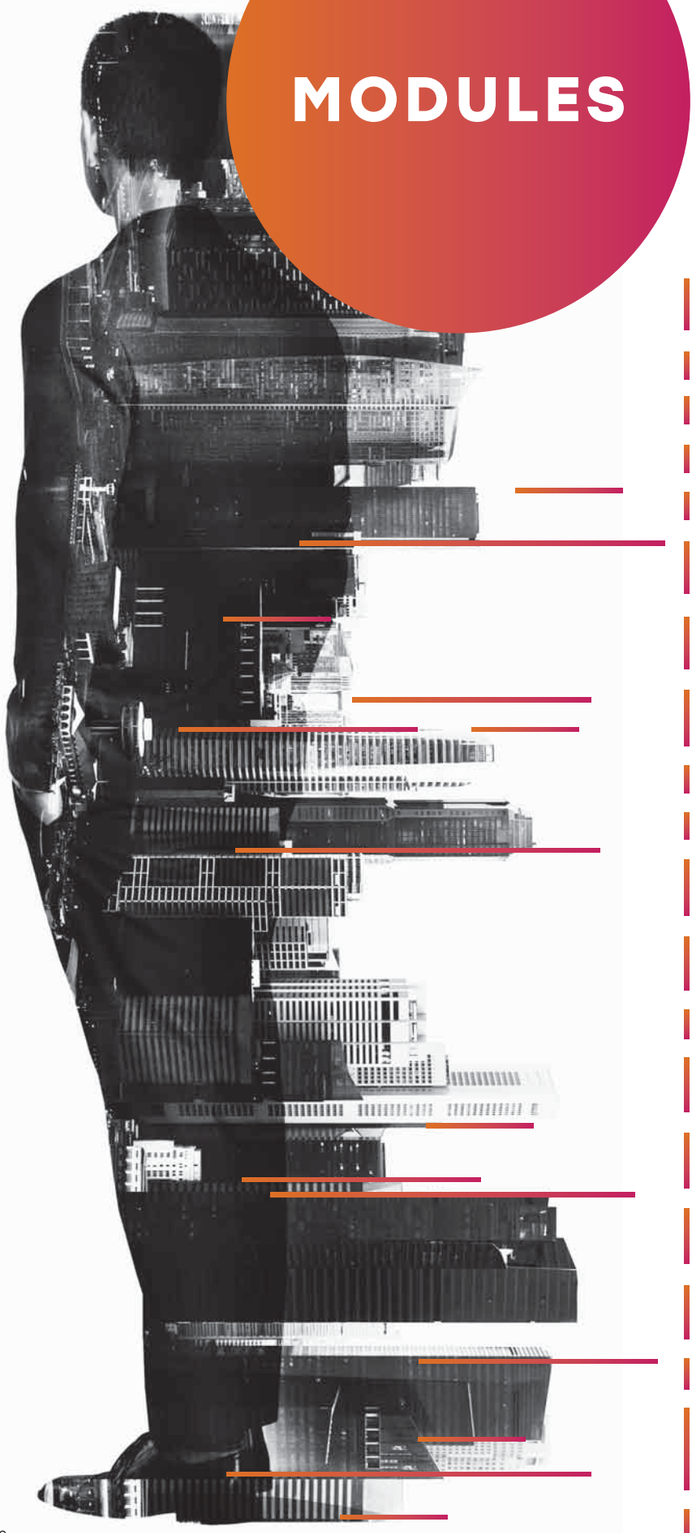
ACADEMIC DEGREE

Unlike similar traditional MBA programs which attempt to compensate for their lack of connection with technology-based modern business models through one or two modules, this program connects the business and technological aspect in all its elements. Specifically:

'Classic' MBA modules like Financial Management or Marketing and Sales Management, use examples and practical cases based on new business models and paradigms. Modern technology is used in class as the foundation for solving business problems (real time computer simulations, digital tools and applications, software...).

Technology-oriented modules, like Digital Transformation, Strategic Management of Technology and Innovation or IT Systems in Modern Organizations, are focused on strategic perspective and most useful application of technological solutions in any business or industry.

Business plan development is exercised in small teams throughout the program, but the most important one is a real-life start-up project. After a yearlong analysis and evaluation of a team's business idea, its market opportunity and potential, the project ends with a pitch in front of the actual investors. It often goes on through the collaboration between MBA students and industry partners to develop a prototype (MVP) or real market start-up solution. An additional benefit of this approach is strong networking which facilitates synergy between MBA, computer engineering and digital marketing students. The result is an impressive and very influential alumni community positioned "strategically" in modern and fast growing companies we can be proud of.



MODULES

- INTRODUCTION TO e-LEADERSHIP
- MANAGERIAL ECONOMICS
- STRATEGIC MANAGEMENT
- OPERATIONS MANAGEMENT
- FINANCIAL MANAGEMENT
- CREATIVITY AND PROBLEM SOLVING
- MARKETING AND SALES MANAGEMENT
- FINANCIAL AND MANAGERIAL ACCOUNTING
- QUANTITATIVE METHODS
- PROJECT MANAGEMENT
- ENTREPRENEURSHIP AND INNOVATION
- STRATEGIC MANAGEMENT OF TECHNOLOGY AND INNOVATION
- DIGITAL TRANSFORMATION
- INFORMATION SYSTEMS IN MODERN ORGANIZATIONS
- INTERNATIONAL LAW, CYBERSECURITY AND PRIVACY
- BUSINESS COMMUNICATION AND NEGOTIATION
- MANAGING AND LEADING PEOPLE
- NEW PRODUCTS MANAGEMENT
- START-UP BUSINESS PROJECT (team assignment through DESIGN THINKING)
- MASTER'S THESIS

Business transformation and innovation in digital economics

e-Leadership MBA program - Strategic Leadership, Digital and Business Savvy

Strategic Leadership:

- Forecasting needs for information
- Understanding customer needs
- Solution orientation
- Communication
- Creativity
- Independent learning
- Team leading
- Cultures, internationalization

Digital Savvy:

- Big data analytics & tools
- Cloud computing & virtualization
- Mobile app design and development
- Complex business systems
- Web development & tools
- IT architecture, platform architecture
- Security skills
- ERP systems
- Social media

Business Savvy:

- Customer relations & sales
- Partnership establishment
- Business development
- Organizational change
- Project management
- Process optimization
- Strategic marketing
- Agile methodology
- Business analytics
- Market analysis
- Financial skills

ADMISSION PROCEDURE FOR INTERNATIONAL STUDENTS

Following the global trends in higher education, we have established the Admissions Office with the aim of introducing future students with the many advantages of studying at the best rated professional higher education institution in Croatia. The staff at the Admissions Office will be happy to help prospective students from the moment they start thinking about studying at Algebra. It will serve them as the main point of information and support throughout the entire enrollment process. Our students will be in touch with the Admissions Office until the start of the academic year. After that, all further support is taken over by the Student Office.

UNDERGRADUATE PROFESSIONAL STUDY PROGRAM (BACHELOR)

The program study period is equivalent to full time three-year studies which amounts to 180 ECTS.The program starts in October. In order to apply to any of our undergraduate study programs, the following admission procedures must be fulfilled:

STEP 1

Submit documents

Documents required

- Copy of passport
- 2 passport size photos
- Educational certificates' copies
- Proof of English language proficiency, e.g. IELTS, TOEFL, Pearson Test, or equivalents copy
- CV in English
- Filled online application form
- Proof of payment of 255 EUR application fee (non-refundable) for international students

Before coming to Croatia, you should apply for the academic recognition of your previous education.

STEP 2

Take the entrance exam & interview

Entrance exam & interview

Algebra provides free preparation for candidates for the entrance exams which consists of English test and Mathematics test.

An online interview (Skype) will be conducted with the candidate in order to determine his/her motivation and English proficiency. Upon successful completion of the interview, the candidate will receive a conditional letter as a confirmation of acceptance to study at our institution.

SPECIALIST GRADUATE PROFESSIONAL STUDY PROGRAM (MASTER)

The program study period is equivalent to full time two-year studies which amounts to 120 ECTS.The program starts in October or March, depending on the selected study. In order to apply to any of our graduate study programs, the following admission procedures must be fulfilled:

STEP 1

Submit documents

Documents required

- Copy of passport
- 2 passport size photos
- Educational certificates' copies:
  - » complete, original Transcript of records
  - » Degree Certificate/Diploma,
  - » Diploma Supplement for the finished undergraduate study program before enrolment
- Proof of English language proficiency, e.g. IELTS, TOEFL, Pearson Test, or equivalents copy
- CV in English
- Filled online application form
- Proof of payment of 255 EUR application fee (non-refundable) for international students

Before coming to Croatia, you should apply for the academic recognition of your previous education.

STEP 2

Take the interview

The interview

An online interview (Skype) will be conducted with the candidate in order to determine his/her motivation and English proficiency. On successful completion of the interview, the candidate will receive a conditional letter as a confirmation of acceptance to study at our institution.

STEP 3

Make tuition fee payment

Tuition fee

The tuition fee is payable in Croatian kuna (HRK) and in EUR. An invoice for the tuition fee will be sent separately upon successful completion of the entrance exam and interview.
70% of the tuition fee should be paid in advance. On reception of this payment, the university will issue the Acceptance Letter which is required to apply for the visa. Once the visa is approved, the remaining 30% of the tuition fee should be paid before the candidate joins the program.

STEP 4

Entering the country and VISA

Visa and Temporary residence permit

Check if you need a Visa to enter Croatia by contacting the nearest Croatian Embassy/Consulate or on the website www.doyouneedvisa.com. EU citizens do not require a Visa to enter Croatia.

The list of documents needed for registering your stay is available on the following link: www.mvep.hr/en/consular-information/stay-of-aliens/granting-stay-in-croatia-/

Visa refusal & refund policy

In case the visa is denied for some reason, Algebra University College will return the payment after charging 10% of administrative costs. Refusal documents must be sent to Algebra University College within 14 days to get the refund. Postage costs are also incurred by applicants.

Please note:

1. You will receive an official Letter of Admission from our university with important dates, accommodation, enrolment etc. You are expected to arrive on time and commence the studies according to the instructions.
2. As a future student you are responsible for acquiring a student visa/residence permit for Croatia well in advance and also to collect documents required for future visa applications with respect to the available mobility tracks, such as health certificates, police certificates, copy of a high school diploma etc. Contact the appropriate embassy in order to receive further information about the residence permit application procedure and start processing the residence permit immediately after receiving the Letter of Admission. Check if a transit visa is needed when travelling to Croatia.
3. All international students are required to have health & travel insurance from their home country prior to their arrival in Croatia. This type of insurance has to be valid in case any health services are needed while staying in Croatia. For students coming from EU countries their EU health insurance card is valid under the stated terms & conditions. Any questions and support that students may need prior to arriving and during their stay can be directed to the International Office of Algebra University College.
4. At the end of the study period, a degree will be issued by the University to students who have successfully met all requirements by the university.
5. Having successfully passed all study requirements, in addition to the degree you will be awarded a Diploma supplement summarizing all the specific educational characteristics of Algebra University College and all compulsory extra events, e.g. participation in winter/summer schools and the organizational mobility required by the final degree project.

For more information, please contact the International Office
Phone: 00 385 1 5809 319; 00 385 1 5808 863
Email: international-office@algebra.university

ABOUT US

Algebra University College is the flagship of the largest private educational organization in the Republic of Croatia and the region, and present in more than 20 cities across Croatia.
Founded in 1998, we currently have more than 150 full-time employees and more than 400 associated experts. Annually, we educate around 15.000 students through various seminars and short educational programs in lifelong learning, while in higher education we enroll more than 550 new students each year.

Our main campus is located in the heart of Zagreb, the capital of Croatia, while lifelong learning and training programs are also conducted in: Osijek, Pula, Rijeka, Zadar, Split, Šibenik and Varaždin, as well as in more than ten other smaller cities. We currently provide almost a thousand shorter education programs (in duration of up to 2 weeks), 50 accredited lifelong learning programs and 12 accredited higher education study programs. Many of our programs are authorized by world software and equipment manufacturers such as: Microsoft, Cisco, Oracle, Red Hat, VMware, Adobe, Autodesk, EC-Council, IMC2 and others. We are an academic and/or educational partner of all the stated vendors, for most of them the only one in Croatia.

Majority of educational programs for the acquisition of new qualifications, as well as all study programs in higher education, are accredited by Ministry of Science and Education and are thus linked to the European Qualifications Framework (EQF) through our National Qualifications Framework. In addition, we are also dedicated to applied research:

Thus, the Algebra LAB provides research, services and solutions in areas of:

- Data science
- Application of information technology in education including: digital educational content, distance learning systems and assessment systems
- Evidence based labor market and educational policy research and development

MISSION

We create opportunities for Croatian and international students to acquire excellent skills and knowledge and build globally competitive careers in digital technologies.
We are aware of our responsibility within the community and therefore actively promote educational excellence in digital technologies in order to encourage economic growth and development of Croatian economy. In our teaching and research, we strive to create a value system coherent to values in which we strongly believe:
I. high value received for the cost of service
II. top quality education
III. operational and organizational excellence
IV. constant contribution to the development of society we live in

VISION

We aim to become the first choice for Croatian and international students interested in building careers in digital technologies through development of excellence in all areas of our work: infrastructure, staff, applied research, cooperation with the industry and internationalization.

WHAT MAKES US DIFFERENT

We hope this publication will help you recognize three specific features worth considering when deciding on your future career path and choosing the best higher education institution.

1 First of all, our students acquire the necessary knowledge for fast growing industries based on digital technologies. This gives them a head start and enables them to choose a career for which the demand will increase significantly in the future. Even though there are still jobs and careers in the "old" economy, we are convinced that the path towards the digital era and the "new" economy is the right path that will, in the long term, provide students with a platform for personal development and high employability. Perhaps this is best illustrated by the fact that 96%* of students start working within three months after graduation.

2 Our second competitive advantage is constant monitoring of technological developments, as well as the real needs of employers, which results in academic program improvements. Recognizing the advancements in education worldwide, we were the first institution in Croatia to apply modern qualification framework approach in design of our programs and have developed the implementation methodology for it. It is precisely this methodology that has become a part of the official guidelines which will be applied by other Croatian institutions during the following years in accordance with the more diverse needs of employers and technological developments.

3 Finally, our third specific feature is the orientation towards true quality. Our overall approach to education and our quality has been recognized within Croatia by our national higher education regulatory agency (Agency for Science and Higher Education) where we are ranked 1st among all Universities of Applied Sciences in respect to quality assurance, as well as in respect to the quality of the overall educational process. We are the only Croatian higher education institution that has been awarded "Meets the Quality Requirements of NVAO" certificate by Dutch Flemish accreditation agency NVAO.

Furthermore, similar recognition on the global level came in 2014 when Microsoft awarded us "Learning Partner of the Year Award" in a strong competition of 3200 partners worldwide.

1 ESG
the best professional study program in the Republic of Croatia

nvao
meets the quality requirements of NVAO

Microsoft Partner
2014 Partner of the Year Winner
Learning

agency for science and higher education croatia

* Of all students who are actively seeking a job.

OUR AWARDS

Ranked 1st according to Croatian Agency for Science and Higher Education among all Universities of Applied Sciences in Republic of Croatia in respect to Quality Assurance system.

Ranked 1st by Microsoft as “Partner of the Year 2014” in competition of 3200 organizations worldwide.

1. Our Algebra LAB scientists were ranked 1st in 2017 European Big Data Hackathon organized by European Commission, competing with data scientists representing other EU countries.

96% 96 percent of our graduates are in relevant employment three months after graduation.

Ranked 1st according to Croatian Agency for Science and Higher Education among all Universities of Applied Sciences in Republic of Croatia in respect to overall quality of institution.

The only Croatian higher education institution awarded “Meets the Quality Requirements of NVAO” certificate.

22% The fastest growing! The average annual growth rate of the number of enrolled students in our undergraduate studies over the past three years is 22% annually.

1.100 1.100 computers and physical servers are available in our classrooms and laboratories.

OUR RESOURCES

Teaching and research resources often make a key difference between good and excellent higher education institutions. Being fully committed to excellence, we have made a significant investment in our resources, partly from EU development funds. As a result, our students, teachers and researchers can use:

High availability private cloud with numerous physical servers, storages, firewalls, UPS's... Said equipment allows Software Engineering / Data Science students to use complex and high output virtual environments in our classrooms and at home in order to finish their tasks and research projects. On the other hand, this equipment allows System Engineering students to work with complex real life infrastructure.

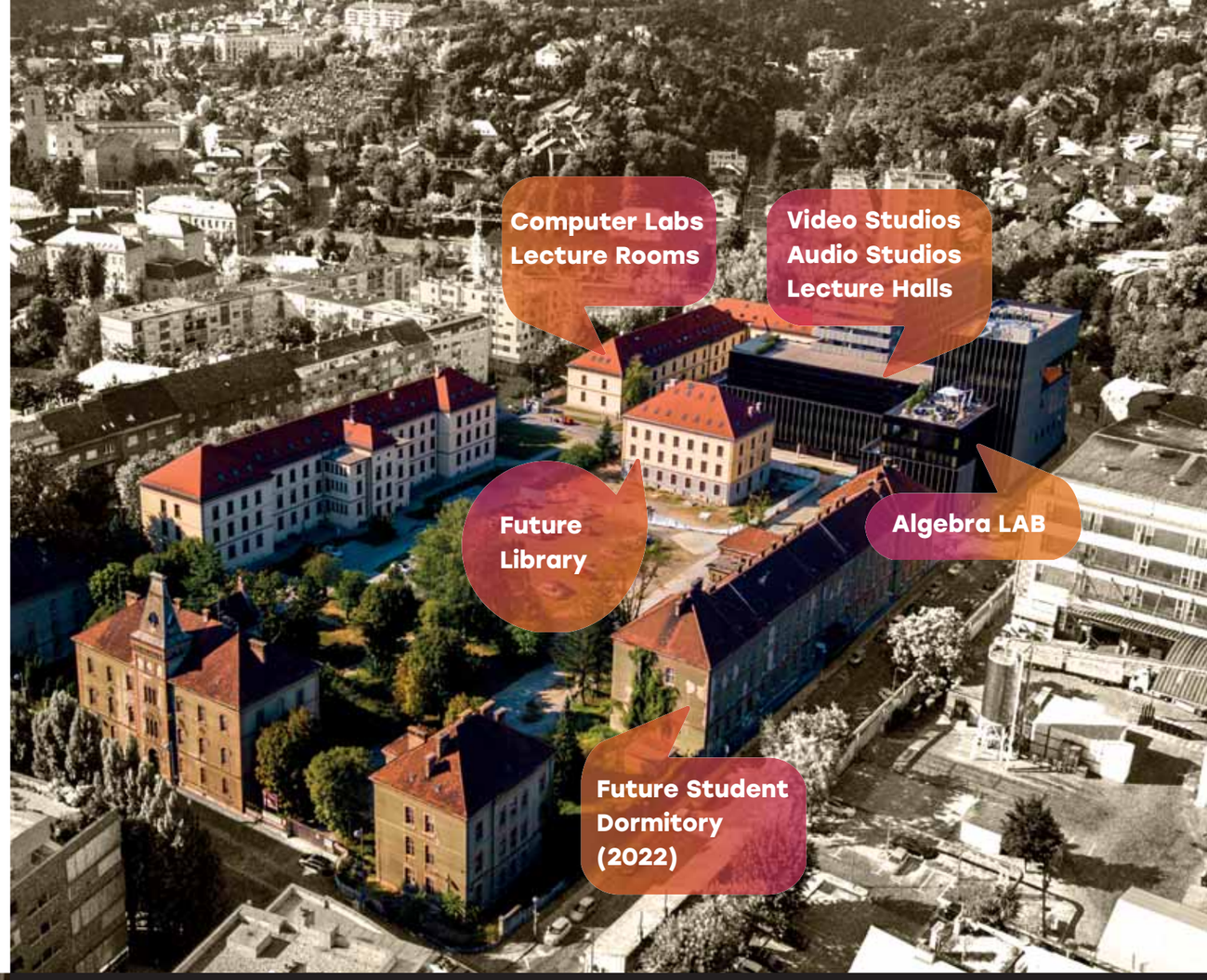
Two equipped video studios, one fully professional used for formal study programs and the other, a smaller one, used for student projects and always at our students' disposal. This equipment is mostly used by Multimedia Computing students.

- Professional audio studio used for formal study programs.
- 20 computer laboratories and classrooms with different types of equipment and software, used and prepared specifically for various courses.
- Complete networking laboratory with numerous routers, switches, next generation firewalls and other wired and wireless network equipment for System Engineers.
- Photo and video equipment that can be used by students (rent free) for their projects.
- 3D printers, VR equipment and lab, mostly used by Multimedia and Game Development students.
- IoT and robotics laboratory with numerous equipment (robots, smart home and smart city devices, many of which are either laboratory based or implemented within the campus, while some are also available on-line and are in real use throughout the city) used by Software Engineering and Data Science students.

CAMPUS

We are situated in a historical university campus of the CUC in Zagreb city center, located on the main street (Ilica) connecting central city square and Zagreb's west residential and business areas. We are well connected to other parts of the city with a few tram lines and have a public garage and parking lot within the campus for students/teachers.

Our teaching activities are mostly based in a superbly renovated and equipped building built in 1903 by Austro-Hungarian Empire to serve as a University campus, now a part of the Catholic University of Croatia campus, and in a new building commissioned in late 2017. Within the campus there are video/audio studios, research facilities, co-working & accelerator and huge lecture halls. Contrast between new technologies and old restored buildings visible in our campus creates a stimulating and dynamic environment. With more than 4000 square meters currently available to our students in form of lecture rooms, classrooms, laboratories, teaching cabinets, lounges, library... we aim to raise the standards of resources, equipment and design of higher education institutions in Croatia. We expect to complete our new and spacious university library in the next academic year, and in the years to come the new student dormitory as well. Both library and student dormitory will be located within the Campus.



More than 4000 square meters of lecture halls, classrooms, laboratories and library

1903

Completely refurbished and redecorated old building

New building 2017

New university library and student dormitory under construction.

Aside from the beautiful coast and great cultural and historical heritage, Croatia has been recognized for innovation, global reference projects, export of the best business-technological practices, as well as great professionals recognized for their skills and expertise all over the world.

Croatia – your live and learn destination

Croatia is one of the sunniest spots in Europe and one of the safest countries in the world!

Croatia is an EU member state with the second highest growth in number of international tourists in 2016. It is considered one of the safest countries in the world according to The Global Peace Index 2019 produced by the Institute for Economics and Peace (IEP).

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

As a study destination, Croatia has everything you need! With a Mediterranean climate along its 5,835 km of coastline and continental climate in the inland, no matter where you're staying in Croatia, you are always just a few hours away from the sea, the mountains and the flatlands.You can spend your summers enjoying one of Croatia's 1,244 islands, cruising the Dalmatian coast, food & wine tasting in Istria or discovering Slavonia's ecotourism and your winters cozying up in the city of Zagreb.

Zagreb

Zagreb, one of the oldest European cities, is not only the administrative, but also economic, diplomatic and cultural capital of Croatia, with a population of almost one million.

It is also a university center with forty higher education institutions and over 80,000 students. A city that is proud of its long history of education: the first city school (primary) was built in the middle of the 14th century, the first secondary school was founded at the beginning of the 16th century and in the second half of the 16th century, Zagreb had its first university.

Zagreb is a city of science and culture. The city has approximately fifty museums and galleries, as well as private art collections and about twenty theatres and music venues. Many open-air events and exhibitions are organized from spring to autumn. While walking down the streets of Zagreb, you can admire the architecture, which mostly dates back to the Austro-Hungarian Empire. Even though Zagreb is a Central European city, in many ways, it has a Mediterranean way of life. Great atmosphere and friendly local people are the biggest values of Zagreb.

In summer, Zagreb becomes a multi-cultural hot spot with an extensive choice of fun!

From outdoor activities such as picnics, sport activities, rooftop parties, open cinemas and festivals to interesting museums, restaurants with traditional and international cuisine, cozy cafés and a great party scene.

During the Advent season, Zagreb offers a variety of events that will satisfy even the most demanding visitors. Plenty of fun, excellent food, unique events, art, but also a genuine Christmas atmosphere, await you on the streets of Croatia's capital.

BEST CHRISTMAS MARKET 2018 ZAGREB

BEST CHRISTMAS MARKET 2017 ZAGREB

BEST CHRISTMAS MARKET 2016 ZAGREB

ACCOMMODATION AND FOOD

Average monthly living expenses in Croatia are estimated between 400 and 600 EUR, depending on the type of accommodation (student dorm or privately rented housing) and the city of residence in Croatia. These amounts should be sufficient to cover food, accommodation, utilities, transportation and other expenses.

The student ID card ("X-ica") is used as a proof for exercising student rights and benefits such as subsidized meals in cafeterias, discounts on public transportation, discounts in certain public institutions and more. Subsidized food for Erasmus+ students is available in public student restaurants, where you can have 3 good quality and quantity meals per day. International students in Croatia receive a student card during the first month of their mobility period.

A student dormitory at our campus will be built in the near future. Until that time, the staff of Algebra University College assist students with finding private accommodation in the organization of our accommodation provider, Home In Zagreb agency. Students can also receive helpful links to other rental agencies that offer long and short-term apartment rentals. If students want to stay in a hostel, we can recommend modern & urban designed hostels, located in the heart of Zagreb (near our campus) which would cost around 250-500€/per month, depending on the season. Prices of private accommodation in Zagreb may vary depending on the city area, size and amenities that apartments include. Algebra University College staff will be happy to assist students in finding accommodation.

Croatian Cuisine

Croatian cuisine is known as a cuisine of the regions, since every region of Croatia has its own distinct culinary tradition. The main dishes vary depending on the area you visit. In Dalmatia, the coastal area, on the islands and in Istria, the cuisine is Mediterranean and dishes are based on fish and other seafood, seasoned with olive oil and Mediterranean herbs and spices, while typical meat dishes include 'pašticada' (a stewed beef dish) and cooked lamb. Mainland cuisine is more characterized by the earlier Slavic and the more recent contacts with Hungarian and Turkish cuisine.

Among the most popular local dishes and specialties are the renowned Dalmatian or Istrian prosciuttos, cheeses from the island of Pag and the Lika region, sheep's cheese, Slavonian 'kulen' (a spicy cured pork meat specialty), the renowned zagorski štrukli of Zagreb and Zagorje region, fresh cottage cheese with cream, and more.

STUDENT OFFICE

You will make your first contact with Algebra University College through the International Office. Once your study program starts, you will receive support from the Student Office. Located at the eastern entrance of our main building, the staff will help you from the moment you start studying until you obtain your diploma. The Student Office organizes and provides information on administrative study requirements and other student commitments, issues certificates of student status, transcripts, monitors tuition fee payments, and more.
In addition to administrative business, the Student Office is at your disposal for support and advice throughout your studies, so you can efficiently fulfill all your study commitments.

INFOEDUKA – DIGITAL STUDENT SERVICE
Our digital student administration system is also available to you 24/7 and offers additional information and services for students. Infoeduka is a unique student support system designed for simple access to personal information in order to easily apply for exams, to see your class schedule, study program calendar, exam dates, your grades and paper results, to enroll into a semester or a year, to download class materials, and to access online services such as forums and webmail.

It is a responsive system that works on all major platforms and resolutions, and it is also available as a free mobile application on Apple iOS and Android devices.

Head of Student Office
Ljiljana Buljan

Phone
00 385 1 5089 368

E-mail
student@algebra.hr

SPORTS & LEISURE

It is common knowledge and a scientifically proven fact that the lack of physical activity endangers human health. Insufficient physical activity and reduced stimulus to the locomotor system negatively reflect the normal functioning of all organs. Physical inactivity is the fourth leading factor in mortality in the world, while physically active persons have a significantly reduced risk of illness from various diseases*.

We invest a lot of effort in the quality of life and health of our students. One of our most important goals in recent years has been the introduction of Physical Education as a mandatory course in year one for all our bachelor programs. The most important objectives of the course are:

- Creating a habit of a healthy lifestyle with the aim of preserving and improving one's health,
- Meeting the basic human needs for movement, play and socialization,
- Acquiring positive attitude and habits of sport and regular exercise,
- Student training for independent and lifelong physical exercise.

Other than the programmed exercise in Physical Education classes, our students can join the organized sports sections and participate in the Zagreb University Sports Federation competitions. For all of them, there is an additional training period, as well as expert guidance and supervision, in order to be optimally prepared for the competitions.

To improve the quality and attractiveness of our study to a higher level, we organize and support the departure of our students to international university competitions such as: Elektrijada, Tehnologijada, University Games etc. Competitions in sports and scientific disciplines, give our students opportunities to make valuable contacts, exchange experiences with students from other faculties and universities, and have fun.

Head of Algebra Sports is responsible for organizing, implementing and controlling our sport recreational activities.

Algebra University College organizes sports games, skiing and active excursions for all our students with the purpose of socializing, entertaining and improving the quality of life of its students.

Head of Algebra Sports
Tin Petračić
Phone
00 385 1 2222 180
E-mail
sport.algebra@algebra.hr

*World Health Organization, 2017.

ACADEMIC PARTNERS / INITIATIVES

We are members of the most renowned academic IT initiatives, providing additional value to our students and proving quality of our work and commitment to excellence.

Microsoft Developer Network Academic Alliance (MSDN AA)

We have become involved with this program in order to improve and simplify studying for our students. It offers numerous advantages through DreamSpark, such as free official studying materials and latest software solutions.

Microsoft Imagine Academy

Microsoft Imagine Academy is a global IT educational program designed to help schools to ensure the success of its students and teachers. Access to the latest resources in education through Microsoft technologies makes it easy for teachers to prepare students for the labor market with an ever-increasing demand for Microsoft technologies.

CISCO Networking Academy

Cisco Networking Academy is an innovative global initiative that provides students with knowledge and skills in the field of information and communication technologies. It has been launched and supported by Cisco Systems.

IBM Academic Initiative

Within this program both our students and staff get access to advanced software and IBM development platforms as well as to all educational materials offered by IBM.

Oracle Academic Inititative

We have joined the program in its advanced version “Advanced Computer Science” in order to provide our students with access to the latest Oracle software, and also to implement a part of our curriculum through the use of official Oracle teaching materials specifically developed for academic instructions.

EMC² Academic Alliance

Through this partnership, our students receive the opportunity to introduce themselves to new trends in the field of information infrastructure development, especially in areas such as Big Data, Cloud Computing, Information and Storage Management and virtualization using EMC teaching materials.

Tableau Academic Program

Our Data Science and Digital marketing students and teachers are enabled to use Tableau Desktop for free.

Red Hat Academy

Red Hat® Academy turns academic institutions into centers for enterprise-ready talent by outfitting them with Red Hat Training. This comes in the form of hands-on instruction, curriculum, labs, performance-based testing, and instructor support.

Fortinet Network Security Academy (FNSA)

FNSA was created to address the international shortage of cybersecurity experts and to build a workforce skilled in all aspects of network security platform who will be recognized in the industry among an elite group of security professionals. Using provided Fortinet technology we support our System engineering students and programs.

VMware Academic Program (WMAP)

WMware Academic Program (VMAP) is a comprehensive software licensing program designed specifically for the global higher education community. The VMware Academic Program supports the use of virtualization applications in teaching and research. The program provides both desktop and infrastructure software for personal use, whether as part of STEM classes, in research projects, or for gaining hands-on experience with VMware products.

SAP University Alliances

Participation in the SAP program enables our students to work with cutting edge SAP technologies – SAP CRM and SAP Hybrids eCommerce.

Palo Alto Authorized Academy Centers

Palo Alto Networks Academy is a collaborative program between Palo Alto Networks and academic partners who implement next generation technologies in their studies and courses, making it available to students. The program allows students and professors to access Palo Alto technologies which enables the partners to prepare their students for exciting careers in rapidly advancing fields such as Cloud Computing or network and computer security.

HubSpot Academy

Algebra University College has a standing partnership with HubSpot Academy. Our students use HubSpot methodologies and tools on several courses and have access to a large database of educational materials as well as the HubSpot certification program.

UNIVERSITY-INDUSTRY COOPERATION

Career Center

Rely on expert advice.

Modern educational institutions in countries positioned at the top of the world's competitive scale provide a layered functional link between students and their careers, education, the economy, and the long-term national development strategy. This is a strategic commitment at the heart of Algebra University College's business model.

Building a career for every student or alumni is secured through the work of Career Center, which is the focal point of contact between students, the University College and employers. The Career Center is available from the moment the student considers studying at Algebra and even after completing it as the main point of information. While studying at Algebra University College, the Career Center has an advisory role for all areas of the student's needs: learning aids and support, expert psychological assistance, supplementary and additional teaching, planning and realization of professional practices, career counseling and counseling on further academic development, employment assistance and the development of additional skills. The Career Center is actively working to improve the quality of learning experience by supporting and motivating career-oriented students. These activities help the students to successfully deal with academic challenges, progress through the study and start building their career during student days.

Our mission is to provide services that enable students in undergraduate and/or graduate studies, and alumni for an effective transition from education to the labor market. We support students as they explore and further understand themselves and their career options, gain valuable experience, develop as professionals, and launch their post-graduation career plans.

THE ACTIVITIES OF CAREER CENTER:

Mentoring program
Professional Practices
Guest lectures / thematic workshops
Job shadowing
Career Talks
Career Academy

The primary task of our experts at the Career Center is to provide students with career support and counseling. This means that we are systematically working on strengthening competencies of our students which are important in the labor market. Career Center also helps students in contacting prospective employers through various activities, lectures, and mandatory as well as voluntary work placement.

Contact:
Head of Career Center
Martina Matejić
Phone
00 385 1 2222 180
E-mail
martina.matejic@algebra.hr

Economic Council

Algebra Economic Council is our link with the business and academic community that makes sure we appropriately understand and address the requirements of the labor market and the entire ecosystem. Algebra University College is committed to work hand in hand with all other stakeholders in favor of economic and social prosperity.

The Economic Council consists of a number of reputable individuals from the industry, public institutions, local authorities, academic communities and professional associations. The Council gathers on a regular basis to discuss most important policy and market topics, helping us to determine the strategic direction of our educational programs and institutional development. Chairperson of the Council is Professor Mario Kovač, PhD, from the Faculty of Electrical Engineering and Computing, University of Zagreb.

With such a strong collaboration link, we gain industry and society relevance and ensure that classes we teach provide necessary knowledge and skills required by the labor market. The Economic Council also helps us reflect upon the development of our programs, continuously improve quality, and raise standards in education.

Since there is a shortage of skilled IT professionals, very often our industry partners, represented through the Economic Council, offer and provide our students not only with diverse forms of internship and apprenticeship programs, but also with scholarships and employment opportunities.

In addition, with the support of the Economic Council we get access to industry leading experts, either from local partner companies or international corporations, who willingly team up with our resident faculty members, provide visiting lectures and specialized workshops, and lead collaboration and research projects.

Check out the members of our Economic Council and learn more:
www.algebra.hr/visoko-uciliste/en/about-us/economic-council/

A WORD FROM OUR PARTNERS

Plamenko Barišić,
CEO of KING ICT

"Our current experience with employment of Algebra students is excellent. Everything they stated during the employment phase related to their knowledge and skills they quickly demonstrated in practice, which is rare nowadays."

Zoran Šimunić, PhD
Senior Executive Officer
Privredna banka Zagreb

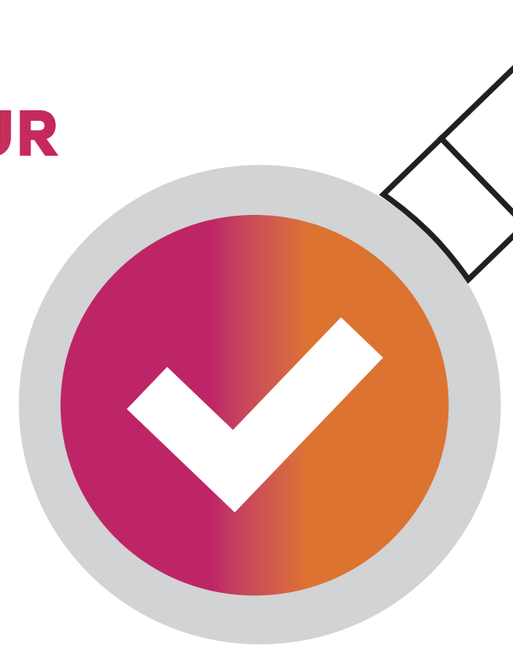
"The most crucial part is bringing our students, potential employees in business processes before and after graduation. In doing so, we provide them with additional specific knowledge in areas where they will work later, and this model has proven to be mutually beneficial."

Assistant Professor,
Darko Huljenić, PhD
Manager for Technological and Scientific Activities - Ericsson Nikola Tesla

"A number of collaborative programs, involving various forms of practical work, help students gain valuable experience in the technology sector during their studies by working on concrete projects. What is particularly important for students who have completed their studies at Algebra University College is that after graduation they already have valuable industrial certificates."

COMPANIES WHICH EDUCATE THEIR EMPLOYEES AT OUR INSTITUTION

Co-operation with leading companies is completely bidirectional. On one hand, it provides our students with the chance of getting hired by one of these companies, while on the other the companies educate their specialists / employees in one of our programs.



Algebra LAB

Algebra LAB is an interdisciplinary community whose ambition is to utilize the best that digital technology has to offer, in order to boost human innovation. Ours is a proven track record of accelerating technological transfer from science labs and classrooms into the sphere of business and social value.

Algebra LAB is an open innovation lab – a meeting place for all the key elements needed for successful innovations, a place where applied research, entrepreneurial education and mentors come together. They form a network of professional contacts, top experts of different profiles (from artists to scientists, business professionals and engineers), thus forming a close-knit web for knowledge dissemination and a unique shared space that supports continuous flow and exchange of ideas.

Our competencies, proven expertise and experience, serve the transformation of scientific research and digital technologies into business opportunities. Algebra LAB experts combine sector expertise, technological competence and top-level business practices to create new and effective business solutions for different challenges of the digital age.

We offer attractive educational modules and incubation programs for entrepreneurs and start-up projects, research & development opportunities for investors, as well as for the private and public sector. As such, Algebra LAB is an ideal partner for all constituents of public and private sector, who are interested in innovative approaches to developing products, services and business processes. As such, in 2018 we have been listed by the European Commission as a fully operational Digital Innovation Hub on their Smart Specialisation Platform.

In 2018 Algebra LAB incorporated the Zagreb entrepreneurship incubator (ZIP) together with their network of mentors and upgraded the incubator program. At Algebra LAB we have incubated the 11th generation of young entrepreneurs, while in total over 70 startups have emerged from our program. We present you with a small fraction of our teams and their business ideas, many of whom are Algebra's own students.

FLOORNAP – web platform for cheap accommodation opportunities

SMARTWAITER – digital platform for placing orders in restaurants and cafes

SMARTSTOP – IoT solution for public transportation

JAYONE – digital platform for all users of Summer Work and Travel Program (J-1)

KIDCOIN – web platform for children's savings in virtual currency

By supporting our students in developing their high-tech ideas into marketable products, and giving them the necessary toolset of skills and capabilities to set up an actual business, we strive to demonstrate to the wider business community that all necessary elements of a successful business ecosystem can indeed be found in one place – at Algebra LAB. We annually organize around 100 events (conferences and meetups) aimed at startup communities and anyone interested in the Croatian and regional innovation ecosystems.

We are particularly proud of our achievements in the field of data science. Our researchers' expertise includes a wide range of methods, technology and projects related to data science and data economy. In this area our researchers implemented numerous business projects including churn management models, customer lifetime management models, cost allocation and management systems, advanced visualization and data science/big data architecture services. Areas/industries of expertise include labor market analysis, VET implementation, NSI support (dissemination databases, advanced visualization and data monetization scenarios), while clients range from domestic to international, from SMEs to corporations, including governments and government institutions.

We are very active and successful in applying for the EU-funded projects. The following is the list of our successful project applications in the last two years.

1 KNOWING IPR (INTERREG DANUBE TRANSNATIONAL PROGRAMME)

The project aims to improve framework conditions for innovation in the Danube region by developing a transnational KnowING IPR platform, which will provide an open access tool for advanced intellectual property rights analysis and guidelines for improved and harmonized IPR policy framework across the Danube region.

2 ATRIUM OF KNOWLEDGE

The aim of the project is to enhance the research, development and innovation capacities of our project partner, University of Karlovac, in the area of food technologies.

3 ACADEMY ON THE WALK

The aim of the project is to enhance entrepreneurship potential of students of our project-partner, The Academy of Visual Arts. The secondary aim of the project is to create a digital archive that will become a data base for all students and stakeholders in the sector of creative industries in Croatia.

4 NEW ENTREPRENEURSHIP INCUBATOR

The goal of the project is to develop new mentorship possibilities for startups and SMEs. Focus is on SMEs active in devising software and engineering solutions. We connect them with corporations, to give them an opportunity of testing their business solutions, as well as with students, who bring in fresh perspectives.

5 APPLIED DATA SCIENCE EDUCATIONAL ECOSYSTEM (ADSEE) – ERASMUS+

The main objective of the project is to deliver a new educational and training program in data science (DS) through development of educational modules, adaption of contents and methods according to envisaged needs of the target groups, creation of interactive didactic tools and production of guidelines and recommendations on innovative education approaches in DS. Special attention will be paid to data science in non-technical universities.

6 DIGITAL INNOVATION HUB FOR CLOUD BASED SERVICES – ERASMUS+

The goal of this project is to develop a European-wide, transnational, interconnected development service model and network based on cloud and mobile technologies (4G/5G). There will be five digital innovation hubs created for cloud based services on different locations in Europe. These hubs will be learning and development environments to VET students as well as development service environment for companies to renew their future views, the knowhow, skills and the digital service creation.

If your goal is to make a difference by leveraging the full potential of digital technologies in answering social or business challenges, Algebra LAB is THE place for you to be!

INTERNATIONAL COOPERATION

The International Office, supports international cooperation through joint development projects and active work within the framework of European and world initiatives that contribute to the development of economy and education.

It also provides support for student and teacher exchanges alike and it encourages work placement abroad. We believe that through international cooperation and exchange of knowledge and experience with top foreign institutions, as well as through constant building and improvement of our internal resources, we can successfully build an internationally comparable educational institution that will truly represent a competitive advantage for the national economy on European and global markets.

In order to provide our students with high quality education and improvement, as well as wellbeing of wider social community, we organize many activities for our students, teachers and employees, but also for international students and experts who share our values and vision.

GO GLOBAL

Erasmus+

Algebra University College is the holder of the ERASMUS + University Charter. Erasmus + is the program of the European Union for Education, Training, Youth and Sports for the period 2014-2020 which, among other things, financially supports mobility of students, teachers, researches and other non-academic staff.

Erasmus+ provides students with the possibility of study visit or traineeship at European (and many non-European) host institutions. Algebra University College has signed Erasmus agreements with more than 70 educational institutions where our students can stay, including the oldest and largest universities across Europe, and has prepared additional financial benefits for students who decide to study abroad to experience studying at a foreign university.

Besides universities with whom we cooperate through Erasmus+ program, we currently cooperate with more than 20 overseas universities in parts of the world not currently covered by Erasmus. Due to the agreements, all our students (including international) could also benefit from student exchange programs or work placement in some of our overseas university partners or with overseas employers.

We hold the ERASMUS+ University Charter for the period 2014 – 2020.

What Erasmus+ Students Say About Their Experience

What motivated you to participate in Erasmus+ mobility program?

Nikoleta: I was motivated to return to Croatia for the second time because I loved my first Erasmus+ experience here and I wanted more of it (meet new people, learn things that make people say: “Oh wow, are you really studying that?’, explore the country, be charged with innovation spirit and of course open new doors.

Baraa: Taking responsibility by living on my own and managing to do that successfully. Also to get introduced to new ways of learning and different cultures.

Barnabas: I had already heard a bunch of good things about Erasmus mobility program, before I applied for it. I had no reason not to be a part of this journey. I could live abroad in my chosen country and study there. Get to know that country. Its culture, history, language, famous tourist points or not so famous hidden spots. Meet new people from around the world and live through days and nights with them. I even get an Erasmus grant to experience all of this? Come on!

Is this the first time you are living on your own in a foreign country? What is the experience like?

Barnabas: Yes, and this is my first time living without my parents. I moved out of my comfort zone. I am finally taking care of my everyday life. I have become more independent. It is not hard to live in a foreign country I just had to get used to it. I am enjoying it but I am also eager to return home.

Markus: It’s my first time abroad in a long time. At first it was hard to find everything but after a few days I felt right at home.

Nikoleta: It’s my second time in the first foreign country I lived in thanks to student exchange. I could write a whole book about it, especially after the knowledge I gained from the last semester and life situations I experienced. Now, when I spend more time here locals are more comfortable to talk with me, my language skills have improved tremendously, the friendships that I have built will last, the food I tried was super-delicious and there are way too many similarities I have found here. The experience is amazing but unique for everyone, it really depends on what you are looking for.

What do you like about studying at Algebra?

Markus: All professors are very practical and since they are also working in the field, they are up to date with the latest trends and technology, which is very important in media-focused courses.

Barnabas: Experienced, fresh, active teachers, who are friendly and always open for discussion. The up-to-date schedule at the entrance, so I could always find where my classes are. Classrooms that are easy to find. The clean environment. The flexibility, for example, if there is a computer malfunction, then you can switch to a different computer, because there are always free ones, and the maintenance guy comes right in, fixing the problematic computer.

Baraa: The whole experience is amazing, the staff, the courses and the equipment.
Nikoleta: I loved it all and that’s the reason I came back again for my master’s degree. :)

What kind of support during your mobility period did you receive from staff at Algebra?

Nikoleta: Every single kind I needed and I asked for! The staff are amazing – from polite cleaning staff to the international office coordinators, professors and assistants with great understanding and passion, to everyone else I met. Atmosphere was formal but casual and open as well, I can’t explain it in few words only.

Markus: The International Office helped me greatly by providing all the documents necessary for state funding, and with other questions in general.

How did Erasmus+ influence you from a personal and professional aspect?

Baraa: It has widened my horizons and made me change my mind about higher education in a way. On a personal level, it has changed the way I deal with stuff on a daily basis and I also learnt cooking!

Markus: I feel more prepared when interacting and understanding people from other countries and dealing with environments that I haven’t experienced before.

Nikoleta: From the personal aspect, it influenced me in a very positive way when it comes to meeting new and interesting people (love, friends, colleagues) and from the professional aspect, I would say it taught me important lessons and gave me keys to doors that I can knock on anytime.

Barnabas: It made me more independent and confident. I made friends from different countries and it seems like we will visit each other. I learnt more about Java programming, networking, 3D modelling, video editing. And got to know Zagreb, and Croatia.

What are other benefits of taking part in Erasmus+ mobility programme?

Baraa: Making friends for life, from various backgrounds and cultures and having the time of your life.

Markus: I made a lot of friends from all over the world, I met Croatian people and learned a lot about Zagreb and all the other beautiful places in Croatia.

Nikoleta: Learning about the history of the country, languages, being closer to entrepreneurial spirit, witnessing innovations that are surrounding Croatian people, learning from lifestyles they have, hospitality they offer, meeting people from all around the world, learning about different traditions, having the opportunity to learn more about yourself and others.

What advice would you give to students who want to take part in Erasmus+ mobility program?

Baraa: DO IT.

Markus: Always be open towards new people and new places. The world is like a book, if you only stay in one place, you will only read one page.

Nikoleta: Be open for everything, socialize and enjoy most of your time, ask questions, enjoy food but exercise as well, be polite, be informed, learn how to manage your time and money so you can have great time without worrying. Prepare yourself mentally and remind yourself why you are away from home and what your goals are.

Barnabas: Look for ESN and visit their events. Consider buying a bicycle if the city where you go is not so big. Google all information about the place you are going to. Don’t spend all your money in the first month.

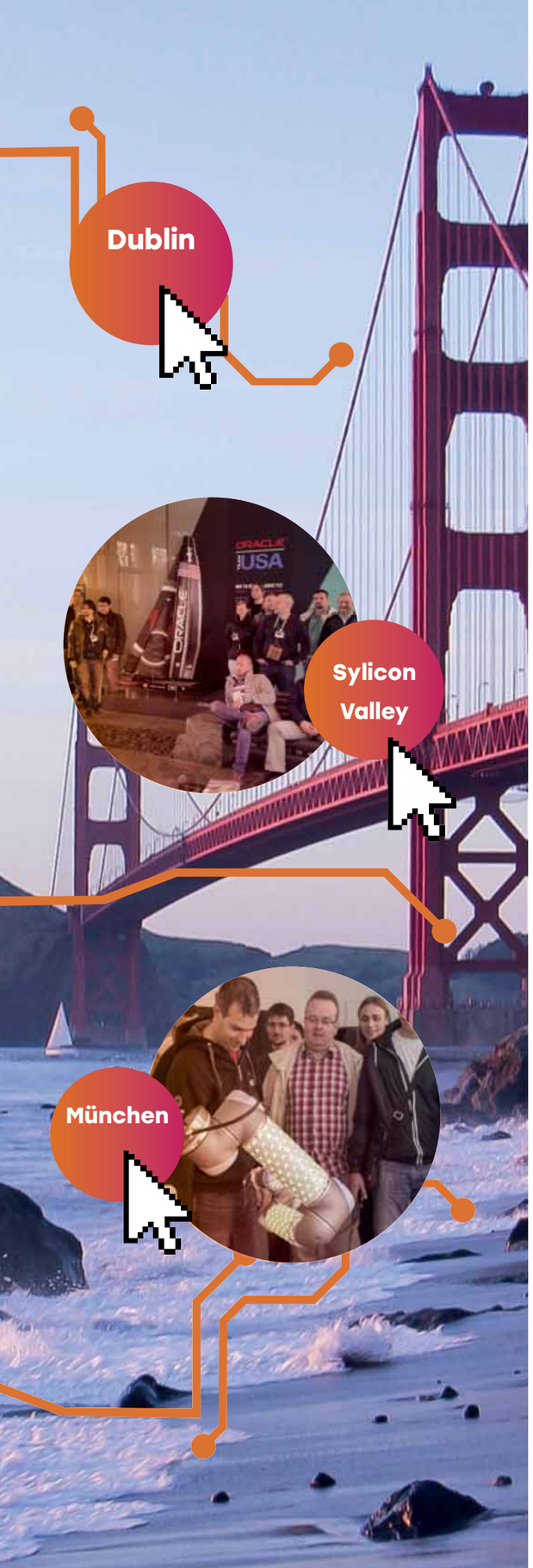
Did Erasmus+ at Algebra meet your expectations?

Markus: Yes, it exceeded my expectations.

Nikoleta: I would say it even exceeded them in some aspects.

Baraa: And more.

Barnabas: I would recommend it to everybody.



INTERNATIONAL STUDY TRIPS

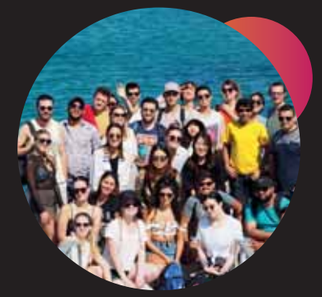
The ultimate immersive experience to learn, discover and grow!

Learning does not end in the classroom, it merely begins there. We design student study trips to stimulate all the senses with a mix of learning, attractions, activities, plus unique and tailor-made experiences. In a climate in which youth are susceptible to confusing and sometimes misleading information, a quality international experience provides the grounding and perspective that can help develop thoughtful young global citizens.

Each year we take a fancy trip abroad. So far, we've stolen gold from the leprechauns in Dublin, visited Amazon and LinkedIn headquarters, attended start-up competition at the Trinity College, missed the Oktoberfest in Munich by a second, observed start-ups...well, start-up characteristics in Silicon Valley and put the stay in What Happens in Vegas, Stays in Vegas. Legendary Harvard, Stanford, Berkeley, and MIT universities, as well as IBM Watson research center, are just some of the locations our students could cross from their bucket lists. A unique chance to experience newest trends firsthand, listen to the lectures of world-renowned experts and return home armed with new knowledge and skills.

Seriously, though, once each year you will have an opportunity to spend some time abroad and visit the best universities, development centers and companies.

INTERNATIONAL SCHOOL



Algebra University College has been organizing International Winter and Summer School programs for the past 3 years with the aim of introducing students to the quality of our study programs and all the wonders Croatia has to offer. Students from all over the world participated in various STEAM oriented programs that prepared them for their future careers and encouraged their creativity while spending their free time meeting new people from every corner of the world and exploring Croatia. Our International School programs are organized, in a way, to offer our students an excellent balance of work & play.

Our courses are designed to be both applicable, creative and suitable for students from all backgrounds so don't get discouraged if you are just introducing yourself to the world of digitalization, we have something for everyone! Not only will you have a chance to meet likeminded individuals and future colleagues from all over the world, but you can do that while earning credits and helping your future career. Furthermore, you get to study a field of your interest while exploring Croatia and getting to know its people and culture. Young people around the globe already confirmed the quality of our professional curriculum and collected a lot of wonderful memories through studying, spending time together and traveling within organized field trips around Croatia! Our summer program is in July and lasts for 3 weeks during which you have classes in 2 Croatian cities.

We want you to experience Croatia fully, so having your courses for a week in one of Croatia's beautiful cities on the Adriatic coasts and 2 weeks in its vibrant capital is a must! The winter program starts in January with 3 weeks of classes in the country's capital – Zagreb. Beside field trips to the Croatian coast, the students visit Croatian companies from their field of interest and have a chance to see firsthand how they can apply the skills and knowledge obtained during the program in real life. Don't miss a chance to become a part of an invaluable summer or winter experience where you will have an opportunity to meet young people from all over the world, learn something new and experience Croatia's way of life! We provide our students with quality and efficiency of teaching, great programs, great teachers and the best experience in Croatia during their stay. International and local students can participate in winter or summer courses apart from studying at Algebra University College. Learn more at www.algebra.hr/international-school/ and join us!

www.algebra.university

EXCEL AT WHAT YOU LOVE DOING. LIGHT THE SPARK.

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