



University of
Zagreb



STUDY ENGINEERING
IN ENGLISH LANGUAGE
at the UNIVERSITY OF ZAGREB, CROATIA
UNDERGRADUATE STUDY PROGRAMME

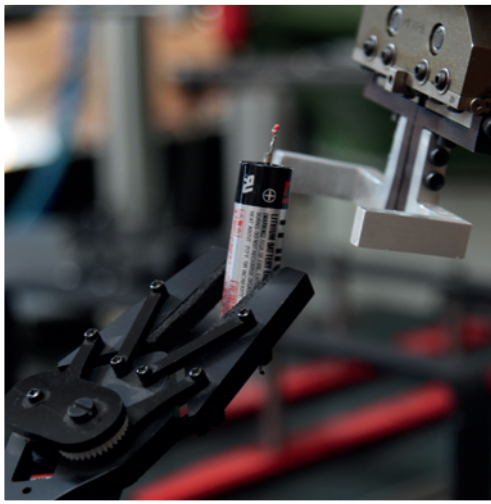
STUDY PROGRAMME IN ENGINEERING

The course aims at prospective students who seek a broad and methodical technical education without committing themselves to one of the classical engineering disciplines at the beginning of their studies.

The course addresses prospective students who aspire to become professionals at the multidisciplinary intersections of different fields of engineering or in newly emerging disciplines.

Examples include electrical engineering and information technology, mechanical engineering, mechatronics, process engineering or material sciences to name only a few. Students may design their curriculum in the second and third year of study by choosing courses from a broad spectrum of elective courses. The focus set on mathematics and natural sciences in the first year goes far beyond that of classical engineering courses, while at the same time theory and practical elements are well-balanced within the curriculum. The engineering fundamentals are enriched in the third year with deepening orientation courses selected by the student.

The Undergraduate Study Programme in Engineering in English language is offered as an interdisciplinary study programme (180 ECTS).



DEGREE

Courses taught at the Study of Engineering in English are designed to meet the specific needs of prospective engineers with the aim of acquiring broad knowledge and a variety of skills which are indispensable to their future vocation. Upon graduation, students are awarded the degree of Bachelor of Engineering.

DURATION

The course of the study of engineering lasts **three years, which is a typical length of Bachelor study in countries of the European Union** and most other European countries.

Likewise, **students can continue their studies in one of the classical master programmes offered at the University of Zagreb** (e.g. electrical engineering and information technology, mechanical engineering, civil engineering, process engineering, chemical engineering, mining, geology or petroleum engineering). The bachelor course of Engineering will give students a very broad base in many engineering fields, without preference to one specific field or engineering practice.

OUR MISSION

Our mission is **to provide inventive, inclusive, interdisciplinary and international engineering education delivering meaningful and memorable learning experiences** based on academic experience and cutting-edge research.

OUR VISION

To future graduated engineers Study of Engineering will:

- **provide knowledge** to support the critical role of engineering in societal and global development,
- **improve** the synergistic role of interdisciplinary, research, education and practice,
- **promote** the value of sustainable engineering.

CURRICULUM

The organogram shows the organisational structure of the Undergraduate Study Programme in Engineering at the University of Zagreb. Interdisciplinary teaching is formulated on the research outcomes of the technical faculties of the University of Zagreb. The curriculum offers 30 credit points per semester.



Year 1 Science Fundamentals		Year 2 Engineering Fundamentals		Year 3 Engineering Orientation	
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Math Physics Chemistry IT Mechanics 30 ECTS	Math Materials Sociology Strength of Materials Electr. Eng 30 ECTS	Probability & Statistics Thermodynamics Product Develop. 15 ECTS + Elective Courses 15 ECTS	Energy Technology Fluid Mechanics 15 ECTS + Elective Courses 15 ECTS	Elective Courses 30 ECTS	Elective Courses 15 ECTS Bachelor Thesis 15 ECTS

APPLICATION

You may apply online at:

engineering.unizg.hr/engineering/admission/on-line_application



APPLICATION STEPS

1. Fill in the on-line application form
2. Send required documents by post
3. Acceptance results
4. Payment (if accepted)
5. Enrolment (if accepted)

ADMISSION REQUIREMENTS

Your certificate of aptitude for higher education (final secondary school leaving certificate, etc.).

Evaluation of secondary school grades (overall average over the continuum of all years of secondary school education comprising all the grades and the final exam, together with a specific evaluation of grades in Maths, Chemistry and Physics).

Motivation Letter.

Interview with the Admission Board in Zagreb.

Candidates who are neither native speakers of English nor have graduated from an English- language secondary school or college are advised to take an **internationally recognised English language proficiency test** (TOEFL, IELTS or equivalent).

The Admission Board may consider **late applications** submitted in July or August, depending upon **the quality of the current applicant pool and the number of vacancies available.**

The academic year **starts on the first Monday in October** and lasts until the end of July.

The tuition fee is EUR 5,900 per year.



ACADEMIC CALENDAR

ACADEMIC YEAR From October 1 until September 30

January - May	INDICATION OF INTEREST by email
June - July	APPLICATION
August	ENROLMENT
October - February	WINTER SEMESTER Teaching period
February	WINTER EXAMINATION PERIOD No classes
March - June	SUMMER SEMESTER Teaching period
July	SUMMER EXAMINATION PERIOD No classes

Actual dates are available at:
http://engineering.unizg.hr/engineering/course/academic_information

APPLICATION DEADLINE July

FACULTIES PARTICIPATING IN THE STUDY PROGRAMME IN ENGINEERING

The Undergraduate Study Programme in Engineering is conducted by the following faculties of the University of Zagreb:

- Faculty of Electrical Engineering and Computing
- Faculty of Chemical Engineering and Technology
- Faculty of Mechanical Engineering and Naval Architecture
- Faculty of Civil Engineering
- Faculty of Mining, Geology and Petroleum Engineering



COURSES

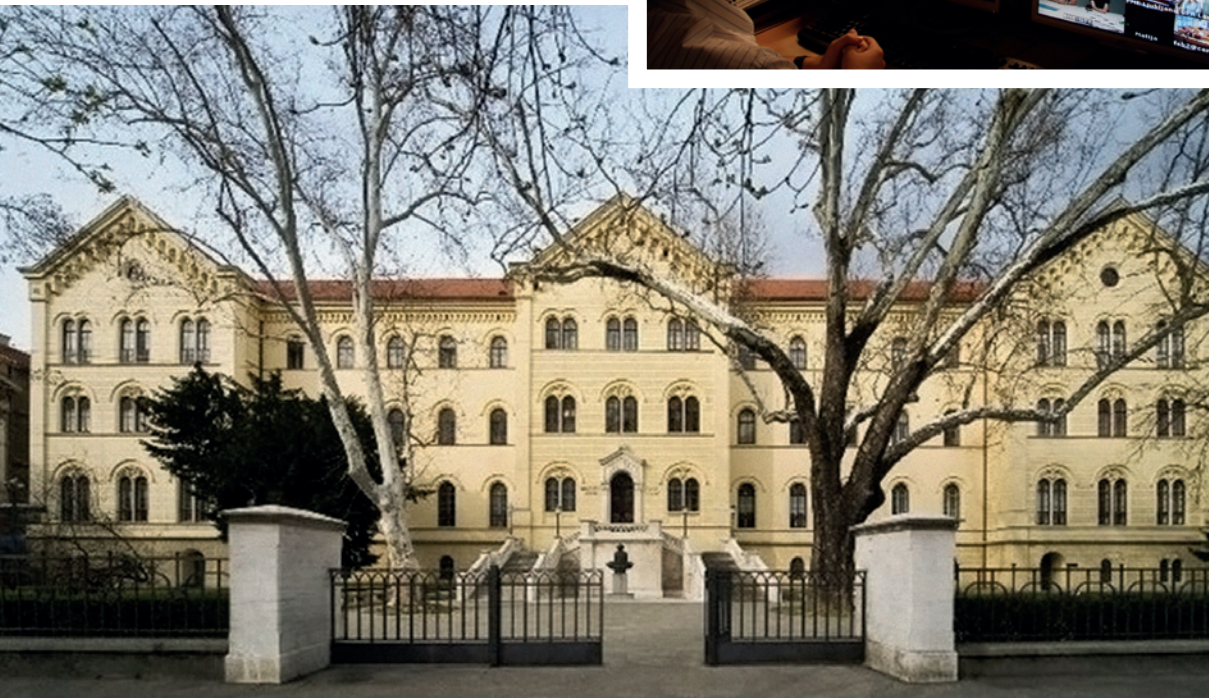
Course	ECTS	Semester workload	Semester
1 SEMESTER			
Applied Chemistry	5	5	1
Mathematics 1	8	7	1
Mechanics 1	5	4	1
Physics	7	5	1
Programming	5	4	1
2 SEMESTER			
Fundamentals of Electrical Engineering	7	5	2
Introduction to materials	5	4	2
Mathematics 2	8	7	2
Sociology of Work and Professional Ethics	5	3	2
Strength of Materials	5	4	2
3 SEMESTER			
Probability and Statistics	7	7	3
Product Development	5	4	3
Thermodynamics	8	6	3
ELECTIVE - TECHNICAL Number of ECTS credits to select: at least 10			
Applied Geophysics	5	4	3
Computer Aided Design	5	4	3
Electronics	5	4	3
Fundamentals of Engineering Structures	5	4	3
Manufacturing Technology	5	4	3
Mechanics 2	5	4	3
Physical and Historical Geology	5	4	3
4 SEMESTER			
Energy Technology	7	5	4
Fluid Mechanics	8	6	4
ELECTIVE - TECHNICAL Number of ECTS credits to select: at least 10			
Concrete Technology	5	4	4
Design of Machine Elements	5	4	4
Hydraulics and Hydrology	5	4	4
Mass and Energy Balances	5	4	4
Mineralogy and Petrology	5	4	4
Rock and Soil Mechanics	5	4	4
Structural Elements Calculation Basis	5	4	4
Transport Phenomena	5	4	4
ELECTIVE - NON TECHNICAL Number of ECTS credits to select: at least 5			
Entrepreneurship	5	4	4
Management in Engineering	5	4	4
Organic Chemistry	5	4	4
5 SEMESTER			
Elective - technical Number of ECTS credits to select: at least 25			
Automatic Control	5	4	5
Blasting	5	4	5
Ceramics Engineering	5	4	5
Communication Systems	5	4	5
Drilling and Well Completion	5	4	5
Engineering Geology	5	4	5
Exploitation and Mineral Processing	5	4	5
Hydraulic Engineering Structures	5	4	5
Hydrogeology	5	4	5
Mechatronics	5	4	5
Petroleum Geology	5	4	5
Petroleum Production Engineering	5	4	5
Petroleum Reservoir Engineering	5	4	5
Polymer Engineering	5	4	5
Railways	5	4	5
Roads	5	4	5
Separation Processes	5	4	5
Signals and Systems	5	4	5
Elective - non technical Number of ECTS credits to select: at least 5			
Biochemical engineering	5	4	5
Project Management	5	5	5
6 SEMESTER			
Undergraduate Thesis	15	12	6
ELECTIVE - TECHNICAL Number of ECTS credits to select: at least 10			
Chemical Engineering Thermodynamics	5	4	6
Databases	5	4	6
Electromechanical Systems	5	4	6

Electronic Measurements and Instrumentation	5	4	6
Energy efficiency of buildings	5	4	6
Energy Management	5	4	6
Innovation and Product Life Issues	5	4	6
Petroleum refining and petrochemical processes	5	4	6
Robotics	5	4	6
Sustainable construction	5	4	6
ELECTIVE - NON TECHNICAL			
Number of ECTS credits to select: at least 5			
Engineering Legislation and Contracting	5	4	6
Industrial Design	5	4	6
Principles of Green Technology	5	4	6

STUDYING IN ZAGREB

The University of Zagreb provides a number of student services. Please contact the International Relations Office for further information.

Student services consist of different information and advice centres / offices for issues concerning studies and student life at the University of Zagreb. Services include the International Relations Office, the University Computing Centre, the Office for students with disabilities and many more. They are dispersed all around the University, and some faculties have their own services.



UNIVERSITY OF ZAGREB

The University of Zagreb (1669) is the oldest and biggest university in South-Eastern Europe. Ever since its foundation, the University has been continually growing and developing and now consists of 29 faculties, three art academies and the Centre for Croatian Studies.

With its comprehensive programmes and over 50,000 full-time undergraduate and postgraduate students the University is the strongest teaching institution in Croatia. It offers a wide range of academic degree courses leading to Bachelor's, Master's and Doctoral degrees in the following fields: Arts, Biomedicine, Biotechnology, Engineering, Humanities, Natural and Social Sciences. It is also a strongly research-oriented institution, contributing with over 50 percent to the total research output of the country.

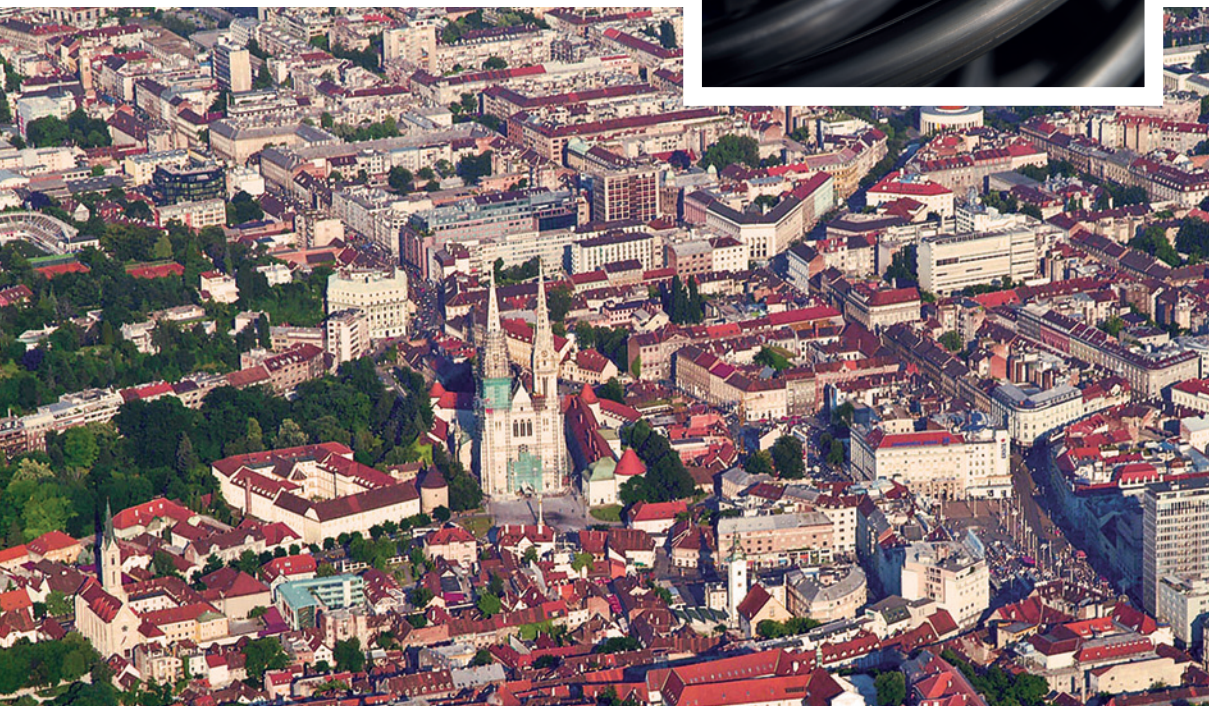
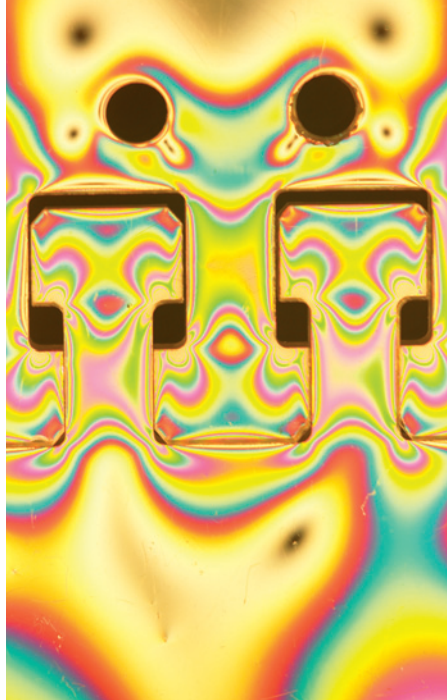
ZAGREB

Welcome to Zagreb, the capital of the Republic of Croatia! Zagreb is an old Central European city. Throughout the centuries, it developed into a rich cultural and scientific center and an important trade and business destination.

In 1991, when the Croatian people won their independence and statehood, Zagreb became the nation's capital, the political and administrative center of the Republic of Croatia. Zagreb, the largest city in Croatia, is also the commercial, business and university center. The city abounds in cultural and artistic events and offers all kinds of entertainment. It is a community which vibrates with the energy you would expect from a major city, but at the same time, it has retained a characteristic flavour of old Central European towns.

Zagreb offers to its guests the baroque atmosphere of the Old (Upper) Town, picturesque open markets, various shops and a great choice of craftsmen's products, together with a delicious and unique national cuisine. Zagreb is a city of numerous and spacious green parks and promenades, while many resorts, archaeological sites and medieval towns and castles may be found in the beautiful surrounding countryside.

For the first time in its rich history, Zagreb entered the third millennium with more than a million inhabitants. Despite the rapid growth of its economy and traffic, it has preserved its unique beauty and easy-going and relaxed atmosphere, making it truly a city on a human scale.



CONTACT INFORMATION

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