



UNIVERSITY OF ZAGREB  
SCHOOL OF MEDICINE

A large, dark bronze statue of a person wearing a hood, looking down at their hands. The statue is positioned in the foreground, partially obscuring the entrance to the building.

INFORMATION  
PACKAGE  
2023/24.

UNIVERSITET U ZAGREBU MEDICINSKI FAKULTET

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# 1. UNIVERSITY OF ZAGREB

## 1.1. Basic information about the University of Zagreb

The University of Zagreb currently comprises a total of 31 faculties and three art academies, one interdisciplinary study, one university center, as well as the University Computing Center and university centers in Zagreb, Sisak, and Varaždin.

More than 50,000 students are enrolled in study programs covering biotechnical, biomedical, social-humanistic, natural sciences, technical, and artistic fields. Comprehensive data is available on the University's website <http://www.unizg.hr>

(source: [http://www.unizg.hr/en/about\\_the\\_university/history](http://www.unizg.hr/en/about_the_university/history))

Enrollment and graduation statistics provide compelling evidence of the quality, recognition, and appeal of the study programs offered by the University of Zagreb.

### The structure and organization

As one of the largest and most dynamic universities in the region, the University of Zagreb has a diverse structure consisting of numerous faculties and art academies. The university offers over 350 study programs in the fields of natural sciences, technical sciences, medical sciences, biotechnical sciences, social sciences, humanities, arts, and interdisciplinary areas.

The organization of the university is decentralized, with each faculty and art academy possessing autonomy while also collaborating and operating within the framework of the university as a whole.

## 1.3. Collaboration and partnerships

The University of Zagreb has a rich network of collaborations with numerous domestic and international institutions. Partnerships involve student and staff exchanges, joint research projects, conferences, workshops, and symposia. The university is actively engaged in various international programs, including the Erasmus+ program for student and staff mobility.

These collaborations provide students, faculty, and researchers with opportunities to expand their knowledge and skills, as well as to connect with the international academic community. Involvement in international programs and networks also contributes to the global reputation of the University.

## 1.4. Study programs and research

The University of Zagreb offers a wide range of study programs at the undergraduate, graduate, and doctoral levels, including numerous interdisciplinary programs. Additionally, the university provides a variety of postgraduate specialist and professional study programs.

Research activities at the university are diverse and innovative, encompassing everything from fundamental scientific research to applied projects in collaboration with industrial partners. The university hosts a number of research centers and laboratories, where advanced research is conducted across various scientific disciplines.

## 1.5. Student Life

The University of Zagreb offers a vibrant student life with numerous student clubs, organizations, and events. Students can participate in sports activities, cultural events, volunteer programs, and other extracurricular activities. The university campus provides various facilities for students, including libraries, sports facilities, dining halls, and student dormitories.

Engaging in student life allows students to develop skills beyond the classroom, make new friendships, and experience the richness of university life

## 1.6. Conclusion

The University of Zagreb is more than a place of learning. It is a nexus where science, culture, innovation, and ambitions converge. As the central hub of the academic community in Croatia, the university plays a crucial role in shaping the future of the country and beyond. Through its diverse programs, research endeavors, and rich student life, the university continues its mission of shaping new generations of leaders, scientists, artists, and innovators.

## 1.7. Contact information for the University of Zagreb:

Address: Trg Republike Hrvatske 14, 10000 Zagreb, Croatia

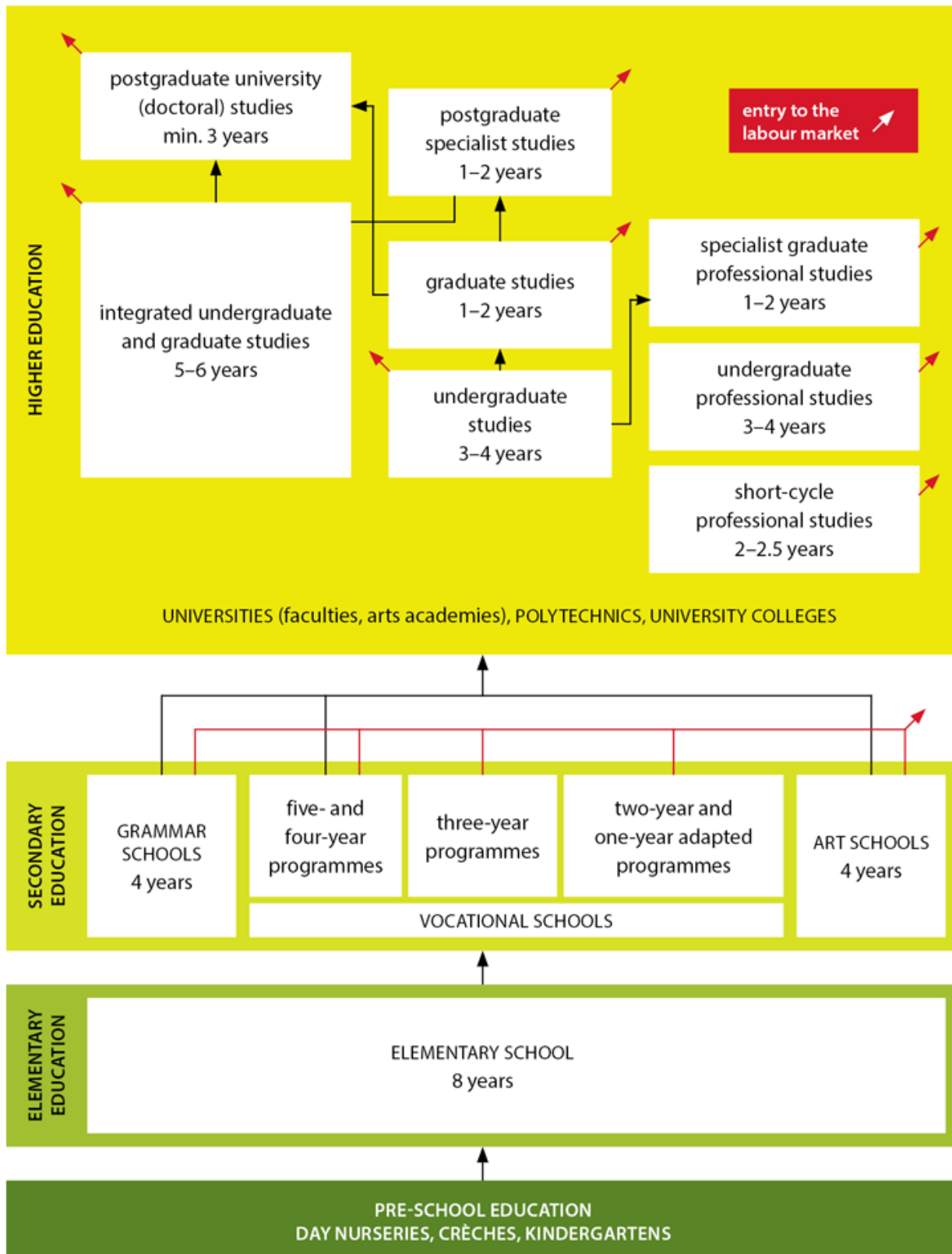
Phone: +385 1 4564 111

Fax: +385 1 4830 602

Website: [unizg.hr](http://unizg.hr)

Email: [unizginfo@unizg.hr](mailto:unizginfo@unizg.hr)

## 1.8. Different Categories of Studies in Croatia



## 1.9. Academic calendar

The academic calendar is a foundational document that provides an overview of all key activities within the academic year. At the University of Zagreb, the Senate is responsible for compiling the academic calendar. The Senate establishes a standardized course of instruction and other activities across all university units, taking into account key dates crucial for the functioning of university bodies.

On the other hand, at the University of Zagreb School of Medicine, the Faculty Council is the body responsible for creating the academic calendar. For each academic year, the calendar is publicly available on the School of Medicine's website.

## UNIVERSITY CALENDAR FOR THE 355th ACADEMIC YEAR (2023./2024.)

OCTOBER 2023.						
P	U	S	Č	P	S	N
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

2. Start of classes in the winter semester \*

10. Regular (1st) Senate Meeting

12. *Veni Sancte Spiritus*

NOVEMBER 2023.						
P	U	S	Č	P	S	N
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

1. ALL SAINTS' DAY

3. Ceremonial Session of the Senate

*DIES ACADEMICUS*

14. Regular (2nd) Senate Session

18. DAY OF REMEMBRANCE FOR THE VICTIMS OF

THE HOMELAND WAR AND DAY OF

REMEMBRANCE FOR THE VICTIMS OF VUKOVAR

AND ŠKABRNJA

9. - 11. INSPECTION OF THE UNIVERSITY OF ZAGREB

DECEMBER 2023.						
P	U	S	Č	P	S	N
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

12. Regular (3rd) Senate Session

25. CHRISTMAS

26. SAINT STEPHEN

27 - 31. CHRISTMAS AND NEW YEAR HOLIDAYS

JANUARY 2024.						
P	U	S	Č	P	S	N
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

1. NEW YEAR'S EVE

2. - 5. CHRISTMAS AND NEW YEAR HOLIDAYS

6. HOLY THREE KINGS

9. Regular (4th) Senate Session

Session

26. End of classes in the winter semester

30. Start of the winter exam period

FEBRUARY 2024.						
P	U	S	Č	P	S	N
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29			

13. Regular (5th) Senate Session

23. End of winter exam period

26. Start of classes in summer semester

MARCH 2024.						
P	U	S	Č	P	S	N
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

12. Regular (6th) Senate Session

31. EASTER

APRIL 2024.						
P	U	S	Č	P	S	N
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

1. EASTER MONDAY

9. Regular (7th) Senate Session

MAY 2024.						
P	U	S	Č	P	S	N
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

1. LABOUR DAY

14. Regular (8th) Senate Session

30. STATEHOOD DAY

30. FEAST OF CORPUS CHRISTI

JUNE 2024.						
P	U	S	Č	P	S	N
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

7. End of class in the summer semester

10. Start of the summer exam period

11. Regular (9th) Senate Session

12. *TE DEUM*

22. ANTI-FASCIST STRUGGLE DAY

JULY 2024.						
P	U	S	Č	P	S	N
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

9. Regular (10th) Senate Session

12. End of summer exam period

AUGUST 2024.						
P	U	S	Č	P	S	N
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

5. VICTORY DAY

15. ASSUMPTION OF MARY

26. Start of the autumn exam period

SEPTEMBER						
P	U	S	Č	P	S	N
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

10. Regular (11th) Senate Session

27. End of autumn exam period

KEY:							
	PUBLIC HOLIDAYS		Regular Senata Sessions		CHRISTMAS AND NEW YEAR HOLIDAYS		WINTER EXAM PERIOD
	SUNDAY		INSPECTION OF THE UNIVERSITY OF ZAGREB		CLASS IN SUMMER SEMESTER		AUTUMN EXAM PERIOD
					CLASS IN WINTER SEMESTER		SUMMER EXAM PERIOD

## Recognition of qualifications depends on the type of education:

When it comes to secondary education:

- Qualifications from general, gymnasium, and arts programs are recognized by the Agency for Education.
- For vocational programs, the Agency for Vocational Education and Adult Education is competent.

For higher education qualifications and study periods:

- If the purpose is further education in Croatia, recognition falls under the jurisdiction of the universities.
- If the goal is employment, the Agency for Science and Higher Education, specifically its National ENIC/NARIC office, is responsible. For medical doctors, the Croatian Medical Chamber is responsible, and for nurses, the Croatian Chamber of Nurses.

Specializations and professional exams are recognized by relevant ministries and professional organizations.

Requests for recognition of foreign higher education qualifications and study periods for further education purposes are submitted by mail to the Office for Academic Recognition of Foreign Higher Education Qualifications at the University of Zagreb.

For any additional questions, you can call +385 1 4564 272 (Monday - Friday, 09:00-11:30) or send an inquiry to email: [akadured@unizg.hr](mailto:akadured@unizg.hr).

Complete data and forms are available on the official website of the University. The Office for Academic Recognition at the University of Zagreb issues a certificate of the acquired qualification and the duration of the study, while a special committee at the School of Medicine in Zagreb conducts the recognition process for ECTS credits obtained during the completion of a foreign undergraduate university study.

To initiate the recognition process, the request must be sent by mail to the University of Zagreb, Office for Academic Recognition of Foreign Higher Education Qualifications, Trg Republike Hrvatske 14, P.P. 407, 10002 ZAGREB.

For any specific questions related to the recognition process, you can contact +385 1 4564 272, from Monday to Friday, between 09:00 and 11:30, or via email at [akadured@unizg.hr](mailto:akadured@unizg.hr).

All necessary information and forms for submitting requests can be found on the official University website: <http://www.unizg.hr/en/studies-and-studying/enrollment-scholarships-recognition/academic-recognition-of-foreign-higher-education-qualifications>.



The Office for Academic Recognition of Foreign Higher Education Qualifications and Study Periods, as part of the University of Zagreb, will issue a certificate of the recognized qualification and the duration of the study, while a specialized committee at the School of Medicine in Zagreb will conduct the recognition process for previously obtained ECTS credits.

## 2. SCHOOL OF MEDICINE – ZAGREB

### 2.1. History and general information about the School of Medicine – Zagreb

The Faculty of Medicine at the University of Zagreb (hereinafter referred to as the Faculty) was established by the decision of the Croatian Parliament in January 1917, as the first such faculty in Southeastern Europe. The official teaching at the Faculty commenced in 1918 with the inaugural lecture by Drago Perović ("On the direction of teaching and scientific work in anatomy"). The history of the Faculty is detailed in a monograph published on the occasion of the 100th anniversary of the founding of the Faculty of Medicine at the University of Zagreb ([LINK](#)). Since its establishment, the Faculty has been a key component of the University of Zagreb, closely collaborating with the Croatian Academy of Sciences and Arts (HAZU). It serves as a central institution not only for the development and advancement of scientific, educational, and professional activities in the field of biomedicine and healthcare but also for the overall development of the Croatian healthcare system.

For example, our Faculty initiated the establishment of the Faculty of Medicine at the University of Rijeka (opened in 1955); in 1979, it opened its branch studies in Split and Osijek, which later became independent Faculties of Medicine (Split in 1997, Osijek in 1998). The Dental School of the University of Zagreb was part of our Faculty until 1962, and the Health Polytechnic was part of our Faculty until 1997. As part of the University of Zagreb, our Faculty also participated in the establishment of the Faculty of Education and Rehabilitation Sciences and the Faculty of Kinesiology. Five of our professors have served as rectors of the University (Karlo Radoničić, Drago Perović, Branko Špišić, Andrija Štampar, Zdenko Krajina), and some have been vice-rectors (Zdenko Kovač, Miloš Judaš, Boris Brkljačić). Since its inception, many of our professors have also been prominent members of the Croatian Academy of Sciences and Arts (HAZU), with some serving as its presidents (Andrija Štampar, Ivo Padovan, Zvonko Kusić).

The Faculty has been organizing postgraduate education since 1947 (initially as courses for physicians), and since 1955, it has offered postgraduate specialist, master's, and doctoral studies. Master's studies were abolished in 1998, and since 2003, the Faculty has had a doctoral program in Biomedicine and Health, and since 2006, a doctoral program in Neuroscience. Today, our Faculty educates more than 60% of all medical doctors in Croatia and over 80% of all doctors of medical sciences. To date, 26,498 doctors of medicine have graduated from the Faculty (including 400 from the English-language program), along with 545 master's degrees in nursing.

Recognizing its crucial role in public health development, the Faculty gained international recognition on April 7, 1948, with the founding of the World Health Organization (hence the celebration of International Health Day on that date). Our former professor and dean, Andrija Štampar, served as the President of the Founding Assembly. Our staff has also held key

positions in the Croatian Medical Association and the Croatian Chamber of Physicians, various working groups of the Ministry of Health, led numerous professional societies promoting evidence-based medicine, and collaborated with various segments of civil society (e.g., patient associations) to promote public health.

Finally, our Faculty made a significant contribution during the Homeland War, both in terms of healthcare (organizing wartime medical services) and addressing various humanitarian crises (care for displaced persons and refugees, prisoner exchanges, humanitarian convoys, etc.). This contribution continues to this day through continuous healthcare and psycho-social care for war veterans and civilian victims of the Homeland War, identification of war victims' remains, etc. (LINK to relevant chapters of the Monograph).

It is not surprising that our Faculty has received numerous awards for these achievements, including the Croatian State Award for outstanding contributions to teaching, scientific research, and humanitarian activities in medicine, continuous development and improvement of healthcare (decision of the President of the Republic of Croatia from July 31, 2017), as well as corresponding awards and the gold medal of the University of Zagreb.

Scientific excellence and international recognition have been enduring characteristics of the Faculty since its inception. Many of our teachers hold leading positions in international professional associations, organize international conferences, are members of international panels and commissions for the review of research projects, serve as editors of prestigious international journals, and have received the highest national, European, and global awards for their professional and scientific work (Appendix 1 - Awards and Recognitions). Based on the number of internationally recognized scientific publications, our Faculty is the leading scientific institution in Croatia: 22.3% of all works with the address of an academic institution in Croatia bear the address of our Faculty; our staff publish around 1,100 papers indexed in the Scopus database each year; more than 10% of our papers indexed in the WoS database are published in journals with the highest impact factor (LINK Self-analysis Chapter V). Finally, out of a total of 10 scientific centers of excellence in the STEM field in Croatia, two are based at our Faculty: the Scientific Center of Excellence for Reproductive and Regenerative Medicine and the Scientific Center of Excellence for Basic, Clinical, and Translational Neuroscience.

**Internationalization and modernization of education at the Faculty from 1990 to the present.** The first key change was the transition from a five-year to a six-year study program - the first generation of students enrolled in the academic year 1990/1991. Subjects integrating previously acquired knowledge were introduced into the sixth year of study, along with numerous elective courses and an integrated hospital internship organized as clinical duty in clinical outpatient departments. The quality of teaching staff has been continuously improving - for example, we established the Department of Educational Technology, the Croatian Society for Medical Education, introduced the "Art of Medical Education" program, and, in collaboration with Harvard Medical International, trained teachers for problem-based learning, etc.

The Faculty thus welcomed the new European approach to higher education and, in the academic year 2004/2005, enrolled the first generation of students under the Bologna Process (a new accredited integrated six-year undergraduate and graduate program in Medicine, leading to the academic title of Doctor of Medicine), with the implementation of an

innovative approach to medical education marked by the acronym SPICES (Student-centered, Problem-based, Integrated, Community-based, Electives, Systematic). In the academic year 2008/2009, we aligned the study conditions with European Directive 2005/36/EC (recognition of professional qualifications), defining a 6-year, 5,500-hour medicine study program. The increased workload was used for additional practical content and skills - that is, the study was directed towards learning outcomes and competence acquisition. Furthermore, in 2003, we initiated the integrated undergraduate and graduate Medicine study program in English (which also allows the enrollment of foreign students using EU mobility programs). The success of this program is best evidenced by our Faculty being the first in the EU to be awarded the Certificate for the Quality of Internationalization of the Integrated Undergraduate and Graduate Medicine Study Program in English in the field of biomedicine in 2015 (CeQuint).

Finally, in the academic year 2011/2012, we were the first in the Republic of Croatia to introduce the University Graduate Study in Nursing, thus enabling nurses to obtain a university degree.

**Introduction of doctoral studies as the third cycle of the Bologna Process (with the aim of linking the European Higher Education Area and the European Research Area).** We introduced the postgraduate study program for obtaining the academic title of Doctor of Medical Sciences in the academic year 1997/1998. This program has been named Biomedicine and Health since 2003/2004, and the corresponding program in English was introduced in 2007/2008. This study program was the first in Croatia to follow the principles of the Bologna Process and implement the ECTS credit system. The Faculty has also been actively involved in the development and harmonization of doctoral studies at the European level. In 2004, the non-governmental organization ORPHEUS (Organization of PhD Education in Biomedicine and Health Sciences in the European System) was established at our Faculty to promote the harmonization of doctoral studies in the field of biomedicine. Finally, in 2005/2006, we introduced a new doctoral program in Neuroscience.

**Introduction of new specialization programs for doctors of medicine.** The new specialization programs are focused on learning outcomes and the acquisition of general and specific competencies for each specialization, as prescribed by the Regulation on Specialist Training of Doctors of Medicine (NN 65/22). The regulation has specified a total of 49 specializations, each including a corresponding postgraduate specialist study program (theoretical part of training) conducted at the Faculty (with the exception of the Infectology study, which is shared for specializations in Infectology and Pediatric Infectology). Our Faculty is the only medical faculty in Croatia with accredited postgraduate specialist study programs for all specializations. Additionally, we have signed an agreement with the remaining three medical faculties (Osijek, Rijeka, Split) for the joint implementation of the Transfusion Medicine study program (with our Faculty as the lead). Furthermore, in collaboration with the Faculty of Kinesiology, we have successfully reaccredited the Occupational Medicine and Sports Medicine study program (with our Faculty as the lead).

**Internationalization of continuous medical education programs.** Continuous medical education (CME) includes various forms of postgraduate training organized outside of postgraduate studies. In 2017, the Faculty adopted a new Regulation on Continuous Medical Education, aligning all forms of CME with the requirements of the European Credit Transfer and Accumulation System (ECTS) and the European Union of Medical Specialists (UEMS).

This enables the evaluation of education, comparability of the type and quality of teaching, the attainment of internationally recognized credits for foreign participants and teachers in their home countries, and facilitates the international mobility of medical staff.

**Obligation of regular annual reporting on the Faculty's activities.** The Faculty has a longstanding practice of publishing the dean's annual report on the past year's activities in printed form in our journal *mef.hr*, in the issue released in December. This serves as a supplementary document for the ceremonial session of the Faculty Council, marking December 17 as the Day of the Faculty of Medicine

## 2.2. Mission and vision

### MISSION

The fundamental task of the Faculty is to maintain international scientific, professional, and educational competitiveness and recognition, as well as to continuously align study programs with strategic goals and the development needs of Croatian society. Scientific research is not only the foundation of modern university education but also a crucial international benchmark for assessing academic quality and competitiveness. The Faculty enrolls excellent students, offers student-oriented programs, integrates basic sciences, provides excellent clinical education, adheres to professional standards and ethical principles, applies the best teaching methods, and recognizes and rewards the best students. The Faculty creates a stimulating academic environment, promotes scientific and humanitarian aspects of medical practice, and simultaneously conducts scientific research through competitive international and national projects.

The Faculty must achieve all of this despite operating in significantly challenging circumstances, as it is simultaneously undergoing a prolonged and complex process of recovery and comprehensive reconstruction from earthquakes and the consequences of the COVID-19 pandemic. The Faculty intends to use the infrastructure reconstruction process, damaged by earthquakes, as an opportunity for additional improvement and expansion of spatial capacities. The Faculty aims for a higher degree of functional integration of all its organizational units and teaching bases, and therefore, it must continue to strive for the improvement of the quality of all forms of activity, full digitalization of operations, systematic strengthening of the so-called "Knowledge Triangle" (research – education – innovation) by promoting innovation, academic entrepreneurship, and collaboration between the academic community and the economy. Lastly, the Faculty must timely and qualitatively prepare for negotiations on a new financing model (Program Agreements), taking into account previous analyses and recommendations of the University Budget Committee, as well as its own analyses.

### VISION

The Faculty of Medicine at the University of Zagreb is a nationally and internationally recognized center of excellence in the fields of education, scientific research, and knowledge and technology transfer. With its dedication to biomedicine and healthcare, the faculty actively contributes to the broader societal community. Its role extends beyond achieving high

standards in academic spheres to fostering academic entrepreneurship and establishing collaborations with the business sector for the practical application of achieved results.

### 2.3. Quality management system

The Faculty has a long-standing tradition of maintaining high-quality standards through the continuous work of the Quality Promotion Commission and the Teaching Quality Assurance Commission. This is a system that is continually enhanced, and in the past period, there has been improved student involvement in all bodies and commissions of the Faculty. Efforts have been made to comprehensively gather feedback from students and conduct formal evaluations of the teaching staff.

Efforts have also been invested in adapting the implementation of educational programs in graduate, professional postgraduate, and doctoral studies considering the limitations caused by the pandemic. This situation has prompted more lasting changes in the delivery of education, utilizing the potential of modern information technology to enable quality distance learning.

In terms of the social role of the Faculty, significant efforts have been made in activities related to the promotion of teaching, scientific, and professional activities (Brain Awareness Week, Science Day, Open Days, Career Day, organization of public forums and lectures, activities in schools, etc.). Given the Faculty's key role in the lifelong education of physicians and other healthcare personnel, a large number of professional courses have been organized as part of continuous professional development for physicians.

The European Consortium for Accreditation in Higher Education has awarded the CeQuint certificate (Certificate for Quality in Internationalization). With this, the Faculty has become the first biomedical institution of higher education within the European Union to receive this type of certificate.

### 2.4. Human and material resources of the School of Medicine – Zagreb

The School of Medicine in Zagreb possesses rich human, spatial, and informational resources, placing it among the leading higher education institutions in Croatia.

According to the records of the Personnel and Legal Affairs Office, as of July 26, 2023, the Faculty employed a total of 815 staff, with 64.9% being teaching staff and the remaining 35.1% comprising professional, administrative, technical, and support staff.

Concerning the teaching staff, the Faculty employs a total of 530 individuals, including 374 on scientific-teaching positions, accounting for 45.88% of all employees or 70.56% of teaching staff. Additionally, there are 134 employees in associate positions, constituting 16.44% of the total workforce or 25.28% of teaching staff, and 3 employees in teaching positions, making up 0.36% of all employees or 0.56% of teaching staff. A comprehensive overview of the teaching staff distributed across 35 departments is presented in the following tables.

## 2.5. Organization of Studies at the School of Medicine – Zagreb

The studies at the School of Medicine - Zagreb are structured at two levels. The first level involves conducting six-year integrated undergraduate and graduate university studies: Integrated undergraduate and graduate university study of Medicine and Integrated undergraduate and graduate university study of Medicine in English. Additionally, there is a two-year graduate university study named the Graduate University Study of Nursing. The second level of studies comprises two-semester university postgraduate specialist studies and three-year university postgraduate (doctoral) studies.

In each completed study year, a student typically acquires 60 ECTS credits. Upon completion of the integrated undergraduate and graduate university studies, a total of 360 ECTS credits are obtained, and the student can enroll in the corresponding university postgraduate specialist program (120 ECTS credits) and the university postgraduate (doctoral) program (180 ECTS credits).

In the spirit of the Bologna Process and the openness of the European Higher Education Area, the participation of students from other faculties of the University of Zagreb, especially those in the biomedical field, is encouraged. The establishment of joint courses, particularly elective ones, is also encouraged, following the procedures prescribed by the general regulations of the University of Zagreb.

A student who completes the graduate university study at the School of Medicine - Zagreb can enroll in an appropriate postgraduate program at the School of Medicine - Zagreb or at another faculty in Croatia or abroad. Likewise, it is anticipated that students who complete a university graduate study program at other University of Zagreb components may, under certain conditions defined by specific regulations, enroll in a postgraduate program at the School of Medicine - Zagreb.

## 2.6. The enrollment process for a university program

### 1. Integrated Undergraduate and Graduate University Study of Medicine

The ranking list of applicants for enrollment in the integrated undergraduate and graduate study of Medicine is compiled based on a scoring system of a total of 1000 points, allowing candidates to achieve

- Based on high school performance up to 160 points;
- Based on passed exams in the national graduation examination:
  - Croatian language (higher level) up to 100 points,
  - Mathematics (higher level) up to 40 points,
  - English language (higher level) up to 100 points;
- Based on the assessment of special abilities or a test to verify knowledge of material from Biology, Physics, and Chemistry, essential for the study, conducted by the Faculty of Medicine, up to 600 points.

Admission Threshold for the Medicine Study Program is 330 points, i.e., 55% of the total 600 points achievable based on the knowledge test. The threshold for each subject is 40%, or 16 correctly solved tasks.

During the four years of high school education, candidates must attend and pass exams in biology, chemistry, and physics for at least two years. If a candidate has not attended and passed two years of Latin language classes in high school, they must pass the language exam before enrolling in the second year of the study.

Candidates must meet health requirements specified by the Regulations on Undergraduate and Graduate Studies of the Faculty of Medicine, University of Zagreb, ensuring they have no health barriers for any job within the profession/qualifications they are training for. Health requirements are verified by a confirmation from the relevant school doctor. Applicants who do not meet one of the health criteria are eliminated from further selection.

Candidates submit their applications through the application system. The application is valid only after submitting the following documents:

- a) Confirmation from the relevant school doctor regarding health and psychophysical fitness for the study of medicine.
- b) Personally signed statement about psychophysical fitness for the Integrated Undergraduate and Graduate University Study of Medicine and for the profession of a medical doctor.
- c) Confirmation of payment of exam fees.
- d) Decision from the Croatian Institute for Pension Insurance for candidates with 60% or more physical impairment, along with the Institute for Expertise, Professional Rehabilitation, and Employment of Persons with Disabilities' findings and opinions on the severity and type of disability – impairment of functional abilities. Findings and opinions regarding work capacity (RS Form) for candidates with the 2nd to 4th degree of disability according to the List of Severity and Type of Disability - impairment of functional abilities, excluding individuals with intellectual disabilities (point V.6. Intellectual disabilities) individually or in conjunction with other impairments. The submitted findings and opinions for each candidate applying under this basis will be additionally reviewed by an expert committee appointed by the Faculty of Medicine to determine if the candidate has the appropriate health fitness for the study of medicine in accordance with Article 6, paragraphs 6 and 7 of the Regulations on Undergraduate and Graduate Studies of the Faculty of Medicine, University of Zagreb.

Candidates from EU member states must provide a certificate of proficiency in the Croatian language at the B2 level for enrollment. Additionally, candidates must submit a decision on the recognition of foreign educational qualifications for enrollment, without which enrollment cannot take place.

## **2. Integrated Undergraduate and Graduate University Study of Medicine in English Language**

Seventy students are admitted to the Integrated Undergraduate and Graduate University Study of Medicine in English Language, with an obligation to pay tuition fees of 12,000.00 euros

annually upfront or 12,200.00 euros (2 x 6,100.00) payable in two installments, before the start of each semester. Applications are open to individuals who have completed a high school education lasting at least four years and passed the state graduation exam.

Applications for enrollment in the selection process are accepted through official representatives abroad or by mail to the address of the Faculty of Medicine, University of Zagreb, no later than 15 days before the scheduled examination date, which is conducted online according to a schedule that will be previously published on the Faculty's website. Applications for enrollment in the summer selection period in Zagreb are accepted in June, and the selection exam takes place in the first half of July, the details of which will be published on the Faculty's website in advance. Each of the selection processes constitutes a separate entity with a distinct exam and list of applicants. Based on the previously conducted selection processes, spaces for enrollment in the Integrated Undergraduate and Graduate University Study of Medicine in English Language are filled. The selection exam in the autumn period is held if there are available spaces for enrollment.

In addition to the mentioned requirements, candidates must also meet health conditions to successfully complete the study program and meet the competencies required for the job market.

### **3. Graduate University Study of Nursing**

The eligibility for enrollment in the graduate university study program in Nursing at the Faculty of Medicine, University of Zagreb, is determined by candidates who fall within the approved quota for admission in the academic year 2023/2024 based on their position on the ranking list. The general requirement for admission is the completion of a relevant undergraduate study in nursing or midwifery. Candidates eligible to apply are those who have completed either a university undergraduate study in nursing or midwifery, or a professional undergraduate study in nursing or midwifery with the completion of a differentiated module during the first year of study (professional bachelor's degree in nursing or midwifery).

In addition to the mentioned criteria, candidates must also meet health conditions to successfully complete the study program and meet the competencies required for the job market.

### **4. University Postgraduate Doctoral Study in Biomedicine and Health**

The University Postgraduate (Doctoral) Study in Biomedicine and Health accepts a minimum of 25 and a maximum of 50 students. Eligible applicants are those who have completed an integrated undergraduate and graduate university study in medicine or another university graduate study in the scientific field of Biomedicine and Health and related areas. Exceptionally, with justification and a request, applicants with completed university graduate studies in other natural science fields, and in the case of public health and social sciences, who have a grade point average of at least 3.51, may also be accepted.

Candidates who have completed their studies abroad must undergo the academic recognition process for foreign higher education qualifications. Upon enrollment, students with foreign citizenship must have a residence permit in the Republic of Croatia and regulated health insurance within the Republic of Croatia.



## **5. University Postgraduate Doctoral Study in Neuroscience**

The University Postgraduate (Doctoral) Study in Neuroscience accepts a minimum of 3 and a maximum of 12 students. Eligible applicants are those who have obtained a diploma from a university graduate study in fields relevant to neuroscience: biomedical field (medicine, dentistry, veterinary medicine, pharmacy) or related fields (biology, biochemistry, biophysics, physics, psychology, rehabilitation, speech therapy, kinesiology), and who have a grade point average of at least 3.51 in their graduate studies. Additionally, applicants commit to working on scientific research projects in a collaborative role as an assistant and have agreed with a mentor/supervisor with a research project in one of the available qualified laboratories before enrollment. Furthermore, applicants are required to submit two recommendations from university professors.

Candidates who have completed their studies abroad must undergo the academic recognition process for foreign higher education qualifications. Students with foreign citizenship must have a residence permit in the Republic of Croatia and regulated health insurance within the Republic of Croatia upon enrollment

## **6. Doctoral Program in English Language**

The University Postgraduate (Doctoral) Study in Biomedicine and Health in English Language admits a minimum of 3 and a maximum of 10 students. Eligible candidates are foreign citizens in the Republic of Croatia who have graduated from a medical faculty or another faculty specializing in the scientific field of biomedicine and health sciences or a related field. They should have an average grade on the undergraduate study of at least 3.51 (on a scale of 1-5) or at least 8.00 (on a scale of 5-10 or A-F). Candidates must undergo academic recognition of foreign higher education qualifications, i.e., recognition of the duration of studies at the University of Zagreb

## **7. University Postgraduate Specialist Studies**

Admission to postgraduate specialist studies at the university is as follows:

**Abdominal Surgery:** For medical doctors undergoing specialized training in abdominal surgery.

**Allergology and Clinical Immunology:** For medical doctors undergoing specialized training in allergology and clinical immunology, as well as specialists and trainees in general internal medicine, pediatrics, pulmonology, rheumatology, dermatology and venereology, family medicine, and occupational medicine.

**Anesthesiology, Reanimatology, and Intensive Medicine:** For medical doctors undergoing specialized training in anesthesiology, reanimatology, and intensive medicine.

**Endocrinology and Diabetology:** For medical doctors with completed two years of specialization in endocrinology and diabetology, and specialists in internal medicine undergoing subspecialization in endocrinology and diabetology.

**Fetal Medicine and Obstetrics:** For medical doctors undergoing specialized training in gynecology and obstetrics, pediatrics, pathology, or anesthesiology, and for those undergoing subspecialization in fetal medicine and obstetrics and neonatology.

**Physical Medicine and Rehabilitation:** For medical doctors undergoing specialized training in physical medicine and rehabilitation, after the second year of specialization.

**Gastroenterology:** For medical doctors who have completed at least two years of specialized training in gastroenterology, ending on October 1, 2023.

**Gynecology and Obstetrics:** For medical doctors undergoing specialized training in gynecology and obstetrics, after the first year of specialization.

**Hematology:** For medical doctors undergoing specialized training in hematology.

**Emergency Medicine:** For medical doctors and emergency medicine trainees in advanced years of specialization (up to 30 participants).

**Public Health:** For candidates with a completed university graduate degree in biomedical and natural sciences (medicine, dentistry, veterinary medicine, pharmacy, nursing, biology, or other natural sciences), social sciences (economics, law, social work, psychology, political science, or other social sciences), or technical sciences (architecture, construction, etc.). Prerequisite for admission is passive knowledge of English and computer skills.

**Public Health Medicine:** For medical doctors undergoing specialized training in public health medicine.

**Cardiology:** For medical doctors undergoing specialized training in cardiology.

**Cardiothoracic Surgery:** For medical doctors undergoing specialized training in cardiothoracic surgery.

**Clinical Pharmacology with Toxicology:** For medical doctors undergoing specialized training in clinical pharmacology with toxicology. It is desirable that applicants have completed at least one year of the specialist program.

**Clinical Microbiology:** For medical doctors undergoing the second or higher year of specialized training in clinical microbiology.

**Clinical Radiology:** For medical doctors undergoing specialized training in clinical radiology, after the first year of specialization.

**Maxillofacial Surgery:** For medical doctors undergoing specialized training in maxillofacial surgery, after the first year of specialization, with the approval of the study director and earlier.

**Occupational and Sports Medicine:** For applicants who have completed their graduate studies at the Faculty of Medicine and for medical doctors undergoing specialized training in occupational and sports medicine.

**Healthcare Management:** For candidates with a completed university graduate degree in relevant academic fields (biomedical, natural, and social sciences) with active knowledge of English and computer skills.

Neurology: For medical doctors undergoing specialized training in neurology, after the first year of specialization.

Nuclear Medicine: For medical doctors undergoing specialized training in nuclear medicine.

Family Medicine: For medical doctors undergoing specialized training in family medicine.

Ophthalmology and Optometry: For medical doctors undergoing specialized training in ophthalmology and optometry.

Oncology and Radiotherapy: For medical doctors undergoing specialized training in oncology and radiotherapy, after the second year of specialization, and for medical doctors undergoing training in narrow specializations: surgical oncology, gynecological oncology, pediatric hematology and oncology, dermatological oncology, urological oncology.

General Surgery: For medical doctors undergoing the third year of specialized training in general surgery, with completed common surgical trunk.

Orthopedics and Traumatology: For medical doctors undergoing specialized training in orthopedics and traumatology.

Otorhinolaryngology: For medical doctors undergoing specialized training in otorhinolaryngology.

Pathology and Cytology: For medical doctors in the third or higher year of specialized training in pathology and cytology.

Pediatrics: For medical doctors and those who have completed two years of specialization in pediatrics. Candidates from other fields undergoing subspecialization must pass a specialist exam in their basic specialization.

Psychiatry: For medical doctors undergoing specialized training in psychiatry.

Psychotherapy: For specialist psychiatrists, psychiatry trainees, and physicians of other profiles.

Pulmonology: For medical doctors undergoing specialized training in pulmonology, with completed common internal medicine trunk.

School and Adolescent Medicine: For medical doctors, trainees in school and adolescent medicine, as well as specialist pediatricians and family medicine specialists (as part of subspecialization).

Transfusion Medicine: For trainees in transfusion medicine in the third or higher year of specialized training.

Urology: For medical doctors undergoing specialized training in urology. It is desirable that applicants have completed at least one year of the specialist program.

## 2.7. Procedure for enrolling foreign students in the study program

Foreign students who are permanently residing in the Republic of Croatia enroll under the same conditions as Croatian citizens. Foreign students who are not permanently residing in

the Republic of Croatia have the right to enroll in a study program according to the conditions set by competent authorities, based on international agreements and treaties.

For the integrated undergraduate and graduate university study program in Medicine in the Croatian language, students can transfer exclusively from other medicine studies at universities in EU member states and the European Educational Project, or with which the School of Medicine - University of Zagreb has a collaboration agreement. A student requesting a transfer must have Croatian citizenship or citizenship of an EU member state.

For the integrated undergraduate and graduate university study program in Medicine in the English language, students can transfer, regardless of citizenship, from other medicine studies at universities and other related biomedical faculties, subject to the conditions prescribed by the Regulations on undergraduate and graduate studies. The transfer of students from medical faculties outside the Republic of Croatia is carried out in accordance with the law regulating the recognition of foreign educational qualifications.

## 2.8. The legal framework

The fundamental legal framework of the Faculty of Medicine - Zagreb is embodied in the Statute of the Faculty of Medicine - Zagreb, which is published on the official website of the Faculty of Medicine - Zagreb at <https://mef.unizg.hr/>. The same website also contains key legal acts governing the operation of the University of Zagreb, as well as legal acts regulating various areas of study at the Faculty of Medicine - Zagreb, such as the Regulations on Undergraduate and Graduate Studies, Regulations on Postgraduate University (Doctoral) Studies, Regulations on Postgraduate Specialist Studies, Regulations on Quality Assurance at the Faculty of Medicine, University of Zagreb, Manual for Quality Assurance at the Faculty of Medicine, University of Zagreb, etc. In addition to the aforementioned foundational documents, the website also includes numerous decisions that address issues related to studies at the Faculty of Medicine - Zagreb.

## 2.9. The grading system

The grading system is regulated by Article 81 of the Statute of the University of Zagreb and Article 78 of the Statute of the Faculty of Medicine - Zagreb

## 2.10. International cooperation

International cooperation is one of the key factors that ensure and enhance the quality of higher education institutions, a fact recognized in Croatia as well. Various strategic documents issued by the European Commission (EU Strategy 2020), national ministries, and universities aim to strengthen international cooperation, promoting the internationalization of their activities and study programs. In pursuit of enhanced international collaboration, the Office for International Cooperation of the Faculty of Medicine - Zagreb was established in 1985, making it one of the first faculty offices for international cooperation at the University of Zagreb.

The Office for International Cooperation carries out activities aimed at achieving the goals related to international collaboration, including:

- Organization and support for students in outgoing and incoming mobilities
- Organization and support for (non-)teaching staff in outgoing and incoming mobilities
- Logistical support and organization of arrivals for international students, teachers, and delegations
- Keeping records of mobility
- Promoting the international visibility of the Faculty of Medicine
- Actively expanding the network of partner universities and institutions
- Support in signing international agreements
- Support in joining international associations, networks, etc.
- International verification of educational documents of graduates from the Faculty of Medicine (collaboration with ECFMG, DataFlow, HireRight, and other international agencies)

The Faculty of Medicine - Zagreb has so far concluded a total of thirty-one bilateral agreements or memoranda of understanding with international institutions. Additionally, it has eleven Erasmus+ interinstitutional agreements and is a member of international associations such as ASPHER (Association of Schools of Public Health in the European Region), ECTS Medical Association, UNIC (European University of Post-Industrial Cities), and ORPHEUS (Organisation for PhD Education in Biomedicine and Health Sciences in the European System).

### 2.11. Student mobility, scholarships, and summer schools

Student mobility involves a shorter or longer study stay at a foreign university. Shorter study stays include summer schools, conferences, and seminars. Longer study stays involve at least one semester of study abroad. A student can participate in mobility programs multiple times during their studies, with the total duration determined by the study program, not exceeding half of the program's duration. Through studying, learning, and writing papers or theses abroad, students have the opportunity to gain knowledge, experience new cultures and customs, encounter new technologies, and acquire valuable skills. In addition to contributing to personal and academic development, mobility also enhances the education system and builds a knowledge-based society.

Student mobility at the Faculty of Medicine - Zagreb is facilitated through the following programs:

- Bilateral agreements and memoranda of understanding,
- ERASMUS+ interinstitutional agreements of the Faculty of Medicine, University of Zagreb.

Based on signed bilateral programs, scholarships are awarded to students, professors, scientists, and researchers for the following categories:

- Integrated undergraduate and graduate university studies and graduate university studies,
- Postgraduate university studies,
- Postdoctoral training,
- Specializations,
- Study visits,
- Work visits, and
- Summer language courses.

Current scholarship competitions are published on the Faculty of Medicine - Zagreb website, and students of the Faculty of Medicine - Zagreb can apply. For additional information, students can contact the Office for International Cooperation.

### 3. GENERAL INFORMATION ABOUT STUDIES

Two integrated undergraduate and graduate study programs in Medicine (in Croatian and English), one graduate study program in Nursing, 54 postgraduate specialist study programs, and two postgraduate doctoral study programs (one of which is conducted in English) are offered at the Faculty. The list of study programs is provided in the table below:

University Integrated Undergraduate and Graduate Studies, 360 ECTS, Croatian Qualifications Framework Level: 7.1. univ.		Year of accreditation
Medicine in Croatian language	dr. med.	2005./06.
Medicine in English language	dr. med.	2005./06.
University Graduate Study, 120 ECTS, Croatian Qualifications Framework Level: 7.1. univ.		
Nursing	univ.mag.med.techn.	2011./12.
University Specialist Study, 60 ECTS, Croatian Qualifications Framework Level: 7.2. univ.		
Public Health	univ. spec. sanit. publ.	2013./14.
Clinical Radiology	univ. spec. med.	2013./14.
Family Medicine	univ. spec. med.	2013./14.
Pediatrics	univ. spec. med.	2013./14.
Psychotherapy	univ. spec. med.	2013./14.
Ultrasound in Gynecology and Obstetrics	univ. spec. med.	2013./14.
Infectious Diseases	univ. spec. med.	2014./15.
Ophthalmology and Optometry	univ. spec. med.	2014./15.
Otorhinolaryngology and Head and Neck Surgery	univ. spec. med.	2014./15.
Psychiatry	univ. spec. med.	2014./15.

Urology	univ. spec. med.	2014./15.
Dermatology and Venereology	univ. spec. med.	2015./16.
Child and Adolescent Psychiatry	univ. spec. med.	2015./16.
Endocrinology and Diabetology	univ. spec. med.	2015./16.
Epidemiology	univ. spec. med.	2015./16.
Physical Medicine and Rehabilitation	univ. spec. med.	2015./16.
Emergency Medicine	univ. spec. med.	2015./16.
General Internal Medicine	univ. spec. med.	2015./16.
Orthopedics and Traumatology	univ. spec. med.	2015./16.
School and Adolescent Medicine	univ. spec. med.	2015./16.
Allergology and Clinical Immunology	univ. spec. med.	2016./17.
Anesthesiology, Resuscitation, and Intensive Care Medicine	univ. spec. med.	2016./17.
Gastroenterology	univ. spec. med.	2016./17.
Gynecology and Obstetrics	univ. spec. med.	2016./17.
Hematology	univ. spec. med.	2016./17.
Internal Oncology	univ. spec. med.	2016./17.
Public Health Medicine	univ. spec. med.	2016./17.
Maxillofacial Surgery	univ. spec. med.	2016./17.
Healthcare Management	univ. spec. admin. sanit.	2016./17.
Nephrology	univ. spec. med.	2016./17.
Neurology	univ. spec. med.	2016./17.
Pathology and Cytology	univ. spec. med.	2016./17.
Abdominal Surgery	univ. spec. med.	2017./18.
Cardiology	univ. spec. med.	2017./18.
Clinical Microbiology	univ. spec. med.	2017./18.
Laboratory Immunology	univ. spec. med.	2017./18.
Neurosurgery	univ. spec. med.	2017./18.
Nuclear Medicine	univ. spec. med.	2017./18.
Oncology and Radiotherapy	univ. spec. med.	2017./18.
General Surgery	univ. spec. med.	2017./18.
Plastic, Reconstructive, and Aesthetic Surgery	univ. spec. med.	2017./18.
Pulmonology	univ. spec. med.	2017./18.
Rheumatology	univ. spec. med.	2017./18.

Vascular Surgery	univ. spec. med.	2017./18.
Pediatric Surgery	univ. spec. med.	2018./19.
Clinical Pharmacology with Toxicology	univ. spec. med.	2018./19.
Forensic Medicine	univ. spec. med.	2018./19.
Fetal Medicine and Obstetrics	univ. spec. med.	2019./20.
Cardiothoracic Surgery	univ. spec. med.	2019./20.
Geriatrics	univ. spec. med.	2023./24.
<b>University Specialist – Joint Studies, 60 ECTS, Croatian Qualifications Framework Level: 7.2. univ.</b>		
Transfusion Medicine	univ. spec. med.	2016./17.
Occupational and Sports Medicine	univ. spec. med.	2019./20.
<b>Doctoral Studies, 180 ECTS, Croatian Qualifications Framework Level: 8.2. univ.</b>		
Biomedicine and Health (in Croatian and English)	dr. sc. biomed.	2005./06.
Neuroscience	dr. sc. biomed.	2005./06.

### 3.1. Integrated Undergraduate and Graduate University Study of Medicine in the Croatian language

At the Faculty of Medicine - Zagreb, students are educated for the profession of general practitioners, or physicians qualified for primary health care. Upon completing the studies, the student earns the title of Doctor of Medicine. The medical program lasts for 6 years, or 12 semesters, and can only be pursued as a full-time study.

Education for the professional title of Doctor of Medicine includes mandatory general education subjects (pre-medicine) and four basic groups of mandatory professional subjects, known as basic medicine, preclinical, clinical, and public health subjects. Teaching is conducted to a lesser extent through lectures, and predominantly through exercises, seminars, demonstrations, consultations, clinical visits, work in clinical departments and health centers, on-call duties, and field practice, i.e., practical training.

Practical training at the Faculty of Medicine - Zagreb includes exercises, clinical observations, educational visits, clinical and clinical-pathological conferences, professional practice, fieldwork, and other forms of education that enable the acquisition of prescribed knowledge and skills.

Students have the right and duty to participate in all forms of education as prescribed by the Regulations on undergraduate and graduate studies. The number of students in a group for individual forms of education is determined by the Regulations on undergraduate and graduate studies.

The total obligations of regular students in teaching at the Faculty of Medicine - Zagreb can range from a minimum average of 20 hours to a maximum of 30 hours per week. Practical clinical teaching is organized and conducted outside the specified timetable.



Teaching and extracurricular activities for students in physical education and health are organized and conducted outside the previously mentioned timetable and are mandatory in the first and second years of study, while being optional (elective) in other years of study.

Conditions for student enrollment, curriculum and plans, organization of teaching, knowledge assessment, evaluation of the success of teaching, and the quality assessment of the teaching program, student status and study rules, student participation in the work of the Faculty of Medicine - Zagreb, as well as other issues essential for the conduct of studies, are regulated by the relevant Regulations on undergraduate and graduate studies.

### **The list of courses**

I. year	
Social Medicine	mandatory course
Introduction to Medicine and History of Medicine	mandatory course
Medical Biology	mandatory course
Professional Practice	mandatory course
Physical Education and Health Culture	mandatory course
Medical Chemistry and Biochemistry I	mandatory course
First Aid	mandatory course
Anatomy	mandatory course
Medical English I	mandatory course
Foundations of Medical Skills I	mandatory course
Physics and Biophysics	mandatory course
Inorganic Substances in Biological Processes	non mandatory course
Bioprospects and Health	non mandatory course
Human and Environment	non mandatory course
Social Networks in Medicine	non mandatory course
Elements of Medical Narration and in Medicine	non mandatory course
Epidemiology, Symptomatology, and First Aid for Poisoning by Poisonous Marine Animals and Venomous Animals	non mandatory course

Mr. Horvat Goes to the Doctor	non mandatory course
How to Apply the Hippocratic Oath?	non mandatory course
Physicians and Their Collaborators	non mandatory course
Methods of Health Education Work in the Practice of Medical Doctors	non mandatory course
Molecular Biology in Medicine	non mandatory course
Palliative Care and Rehabilitation of Oncology Patients	non mandatory course
Specific Features of the Work of a Primary Care Physician	non mandatory course
Protection of Youth Health	non mandatory course
Nervous Signal in Selected Signal Transmission Diseases	non mandatory course
<b>II. year</b>	
Medical Sociology	mandatory course
Medical Chemistry and Biochemistry II	mandatory course
Foundations of Neuroscience	mandatory course
Immunology	mandatory course
Medical English II	mandatory course
Physical Education and Health Culture	mandatory course
Professional Practice II	mandatory course
Histology and Embryology	mandatory course
Foundations of Medical Skills II	mandatory course
Physiology	mandatory course
Food Additives – Beautiful and Tasty but Healthy?	non mandatory course
Etiology, Prevention, and Early Detection of Tumors	non mandatory course
How to Preserve the Quality of Life and Work Ability of Physicians	non mandatory course
Mechanisms of Pain	non mandatory course
Right to Life	non mandatory course

Brain Development and Plasticity	non mandatory course
Stress and the Brain	non mandatory course
Anxiety and How to Overcome It	non mandatory course
Time is Life – Resuscitation Procedures in Practice	non mandatory course
Elements of Medical Narration and in Medicine	non mandatory course
Functional Aspects of Smoking	non mandatory course
Bone – Molecular Biology at the Patient's Bedside	non mandatory course
Family Planning	non mandatory course
Before We Were Born	non mandatory course
Rheology of Arterial Blood Flow	non mandatory course
Body Fluids and Edema	non mandatory course
Learning and Memory	non mandatory course
Lifestyle and Environment – Determinants of Health or Disease	non mandatory course
III. year	
Pathology	mandatory course
Medical English III	mandatory course
Clinical Propaedeutics	mandatory course
Pathophysiology	mandatory course
Medical Microbiology and Parasitology	mandatory course
Psychological Medicine I and II	mandatory course
Professional Practice III	mandatory course
Foundations of Medical Skills III	mandatory course
Pharmacology	non mandatory course
Dyspepsia	non mandatory course
Experimental Pharmacology and Pathology	non mandatory course
Evolutionary and Developmental Roots of Humanity	non mandatory course

Eukaryotic Genome	non mandatory course
Global Health	non mandatory course
Let's Go to the Liver	non mandatory course
Immunohistochemistry and Immunocytochemistry in Tumor Diagnosis	non mandatory course
Drug-Food Interactions	non mandatory course
Microbiology of Sepsis	non mandatory course
Modern Approach to Type 2 Diabetes Treatment	non mandatory course
Multidisciplinary Approach in Morphological Diagnosis of Gastrointestinal and Hematopoietic System Tumors	non mandatory course
Medical Law	non mandatory course
Most Common Adverse Effects of Drugs in Internal Medicine	non mandatory course
Autonomic Nervous System Disorders	non mandatory course
Psychooncology	non mandatory course
Drug Hypersensitivity Reactions	non mandatory course
Symptom-Oriented Approach to Neurological Patients	non mandatory course
Sexually Transmitted Diseases and Infections	non mandatory course
Contemporary Diagnosis and Epidemiology of Childhood Diseases Caused by Viruses	non mandatory course
Zoonotic Agents	non mandatory course
It's Important to Find Valid Evidence	non mandatory course
Nerve Cell – From Health to Disease	non mandatory course
<b>IV. year</b>	
Nuclear Medicine	mandatory course
Internal Medicine	mandatory course

Clinical Biochemistry	mandatory course
Neurosurgery	mandatory course
Medical English IV	mandatory course
Foundations of Medical Skills IV	mandatory course
Neurology	mandatory course
Radiology	mandatory course
Clinical Microbiology and Parasitology	mandatory course
Clinical Oncology	mandatory course
Professional Practice IV	mandatory course
Psychiatry	mandatory course
Infectious Diseases	mandatory course
Dermatovenereology	mandatory course
Medical Physics	mandatory course
Acute Abdominal Pain	non mandatory course
Anxiety Disorders	non mandatory course
Thyroid Diseases - Diagnosis and Treatment	non mandatory course
Diagnosis and Treatment of Functional Gastrointestinal Diseases	non mandatory course
Child in Crisis – Diagnostic Methods in Child and Adolescent Psychiatry	non mandatory course
Doctor, My Joints Hurt	non mandatory course
Doping and Antidoping	non mandatory course
Cardiac Electrostimulation in Clinical Practice	non mandatory course
Pharmacodynamic Effects and Laboratory Characterization of Antibiotics	non mandatory course
Pharmacoeconomics	non mandatory course
Pharmacogenomics and Individualization of Therapy	non mandatory course
Gastrointestinal Infections – Trends in	non mandatory course

Developed Countries	
Where is the Boundary Between Embryogenesis and Carcinogenesis?	non mandatory course
Genes and Environment	non mandatory course
Hemodynamics of Cardiac Diseases	non mandatory course
"Hemophilia and Inherited Bleeding Disorders"	non mandatory course
HPV Infection - Latest Insights	non mandatory course
Interpersonal Relationships	non mandatory course
Outpatient Care for Polytraumatized Patients	non mandatory course
Surgical Treatment of Genetic Malformations	non mandatory course
Communication in Medicine	non mandatory course
Low Back Pain - the Most Common Problem in the Musculoskeletal System in Primary Health Care	non mandatory course
Blood as a Medicine	non mandatory course
Laboratory Diagnosis of Infections in Pregnancy	non mandatory course
Microbiology of Sepsis and Bloodstream Infections - Practical Approach for Future Doctors	non mandatory course
Mechanism of Adverse Drug Reactions	non mandatory course
Multiresistant Bacteria – Causes of Hospital Infections	non mandatory course
Nuclear Medicine in the Diagnosis and Therapy of Malignant Diseases	non mandatory course
Addictions	non mandatory course
Parasitic Infections in the Era of Globalization	non mandatory course
I Wash My Hands of Hospital Infections	non mandatory course
Application of Stem Cells in Research and Treatment of Nervous System Diseases	non mandatory course

Geriatric Psychiatry	non mandatory course
Psychotherapy	non mandatory course
Evidence-Based Rehabilitation Interventions	non mandatory course
Sensory Technologies in Psychiatry and Neurology	non mandatory course
Liver Transplantation	non mandatory course
Transplant Reaction	non mandatory course
Tuberculosis and Nontuberculous Mycobacteria – Old and New Diagnostic Challenges	non mandatory course
Venous Thrombosis and Thrombophilia	non mandatory course
Family Health Protection	non mandatory course
Focal Liver Diseases	non mandatory course
V. year	
Pediatric Surgery	mandatory course
Urology	mandatory course
Pediatrics	mandatory course
Surgery	mandatory course
Physical and Rehabilitation Medicine	mandatory course
Anesthesiology and Intensive Care Medicine	mandatory course
Medical English V	mandatory course
Foundations of Medical Skills V	mandatory course
Gynecology and Obstetrics	mandatory course
Orthopedics	mandatory course
Medical Statistics	mandatory course
Professional Practice V	mandatory course
Introduction to Scientific Research	mandatory course

Otorhinolaryngology and Head and Neck Surgery	mandatory course
Medical Informatics	mandatory course
Maxillofacial Surgery with Dentistry	mandatory course
Heart Diseases and Pregnancy	non mandatory course
Covid-19	non mandatory course
Diagnosis and Treatment of Peripheral Nervous System Diseases	non mandatory course
Pharmacovigilance - Safe Use of Medications	non mandatory course
Emergency Conditions in Otorhinolaryngology	non mandatory course
Digestive System Infection in Children	non mandatory course
How to Write a Thesis	non mandatory course
Living with Epilepsy	non mandatory course
Surgical Treatment of Acute Ischemia	non mandatory course
Surgical Treatment of Head and Neck Tumors	non mandatory course
Clinical Optometry	non mandatory course
Communication in Medicine	non mandatory course
Chronic Kidney Disease and Replacement of Renal Function by Dialysis	non mandatory course
Laparoscopic Surgery	non mandatory course
Liaison Psychiatry (Mental Problems in Physical Patients)	non mandatory course
Treatment of the Most Common Mental Disorders in Family Medicine	non mandatory course
Human Sexuality Medicine	non mandatory course



Multidisciplinary Treatment in Clinical Oncology	non mandatory course
Inherited Metabolic Diseases	non mandatory course
Head and Neck Oncological Surgery – Multidisciplinary Approach	non mandatory course
Fundamentals of Medical Sexology and Psychology of Love	non mandatory course
Fundamentals of Ultrasound Diagnostics	non mandatory course
Written Expression in Medicine	non mandatory course
Prejudices about Multiple Sclerosis	non mandatory course
Obesity and Treatment	non mandatory course
Professionalism in Psychiatry	non mandatory course
Changes in Facial Skin	non mandatory course
Psychotraumatology	non mandatory course
Regional Anesthesia in Pain Treatment	non mandatory course
Resistant Hypertension, Diabetes, and Chronic Kidney Disease	non mandatory course
Sphingolipids in Health and Disease	non mandatory course
Sports Cardiology	non mandatory course
What We Need to Know About Transfusion: Clinical Effectiveness vs. Risks	non mandatory course
Kidney Transplantation	non mandatory course
Pregnancy and the Eye	non mandatory course
Ultrasound as a Stethoscope	non mandatory course
I Feel Dizzy	non mandatory course
Why Do I Have Tremors	non mandatory course

Why Am I Forgetting	non mandatory course
Living Well with Dementia: What Medical Students Need to Learn about Dementia?	non mandatory course
Psychotherapy	non mandatory course
<b>VI. year</b>	
Medical Ethics	mandatory course
Epidemiology	mandatory course
Ophthalmology	mandatory course
Forensic Medicine	mandatory course
Palliative Medicine	mandatory course
Foundations of Medical Skills VI	mandatory course
Family Medicine	mandatory course
Health Ecology and Occupational Medicine and Sports Medicine	mandatory course
Medical Genetics	mandatory course
Emergency Department Duty	mandatory course
Master's Thesis	mandatory course
Final Exam	mandatory course
Master's Exam	mandatory course
Organization of Health Care and Health Economics	mandatory course
Clinical Assessment	mandatory course
Rational Drug Use	mandatory course
Community Health	mandatory course
School Medicine	mandatory course
Medical English VI	mandatory course
Emergency Medicine	mandatory course

### 3.2. Integrated Undergraduate and Graduate University Study of Medicine in English Language

Based on positive experiences and the tradition of training foreign doctors in Croatia in postgraduate clinical and public health studies, an initiative was launched in early 2002 to establish a medical faculty offering courses in English. With the assistance of international partners, a study proposal was developed and adopted by the Senate of the University of Zagreb in 2002. This marked the first approved curriculum for a comprehensive English-language program at the University of Zagreb and the first English-language medical studies in Croatia. The Faculty of Medicine at the University of Zagreb received approval for the program in 2005 as a full-fledged study program for personal use. The overall student class workload is aligned with EU requirements, and the program awards 360 ECTS credits.

In the initial years of introducing the English-language program, most enrolled students were from Canada and the United States, mainly representing the Croatian diaspora. There were also students from France, Sweden, and Germany, as well as students with dual citizenship and Croatian citizens (approximately 10%). Today, there is growing interest in this program, with an annual enrollment of 50 students. The entrance exam is not only held in Zagreb but also in Israel, Sweden, and Germany.

The study rules are the same as those for the Croatian-language medical program. Although there are similarities, the integrated program of medical studies in English is not a replica of the national program translated into English. Instead, it has been modernized with specific content, methodological approaches, and educational strategies characteristic of reformed medical schools in Europe and worldwide. The teaching methods include contemporary and innovative approaches such as student-oriented teaching, problem-based learning (PBL), and small-group teaching.

During the final year of study, there is also horizontal and vertical integration of knowledge, skills, and attitudes through the "Clinical Rotations" course. During this course, students have the opportunity to spend time in healthcare institutions/hospitals in Croatia or abroad, gaining exposure to different healthcare systems and adapting to potential future work environments. Since 2009, the hourly load for the "Croatian Language" course has been increased, enhancing the clinical part of the study that involves communication with patients and integrating English-language students into Croatian society.

The integrated undergraduate and graduate study of Medicine lasts for six years, or twelve semesters, and can only be attended as full-time studies. Upon completion, students earn 360 ECTS credits and the academic title of Doctor of Medicine (Dr. med.). This title is written after the name and surname as Dr. med.

#### **List of courses**

I. year	
Introduction to Medical Terminology	mandatory courses
Medical and Molecular Biology	mandatory courses

History of Medicine	mandatory courses
First Aid	mandatory courses
Social Medicine and Introduction to Medicine	mandatory courses
Physics and Biophysics	mandatory courses
Anatomy and Clinical Anatomy	mandatory courses
Fundamentals of Medical Skills	mandatory courses
Basics of Medical Informatics	mandatory courses
Physical Education	mandatory courses
Medical Chemistry and Biochemistry	mandatory courses
Croatian Language 1	mandatory courses
<b>II. year</b>	
Medical Chemistry and Biochemistry	mandatory courses
Fundamentals of Medical Skills	mandatory courses
Histology and Embryology	mandatory courses
Physiology	mandatory courses
Psychological Medicine	mandatory courses
Medical Sociology	mandatory courses
Fundamentals of Neuroscience	mandatory courses
Physical Education	mandatory courses
Croatian Language 2	mandatory courses
Immunology	mandatory courses
Measurement and Analysis of Human Locomotion	non mandatory courses
Anxiety and how to break free form it	non mandatory courses
Stress and the brain	non mandatory courses
<b>III. year</b>	
Pathology	mandatory courses
Fundamentals of Medical Skills	mandatory courses

History Taking and Physical Examination	mandatory courses
Pharmacology	mandatory courses
Pathophysiology	mandatory courses
Pharmacoeconomics	mandatory courses
Medical Microbiology	mandatory courses
Medical Ethics	mandatory courses
Croatian Language 3	mandatory courses
Management in Hospital Setting	non mandatory courses
Palliative Care	non mandatory courses
Experimental Pharmacology and Pathology	non mandatory courses
The most common adverse side effects of drugs in internal medicine	non mandatory courses
Elective: CROSS 2023	non mandatory courses
<b>IV. year</b>	
Psychiatry	mandatory courses
Statistical Analysis of Medical Data	mandatory courses
Neurology	mandatory courses
Clinical Oncology	mandatory courses
Clinical Biochemistry	mandatory courses
Principles of Evidence Based Medicine	mandatory courses
Medical Physics	mandatory courses
Clinical Nutrition	non mandatory courses
Allergy and Asthma	non mandatory courses
Mechanism of adverse drug reaction	non mandatory courses
Modern Insight in Microbiological Diagnostic of Parasitic Infections	non mandatory courses
Emerging and neglected zoonoses of medical importance	non mandatory courses

Neuroimmunology	non mandatory courses
Nuclear Medicine	mandatory courses
Diagnostic and Interventional Radiology	mandatory courses
Infectious Diseases and Tropical Medicine	mandatory courses
Fundamentals of Medical Skills 4	mandatory courses
Internal Medicine	mandatory courses
Dermatovenereology	mandatory courses
Cardiac Imaging	non mandatory courses
From Pharmacogenomics to Personalized Medicine	non mandatory courses
Elective: CROSS 2023	non mandatory courses
V. year	
Urology	mandatory courses
Orthopaedics	mandatory courses
Pediatric Surgery	mandatory courses
Neurosurgery	mandatory courses
Ophthalmology	mandatory courses
Surgery - Integrated Course	mandatory courses
Pediatrics	mandatory courses
Anesthesiology and Reanimatology	mandatory courses
Maxillofacial Surgery with Basic Principles of Stomatology	mandatory courses
Physical and Rehabilitation Medicine	mandatory courses
Fundamentals of Medical Skills 5	mandatory courses
Medical Informatics	mandatory courses
Gynecology & Obstetrics	mandatory courses
Epidemiology	mandatory courses
Otorhinolaryngology - Head and Neck Surgery	mandatory courses

VI. year	
Community Health	mandatory courses
Forensic Medicine	mandatory courses
Organization and Management of the Health Care	mandatory courses
Integrated Clinical Module: Part 1	mandatory courses
End of Life Care	mandatory courses
Fundamentals of Medical Skills 6	mandatory courses
Geriatrics	mandatory courses
Emergency Medicine	mandatory courses
Basics of Pediatric Allergy	non mandatory courses
Nerve compression syndromes of the upper limb	non mandatory courses
First - year mandatory courses	non mandatory courses
Clinical Round	non mandatory courses
How to write an MD thesis	non mandatory courses
Ultrasound as a stethoscope	non mandatory courses
School and University Medicine	mandatory courses
Graduation Paper	mandatory courses
Graduation Exam	mandatory courses
Final Exam	mandatory courses
Integrated Clinical Module: Part 2	mandatory courses
Problems of Addiction	mandatory courses
Family Medicine	mandatory courses
Environmental and Occupational Health and Sports Medicine	mandatory courses
Clinical Rotations	mandatory courses

### 3.3. Graduate University Study in Nursing

The eligibility for enrollment in the graduate university study in Nursing is open to candidates who have completed the corresponding undergraduate study in nursing or the relevant undergraduate study in midwifery and who achieve a place within the approved quota on the ranking list. The duration of the graduate university study in Nursing is two years, or four semesters. Upon completion of the graduate university study in Nursing, the academic title of Master of Nursing is conferred.

#### List of Courses

I. year	
1st semester	2nd semester
Science, Philosophy, and Theory of Nursing	Theory of Education and Training
Research and Research Methods	Quality Assurance in Nursing
Health Promotion and Primary Health Care	
Geriatrics and Gerontology in Nursing and Palliative Care	
Mental Hygiene and Psychosomatic Medicine	
Social Welfare and Health	
Nursing in Occupational Health and Professional Diseases	
Environment and Health	
Healthcare System with Management in Healthcare Institutions	
Publishing Articles in Indexed Journals	
II. year	
3rd semester	4th semester
Nursing Psychology	Graduation Thesis
Application of Research in Nursing	Final Exam



Informatics in Nursing	Graduate Exam
Research Methodology and Evaluation of Health Interventions	
Rehabilitation	
Ergonomics in Occupational Medicine	
Hospital Infections	
Pharmacotherapy	
International Seminars, Courses, or Schools - Participation	

### 3.4. Postgraduate University Specialist Studies

#### 3.4.1. General Information about Studies

A postgraduate specialist study is conducted as part of professional development and is often integrated into the specialization program in a specific field. The specialist postgraduate study lasts for one year and concludes with the successful completion of all exams, passing the final exam, and the preparation and defense of the final professional project.

The faculty offers organized postgraduate classes in 30 areas, covering all fields for which a sufficient number of participants apply each academic year. To accommodate the interest of international students, some programs are conducted in English as needed.

#### 3.4.2. Admission Requirements

An individual eligible for enrollment in a specialist study is someone who has completed the corresponding university graduate study in the relevant field as determined by the study program. In accordance with the provisions of the University and Faculty statutes, the study program specifies the types of completed university graduate studies or undergraduate studies, as well as the level of achievement in these studies that are suitable for enrollment in the corresponding specialist studies. An additional requirement for enrollment in a specialist study may be completion of a certain period of specialization.

In exceptional cases, individuals who have completed another graduate study may be allowed to enroll in a postgraduate specialist study that is not part of the specialist training program for medical doctors, provided that they master the relevant differentiated content from the integrated undergraduate and graduate study program in Medicine or the graduate study program in Nursing. Enrollment cannot be approved if the differentiated content exceeds 30 ECTS credits.

Enrollment in a specialist study is carried out through a public competition announced in the daily press and on the University of Zagreb and Faculty of Medicine – Zagreb websites.

An applicant who holds a diploma from a foreign university is required, at their own expense, to obtain and submit, after applying for the competition, a decision from the competent authority regarding the academic recognition of the foreign higher education qualification for the purpose of enrollment in the specific specialist study.

### 3.4.3. Structure and Organization of Studies

COURSE TITLE	PROGRAM TITLE
General Competencies of Specialist Physicians	mandatory subject within all postgraduate specialist studies
Surgery of the Stomach and Small Intestine	Abdominal surgery
Bleeding from the Digestive Tract, Mesenteric Ischemia, and Visceral Aneurysms	Abdominal surgery
Pancreatic Surgery	Abdominal surgery
Hernia	Abdominal surgery
Diseases of the Biliary System	Abdominal surgery
Transfusion Treatment in Surgery	Abdominal surgery
Diseases of the Colon, Rectum, and Anus	Abdominal surgery
Cytoreductive Surgery and HIPEC	Abdominal surgery
Appendix	Abdominal surgery
Liver Surgery	Abdominal surgery
Spleen Surgery	Abdominal surgery
Insect Venom Hypersensitivity	Abdominal surgery
Structure and Function of the Immune System	Allergology and clinical immunology
Epidemiology of Immune Diseases	Allergology and clinical immunology
Respiratory System Allergic Diseases	Allergology and clinical immunology
Anaphylaxis	Allergology and clinical immunology
Food Sensitivity	Allergology and clinical immunology
Drug Sensitivity	Allergology and clinical immunology
Insect Poison Sensitivity	Allergology and clinical immunology
Occupational Allergic Diseases	Allergology and clinical immunology
Hypereosinophilic Syndromes and Diseases	Allergology and clinical immunology
Laboratory Immunodiagnostics and In Vivo Tests	Allergology and clinical immunology
Immunodeficiencies	Allergology and clinical immunology
Systemic Autoimmune Diseases	Allergology and clinical immunology
Autoimmune Diseases Related to Organ Systems	Allergology and clinical immunology
Clinical Epidemiology and Evidence-Based Medicine	Allergology and clinical immunology
Allergic and Atopic Skin Diseases	Allergology and clinical immunology
General Competencies of Specialist Physicians	Allergology and clinical immunology

General Competencies of Specialist Physicians	Allergology and clinical immunology
Vaccines - Immune Response and Allergic Reactions	Allergology and clinical immunology
Autoimmune Skin Diseases - Clinical Presentation Specifics, Diagnostics, and Therapy	Allergology and clinical immunology
General Competencies of Specialist Physicians	Anesthesiology, resuscitation, and intensive care medicine
General Competencies of Specialist Physicians	Anesthesiology, resuscitation, and intensive care medicine
Pharmacology in Anesthesiology	Anesthesiology, resuscitation, and intensive care medicine
Anesthetic Procedures	Anesthesiology, resuscitation, and intensive care medicine
Special Anesthesia	Anesthesiology, resuscitation, and intensive care medicine
Postoperative Patient Monitoring	Anesthesiology, resuscitation, and intensive care medicine
Pediatric Anesthesia	Anesthesiology, resuscitation, and intensive care medicine
Introduction to Anesthesiology, Legal and Ethical Aspects of Anesthesia	Anesthesiology, resuscitation, and intensive care medicine
Physiology Related to Anesthesiology and Intensive Care	Anesthesiology, resuscitation, and intensive care medicine
Transport of Critically Ill Patients	Anesthesiology, resuscitation, and intensive care medicine
Pharmacotherapeutics	Anesthesiology, resuscitation, and intensive care medicine
Cardiopulmonary Resuscitation	Anesthesiology, resuscitation, and intensive care medicine
Trauma	Anesthesiology, resuscitation, and intensive care medicine
Other Conditions Managed in the Intensive Care Unit	Anesthesiology, resuscitation, and intensive care medicine
Pediatric Intensive Care Medicine	Anesthesiology, resuscitation, and intensive care medicine
Respiratory System and Mechanical Ventilatory Support	Anesthesiology, resuscitation, and intensive care medicine
Organ Systems	Anesthesiology, resuscitation, and intensive care medicine
Sepsis and Septic Shock	Anesthesiology, resuscitation, and intensive care medicine
Perioperative Optimization	Anesthesiology, resuscitation, and intensive care medicine

Transfusion Medicine	Anesthesiology, resuscitation, and intensive care medicine
Treatment of Acute and Chronic Pain	Anesthesiology, resuscitation, and intensive care medicine
General Competencies of Specialist Physicians	Endocrinology and diabetology
General Competencies of Specialist Physicians	Endocrinology and diabetology
Adrenal Gland Diseases and Neuroendocrine Tumors	Endocrinology and diabetology
Emergency Conditions in Endocrinology	Endocrinology and diabetology
Thyroid Diseases	Endocrinology and diabetology
Pediatric Endocrinology and Diabetology	Endocrinology and diabetology
Diseases of the Sellar Region	Endocrinology and diabetology
Metabolic Bone Diseases	Endocrinology and diabetology
Andrology and Gynecological Endocrinology	Endocrinology and diabetology
Etiopathogenesis and Diagnosis of Diabetes Mellitus	Endocrinology and diabetology
Treatment and Complications of Diabetes Mellitus	Endocrinology and diabetology
Metabolic Diseases and Clinical Approach to Patients with Diabetes and the Use of New Technologies in the Diagnosis and Treatment of Diabetes	Endocrinology and diabetology
Fertilization, Implantation, and Placentation	Fetal medicine and obstetrics
High-Risk and Complicated Pregnancy	Fetal medicine and obstetrics
Antenatal Diagnostics and Fetal Monitoring	Fetal medicine and obstetrics
Physiology of Pregnancy	Fetal medicine and obstetrics
Diseases of the Newborn	Fetal medicine and obstetrics
Embryology	Fetal medicine and obstetrics
Adaptation of the Newborn	Fetal medicine and obstetrics
Perinatal Pathology	Fetal medicine and obstetrics
Perinatal Epidemiology	Fetal medicine and obstetrics
Pregnancy and the Autoimmunity Phenomenon	Fetal medicine and obstetrics
Emergency Conditions in Obstetrics	Fetal medicine and obstetrics
Transfusion Treatment in Pregnancy and Labor	Fetal medicine and obstetrics
Early Brain Damage	Fetal medicine and obstetrics
Intracranial Pathology in Pregnancy	Fetal medicine and obstetrics
Thrombophilia and Pregnancy	Fetal medicine and obstetrics
Infections in Pregnancy	Fetal medicine and obstetrics
Drugs in Pregnancy	Fetal medicine and obstetrics
Obstetric Operations	Fetal medicine and obstetrics
Management of the Newborn in the First Hours of Life	Fetal medicine and obstetrics
Ventilation Disorders in the Early Neonatal Period and Respiratory Support	Fetal medicine and obstetrics
General Competencies of Specialist Physicians	Physical medicine and rehabilitation

General Competencies of Specialist Physicians	Physical medicine and rehabilitation
Functional Anatomy of the Musculoskeletal System	Physical medicine and rehabilitation
Thermotherapy	Physical medicine and rehabilitation
Kinesiology and Kinesiotherapy	Physical medicine and rehabilitation
Manual Techniques in Physical Medicine	Physical medicine and rehabilitation
Rheumatological-Physiatric Propaedeutics	Physical medicine and rehabilitation
Electrotherapy, Hydrotherapy, Balneotherapy, and Thalassotherapy	Physical medicine and rehabilitation
Rehabilitation of Neurological Patients	Physical medicine and rehabilitation
Rehabilitation of Traumatized Patients, Patients with Limb Amputation, Orthotics, and Prosthetics	Physical medicine and rehabilitation
Rehabilitation after Surgical Procedures on the Musculoskeletal System	Physical medicine and rehabilitation
Rehabilitation of Sports Injuries	Physical medicine and rehabilitation
Rehabilitation of Cardiovascular Patients	Physical medicine and rehabilitation
Rheumatic Diseases and Rehabilitation	Physical medicine and rehabilitation
Medical Assessment of the Musculoskeletal System	Physical medicine and rehabilitation
Diagnostic Ultrasound	Physical medicine and rehabilitation
Radiological Diagnosis of Musculoskeletal Diseases	Physical medicine and rehabilitation
General Competencies of Specialist Physicians	Gastroenterology
General Competencies of Specialist Physicians	Gastroenterology
Symptoms and Signs of Digestive System Diseases	Gastroenterology
Functional and Motility Disorders of the Digestive System	Gastroenterology
Diseases of the Stomach and Duodenum	Gastroenterology
General Hepatology	Gastroenterology
Toxic Liver Diseases, Cirrhosis, and Complications of Cirrhosis	Gastroenterology
Oroesophageal Diseases	Gastroenterology
Diseases of the Biliary System	Gastroenterology
Diseases of the Pancreas	Gastroenterology

Inherited, Autoimmune, and Metabolic Liver Diseases	Gastroenterology
Infectious Diseases of the Liver	Gastroenterology
Inflammatory Bowel Diseases	Gastroenterology
Diseases of the Colon and Anorectal Region	Gastroenterology
Clinical Nutrition in Gastroenterology	Gastroenterology
Lower Gastrointestinal Endoscopy	Gastroenterology
Diseases of the Small Intestine and Malabsorption Syndrome	Gastroenterology
Ultrasonography in Gastroenterology	Gastroenterology
Upper Gastrointestinal Endoscopy	Gastroenterology
Presentation of the Bilio-Pancreatic System - ERCP, EUS, and Other Methods	Gastroenterology
Endoscopy - Approach to Clinical Problems	Gastroenterology
Transitional Gastroenterology	Gastroenterology
Nuclear Medicine Methods in Gastroenterology	Gastroenterology
Gastrointestinal Manifestations in Special Clinical Situations	Gastroenterology
Liver Failure and Transplantation	Gastroenterology
Pharmacotherapy of Digestive System Diseases	Gastroenterology
Radiological Methods in Gastroenterology	Gastroenterology
The Role of Mucosal Immunity in the Development of Autoimmune Diseases	Gastroenterology
General Competencies of Specialist Physicians	Gynecology and obstetrics
General Competencies of Specialist Physicians	Gynecology and obstetrics
Human Reproduction	Gynecology and obstetrics
Gynecological Endocrinology	Gynecology and obstetrics
Ultrasound in Gynecology and Obstetrics	Gynecology and obstetrics
Perinatology	Gynecology and obstetrics
Classic Obstetrics	Gynecology and obstetrics
Gynecological Surgery	Gynecology and obstetrics
Urogynecology	Gynecology and obstetrics
Urology	Gynecology and obstetrics
Anesthesiology	Gynecology and obstetrics
Abdominal Surgery in Gynecology and Obstetrics	Gynecology and obstetrics
Gynecological Pathology and Cytology	Gynecology and obstetrics
Gynecological Oncology	Gynecology and obstetrics
Menopausal Medicine	Gynecology and obstetrics
Dysfunctional Uterine Bleeding	Gynecology and obstetrics
Oncofertility Procedures	Gynecology and obstetrics
Complications of Gynecological Surgeries	Gynecology and obstetrics
Emergency Conditions in Gynecology and Obstetrics	Gynecology and obstetrics
General Competencies of Specialist Physicians	Hematology

General Competencies of Specialist Physicians	Hematology
Hematopathology and Cytology	Hematology
Erythrocyte Diseases	Hematology
Benign Diseases of Granulocytes and Lymphocytes, and Diseases of Monocytes and Macrophages	Hematology
Diseases Caused by Hemostasis Disorders	Hematology
Structure and Function of the Hematopoietic System, Symptoms, Signs, and Classification of Diseases	Hematology
Laboratory Diagnostic Methods in Hematology	Hematology
Myeloproliferative Diseases	Hematology
Myelodysplastic Syndrome	Hematology
Neoplastic Diseases of the Lymphocytic System	Hematology
Diseases of the Spleen, Splenomegaly, and Hypersplenism	Hematology
Hematopoietic Stem Cell Transplantation	Hematology
Emergency Conditions, Supportive and Palliative Therapy in Hematology	Hematology
Acute Leukemias	Hematology
Neoplastic Disorders of Cells Producing Immunoglobulins	Hematology
Transfusion Medicine in Hematology	Hematology
Chronic Graft-Versus-Host Disease	Hematology
Hematological Diseases in Children	Hematology
Diagnosis and Treatment of Infections in Hematological Patients	Hematology
Radiological and Nuclear Medicine Methods in Hematology	Hematology
Methodology of Clinical Research in Hematology and Critical Interpretation of Their Results	Hematology
General Competencies of Specialist Physicians	Emergency medicine
General Competencies of Specialist Physicians	Emergency medicine
Leading Symptoms in Emergency Medicine	Emergency medicine
Emergency Conditions in Internal Medicine	Emergency medicine
Laboratory Diagnostics in Emergency Medicine	Emergency medicine
Radiological Diagnostics in Emergency Medicine	Emergency medicine
Ultrasound in Emergency Medicine	Emergency medicine
Emergency Interventions in Medicine	Emergency medicine
Clinical Pharmacology in Emergency Medicine	Emergency medicine
Emergency Conditions in Pediatrics	Emergency medicine
Emergency Conditions in Neurology	Emergency medicine
Emergency Conditions in Psychiatry	Emergency medicine
Emergency Conditions in Gynecology and Obstetrics	Emergency medicine

Emergency Conditions in Otorhinolaryngology	Emergency medicine
Emergency Medicine in Prehospital Settings	Emergency medicine
Specifics of Emergency Medicine	Emergency medicine
Emergency Conditions in Infectious Diseases	Emergency medicine
Emergency Conditions in Ophthalmology	Emergency medicine
Emergency Conditions in Surgery	Emergency medicine
Artificial Ventilation	Emergency medicine
Acute Poisonings	Emergency medicine
Pathophysiology of Shock	Emergency medicine
Introduction to Health Economics	Public health
Statistical and Epidemiological Methods in Public Health	Public health
Environment and Health	Public health
Health and Health Care System	Public health
Health and Health Care System	Public health
Bioethics and Human Rights	Public health
Bioethics and Human Rights	Public health
Health Promotion, Health Education, and Health Communication	Public health
Health and Society	Public health
Health and Society	Public health
International Health	Public health
Planning and Organization, as well as Quality Management in the Healthcare System	Public health
Healthcare Management Skills and Intersectoral Collaboration	Public health
Community Health - Health Assessment and Health Planning	Public health
Public Health Interventions	Public health
Health, Social, and Healthcare Policy	Public health
Healthcare Technology	Public health
Public Health Informatics	Public health
Qualitative Methods in Health Research	Public health
Quality Assurance in Healthcare	Public health
Gerontological Public Health Care	Public health
Promotion of Mental Health	Public health
Primary Health Care and Family Medicine	Public health
Healthcare Financing	Public health
Pharmaceutical Policy and Healthcare Market	Public health
General Competencies of Specialist Physicians	Public health medicine
General Competencies of Specialist Physicians	Public health medicine
Introduction to Health Economics	Public health medicine
Statistical and Epidemiological Methods in Public Health	Public health medicine
Environment and Health	Public health medicine



Health Promotion, Health Education, and Health Communication	Public health medicine
Planning and Organization, as well as Quality Management in the Healthcare System	Public health medicine
Healthcare Management Skills and Intersectoral Collaboration	Public health medicine
Community Health - Health Assessment and Health Planning	Public health medicine
Public Health Interventions	Public health medicine
Health, Social, and Healthcare Policy	Public health medicine
Health Technology	Public health medicine
Health and Health Care System	Public health medicine
Health and Health Care System	Public health medicine
Public Health Informatics	Public health medicine
Qualitative Methods in Health Research	Public health medicine
Bioethics and Human Rights	Public health medicine
Bioethics and Human Rights	Public health medicine
Quality Assurance in Healthcare	Public health medicine
Gerontological-Public Health Protection	Public health medicine
Promotion of Mental Health	Public health medicine
Primary Health Care and Family Medicine	Public health medicine
Health and Society	Public health medicine
Health and Society	Public health medicine
Healthcare Financing	Public health medicine
Pharmaceutical Policy and Health Market	Public health medicine
General Competencies of Specialist Physicians	Cardiology
General Competencies of Specialist Physicians	Cardiology
Epidemiology and Prevention of Cardiovascular Diseases	Cardiology
Echocardiography and Other Imaging Methods in Cardiology	Cardiology
Invasive Diagnostic Procedures and Interventional Techniques in Cardiology	Cardiology
Clinical Cardiovascular Pharmacology	Cardiology
Clinical Examination, Laboratory Diagnostics, and Genetics in Cardiology	Cardiology
Arterial and Pulmonary Hypertension	Cardiology
Emergency and Intensive Cardiology	Cardiology
Acute Coronary Syndrome and Chronic Ischemic Heart Disease	Cardiology
Diseases of the Heart Valves	Cardiology
Diagnosis and Treatment of Cardiac Arrhythmias	Cardiology
Cardiac Electrostimulation	Cardiology
Primary and Systemic Diseases of the Myocardium and Pericardium	Cardiology

Heart Failure	Cardiology
Cardiovascular Patient Rehabilitation	Cardiology
Diseases of Arteries and Veins	Cardiology
Congenital Heart Diseases	Cardiology
Advanced Electrocardiography	Cardiology
Cardiology of Work and Sports	Cardiology
Cardiological Issues in Non-cardiac Patients	Cardiology
General Competencies of Specialist Physicians	Cardiothoracic Surgery
General Competencies of Specialist Physicians	Cardiothoracic Surgery
Modern Aspects of Surgical and Transcatheter Treatment of Valvular Pathology	Cardiothoracic Surgery
Surgery of Large Blood Vessels	Cardiothoracic Surgery
Surgical Treatment of Congenital Heart Defects	Cardiothoracic Surgery
Anatomy, Physiology, and Diagnostic of the Organs of the Chest	Cardiothoracic Surgery
Ischemic Heart Disease	Cardiothoracic Surgery
Surgical Treatment of Advanced Stages of Heart Failure	Cardiothoracic Surgery
Perioperative Approach to Cardiothoracic Surgical Patients	Cardiothoracic Surgery
Lung Surgery	Cardiothoracic Surgery
Pleural Surgery	Cardiothoracic Surgery
Surgery of the Chest Wall, Diaphragm, and Mediastinum	Cardiothoracic Surgery
Tracheal Surgery	Cardiothoracic Surgery
Esophageal Surgery	Cardiothoracic Surgery
Chest Injuries	Cardiothoracic Surgery
Fundamentals of Pharmacodynamics	Clinical Pharmacology and Toxicology
Fate of the Drug in the Body	Clinical Pharmacology and Toxicology
Preclinical Drug Development	Clinical Pharmacology and Toxicology
Clinical Toxicology	Clinical Pharmacology and Toxicology
Clinical Drug Trials	Clinical Pharmacology and Toxicology
Adverse Effects and Drug Interactions	Clinical Pharmacology and Toxicology
Evidence-Based Medicine	Clinical Pharmacology and Toxicology
Good Clinical Practice	Clinical Pharmacology and Toxicology

Fundamentals of Biomedical Statistics	Clinical Pharmacology and Toxicology
Polyomic Approaches in the Application of Personalized Therapy	Clinical Pharmacology and Toxicology
General Competencies of Specialist Physicians	Clinical Pharmacology and Toxicology
Rational Pharmacotherapy	Clinical Pharmacology and Toxicology
Pharmacogenomics and Personalized Medicine	Clinical Pharmacology and Toxicology
Drug Hypersensitivity	Clinical Pharmacology and Toxicology
Drug Use in Special Patient Groups	Clinical Pharmacology and Toxicology
Ethical Issues in Clinical Pharmacology	Clinical Pharmacology and Toxicology
General Bacteriology	Clinical Microbiology
General Virology	Clinical Microbiology
General Mycology and Special Mycology	Clinical Microbiology
General Parasitology and Special Parasitology	Clinical Microbiology
Special Bacteriology	Clinical Microbiology
Special Virology	Clinical Microbiology
Selected Chapters from Biochemistry	Clinical Microbiology
Epidemiology	Clinical Microbiology
Immunology	Clinical Microbiology
Pathogenesis of Infections	Clinical Microbiology
General Competencies of Specialist Physicians	Clinical Microbiology
General Competencies of Specialist Physicians	Clinical Microbiology
Clinical Microbiology	Clinical Microbiology
Clinical Infectious Diseases	Clinical Microbiology
Respiratory System Viral Infections	Clinical Microbiology
Modern Radiological Techniques and Technology	Clinical Radiology
Radiobiology and Protection from Ionizing Radiation	Clinical Radiology
Contrast Agents in Radiology	Clinical Radiology
Radiology of the Hepatobiliary System, Pancreas, and Spleen	Clinical Radiology
Radiology of the Urogenital System	Clinical Radiology
Radiology of the Heart and Major Blood Vessels	Clinical Radiology
Radiology of the Musculoskeletal System	Clinical Radiology
Radiology of the Respiratory System and Mediastinum	Clinical Radiology
Radiology of the Gastrointestinal System	Clinical Radiology
General Competencies of Specialist Physicians	Clinical Radiology
General Competencies of Specialist Physicians	Clinical Radiology

Angiographic Diagnostics	Clinical Radiology
Interventional Radiology	Clinical Radiology
Ultrasound Diagnostics of Organ Systems	Clinical Radiology
Breast Disease Diagnostics	Clinical Radiology
Magnetic Resonance Imaging	Clinical Radiology
Diagnostic and Interventional Procedures in Neuroradiology	Clinical Radiology
Pediatric Radiology	Clinical Radiology
Maxillofacial Traumatology	Maxillofacial Surgery
Diagnostic Algorithms, General Surgical, and Pharmacotherapeutic Principles	Maxillofacial Surgery
Oral Surgery	Maxillofacial Surgery
Selected Chapters from Dental Prosthetics	Maxillofacial Surgery
Inflammation of the Maxillofacial Region	Maxillofacial Surgery
Jaw Cysts and Differential Diagnosis of Jaw Radiolucency	Maxillofacial Surgery
Selected Chapters from Orthodontics	Maxillofacial Surgery
Selected Chapters from Dental Medicine	Maxillofacial Surgery
General Competencies of Specialist Physicians	Maxillofacial Surgery
Cleft Lip and Craniofacial Syndromes	Maxillofacial Surgery
Facial Aesthetic Surgery	Maxillofacial Surgery
Craniofacial Skeletal Deformities	Maxillofacial Surgery
Head and Neck Oncological Surgery	Maxillofacial Surgery
Head and Neck Plastic and Reconstructive Surgery	Maxillofacial Surgery
Temporomandibular Joint Surgery	Maxillofacial Surgery
Digital Planning Techniques in Maxillofacial Surgery	Maxillofacial Surgery
Surgical Diseases of the Cranial Base	Maxillofacial Surgery
General Competencies of Specialist Physicians	Occupational and Sports Medicine
Professional Diseases, Toxicology, and Occupational Pathology	Occupational and Sports Medicine
Physiology of Work and Sports	Occupational and Sports Medicine
Psychology of Work and Sports	Occupational and Sports Medicine
Sports and Recreational Medicine	Occupational and Sports Medicine
Assessment of Work and Sports Abilities	Occupational and Sports Medicine
Training Theory	Occupational and Sports Medicine
Ecological Analysis of Work and Sports Conditions	Occupational and Sports Medicine
Sports Medicine	Occupational and Sports Medicine
Chronic Diseases in Workers and Athletes and Physical Exercise	Occupational and Sports Medicine

Kinesiology I.	Occupational and Sports Medicine
Statistical and Epidemiological Foundations of Quality Management	Healthcare Management
Selected Chapters in Public Health, Policy, and Healthcare System Management	Healthcare Management
Pharmaceutical Policy and Healthcare Market	Healthcare Management
Evidence-Based Medical Practice - Quality Management and Hospital Accreditation	Healthcare Management
Health Insurance and Health Services Management	Healthcare Management
Introduction to Management and Change Management	Healthcare Management
Economics and Financing of Healthcare - Investing in Health	Healthcare Management
Health Systems and Health Policy	Healthcare Management
Health Information Systems as Decision Support in Healthcare	Healthcare Management
Fundamentals of Financing and Accounting for Healthcare Management	Healthcare Management
Risk Management	Healthcare Management
Global Public Health	Healthcare Management
Management of Public Health Programs - Mental Health Approaches and Methods	Healthcare Management
Leadership and Negotiation	Healthcare Management
Business Communication and Business Style	Healthcare Management
Resource Management	Healthcare Management
Pharmaceutical Medicine - Drugs from Research to Users	Healthcare Management
Selected Health Statistics on the Population	Healthcare Management
Investing in Health and New Healthcare Technologies	
General Competences of Specialist Physicians	Neurology
General Competences of Specialist Physicians	Neurology
Cerebrovascular Diseases	Neurology
Headaches and Pain Syndromes	Neurology
Intensive Neurology	Neurology
Spinal Diseases	Neurology
Epilepsies	Neurology
Cognitive Neurology	Neurology
Neuromuscular Diseases	Neurology
Extrapyramidal Diseases - Movement Disorders	Neurology
Demyelinating Diseases	Neurology
General Competences of Specialist Physicians	Nuclear Medicine
General Competences of Specialist Physicians	Nuclear Medicine
Physics and Instrumentation of Nuclear Medicine	Nuclear Medicine

Radiopharmacy and Radiopharmaceuticals	Nuclear Medicine
Thyroid Disease Diagnostics	Nuclear Medicine
Nuclear Medicine Bone System Investigations	Nuclear Medicine
Radionuclides in Nephrology and Urology	Nuclear Medicine
Hybrid Imaging	Nuclear Medicine
Treatment of Thyroid Diseases	Nuclear Medicine
Radionuclides in Gastroenterology	Nuclear Medicine
Radionuclides in Hematology	Nuclear Medicine
Nuclear Medicine Investigations of Inflammatory Diseases	Nuclear Medicine
Computational Methods in Nuclear Medicine	Nuclear Medicine
Radionuclides in Endocrinology	Nuclear Medicine
Radionuclides in Oncology	Nuclear Medicine
Treatment with Open Radiation Sources	Nuclear Medicine
Selected Chapters in the Application of Radionuclides in Nuclear Medicine	Nuclear Medicine
Nuclear Medicine Investigations of the Heart, Lungs, and Blood Vessels	Nuclear Medicine
Radionuclides in Neurology	Nuclear Medicine
Radiation Protection	Nuclear Medicine
Emergency Scans in Nuclear Medicine	Nuclear Medicine
Undifferentiated and Medullary Thyroid Carcinomas - Diagnosis and Therapy	Nuclear Medicine
Organization, Content, and Methods of Work in Family Medicine - Part I	Family Medicine
Improvement of Work Quality	Family Medicine
Protection of Mental Health	Family Medicine
Research in Family Medicine	Family Medicine
Protection of Family Health	Family Medicine
Protection of the Health of Children and Youth	Family Medicine
Health Economics	Family Medicine
Medical Informatics	Family Medicine
Medicine and Society	Family Medicine
Medical Sociology for Family Physicians	Family Medicine
Organization, Management, and Leadership in Healthcare	Family Medicine
Health Effects of the General and Work Environment	Family Medicine
General Competences of Specialist Physicians	Family Medicine
General Competences of Specialist Physicians	Family Medicine
Health Protection for the Elderly	Family Medicine
Health Protection for Oncology Patients	Family Medicine
Organization, Content, and Methods of Work in	Family Medicine

Family Medicine - Part II	
Health Protection for Patients with Chronic Diseases	Family Medicine
Health Protection for Women	Family Medicine
Epidemiology for Family Physicians	Family Medicine
Human Sexuality	Family Medicine
Legislation and Medical Ethics	Family Medicine
Health Promotion and Disease Prevention	Family Medicine
Complementary and Alternative Medicine	Family Medicine
Functional Testing of the Eye	Ophthalmology and Optometry
Pathological Anatomy of the Eye	Ophthalmology and Optometry
Protective Apparatus of the Eye	Ophthalmology and Optometry
Eye Trauma	Ophthalmology and Optometry
Tumors of the Eye's Protective Apparatus	Ophthalmology and Optometry
Employability and Rehabilitation of the Visually Impaired	Ophthalmology and Optometry
Corneal Transplantation and Eye Banking	Ophthalmology and Optometry
Physiology of the Eye	Ophthalmology and Optometry
External Coverings of the Eye	Ophthalmology and Optometry
Immunology and Immune Diseases of the Eye	Ophthalmology and Optometry
Genetics in Ophthalmology	Ophthalmology and Optometry
Lens and Lens Diseases	Ophthalmology and Optometry
General Competences of Specialist Physicians	Ophthalmology and Optometry
General Competences of Specialist Physicians	Ophthalmology and Optometry
Neuro-Ophthalmology	Ophthalmology and Optometry
Diseases of the Middle Eye Membrane	Ophthalmology and Optometry
Retinal Diseases	Ophthalmology and Optometry
Orbital Pathology and Thyroid Diseases	Ophthalmology and Optometry
Optometry	Ophthalmology and Optometry
Pharmacotherapy in Ophthalmology	Ophthalmology and Optometry
Pediatric Ophthalmology and Strabismus	Ophthalmology and Optometry
Glaucoma	Ophthalmology and Optometry
Contemporary Approach to Cataract Surgery	Ophthalmology and Optometry
Macula and Macular Diseases	Ophthalmology and Optometry
Vitreoretinal Surgery	Ophthalmology and Optometry
General Competences of Specialist Physicians	Oncology and Radiotherapy
General Competences of Specialist Physicians	Oncology and Radiotherapy
Carcinogenesis and Tumor Prevention	Oncology and Radiotherapy
Molecular Genetics of Tumors	Oncology and Radiotherapy
Molecular Biology of Tumors	Oncology and Radiotherapy
Radiobiology of Tumors	Oncology and Radiotherapy
Pathology and Cytology of Malignant Tumors	Oncology and Radiotherapy
Radiological and Ultrasound Diagnosis of	Oncology and Radiotherapy

Oncology Patients	
Radiation Therapy Physics and Equipment	Oncology and Radiotherapy
Radiation Dose Measurement and Protection in Radiotherapy	Oncology and Radiotherapy
Application of Radionuclides and Brachytherapy in Oncology	Oncology and Radiotherapy
Systemic Therapy for Solid Tumors	Oncology and Radiotherapy
Supportive Treatment and Management of Side Effects, Reconstructive Procedures, Palliation, Ethical Considerations, and Psychological Support in Oncology	Oncology and Radiotherapy
Interplay of Surgical Treatment with Other Oncological Therapies and Diagnostic Methods	Oncology and Radiotherapy
Tumors of the Female Reproductive System	Oncology and Radiotherapy
Clinical Immunotherapy in Oncology	Oncology and Radiotherapy
Tumors of Childhood	Oncology and Radiotherapy
Tumors of the Musculoskeletal System	Oncology and Radiotherapy
Breast Tumors	Oncology and Radiotherapy
Skin Tumors	Oncology and Radiotherapy
Central Nervous System Tumors	Oncology and Radiotherapy
Epidemiology of Malignant Tumors, Informatization, Research, and the Role of Individual Healthcare Segments	Oncology and Radiotherapy
Head and Neck Tumors	Oncology and Radiotherapy
Digestive System Tumors	Oncology and Radiotherapy
Intrathoracic Tumors	Oncology and Radiotherapy
Neoplasms of the Hematological and Immune System	Oncology and Radiotherapy
Urinary System Tumors	Oncology and Radiotherapy
General Competencies of Specialist Physicians	General Surgery
General Competencies of Specialist Physicians	General Surgery
Microbiology, Surgical Infections, and Antimicrobial Therapy	General Surgery
Urology	General Surgery
Gynecology	General Surgery
Basic Principles of Anesthesia and Intensive Medicine in Surgical Patients	General Surgery
Perioperative Surgical Procedures and Treatment	General Surgery
Radiological Diagnostics in Surgery	General Surgery
Vascular Surgery	General Surgery
Neurosurgery	General Surgery
General Oncological Surgery	General Surgery
Organ and Tissue Transplantation	General Surgery
Abdominal Surgery	General Surgery
Cardiothoracic Surgery	General Surgery



Maxillofacial Surgery	General Surgery
Orthopedics and Traumatology	General Surgery
Plastic, Reconstructive, and Aesthetic Surgery	General Surgery
Pediatric Surgery	General Surgery
Basic and Applied Sciences in Orthopedics and Traumatology	Orthopedics and Traumatology
Amputations and Contemporary Orthopedic Aids	Orthopedics and Traumatology
Radiological Diagnostics and Imaging Methods in Orthopedics and Traumatology	Orthopedics and Traumatology
Reconstructive Surgery of the Musculoskeletal System	Orthopedics and Traumatology
Hip and Knee Endoprostheses	Orthopedics and Traumatology
Polytrauma	Orthopedics and Traumatology
Contemporary Insights into Tumors of the Musculoskeletal System	Orthopedics and Traumatology
Traumatology of the Musculoskeletal System	Orthopedics and Traumatology
Pediatric Orthopedics and Traumatology	Orthopedics and Traumatology
Vertebrology - Clinical Issues of the Spine	Orthopedics and Traumatology
Clinical Issues of the Hand and Elbow	Orthopedics and Traumatology
Gonology - Clinical Issues of the Knee Joint	Orthopedics and Traumatology
Podology - Clinical Issues of the Ankle and Foot	Orthopedics and Traumatology
Sports Traumatology	Orthopedics and Traumatology
General Competencies of Specialist Physicians	Orthopedics and Traumatology
General Competencies of Specialist Physicians	Orthopedics and Traumatology
Clinical Issues of the Shoulder Girdle and Upper Arm Joints	Orthopedics and Traumatology
General Competencies of Specialist Physicians	Otorhinolaryngology
General Competencies of Specialist Physicians	Otorhinolaryngology
Head and Neck Oncology	Otorhinolaryngology
Diseases of the Neck - Diagnosis and Therapy	Otorhinolaryngology
Audiological Otoneurology	Otorhinolaryngology
Otology	Otorhinolaryngology
Vestibular Otoneurology	Otorhinolaryngology
Audiology	Otorhinolaryngology
Laryngology	Otorhinolaryngology
Rhinology	Otorhinolaryngology
Oropharyngology	Otorhinolaryngology
Plastic-Reconstructive Surgery of the Head and Neck	Otorhinolaryngology
Tracheobronchology	Otorhinolaryngology
Head and Neck Oncosurgery	Otorhinolaryngology
Reconstructive Surgery in Otology	Otorhinolaryngology
Multidisciplinary Oncological Approach in Otolaryngology	Otorhinolaryngology
Rhinology II	Otorhinolaryngology

Phoniatics	Otorhinolaryngology
Esophagology	Otorhinolaryngology
Selected Chapters in Pediatric Otorhinolaryngology	Otorhinolaryngology
Secretory Otitis	Otorhinolaryngology
Rare Tumors of the Head and Neck	Otorhinolaryngology
Thyroid and Parathyroid Gland Surgery	Otorhinolaryngology
Aesthetic Surgery of the Head and Neck	Otorhinolaryngology
Melanomas of the Head and Neck	Otorhinolaryngology
Diagnostic Methods in Pathology - Electron Microscopy, Histochemistry, Immunohistochemistry, Cytology	Pathology and Cytology
Molecular and Computational Pathology	Pathology and Cytology
Diseases of the Heart and Blood Vessels	Pathology and Cytology
Kidney Diseases	Pathology and Cytology
General Mechanisms of Disease: Inflammation, Immune Disorders, Carcinogenesis	Pathology and Cytology
Breast Pathology	Pathology and Cytology
Diseases of the Head and Neck	Pathology and Cytology
Diseases of the Endocrine Glands	Pathology and Cytology
Lung, Pleura, and Mediastinum Pathology	Pathology and Cytology
Skin Pathology	Pathology and Cytology
Pathology of the Urinary System and Male Reproductive Organs	Pathology and Cytology
Diseases of the Musculoskeletal System and Soft Tissue Tumors	Pathology and Cytology
Blood and Hematopoietic Organ Diseases	Pathology and Cytology
General Competencies of Specialist Physicians	Pathology and Cytology
General Competencies of Specialist Physicians	Pathology and Cytology
Liver and Biliary Tract Diseases	Pathology and Cytology
Fundamentals of Forensic Medicine	Pathology and Cytology
Diseases of the Central Nervous System	Pathology and Cytology
Diseases of the Gastrointestinal System	Pathology and Cytology
Gynecological and Perinatal Pathology	Pathology and Cytology
Forensic Medicine	Pathology and Cytology
Molecular Diagnostics	Pathology and Cytology
Neuropathology	Pathology and Cytology
Cytology	Pathology and Cytology
Solid Organ Transplantation	Pathology and Cytology
Immunopathology - Bone Marrow Transplantation	Pathology and Cytology
General Competencies of Specialist Physicians	Pediatrics
General Competencies of Specialist Physicians	Pediatrics
Emergencies in Pediatrics	Pediatrics
Congenital and Acquired Metabolic Disorders in Children	Pediatrics

Growth and Development, Endocrinology, and Diabetes	Pediatrics
Immunological and Rheumatic Diseases in Pediatric Age	Pediatrics
Medical Genetics	Pediatrics
Preventive and Social Aspects of Pediatrics	Pediatrics
Neonatology	Pediatrics
Pediatric Gastroenterology	Pediatrics
Pediatric Hematology and Oncology	Pediatrics
Nutrition in Health and Disease - Selected Topics	Pediatrics
Basics of Premature Infant Treatment	Pediatrics
Thyroid Diseases in Fetal, Neonatal, and Pediatric Age	Pediatrics
Autoimmune Rheumatic Diseases	Pediatrics
Cystic Fibrosis - Various Aspects of the Disease	Pediatrics
Metabolically Induced Kidney Diseases in Children	Pediatrics
Infectious Diseases	Pediatrics
Pediatric Cardiology	Pediatrics
Pulmonology and Tuberculosis	Pediatrics
Pediatric Nephrology	Pediatrics
Neuropediatrics	Pediatrics
Congenital Anomalies of the Digestive Tract and Abdominal Wall	Pediatrics
Neuromuscular Diseases in Children	Pediatrics
Epilepsies and Epileptic Syndromes	Pediatrics
Pediatric Cardiology - Congenital Heart Defects	Pediatrics
Intestinal Flora in Health and Disease	Pediatrics
General Competencies of Specialist Physicians	Psychiatry
General Competencies of Specialist Physicians	Psychiatry
General Psychopathology	Psychiatry
Psychiatric Interview and Classification Systems	Psychiatry
Psychogeriatrics	Psychiatry
Mood Disorders	Psychiatry
Anxiety Disorders	Psychiatry
Ethics in Psychiatry	Psychiatry
Addiction Disorders	Psychiatry
Psychotic Disorders	Psychiatry
Emergency and Crisis Situations in Psychiatry	Psychiatry
Personality Disorders	Psychiatry
Disorders in Childhood and Adolescence	Psychiatry
Eating Disorders	Psychiatry
Fundamentals of Neuroscience in Psychiatry	Psychiatry
Forensic Psychiatry	Psychiatry
Social Psychiatry and Community Psychiatry	Psychiatry

Cognitive-Behavioral, Integrative, and Systemic Psychotherapy	Psychiatry
Biological Treatment Methods in Psychiatry	Psychiatry
Collaborative Psychiatry	Psychiatry
Dynamic Psychotherapy	Psychiatry
How to Write a Scientific Paper in Psychiatry	Psychiatry
Person-Centered Psychiatry	Psychiatry
Professional Skills	Psychiatry
History of Psychiatry	Psychiatry
Psychodynamics and Clinical Pictures of Psychosomatic Disorders	Psychotherapy
Theoretical Foundations of Psychoanalytic Therapy	Psychotherapy
Theoretical Foundations of Group Analysis	Psychotherapy
Psychodynamics and Clinical Picture of Neuroses	Psychotherapy
Developmental Psychology	Psychotherapy
Clinical Pictures of Self Disorders	Psychotherapy
Selected Chapters in Psychiatry	Psychotherapy
Theoretical Foundations of Cognitive-Behavioral Therapy	Psychotherapy
Psychotherapy of Psychoses	Psychotherapy
Psychotherapeutic Approach in Hospital Conditions (Clinical Psychotherapy)	Psychotherapy
Family Therapy and Psychodrama-Expressive Group Therapy	Psychotherapy
Self-Experience in Group Analysis	Psychotherapy
Personality Disorders	Psychotherapy
Disorders in Childhood and Adolescence	Psychotherapy
Eating Disorders	Psychotherapy
Sociotherapy and Rehabilitation in Psychiatry	Psychotherapy
General Competencies of Specialist Physicians	Pulmonology
General Competencies of Specialist Physicians	Pulmonology
Epidemiology and Prevention of Respiratory Diseases	Pulmonology
Functional Diagnostics in Pulmonology	Pulmonology
Imaging Methods in Pulmonology	Pulmonology
Pathohistological, Cytological, and Molecular Diagnostics in Pulmonology	Pulmonology
Microbiology in Pulmonology	Pulmonology
Asthma and Allergic Respiratory Diseases	Pulmonology
Endoscopy in Pulmonology	Pulmonology
Thoracic Surgery	Pulmonology
Chronic Obstructive Pulmonary Disease	Pulmonology
Tuberculosis and Other Mycobacterial Infections	Pulmonology

Lung Cancer	Pulmonology
Other Thoracic Tumors	Pulmonology
Diffuse Diseases of Pulmonary Parenchyma	Pulmonology
Respiratory Infections	Pulmonology
Respiratory Insufficiency	Pulmonology
Diseases of Pulmonary Circulation	Pulmonology
Lung Transplantation	Pulmonology
Emergencies in Pulmonology	Pulmonology
Sleep-Disordered Breathing	Pulmonology
Rehabilitation of Respiratory Patients	Pulmonology
Epidemiology	School and Adolescent Medicine
Otorhinolaryngology in Children and Adolescents	School and Adolescent Medicine
Specifics of Healthcare for Children and Adolescents with Chronic and Permanent Diseases	School and Adolescent Medicine
Social Medicine and Organization of Healthcare	School and Adolescent Medicine
Health Education Methodology	School and Adolescent Medicine
Gynecology in Children and Adolescents	School and Adolescent Medicine
Vision Protection for Schoolchildren and Youth	School and Adolescent Medicine
Orthopedic Problems in Children and Adolescents	School and Adolescent Medicine
Child Growth and Development	School and Adolescent Medicine
Medical Sociology and Health Economics	School and Adolescent Medicine
Selected Chapters in Medical Informatics	School and Adolescent Medicine
Health Ecology and Occupational Health	School and Adolescent Medicine
Structure, Methodology, and Functioning of Scientific Work	School and Adolescent Medicine
Medical and Health Statistics	School and Adolescent Medicine
General Competencies of Specialist Physicians	School and Adolescent Medicine
General Competencies of Specialist Physicians	School and Adolescent Medicine
Mental Health Protection for Children and Adolescents	School and Adolescent Medicine
Healthcare for Schoolchildren and Youth	School and Adolescent Medicine
Sports Kinesiology	School and Adolescent Medicine
Sports Medicine	School and Adolescent Medicine
Rational Pharmacotherapy	School and Adolescent Medicine
Violence as a Public Health Issue	School and Adolescent Medicine
General Competencies of Specialist Physicians	Transfusion Medicine
General Competencies of Specialist Physicians	Transfusion Medicine
Laboratory Diagnostic Methods	Transfusion Medicine
Blood Donation and Production of Blood Products	Transfusion Medicine
Immunohematology of Red Blood Cells, Platelets, and Granulocytes	Transfusion Medicine
Ethics and Quality Management in Transfusion	Transfusion Medicine

Medicine	
Organization and Function of the Immune System	Transfusion Medicine
Bloodborne Infectious Diseases	Transfusion Medicine
Hemostasis	Transfusion Medicine
Clinical Transfusion Medicine	Transfusion Medicine
Transfusion Reactions	Transfusion Medicine
Storage of Tissues and Cells	Transfusion Medicine
Immunogenetics	Transfusion Medicine
General Competencies of Specialist Physicians	Urology
General Competencies of Specialist Physicians	Urology
Selected Chapters in the Structure and Development of the Urogenital System	Urology
Selected Chapters in the Anatomy of the Urogenital System	Urology
Selected Chapters in the Physiology of the Urogenital System	Urology
Selected Chapters in the Pathological Morphology of Male Reproductive Organs and Urinary System	Urology
Selected Chapters in the Pathophysiology of the Urogenital System	Urology
Radiological and Ultrasonographic Diagnostics and Interventional Radiology in Urology	Urology
Nuclear Medicine Examinations in Urology	Urology
Selected Chapters in Nephrology	Urology
Clinical Pharmacology of the Urogenital System	Urology
Selected Chapters in Clinical Microbiology	Urology
Selected Chapters in the Pathophysiology of the Urogenital System	Urology
Radiological and Ultrasonographic Diagnostics and Interventional Radiology in Urology	Urology
Urodynamics and Andrology	Urology
Urological Oncology - Surgical Aspects	Urology
Dialysis	Urology
Urolithiasis - Diagnosis and Therapy	Urology
Pediatric Urology	Urology
Urogenital Trauma	Urology
Urogynecology	Urology
Minimally Invasive Procedures in Urology and New Technologies	Urology
Adrenal Gland Diseases	Urology
Kidney Transplantation and Organ Explantation	Urology
Detection and Diagnostic Procedures, as well as Therapy for Prostate Cancer	Urology
Chemotherapy and Radiotherapy of Tumors in Urology	Urology

Urological Oncology - Surgical Aspects	Urology
Pediatric Urology	Urology
Urogenital Trauma	Urology

### 3.5. Postgraduate university (doctoral) studies in Biomedicine and Health

#### 3.5.1. General information about the study

The postgraduate university (doctoral) study program in Biomedicine and Health was introduced as the third cycle of the Bologna Process with the aim of connecting the European Higher Education Area and the European Research Area. The postgraduate study program leading to the academic degree of Doctor of Medical Sciences was established in the academic year 1997/1998. From the academic year 2003/2004, this program has been titled Biomedicine and Health, and a corresponding program in English was introduced in the academic year 2007/2008. In Croatia, this study program was the first to embrace the principles of the Bologna Process and implement the ECTS (European Credit Transfer and Accumulation System) credit system. The University of Zagreb School of Medicine played an active role in the development and harmonization of doctoral studies at the European level. In 2004, the non-governmental organization ORPHEUS (Organization of PhD Education in Biomedicine and Health Sciences in the European System) was established based on the same principles, promoting the harmonization of doctoral studies in the field of biomedicine.

#### 3.5.2. Conditions for enrollment

A person eligible for enrollment in the postgraduate university (doctoral) study program in Biomedicine and Health must have completed an appropriate university graduate program or an integrated university undergraduate and graduate program in the scientific field of Biomedicine and Health or a related field. The applicant should have a grade point average of at least 3.51, or in a grading system of 5-10 or A-F, a grade point average of at least 8.00. Exceptionally, applicants with completed graduate studies in other natural sciences or, in the case of public health, social sciences, may be admitted with a justification and request.

Enrollment quotas are determined based on the availability of research, teaching, and mentoring capacities. Admission to the postgraduate university study program is based on a public competition announced in the daily press and on the Faculty's website. Applicants who have completed an integrated undergraduate and graduate program or a graduate program abroad must submit a decision on the academic recognition of the foreign higher education qualification before enrollment.

Criteria for evaluating applicants include success in the integrated undergraduate and graduate program or the graduate program, demonstrated interest in scientific research (published papers and abstracts of conference presentations), recommendations from teachers and potential mentors, and a proposed research area as part of the doctoral thesis. An interview with the applicant is a mandatory part of the application process. All necessary conditions for completing the study within the specified period are clearly defined upon enrollment.

### 3.5.3. Structure and organization of studies

COURSE TITLE	MANDATORY / ELECTIVE
Structure, Methodology, and Functioning of Scientific Work	Mandatory Course
Biochemical Methods in Biomedical Research	Elective Course
Electrophysiological Methods in Medical Research	Elective Course
Laboratory Animals in Biomedical Research	Elective Course
Methods for Investigating Psychological Functions and Behavior	Elective Course
Characteristics of Clinical Medical Research	Elective Course
Medical Informatics Methods	Elective Course
Genomic Approaches in Biomedical and Translational Research	Elective Course
Morphological Research Methods in Biomedical Sciences	Elective Course
Proteomics in Biomedical Research	Elective Course
In vivo and In vitro Research Methods	Elective Course
Telemedicine	Elective Course
Methods for Research and Evaluation of Health Interventions	Elective Course
Evidence-Based Medical Practice	Elective Course
Molecular Biology Methods in Medicine	Elective Course
Epidemiological Methods in Research	Elective Course
Structure, Methodology, and Functioning of Scientific Work 2	Mandatory Course
Diagnosis and Treatment of Urinary Incontinence in Women	Elective Course
Genome Instability	Elective Course
Clinical Nutrition	Elective Course
Metabolic Syndrome	Elective Course
Advanced Ultrasonographic Methods in Gastroenterology and Hepatology	Elective Course
Biochemical Methods in Biomedical Research	Elective Course
Electrophysiological Methods in Medical Research	Elective Course
Laboratory Animals in Biomedical Research	Elective Course
Methods for Investigating Psychological Functions and Behavior	Elective Course



Characteristics of Clinical Medical Research	Elective Course
Diseases of the Adrenal Glands	Elective Course
Targeted Genome Changes in Mammals	Elective Course
Pharmacogenomics	Elective Course
Immunocytokines	Elective Course
Biomaterial Infections	Elective Course
How to Become a Nerve Cell?	Elective Course
Surgical Treatment of Pituitary Tumors	Elective Course
Medical Anthropology	Elective Course
Mechanisms of Allergic Reactions	Elective Course
Molecular Oncology - Knowledge Based on New Technologies	Elective Course
Molecular Aspects of Lymphocyte Development	Elective Course
Multi-Resistant Bacteria - Causes of Hospital Infections	Elective Course
Pathophysiology of the Brain and Cerebrospinal Fluid	Elective Course
Pathogenesis of Infectious Diseases	Elective Course
Application of Doppler Ultrasound in Scientific Research and Diagnosis of Vascular Diseases	Elective Course
Understanding Bone Metabolism - Fundamental Knowledge in Clinical Practice	Elective Course
Developmental Neurobiology of Humans	Elective Course
Strength of Synapses and Weaknesses of the Mind	Elective Course
Kidney Transplantation	Elective Course
Role of Immunogenetics in Transplantation	Elective Course
Neurosonology	Elective Course
Analysis of Biomedical Signals	Elective Course
Neurodegenerative Disease of the Optic Nerve	Elective Course
Medical Informatics Methods	Elective Course
Research Methods in Molecular Oncology	Elective Course
Viral Hepatitis	Elective Course
Doctoral Day	Elective Course

Statistical Data Analysis in Medicine	Elective Course
Clinical-Laboratory Diagnosis of Malignant Melanoma with Special Emphasis on Molecular-Biological Diagnostic Capabilities	Elective Course
Physiology and Biochemistry of the Uterus in Pregnancy and Childbirth	Elective Course
Human Reproduction	Elective Course
Management of Health and Public Health Risks in Crisis Situations	Elective Course
Liver Transplantation in Children	Elective Course
Genomic Approaches in Biomedical and Translational Research	Elective Course
Morphological Research Methods in Biomedical Sciences	Elective Course
Proteomics in Biomedical Research	Elective Course
In vivo and In vitro Research Methods	Elective Course
Telemedicine	Elective Course
Research Methods and Evaluation of Health Interventions	Elective Course
Evidence-Based Medical Practice	Elective Course
Experimental Oncology: Malignant Diseases as a State of Permanent Oxidative Stress	Elective Course
Epigenetics	Elective Course
Hand Surgery	Elective Course
Microvascular Tissue Transfer	Elective Course
Molecular Genetics of Aging and Carcinogenesis	Elective Course
Molecular Hematology	Elective Course
Molecular Genetic Basis of Gastrointestinal System Tumors	Elective Course
Neurobiology of Aging	Elective Course
Selected Chapters from Transplant Immunology	Elective Course
Collaborative and Consultative Psychiatry	Elective Course
Translational Medicine - From Disease to Genes	Elective Course
Liver Transplantation	Elective Course
Management of Mental Health Institutions	Elective Course
Bone Morphogenetic Proteins in Bone and Cartilage Regeneration	Elective Course
Molecular Biology Methods in Medicine	Elective Course

Epidemiological Methods in Research	Elective Course
Diabetes and Pregnancy	Elective Course
Fetal and Newborn Neurophysiology, Fetal Behavior	Elective Course
Endocrine Tumors of the Digestive System and Pancreas	Elective Course
Reproduction and Workplace	Elective Course
Diagnosis and Treatment of Urinary Incontinence in Women	Elective Course
Genome Instability	Elective Course
Clinical Nutrition	Elective Course
Metabolic Syndrome	Elective Course
Advanced Ultrasonographic Methods in Gastroenterology and Hepatology	Elective Course
Biochemical Methods in Biomedical Research	Elective Course
Electrophysiological Methods in Medical Research	Elective Course
Laboratory Animals in Biomedical Research	Elective Course
Methods for Investigating Psychological Functions and Behavior	Elective Course
Characteristics of Clinical Medical Research	Elective Course
Diseases of the Adrenal Glands	Elective Course
Targeted Genome Changes in Mammals	Elective Course
Pharmacogenomics	Elective Course
Immunocytokines	Elective Course
Biomaterial Infections	Elective Course
How to Become a Nerve Cell?	Elective Course
Surgical Treatment of Pituitary Tumors	Elective Course
Medical Anthropology	Elective Course
Mechanisms of Allergic Reactions	Elective Course
Molecular Oncology - Knowledge Based on New Technologies	Elective Course
Molecular Aspects of Lymphocyte Development	Elective Course
Multi-Resistant Bacteria - Causes of Hospital Infections	Elective Course
Pathophysiology of the Brain and Cerebrospinal Fluid	Elective Course
Pathogenesis of Infectious Diseases	Elective Course

Application of Doppler Ultrasound in Scientific Research and Diagnosis of Vascular Diseases	Elective Course
Understanding Bone Metabolism - Fundamental Knowledge in Clinical Practice	Elective Course
Developmental Neurobiology of Humans	Elective Course
Strength of Synapses and Weaknesses of the Mind	Elective Course
Kidney Transplantation	Elective Course
Role of Immunogenetics in Transplantation	Elective Course
Neurosonology	Elective Course
Analysis of Biomedical Signals	Elective Course
Neurodegenerative Disease of the Optic Nerve	Elective Course
Medical Informatics Methods	Elective Course
Research Methods in Molecular Oncology	Elective Course
Viral Hepatitis	Elective Course
Structure, Methodology, and Functioning of Scientific Work 3: Scientific Projects	Elective Course
Doctoral Day	Elective Course
Clinical-Laboratory Diagnosis of Malignant Melanoma with Special Emphasis on Molecular-Biological Diagnostic Capabilities	Elective Course
Physiology and Biochemistry of the Uterus in Pregnancy and Childbirth	Elective Course
Human Reproduction	Elective Course
Management of Health and Public Health Risks in Crisis Situations	Elective Course
Liver Transplantation in Children	Elective Course
Medical Statistics 2.1: Planned Experimental Study Design	Elective Course
Medical Statistics 2.2: Quasi-Experimental Study Model	Elective Course
Genomic Approaches in Biomedical and Translational Research	Elective Course
Morphological Research Methods in Biomedical Sciences	Elective Course
Proteomics in Biomedical Research	Elective Course
In vivo and In vitro Research Methods	Elective Course
Telemedicine	Elective Course

Research Methods and Evaluation of Health Interventions	Elective Course
Evidence-Based Medical Practice	Elective Course
Experimental Oncology: Malignant Diseases as a State of Permanent Oxidative Stress	Elective Course
Epigenetics	Elective Course
Hand Surgery	Elective Course
Microvascular Tissue Transfer	Elective Course
Molecular Genetics of Aging and Carcinogenesis	Elective Course
Molecular Hematology	Elective Course
Molecular Genetic Basis of Gastrointestinal System Tumors	Elective Course
Neurobiology of Aging	Elective Course
Selected Chapters from Transplant Immunology	Elective Course
Collaborative and Consultative Psychiatry	Elective Course
Translational Medicine - From Disease to Genes	Elective Course
Liver Transplantation	Elective Course
Management of Mental Health Institutions	Elective Course
Bone Morphogenetic Proteins in Bone and Cartilage Regeneration	Elective Course
Methods of Molecular Biology in Medicine	Elective Course
Medical Statistics 2.3: Application of Computer Statistical Tools for the Analysis of Medical Data in Observational Study Design with a Large Sample	Elective Course
Medical Statistics 2.4: Application of Computer Statistical Tools for the Analysis of Medical Data in Observational Study Design with a Small Sample	Elective Course
Epidemiological Methods in Research	Elective Course
Diabetes and Pregnancy	Elective Course
Neurophysiology of the Fetus and Newborn, Fetal Behavior	Elective Course
Endocrine Tumors of the Digestive System and Pancreas	Elective Course
Reproduction and the Workplace	Elective Course

## 3.6. Postgraduate university (doctoral) study in Neuroscience

### 3.6.1. General information about the study

The postgraduate university (doctoral) study in Neuroscience was introduced in the academic year 2005/2006. Alongside Biomedicine and Health, it represents the highest level of formal education, aiming to educate new doctors of science through the completion of a doctoral thesis based on original research. The purpose of the doctoral study is to generate new and relevant knowledge and scientific insights, with an emphasis on their application.

The doctoral study is distinctly different from the previous two cycles of higher education (undergraduate and graduate studies) in its focus on research rather than learning. Research in the doctoral program is a lengthy, intensive, and often challenging process in which doctoral candidates collaborate with mentors. They acquire knowledge and competencies through the conduct of scientific research, culminating in their doctoral thesis. The doctoral thesis is an original contribution to science, evaluating the candidate's competence for conducting independent, original, and scientifically significant research.

Upon successful defense of the doctoral thesis at the Faculty of Medicine, University of Zagreb, candidates are awarded the academic degree of Doctor of Science in the scientific field of biomedicine and health.

To develop into top-notch scientists capable of independently conducting research, doctoral candidates will participate in lectures, workshops, research seminars, and discussion groups. Through these activities, they will become familiar with various scientific methods used in research and acquire skills such as problem-solving, analytical and critical thinking, project creation and management, team leadership, and independent research.

Doctoral education is crucial for the development of an academic career, addressing the increasing demands of the job market (economy, industry, companies, public sector, non-governmental organizations, etc.). The market requires experts who contribute to the creation of new knowledge, products, or methods (research, production, etc.). In addition to research competencies, doctoral candidates will develop skills applicable to a wide range of jobs (communication and presentation skills, project and team management, etc.), preparing them for the challenges of society, the economy, and the development of their scientific or professional careers.

### 3.6.2. Admission requirements

A person who has completed an appropriate university graduate program or an integrated undergraduate and graduate university program in the scientific field of Biomedicine and Health and related fields is eligible to enroll in the postgraduate university (doctoral) study in Neuroscience. The candidates must have a minimum grade point average of 3.51, or the equivalent in the grading system of 5-10 or A-F, with the exception that applicants with completed graduate studies in other natural, public health, and social science fields may be admitted upon justification and request.

Enrollment quotas are determined based on the availability of research, teaching, and mentoring capacities.

Admission to the postgraduate university (doctoral) study in Neuroscience is based on a public competition announced in the daily press and on the Faculty's website. Applicants who have completed an integrated undergraduate and graduate program or a graduate program abroad must submit a decision on the academic recognition of foreign higher education qualifications before enrollment.

Criteria for evaluating applicants include success in the integrated undergraduate and graduate program or graduate program, demonstrated interest in scientific research (published papers and abstracts of congress communications), recommendations from professors and potential mentors, and a proposal for the research area within the framework of the doctoral thesis. An interview with the applicant is a mandatory part of the application process. All necessary conditions for completing the study within the specified period are clearly defined upon enrollment.

### 3.6.3. Structure and organization of the study

COURSE TITLE	MANDATORY / ELECTIVE
Neuroanatomy	mandatory course
Introduction to Neurobiology	mandatory course
History of Neuroscience	mandatory course
Evolutionary Neurobiology of Humans	mandatory course
Macroevolution of the Nervous System and Phylostratigraphy	mandatory course
Statistical Methods in Neuroscience	mandatory course
Synapse: From Genes to Proteins	mandatory course
Cell Signaling	mandatory course
Fluorescent Methods in Biomedical Research	elective course
Designing Research in Biomedical Sciences	elective course
Histological Methods in Brain Research	elective course
Procedures with Experimental Animals in Neuroscience Research	elective course
Introduction to Developmental Neuropathology	mandatory course
Introduction to Neurochemistry	mandatory course
Developmental Neurobiology	mandatory course
Molecular Neurobiology of Cortical Development	mandatory course
Neonatal Neurology and Neurophysiology	mandatory course

Neurobiology of Aging	mandatory course
Electron Microscopy of the Fetal Human Brain	elective course
Morphological Research Methods and Electron Microscopy in Neuroscience	elective course
Neuron Reconstruction Methods and Stereology	elective course
Methods for Isolating RNA from Brain Tissue	elective course
Gene Polymorphisms	elective course
Cell Cycle Analysis by Flow Cytometry	elective course
Brain Tissue Banks in Development and Neurodegeneration	elective course
How to Become a Nerve Cell?	elective course
Genetic Basis of Brain Tumors	elective course
Developmental (Pediatric) Neurology	elective course
Principles of Intracellular Signaling of Hormone Receptors in the Central Nervous System	elective course
Genetic Basis of Neurodevelopmental Disorders	elective course
Analysis and Understanding of Images	elective course
Transcription Regulation in the Brain	elective course
Biomembranes: Interaction of Lipids and Proteins	elective course
Pathophysiology of the Brain and Cerebrospinal Fluid	elective course
Quantitative Methods of Animal Models of Brain Diseases	elective course
Introduction to Animal Behavior	elective course
Cellular Neurophysiology	elective course
Introduction to Patch-Clamp Methods	elective course
Visualization of Fluorescent Structures by Confocal Laser Microscopy and Their Three-Dimensional Reconstruction	elective course
Methods for Studying Gene Expression in the Brain	elective course



Methods of Genome Analysis and Their Application in Neuroscience	elective course
Determination of Total and Phosphorylated Tau Proteins from Cerebrospinal Fluid using the ELISA Procedure	elective course
Precise Identification of Cortical Areas in the Adult Human Brain In Vivo	elective course
Doctoral Day	elective course
Targeted Genome Editing in Mammals	elective course
Molecular Neuropathology	mandatory course
Molecular Biology of Myelin	elective course
Properties of the Diffuse Neuroendocrine System	elective course
Guidance of Axons in the Development of Cortical Pathways in the Human Telencephalon	elective course
Introduction to Evolutionary Psychology	elective course
Experimental Models of Hemorrhagic and Ischemic Stroke	elective course
In Vivo Quantitative MRI Analysis of the Human Brain during Development in Adulthood	elective course
Assessment of Cognitive Functions, Communication, and Language in Early Preschool Children	elective course
The Role of Membrane Lipids in Neurodegeneration	elective course
Sleep, Neuroplasticity, and Thalamocortical Dysrhythmia Syndromes	elective course
Experimental Models of Epilepsy and the Role of GABA in the Development of the Brain Cortex	elective course
Neurobiology of Addiction	elective course
Studying Membrane Proteins in Expression Systems	elective course
Inherited Metabolic Diseases of the Central Nervous System	elective course
Application of Stem Cells in Research and Treatment of Central Nervous System Diseases	elective course

MRI Imaging of the Spinal Cord	mandatory course
Modern Clinical Imaging of the Brain	mandatory course
Mechanisms of Progressive Differentiation of Neural Stem Cells in the Cortex of the Large Brain (Neocortex)	mandatory course
Drugs, Substances, and the Brain	mandatory course
Doctoral Day 2	mandatory course
Glycolipidomics and Sphingolipidomics of the Nervous System in Health and Malignant Transformation	mandatory course
Neuropsychological Consequences of Structural Brain Damage	mandatory course
Pharmacogenomics, Neuroimaging, and Computational Neuroscience in Personalized Psychiatry	mandatory course
Neurobiology of the Treatment of Psychiatric Disorders	elective course
Cognitive Flexibility and Orbital Prefrontal Cortex	elective course
The Role of the Nervous System in Regulating Diet and Peripheral Energy Metabolism	elective course
Neuroethics	elective course
Memory, Metacognition, Intelligence	mandatory course
Hippocampal Plasticity After Injury	mandatory course
Rare Neurometabolic and Neurodegenerative Diseases	mandatory course
Neonatal Neurointensive Diagnostics and Therapy	mandatory course
Breathing Disorders, Especially Sleep-Related Breathing Disorders and Early Sleep Disorders	mandatory course
Neurobiological Basis of Decision Making	mandatory course

#### 4. ABOUT ZAGREB

Zagreb, the capital city of Croatia, is a city with open doors, a turbulent history, and interesting personalities. It serves as the cultural, scientific, economic, political, and administrative center of the Republic of Croatia, housing the Parliament, President, and Government. One-fourth of the total population of Croatia resides in Zagreb. The city we

know today, forming its historical core, was established in the Middle Ages on two hills: the secular Gradec (today's Upper Town) and the ecclesiastical Kaptol. The first written mention of Zagreb dates back to 1094 when Hungarian King Ladislaus, on his way to the Adriatic, founded the Zagreb bishopric on Kaptol. The Zagreb Cathedral in neo-Gothic style still dominates the city's skyline, and the Renaissance walls around it are among the few preserved in this part of Europe.

Zagreb is a city with a diverse and rich cultural and artistic life. Thirty permanent and occasional theaters and theater scenes, thirty museums, a larger number of galleries, and numerous theater, music, and dance festivals place Zagreb on the list of art cities. The blue color is the color of the city of Zagreb, visible not only on the city's coat of arms but also on trams, buses, funiculars, and the uniforms of Zagreb athletes.

Zagreb – its streets and monuments – have lived for centuries. However, its greatest value is measured by the moment it gives us, the beauty and personality it shares with us. Step by step... Stop, talk to a passerby... in Zagreb's street cafes and the relaxed atmosphere of pedestrian zones, you will discover why it is called a city with a soul...

Source: Tourist Board of the City of Zagreb, <http://www.infozagreb.hr/>.

## 5. PUBLIC TRANSPORT

In the metropolis of Zagreb, public transportation is provided through various means - trams, buses, trains, and taxis. This vital service is offered by Zagrebački holding d.o.o., with its subsidiary Zagrebački električni tramvaj (ZET, available at <http://www.zet.hr>), in collaboration with Hrvatske željeznice (available at <http://www.hznet.hr>), while taxi services are available through various taxi operators.

Within the city transportation system in Zagreb, including buses, trams, and trains operated by Hrvatske željeznice, passengers can choose from three types of tickets:

Subscription ticket - suitable for regular users of public transportation; the ticket is valid for 3.5 years from the date of issue regardless of any changes in the user's status or profile; requests for the subscription ticket require a completed application, a 3x3.5 cm photograph, and additional documents depending on the type of ticket; the cost of issuing the ticket is charged upon submission of the request; if you want a ZET subscription card that includes train travel within Zagreb by Hrvatske željeznice, this needs to be announced in advance.

Value ticket - an ideal option for occasional users of public transportation in Zagreb; the ticket is universal for all zones and lines, and it can be transferred to other users; with this ticket, passengers can travel by tram, bus, and funicular regardless of the direction of travel, with a validity of 90, 60, or 30 minutes in the first zone.

Paper ticket - available for purchase directly from the driver, at ZET sales points, or through contracted partners.

More details about each type of ticket, as well as information about sales locations, can be found on the ZET website (<http://www.zet.hr>).

In addition, several taxi companies operate in Zagreb, and relevant information about their services is available on their websites.

## 6. STUDENT HOUSING

For students, four student dormitories are offered for accommodation:

Stjepan Radić Dormitory, located at Jarunska 2, 10000 Zagreb, offers 12 pavilions with a total of 4,014 beds, including an administrative building. In addition, there are various amenities, including a fitness center, cinema hall, classrooms, language school, medical and dental services, dance hall, two student restaurants, a pizzeria, and a café-confectionery.

Cvjetno Dormitory, located at Odranska 8, 10000 Zagreb, has 8 pavilions and 1,812 beds. In addition to accommodation, students have access to a fitness center, congress hall, classrooms, language school, medical and dental services, pastoral office, multipurpose hall, two student restaurants, and a café-confectionery.

Dr. Ante Starčević Dormitory, at Zagrebačka avenija 2, 10000 Zagreb, provides 3 pavilions with 1,237 beds (single and double rooms equipped with a bathroom, refrigerator, and internet). Each floor has a classroom, laundry room, and tea kitchen. For leisure time, students can enjoy language school, sports and recreational activities such as fitness, table tennis, aerobics, Zumba, and open sports fields for soccer and basketball.

Laščina Dormitory, located at Laščinska cesta 32, 10000 Zagreb, offers 10 pavilions with 482 beds. Rooms have internet access, and each floor has a shared bathroom and tea kitchen. Additional amenities include a multipurpose hall (for table tennis, clubs, aerobics, dance, etc.), basketball court, small soccer and volleyball court, classroom, TV hall, and a student restaurant.

Current regulations, announcements, and decisions are available at the following link: <http://www.sczgj.unizg.hr/smjestaj/smjestaj/kriteriji-za-raspodjelu-mjesta/>.

## 7. STUDENT ID CARD

Student ID card, serves as an identification document for regular students of the University of Zagreb School of Medicine, providing them access to various student privileges. It confirms the student's status and allows access to different student benefits such as subsidized meals, discounted public transportation, and discounts at certain public establishments.

Upon completion of their studies, students are required to return their identification card. In the event of a lost card, it is necessary to report the loss to the administrative office of the University of Zagreb School of Medicine.

## 8. SUBSIDIZED MEALS

The monthly amounts on the student ID card cannot be accumulated; they are renewed every month, regardless of the balance at the end of the previous month. The balance on the student ID card can be checked at the bottom of each receipt, on the University Computing Centre (SRCE) website (<http://www.srce.unizg.hr/issp/>), or by calling +385 1 6165 876.

Student ID cards can be used in the following restaurants in Zagreb:

- Restaurant Savska, Savska cesta 25,

- Cvjetno naselje (student dormitory), Odranska 8,
- Stjepan Radić (student dormitory), Jarunska 2,
- Laščina (student dormitory), Laščinska cesta 32,
- Faculty of Economics and Business, Trg J. F. Kennedyja 6,
- Faculty of Veterinary Medicine, Heinzelova 55,
- Faculty of Agriculture and Forestry, Svetošimunska 25,
- Faculty of Mechanical Engineering and Naval Architecture, Ivana Lučića 5,
- School of Medicine, Šalata 3b,
- Academy of Fine Arts, Ilica 85,
- Restaurant "Borongaj" – dining hall "Tekstilni," Prilaz B. Filipovića 28a,
- Cassandra d.o.o., Unska 3,
- Odeon d.o.o., A. Kačića-Miošića 26,
- Restaurant "Superfaks," Pierottieva 6,
- Fast-food restaurant "Bologna," Horvatovac 102a,
- Restaurant Borongaj, Borongajska cesta.

The list of establishments where the student ID card can be used in other cities can be found at the following link: <http://www.srce.unizg.hr/usluge/issp/popis-restorana/>.

## 9. DINING FACILITIES AT THE SCHOOL OF MEDICINE

The restaurant at the School of Medicine is located in the building of the School of Medicine at Šalata 3b.

The restaurant offers a menu with set meals, à la carte options, and other food products. All dishes are prepared by professional chefs using fresh and high-quality ingredients. To ensure the quality of the meals, emphasis is placed on using quality ingredients, with a focus on maximizing the nutritional value of the food during cooking.

The restaurant operates from Monday to Friday:

- Breakfast: 8:00 am to 10:30 am
- Break: 10:30 am to 11:00 am
- Lunch: 11:00 am to 3:00 pm

It is closed on Saturdays and Sundays.

## 10. IMPORTANT PHONE NUMBERS

- Emergency services – 112,

- Police – 192,
- Firefighters – 193, and
- Ambulance – 194.

## 11. HEALTHCARE

Regular students can rely on the support of two doctors: a chosen family medicine doctor, whom they contact when they are ill, and a university doctor. Each faculty is assigned a specific university doctor. At the beginning of the first academic period, the university doctor conducts a detailed systematic examination. This examination not only includes a medical check-up but also a discussion about the student's lifestyle and their adjustment to university life.

For students coming from outside Zagreb but wishing to retain their chosen doctors at their place of permanent residence during their studies, there are several options in case of illness. They can turn to emergency medical services, or alternatively, they can choose a family medicine doctor at one of the three health centers in Zagreb: DZ Centar, Zapad, and Istok. The choice usually depends on the student's place of residence.

If students decide to keep their chosen doctors at their place of permanent residence while studying in Zagreb, they have the right to services only within the scope of emergency medical care. The list of emergency services is available on the website <http://www.zagreb.info/zg-info/dezurne-hitne-sluzbe/19709>, while the list of on-call pharmacies can be found at <http://www.zagreb.info/zg-info/dezurne-ljekarne-u-zagrebu/19698>.

THE INSTITUTE OF PUBLIC HEALTH DR. ANDRIJA ŠTAMPAR – [www.stampar.hr](http://www.stampar.hr), has organized a Service for School and Adolescent Medicine for students. For the medical faculty, the team consists of: Prof. Dr. Vesna Jureša and Ivana Radibratović, bmt, Kauzlarićev prilaz 7, tel. 01 64 14 020. Working hours: even dates: in the afternoon, odd dates: in the morning. The email address of the responsible doctor: [vesna.juresa@stampar.hr](mailto:vesna.juresa@stampar.hr).

Students can also contact the clinic of the Center for Health Activities of the Faculty of Medicine located in the building at Šalata 4a.

## 12. INFORMATION TECHNOLOGY EQUIPMENT AT THE SCHOOL OF MEDICINE - ZAGREB

The faculty spaces are equipped with the necessary information technology equipment for the smooth conduct of business processes, primarily for teaching in undergraduate and postgraduate studies. All five computer classrooms are equipped with student and teacher computers, as well as appropriate presentation equipment (projectors, televisions, speakers, microphones, etc.).

In the faculty premises, students and teachers also have access to wireless internet through the Eduroam service.

### 13. LIBRARY AND DOCUMENTATION CENTER OF THE MEDICAL FACULTY - ZAGREB

The library system of the Medical Faculty consists of the Central Medical Library, the "Andrija Štampar" Library, and affiliated libraries. These libraries serve as information and communication centers, providing scientific and professional information and supporting the educational, scientific-research, and professional work of the Faculty staff and affiliated clinical bases, as well as other stakeholders in the healthcare system. The libraries support the educational and research needs of students at all levels of study. Their fundamental tasks include acquiring library materials and building library collections in analog and digital forms, processing library materials according to professional standards, ensuring public access to information about library materials, providing information services, lending and making library materials available, including interlibrary loan, supporting students and other users in choosing literature, ensuring access, proper use, and citation of sources, conducting complex and systematic searches of specialized databases, monitoring the scientific productivity of the parent institution, conducting bibliometric and related analyses according to the needs of users and regulations of the parent institution, creating and managing the institutional repository with a focus on storing information objects created at the Faculty and ensuring their public availability, participating in the teaching activities of the parent institution at all levels, collaborating on professional and scientific projects, programs, and committees of the parent institution, creating and maintaining formal and informal educational programs in the field of advanced information literacy, designing and implementing science popularization programs, and actively cooperating with institutions in the domestic and international academic and scientific community to improve the accessibility of scientific information.

The Central Medical Library (CML) operates within the premises of the Medical Faculty and at two separate locations at the Clinical Hospital Center Zagreb. Its central part includes the student department with an extensive collection of textbooks and manuals and a student reading room, a collection of domestic and foreign medical journals, a reference collection, a collection of monographic publications with a rich collection of medical Croatiana, and a collection of doctoral and master's theses defended at the Medical Faculty in Zagreb. At the location of the Medical Library Rebro at the Clinical Hospital Center Zagreb, there is an extensive collection of foreign journals in all clinical disciplines and a collection of monographic publications of clinical orientation. The library at the Clinic for Women's Diseases and Obstetrics contains journals and books mostly related to the field of gynecology and obstetrics.

Under normal conditions, the total area of the Central Medical Library is 2085 m<sup>2</sup> with 170 seats. Library users include students, teaching and professional staff, retirees, and alumni of the Medical Faculty, professional staff of the Clinical Hospital Center Zagreb, teaching and professional staff of other higher education institutions within the University of Zagreb, scientific staff of other research institutions, professional staff of various medical institutions, and other interested members of the public. The library is open to all users from Monday to

Thursday from 8 am to 7 pm and on Fridays from 8 am to 5 pm. The student department is available from Monday to Friday from 8 am to 11 pm, on Saturdays from 10 am to 10 pm, and as needed on Sundays during exam periods.

The library acquires all mandatory textbooks in multiple copies and significant domestic and foreign medical monographs. Books for the study of medicine in English are also available in the library. At the end of 2022, the total number of book volumes was 85,282. The collection of printed journals includes a total of 1,284 titles, or 85,311 volumes. The number of active borrowers with registered loans on an annual basis is around 1200, the number of physical visits is 55,000, and the number of loans is about 7500. The library provides access to a large number of scientific electronic sources, journals, and databases. Through the national academic consortium from 2018 to 2022, access to databases such as Web of Science, Scopus, PsycINFO, CAB Abstracts, and collections of journals from leading global publishers such as Springer Nature, Wiley, Taylor & Francis, Karger, AAAS Science, Annual Reviews, Cambridge Journals, Oxford University Press, Sage, and databases like Evidence-Based Medicine Reviews (EBMR), CINAHL, ProQuest, and JSTOR has been ensured. During the EU project "e-sources," a representative of the Central Medical Library was a member of the Advisory Commission for the selection of sources at the national level.

In addition to national subscriptions, subscriptions from the University of Zagreb are coordinated with the Faculty and the library. Over the five-year period, access to journals from publishers such as Wolters Kluwer, Lippincott Williams & Wilkins, British Medical Journal Collection, De Gruyter, etc., has been provided. In addition, the Medical Faculty invests additional funds in the purchase of e-sources, procuring journals, books, and multimedia content from the world's largest publisher Elsevier included in the ClinicalKey database, additional specialized medical collections from publishers such as Springer, Oxford University Press, Karger, and other sources whose list changes depending on the scope of national and university licenses. Access to all e-sources is provided within the Faculty's IP range and remotely, via proxy services or by creating personal user accounts. The Faculty allocated a total of HRK 772,356 for the purchase of books and journals in 2022 alone.

Library staff processes around 4,000 information requests annually, including highly complex requests for systematic reviews and guidelines. The Central Medical Library is the first Croatian higher education library to introduce a regular service for issuing bibliometric certificates for scientific, teaching, and professional advancements. These certificates are recognized by all Croatian institutions, and more than 1,000 are issued annually. The library uses the Aleph integrated library system for its operations, enabling digitized business processes, precise statistical reporting, and efficient communication and data exchange with numerous Croatian higher education institutions.

The Medical Faculty established an institutional repository in 2006, gathering the faculty's scientific production in one place, providing free access to works by staff and students, and increasing the visibility and usability of these sources. The repository is managed and updated by Central Medical Library staff, who, based on their experience, were among the initiators of the initiative to establish the national Dabar system (Digital Academic Archives and



Repositories), which currently includes more than 160 repositories. The new digital repository of the Medical Faculty – Dr Med is among the largest repositories in the system and has received special recognition for promoting open access. The repository currently contains around 5,500 works, including all graded papers from 2014 onward, dissertations, journal articles, books, conference presentations, etc. It also allows the storage of educational materials, research data sets, and data management plans. The repository meets all standards of metadata and technical interoperability, is included in relevant international registers, and is indexed by all major search engines. The migration of about 2,000 works from the "old" repository to the "new" repository is currently underway, consolidating the scientific and professional production of students and faculty members and making it entirely publicly available. The repository registers over 1,100,000 downloads of full texts annually.

Library staff continually undergo professional development (APPENDIX XX – LINK) and acquire higher professional and scientific titles, including one Master of Science, two Doctors of Science, two Senior Librarians, and three Librarian Advisors. They actively monitor the development of medical scientific and professional communication and participate in conferences and published works, focusing on the production of their institution and tracking patterns of scientific publishing in Croatia and worldwide. They regularly publish news in the field of information and communication sciences and specialized medical librarianship in the official journal *mef.hr*. They are actively involved in domestic and international professional associations and projects at the university and national levels.

Librarians from SMK regularly participate in teaching modules at the graduate and postgraduate levels at the School of Medicine, both in Croatian and English. Elements of information literacy are systematically integrated into the curriculum through mandatory and elective courses, providing students and physicians with support in developing advanced skills in assessing the validity and evidential strength of medical information. Special emphasis has been placed on the changes in communication patterns during the pandemic, raising awareness among students about the importance of continuous education, ongoing monitoring of new medical information, and the need for credible yet accessible communication with patients.

SMK regularly organizes thematic workshops and informal educational events for students and faculty, such as "Diploma Thursday," "FAQ Graduate," "Entry and Updating of Works in the CROSBID Database," and "Formatting and Editing Author Profiles in Databases."

SMK staff members are actively involved in international projects in collaboration with the School of Medicine, such as A4L - Alliance for Life Sciences: From Strategies to Actions in Central and Eastern Europe, and RAPIDE - Relevant Assessment and Pedagogies for Inclusive Digital Education.

For almost twenty years, with the support of the Faculty, the Central Medical Library has been organizing the Medical Information Conference Croatia (MICC). This conference is designed for physicians and information professionals in the field of biomedical sciences but is also open to other professionals in medicine and healthcare, as well as students and the

general public. The conference addresses contemporary trends related to the publication, access, use, dissemination, and preservation of information in the fields of science, higher education, and healthcare. Over a five-year period, themes such as "Medical Knowledge in the Public Space: Information or Disinformation," "Communication Challenges in Biomedicine During the Pandemic," and "Through the Sieve and Riddle: What and How to Evaluate in Science and Higher Education" have been highlighted.

The library regularly participates in the Night of Books event with tailored thematic programs, aiming to popularize reading and the written word.

## 14. STUDENT COUNCIL, STUDENT ASSOCIATIONS, AND STUDENT SECTIONS

### 14.1. Student council

The Student Council of the University of Zagreb is the umbrella organization for students representing all students of the University of Zagreb. It is a student-elected representative body that protects the interests of students at the faculty level, participates in decision-making bodies of the faculty, and represents students of the faculty within the higher education system. The Student Council was established in late 1996 when the Croatian Parliament passed the Law on the Student Council.

As the Student Council is legally established and operates on democratic principles (student elections are held every two years), it is the only body with legitimacy to represent the entire student population. The Executive Board of the Student Council at each faculty branch consists of student representatives and their deputies elected in student elections. In the case of our Medical Faculty, these students were elected in the elections held on March 29 and 30, 2023. The branch president is then selected from the elected students.

All presidents of Student Councils at individual faculties within the University, along with the 17 students directly elected from the University list, form the Student Council of the University.

The goal of the Student Council is to protect the rights and promote the interests of students at the level of each higher education institution (faculty, college, university) as well as at the national and international levels. At our faculty, student representatives achieve this through equal participation and work in the Faculty Council, the Dean's Collegium, as well as in other Faculty committees crucial for the functioning of the faculty, such as the Teaching Committee, the Research Committee, the Committee for International Cooperation, and many others.

### 14.2. Student Associations:

#### 14.2.1. CroMSIC

The Croatian Medical Students' International Committee (CroMSIC) is a student organization operating at four medical faculties in Osijek, Rijeka, Split, and Zagreb. Established in 1991,

one of its most significant activities during that time was collaboration with the UNHCR and foreign students on vaccination campaigns for refugees and soldiers on the front lines during the Croatian War of Independence.

CroMSIC is an equal member of the International Federation of Medical Students' Associations (IFMSA). IFMSA is an international non-profit organization that brings together, coordinates, and advocates for over 1.3 million medical students. Founded in 1951 in Copenhagen, it currently represents 140 national student organizations from all corners of the world. IFMSA is recognized as a legitimate representative of medical students and an official partner of the United Nations, the World Health Organization, the World Medical Association, and many other professional and international organizations and institutions.

Through various projects and actions, CroMSIC operates in the field of public health, with a special emphasis on mental health and the prevention of malignant diseases through projects like 'Pogled u sebe' (Look into Yourself) and 'Budi mRAK!' (Be DARK!), sexual and reproductive health addressed by the project 'THE Talk,' human rights and peace, as well as medical education for students.

CroMSIC organizes student exchanges among the member faculties for a duration of one month. Throughout the year, students from all parts of the world come to Croatia, where they have practical experience in hospitals or participate in scientific projects. The same opportunity is provided to CroMSIC members, who, through their involvement in the association and participation in various events, earn the right to go on exchanges worldwide.

#### 14.2.2. EMSA, SSSLZ, Summer School of Emergency Medicine

EMSA stands for the European Medical Students Association, an organization that gathers branches from medical faculties across Europe engaged in the fields of public health, medical education, science, medical ethics, and European integration. EMSA Zagreb, as a non-governmental organization, is one of the oldest branches founded by students of the Faculty of Medicine in Zagreb, and has been active for over 20 years, following all pillars of EMSA Europe.

SSSLZ, i.e., the Student Section of the Croatian Medical Association, is, as its name suggests, one of the sections operating within the umbrella organization, the Croatian Medical Association. These associations share the same members, namely students of the Faculty of Medicine in Zagreb, and jointly organize various projects such as the Summer School of Emergency Medicine, Zagreb International Medical Summit, Teddy Bear Hospital, and, in collaboration with the Faculty of Pharmacy and Biochemistry, the Clinical Skills Event competition.

The goal of the Summer School of Emergency Medicine (<https://www.facebook.com/DubrovnikSummerSchool/>) in Dubrovnik is to learn and practice basic skills needed in emergency medicine and first aid through various workshops (basic surgical skills and suturing course, trauma workshops and scenarios, traumatic brain injury, emergency situations in pediatrics, drowning rescue workshop), various lectures, and the European Resuscitation Council's Immediate Life Support (ILS) course, during which

students receive an internationally recognized certificate. Over the years, hundreds of medical students from various parts of Europe and the world have successfully attended the school. We take pride in hosting lectures by Prof. Maaret Castren, former President of the European Resuscitation Council from HUCS, Helsinki, and Prof. Jerry Nolan, President of the European Resuscitation Council from the University of Bristol, which means a lot to us. In addition to the educational-scientific part, the school aims to showcase the beauty of Dubrovnik and its surroundings through free activities, including organized trips to Lokrum Island, sightseeing of the Dubrovnik walls and the city, and visits to the Dubrovnik Summer Festival and Culture Club Revelin located within the walls.

ZIMS – Zagreb International Medical Summit (<https://www.facebook.com/zims.hr/>) is a student congress that brings together students and young doctors in the field of biomedical sciences, with a focus on science in medicine. The project was established in 2000 in collaboration between EMSA Zagreb and SSHLC Zagreb. Since then, it has been held every year in November with increasing participation from all over Europe and the world. The summit lasts for 4 days and includes a rich scientific and social program. The number of participants is around 70 annually, and they can participate actively by presenting papers or passively by participating in workshops and lectures. All abstracts are published in the Book of Abstracts, which is printed as a supplement to the journal Liječnički vjesnik. The best-rated scientific paper has the opportunity to be published as a "full text" in Liječnički vjesnik, a widely cited medical journal. The congress also includes guest lecturers, professors from the Faculty of Medicine in Zagreb. In addition to lectures, participants have the opportunity to participate in practical workshops related to clinical skills (e.g., surgical suturing workshop, first aid workshop, EKG reading workshop, etc.). The social program includes organized sightseeing of the city of Zagreb, a one-day trip, and daily evening programs aimed at bringing participants together and introducing them to the beauties and culture of Croatia.

Teddy Bear Hospital (<https://www.facebook.com/bolnicazamedvjedice/>) is a project aimed at eliminating the fear of white coats in preschool children, which arises due to unknown and often unpleasant circumstances in which a child finds themselves during their first encounters with illness, doctors, and other healthcare professionals. Through specially designed interactive workshops, the project aims to familiarize children with the work of doctors, the functioning of a medical office, and basic procedures and medical equipment used by doctors during examinations. In this way, we prepare the youngest for the situation in which they themselves will be ill and need a doctor's examination, and try to reduce the potential fear that may arise at that time. During the workshops, medical students of all years participate, developing their communication skills and building a quality relationship between children and healthcare professionals. In addition to the above, special attention is focused on educating children about health. Workshops are held several times a month throughout the year in various kindergartens in the City of Zagreb and Zagreb County, and once a year, a large Teddy Bear Hospital is organized in Zrinjevac Park in collaboration with numerous partners.

The Clinical Skills Event (CSE) (<http://usfmbh.wixsite.com/cpsa/klinike-vjetine>) is the youngest project of EMSA Zagreb, organized in collaboration with the student association CPSA (Croatian Pharmaceutical Students Association). The competition is designed as a mutual test of knowledge and skills among 10 teams, each consisting of 5 students: 2 medical students, 2 pharmacy students, and 1 medical biochemistry student. It takes place over two

days, with the first day including lectures on the competition's theme, explaining the rules of the competition, and reviewing a trial case. On the second day, the competition itself takes place, with participants randomly divided into teams. Together, they must use their collective knowledge and skills to solve an interesting clinical case. The top 3 teams according to the commission's scoring qualify for the oral part of the competition. In front of the commission, they present the case and answer additional questions, explaining the reasons for their therapeutic decisions. The best teams are also rewarded. Participants demonstrate their knowledge and resourcefulness, and most importantly, teamwork and joint decision-making in making diagnostic-therapeutic decisions. The idea behind organizing this competition is to emphasize the need for multidisciplinary and teamwork in these professions.

### 14.2.3. SportMEF

The Sports Association of the Students of the School of Medicine - Zagreb was established in 2008 as an extension of the Student Sports Section of the School of Medicine. The association is comprised of students of the School of Medicine who demonstrate both sports and organizational affinities. The goal of the association is to promote and develop healthy lifestyle habits, engage in activities aimed at preserving health in the population, promote and protect humane ideas, ethical principles, and human rights, organize humanitarian, cultural, and sports events, promote and develop sports activities at the School of Medicine, promote sports culture and science in sports, foster a sense of belonging, contribute to the development of responsible medical students and future physicians, cultivate a friendly and competitive spirit among members, and collaborate with other student communities and sports societies.

Students promote these values as members of one or more sports sections, including athletics, judo, basketball, football, volleyball, swimming, handball, table tennis, chess, tennis, water polo, and rowing. The association's projects are a significant part of its activities, with the most important ones being "162 Stairs," "SportMEF Futsal Tournament," and "Humanijada."

"162 Stairs" is a traditional road race held to promote health and sports as a prevention measure for cardiovascular and other diseases, as well as to encourage physical activity as a fundamental factor for health.

The "SportMEF Futsal Tournament" aims to encourage sports activity and promote sports as a healthy lifestyle, as well as to make good use of the free time students have. Through the tournament, participants improve their health through play and entertainment, presenting sports as a vital factor in maintaining well-being.

"Humanijada" is an international sports-educational meeting of biomedical faculties. The association collaborates with other student communities and individuals involved in our medical calling. Participation in Humanijada helps develop team spirit, strengthen self-confidence, relieve stress, and foster a sense of responsibility towards each other and one's health.

In addition to these projects, an integral part is participating in the University Championship of the City of Zagreb, where medical students have been involved since the academic year 1992/1993. In this way, we promote a sense of belonging to the School of Medicine, foster team spirit, and develop friendly relationships with students from other higher education institutions.

#### 14.2.4. Association StEPP

The student association operating at the University of Zagreb School of Medicine, StEPP, has as its fundamental goal to raise awareness about the importance of understanding the theory and practice of first aid and pre-hospital emergency medicine, both among medical professionals and in the broader community.

To achieve its goal, StEPP brings together students of medicine and dental medicine. Through socializing and teamwork, association members acquire knowledge and practice essential skills for saving human lives. Subsequently, they share their acquired knowledge with colleagues and medical laypersons through workshops, half-day, full-day, and two-day educational events. Through continuous efforts, we have educated more than 3500 students and medical laypersons.

By setting an example and sharing experiences, along with collaboration with other student associations and sections, we aim to inspire every individual, especially participants in our education programs, to selflessly share and pass on the knowledge and skills they have acquired. Members of the StEPP Association contribute to their personal development as future healthcare professionals, while also forming new friendships and gaining unique experiences during their studies in a positive, enjoyable, and open environment.

More information about the StEPP Association can be found at:

<https://www.facebook.com/stepp.fast/>.

#### 14.3. Student sections

- Student Section for the Promotion of Proper Nutrition and Health: <https://shorturl.at/lxKR6>
- Student Section for Infectious Diseases: <https://shorturl.at/ehmz5>
- Student Section for Anesthesiology and Reanimatology: <https://shorturl.at/ajtHI>
- Student Section for Orthopedics and Traumatology: <https://shorturl.at/HQ245>
- Student Section for Cardiology: <https://rb.gy/ku5wq>
- Student Section for Otorhinolaryngology and Head and Neck Surgery: <https://rb.gy/8pbcy>
- GYRUS: <https://rb.gy/j9pfo>
- Student Section for Gastroenterology and Hepatology: <https://rb.gy/g5ssr>
- CroMSIC Zagreb: <https://rb.gy/uv2j3>
- Student Section for Dermatovenereology: <https://tinyurl.com/yнк5eprz>
- Student Section for Voluntary Blood Donation and Transfusion Medicine: <https://tinyurl.com/2p948w6v>
- Student Section for Public Health "Andrija Štampar": <https://tinyurl.com/mr2zdn3y>
- Medical Faculty Choir in Zagreb "Lege artis": <https://tinyurl.com/c2snda4f>
- Student Section for Oncology and Immunology: <https://tinyurl.com/bp9bsef6>

- Student Section for Surgery: <https://tinyurl.com/5nm8tdum>
- Student Section for Innovations in Medicine: <https://tinyurl.com/mrxcx8fv>
- HIPOKART: <https://tinyurl.com/4773duxn>
- Student Section for Pediatrics: <https://tinyurl.com/2srzh5kz>
- MEDICINAR: <https://tinyurl.com/yc7mvwdx>
- Student Section for Neuroscience: <https://tinyurl.com/m9v6rhy4>
- Student Section for Psychiatry: <https://tinyurl.com/288zar8k>
- Student Section for Hypertension: <https://tinyurl.com/29ufaua7>
- Student Section for Emergency Medicine: <https://tinyurl.com/you9k4b4w>
- Student Section for Gynecology and Obstetrics: <https://tinyurl.com/29ac4x8s>
- Student Section for Radiology: <https://tinyurl.com/yckmzypz>
- MEF Mountaineering: <https://tinyurl.com/4wvw4zk3>
- Student Line for Rare Diseases: <https://tinyurl.com/rmbe5f89>
- Student Section for Pathology: <https://tinyurl.com/k9pymkhn>
- Student Section for Endocrinology: <https://tinyurl.com/mr3hrhyu>

## 14.4. Useful contacts for students

### 14.4.1. Libraries in Zagreb

National and University Library, Hrvatske bratske zajednice 4, tel. +385-1- 6164 111  
 August Cesarec, Radauševa 7, Ravnice, +385-1-2318 729  
 August Cesarec, Maksimirska 13, +385-1-2313 066  
 Gradska knjižnica, Starčevićev trg 6, +385-1-4572 344  
 Marija Jurić Zagorka, Krvavi most 2, +385-1-4813 993  
 Marin Držić, Avenija Vukovar 222, +385-1-6151 697  
 Novi Zagreb, Ul.B.Magovca 15, Travno, +385-1-6604 088  
 Tin Ujević, Avenija Vukovar 14, +385-1-3095-221  
 Vladimir Nazor, Ulica grada Mainza 37, +385-1-3703 414

### 14.4.2. Cultural and Information Centers

Austria (Austrian Cultural Forum), Ivana Gundulića 3, +385-1-4881 250  
 British Council, Ilica 12/I, +385-1-4899 500  
 Mediateka (French Library), Petra Preradovića 5, +385-1-4883 570  
 Institut francais (French Institute), Preradovićeve 40, +385-1-4855 222  
 Goethe-Institut, Ulica grada Vukovara 64, +385-1-6195 000  
 Iranian Cultural Center, Tuškanac 65, +385-1-4834 171  
 Italian Cultural Center, Preobraženska 4, +385-1-4830 208