

# UNDERGRADUATE PROGRAM DESCRIPTION

for International Students



## **Contents**

| Why choose the University of Debrecen?        | 5  | Humanities Programs<br>English and American Studies, BA | <b>36</b><br>36 |
|---|----|---|-----------------|
| Basic Medicine Course (Premedical Studies)    | 6  | Romance Philology and Cultures                          |                 |
| Intensive Basic Medicine Course               |    | (French Studies), BA                                    | 37              |
| (Premedical studies)                          | 6  | Kindergarten Education, BA                              | 38              |
| English Language Courses                      | 7  | Psychology, BA  | 40              |
| Preparatory courses for Music                 | 7  | . Sychiotogy, 271                                       | -,0             |
| International Foundation Year                 | 9  | IT Programs   | 42              |
| Intensive Foundation Semester                 | 9  | Business Informatics, BSc                               | 42              |
| michare roundation beinester                  | ,  | Computer Science, BSc                                   | 44              |
| Agriculture Programs                          | 10 | Computer Science Engineering, BSc                       | 46              |
| Agribusiness and Rural                        |    | ,                 |                 |
| Development Engineering, BSc                  | 10 | Music Programs  | 48              |
| Agricultural Engineering, BSc                 | 12 | Classical Performing Arts (Music), BA                   | 48              |
| Food Engineering, BSc                         | 13 | Contemporary Music, BA                                  | 49              |
| Precision Agricultural Engineering, BSc       | 15 | Musical Creative Art and Musicology, BA                 | 50              |
| Business Programs                             | 16 | Science Programs  | 51              |
| Business Administration                       |    | Biology, BSc  | 51              |
| and Management, BSc                           | 16 | Biotechnology, BSc                                      | 52              |
| Commerce and Marketing, BSc                   | 17 | Chemistry, BSc  | 53              |
| -   |    | Earth Sciences, BSc                                     | 54              |
| Engineering Programs                          | 18 | Geography, BSc  | 55              |
| Biochemical Engineering, BSc                  | 18 | Mathematics, BSc  | 56              |
| Chemical Engineering, BSc                     | 20 | Physics, BSc  | 57              |
| Civil Engineering, BSc                        | 21 |   |                 |
| Electrical Engineering, BSc                   | 23 | One-tier medical Programs                               | 58              |
| Mechanical Engineering, BSc                   | 24 | Medicine, MD  | 58              |
| Mechatronics Engineering, BSc                 | 25 | Dentistry, DMD  | 60              |
| Professional Pilot, BSc                       | 26 | Pharmacy, PharmD  | 62              |
| Vehicle Engineering, BSc                      | 29 |   |                 |
|   |    | Application and Admission                               | 64              |
| Health Sciences Programs                      | 30 | Fees  | 65              |
| Health Care and Disease Prevention            |    | Cost of living  | 65              |
| (Public Health), BSc                          | 30 | Dates and deadlines to remember                         | 67              |
| Nursing and Patient Care (Nurse), BSc         | 31 | Hungary and the city of Debrecen                        | 67              |
| Nursing and Patient Care (Dietetics), BSc     | 32 |   |                 |
| Nursing and Patient Care (Physiotherapy), BSc | 34 |   |                 |



# Why choose the University of Debrecen?

The University of Debrecen in Hungary is one of Central Europe's top educational and research institutions. It offers a wide range of internationally recognized academic courses in Medical, Engineering, Business, IT, and Agricultural fields among many degree to its 30,000 students. Debrecen is a charming and fast-developing school town in the heart of Europe.

## WE ARE HIGHLY RANKED BY THE MOST PRESTIGIOUS HIGHER EDUCATION RANKINGS:

40 in QS EECA ranking 2022

191 in THE Emerging Economies University Rankings 2022

351-400 in QS WUR by Subject "Medicine" 2022

201-250 in QS WUR by Subject "Agriculture&Forestry" 2022

301-400 in THE University Impact Rankings Quality Education 2022

651-700 in QS World University Rankings 2023



30,000+ students 24% international students



13 Faculties on 8 campuses



19:1 student/academic staff ratio



100+ lecture halls



500+ research labs



7 libraries



15 gyms



7,300+ international students from over 130 countries



1,524 academic staff



189 international academic staff



363 university buildings



530+ practice and seminar rooms



135 laboratories and language labs



6,000,000+ library documents

#### WE OFFER:

- A wide range of academic fields: Medical and Health Sciences, Agriculture, Business, Engineering, Humanities, IT, Law, Music, Natural Sciences
- Sophisticated and student-focused classes
- Research projects: students are encouraged to join ongoing research projects.

#### WE OFFER YOU MEDICAL PROGRAMS WITH WORLDWIDE ACCREDITATION:

- World Federation for Medical Education (WFME)
- World Health Organization
- New York State Education Department
- Medical Board of California
- Medical Councils of Israel, Ireland, Iran and Norway

The latest information about our programs including the most up-to-date curricula can be found online at www.edu.unideb. hu. For more information please contact us at info@edu.unideb.hu.

Foundation Programs Foundation Programs

### **Basic Medicine Course (Premedical Studies)**

The one-year premedical Basic Medicine Course is recommended to those students who do not have sufficient knowledge in Biology, Physics and Chemistry from high school. The requirements in these premedical science subjects are rigorous, thus it is recommended that students who need a period of preparation prior to beginning the Medicine, Dentistry or Pharmacy Program join the Basic Medicine Course. Students successfully completing the course are directly admitted to their chosen program. In addition to the Basic Medicine Course starting each September, our University launches an Intensive BMC in January as well (January-July).

**Duration:** 2 semesters (September - June)

#### **Entry requirements:**

- high school certificat
- English language proficiency
- entrance examination in biology and physics/chemistry (written and oral)

Subjects: Biology, Chemistry, Physics

# Intensive Basic Medicine Course (Premedical studies)

The one-semester pre-medical Basic Medicine Course is recommended for students who do not have sufficient knowledge in biology, physics and chemistry from high school. The requirements in these pre-medical science subjects are rigorous, thus it is recommended that students who need a period of preparation prior to beginning the medicine, dentistry or pharmacy program join the Basic Medicine Course. Students who successfully complete the course are directly admitted to their chosen program. The course is recommended for those students who would like to refresh their high school knowledge before starting their first year studies.

**Duration:** 1 semester (January – July)

#### **Entry requirements:**

- high school certificate
- English language proficienc
- entrance examination in biology and physics/chemistry (written and oral)

Subjects: Biology Chemistry Physics

### **English Language Courses**

We offer English Language Courses to students whose knowledge of English is not sufficient to be enrolled in the International Foundation Year or any other undergraduate program but who are NOT applying for medicine or dentistry. After the completion of the first semester of the language course students can either continue with the second semester of the language course starting in February or start the Intensive Foundation Semester, during which they can study the subjects necessary for the entrance exam of their chosen discipline.

|   | Program name          | English<br>Language Courses     | Short English<br>Language Course | Intensive English<br>Language Course |
|---|-----------------------|---------------------------------|----------------------------------|--------------------------------------|
|   | Duration              | September - May                 | September - December             | February - June                      |
| U | Language requirements | IELTS 3.5                       | IELTS 3.5                        | IELTS 4.5                            |
|   | Subjects              | English language –<br>900 hours | English language –<br>300 hours  | English language –<br>400 hours      |

### **Preparatory courses for Music**

The objective of these preparatory courses is to prepare foreign students for the requirements of entry tests to Hungarian higher education institutions of music. Apart from systematizing their thus far acquired music knowledge and experience, they can improve their musical skills and theoretical knowledge and meet the requirements of pursuing their studies in higher education (BA or MA).

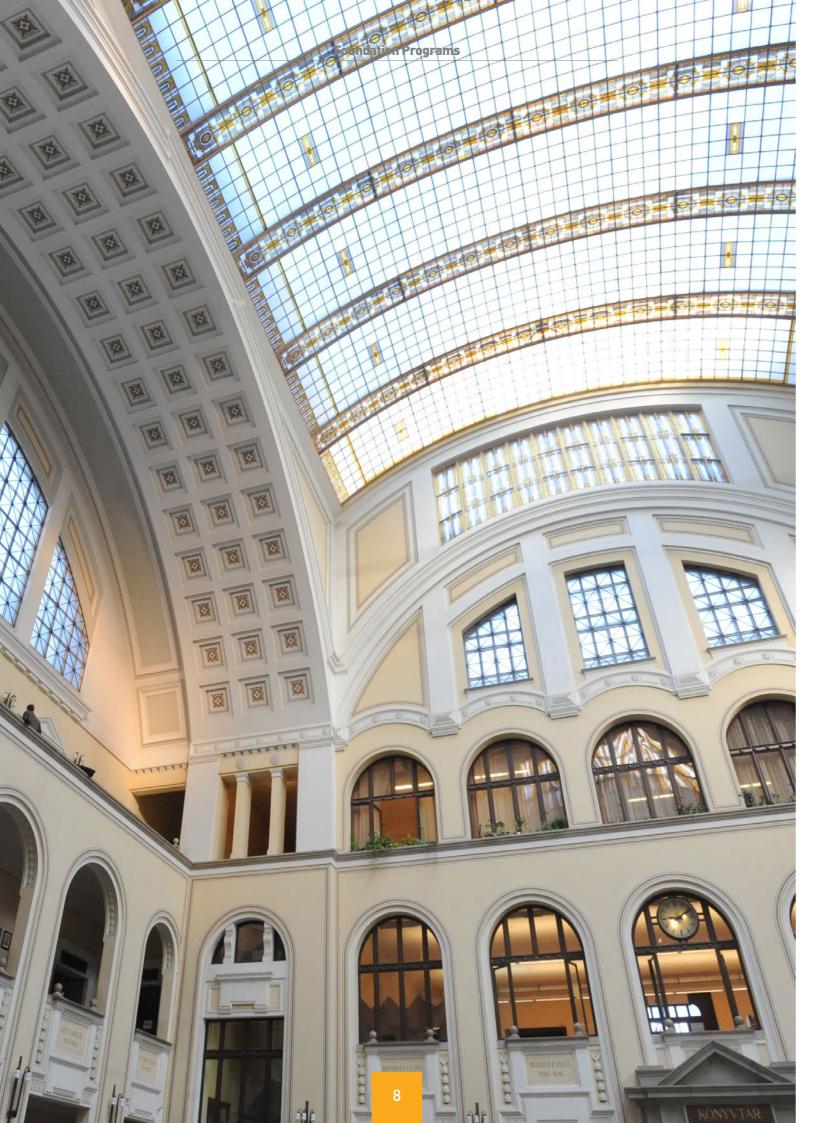
|   | Program name | Preparatory course for classical instrument / voice studies            | Preparatory course for<br>Musical Creative Art<br>and Musicology study | International<br>Foundation Year for Pop<br>Music   |
|---|--------------|--|--|---|
|   | Duration     | 10 months  | 10 months  | 10 months   |
| 1 | Major study  | Instrument /singing<br>Music Theory<br>Musicianship (Solfege)<br>Piano | Music theory<br>Musicianship (Solfege)<br>Piano                        | Major Instrument /Voice<br>Band Practice<br>Pop Music Theory<br>Solfeggio<br>Piano (except Keyboards major) |
|   | Lesson/week  | 2 lessons/week<br>2 lessons/week<br>2 lessons/week<br>1 lesson/week    | 2 lessons/week<br>2 lessons/week<br>1 lesson/week                      | 2 lessons/week<br>4 lessons/week<br>2 lessons/week<br>2 lessons/week<br>1 lesson/week                       |

#### **Entry requirements:**

- high school certificat
- certificate of musical pre-training
- English language proficiency
- entrance examination (more information: www.music.unideb.hu

Starting date: September

Period of training: 2 Semesters (September-December and January-April)



### **International Foundation Year**

For students who require additional instruction or review in sciences and in English language we offer foundation year courses to prepare them to study in their chosen degree program. With a range of courses, including intensive English language instruction, the International Foundation Year bridges the gap between students' current qualifications and background and the knowledge and skills required for honors courses. Students are provided with the necessary skills to proceed with studies in their chosen discipline. Students who are enrolled in the International Foundation Year and achieve a grade point average of at least 3.5 in the first semester and 4.0 in the second semester can enter the first year of their chosen program without taking an entrance exam.

**Starting date:** September

**Duration:** 10 months

(i) Language requirements: Basic English language proficiency

Academic requirements: high school certificate; or 12 years of education; or British curriculum

(5 0' level + 3 AS' level/2 A' level exams)

#### Subjects

Basic science subjects – mathematics, biology, physics, chemistry – IT skills, general English professional English, Hungarian as a foreign language.

In the frame of the International Foundation Year Program students have to choose one of the following specializations, depending on which major they wish to apply for:

- Information Technology
- Physics-related Engineering, or Science
- Chemistry-related Engineering, or Science
- Rusiness

### **Intensive Foundation Semester**

The Intensive Foundation Semester (from February till June) is suggested for students who require additional instruction or review in sciences and English. We offer foundation courses to prepare them to study in their chosen degree program. Students who successfully finish the Intensive Foundation Semester program with a grade point average of 4.0 are guaranteed admission into any engineering, IT or business program.

Starting date: February

**Duration:** 5 months

Language requirements: Basic English language proficiency

**Academic requirements:** high school certificate; or 12 years of education; or British curriculum (5 O' level + 3 AS' level/2 A' level exams)

#### Subjects

The preparation of foreign students, to enable them to successfully learn subjects at the University of Debrecen, is carried out according to the curriculum of the foundation year. During this time, several subjects will be taught to students: general English, academic English, optional Hungarian as a foreign language, mathematics, IT skills, and optionally - depending or prospective studies - biology, chemistry, and physics.

Agriculture Programs

Agriculture Programs

# Agribusiness and Rural Development Engineering, BSc

The purpose of the program is to train rural development agricultural engineers who can carry out organizational, management, administrative, logistical, and production tasks related to production, service, and consultancy. With their acquired knowledge of agronomic, economic, management, business, analytical, advisory, agro-commerce, agro-marketing, environmental, and regional skills and deep understanding of the relationship between administrative tasks and the agricultural economy, they can carry out professional tasks that meet the market expectations. They have the competence to interpret rural development following according to the standards of the European Union, with the necessary skills for planning and implementing rural development programs. They are prepared to pursue their studies in the Master's degree. After completing this program, they will be able to start the MSc in Rural Development Engineering program in possession of full credit prerequisites.

Faculty: Economics and Business

Academic discipline: Agricultural Science

**Qualification:** Rural Development Engineer

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate, entrance examination in mathematics and chemistry (written and oral)

**Duration:** 7 semesters

**ECTS:** 210

#### MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### **THEME**

#### **MAIN SUBJECTS**

1. Foundations for economics

Mathematics for Economy and Business, Information Technology, Economics, Statistics, Economic law, Public administration

2. Foundations for agricultural technology and agricultural science

Horticulture, Plant production, Animal husbandry, Foundations of engineering, Environment management, Natural sciences basics for plant production, Natural sciences basics for animal husbandry, Natural sciences basics for agricultural production

3. Foundations of agricultural economics and entrepreneurship

Land and property policy, Introduction to finance, Accounting, Application of support and regulatory systems, Agronomy, Professional consultancy, Trade in agriculture, Marketing, Logistics

4. Regional and rural development

EU studies, Agricultural economics, Regional economics, Rural Development, Business planning, Project planning, Human resource management  Special studies related to the theoretical and practical issues of the operation of the rural economy, their economic and social connections Basics of Special GIS, Agricultural information systems, Rural and civil security, Settlement development and management, Village Sociology, Competitiveness development, Rural community development, Practice related to professional theoretical training

6. Other

Free elective courses, Thesis writing, Physical education

Internship, practice: Students should complete a 12-week field practice.



**Agriculture Programs** 

#### Agriculture Programs

### Agricultural Engineering, BSc

In the agricultural engineering undergraduate course, students learn about different areas of the agricultural sector, gain insight into crop production, animal husbandry, and also gain unique agrotechnical knowledge (e.g., horticultural, fish farming, forestry, environmental, and game management knowledge). Students also acquire knowledge of science, technology, agriculture, and economics, which makes them agricultural professionals with general skills in agricultural production, processing, and farming.

Faculty: Agricultural and Food Sciences and Environmental Management

Academic discipline: Agricultural Science

**Qualification:** Agricultural Engineer (with Bachelor of Science degree

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)
Academic requirements: high school certificate; entrance examination in mathematics and chemistry/biology (written and oral)

**Duration:** 7 semesters

**ECTS:** 180+30

#### MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- Zoology, Agricultural History, Mathematics, Agricultural Chemistry, Agricultural Botany, Informatics, Animal physiology, Organic and biochemistry, Agricultural and Food industrial microbiology, Rural Development, Basic of Plant Physiology, Soil Science, Water Management, Agricultural Fundamentals, Environmental management
- 2. Land use and regional development, Agricultural machinery, Economic Sciences, Crop production, Agrochemistry, Agroecology, Feeding for animals, Animal husbandry, Horticulture, Water management
- 3. Plant genetics and plant breeding, Animal husbandry, Horticulture, Environmental management, Economic Sciences, Statistics, Regulation and Administration of Agriculture, Animals Health, Food Technologies, Quality Management System, Farm business management, Forest and game management, Grassland management, Integrated Plant Protection

**Internship, practice:** Students should complete a 12-week professional practice in the last semester.

**Career prospects:** Undergraduates may find employment in agricultural enterprises, even in management positions, in the field of agricultural advisory and administration, in research institutes, in your own farms, in advocacy organisations.

### Food Engineering, BSc

The BSc in food engineering is aimed at training professionals who are able to operate, supervise and develop food processing technologies. The studies include the physical, chemical and biological fundamentals of engineering with special emphasis on food quality and safety related issues. Besides becoming acquainted with operations and technological processes the students also learn economic, management and analytical subjects. The main goal of the program is to train experts who are able to fully provide services related to the everyday tasks of operation from engineering, biological and chemical work to management duties based on their comprehensive theoretical knowledge.

Faculty: Agricultural and Food Sciences and Environmental Management

Academic discipline: Agricultural Science

**Qualification:** Food Engineer **Starting date:** September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in mathematics, chemistry or biology (written and oral)

**Duration:** 7 semesters **ECTS credits:** 180+30

#### MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Agricultural Botany, Economic Sciences, General and Inorganic Chemistry, History of Agriculture and EU Knowledge, Informatics, Mathematics, Raw Materials of Food Processing, Thermodynamics, Zoology, Animal Physiology, Agricultural and Food Microbiology, Analytical Chemistry, Basic Equipment for Food Industries, Environmental Management, Environmental Technology, Introduction to Food Safety, Organic and Biochemistry, Technical Basics of Agricultural Machinery
- Agricultural and Food Microbiology, Business Studies and English Language Skills, Economic Sciences, Electrotechnics, Food Chemistry, Food Hygiene, Introduction to Intercultural Communication, Professional Language Skills, Unit Operations in Food Processing, Colloid Chemistry, Grant Proposal Writing in the target language, Measurement and Control, Principles of Food Technology
- Basics of Quality Assurance, Business Studies and English Language Skills, Food Industry Technologies and Quality Assurance, Instrumental Analytics, Legal English, Statistics, Unit Operations in Food Processing, English for Environmental Management and Politics, Food Analytics, Food Industry Economics, Intercultural Communication, Principles of Food Technology, Project Work, Agricultural Regulation and Administration
- 4. Professional Practice, Thesis

**Internship**, **practice**: Students should complete a 14-week professional practice in the last semester.

**Career prospects:** Graduates may find employment in the food industry, raw material and product qualification, food analysis, inspection, quality assurance or may work for food authorities. Graduates may continue their studies with an MSc in food engineering, an MSc in food quality and assurance, or an MSc in nutrition.



### Precision Agricultural Engineering, BSc

Unique in Hungary and Europe, the training includes, in addition to the basic agricultural knowledge, the knowledge of precision agriculture, agricultural digitalisation, the application and operation of precision agricultural equipment, info-communication tools, geoinformatics, data collection and data management, knowledge of the use of software in agriculture, knowledge of agricultural robotics, the basics of operating agricultural drones, knowledge of precision farming technology, the principles, structure, and operation of precision farming advisory systems.

Faculty: Agricultural and Food Sciences and Environmental Management

**Academic discipline:** Agricultural Science **Qualification:** Precision Agricultural Engineer

**Starting date:** September

Language requirements: English language proficiency (TOEFL 513/IELTS 5.5/oral examination)
Academic requirements: high school certificate; entrance examination in mathematics, chemistry or biology (written and oral)

**Duration:** 7 semesters

**ECTS:** 180+30

#### MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Mathematics, Informatics, Mechanical knowledge, Inorganic and organic chemistry, Agrochemistry, Botany, Physics, Plant physiology, Microbiology, Soil science, Agricultural basics, Horticulture, Plant pathology, Environmental management, Animal physiology
- 2. Statistics, Agrometeorology, Water management, Crop production, Animal husbandry, Land use, Integrated crop protection, Agricultural marketing and prices, Principles of microeconomics, Global food system, Agricultural computer application, Geospatial data analysis, Agricultural mechanics and robotics, Intro to Precision Agricultura and Lab, Farm machinery system management
- Hydraulics, pneumatics, Technical writing in engineering, Quality management systems, Management and organisation knowledge, Technical consulting in precision farming, Organisation and economics of precision farming, Precision feeding and animal husbandry, Precision agr data mapping, Use of soil and plant sensors in crop production, Climate risk management and precision agriculture, Crop management with precision farming, Electrical diagnostics for farm machinery, Project work

**Internship, practice:** Students should complete a 12-week professional practice in the last semester

**Career prospects:** Undergraduates may find employment in small, medium and large agricultural enterprises, in agricultural integrators, service and trading companies, in consultancy networks, in professional organisations, in educational institutions and research institutes.

**Business Programs** 

#### **Business Programs**

# Business Administration and Management, BSc

The program prepares specialists in economics and business who, using the skills acquired in the fields of economics, social sciences, applied economics, methodology and their chosen specialization are able to analyze, plan, organize, coordinate and accomplish the activities of business organizations and institutions.

Faculty: Economics and Business

Academic discipline: Economic Sciences

Qualification: Economist in Management and Business Administration

**Starting date:** September

(1) Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in mathematics and

English (written and oral) **Duration:** 7 semesters

**ECTS credits:** 180 + 30

MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Mathematics, Business Informatics, Introduction to Economics, Introduction to Business, Finance, Communication, International Financial Accounting, Organizational Behavior, Microeconomics, Business Civil Law, Environmental Economics
- 2. Macroeconomics, Business Public Law, Corporate Finance, Marketing, Organizational Behavior, International Economics, Economic Policy, World Economy, Statistics, Marketing Management, Management of Value Creating Processes, Reading and Writing in Economics and Business
- 3. Human Resource Management, Controlling, EU Studies, Issues in Economic Development, Communication with Customers, Conflict Management, Knowledge Management, Measuring Economic Performance, Business Planning, International Business, Decision Theory and Methodology, Regulation Theory, Entrepreneurship Theory and Practice, Project Management, Services Marketing
- 4. Business Practice, Thesis

Internship, practice: 1 semester-long business practice should be completed.

Career prospects: Graduates with a bachelor's degree in business administration and management will find themselves qualified for positions such as construction manager, environmental engineer, human resources officer, logistics and distribution manager, marketing executive, or sales executive. The program provides students with the necessary background knowledge to continue with the second (MSc) phase of their training.

### Commerce and Marketing, BSc

The aim of the program is to prepare specialists in economics and business with commerce and marketing competence and skills, who are able to procure and market various products and services, and organize and manage commercial activities of small and medium enterprises.

Lecture, seminar: 40%

Practice: 60%

Faculty: Economics and Business

Academic discipline: Economic Sciences

**Qualification:** Economist in Commerce and Marketing

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in mathematics and

English (written and oral)

Duration: 7 semesters ECTS credits: 180 + 30

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Introduction to Economics, Mathematics, Basics in Marketing, International Financial Accounting, Communication, Business Civil Law, EU studies, Philosophy, Sociology, Business Informatics, Microeconomics, Introduction to Business, Finance, Business Language, Statistics, Commercial Commodity Description
- Management, Macroeconomics, Management of Value Creating Processes, Business Language, Statistics, Corporate Finance, Marketing Management, Environmental Economics, International Economics, Business Public Law, Business Planning, Marketing Research, Marketing Communications, Foreign Trade Techniques
- 3. Enterprise Resource Planning Systems, Economics of Trade, Organizational Behavior, Product and Brand Management, Pricing in Marketing, Services Marketing, Planning and Analysis of Marketing Channels, International Marketing, Advertising and Advertising Planning, Non-profit and SME Marketing
- 4. Business Practice, Thesis

**Internship, practice:** Students should complete a semester long practice at a multinational or local company, or at a non-profit organization.

**Career prospects:** Graduates may go on to a variety of subject-specific careers in advertising, public relations, or account, brand, marketing or sales management. The program provides students with the necessary background knowledge to continue with the second (MSc) and later the third (PhD) phases of training.

### **Biochemical Engineering, BSc**

The aim of the program is to enable students to be competent in all fields of biotechnology by providing them with deep theoretical knowledge and practical skills (engineering and technological). Students will experience laboratory and manufacturing practices for themselves that a biochemical engineer might encounter in everyday work. Students will get acquainted with the equipment and apparatus used in the biotechnological industry and understand their optimal operation.

Faculty: Science and Technology

Academic discipline: Engineering Science

Qualification: Biochemical Engineer (with Bachelor of Science degree

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)
Academic requirements: high school certificate; entrance examination in mathematics and chemistry/biology (written and oral)

**Duration:** 7 semesters **ECTS credits:** 210

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Introduction to Economics, EU Studies, Mathematics, Introduction to Physics, General Chemistry, Introduction to Cell Biology, Basic Engineering Management of Value Creating Processes, Civil Law, Mathematics, Organic Chemistry, Biochemistry, General Microbiology and Mycology, Mechanical engineering, Animal Genetics
- 2. Macroeconomics, Biochemistry, Organic Chemistry, Microbiology, Methods in Molecular Biology, Informatics for Engineers, Unit operations, Environmental Technology, Visits to Biotech Companies, Microbial Physiology, Genetics, Physical Chemistry, Process control, Biomathematics, Bioprocess Engineering, Environment Impact Assessment
- 3. Marketing, Civil Law, Bioinformatics, Microbial Physiology Practice, Analytical Chemistry, Bioprocess Engineering, Plant Biochemistry and Molecular Biology, Plant Physiology, Genetics, Bio-Physical Chemistry, Colloid and Surface Chemistry, Methods in Spectroscopy, Computer Modeling of Chemical Technology Systems, Process control, Analytical chemistry, Unit operations, Plant Physiology
- 4. Introduction to Business, Quality Management, Computer Modeling of Chemical Technology Systems, Unit operations, Safety, Research Techniques in Plant Biology, Thesis

**Internship, practice:** Students should complete a 6-week practice at a company or research institute related to engineering.

Career prospects: Graduates can choose from a wide range of career opportunities in different areas of biotechnology according to their field of interest. They can choose to work either in theoretical or practical areas. They will also have the opportunity to work in the field of research and development.



**Engineering Programs** 

#### **Engineering Programs**

### **Chemical Engineering, BSc**

The objective of the program is to train professionals who possess the foundational knowledge and technical skills that comprise the natural, social and chemical engineering sciences. Students acquire the most essential skills in technology and safety, environmental protection, management, and social sciences. Concrete practical methods as well as the capability to apply acquired skills will help them to get accustomed to the professional requirements and standards of their future workplace. They will be capable of understanding/controlling production processes, providing quality assurance and technical services, and solving tasks regarding planning and development.

 $\textbf{Lecture, seminar:}\ 53\%$ 

Practice: 47%

Faculty: Science and Technology

Academic discipline: Engineering Science

**Qualification:** Chemical Engineer

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance exam Mathematics and Chemistry

(written and oral) **Duration:** 7 semesters

ECTS credits: 210

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Mathematics, Physics for Engineers, General Chemistry, Economics, Management, State Administration and Law, Engineering Ethics, Inorganic Chemistry, Organic Chemistry
- Organic Chemistry, Physical Chemistry, Informatics for Engineers, Mechanics for Chemical Engineers, Unit Operations, Macromolecular Chemistry, Colloid Chemistry, Biochemistry, Process Control, Chemical Technology
- Qualitative and Quantitative Analysis, Materials of Construction, Process Control, Mechanics for Chemical Engineers, Unit Operations, Chemical Technology, Business and Investment Organization, Instrumental Methods of Analysis, Plastics and Processing, Computer Modeling of Chemical Technology Systems, Environmental Technology, Pilot Plant Work
- 4. Computer Modeling of Chemical Technology Systems, Safety, Thesis

**Internship, practice:** Students should complete a 6-week practice at a company or research institute.

#### **Career prospects:**

**Graduate study opportunities:** 

- MSc programs in development: chemistry, chemical engineering, MSc in materials engineering
   MSc in materials science, environmental engineering, environmental science, bioengineering
- PhD in chemistry

### Civil Engineering, BSc

The objective of the Civil Engineering BSc program is to train civil engineers who are capable of solving complex plan, design, management, operational and construction problems related to civil engineering in the public sector and private industry. Graduates will possess a potential for leadership, an ability to communicate effectively and a capacity to work in a team.

Lecture, seminar: 49%

Practice: 51%

Faculty: Engineering

Academic discipline: Engineering Science

**Qualification:** Civil Engineer **Starting date:** September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in mathematics and

physics (written and oral)

Duration: 8 semesters
ECTS credits: 240

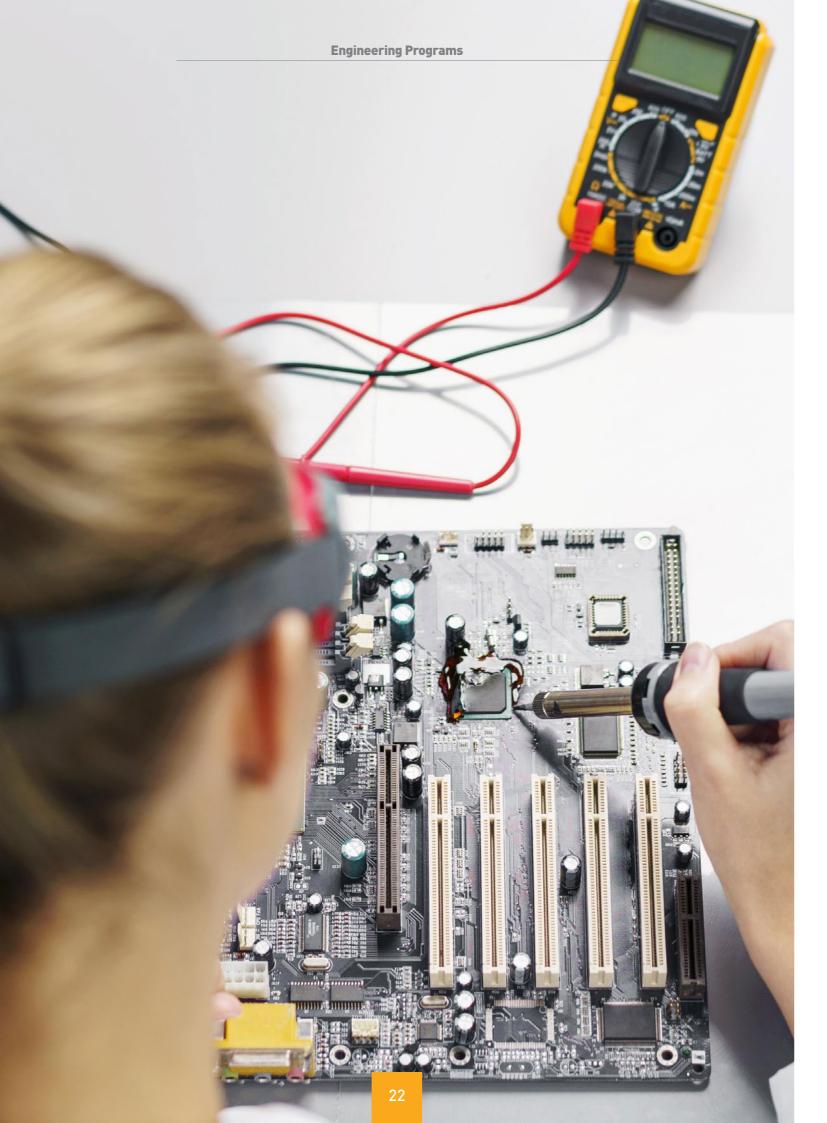
# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Basics of Engineering Calculations, Mathematics, Descriptive Geometry, Technical Drawing, Technical Chemistry, Engineering Physics, Informatics for Engineers, European Studies, Geoinformatics, Urban & Regional Development, Mechanics, State Administration and Law, Quality Management, Hydraulics, Construction Materials, CAD Modelling
- Mathematics, Mechanics, Introduction to Economics, Geographical Information System (GIS), Hydrology & Hydrogeology, Construction Materials, Geology, Theory of Design, Mechanics, Microeconomics, Basics of Environmental Engineering, Public Works, Geotechnics, Transportation Engineering
- Quality Management, Water Management & Hydraulic Structures, Geotechnics, Building Construction, Construction Management, Theory of Girders, Design of Buildings, Reinforced Concrete Structures, Steel Structures, FEM Modelling, Timber & Masonry Structures
- 4. Bridges & Structures, Geotechnics, Thesis

Internship, practice: Students should complete at least a 6-week practice at a company.

Career prospects: A civil engineering degree prepares you for work in the construction industry as well as in the business, management and financial sectors. Jobs directly related to the degree include: building control surveyor, consulting civil engineer, contracting civil engineer, design engineer, structural engineer, building services engineer, construction manager.



### **Electrical Engineering, BSc**

The program provides a comprehensive education that prepares students for a successful engineering practice and/or advanced studies. Students learn about the basic physical laws governing our environment, about material science and technology at the micro- and nanometer level, as well as mathematics and informatics. They acquire practical knowledge in computer engineering and electronic technology, microelectronics and energy systems, optical materials and automation. Apart from basic and applied knowledge, students will be trained in e-commerce, planning, and solving and managing problems efficiently.

Lecture, seminar: 52%

Practice: 48%

Faculty: Science and Technology

Academic discipline: Engineering Science

Qualification: Electrical Engineer

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in mathematics and physics (written and oral)

Duration: 7 semesters ECTS credits: 210

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Mathematics, Physics, Materials Science for Electrical Engineering, Informatics, Programming, Electricity, Introduction to Measurements and Instrumentation, Electronics
- Mathematics, Basic Environmental Science, Introduction to Economics, EU Studies, Introduction to LabVIEW Programming, Electricity, Electronics, Digital Electronics, Fundamentals of Civil Law, Measurements and Instrumentation, Basics of Circuit Simulation and Design, Intermediate Basic Exam in Electrical Engineering, Microelectronics, Automation
- 3. Fundamentals of Civil Law, Electronic Technology, Automation, Telecommunication, Electric Power Systems, Intellectual Property Protection, Production and Quality Management
- **4.** Economics of Enterprises, Thesis

**Internship, practice:** The summer practice should be carried out at an external professional institution.

Career prospects: An electrical engineer designs, develops and maintains electrical control systems and components according to required specifications. Graduates can occupy a variety of roles in engineering consultancies, manufacturing, automotive and railway engineering, steel manufacturing, or water companies. Most electrical engineers work in multidisciplinary project teams, which are likely to include engineers from other specialist areas as well as architects, marketing and sales staff, manufacturers, technicians and customer service personnel.

**Engineering Programs** 

### Mechanical Engineering, BSc

The aim of the program is to train mechanical engineers who are able to operate and maintain machines and mechanical systems, introduce and apply engineering technologies, organize and monitor work, and solve standard complex tasks in the field of technological development, research, and design, taking into account the needs of the labor market as well.

**Specialisations:** Automotive Production Process Control Specialization/ Building Services

Engineering Specialization/ Operation and Maintenance Specialization

Lecture, seminar: 42%

Practice: 58%

Faculty: Engineering

Academic discipline: Engineering Science

Qualification: Mechanical Engineer

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in mathematics and physics (written and oral)

**Duration:** 7 semesters **ECTS credits:** 210

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Mathematics, Engineering Physics, Introduction of Mechanical Engineering, Engineering Informatics, Descriptive Geometry, Materials Engineering, Statics, Technical Chemistry, Technical Drawing and Basics of CAD, Materials Technology and Testing
- 2. Strength of Materials, Studies of Economy and Law, Microeconomics, CAD Systems, Electrotechnics and Electronics, Thermodynamics, Dynamics and Vibration, Macroeconomics, Machine Elements, Measurement Technology, Fluid Mechanics
- 3. Machine Elements, Manufacturing Processes, Applied Automatization Basics of Engineering Management
- **4.** Environmental, Health, Safety and Ergonomic, Courses of Specialization, Optional courses, Thesis

Internship, practice: Students should complete a 6-week practice at a production company.

**Career prospects:** Mechanical engineering graduates are sought by employers in almost all sectors of the engineering industry including the automotive industry, chemicals industry, construction industry, materials and metals industry, oil and gas industry, power generation industry, rail industry, and utilities industry.

### **Mechatronics Engineering, BSc**

The objective of the program is to train mechatronics engineers who have the competence to combine engineering with electronics, electrotechnics, and computer control in a synergetic way. Students will able to complete routine design, operation, and maintenance of mechatronic equipment and processes, to introduce and apply mechatronic technologies, to organize energy-efficient and environmental process and production management, and to complete average tasks in engineering development and design considering the needs of the international labour market.

Lecture, seminar: 39%

Practice: 61%

Faculty: Faculty of Engineering

Academic discipline: Engineering Science

**Qualification:** Mechatronics Engineer

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)
Academic requirements: high school certificate; entrance examination in mathematics and physics (written and oral)
Duration: 7 semesters

ECTS credits: 210

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Mathematics, Engineering Physics, Informatics, Electromagnetism, Law and Ethics, Basics of Mechatronics, Computer-Aided Modelling, Materials Engineering, Economics for Engineering, Informatics (Labview), Electrotechnics
- 2. Mathematics, Statics and Strength of Materials, Microeconomics and Economic Processes of Enterprises, Electronics, Mechanical Machines and Machine Elements, Manufacturing Technologies, Dynamics and Vibration, Mechatronic Devices, Measurement and Data Acquisition, Environment, Health and Safety, Ergonomics, Applied Automatization, Pneumatics and Hydraulics
- Quality and Technical Management, Applied Automatization, Electropneumatics and Electrohydraulics, Modelling and Simulation Prototype Technologies, Robots and Robotic Technology, Electrical Machines and Drives, Thermodynamic Processes, Modelling and Simulation Prototype Technologies, Caxx Techniques, Cyber-Physical Systems
- **4.** Project of Mechatronics, Thesis

**Internship, practice:** Students should complete a 6-week practice at a production company.

Career prospects: Mechatronics engineering has a wide range of application in the business and industrial sectors. Graduates of mechatronics engineering can work in the fields of robotics nanotechnology, automation, aircraft engineering, oceanography, oil and gas industry, biomedical systems, transport, and computer-aided design.

Engineering Programs Engineering Programs

### **Professional Pilot, BSc**

The main objective of the program is to provide applicants with knowledge and skills that enable the passing of the ATPL (Airline Transport Pilot Licence) theoretical knowledge examination and CPL(A), ME/IR(A) skill tests of the Hungarian Aviation Authority by fulfilling all requirements of the Authority with out any further education. To train professionals who understand the aviation industry, are capable of working for aircraft operator companies as professional pilots, are aware of the tasks related to air operation, ground handling and air transportation can perform adequate compliance tasks and possess the knowledge related to the integrated ATP(A) training.

#### THE PROGRAM INCLUDES:

- Theoretical part: 52 courses including several engineering and aeronautical subjects,
- Practical part: 8 courses including Integrated ATP(A) course with a total of 200 hours (140 flight and 60 simulator hours) and Type Rating course or Airline Pilot Standards Multi-Crew Cooperation course (more than 50 hours in Airbus A320 simulators).

#### **OUR STUDENTS ACQUIRE:**

- Bachelor's degree,
- CPL (Commercial Pilot Licence),
- ME/IR (Multi-Engine/Instrument Rating),
- MEP CR (Multi-Engine Piston Class Rating),

#### In addition:

- ATPL theoretical knowledge exam certificate,
- MCC (Multi-Crew Cooperation Training) course completion certificate,
- NVFR licence endorsement,
- UPRT (Upset Prevention and Recovery Training) course completion certificate and logbook endorsement,
- Type-rating course completion certificate or APS MCC (Airline Pilot Standard Multi-Crew Cooperation Training) course completion certificate (both trainings are conducted in Airbus A320 environment).

#### **CORE MODULES:**

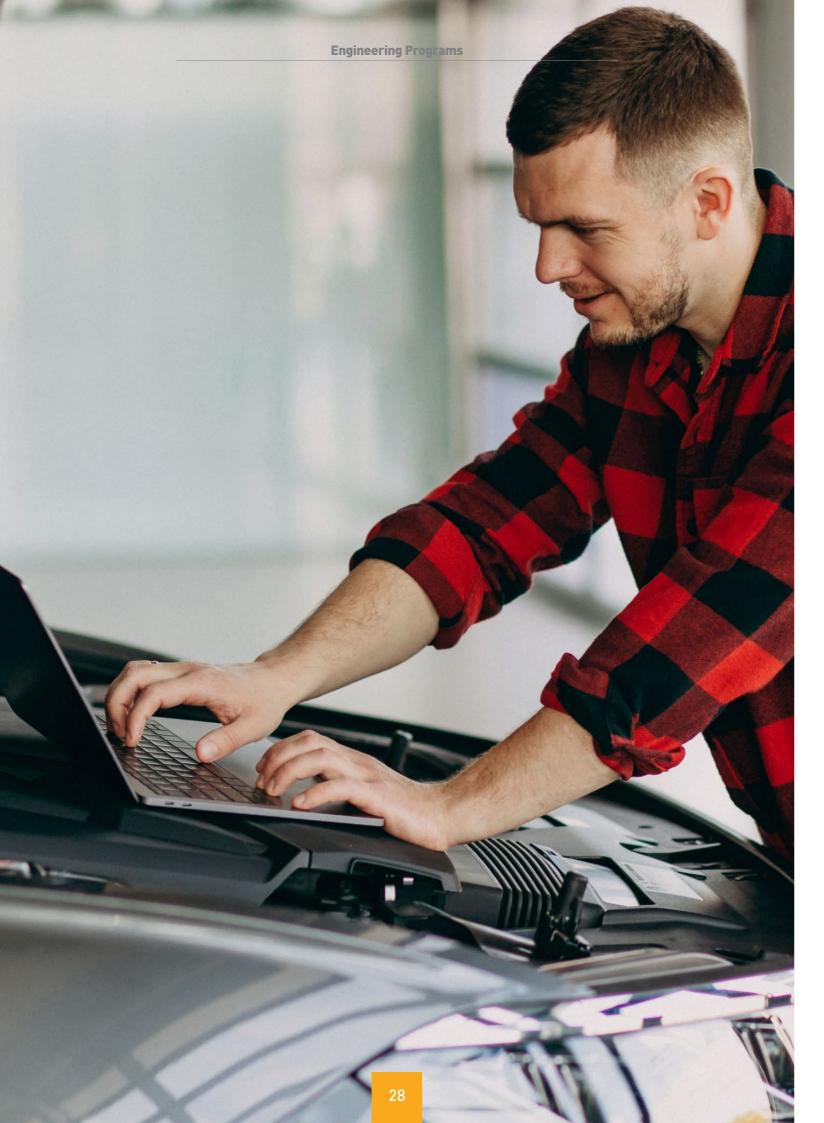
- Basics of Natural Sciences (Mathematics, Technical Mechanics, Engineering Physics, Thermodynamics and Fluid Mechanics, Informatics, Descriptive Geometry, Meteorology, Human performance and limitations)
- Economics and Humanities (Economics for Engineers, Microeconomics, Management for Engineers, Quality and Technical Management, Environmental protection, Dangerous Goods, Aviation Terminology)
- Professional Compulsory Subjects (Informatics for Engineers, Aircraft Technology, Mechanical Machines and Machine Elements, Materials Engineering, Manufacturing Technologies, Technique of Measurement, Environment, Health and Safety, Ergonomics (Basics of EHS), Mechatronic Devices (Sensors, Actuators, Motors), Basics of Aviation, Aircraft General Knowledge (Airframe, Systems, Power Plants and Instrumentation), Air Law, Human Performance, Meteorology, General Navigation, Radio Navigation, Communications)
- Field-specific Vocational Subjects (Mass and Balance, Performance, Flight Planning and Monitoring, Operational Procedures)
- Modules (Airline Pilot Standards Multi-Crew Cooperation course including Jet Orientation training; Type Rating course)

Lecture, seminar: 40% Practice: 60%

Internship, practice: Professional Pilot BSc students have to complete three summer internships lasting 8 weeks each.

Career prospects: Those who pursue this degree program will be able to fly an aircraft in civil





### **Vehicle Engineering, BSc**

The purpose of the program is to train vehicle engineers who are able to accomplish basic engineering tasks related to the design, manufacturing, systems thinking perspective of operation, and the repair of automotive, railway, naval and air vehicles, vehicle systems, construction and material handling machines and mobile machinery, considering the technicalities of transportation and logistics. They perform these tasks in accordance with the ruling principles of safety, environmental protection and power management. Students will be prepared to continue their studies at Master's [MSc] level.

Faculty: Engineering

Academic discipline: Engineering Science

Qualification: Vehicle Engineer

Starting date: September (2021)

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)
Academic requirements: high school certificate, entrance examination in mathematics and physics (written and oral)

**MAIN SUBJECTS** 

**Duration:** 7 semesters

**ECTS:** 210

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

### PROFESSIONAL FIELD

#### Vehicle and mobile machinery structures, equipment and operation

Thermodynamics and Fluid Mechanics of Vehicles, Applied Automation, Vehicles and Mobile Machinery

2. Vehicle and drive element design, manufacturing, repairing and maintenance

Vehicle and Drive Elements, Vehicle Materials and Technologies, Vehicle Manufacturing and Repair, Vehicle Design and Diagnostics

3. Informatics, control theory

Programming, Control Theory

4. Specific fields of vehicle and mobile machinery engineering

Electronics and Electrotechnics, Basic Theory of Vehicle Engineering, Technical Drawing, Measurement Technology, Electric Machines and Drives

5. Other

Natural sciences, economics and humanities

#### Specializations:

- Vehicle Manufacturing
- Automotive Vehicle Engineering
- Aircraft Engineering (starting in September 2022)

Internship, practice: Students should complete a 6-week professional practice.

**Health Sciences Programs** 

# Health Care and Disease Prevention (Public Health), BSc

The aim of the BSc in public health program is to provide students with solid knowledge of the discipline, so that they understand the basic concepts of public health and are able to suggest solutions to public health challenges.

Lecture, seminar: 72%

Practice: 28%

Faculty: Health Sciences

Academic discipline: Medical and Health Sciences

**Qualification:** Public Health Supervisor

Starting date: September

Language requirements: English language proficiency (CEFR level B2, assessed at the

compulsory entrance interview)

Academic requirements: high school certificate; entrance interview

**Duration:** 8 semesters **ECTS credits:** 240

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. First Aid, Health Informatics, Medical Latin, General Principles in Health Care & Nursing, Basics of Pedagogy, Philosophy, Basics of Psychology, Basics of Sociology, Ecology, Bioethics, Mathematical Basics of Biostatistics, Health Antropology, Communication, Cell Biology, Economics and Management, History of Public Health, Health Psychology, Hungarian Language, Introduction to Public Health, Biostatistics, Genetics and Molecular Biology, Anatomy, Physiology
- 2. Hungarian Language, Basic Epidemiology, Immunology, Intoduction to Law, Microbiology, Public Health Medicine, Clinical Propedeutics, Biochemistry, Epidemiology of Communicable and Non-communicable Diseases, Terrestrial Environmental Protection, Environmental Health
- 3. Aquatic Environmental Protection, Epidemiology of Communicable and Non-communicable Diseases, Health Care Law, Health Promotion and Health Policy, Occupational Health, Pharmacology, Public Health Medicine, Basics of Research Methodology, Child and Adolescent Health, Field and Laboratory Practice, Professional Hungarian, Basics of Dietetics, Gerontology
- Field and Laboratory practice, Health Care Law, Health Promotion, Health Promotion in Primary Care, Nutritional Health and Food Safety, Professional Hungarian, Applied Epidemiology, Basics of Quality Assurance, Field and Laboratory Practice, Thesis

**Internship**, **practice**: The duration of the internship is at least 10 weeks.

Career prospects: The degree will open up a range of career opportunities in the following fields:

- health services, research, surveillance, health promotion and/or environmental health amon other areas.
- public health and related agencies such as cancer registries, food safety authorities, disease screening programs, community development, international aid agencies, the private sector with the pharmaceutical industry and management consultancies.

## Nursing and Patient Care (Nurse), BSc

The goal of the nursing degree program is to train professionals who possess high level professional knowledge, who take up the responsibility to provide nursing for individuals, families and communities, who are able to do their best in health care and rehabilitation, who can make decisions in preventive care, curing, nursing care and rehabilitation at all levels of health and social provision.

Lecture, seminar: 43%

Practice: 57%

Faculty: Health Sciences

Campus location: Nyíregyháza

Academic discipline: Medical and Health Sciences

**Qualification:** Nurse **Starting date:** September

Language requirements: English language proficiency (CEFR level B2, assessed at the

compulsory entrance interview)

Academic requirements: high school certificate; entrance interview

**Duration:** 8 semesters **ECTS credits:** 240

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. General Principles of Health Care and Nursing, Biophysics, Imaging Diagnostic Techniques and Technical Basics, Biochemistry, Theoretical Psychology, First-aid Application, Functional Anatomy, Hungarian Language, Health Informatics, Law in Health Sciences Training, Latin, Health Development (Pedagogy and Health pedagogy), Physiology-Pathophysiology, Microbiology, Pathology
- 2. General Principles of Health Care and Nursing, Internal Medicine, Physiology-Pathophysiology, Pharmacology, Hungarian Language, Health Informatics, Basics of Research Methods, Preventive medicine and public health, Health Development, Gerontology, Paediatrics, Skill Development, Clinical Practice, Surgery, Professional Care
- Internal Medicine, Internal Medicine and Nursing, Paediatrics, Clinical Practice, Surgery Professional Care, Psychiatry, Surgery, Surgery and Nursing, Professional Care, Dietetics, Neurology, Gynecology, Obstetrics
- 4. Anaesthesiology and Intensive Care, Clinical Practice, Community Medication, Oxiology and Emergency Patient Care, Rehabilitation, Professional Care, Thesis

Internship, practice: The duration of the internship is 48 weeks

**Career prospects:** The nurses may be located in healthcare, various public and private health care facilities, hospitals, clinics, nursing homes, rehabilitation centers and other areas of social and educational sectors as well as charitable organizations as well. Based on their acquired knowledge the graduates can continue their education in doctoral programs.

## Nursing and Patient Care (Dietetics), BSc

The degree covers the impact nutrition has regarding the function of the human body in health and disease. It provides professional knowledge and skills to prevent, treat and manage poor health with food, nutrients and dietary change. After the successful completion of this program, you, as a qualified dietitian, will be able to use your knowledge to work with people by promoting healthy lifestyle, optimizing health, managing and preventing diet-related diseases. Dietitians are the only qualified health professionals who assess, diagnose, treat and prevent diet and nutrition problems. The aim of this program is to enable you to use your proficiency to promote a healthy lifestyle and offer nutrition advice. You will be able to interpret the latest nutrition science results into more comprehendible, practical information about diets and healthy eating. Furthermore, you will be able to help people to manage their health and nutrition-related diseases. Once you have successfully completed this program, you will gain a comprehensive view of the mental and physical aspects of nutrition, helping people overcome the barriers hindering behavioural change. As a dietitian you will be guided to acquire communicational and professional skills in order to became an effective health care professional, serving people in need by improving and maintaining people's quality of life and health.

Lecture, seminar: 61% Practice: 39%

Faculty: Health Sciences

Academic discipline: Medical and Health Sciences

**Qualification:** Dietitian **Starting date:** September

Language requirements: English language proficiency (CEFR level B2, assessed at the

compulsory entrance interview)

Academic requirements: high school certificate; entrance interview

**Duration:** 8 semesters **ECTS credits:** 240

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- Applied Health Sciences, Anatomy, Biostatistics, Health Informatics, Food Chemistry, Physiotherapy, Roger's Conversation, Physical Education, General Principles in Nursing and Clinical Propedeutics, Dietetics, Engineering of Food Plants, Properties of food raw materials, Food Hygiene, Physiology, Epidemiology, Communication, Quality management, Block practices
- 2. Psychology, Hungarian Language, First Aid, Food Processing Technologies, Clinical Dietetics, Microbiology, Public Health Medicine, Medical Latin, Principles of Health Sciences, Catering Systems of Health Institutions, Health Care Law, Psychological and Addictological Knowledge, Block practices

- Pedagogy, Dietetics, Catering Management, Food Processing Technologies, Philosophy, Economics and Management, Pharmacology, Preventive Medicine & Public Health, Public Health Medicine, Bioethics, Dietetics, Research Methodology, Health Sociology, Nutritional Psychology, Summer practice, Block practices, Field Practice
- Dietary knowledge, Health Promotion in Primary Care, Catering Management, Food Safety, Foodstuff regulations, Household Economics, Communal Catering, Sport Dietetics, Nutritional Health and Epidemiology, Health Policy, CPR, Field practices, Block practices

Internship, practice: The duration of the internship is at least 16 weeks.

**Career prospects:** Health care institutions, educational institution in the field of health, university departments, institutes, research centers, food and feed companies or research companies and institutes, food office and civil organizations.





### Nursing and Patient Care (Physiotherapy), BSc

The curriculum of the BSc in physiotherapy program aims to prepare students for the prevention, treatment and rehabilitation of movement system disorders and other diseases using the therapeutic tools of physiotherapy.

Lecture, seminar: 43% Practice: 57%

Faculty: Health Sciences

Academic discipline: Medical and Health Sciences

**Qualification:** Physiotherapist **Starting date:** September

Language requirements: English language proficiency (CEFR level B2, assessed at the

compulsory entrance interview)

Academic requirements: high school certificate; entrance interview

**Duration:** 8 semesters **ECTS credits:** 240

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. General Principles of Health Care and Nursing, Biophysics, Imaging Diagnostic Techniques and Technical Basics, Biochemistry, Theoretical Psychology, First-aid Application, Functional Anatomy, Hungarian Language, Health Informatics, Law in Health Sciences Training, Latin, Health Development (Pedagogy and Health pedagogy), Physiology-Pathophysiology, Microbiology, Pathology
- 2. Basic Biochemistry, Physiology, Philosophy, Kinesiology, Hungarian Language, Clinical Propedeutics, Applied Training Methods, Basics of Internal Medicine, Biochemistry, Basics of Dietetics, Health Care Law, Principles of Health Sciences, Gerontology, Basics of Research Methodology, Principles of Kinesiology, Kinesiology Practice, Mobilization-Manual Techniques
- Internal Medicine, Internal Medicine and Nursing, Paediatrics, Clinical Practice, Surgery Professional Care, Psychiatry, Surgery, Surgery and Nursing, Professional Care, Dietetics, Neurology, Gynecology, Obstetrics
- 4. Health Promotion in Primary Care, Intensive Therapy for Physiotherapists, Physiotherapy Principles of the Movement System, Neurology for Physiotherapists, Psychiatry, Rehabilitation Skills, Rheumatology for Physiotherapists, Internal Medicine Clinical Practice, Neurology Clinical Practice, Rehabilitation Clinical Practice, Orthopaedics Clinical Practice, Rheumatology Clinical Practice, Traumatology Clinical Practice, Thesis

**Internship**, **practice**: The duration of the internship is 14 weeks.

**Career prospects:** The degree will open up a range of career opportunities in the following fields: health services, providing therapy and rehabilitation for a broad scale of diseases, institutions offering balneo- and hydrotherapy, home care, private sector, prevention and other healthcare-related fields.

Humanities Programs Humanities Programs

### **English and American Studies, BA**

The aim of the program is to provide our students with a range of practical skills and theoretical tools in the area of English language, cultures and literatures so that they can utilise and adapt their acquired knowledge in relevant fields in their future job.

Lecture, seminar: 25% Practice: 75%

Faculty: Humanities

Academic discipline: Humanities

Qualification: Philologist in English and American Studies

Starting date: September

(IELTS 6.0 or equivalent)

Academic requirements: high school certificate; entrance examination in English (oral, in person

or via electronic communication)

ECTS credits: 180

**Duration:** 6 semesters

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. The Structure of English: The Noun Phrase and The Verb Phrase, Skills Development: Reading & Speaking, Skills Development: Writing & Composition, English Pronunciation, Grammar in Context, British Civilization, Aspects of English, Introduction to Hungarian Culture, Targeting the Verb Phrase, Essay Writing and Research, Vocabulary Building, Advanced Writing & Composition, Skills Development: Speaking & Listening, American Civilisation, History of the British Isles
- Targeting the Noun Phrase, Introduction to Linguistics, The English Sentence, Introduction to Literature and Visual Culture, American Literature, American Culture and Institutions, Modern British Literature and Culture, Introduction to Literature and Culture, British Literature to 1945, Introduction to Applied Linguistics, History of the USA, British Literary Seminar, Challenging Grammar + the subjects of the Business English specialization
- 3. The subjects of one of the following tracks: a) British Literature and Culture, b) Linguistics and Communication or c) North American Studies; Thesis

**Internship, practice:** Graduates are able to work in business and governmental organizations, media, publishing, tourism, diplomacy, etc. Graduated students holding a Bachelor of Arts degree in English and American studies are eligible for admission to the English studies MA and American studies MA programs.

# Romance Philology and Cultures (French Studies), BA

The aim of the program is to provide our students with a range of practical skills and theoretical tools in the area of French language, cultures and literatures so that they can utilise and adapt their acquired knowledge in relevant fields in their future job.

Lecture, seminar: 25%

Practice: 75%

Faculty: Humanities

Academic discipline: Humanities

**Qualification:** Philologist in Romanistics

Starting date: September 2022

Language requirements: French language proficiency (B2)

Academic requirements: high school certificate; entrance examination in French (oral, via

electronic communication)

**Duration:** 6 semesters

**ECTS:** 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Introduction to Philology, French Civilization, French Descriptive Grammar, Developing Skills in French Usage, French Phonetics, Introduction to Linguistics, Introduction to Literature, The Arts in France: Visual Arts and Music
- 2. French Descriptive Grammar, XVIIth and XVIIIth-Century French Literature, Grammar-Text-Usage, Developing Skills in French Usage, XIXth-century French Literature, French Theatre, Linguistics Analysis of Texts
- Main Trends in French Linguistics, Variets of French, XXth-century French Literature, French Cinema, Applied Linguistics, The French Literature of the Middle Ages and the Renaissance, Developing Skills in French Usage

**Internship, practice:** Graduates are able to work in business and governmental organizations, media, publishing, tourism, diplomacy, etc. Graduated students holding a Bachelor of Arts degree in French studies are eligible for admission to the French studies MA program.

Humanities Programs

Humanities Programs

### Kindergarten Education, BA

The aim of the program is to provide our students with a range of practical skills and theoretical tools in the area of Early Childhood Education and Care. The graduates will be able to plan and manage process-related pedagogical activities that support child-centred development and care of children from 3 years of age to 6. They acquire theoretical knowledge and can organize colourful and interesting activity programmes in kindergartens using up-to-date methods. The graduates transfer universal and national values to children as well as support differentiated child development, in cooperation with the family and in accord with the social environment.

Lecture, seminar: 77%

Practice: 23%

Faculty: Faculty of Education for Children and Special Educational Needs

Campus location: Hajdúböszörmény
Academic discipline: Pedagogy/Education
Qualification: Kindergarten Educator

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

**Academic requirements:** high school certificate; entrance examination in English (Aptitude exam: written (Letter of motivation), oral: a conversation via electronic communication); Aptitude test in physical fitness

**Duration:** 6 semesters **ECTS credits:** 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Basics of Education, Research Methods, Early Childhood Education, Development of Personality and Professional Competencies, Psychology, Pedagogy of Play, Work Activities by Children, The Cultivation of Speech and Mother tongue, The Activities of Rhymes and Telling Fairy Tales and its Methodology, Theory and Practice of Bilingual Education, Early English in Childhood Education, Individual Practice in Kindergarten
- 2. Early childhood and History of Kindergarten Education, Value and Ethics in Education, Anthropological Perspective of Early Childhood, Pedagogy of Play, The Education of Puppetry and its Methodology, Active Exploration of the Outside environment I. and its Methodology, The Cultivation of Music, Singing, Music, Singing Games, and Dances and its Methodology, Physical Activity by Children, Pedagogy of Health and First Aid Training in Kindergarten, Developing Intercultural Competence, Civilization and Culture, Individual and Group Practice in Kindergarten
- Development of Critical and Reflective Thinking, International Trends in Early Childhood Education, Society, Culture and Minorities in Hungary, ICT, Active Exploration of the Outside Environment, International Music Trends in Early Childhood Education, Building Partnerships with Families The Relations of Kindergarten, Inclusive Education The basics of Special Educational Needs, The issues of Compensation for Disadvantaged Education, Child Protection in Early Childhood, Problem and Conflict Resolution, English Children's Literature, Inquiry based Education, Group Practice, Individual and Complex Practice in Kindergarten

**Internship, practice:** Individual Practice in Training Kindergarten takes two weeks per semester. Complex Practice in Kindergarten in the last semester takes 8 weeks time (230 hours).

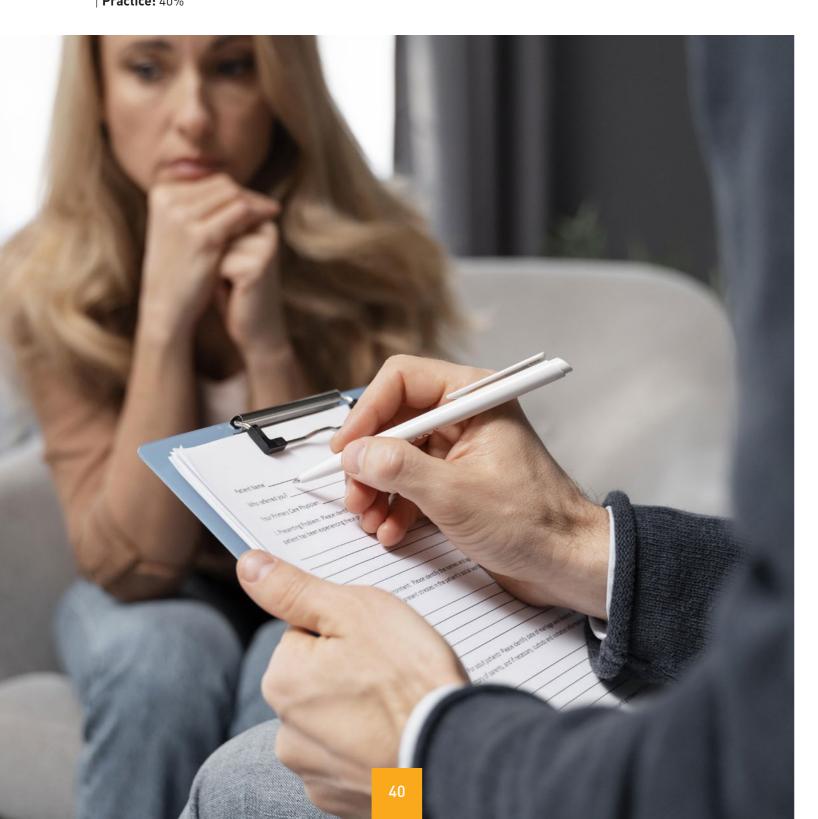
Career prospects: After graduation, students can find jobs in private, public or church-funded kindergartens, infant nurseries, family nurseries or family care services. The graduates are suitable for jobs in nursing, caring, educating, mediating and counselling in the scope of childrage work



### Psychology, BA

The aim of the program is to introduce students into the theoretical foundations and basic methods of psychology and also, to give an insight into the applied branches of psychology. The program develops the skills of the students and provides them with techniques that can be used in order to measure, explore and develop individuals, groups or organizations through professional measures and intervention. Students will obtain an integrated knowledge of education, communication, socialization, learning and human development. The BA program offers a solid basis (in terms of knowledge and approaches) for further learning in any psychology MA program.

Lecture, seminar: 60% Practice: 40%



Faculty: Humanities

**Academic discipline:** Humanities

**Qualification:** Human Behavior Analyst

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate

Admission criteria: English Placement Test + Oral Entrance Exam

**Duration:** 6 semesters **ECTS credits:** 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. History of philosophy, Society, culture and Socialization, Theory and Practice of Communication, Computer science, Professional socialization, Basics of Biology, Statistics for Psychologists, Experimental Psychology, Developmental Psychology, Personality Psychology, Social Psychology
- 2. Methodology, Statistics for psychologists, Experimental Psychology, Research Methods in Cognitive Psychology, Evolutionary Psychology, Developmental Psychology, Diagnostics in Personality Psychology, Social Psychology, Sport Psychology, Clinical Child Psychology, Work psychology, Psychology of School Teaching and Learning
- Individual Research in Developmental Psychology, Individual Research in Personality Psychology, experimental social Psychology, Individual Research in Social Psychology, Psychophysiology of Cognitive Processes, Psycholinguistics, Experimental Affective Psychology, Helping Relations, Clinical and Health Psychology, Laboratory Practice in Work Psychology, Learning Disabilities, Thesis

**Internship, practice:** No compulsory internship is included in the program.

Career prospects: A human behavior analyst can contribute to completing tasks in any organization, field, or institute, where education, recruitment, selection, or health activities take place. Furthermore, a human behavior analyst can also work in any psychological laboratory and can complete and evaluate several standard experiments and aptitude tests used, for example in organisational psychology. It is important, that a behaviour analyst should work under the supervision of a qualified psychologist. Thus, for fulfilling the responsible work of a qualified psychologist MA qualification in psychology is needed. However, a human behavior analyst can effectively assist among others the work of a school psychologist, organization psychologist, or the work of scientific researcher.

**IT Programs IT Programs** 

### **Business Informatics, BSc**

The Business Informatics BSc program trains professionals who bridge the gap between the developers of business software and their users. During their training students learn how to implement their knowledge in the fields of economics and IT. As a result, they will be able to understand both software development and business and financial processes, and consequently, after graduation they will be able to solve business problems supported by info-communication technologies and to operate business IT systems. Moreover, they will be able to cooperate with economics and business professionals, partners, and software developers. This major prepares business informatics students for working in a business environment rich in data and enables them to acquire certification in business information technology. Besides this, students have the opportunity to study the most important modules of software produced by SAP, the top company producing business management software. Such knowledge will give students a profitable advantage in the labor market.

Lecture, seminar: 49% Practice: 51%

Faculty: Informatics

Academic discipline: Computer Science and Information Technology

**Qualification:** Business Informatics Engineer

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination) Academic requirements: high school certificate; entrance examination in mathematics (written and oral)

**Duration:** 7 semesters ECTS credits: 210

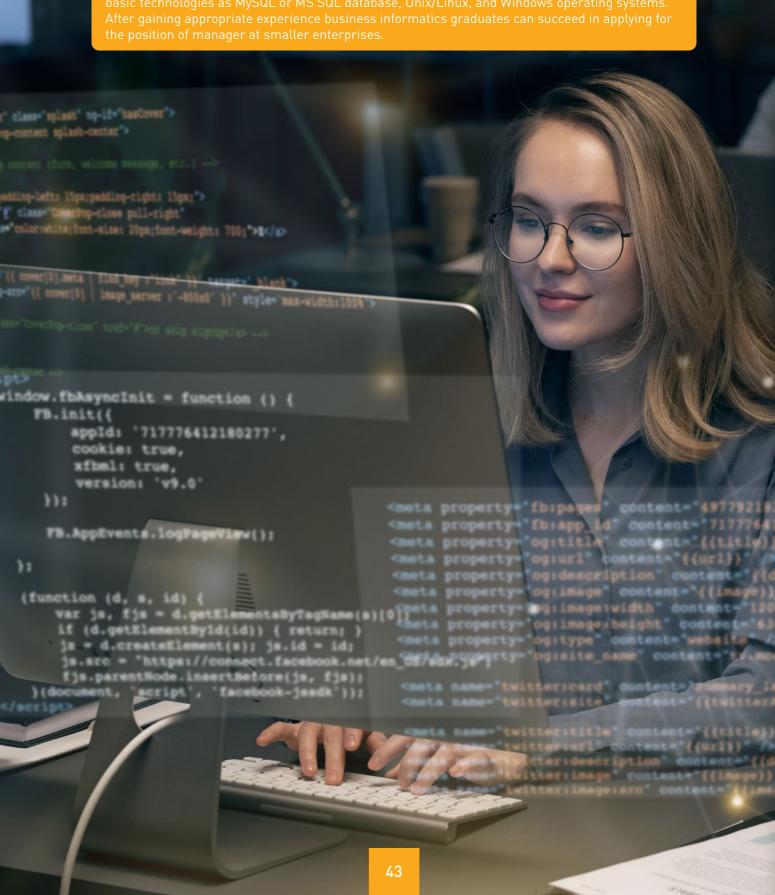
#### MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### **MAIN SUBJECTS YEAR**

- Introduction to Management, Fundamentals of Business Law, Microeconomics, International Financial Accounting, Introduction to Programming, Operating Systems, Data Management, Copyright Law, Data Structures and Algorithms, Programming 1
- Macroeconomics, Introduction to Finance, Organizational Behaviour, Marketing, Programming 2, Database Systems, Information and Knowledge Management, Data Management, Business Intelligence in Practice
- Management Science, Developing Data Handling Programs, Fundamentals of Software Development and Software Testing, Foundations of Computer Security, Financial Mathematics, Introduction to SAP - End user level, Advanced Spreadsheets, Big Data Analytics, Data Visualization, Computer Statistics, Corporate Finance, Strategic Management, Introduction to SAP - Developer level, International Business, Decision Support Systems
- Advanced Data Security, Digital Marketing, Foundations of Artificial Intelligence, Management of Value Creating Processes, Thesis

Internship, practice: Students should complete an 8-week internship either at the university

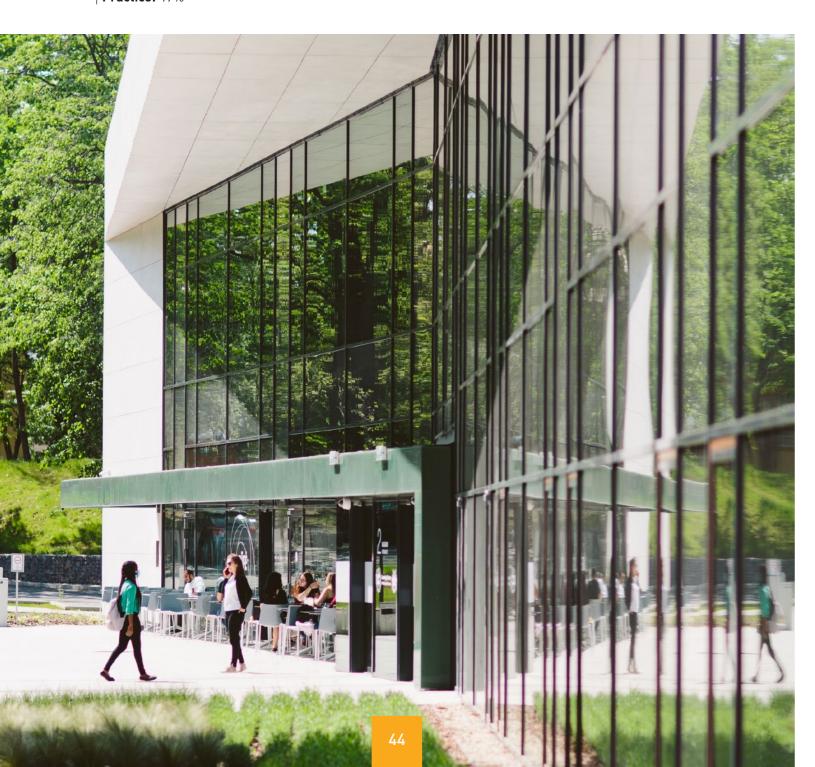
Career prospects: The following career prospects are the most probable: company management



### **Computer Science, BSc**

Computer Science BSc students acquire knowledge that enables them to create, introduce, operate, service, develop and implement software-oriented IT devices and systems on their own or as members of a team. They learn how to design, analyse and apply algorithms using the most important paradigms, and study basic software development methodologies and technologies. They receive instruction in the skills of data modelling and designing, creating and modifying databases; furthermore, they will learn the use of SQL and will be capable of applying the methods and tools of artificial intelligence, logical programming, using divided systems, and developing websites. The theoretical and practical knowledge that students acquire during their studies makes it possible for them to start MSc courses. The ones who decide to start working after graduation will most likely develop and operate mobile, desktop, server web and multimedia applications and IT systems.

Lecture, seminar: 51% Practice: 49%



Faculty: Informatics

Academic discipline: Computer Science and Information Technology

**Qualification:** Computer Scientist

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in mathematics

(written and oral)

**Duration:** 6 semesters

ECTS credits: 180

#### MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### **YEAR MAIN SUBJECTS**

- 1. Computer-Aided Mathematics and Visualization, Discrete Mathematics, Introduction to Programming, Logic in Computer Science, Operating Systems, Calculus, Network Architectures and Protocols, Database Systems, Database Systems Lab, Data Structures and Algorithms, 3D printing and modeling, Cloud Computing, Basics of GIS
- High-Level Programming Languages, Web Technologies, Introduction to Computer Science, Applied Statistics, Software Engineering and Technologies, Foundations of Artificial Intelligence, Foundations of Computer Security, Applied Mathematics, Bioinformatics, E-Sports, Operation of Info-communication Systems, Image Processing in Practice, High-Level Programming Languages 3, Introduction to 3D Game Development, Compilers, Machine Learning in Practice, Advanced Database Knowledge, NoSQL Databases
- 3. Web Application Development, Software Development Methodologies, Computer Statistics, Software Testing, Advanced Data Security, Advanced Web Technologies, Thesis

**Internship**, **practice**: Students should carry out an 8-week internship either at the university

Career prospects: Computer Science BSc graduates can find positions asf junior software

IT Programs IT Programs

### **Computer Science Engineering, BSc**

The Computer Science Engineer BSc belongs to the field of informatics training; however, it is also characterized by an engineering approach. Computer science engineer BSc students acquire appropriate knowledge that enables them to implement and operate information and technical information systems and services, and to carry out developments on them. They study the technical elements of information and infrastructure systems such as computers, telecommunication networks, embedded systems, measurement and management technology solutions, and operating systems. They also study practical engineering methods, the application of software development methodology, and the use of development tools.

Lecture, seminar: 50% Practice: 50%

Faculty: Informatics

**Academic discipline:** Computer Science and Information Technology

Qualification: Computer Science Engineer

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in mathematics and physics (written and oral)

Duration: 7 semesters ECTS credits: 210

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Algorithms and Basics of Programming, Electronics, Physics, Calculus, Mathematics for Engineers, Introduction into Logic and Computer Science, Data Structures and Algorithms, Probability Theory and Mathematical Statistics, Digital Design, Digital Design Laboratory, Programming Languages, Computer Architectures
- 2. Probability Theory and Mathematical Statistics, Economics, Signals and Systems, Introduction to Graphical Programming Environment, Programming Languages, Computer Networks Management of Data Network Systems, Operating Systems, System Programming, Control Systems, Software Development for Engineers, Enterprise Information Systems, Web Solutions, Microcontrollers
- Introduction into Artificial Intelligence, Assembly Programming, Embedded Systems, Modeling and Analysis of Information Technology Systems, Mobile Solutions, Fundamentals of Business Law, Management Basics for Engineers, Database Systems and Knowledge Representation, IT Security, Computer Graphics, Programming Network Devices 1, Programmable Logic Devices, Development of Embedded Systems, Programming Network Devices 2, Modeling and Performance Evaluation of Networks, Telecommunication Systems
- **4.** Sensors and Actuators Network, Thesis

**Internship, practice:** Students should complete an 8-week internship either at the university working on research projects or at a multinational or local company.

Career prospects: There has been a great demand for Computer Science Engineer BSc graduates in the labour market for years. They can easily find work in the sectors of production, services, civil service, banking, commerce, or enterprises. According to their specialization, they can choose to work as system designers and developers, programmers, software developers, web designers, data-base developers, corporate management IT professionals, or system administrators.



### Classical Performing Arts (Music), BA

The aim of the program is to educate musicians who - with their performing skills, theoretical knowledge, and highly developed musical abilities - enrich and spread the Hungarian and European music culture. They can enrich the repertoire of musical knowledge with their sophisticated music taste and are able to work in music institutions, professional performance ensembles and in other occupations which require music education.

Faculty: Music

Level of degree: Bachelor of Arts (baccalaureus artium, abbreviated as: BA)

**Qualification:** Classical Instrumental Music Performer or Classical Music Singer or Choral Conductor

**Specialization:** classical piano, organ, guitar, violin, viola, cello, double bass, recorder, flute, oboe, clarinet, saxophone, bassoon, French horn, trumpet,trombone, tuba, percussions, singing, choral conducting

Starting date: September

Language requirements: English language proficiency

**Academic requirements:** high school certificate, entrance examination (more information: www. music.unideb.hu)

**Duration:** 6 semesters **ECTS credits:** 180 credits

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

Main subjects

Instrumental / Vocal / Conducting Technique and Performance History of Music, Music Theory, Solfeggio, Folk Music, Acoustic, Philosophy, Art History, Repertoire Studies, Orchestra/Choir, Piano, Chamber Music, Methodology, Stage Practice (in vocal area)

**Career prospects:** Graduates are able to work at music institutions, professional performance ensembles and at other occupations which require music education. Having achieved a high standard of knowledge, they can continue their studies in one of the MA specializations.

### Contemporary Music, BA

The aim of the program is to educate pop music performers who - with their technical knowledge and skills in the field of electro-technical, instrumental and vocal techniques and performance skills - are able to perform in various musical ensembles and according to their professional competence are able to collaborate in the operation of musical or cultural institutions or to take simple managerial roles in pop music management. They are prepared to continue their studies at master's level.

Faculty: Music

Academic discipline: Arts

Qualification: Pop Musician (Instrument/Singing)

**Specialization:** Pop Music Guitar, Pop Music Bass Guitar, Pop Music Keyboards, Pop Music Saxophone, Pop Music Trombone, Pop Music Trumpet, Pop Music Percussions, Pop Music Singing

(i) Starting date: September

Language requirements: English language proficiency (at least B2)

Academic requirements: High school certificate, entrance examination

**Further information:** Institute of Pop Music

**Duration:** 6 semesters

ECTS credits: 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

Main subjects

Short History of Classical Music, History of Popular Music, Folk Music/Folk Music Arrangements, Solfege, Music Theory, Applied Music Composition, Cultural History, History of Philosophy, Pop Music Instrument/ Singing Major, Knowledge of Repertoire, Improvisation, Band Practice, Producer Basic Skills, Piano, Management Fundamentals, Foreign Language (English for music professionals), Sound Editing, Orchestration, Rhythm Section, Stage Presence (for singers), Background Singing (for singers), Knowledge of Instrument (for the specific major)

**Internship, practice:** Performing practice (concerts, galas) closely linked to the skills development process, as defined in the curriculum and the semester work plan.

**Career prospects:** Graduates can go on to work as professional pop musicians in various bands or other areas of the music industry. They can also take on general management tasks in various cultural and artistic institutions.

### Musical Creative Art and Musicology, BA

The BA in musical creative art and musicology aims to educate musicians who - with their performing skills, theoretical knowledge, and highly developed musical abilities - enrich and spread Hungarian and European music culture. They can enrich the repertoire of musical knowledge with sophisticated music taste and are able to work in music institutions and at other occupations which require music education.

Faculty: Music

Qualification: Music Theoretician or Music Assistant

**Specialization:** Music Theory or General Studies in Music

Starting date: September

Language requirements: English language proficiency

**Academic requirements:** high school certificate, entrance examination (more information: www.

music.unideb.hu)

**Duration:** 6 semesters

ECTS credits: 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

Main subjects

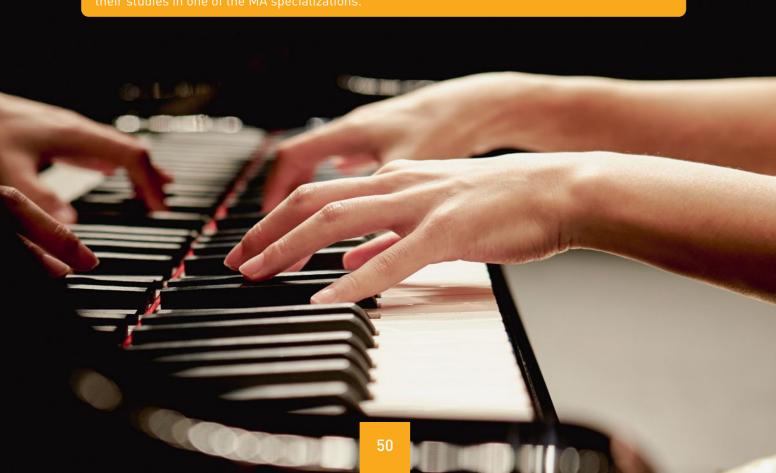
Music Theory, Solfeggio

Other subjects

History of Music, Folk Music, Philosophy, Art History, Acoustics, Repertoire Studies, Choral Conducting, Transposing and Score Reading, Composition, Choir, Piano, Voice,

Thesis

Career prospects: Graduates are able to work at music institutions and at other occupations which require music education. Having achieved a high standard of knowledge, they can continue their studies in one of the MA specializations.



### Biology, BSc

The aim of the program is to provide students with basic knowledge in the most important biological fields. Students will attain skills in the fundamental methods of laboratory and applied biology and come to understand the most important processes of biochemistry, cytology and components of living organisms. The Biology BSc program covers a broad range of biological science including the most important concepts in modern biology; the biological levels of organization; the fundamental principles of structure and function and the development of ecosystems.

Lecture, seminar: 58%

Practice: 42%

Faculty: Science and Technology

Academic discipline: Natural Sciences

**Qualification:** Biologist (with Bachelor of Science Degree)

**Starting date:** September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in Biology, Mathematics (written and oral)

**Duration:** 6 semesters **ECTS credits:** 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- Quality Assurance, Basic Statistical Information, Introduction to Biological Chemistry, Fundamentals of Biology, Introduction to Chemistry, Basic Environmental Science, Plant Organology and Anatomy, Analytics, Introduction to Molecular Biology, Biotechnology, Introduction to Ecology, Plant Taxonomy, Animal Taxonomy, Fundamental Biochemistry, General Microbiology, Basic Ecology, Mycology, Hydrobiology
- Analytics, Plant Taxonomy, Animal Taxonomy, Fundamental Biochemistry, Cell biology, Plant Physiology, General Microbiology, Biotechnology, Basic Ecology, Biogeography, Environmental protection, Ethology, Mycology, Hydrobiology, Bioinformatics, Animal Physiology, Genetics, Molecular biology, Biotechnology, Plant physiology, Microbiology
- 3. Human Biology, Genetics, Evolutionary Biology, Population Genetics, Environmental protection, Animal physiology, Microbiology, Thesis

**Internship, practice:** Students should complete a 6-week practice at a company or research institute.

**Career prospects:** Graduates may go on to a variety of subject-specific careers in research laboratories, educational institutions, hospitals, clinics, environmental agencies, and pharmaceutical food, agricultural and chemical companies.

**Graduate study opportunities:** MSc programs: molecular biology, biology, bioengineering, environmental science.

**Science Programs** 

### Biotechnology, BSc

Biotechnology is a dynamically developing discipline whose main goal is to find biologically based solutions to various industrial, agricultural, and biomedical challenges. The Biotechnology BSc course at the University of Debrecen is based on the following pillars: (i) completion of a broad-spectrum natural science and IT module, (ii) acquisition of basic skills in molecular biology, and (iii) transfer of basic knowledge of natural science, IT and molecular biology in the rich repertoire of biotechnology subjects. It is important that we provide students with a large number of laboratory practices, with the help of which students can become familiar with the main branches of modern biotechnology.

Lecture, seminar: 50% Practice: 50%

Faculty: Science and Technology

Academic discipline: Natural Sciences

Qualification: Biotechnologist (with Bachelor of Science Degree)

**Starting date:** September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in Biology and Chemistry (written and oral)

**Duration:** 6 semesters **ECTS credits:** 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. General and Biotech Economic and Management Skills, Communication, Bioetics, History and Structure of the European Union, Physics, General Chemistry, Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Mathematics, Design and Analysis of Experiments, Informatics, Cell Biology, General and Applied Microbiology, Genetics, Scientific Method and Analysis, Institutional Visit
- 2. Analytical Chemistry, Biophysics, Bioinformatics, Cell Physiology, Biochemistry, Microbial Metabolism, Immunology, Physiology of Experimental Animals, Molecular and Microbial Ecology, Methods in Molecular Biology and Gene Technology, Industrial and Environmental Biotechnology, Quality Assurance, Risk Assessment and Safety in Biotechnology
- Omics and Systems Biology, Physiology of Model Plants, Bioanalytics, Separation Techniques, Synthetic Biology, Pharmaceutical Biotechnology, Medical Biotechnology and Cell Culture, Microbial Pharmaceuticals, Agricultural and Food Biotechnology, Thesis

**Internship, practice:** Students should complete a 6-week practice at a company or research institute.

**Career prospects:** Graduates may go on to a variety of subject-specific careers at biotechnology-oriented pharmaceutical, food, agricultural and chemical companies as well as in laboratories of research institutes, educational institutions, hospitals, clinics, environmental agencies, etc.

**Graduate study opportunities:** Biotechnology, Molecular Biology, Environmental Sciences, Biology, Chemistry MSc programs

### **Chemistry, BSc**

The aim of this study program is the training of chemists possessing theoretical and practical knowledge in chemistry as well as satisfactory basic knowledge in related fields of science (e. g. mathematics, physics, informatics, biology) and at least one foreign language. Degree holders will be able to apply their knowledge in recognizing and solving practical problems in industrial chemical production, in analytical, agricultural, and quality assurance laboratories, as well as in various fields of administration and environmental protection.

Lecture, seminar: 61%

Practice: 39%

Faculty: Science and Technology

Academic discipline: Natural Sciences

**Qualification:** Chemist (with Bachelor of Science Degree)

**Starting date:** September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in chemistry,

mathematics (written and oral)

Duration: 6 semesters ECTS credits: 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Mathematics, Physics for Engineers, History and Structure of the EU, Environmental Science, Basic Chemical Informatics, General Chemistry, Topics in Modern Chemistry, Inorganic Chemistry, Organic Chemistry, Introductory Physical Chemistry Laboratory, Nuclear Chemistry
- Economics and Management, Inorganic Chemistry, Physical Chemistry, Organic Chemistry,
  Analytical Chemistry, Separation Techniques, Chemical Technology, Spectroscopy, Colloid Chemistry, Industrial Placement
- Quality Management, Organic Chemistry, Biochemistry, Chemical Technology, Environmental Chemistry and Technology, Thesis, Visits at Chemical Companies, Thesis

**Career prospects:** Graduates with a bachelor's degree in chemistry will find themselves qualified for entry-level positions as clinical laboratory technologists, chemists, or materials scientists.

Graduate study opportunities: MSc programs in chemistry, chemical engineering, molecular biology.

**Science Programs** 

#### **Science Programs**

### Earth Sciences, BSc

Earth scientists research the specific and complex earth system, studying its composition, structure, history, material and energy flow and transformation processes, raw material and energy resources to be utilized, and values to be protected together with features and processes that may prove to be hazardous for mankind. Earth scientists aim to understand both the long-term and short-term results of global and regional natural and anthropogenic processes. The numerous applied fields of earth sciences (e.g. raw material exploration, water supply protection, volcanology, seismology, weather forecasting, alternative and renewable energy resources) fundamentally influence the quality of our everyday life, as well as technology in our civilization and our relationship with the natural environment.

Lecture, seminar: 65% Practice: 35%

Faculty: Faculty of Science and Technology

Academic discipline: Natural Sciences

**Qualification:** Earth Scientist **Starting date:** September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: High school certificate; entrance exam in Mathematics and Geography (written and oral).

**Duration:** 6 semesters **ECTS credits:** 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Fundamentals of Mathematics, Fundamentals of Physics, Basics of the Environment, Mineralogy and Geology, Basics of Biology, Basics of Computer Science, Introduction to Chemistry, European Union Studies, General and Historical Geology, Earth Sciences fieldwork, Physical Geography, Basics of Environmental Protection, Soil Geography, Introduction to Ecology
- 2. Structural Geology, Physical Geography, Cartography, Biogeography, Atmospheric Resources Hydrology and Hydrogeology, Geology and Physical Geography, Climate
- **3.** Geothermics, Surface Analyses, Thesis

**Internship, practice:** Students should complete a 2-6-week practice at an external company, institution, university or research laboratory.

**Career prospects:** With a Bachelor of Science (BSc) in earth sciences, students can find a position in a number of sectors and industries including environmental consulting firms, oil companies, or research institutes.

### Geography, BSc

The geography BSc program trains professional geographers who have deep insight into spatial processes. Relying on their strong geoinformatical knowledge base, graduates of the program are able to understand natural, environmental, technical and social phenomena and to develop applied science-based solutions.

Lecture, seminar: 61%

Practice: 39%

Faculty: Faculty of Science and Technology

Academic discipline: Natural Sciences

**Qualification:** Geographer **Starting date:** September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in Geography and

Mathematics (written and oral) **Duration:** 6 semesters

ECTS credits: 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Basic of the Environment, European Union Studies, Basics of Geology, Basics of Geology practical, Cartography, Orientation and Navigation, Population and Settlement Geography, Meteorology and Climatology, Basics of Computer Science, Introduction to Sociology, General and Historical Geology, Geoinformatics, Physical Geography, Soil Geography, Basics of Environmental Protection, Regional and Urban Development, Basics of Tourism, Field trip
- Structural Geology, Physical Geography, Biogeography, Fundamentals of the Economic Geography, EU Policies, Geographical Research Methods, Geology and Physical Geography, Social Geography, Physical Geography of Europe, Human Geography of Europe
- 3. Economic Basis of Geography, Fundamentals of Political Geography, Physical Geography of the World, Social Geography of the World, Field Trip, The History of the Geographical Mind, Thesis

**Internship, practice:** Students should complete a 6-week practice at an external company or institution.

**Career prospects:** Graduates can choose from a wide range of career opportunities including working as an environment assistant for the Environment Agency, government researcher, resource planner, or in business development.

**Science Programs** 

### Mathematics, BSc

The program provides students with knowledge of basic elements of the most important mathematical fields. Students of mathematics will attain skills in fundamental methods of applied mathematics which are useful for technical, economical, statistical and computer modeling. The Mathematics BSc program provides a standard of knowledge and competence to students that will make them eligible for second cycle course units or degree programs.

Lecture, seminar: 62%

Practice: 38%

Faculty: Science and Technology

Academic discipline: Natural Sciences

**Qualification:** Mathematician **Starting date:** September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)
Academic requirements: high school certificate; entrance examination in mathematics (written and oral)

**Duration:** 6 semesters **ECTS credits:** 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Basics of Mathematics, Introduction to Algebra and Numbers, Linear Algebra, Combinatorics and Graph Theory, Sets and Functions, Geometry, Algebra, Introduction to Analysis
- 2. Algebra, Number Theory, Differential and Integral Calculus, Computer Geometry, Linear Programming, Differential and Integral Calculus in Several Variables, Measure and Integral Theory, Applied Number Theory, Algorithms in Algebra and Number Theory, Numerical Analysis
- Ordinary Differential Equations, Differential Geometry, Probability Theory, Introduction to Cryptography, Economic Mathematics, Nonlinear Optimization, Vector Analysis, Statistics, Analysis with Computer, Computer Statistics, Thesis

**Internship, practice:** A mathematician can be employed in various industries. Undergraduate and master's degrees will suffice for most government and teaching jobs in this fast-growing field, and doctorates allow for research positions at private businesses.

**Graduate study opportunities:** MSc in mathematics, MSc in applied mathematics, MSc in software engineering.

### Physics, BSc

Students of the Physics BSc program obtain a thorough training in subject areas pertaining to Physics – from mechanics to particle physics. They learn about the physical laws governing our environment and get acquainted with the basic constituents and structure of matter. During the BSc program they acquire practical knowledge in physics, computing, and technology. Apart from learning about physics, students will learn how to think and plan logically and solve problems efficiently.

Lecture, seminar: 64%

Practice: 36%

Faculty: Science and Technology

Academic discipline: Natural Sciences

Quailification: Physicist (with Bachelor of Science degree)

Starting date: September

Language requirements: English language proficiency (TOEFL 513 /IELTS 5.5/oral examination)

Academic requirements: high school certificate; entrance examination in mathematics and

physics (written and oral) **Duration:** 6 semesters **ECTS credits:** 180

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Mathematics in Physics, Basics of Measurement and Evaluation, Differential and Integral Calculus, Linear Algebra, Classical Mechanics, Basic Computer Skills in Physics, Thermodynamics, Thermodynamics practicals, Optics, Mechanics, Laboratory practical: Mechanics, Optics, Thermodynamics, Differential and Integral Calculus of Multivariable Functions
- Condensed Matter, Electromagnetism, Ordinary Differential Equations, Probability Theory and Statistics, Laboratory practical: Mechanics, Optics, Thermodynamics, Introduction to Electronics, Atomic and Quantum Physics, Mechanics, Electrodynamics, Electrodynamics practicals, Condensed Matter Laboratory Practices
- 3. Introduction to Electronics, Condensed Matter, Quantum Mechanics, Nuclear Physics, Basic Environmental Sciences, Statistical Physics, Statistical Physics practicals, Fundamental Interactions, Atom and Nuclear Physics laboratory work, Thesis

**Internship, practice:** Students should complete a 6-week practice at an external company or institution.

**Career prospects:** The solid basic education in natural sciences that our Physics BSc program provides is a foundation for further studies not only in physics, chemistry, and biology, but also in engineering, informatics, and economics.

### Medicine, MD

The objectives of the six-year Medicine program are determined by wellestablished standards of medical education and designed to reflect the unique strengths and goals of University of Debrecen Faculty of Medicine. We aim to train medical doctors who, based on the acquisition of knowledge, professional skills, medical skills and attitude during their training, will be able to take part in activities pertaining to the functioning of the healthcare system by performing particular jobs as part of their professional commitment. Our graduates will demonstrate dedication to compassionate care, advocacy, and service. They will have both the knowledge and skills to enroll in a first and/or a second postgraduate specialist medical training program and, following a successful exam in a specialty field, will continue their career of the chosen specialty by working as specialists; in possession of the required theoretical knowledge and practical skills, they will become successful candidates for training at PhD schools.

Medical graduates of the University of Debrecen are NOT required to take the PLAB exam for practicing in the UK.

Lecture, seminar: 38%

Practice: 62%

Faculty: Medicine

**Qualification:** "Doctor of Medicine". The certificate is a document verifying the awarding of a medical degree, abbreviated as dr. med. (M.D.)

Starting date: September

**Language requirements:** English language proficiency (assessed at the compulsory entrance examination)

**Academic requirements:** high school certificate; entrance examination in biology and physics/ chemistry (written and oral) or successful completion of the Basic Medicine Course at the University of Debrecen

**Duration:** 12 semesters

ECTS credits: 360

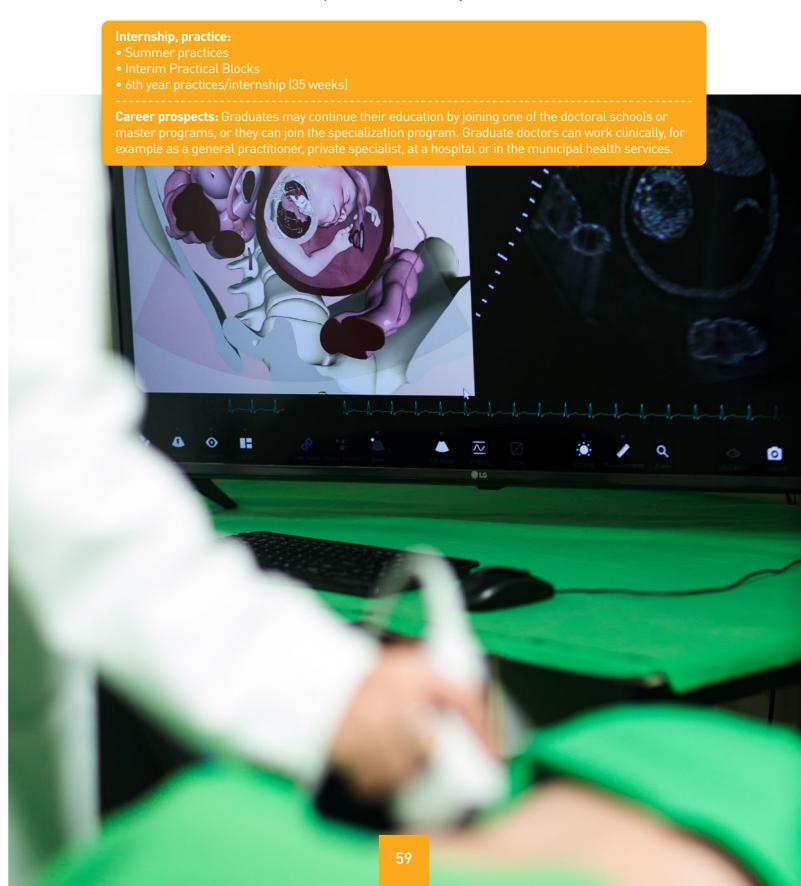
# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Basics of Behavioral Sciences, Biophysics, Biostatistics, Communication Skills, First Aid and Resuscitation, Hungarian Language, Medical Chemistry, Anatomy, Histology, Embryology, Cell Biology, Medical Genetics, Molecular Biology
- 2. Anatomy, Histology, Embryology, Biochemistry, Hungarian Language, Medical Physiology, Neurobiology
- 3. Basic Oncology, Basic Surgical Techniques, Clinical Biochemistry, Hungarian Language, Immunology, Medical Anthropology, Medical Microbiology, Pathology, Propedeutics of Internal Medicine, Clinical Physiology, Internal Medicine, Medical Microbiology, Medical Psychology, Medical Sociology, Pathology
- 4. Internal Medicine, Obstetrics and Gynaecology, Orthopedic Surgery, Pharmacology, Preventive Medicine and Public Health, Pulmonology, Radiology and Nuclear Medicine, Surgery, Traumatology, Behavioral Medicine, Bioethics, Clinical Genetics, Stomatology, Urology

- 5. Behavioral Science, Dermatology, Emergency Medicine, Family Medicine, Forensic Medicine, Infectology, Internal Medicine, Neurology, Paediatrics, Psychiatry, Anesthesiology and Intensive Care, Clinical Oncology, Forensic Medicine, Ophthalmology, Otolaryngology, Thesis
- 6. Internal Medicine, Neurology, Obstetrics and Gynaecology, Paediatrics, Psychiatry, Surgery

The language of instruction is English. However, students are required to learn some basic Hungarian in order to be able to communicate with patients from the third year on.

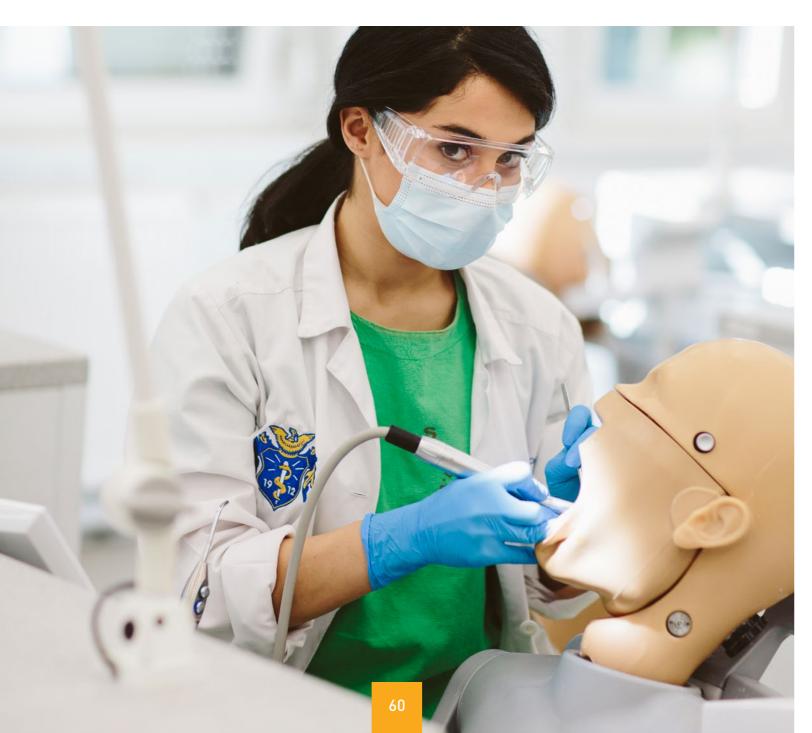


### **Dentistry, DMD**

The five year program has been carefully structured and designed to ensure the high standard of knowledge, skills and responsibility of dental surgeons. To treat patients successfully and safely students must have sufficient motor skills to work with hand and electric instruments. Students must be able to perform palpation, percussion, auscultation and other diagnostic procedures. Students must have reliable gross and fine motor skills and sense of touch and vision. Students are required to be capable of operating all dental equipment, including both high- and low-speed handpieces. Students must be able to take an accurate dental and medical history from the patient. Students must be able to analyze and interpret X-ray and radiographic images necessary for proper diagnosis. Students must be able to perform a visual and tactile dental examination including the observation of shape, color and abnormalities, both extra- and intraorally. Students must be able to discuss problems and treatment with the patients, gather and exchange information, give directions during treatment and give advice to the patients. Students must have positive personal qualities such as respect, understanding and concern for others and also must exhibit professional doctor behavior.

Lecture, seminar: 42%

Practice: 58%



Faculty: Faculty of Dentistry

**Qualification:** "Dentist". The certificate is a document verifying the awarding of a dental degree, abbreviated as dr. med. dent. (D.M.D.)

Starting date: September

**Language requirements:** English language proficiency (assessed at the compulsory entrance

**Academic requirements:** high school certificate; entrance examination in biology and physics/ chemistry (written and oral) or successful completion of the Basic Medicine Course at the University of Debrecen

**Duration:** 10 semesters

ECTS credits: 300

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

#### YEAR MAIN SUBJECTS

- 1. Biophysics, Biostatistics, Hungarian Language, Medical Chemistry, Medical Psychology, Odontology, Cell Biology, First Aid and Resuscitation, Medical Genetics, Molecular Biology, Oral Anatomy, Histology, Embryology, Preventive Dentistry
- 2. Biochemistry, Dental Physiology, Hungarian Language, Introduction to Prosthodontics, Dental Materials, Oral Anatomy, Histology, Embryology, Biochemistry, Introduction to Fixed Prosthodontics, Neurobiology
- Clinical Biochemistry, Dental Microbiology, Dosimetry, Radiation Health Effects, General Pathology, Hungarian Language, Immunology, Propedeutics and Technology of Total and Partial Removable Dentures, Odontotechnology, Oral Biology, Periodontology Propedeutics, Restorative Dentistry, Basic Surgical Techniques, Bioethics, Clinical Biochemistry, Introduction to Dental Radiology, Propedeutics and Technology of Fixed Prosthodontics, Medical Psychology, Oral Surgery Propedeutics, Organ and Oral Pathology
- Complex Dentistry, Dental Pharmacology, Dermatology, Internal Medicine, Oral Surgery, Orthodontics, Otolaryngology, Periodontology, Preventive Dentistry, Preventive Medicine and Public Health, Prosthetic Dentistry, Restorative Dentistry, Surgery, Digital Dentistry, Emergency Medicine, Internal Medicine, Paediatric Dentistry, Propedeutics
- Complex Dentistry, Forensic Medicine, Neurology, Oral Medicine, Oral Surgery, Paediatric Dentistry, Paediatrics, Prosthetic Dentistry, Psychiatry, Restorative Dentistry, Periodontology, Thesis

The language of instruction is English. However, students are required to learn some basic Hungarian in order to be able to communicate with patients.

#### Internship, practice:

- Summer practices
- In the course of the fourth and fifth year students complete their clinical practice, while they trea patients of various departments

Career prospects: The degree is accepted in the entire EU and several other countries around the world. Access to further study: Ph. D. studies, specialization. Specialist training is available in the disciplines of: restorative and prosthetic dentistry, orthodontics, pediatric dentistry, periodontics, dento alveolar oral surgery, and maxillofacial oral surgery.

One-tier medical Programs

One-tier medical Programs

### Pharmacy, PharmD

The program is designed to provide graduates with the core skills and knowledge required for improving patient health through innovative and collaborative pharmacy practice, medication therapy management, and research. The degree covers the chemical, physical, medical, pharmaceutical, pharmacological and therapeutic properties of medical substances, prescription drugs and over-the-counter medications, as well as the application of these products in pharmacy practice, medication therapies and health care.

Lecture, seminar: 42%

Practice: 58%

Faculty: Pharmacy

**Qualification:** "Pharm.D." The certificate is a document verifying the awarding of the Doctor of Pharmacy degree, abbreviated as dr. pharm. (Pharm. D.)

Starting date: September

**Language requirements:** English language proficiency (assessed at the compulsory entrance examination)

**Academic requirements:** high school certificate; entrance examination in biology and physics/ chemistry (written and oral) or successful completion of the Basic Medicine Course at the University of Debrecen

**Duration:** 10 semesters

# MAIN SUBJECTS TYPICALLY INCLUDE (this list is indicative and may change):

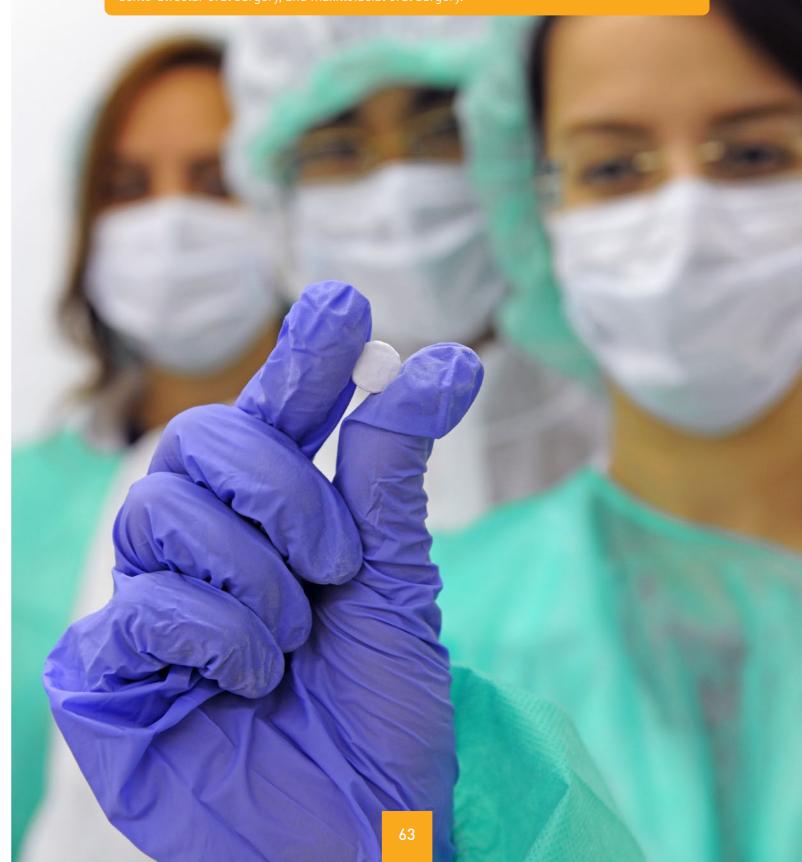
#### YEAR MAIN SUBJECTS

- 1. General Chemistry Theory, General Chemistry Practice, Hungarian Language, Latin Language, Mathematics, Pharmaceutical Biology, Pharmacy Propedeutics, Physics, Biophysics, Inorganic and Qualitative Analytical Chemistry, Organic Chemistry, Pharmaceutical Anatomy, Pharmaceutical Biology, Physical Chemistry
- 2. Botany, Colloid and Surface Chemistry, Human Physiology, Hungarian Language, Organic Chemistry, Pharmaceutical Biochemistry, Physical Chemistry, Quantitative Analytical Chemistry, Pharmaceutical Technology, Pharmacognosy, Quantitative Analytical Chemistry
- 3. Clinical Biochemistry, Medical Hungarian, Pharmaceutical Chemistry, Pharmaceutical Neurobiology, Pharmaceutical Psychology, Pharmaceutical Technology, Pharmacognosy, Immunology
- 4. Medical Microbiology, Pharmaceutical and Bioanalytical Chemistry, Pharmaceutical Bioanalytics and Biotechnology, Pharmaceutical Technology, Pharmacology, Preventive Medicine and Public Health Bioethics, Clinical Basics, Industrial Pharmaceutical Technology, Pharmaceutical Management and Organization
- 5. Biopharmacy, Clinical Pharmacology, Clinical Pharmacy, Drug Interaction Theory, Pharmaceutical Care, Pharmaceutical Communication Skills, Pharmacovigilance, Quality Control, Radiopharmacy Thesis

#### Internship, practice:

- Summer practice
- In the course of the fourth and fifth year students complete their clinical practice, while they reat patients of various departments

Career prospects: The degree is accepted in the entire EU and several other countries around the world. Access to further study: Ph. D. studies, specialization. Specialist training is available in the disciplines of: restorative and prosthetic dentistry, orthodontics, pediatric dentistry, periodontics, dento-alveolar oral surgery, and maxillofacial oral surgery.



# Application and Admission

THE UNIVERSITY OF DEBRECEN HAS AN ONLINE APPLICATION SYSTEM, WHERE YOU CAN SUBMIT YOUR APPLICATION.

The following documents need to be uploaded during the application procedure:

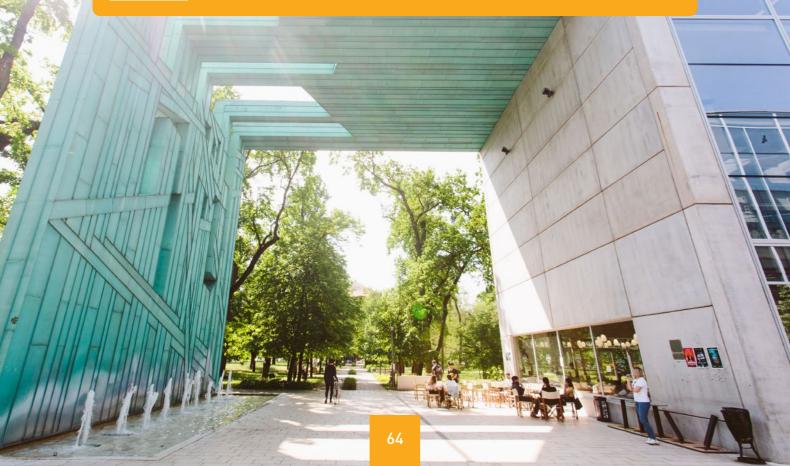
- Valid, completely filled out application form
- Certificate and transcript of former education
- Passport or National ID
- Short Resume/CV
- Medical Certificate
- Bank receipt certifying the transfer of the application fee of 150 USD (non-refundable) to the university bank account.



Please visit our website for more information about the application and admission procedure, special requirements and additional documents for transfer students: edu.unideb.hu/p/application-and-admission



You may also contact our local representatives, who can help you in the





# Fees

Application fee: 150 USDEntrance exam fee: 350 USD



#### **Tuition fees**

For current tuition fees, please visit the program's website or scan the QR code. https://www.edu.unideb.hu/p/tuition-fee-application-entrance-fee
The costs of health insurance, medical check-up and student card are included in the tuition fee

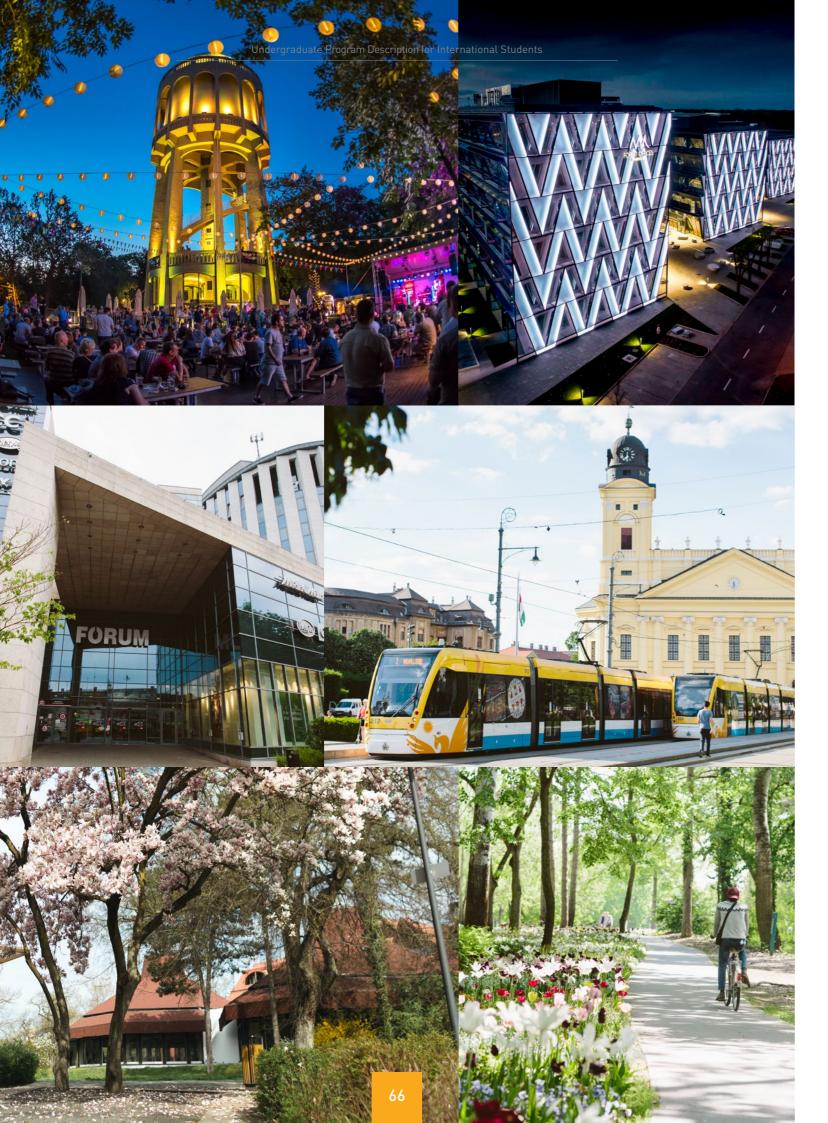
# Cost of living

#### A LIST OF LIVING EXPENSES IN DEBRECEN (APPROXIMATE VALUES):

- Books & supplies from 100 USD
- Dormitory from 440 USD/month
- Private accommodation with utilities from 340 USD/month
- Food from 320 USD/month



For additional living costs you may check our website: https://www.edu.unideb.hu/p/cost-of-living



# Dates and deadlines to remember

#### **APPLICATION DEADLINES**

#### FOR SEPTEMBER ADMISSION

| PhD programs       | 15 May  |
|--------------------|---------|
|                    |         |
| All other programs | 15 June |

#### FOR JANUARY/FEBRUARY ADMISSION

| Non-medical programs and PhD programs | 15 Nov | /em | nbe | ٢ |
|---------------------------------------|--------|-----|-----|---|
|                                       |        |     |     | - |
| Basic Medicine Course II              | 1 Nov  | /em | nbe | ŗ |

# Hungary and the city of Debrecen

#### **COUNTRY INFO:**

Hungary is a European Union member country located in Central Europe. The country shares borders with Austria, Slovakia, Ukraine, Romania, Serbia, Croatia and Slovenia. Its population is ca. 10 million.

#### CITY INFO:

With 204,000 inhabitants, Debrecen is the second-largest city in Hungary. Debrecen has a small-town feel, with all a big city has to offer. A variety of cozy restaurants with local and international cuisine, cafés, wine bars, and ruin pubs add to the "taste" of life in Debrecen.

#### **CITY LIFE:**

Debrecen offers year-round high-quality programs including festivals, concerts, and all sorts of sports events.

#### MAIN ATTRACTIONS AND PLACES TO VISIT:

- Great Forest of Debrecen and Lake Békás
- Aquaticum Spa and Wellness Centre w/ Mediterranean Aqua Park
- Kölcsey Convention Center the largest conference center of Eastern Hungary (capacity: 1,150 people)
- MODEM (Modern and Contemporary Arts Centre)
- Debrecen Zoo
- Debrecen Ice Rink
- Debrecen Swimming Pool complex
- Déri Museum



### 

94. Nagyerdei krt., Debrecen H-4032, Hungary

Medical Programs: +36 52 258 051, 052, 067 Non-Medical Programs: +36 52 518 659

info@edu.unideb.hu