Óbuda University

欧布达大学

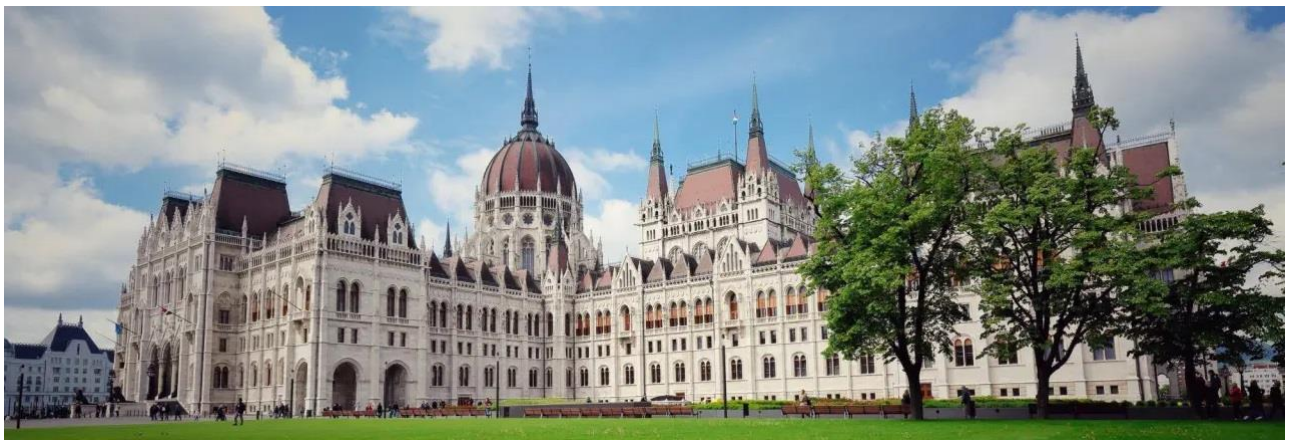


International Centre Exchange Program

Proposal to Shandong University of Technology

March 2023

Óbuda University



欧布达大学

欧布达大学（Óbuda University），坐落于匈牙利首都布达佩斯，是匈牙利最大的应用技术型大学，是欧洲大学协会（EAU）的现任成员。欧布达大学前身于 1410 年建立，1898 年开始以匈牙利皇家公立高等工业学校的名义运作，距今已有 600 年历史，于 2010 年更名为欧布达大学。正如它的前身布达佩斯技术学院一样，是工程学、IT 技术、经济学等领域的领军学校。

- 欧布达大学位于匈牙利全国综合大学第 6 名
- 理工类大学第 1 名



项目介绍

为了促进双方大学深入合作，支持山东理工大学教育国际化的需求，在两校合作备忘录的基础上，从 2023 年 9 月份开始，在全英文授课的本科和硕士课程接受中国合作伙伴的学生来欧布达大学学习一个学期。

语言要求： IELTS 5.5 同等水平

项目时间： 一学期

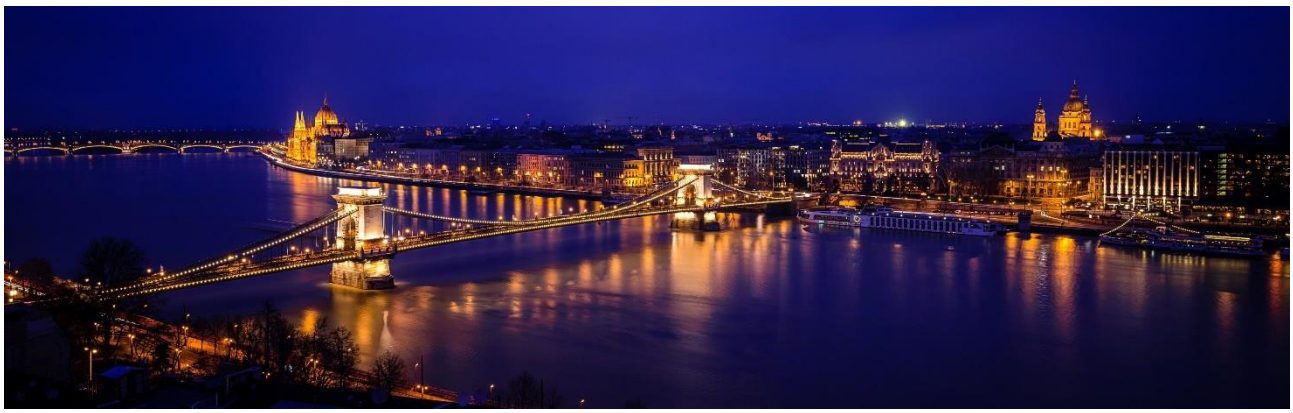
学习内容： 3-4 门专业课程

学习时间： 当年九月中旬至第二年一月

学习费用： 3800-4200 欧元/学期

食宿费用： 每个月在 500-600 欧元左右

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本科项目 Undergraduate Programs

The programs focus on the scientific fundamentals, such as mathematics, physics, computing, mechanics, engineering, drawing, and chemistry, necessary requirements for chosen fields of engineering. The engineering faculties provide a thorough knowledge of practical engineering and depending on the faculty, offers opportunities for specialization. Each faculty divides their programs into branches with compulsory electives and optional elective subjects.

Depending on the BSc faculty, specializations may include; geo-informatics, corporate strategy, info-communication technologies, instrumentation and automation, IOT, embedded systems and robotics, big data, business intelligence, cloud service technologies, IT security, software design and development, environmental public administration, green energy, textiles and interiors and packaging.

Undergraduate programs - ÓU (uni-obuda.hu)

商务与营销 Commerce and Marketing

Brief Course Description/Objective：

The aim of the training is to train economic professionals with commercial and marketing expertise and skills, economic and business knowledge, who are suitable for demand-driven procurement and sales of various products and services, and for organizing and managing the commercial activities of small and medium-sized enterprises. They are prepared to continue their studies in a master's degree.

计算机科学工程 Computer Science Engineering

Brief Course Description/Objective：

The aim of the course is to qualify computer science engineers who are competent to install, develop and maintain technical IT and information infrastructure systems and services, and to participate in the design and development tasks of the data and program systems of those, as well as possess the necessary high-level knowledge to pursue the program at a master level. Our training provides a wide range of knowledge and expertise in one of the most dynamic sectors of the domestic and international market. You will become a professional with practical software development and application skills that meet the needs of the labour market, while at the same time providing you with the theoretical foundation to continue your studies at MSc level.

电气工程 Electrical Engineering

Brief Course Description/Objective：

Training Electrical engineers, who are in possession of general knowledge, technical intelligence, basics of natural sciences, economics and humanities, technical knowledge for the needs of modern industry on a high level. As the graduates are specialized within the faculty by obtaining practical knowledge and skills they are able to do creative engineering work. On the basis of their studies in electricity and their professional calling electrical engineers are able to design devices and systems, to programming, to monitor their calibration, quality and testing, the take part in the installation and operation procedures and are able to do service- and product management in Info communication Technologies and Instrumentation and Automation.

工程管理 Engineering Management

Brief Course Description/Objective：

The goal is to train Technical Managers who are equipped with appropriate knowledge in natural and technical science, economic and organizational skills which are needed for the integrated solutions in production and services regarding the material, financial and IT fields as well as human resources.

环境工程 Environmental Engineering

Brief Course Description/Objective：

The aim is to train environmental engineers with up-to-date knowledge and skills of applied natural

sciences, ecology, technology, economics, and management. They can identify environmental hazards in various areas, and they can use their professional experience to manage prevention and remediation actions economically and efficiently. In possession of their professional knowledge and skills, they are capable to take part in the prevention, reduction, and elimination of environmental pollution and damage; in endeavors towards the rational use of natural resources; and in the operation of low-waste and energy-efficient technologies. At the end of the training program, our students will be able to develop technological solutions for waste recycling, hazardous waste disposal, while they will get general knowledge in the field of nature and landscape protection, environmental policy, as well as are able to communicate and work with domestic and foreign professionals with their engineering qualifications and knowledge of a world language.

工业设计工程 Industrial Design Engineering

Brief Course Description/Objective：

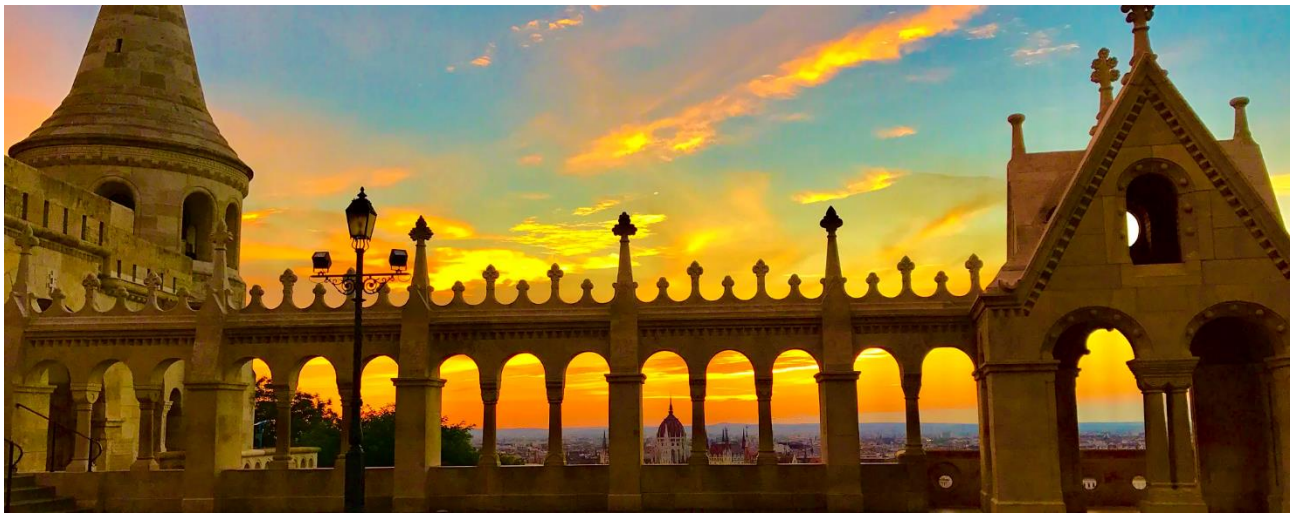
The goal of the course is to train industrial product design engineers who are capable of designing, producing and marketing industrial products and they are capable of meeting the challenges of market economy with flexibility and efficiency, with their technical, aesthetic, human as well as economic knowledge and skills. They have the ability of independent, creative work in all the phases of product development and capable of managing the innovation process of product development as well as the material, organizational and human resources necessary for product development and also the different cycles of product life cycle. In addition they have enough theoretical knowledge to be able to continue their studies in the second cycle of the training or to work with a team within different company frames to develop the conceptual, preliminary and detailed design.

机械电子工程 Mechatronical Engineering

Brief Course Description/Objective：

The aim of the course is the training of mechatronics engineers who, in possession of the acquired complex skills in natural sciences, electronic, mechanical and computer engineering as well as economics, will be capable of supervising and managing processes of manufacturing, assembly and quality regulation based on the use of mechatronic devices and equipment, constructing general mechatronics devices and operating as well as maintaining mechatronics systems, and who also possess well-founded theoretical knowledge to continue their studies in the second cycle of training (MSc).

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硕士项目 Graduate Programs

Students generally follow an assigned curriculum, but can freely choose elective courses depending on their personal interests. Courses are run in small groups and students are expected to work individually under the direction of a personal tutor. Students have free access to laboratories, research facilities, and computers. An MSc degree program is generally 4 semesters, 2 years in duration, consisting of 26 hours of instruction per week and 5 examinations per semester. After a successful completion of a thesis and final exams, the MSc degree is granted enabling its holder to actively conduct valid research and solve high-level engineering tasks.
Graduate programs - ÓU (uni-obuda.hu)

应用数学 Applied Mathematics

Brief Course Description/Objective：

In today's typically inter- and multidisciplinary working environment, there is a strong need for professionals with a strong theoretical background, capable of analysing and effectively solving mathematical problems in engineering applications. Our Master's degree in Applied Mathematics with a specialisation in Engineering Mathematics is unique in the country and represents a niche in this field. Applied mathematics is a branch of mathematics that focuses on mathematical methods applied in engineering and natural sciences, industry and economics, modelling, analysing and studying problems, developing and applying methods to solve them, and providing algorithmic tools for their study. The aim of the course is to train mathematicians who are able to effectively model and solve problems that arise in real-life applications, within engineering, natural sciences, industry and management. The curriculum follows the recommendations of the SIAM, putting emphasis to

application-oriented mathematics, practical applications, modelling and communication skills, team work, computer programming and high-performance computing.

建筑设计 Architect

Brief Course Description/Objective：

Our MSc is especially for bachelor graduates who want to advance their personal and professional development in the field of architectural design. The programme leads to an Óbuda University degree, accredited by the Hungarian Accreditation Committee and linked to the European Credit Transfer and Accumulation System (ECTS). The stringent quality criteria applied by the Accreditation Committee are based on European standards for higher education.

商业发展 Business Development

Brief Course Description/Objective：

The goal is to provide the students with an up-to-date, competitive and high-quality degree which is competitive even in the international labour market. Holders of such a degree are able to analyse the activities of an economic organisation and can tackle complex development programs; as a result of their mastery of innovation and economics, theoretical and methodical knowledge, consciously developed leadership skills and abilities they are capable of performing middle- and top-level managerial tasks.

商务信息学 Business Informatics

Brief Course Description/Objective：

The aim of the course is to train business informatics specialists who can understand complex business processes, identify problems and develop solutions. They are able to identify the needs of IT systems supporting value-creating processes, to develop and manage the applications, and to carry out and coordinate research and development tasks. They are prepared to pursue studies at a PhD course.

计算机工程 Computer Science Engineering

Brief Course Description/Objective：

The aim of the course is to qualify engineers who, having acquired the necessary high-level scientific and specific IT-related technological skills, to be competent to design new IT systems and tools, to

develop and integrate IT systems, to conduct and coordinate IT-purpose research and development tasks, as well as to be capable of pursuing their knowledge in the frame of PhD studies.

地理信息学 Geoinformatics

Brief Course Description/Objective：

The goal of the master's program in geoinformatics is to train geoinformatics researchers and analysts who, based on their basic and practical knowledge of natural sciences, mathematics, IT and English, are able to creatively cultivate the science of geoinformatics. Based on their preparation, experts in geoinformatics are able to interpret spatial phenomena, processes and information related to geographic location, as well as to perform problem solving, planning, development, operation, management and consulting tasks in the operation of geoinformatics systems, decision support systems and expert systems.

机械电子工程 Mechatronical Engineering MSc

Brief Course Description/Objective：

The aim of the course is the training of mechatronic engineers who, in possession of the acquired complex skills in natural sciences, electronic, mechanical and computer engineering as well as economics, will be capable to design, construct, integrate and develop mechatronic devices and equipment, and as well as able to solve research and development tasks of mechatronic systems, and who also possess well-founded theoretical knowledge to continue their studies in the next cycle of training (PhD).