UNIVERSITY OF DUNAÚJVÁROS

STUDY PROGRAM GUIDE

Published by: University of Dunaújváros
Responsible publisher: Dr. István András, Rector
Translated and edited by: Katalin Gyöngyössy
Kitti Szabó
Edina Szilárdi
József Vágó
Cover photo: © University of Dunaújváros
Endpaper photo: © Zsolt Németh

About Dunaújváros

Dunaújváros, one of the youngest and the most dynamically developing towns in Hungary, is located on the right bank of the river Danube, in the heart of the country, just 70 kms south from the capital, Budapest. Dunaújváros is essentially an industrial town, which was founded in relation to the Danube Iron Works.

The decision was made about the construction of the new metallurgical complex primarily due to the favourable location of the town.

Dunaújváros is a town of county rank, which together with the surrounding settlements has a population of nearly 100 thousand people. The town has got a vivid cultural and sport life. The work of the Bartók Chamber Theatre, the Frigyes Sándor Music School, the Dunaújváros Music Association, etc. is well-known and recognized all over the country. The sport life started at the same time when the foundation-stones of the town were laid. In 1951 the Dunapentele Vasas Sport Club was founded, which can be regarded as the legal predecessor of the Dunaferr Sport Club. The Dunaferr Sport Club is already one of the most successful clubs of the country from the beginning.

Dunaújváros is the sport town of the nation, several Olympic champions started their sport career here. The sportsmen of the town achieved outstanding results on the fields of athletics, handball, water polo, football, ice-hockey, martial arts and sports shooting.

The University of Dunaújváros

It is the one and only higher educational institution of the town, its predecessor was the Kerpely Antal Metallurgical Technical School, which was established based on the increasing demand for technicians in the Danube Iron Works. The institution was qualified as a college in 1969. and it was linked to the Miskolc Heavy Industrial Technical University as its Metallurgical and Metal Processing University Faculty (NME KFFK). Since 1990 in accordance with the changes in Miskolc our institution was working under the name of the Dunaújváros University Faculty of the Miskolc University, then in the year 2000 it took up the name of the College of Dunaújváros, as an independent institution. Since 2006 the UOD offers its study programs both in Hungarian and English languages. The institution gained the rank of university of applied sciences as from 1 January 2016, and since that date the official name changed to University of Dunaújváros.

The University of Dunaújváros is located in the center of Dunaújváros city. The European level Campus provides a friendly environment for the students. The infrastructural development of the university is very impressive. A regional library, several large lecture halls, professional laboratories, two large conference rooms and a new ballroom is to be found in a new, multifunctional 4000 sqm building in the area of the Campus. Due to the recent infrastructural development several newly renovated student hostels are awaiting our students and guests and the environment of the university went through an embellishment, too. The students and staff members of the university and the inhabitants of the town can enjoy the public park with a fountain and a bio-pond in front of the main building.

In order to support the study of our students we developed an up-to-date computer network and made it available to our students. makes it possible to use the computers free of charge and to have free Internet access, too. There is possibility for wireless connection to the network on the whole area of the Campus.

In our international study programs, we aspire to provide our students with the theoretical knowledge that is going to enable them to extend their knowledge to an up-to-date condition and to its adequate and practical use. In order to accomplish that goal, we have got the qualified experts working in the industry on every professional area, that we teach, the laboratories and the industrial and economic relationship. It means that the students can acquire the knowledge required for the successful practice of their profession in a study environment equipped with the most modern tools. As a result of the complex educational approach and the intercultural study environment due to the international students of the campus, the graduated students are sought after both in the competitive sector and the public sector in Hungary and in foreign countries, as well.

In our student hostels of high standard today we can provide accommodation for all of the freshmen requiring accommodation. The places of accommodation are apartments with one or two rooms. Every apartment is equipped with an own bathroom, fridge and microwave oven, with access to internet and cable television. On every floor there is an excellently equipped kitchen. Our student hostel is a member of the International Youth Hostel Association as well.

Faculties / Teaching Institutes of the University of Dunaújváros

Institute of Engineering Sciences

3 Departments

- Department of Material Sciences
- Department of Mechanical Engineering
- Department of Natural Sciences and Environmental Protection

Degree Programs

- **Mechanical Engineering MSc** (in English and Hungarian languages)
  - Specialization in Lifetime Management
- **Mechanical Engineering BSc** (in English and Hungarian languages)
  - Specialization in Mechatronics
- **Material Science Engineering BSc** (in English and Hungarian languages)
  - Specialization in Metal Technologies

Postgraduate Courses

- Quality Management
- Welding Technologies
- Maintenance Engineering
- Environmental Engineering
- Rubber Technologies
- Non-Destructive Material Testing and Measurement Techniques

Research Fields

- Material Science Engineering
  - Development of new production technologies using the Gleeble 3800 Thermomechanic Simulator
  - Development of high-performance structural materials
- Modelling fluid mechanical problems
- Non-destructive material testing
- Development of a scanning acoustic microscope
- Decomposition of Nitrogen and Sulfur oxides using fast rising electric discharges
- Treatment of plastic and metallic surfaces using silent electric discharges and cold electric plasmas

Faculties / Teaching Institutes of the University of Dunaújváros

Institute of Information Technology

3 Departments

- Department of Software Development and Application
- Department of Mathematics and Computer Science
- Department of Computer Systems and Control Engineering

Degree Programs

- **Computer Science Engineering BSc** (available in English and Hungarian languages)
  - Specialization in Software Technology (in both languages)
  - Specialization in System and Network Engineering (in Hungarian)
  - Specialization in Business Informatics (in Hungarian)
  - Specialization in Media Informatics (in Hungarian)
  - Specialization in Embedded Systems (in Hungarian)
- **Business Information Technology BSc** (available only in Hungarian language)
  - Specialization in Business Informatics

Specialized Postgraduate Training

- **Security Engineering (available only in Hungarian language)**

Fields of Research

- IT Governance, IT Management
- Embedded Systems
- Generic ITC subjects
- Special ITC related subjects
- On-site education
- Solving programming tasks
- Participation in IT projects, IT project management
- Taking part in math (research) projects
- Robot technology: wheeled and walker robots
- IT Security

Faculties / Teaching Institutes of the University of Dunaújváros

Institute of Social Sciences

3 Departments

- Department of Communication and Media Science
- Department of Economics
- Department of Management and Business Science

Degree Programs

- **Business Administration and Management BA** (available in English and Hungarian languages)
  - Specialization in Business Communication (in both languages)
  - Specialization in Enterprise Management (in both languages)
  - Specialization in Finance and Taxation (only in Hungarian language)
- **Communication and Media Science BA** (in English and Hungarian languages)
  - Specialization in Business Communication (in both languages)
  - Specialization in Media Informatics (in both languages)
  - Specialization in Event Management (only in Hungarian language)
- **Engineering Management BSc** (in English and Hungarian languages)
  - Specialization in Logistics (in both languages)
  - Specialization in Quality Management (only in Hungarian language)

Higher Vocational Training Programs

- **Business Administration and Management** (only in Hungarian language)
  - Specialization in Small and Medium Enterprises
- **Communication and Media Science** (only in Hungarian language)
  - Specialization: Assistant Communicator
  - Specialization: Television Production Assistant

Fields of Research

- Society 5.0
- Gamification
- Organizational culture and communication
  Small and medium-sized enterprises (SMEs)
  Topics which can be integrated into the learning materials of our courses
- Role of macro-regional strategies in the global economic space
- Supply Chain – global supply networks
- Systematic approach of corporate social responsibility in the business and public sphere
- Internalization of external costs

Faculties / Teaching Institutes of the University of Dunaújváros

Institute of Teacher Training

Degree Programs

- **Vocational Technical Instruction BA** (available in Hungarian language)
- **Teacher of Engineering MA** – 4 semesters (in English and Hungarian language)
  - Specialization: Teacher of Mechanical-Mechatronics Engineering (in both languages)
  - Specialization: Teacher of Information Technology Engineering (in both languages)
- **Teacher of Engineering MA** – Undivided – 10 semesters (only in Hungarian language)
  - Specialization: Teacher of Mechanical-Mechatronics Engineering
  - Specialization: Teacher of Information Technology Engineering

Postgraduate Specialist Training Programs for Teachers (only in Hungarian language)

- Further Training Preparing for Special Examination of Internship Leader Mentor Teacher
- Further Training Preparing for Special Examination of Measurement-Evaluation
- Further Training Preparing for Special Examination of E-learning Expertise
- Further Training Preparing for Special Examination of the Examiner
- Further Training Preparing for Special Examination of Adult Trainer
- Further Training Preparing for Special Examination of Adult Teaching

Other Postgraduate Specialist Training Programs (only in Hungarian language)

- Adult Education Organizer Further Training
- Human Resource Organiser Further Training
- Human Resource Counsellor Further Training

Fields of Research

- Vocational education – students, teachers
- Adult education
- Educational services
- Drop-outs in higher and secondary education
- Student career monitoring
- Generation Y and Z
- E-learning courses
- Novel teaching methodology

Innovations

Development of e-learning materials in English and Hungarian.

Degree Study Programs in English Language
Mechanical Engineering BSc

Level of Qualification: *Bachelor (BSc)*
Duration of Study Program: *7 semesters (3 and a half years)*
Type: *Full-time program*

Specializations/Majors

- Mechatronics

The Course

This BSc program in Mechanical Engineering offers the knowledge of mechanical engineers who are able to operate and maintain machines and engineering equipment, to install and apply mechanical engineering technologies, to organize and control the work, and to fulfill the technical development, research and planning tasks of average complexity level in accordance with the requirements of the labour market; and who have acquired in-depth theoretical knowledge that is adequate to enable them to continue with their studies in the graduate, master level.

A Graduated Mechanical Engineer Shall be Able to

- do the technical design and construction of machine parts, machines, equipment, appliances, devices;
- work out and manage the production of machine structures, metal and/or polymer structures and its parts;
- do the diagnostical testing of machines and equipment and to work out the related maintenance, reliability and repairment technological tasks;
- manage the mechanical engineering technological processes and to organise the servicing of machinery devices;
- do the operation and development of mechatronic systems;
- do the operation and development of logistic and material handling systems;
- do the technical control of environmental protection tasks;
- apply environment-friendly technologies, to develop the industrial environment and to design and produce the environment-protecting technical tools;
- do the design of building engineering equipment, to prepare, to organise and to manage its construction;
- do the design, production and maintenance of vehicles and mobile machines;
- do the planning, implementation, production and maintenance of thermodynamical, hydrodynamical and chemical processes;
- find solution to labour safety tasks.

Future (Career) Prospects

Nowadays there is an increasing demand on the labour market for mechanical engineers. The industrial areas of machine production, chemical production and the energy sector requires skillful mechanical engineers to do the work tasks of factories and design offices in relation to technical design, maintenance and quality insurance.

Content and Structure

During their studies students are required to take up to 210 credits, each semester totaling 30 credits, which means completing six subjects in every semester.
The core modules in the first year are taken mainly from the fields of basic engineering subjects and basic natural scientific subjects, such as Mechanics, Machine Structures, Mathematics, Engineering Physics.
In the second and third year the students continue their studies with professional basic mechanical engineering subjects (in Hydraulics, Pneumatics, Welding, Design systems, CNC machines, Production planning, etc.) and the subjects in connection to the field of their specialization.
In the final semester students are required to accomplish their professional practical internship, to write their thesis and take the final exam.

Degree Study Programs in English Language

Materials Engineering BSc

Level of Qualification: *Bachelor (BSc)*
Duration of Study Program: *7 semesters (3 and a half years)*
Type: *Full-time program*

Specializations/Majors

- Metal Technologies

The Purpose of the Course

This BSc program offers the knowledge of materials engineers who are able to interpret and control the chemical processes in the materials, to test and to inspect the characteristics and the structure of the materials in order to change them by the use of various technologies, and to control and organize the material production technological processes in order to provide the required high-quality of materials in mass production. The students of this study program will acquire in-depth theoretical knowledge that is adequate to enable them to continue with their studies in the graduate, master level.

A graduated Materials Engineer Will be Able to:

- define and describe the physical and chemical processes happening in material systems with mathematical tools, with special consideration to the regularities of thermodynamics and kinetics.

A graduated Materials Engineer will Acquire Knowledge of:

- the atomic, the micro- and macrostructure of the solid materials, the fundamental methods to test the structure and the principle of operation for the basic tools;
- the principle of operation for the material producing machines and equipment;
- the essential technologies of the metallurgical production of metals and their alloys;
- the basic technologies of malleable formation and casting of the metals and their alloys;
- the fundamental technologies of heat treatment and surface treatment;
- the basic technologies of the production ceramics and composite materials;
- the basic technologies of producing polymers;
- the essential technologies of processing plastic materials;
- the quality testing and supervision of the work phases in relation to the material technologies.

Future (Career) Prospects

This qualification provides employment opportunities in the following sectors of industry: metallurgy, electronics industry, chemical industry, energy industry and machinery engineering.

Content and Structure

During their studies students are required to take up to 210 credits, each semester totaling 30 credits.

The modules of the study course include subject on the following areas: the structure and characteristics of the materials, coating technologies, the chemistry of metals, ceramics, polymers, metal technology, production technology, heat and fluid dynamics, heat treatment and surface treatment, waste processing, ceramics technologies, chemistry and material science, composites, melting of alloys, environmental protection and energetics, mechanics, quality control, casting processes, polymer technology, knowledge of standards, tool design, technological modelling, characteristics and structure testing.
In the final semester students are required to accomplish their professional practical internship, to write their thesis and take the final exam.

Degree Study Programs in English Language

Engineering Management BSc

Level of Qualification: *Bachelor (BSc)*
Duration of Study Program: *7 semesters (3 and a half years)*
Type: *Full-time program*

Specialization/Major

- Logistics

The Purpose of the Course

The BSc program in Engineering Management offers a broad-based approach to both areas of engineering and management, provides the students with an educational profile that combines in-depth technical competence with a solid knowledge in business administration and management. Business and management topics make extensive use of case studies and project work. The study program includes subjects on the field of business, management, engineering and technology.

A Graduated Engineering Manager Will be Able to:

- design products; to see through the basics of manufacturing products;
- to contribute to the marketing of products;
- to implement and apply new technologies;
- to manage business and human factors, and to control them financially.

Future (Career) Prospects

The business and engineering knowledge and the ability to apply that knowledge indicate in the labour market both excellent employment opportunities and social appreciation. Due to the acquired technological, managerial and interpersonal skills career opportunities for the freshly graduated students are opened primarily on the following areas: project management, product design, quality management, servicing and maintenance.

Content and Structure

During their studies students are required to take up to 210 credits, each semester totaling 30 credits.
There are six core modules in each semester of the first three years of the program. The core modules in the first year are taken mainly from the fields of technical sciences, natural sciences and human sciences. The technical and natural science modules introduce the fundamental technical and mathematical knowledge within the context in which they can be used.
Second year modules introduce the field of business and management. In the second academic year the business modules begin by explaining the economic and industrial environment in which industrial companies operate, then learn the tools and techniques needed to manage an industrial company business successfully. In the second year the students are going to choose a specialization and during the third year, the students will study subjects in accordance with their chosen specializations.
In the final semester students are required to accomplish their professional practical internship, to write their thesis and take the final exam.

Degree Study Programs in English Language

Computer Science Engineering BSc

Level of Qualification: *Bachelor (BSc)*
Duration of Study Program: *7 semesters (3 and a half years)*
Type: *Full-time program*

Specializations/Majors

- Software Technology

The Purpose of the Course

The purpose of the BSc program in Computer Science Engineering is to offer a broad-based approach to information technology, within the frames of a study program that combines in-depth practice-oriented informatics competence with a solid knowledge in computer science. Core content of the course comprises engineering, informatics and business subjects. Students learn how computer architectures are designed; how systems and networks operate; how softwares and systems are programmed; and how new processes are implemented and applied. In the syllabus computer engineering topics make extensive use of case studies and project work; and a wide range of assessment methods is employed.

A graduated Computer Engineer Will be Able to:

- do the design, the development and the building tasks of engineering constructions that requires IT methods;
- apply the practical engineering methods to fulfill the implementation and operation tasks of IT and informational systems;
- write programs in object-oriented and visual programming environment;
- apply software development methods and to use development tools;
- do the installation, configuration, troubleshooting, operation and further development of up-to-date, general-purpose operational systems.

Future (Career) Prospects

In our century informatics has got an outstanding importance. The demand for computer engineers has been increasing intensively on every area of our life. Wide range of career opportunities are opened for our graduated students on various kinds of work areas such as software technology, system engineering, network building, electronics, robotics, project and quality management.

Content and Structure

The total number of credit points to be acquired is 210 credit points. It is made of completing 30 credits in every semester.
The core modules in the first year are taken mainly from the fields of technical science, natural science and human sciences. The technical and natural science modules introduce the fundamental technical and mathematical techniques within the context in which they can be used.
Second year modules introduce the fields of networks and programming. The programming modules begin with explaining the operation systems and problem solving on computers.
During the third year, the students start their specializations.
In the final semester students are required to accomplish their professional practical internship, to write their thesis and take the final exam.

Degree Study Programs in English Language

Business Administration and Management BA

Level of Qualification: *Bachelor (BA)*
Duration of Study Program: *7 semesters (3 and a half years)*
Type: *Full-time program*

Specializations/Majors

- Business Communication
- Enterprise Management

The Purpose of the Course

The purpose of the BA program in Business Administration and Management is to offer an overall approach to the synthesis of business and management processes, which means the transfer of knowledge that enables the student to develop thorough managerial skills through the acquisition of in-depth business knowledge. It is guaranteed by the logical order of subjects and course blocks built on each other.

A graduated Manager of Business Administration BA Will be Able to:

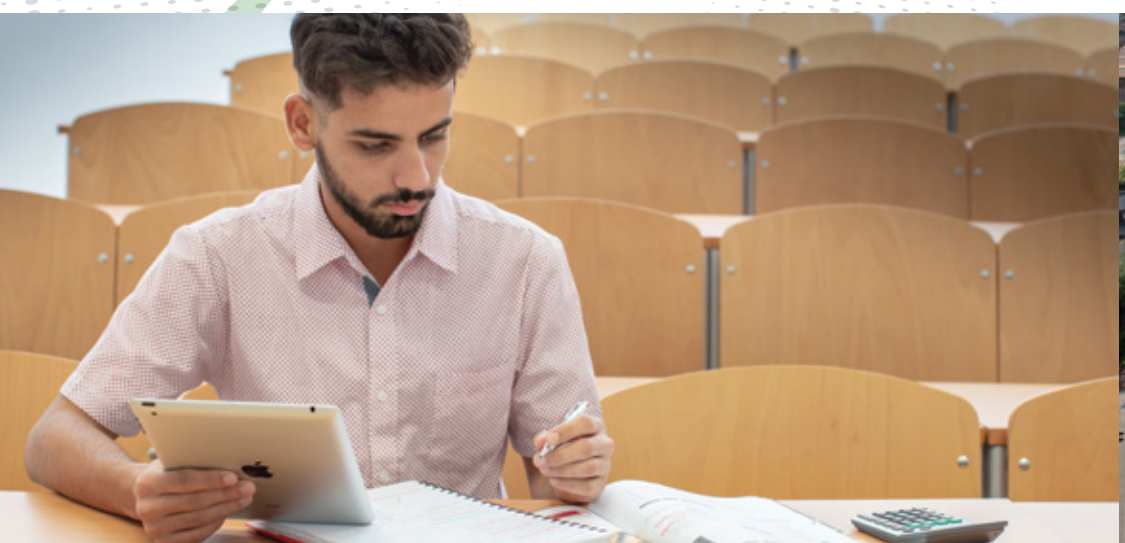
- see through the operation of companies, financial institutions and budgetary institutions,
- contribute in and to control the marketing of products and services,
- interpret the new economic processes in an adequate way and to control a company.
- Moreover, he can have a constructive attitude to the communication inside and outside the organization, to reveal the sources of confusion that may emerge in communication, and to suggest and/or to apply problem solving and/or conflict handling methods.

Future (Career) Prospects

Having business, administration and business communication knowledge and due to the application of the acquired knowledge on the level of skills a wide range of career opportunities are available for graduated students in the following fields: finance, administration, management and business communication (marketing, PR and mediation).

Content and Structure

During their studies students are required to take up to 210 credits, each semester totaling 30 credits.
In each semester of the first 3 years of the program the students must complete 6 basic modules successfully.
The modules of the study program put emphasis on the following areas: economics, methodical and managerial sciences, organizational communication.
The most important aim of the second-year modules is to get to know business administration, applied economics and management. At the end of the second year the student is going to choose specialization.
In the final semester students are required to accomplish their professional practical internship, to write their thesis and take the final exam.
The theoretical knowledge of business, management and business communication is put into practice through the processing of case studies, making project works, participating in simulation games and the adaptation of assessment procedures.



Degree Study Programs in English Language

Communication and Media Science BA

Level of Qualification: *Bachelor (BA)*
Duration of Study Program: *6 semesters (3 years)*
Type: *Full-time program*

Specializations/Majors

- Media Informatics
- Business Communication

The Course

The purpose of the Communication and Media Science BA program is to provide overall knowledge to the students about the communication processes going on in relation to various scenes of the society, the identification of the problems and confusion emerging during the course of communication, the methods of solution, the conditions of effective communication with special attention to the communication channels, the agents of communication and the effects of messages. Moreover, its purpose is to transfer applicable knowledge about the technological background of communication in the media space.

The Graduated Student of Communication and Media BA Course Will be Able to

- interpret the existing communication theories in a synthesizing way;
- he can make a distinction in the communicational stages and as a result of that he is able to choose the tools and methods needed for the communication in the relevant scene and the appropriate genre of the message.
- analyze the message of others, to recognize the hidden meaning, to argue for his point of view.
- Moreover, he is also able to see through the fundamental aspects and principles of the media, to apply most of the media technological tools and programs, to create programs, advertisements in an independent way or in team-work and to identify the technological tools of communication materials produced by others.

Future (Career) Prospects

Effective communication is one of the essential conditions of the prosperousness of the economy, so our graduated students who are not only familiar with the operational process of the organizational communication, but who can put it in practice in the appropriate way, have good prospects in the labour market. The jobs that can be filled up with this qualification are as follows: web designer, media technician, manager of public relations, manager of marketing and marketing communication department, manager or coworker of a communication agency, etc.

Content and Structure

The total number of credit points to be acquired is 210 credit points. It is made of completing 30 credits in every semester.
The foundation studies take place in the first 3 semesters. During the program the modules put great emphasis on the following areas: learning social sciences, the development of communicational skills and the study of communicational theories.

In the second year the modules introduce the regulation and the specific fields of communication, and the modules of specialization and of electives, which include the development of the students' theoretical and practical knowledge. In this phase of the program students are obliged to complete the modules of the specialization successfully, and to do two practical internships in the fifth and the sixth semesters. Furthermore, in the sixth semester they are expected to write their thesis and take the final exam.

Degree Study Programs in English Language

Mechanical Engineering MSc

Level of Qualification: *Master (MSc)*
Duration of Study Program: *4 semesters (2 years)*
Type: *Full-time program*

Specializations/Majors

- Lifetime Management

The Purpose of the Course

Its purpose is to train engineers capable of elaborating the concept of machines, machineries and processes, modelling them, then planning, operating and maintaining them; developing machine industry technologies, new materials, production technologies and using them in view of environmental aspects; performing leading, management and organization tasks, performing the tasks of technical development, research, planning and innovation, connecting to and coordinating engineering projects of domestic and/or international level, as well as continuing engineering studies even on doctoral level.

A Graduated Mechanical Engineer Shall be Familiar with:

- the theory and practice connected with the mechanical engineering profession, while having manual capability of proper level, measuring ability at a laboratory level;
- the tasks and activities connected with management;
- computer communication and analysis;
- environmental protection, quality issues, consumer protection, product liability, principles and application of access of equal chances, workplace health and safety, technical and economical legal regulations as well as the fundamental provisions of engineers' ethics;
- problem solution technics necessary for research or scientific work suitable to be used in wide circle;
- the global social and economic processes.

The Students Graduated in Mechanical Engineering on Master Level Shall be Able to:

- apply the knowledge acquired and utilizing it in the practice, using the problem solution technics;
- process the information on the limits of the professional experience acquired in the discipline, new problems that arise and new phenomena;
- formulate relevant judgment or opinion according to possibilities and drawing conclusions;
- plan and implement tasks at a high professional standard in a self-dependent
- way;
  improve their knowledge to a higher level by means of self-education and self-
- development;
  view the management of technical and economic human resources in a
- complex way;
  do the global planning of complex systems based on systems thinking and
- problem-oriented mentality;
  apply integrated knowledge on the professional fields of mechanical
- equipment and processes, machine industry materials and technologies as well as the connected electronics and information technology.

Future (Career) Prospects

Lifetime management has become an essential factor in the cost-effective operation of production companies, therefore graduated students are sought-after on the labour market. Job opportunities are opened to the skillful mechanical engineers on the following areas: technical design, technical innovation, maintenance and quality insurance.

Content and Structure

During their studies candidates are required to take up to 120 credits, each semester totaling 30 credits.
There are 6 core modules in ea ch of the first 3 semesters of the program.
The core modules in the first year are taken mainly from the field of mathematics, modern material and production technologies, mechanics, physics, product management and value evaluation, lifetime management, maintenance and repair technologies and damage to engineering materials.
Second year modules include technology, structural integrity, machine condition monitoring methods, weldability, furthermore the students are expected to focus on the accomplishment their thesis.

Degree Study Programs in English Language

Teacher of Engineering MA

Level of Qualification: *Master (MA)*
Duration of study program: *4 semesters (2 years)*
Type: *Full-time program*

Specializations/Majors

- Teacher of Mechanical-Mechatronics Engineering
- Teacher of Information Technology Engineering

The Purpose of the Course

The purpose of the Teacher of Engineering master program is to make the student be prepared for the teaching of the subjects in and out of the educational system, in accordance with the specialization of the student (theoretical classes, laboratory and practical courses) and for the self-reliant, creative teaching work based on the preliminary engineering qualification and to provide the knowledge basis for the achievement of the scientific qualification in vocational education.

Course Requirements

To start studies in the Teacher of Engineering master program the student must have one of the following qualifications:

- Bachelor degree certificate (BSc) in materials engineering, mechanical engineering, computer engineering, vocational training (in mechanical engineering, informatics);
- Certificate on college level in materials engineering, metallurgical engineering, mechanical engineering, computer engineering;
- Certificate on college level in Teacher of Engineering or Technical teaching of materials engineering, metallurgical engineering, mechanical engineering or computer engineering
- Certificate on university level in materials engineering, metallurgical engineering, mechanical engineering or computer engineering.

The Graduated Master Student of Teacher of Engineering Shall

- Acquire an excellent mix of teaching and engineering skills
- Develop excellent transferable skills

Future (Career) Prospects

The acquisition of teaching and engineering skills provides excellent job opportunities to the students after graduation. The technological, educational and interpersonal skills and knowledge acquired will open a wide range of career opportunities in the jobs related to teaching, research and engineering.

Content and Structure of the Course

During their studies candidates are required to take up to 120 credits, each semester totaling 30 credits.
There are six core modules in each of the first two semesters of the program.
The core modules in the first year are taken mainly from the fields of Pedagogy, Psychology, Methodology and Natural Sciences.
Second year modules introduce the specializations. In the final semester students are required to accomplish their portfolio and write their thesis.

Online Studium

The Professional Production of the Educational Videos and Electronic Study Materials at the University of Dunaújváros

As a result of the methodical aspirations for renewal in the higher education, it was decided to establish an online development team at the University of Dunaújváros. The preparations for that started in 2011. Following the research and testing of the recently available technologies our office started its organized operation under the name of Online Studium.
Our colleagues were managing successful projects both in the Hungarian business environment and in the national higher education. With their constructive work they contributed to the successful establishment of each project. Based on their experience and knowledge we offer the following services to our partners:

- Online educational counselling;
- The customization, installation and hosting of e-learning frame systems (Moodle);
- The development of online course materials; making polymedia shots;
- Making videos with cameraman in a green-box studio or on the spot.

We developed an online system, which supports the educational process of the university both from the lecturers' and the students' point of view. Its main characteristics are as follows:

- Special MOODLE framework;
- Polymedia-controlled course structure;
- Individual menu system;
- Application and further development of video-recording standards.

Course Material Development

We make our course material developments according to the SCORM standard suitable for the frame systems and by the application of an individual study material engine.
When making our courses we put a great emphasis on the quality of the script and the development base document and on following the basic instructions defined in the script during development.
Our courses are essentially built on two levels, in which structure the second level (subchapter) includes each learning object. When transferring the information, we aspire for keeping the principle of "SHOW-PRACTICE-TEST", therefore our courses consist of video-based lecture, downloadable and printable lecture plan, animations to practice and knowledge-checking test questions.
To support students, we enclose a study guide to each subchapter.

We Recommend the Following Formats to Make the Study and Course Materials

- Video-controlled course built on lectures. Its components: edited video lectures, self-checking test questions, PDF lectures; tasks to be submitted, evaluated test questions.
- SCORM study materials: multimedia course material including simulation tasks. Study material to present primarily the softwares and to get their functions practiced.
- Text-based course material.

In the courses made for the framework of the University of Dunaújváros students can use further online tools in order to intensify the effectiveness of the online education (Chat, forum, video consultation).

The first study materials were worked out in 2011, in the framework of TÁMOP 412/a project, and they were uploaded in Moodle system. Most of the 33 study materials were made for the courses of the welding technologies and maintenance engineering study programs and on the areas of the non-destructive material testing and measurement techniques.
In 2012 in the project TÁMOP 412/a. the development of 10 subjects was started.
The University of Dunaújváros in 2012 defined it as a strategic goal to introduce and develop the online educational form.
In 2012 within the frames of the project TÁMOP 411C 19 courses in English language and 1 course in Hungarian language were elaborated. The course materials were made primarily for the engineering subjects of the Engineering Management BSc program.
The study materials were developed on video-based materials, which supported the students' learning with written educational materials, ppt slides, tests.
To acquire the knowledge of the educational materials, students get support from the teachers, who keep continuously in touch with the students in chat and video chat rooms.


#uodfamily


Campus
Campus


KÖNYVTÁR

Organizational structure

The national group of Hungarian electricity companies – MVM Group – includes MVM Hungarian Electricity Ltd. and companies managed by it. The group of companies, being a competitive strategic holding, is the principal integrated participant of the national electricity market and plays a significant role in the regional electricity industry as well.

Vision

"Our vision is to maximize and provide electricity generation within a long time period, at technically justified and optimal cost levels, giving priority to nuclear safety."

A key factor of our reliability is our disciplined work culture, together with our highly qualified and committed personnel. Special emphasis is placed on retaining the personnel required for sustainable operation and development, as well as on continuous professional growth.

Nuclear power plants - if built to the ultimate and feasible safety levels possible today - are cleaner and more efficient than conventional power plants. MVM Paks NPP Plc. continues to improve its environmental protection activities in all areas; laying the foundations of the long term market position and competitiveness of itself and its business partners.

The safe operation of MVM Paks Nuclear Power Plant is ensured by a highly qualified, safety-conscious, motivated team of professionals committed to the power plant.

We want YOU to belong to us!

paks npp

MVM

CONTACT

E-mail
international@uniduna.hu

Telephone
+36 25 551 288

Address
Táncsics Mihály u. 1/A
H-2400, Dunaújváros, Hungary

Homepage
www.uniduna.eu

www.uniduna.eu