# BME Graduates' Yearbook

Academic Year 2022-2023

Volume 1



Study in the European Union



# Study at BME!

Your future career begins at the Budapest University of Technology and Economics

# Budapest University of Technology and Economics Graduates' Yearbook

Academic Year 2022-2023

Volume 1



### BME Graduates' Yearbook Academic Year 2022-2023 · Volume 1

### **Managing Editor:**

Marianna Oros-Klementisz (Rector's Office, Department of Communication)

### **Editor:**

Bíbor Bánfiné Klekner (Rector's Office, Department of International Relations)

### **Design and Layout:**

Tamás Dongó

### **Photo Credit:**

Bertalan Geberle János Philip Képkocka (Bálint P. Nagy, Döme Csatai, Kristóf Alföldi, Máté Bozsik, Tamás Tászler)

The manuscript was closed on 1 February 2023.

© Budapest University of Technology and Economics, 2023, except photographs © their respective authors.

## Contents

Farewell message from the Rector	4
Farewell message from the Vice-Rector for International Affairs	6
Farewell message from from the President of the Circle of Supporters and Friends of the BME	8
Farewell message from the Director of the Department of Academic Affairs for Education in Foreign Languages	10
Farewell message from the Students' Union (EHK)	12
About the Budapest University of Technology and Economics	14
Graduates of the Budapest University of Technology and Economics	17
Faculty of Civil Engineering	18
Faculty of Mechanical Engineering	34
Faculty of Architecture	46
Faculty of Chemical Technology and Biotechnology	56
Faculty of Electrical Engineering and Informatics	70
Faculty of Transportation Engineering and Vehicle Engineering	86
Faculty of Natural Sciences	94
Faculty of Economic and Social Sciences	102
Graduates of the Budapest University of Technology and Economics	110
Opening Ceremony	118
Student life at BME	120
University life at BME	124
Our life in Hungary	134
Good-bye from the BME Staff!	144



## from the Rector

Dear Graduates,

It is my pleasure to present this commemorative yearbook as a keepsake of your graduation from the Budapest University of Technology and Economics (BME) in the Academic Year of 2022-2023. This recent period has posed substantial challenges for students and for my teaching colleagues and staff alike, nevertheless it has also encompassed remarkable achievements and pleasant memories.

The diplomas you have worked for so tirelessly demonstrate to me and to the world the efforts you have made during these past years to become graduates of engineering, natural sciences, economics and management. You have every right to be proud of graduating from the BME, the University which gave the world three Nobel Prize laureates. Be proud, and let others know about the talent and professionalism you gained at BME. We are undoubtedly proud of you.

University graduation is always a momentous occasion for the graduates, their families, and their Alma Mater.

At the Budapest University of Technology and Economics, your Alma Mater and home in the last few years, we persistently strive for excellence: to be at the forefront of research, discovery, innovation, design, and, last but not least, education. This aspiration for perfection is well reflected in the latest QS University Rankings for Emerging Europe and Central Asia 2022, where BME is ranked 29th among 450 regional peer universities.

Since 1984, our university has continuously offered education in English. Students from every continent and almost every country in the world can benefit from their diplomas which they have proudly obtained at BME. As alumni of the Budapest University of Technology and Economics, you can be sure that the knowledge and skills that you have acquired will give you an excellent foundation for your future professional career. Please, be our ambassadors, and spread the word about the excellent education you received at BME. In six of the eight faculties, we teach and train engineers of the future for the various branches of this beautiful profession. Nevertheless, engineering must serve a purpose, and most importantly, must serve humankind and the world. To achieve this noble goal, creating a European Engineering Degree system within the framework of the EELISA (The European Engineering Learning Innovation & Science Alliance) consortium will be a major milestone. Within the EELISA cooperation, members - representing more than 170,000 students - focus on projects linked to industry and research (Industry 4.0) and green, smart and resilient cities. BME intends to contribute to national and international quality improvement of the technical higher education. This is a very ambitious goal, and this is what I also ask of you: to set ambitious goals for yourself and work hard to achieve them to make our world a better place.

The difficulties of the past few years show that we need to be bold enough to think about our world differently and be braver than before to try solutions that have not been tried before. You proved resilience and determination during these unprecedented times. Now, as engineers, natural scientists and economic professionals, you will be in the vanguard of creating the world of our common future.

As you progress through your professional life, you will discover a multitude of new ideas, but also come across new challenges. Please remember that we will be here for you: to help overcome the obstacles and learn from you and work with you on novel solutions to problems. You are always welcome back to pursue further studies as master's or PhD students, as research fellows, or indeed, as industrial research partners. We will be here to work with you on future innovations.

Dear Graduates,

I wish you all the best for your future. May you be successful in your work, and may you find happiness with your family and friends. I hope you find the right balance for a long and fruitful life. My advice to you for the future is the following: be persistent and loyal, both in your professional and private life. That way, you can achieve happiness.

Goodbye, farewell, and hopefully, see you later.

Yours sincerely,

Prof. Tibor Czigány Rector

### from the Vice-Rector for International Affairs



Dear Graduates,

I wish to congratulate you on the occasion of obtaining your diplomas, issued by one of the most prestigious universities of Central Europe. Your well-deserved diplomas attest and confirm your skills and qualifications as engineers, economists and managers.

You have come to the end of a journey spanning several years, but finally you have achieved the goal that you have set yourself: to study and obtain a diploma from the Budapest University of Technology and Economics. It is my pleasure to affirm that you have made it. I wholeheartedly wish that you will find satisfaction and enjoyment in your professional life, and I wish you good health and lots of happiness in your private lives. I hope you will fulfil your professional dreams and be open and inquiring experts in your respective fields. I hope you will become valuable and creative members of our societies and your communities. Nevertheless, the most important thing is that you find joy in what you do and find happiness.

Obtaining your diploma was no small feat. Indeed, it is undoubtedly one of the most momentous and defining moments of your entire life. Nevertheless, rest assured that your journey of studying and personal development has not ended. Lifelong learning will define your future career, which will ensure that on the solid foundations that you have laid at our university, you will build skills that will be of greater service to society. You will develop your talent, which can serve as a foundation for further inquiry.

With knowledge broadening at an unprecedented rate, and with technologies emerging seemingly out of nothingness like never before your future contributions to science and do your profession are more important than ever. Thus I ask you to have the courage and dedication to build on the foundations that we have laid down together and be brave enough and humble enough to build to the future of humankind.

As you advance through your professional career, you will undoubtedly feel the need to obtain expert advice on topics that may require it. Rest assured, we will be here. We will be here, with open arms and our open minds, welcoming you back, both as project partners for cooperation, as well as a source of knowledge that you can feel free to tap into. Our university has been a defining feature in the development of this country during the past 240 years of its existence. We have worked very hard to achieve the level of education that we can offer our students. Nevertheless, our pursuit of excellence does not stop here. I ask of you that you act as ambassadors of your university: that you help spread the good reputation of this institution wherever life may take you, be it in your home countries or anywhere else on the globe.

I sincerely hope that you have had good experiences at this university and that you will fondly remember your second home, Budapest. I also hope that you have had the opportunity to travel around and get to know Hungary at least a little bit. Based on your good experiences, I hope you will help others make the right choice about their future education by telling them about your Alma Mater. Please tell young people about our university and that studying for a diploma at BME is a worthy pursuit, both at bachelor, master or a PhD level. We are also looking forward to welcoming young minds to part-time or exchange programmes covering one or two semesters. We hope that many students will be able to follow in your footsteps from all over the world.

I wish you good health, happiness and success, and I hope to see you again in the future.

*Prof. Emília Csiszár* Vice-Rector for International Affairs



## from the President of the Circle of Supporters and Friends of the BME



### Dear Colleagues!

Let me welcome you in the community of engineers and more importantly in the community of BME engineers. Let me assure you that this is a diploma you can be very proud of. In the past years you were given a solid fundamental knowledge and as they say, a castle only can only be built on solid fundaments. I'm certain that as you move through your careers BME's education will serve you well. You all experienced what it takes to become a graduate, it has been a fruitful and rewarding journey. You have put hard work in this diploma but hard work does not stop here. Now you know what it takes to achieve the targets you set. I encourage you to never stop learning and experiencing the world around you.

They say that no one makes it to graduation alone, you have made friends and important relationships. Certainly from all over the world, and some of these friendships were made for a lifetime. You all learned from each other, embracing different races, cultures, traditions. The fact that you were studying here together, the obstacles you overcame together made a special bond between all of you. In the future you can reach out and ask for help or guidance. And this fact stands also for the University and your teachers, you can rely on them, ask for their opinion or help. I assure you it is really working, I still have and rely on these connections, fellow colleagues with whom I was in the MBA program quite many years ago.

I'm standing here in the name of MTBK (BME Supporters and Friends Association) which association has been working side by side with the University since 1987. We are providing an organizational framework for everyone who wish to support the realization of the objectives of BME, increase its recognition, and therefore wish to maintain a live relationship with the University. You yourselves will further carry on the reputation of this University.

In closing, my hope for all of you is that whatever your next step is or wherever your journey takes you, look at your studies here as part of a lifetime learning. I encourage you to capitalize on this learning by leaving all situation better than it was when found it. Congratulation to all of you! Very well deserved!

Roland Jakab



## Farewell

## message

from the Director of the Department of Academic Affairs for Education in Foreign Languages



Dear BME Leaders, Dear Graduates, Ladies and Gentlemen!

First of all, at this excellent occasion, congratulations to the graduates on their graduation. Your persistent hard work allowed to and is acknowledged by the gaining of this diploma. As well, thank you to your parents, family, friends and all around you for the continuous and persistent support. Thanks are also due to the Hungarian scholarship programmes of Stipendium Hungaricum, Scholarship for Young Christian, for providing an excellent opportunity for many of our students to complete their studies.

I recall the time when I had the pleasure to issue your admission letter couple of years ago and now it is an honor to celebrate your graduation together.

You have a great degree, great diploma in your hands. You are now a graduate recognized all over the world, which you have achieved at the cost of persistent efforts. I can assure you that this degree is well recognized all over the world and with this degree you will stand anywherein any circumstances.

What does this degree mean? Surely: knowledge, preparedness, experience, professional esteem.

And something more.

Let me briefly explain this through my personal story.

I remember when I started my studies: the situation with my roomate didn't start easily, we had a lot of discussions and disputes, but then we became friends. A difficult beginning of a beautiful friendship. We have gone through incredible things and we are still friends today. Friendship grown, we had new fellows, classmates, new friends; friends with similar feelings, common language, common aims and strong fellowship. Our network started to grow. One day I woke up and recognized I am part of a community, an international community with people from all over the world. This is our community!

I felt we were strong, we could reach anything we want! We can solve any and every problem, we can compete even in NASA competitions, we can launch satellites, we can build the biggest bridge ever, even from pasta, we can go for Nobel prize! And we can solve social challenges, provide solutions for climate change, sustainability issues, we can help in disaster prevention, let it be earthquake in Albania or red mud in Hungary.

This is the BME community.

You are member of the BME community, you are the BME community!

The BME community cares about each other, the BME community achieves its professional goals, provides space for innovation, and shares responsibilities in social challenges. This is the BME community!

And you are permanent member of the BME community forever! In addition to the professional value of the degree, this is what makes you and us special. This connection will never vanish.

Never forget that! We are always waiting you to be back, as student, as researcher, as visitor, as partner in cooperations. And we are encouraging you to be our community ambassador.

Once again, congratulations on your degree, enjoy the moment. And I wish you much success in your life, both professionally and privately.

Dr. László Gergely Vigh

Director, Department of Academic Affairs for Education in Foreign Languages



## from the Students' Union (EHK)



Dear Graduates,

I am delighted to welcome all of you on behalf of the Students' Union of Budapest University of Technology and Economics. It is an honor to be here with you all!

First of all, I would like to congratulate all of you who will receive their University Degree today.

A few years ago all of you had a goal, which you always had in mind during the past semesters but today you have successfully achieved it. It may not have been the easiest part of your lifes' but you have learned and experienced a lot. Today, you can proudly say to your families, friends that I have done it, I have finished University!

You have overcome all of the challenges and made lifelong friendships. Keep in touch and never forget each other and all the beautiful time you have spent together. Your road will lead to different places but you have become a part of BME's community which will enable you to many opportunities during your lifetime.

For those of you who will continue their studies I wish you the best of luck and hopefully we will see each other again during your next graduation ceremony!

To close it all I would like to quote Stephen Hawkings and I would also like to wish all of you a successful future and life!

"We are very, very small, but we are profoundly capable of very, very big things."

Thank you!

Levente Nagy







## the Budapest University of Technology and Economics

The Budapest University of Technology and Economics (BME) is proud of its more than two-hundredyear tradition of excellence in engineering education. It has developed into the largest institutions of higher education in Hungary and is one of Central Europe's most important research centres. The university considers scientific research and development of equal importance not only to its educational activities, but also to economic and social development.

The university takes special pride in the contributions made to science, engineering and culture by its faculty, graduates and researchers. The "elite-research university" status and award was given to the BME by the Ministry of Education and Culture, on 16th April, 2010.

Several Nobel Prize laureates have been associated with the BME:

Dennis Gábor	(physics),	
Eugene Wigner	(physics),	
György Oláh	(chemistry)	

Notable personalities have also studied or taught at the BME:

inventor of the computer,
nuclear physicist,
known for his work on nuclear chain reactions,
architect,
aerodynamic scientist,
inventor of the famous "magic cube",
co-inventor of the carburetor,
one of the inventors of the transformer,
one of the inventors of television

Today, 77 departments and institutes operate within the structure of eight faculties. Seven knowledge centres have been established. About 1.100 lecturers, 400 researchers, other degree holders and numerous invited lecturers and practicing specialist experts participate in the education and research at the BME.

Approximately 2 500 of the university's 23 000 students are from 60 different countries.

The BME issues about 70% of Hungary's engineering degrees.

The goal of the BME is to graduate professionals who are capable of high-level creative work, who can organize and supervise production and infrastructure, and who are qualified to perform scientific research, participate in technical development, solve engineering problems and implement solutions. In additions to educating engineers and economists the university provides continuing training through:

- undergraduate programs in engineering and in business and management
- graduate programs in engineering specialization and in business administration and management
- refresher courses to inform practicing professionals about new scientific developments which affect their works
- Ph.D programs, guidance and instruction for scientific research fellows.



Prof. Tibor Czigány Rector



Miklós Verseghi-Nagy Chancellor



**Prof. Emília Csiszár** Vice-Rector for International Affairs



**Dr. Péter Bihari** Vice-Rector for Education



**Prof. János Levendovszky** Vice-Rector for Science and Innovation

### Leaders of the University



## Graduates

## of the Budapest University of Technology and Economics



# Faculty of Civil Engineering



The Faculty of Civil Engineering is the oldest faculty of the Budapest University of Technology and Economics and can trace its history back to the University's predecessor, the Institutum Geometricum, founded by Emperor Joseph II in 1782. Since then, thousands of engineers have graduated from this Faculty to work worldwide as educators, international researchers, designers and engineering project managers.

The most essential service of the Faculty – education linked closely to research and engineering work – is reflected in the scientific activities of nearly 103 lecturers in 9 departments. They have contributed significantly to a professional, scientifically sound solution to diverse engineering problems. Out of the approximately 1200 students who study at this Faculty, ~300 students from abroad participate in the English language program annually.

The BSc engineering program in English leads to a BSc degree in four years. Two specializations are offered: Structural Engineering and Infrastructure Engineering. Graduates from the BSc Specialization in Structural Engineering are able to design, construct and organize the investments of mechanically, structurally and technologically complex structures in close cooperation with architects as well as transportation and hydraulic specialists. These structures include bridges and underground passages for transportation networks; power stations, cooling towers, craneways, transmission and telecommunication line structures; warehouses, industrial plants, and multi-storey buildings as well as hydraulic and water utility structures. Graduates from the BSc Specialization in Infrastructure Engineering are able to design and construct urban and regional infrastructure, such as roads, railways, water and wastewater utilities, hydraulic constructions, and organize engineering activities in these fields.

The Faculty offers four MSc programmes with a duration of 1.5 years.

### MSc in Structural Engineering:

- Specialization in Numerical Modelling
- Specialization in Structures
- Specialization in Geotechnics and Geology
- Specialization in Structures in Nuclear Power Plants

### MSc in Infrastructure Engineering:

- Specialization in Highway and Railway Engineering
- Specialization in Water and Hydro-Environmental Engineering

### MSc in Land Surveying and Geoinformatics

### MSc in Construction Information Technology Engineering

These specializations are useful for research-oriented students pursuing a doctoral degree in a PhD program, as well as for the next generation of practicing leading engineers, who will solve special structural problems and innovate the construction procedures. The doctoral school of the Faculty offers a 4-year PhD program in Civil Engineering and Earth Sciences.



## on behalf of the Faculty of Civil Engineering



Congratulations! First for the degree you have obtained, but also for the hard work you have put in to achieve it. As a student from abroad, the task is perhaps even more difficult: to adapt to a new environment, to learn new cultures, new habits, to acquire professional knowledge in a foreign language, to build new personal and professional relationships. We hope that this professional knowledge, experience and network will accompany and help you in your future life.

You can be proud of your achievements, the knowledge, and professional skills you have acquired. Please do not stop learning! With a diploma in hand, always look for opportunities to improve your knowledge. It will be a new way of learning, learning from your own work experience.

The BME has been running educational programs in English for almost 40 years. In these nearly four decades, our graduates are well established in many countries all around the world, having acquired a solid foundation of knowledge. The Faculty is very proud of its graduates and their achievements and we are proud of BME's contribution to global civil engineering activities. As civil engineers, you have become useful members of the society, giving back to humanity through your knowledge. The mission of a civil engineer is to create a safe, comfortable, energy efficient and sustainable built environment for the society. I wish you great success in fulfilling this mission!

Always remember BME, your Alma Mater, be proud of being a member of our alumni; we wish you all the best!

*Dr. Nauzika Kovács* Vice-Dean for Education, Faculty of Civil Engineering

## from Elvis Angwenyi Onwonga



### Dear Graduands,

It's a great privilege and honour to give a graduation farewell message. As we close this chapter of our lives and move on to the next, I want to express my heartfelt gratitude to everyone who has guided us along the way. To our beloved professors, instructors, and the entire BME administration, thank you for your unwavering dedication and guidance. Your passion for your subjects and your willingness to go above and beyond for your students has been an inspiration to us all. To our parents and family members, thank you for your support and encouragement. Your belief in us has been the foundation for our success. I am eternally grateful for the opportunity to have learned from such a diverse and accomplished group of individuals. We have had the privilege of spending the past years in this institution, and it has been an unforgettable experience filled with challenges, triumphs, and memories that will stay with us forever. We are leaving as well-rounded individuals, equipped to handle anything that life throws our way. We are now ready to take on the next phase of our lives, with the knowledge, skills, and confidence we have gained here.

This Graduation marks the end of another extraordinary chapter in our lives. As we move forward, let us embrace the bonds we have formed here, the friends we have made, and the memories we have shared. Let us stay in touch, support each other and continue to grow together. Let us keep the spirit of BME alive within us, as we go out into the world and make our mark. Remember, as you elevate to the next level of your life, the top ceiling of your previous level will act as the launching floor of your new level. Allow yourself to continuously learn and self-correct. Congratulations, Class of 2023! Today is your day. Wishing you all the best in your future endeavors, and I know that you will all go on to do great things. Let's stay connected, and let's make the world a better place.

"... progress, not perfection ..."

Elvis Onwonga Angwenyi



**Dr. Szabolcs Rózsa** Dean, Faculty of Civil Engineering



**Dr. Balázs Kövesdi** Vice-Dean, Faculty of Civil Engineering



**Dr. Nauzika Kovács** Vice-Dean, Faculty of Civil Engineering

## Faculty of Civil Engineering — BSc





Alvin Kamau

Karuga



**Mohamed Owais** 

Mohamed



Bidali Jedi Kisia



Festo Kassimu Lubiri



Hesham Salem Al-Abd Al-Shabibi



Khan Naveed



Masa Rados



Muhammad Armaya'u



Sakher Mahmoud Steven Mungai Nazzal Alkousheh Thuku





**Dr. Szabolcs Rózsa** Dean, Faculty of Civil Engineering



**Dr. Balázs Kövesdi** Vice-Dean, Faculty of Civil Engineering



**Dr. Nauzika Kovács** Vice-Dean, Faculty of Civil Engineering

## Faculty of Civil Engineering — MSc





Ahmad Dayoub



Amer Khaled Mohammad Elmanaseer



Ari Akram Abbas



Dan Brian Munene



Egor Stolpovskii



Elvis Angwenyi Onwonga



Fadi Ftouhi









Fatimah Nana Abdulrahim



Jackson Musyoka Kioko



Juma Saleh Ali



Maiah Basel Jamal Issa



Maria Ulfah Marwan



**Ramlah Hamed** Fouad Saeed



Sabrina Simöes Leite De Caldas



Shahin Reham



Shahzada Junaid



Silvia Dayana Astudillo Riera

# Faculty of Civil Engineering





Alvin Kamau Karuga Faculty of Civil Engineering



Ahmad Dayoub Faculty of Civil Engineering



Amer Khaled Mohammad Elmanaseer Faculty of Civil Engineering



**Ari Akram Abbas** Faculty of Civil Engineering



**Amr Khaled Mohamed Mohamed Owais** Faculty of Civil Engineering



**Bidali Jedi Kisia** Faculty of Civil Engineering



**Dan Brian Munene** Faculty of Civil Engineering



**Egor Stolpovskii** Faculty of Civil Engineering



**Elvis Angwenyi Onwonga** Faculty of Civil Engineering



**Fadi Ftouhi** Faculty of Civil Engineering



Fatimah Nana Abdulrahim Faculty of Civil Engineering



Hesham Salem Al-Abd Al-Shabibi Faculty of Civil Engineering



**Festo Kassimu Lubiri** Faculty of Civil Engineering



**Jackson Musyoka Kioko** Faculty of Civil Engineering



**Juma Saleh Ali** Faculty of Civil Engineering



Khan Naveed Faculty of Civil Engineering



**Maiah Basel Jamal Issa** Faculty of Civil Engineering



**Maria Ulfah Marwan** Faculty of Civil Engineering



Masa Rados Faculty of Civil Engineering



Ramlah Hamed Fouad Saeed Faculty of Civil Engineering



**Muhammad Armaya'u** Faculty of Civil Engineering



Sabrina Simöes Leite De Caldas Faculty of Civil Engineering



Sakher Mahmoud Nazzal Alkousheh Faculty of Civil Engineering



**Shahin Reham** Faculty of Civil Engineering



**Shahzada Junaid** Faculty of Civil Engineering



**Silvia Dayana Astudillo Riera** Faculty of Civil Engineering



**Steven Mungai Thuku** Faculty of Civil Engineering



# Faculty of Mechanical Engineering



The Mechanical Engineering Programme at the Budapest University of Technology and Economics began in 1863, and the Faculty of Mechanical Engineering was established soon afterwards, beginning official operations in the academic year 1871-1872. The Faculty is justly proud of its continuous, progressive and more than 140-year history and now offers undergraduate and graduate programs in both Hungarian and English.

The Faculty of Mechanical Engineering offeres a 7-semester undergraduate BSc degree program (BSc in Mechanical Engineering) in English. The new two-year graduate program in English (MSc in Mechanical Engineering Modeling) started in February 2009, and students can start their study either in the fall and in the spring semester. Individual postgraduate PhD programs, which are usually completed in four years, are also available for those who already have an MSc degree and wish to pursue a PhD degree.

The undergraduate BSc program of the Faculty of Mechanical Engineering is designed to continue our tradition of excellence by:

- providing well-grounded and broad knowledge that graduates of this Faculty can apply immediately in their work and also use as the basis for further studies; and
- graduating competent engineers who are not only masters of their profession, but also possess an ethical philosophy of engineering based on accuracy, punctuality and reliability as well as a respect for the human element.

#### The goals of our MSc and PhD Programmes are:

- to train creative, innovative mechanical engineers who can apply the engineering skills and the knowledge they have gained from the natural sciences on a state-of-the-art level; and
- to foster the development of leaders in engineering research and development.

The courses in the Mechanical Engineering Modelling MSc programme deal with those time-dependent and coupled (structural and vibration analysis, fluid dynamics, heat transfer, etc.) problems of mechanical engineering, which typically require the efficient modelling of tasks in order to access the continuously developing methods of computational engineering. As the joke says: 'Anything designed by a civil engineer starting to move is bad, anything designed by a mechanical engineer NOT moving that is bad, too.' Mod-ern computational methods are highly popular in the industry since they allow inexpensive and high-fidelity analysis in the phase of design. However, without a profound knowledge on the underlying physical laws and the limits of these softwares, one cannot expect proper predictions.
Computational methods are reliable if they are properly tested and the principles of their applied algorithms and procedures are well understood. This is analogous to the modern cartoon industry: the 25 pictures of one second of a cartoon can be drawn by computers if the first and the last picture of that second are designed for them by the artist but the computers will totally fail if they have to draw the cartoon without any reference picture, or based on the first (or last) picture only.

The tasks of mechanical engineers that typically require the modelling of machines in motion and that of time-varying processes are based on solid and fluid mechanics, thermodynamics and electronics. Modelling means the understanding and active application of the related theories, which are supported by differential equations and numerical methods in mathematics. Modelling needs also experimental work during the research-development-innovation process in case engineers do not have enough information about the motions and processes they want to capture by a model. Finally, modelling is also affected by the engineers knowledge in design, technology, and informatics, since the model should not be so complex that the available software is unable to solve them within reasonable time and for reasonable cost.

The above principles affected the formation of this master course. After the brief summary of the required fundamental courses (mathematics, mechanics, thermodynamics, electronics, control and informatics), the students have to choose a major and a minor specialization from the following list of modules:

#### 1. Solid Mechanics 2. Fluid Mechanics 3. Thermal Engineering 4. Design and Technology

The possible combinations provide flexibility among more research-oriented knowledge (combinations of the first 3 modules), and the development oriented one (major from modules 1-3 and module 4 as minor or vice versa).

This course is running in English only. It is based on the foundations provided by the longstanding positive traditions of some former successful courses of the Faculty of Mechanical Engineering at BME. This course is also compatible to many master courses in mechanical engineering in the European Union (see, for example, U Bristol, U Bath, ENS Cachan, TU Karlsruhe, U Hannover, TU Munich).

Our Faculty offers its engineering education excellence rooted in, and being fully aware of its unique position of training decision makers, and technological leaders of tomorrow. Our aim in the course of the training is to qualify our graduates to perform as competent problem solvers, good communicators, excellent team workers, successful project leaders, and - above all - ethical participants of the world around them – both locally and globally.



### on behalf of the Faculty of Mechanical Engineering



Ever since enrolling at the BME, you have heard us the addressing you as "Dear Colleagues!" countless times and, please, believe me, it was not just an empty phrase from your instructors and mentors.

At the Faculty of Mechanical Engineering, we use this addressing to express that, from the very beginning, we not only respect you and your commitment to become mechanical engineers but also consider you as equal partners. Just like you, we have given the best of our knowledge, and we celebrate your diplomas and your inauguration as engineers together with you on this day. First of all, I congratulate you on your success!

The World has changed a lot recently; both our own and our beloved one's health was endangered and now, we are already facing a novel, even more threatening danger. This has clearly shown that peace and prosperity cannot be taken for granted. As mechanical engineers, we are problem-solving professionals; we need to give the best of our knowledge wherever we can contribute to peace and prosperity. As Matt Damon said in the Martian movie: "You solve one problem and you solve the next one and then the next. And if you solve enough problems, you get to come home."

#### Dear Colleagues!

Entirely new young people are standing here, replacing the ones enrolled a few semesters ago: you have mastered the competencies and skills that make you engineers. So now the world opens up: create, innovate, use your knowledge to advance humanity, find and serve righteous purposes. I look forward to seeing great things from you!

Prof. Imre Orbulov

Dean

Faculty of Mechanical Engineering

### from Zahraa Ali Jawad Almukhtar



Dear Vice-rectors, Deans, Fellow Graduates, Family, Friends, Ladies, and Gentlemen,

First and foremost, I am honoured to deliver this speech on behalf of my fellow graduates in the Faculty of Mechanical Engineering at the Budapest University of Technology and Economics. We would like to express our sincerest gratitude to all our beloved professors, teaching assistants, and administrators for enlightening us on the right path, cultivating our knowledge in all these years we have accomplished and preparing us to start the next phase of life.

Under this circumstance, let us congratulate our graduates for making it to this level in their quest with flying colours and honours. You have successfully completed this academic challenge and participated in extracurricular activities both locally and globally. Indeed, you have been an inspiration and a shining example to the following undergraduates in several ways.

Undoubtedly, we consider ourselves fortunate to be a part of such a great institution like BME, which is known as the oldest Engineering University in Europe and has an outstanding Ranking worldwide. BME was the right choice for us, as we had the opportunity to gain knowledge from expert cooperated Professors in Mechanical Engineering and their life experiences. Although we came from different countries, BME has united us and given us the opportunity to distinguish the various cultures.

In the long run, from this day, we will be leaving with prideful achievements and unforgettable memories. I hope your dreams take you to the corners of your smiles, to the highest of your opportunities, and to the unique places your heart has ever known. I wish you the best of luck, good health, and eternal success in your future endeavours.

Once again, congratulations, dear fellow graduates, and thank you to everyone who has guided us to this day. It has always been a delightful honour to be a part of BME.

Zahraa Ali Jawad Almukhtar



**Prof. Imre Orbulov** Dean, Faculty of Mechanical Engineering



**Dr. Csaba Hős** Vice-Dean, Faculty of Mechanical Engineering

## Faculty of Mechanical Engineering — BSc





Albará Ramil Jamil Ghazal



Gábor Ábel Edelmayer



Hamza Samer Awni AlSilawi



Mario Magdy Tadros Aziz Tadros



Mohamed Badr Gomaa Abdelkhalik



Mohammadreza Omrani



Muhammad Saad Aziz



Steven Nashwan Hazim Alqis Butrus



**Prof. Imre Orbulov** Dean, Faculty of Mechanical Engineering



**Dr. Csaba Hős** Vice-Dean, Faculty of Mechanical Engineering

## Faculty of Mechanical Engineering — MSc







Ishfaq Ahmad Bhat Mohd Basit Wani



Umair Rashid



Zahraa Ali Jawad Almukhtar

# Faculty of Mechanical Engineering





**Albará Rami Jamil Ghazal** Faculty of Mechanical Engineering



**Gábor Ábel Edelmayer** Faculty of Mechanical Engineering



Hamza Samer Awni AlSilawi Faculty of Mechanical Engineering



**Ishfaq Ahmad Bhat** Faculty of Mechanical Engineering



Mario Magdy Tadros Aziz Tadros Faculty of Mechanical Engineering



Mohamed Badr Gomaa Abdelkhalik Faculty of Mechanical Engineering



**Mohammadreza Omrani** Faculty of Mechanical Engineering



Mohd Basit Wani Faculty of Mechanical Engineering



**Muhammad Saad Aziz** Faculty of Mechanical Engineering



**Steven Nashwan Hazim Alqis Butrus** Faculty of Mechanical Engineering



**Umair Rashid** Faculty of Mechanical Engineering



Zahraa Ali Jawad Almukhtar Faculty of Mechanical Engineering



## Faculty of Architecture



The Faculty of Architecture focuses on training highly professional experts in architectural engineering who are aware of the social and cultural implications of their profession. Versatility is emphasised so that students will gain fundamental knowledge and abilities in every possible field of architecture and be able to find work in a highly competitive job market, and in any building- or design-related area of consulting, construction, and management.

Graduates of the Faculty of Architecture are qualified for a broad spectrum of architectural occupations:

- Design, construction and maintenance of residential, public, industrial and agricultural buildings;
- Reconstruction and the preservation of historical monuments;
- Urban design and settlement planning; and
- Administration of all these activities.

The curricula were organised on Swiss and German models. The Faculty has maintained these traditions for the last 40 years but provides additional European and international dimensions through guest lecturers from abroad, topical short courses, workshop seminars and exchange programs.

The Academic Programs of the Faculty of Architecture taught in English are in full conformity with the Integrated MSc Program and MSc Program provided in Hungarian, which after two years practice and experience are accepted for access to EUR-ING title.

Students, both International and Hungarian, who have a command of both languages can choose from either program. The participation of Hungarian students in the program given in English has obvious advantages. It eases the integration of international students into the society, which surrounds them during the years of their studies. It also attracts students from European, American and other universities worldwide to study in Budapest within the framework of the International Student Exchange Program and other agreements.

Hungarian students likewise gain the opportunity to study at schools of architecture abroad. These exchanges will become a powerful factor in achieving real convertibility among educational system worldwide and, eventually, mutual international recognition of degrees.

#### Graduation

Graduation from the University is based on the successful completion of examinations in all subjects and on the successful defense of a diploma project in front of a Final Examination Board. The examinations are public and the Board consists of professors and eminent specialists in the profession. Diploma projects are prepared in the last semester under departmental guidance and can be submitted only by students with an "absolutorium" (university leaving certificate). The diploma project is expected to reflect its author's familiarity with technical and aesthetic knowledge fundamental to architectural practice, and his/her creativity in applying it. Currently, international agreements make it possible for certain Hungarian students to prepare and defend their diploma projects in the university of another country. Students from abroad can correspondingly prepare and defend their thesis projects under the guidance of the Faculty of Architecture at the Budapest University of Technology and Economics.



#### The Academic Programs of the Faculty of Architecture in English language are as follows:

#### General Course in Architecture (Preparatory Program)

The 1-2 semester program called General Course precedes the Integrated MSc Program. It is designed to develop the skills of students from abroad so they will be at no disadvantage in meeting the Faculty's exacting educational standards. Students are introduced to various aspects of the profession they have selected, and they concentrate on studying English and basic technical subjects such as mathematics and freehand drawing. Successful fulfilment of the General Course is equal to a successful Placement Test. The partial fulfilment of the General Course doesn't replace the Placement Test. Students who successfully pass the Placement Test can start the Integrated MSc Program.

#### Integrated MSc Program in Architectural Engineering

The Integrated MSc Program is a five-year (10 semester) long training and leads directly to an MSc degree in Architecture and Architectural Engineering (Dipl. Ing. Arch.). For integrated MSc degree (10 semesters) students have to accumulate min 300 credit points. The Program requires to accomplish obligatory subjects and elective subjects too. Currently there isn't BSc program offered in English language.

#### Preparatory Year for Master of Science Program in Architecture (Pre-MSc Program)

The 2-semester program called Pre-MSc Program precedes the MSc Program. The Pre-MSc Program is offered for students who have earned BSc degrees in other schools of architecture and could legally join the MSc Program, but could not successfully complete the entrance exam of the MSc Program. Based on the different kind of BSc studies there might be differences in their preparedness. The aim of the Program is to equal these differences and prepare the students for the MSc Program. Students are offered to join the courses of the Integrated MSc Program. There are two kinds of courses in the Program: obligatory and suggested courses. Successful fulfilment of all the obligatory courses is equal to a successful entrance exam. Suggested courses are tendered to develop the skills of students in various fields.

#### Master of Science Program in Architecture (MSc Program)

MSc Program, which is a two-year (4 semester) long training and leads to an MSc in Architecture. Students who have earned BSc degrees in other schools of architecture can join the MSc Program. For MSc degree (4 semesters) students have to accumulate min 120 credit points. The Program requires to accomplish obligatory subjects and elective subjects too. During the MSc Program, students can choose after the first semester from the following specialisations:

- Real-Estate Development and Facility Management
- Architectural and Interior Design
- City Design
- Structural Design

Note: The Faculty of Architecture reserves the right of changing the Curricula. Specialisations have a minimum required number of students to start.

The Faculty of Architecture offers Postgraduate studies in its two Doctoral Schools. .

#### Doctoral Studies PhD (Csonka Pál Graduate School)

Studies in Csonka Pál Graduate School cover a wide range of scientific and engineering topics related to architecture, including urban sciences, energetics and sustainability, architectural heritage and history of architecture, structures, applied mechanics and applied geometry. The focus of this school is independent research under personal supervision.

#### Doctoral Studies DLA (Doctoral School of Architecture)

The program of the Doctoral School of Architecture leads to the PhD-equivalent degree Doctor of Liberal Arts (DLA). The four year-long curriculum strongly focuses on creative architectural design supported by project-based research.



### on behalf of the Faculty of Architecture



Dear Graduating Students,

On behalf of all teachers and members of the Faculty of Architecture, I would like to congratulate you on your graduation.

The road to this university degree was not easy, especially the extraordinary semesters during the pandemic. You worked extremely hard to fulfil all of the requirements. You think that from today on, you will never draw or work at night again. Unfortunately, I have to say, you will. You have chosen a profession where you will sometimes be forced to work a lot and spend the night before submitting a plan. But the joy of the work done, the beauty of the drawing or the finished building will make you forget the great amount of effort.

I wish you to be a successful architect, planner, structural designer, constructor, landscape artist or en-trepreneur. There are so many possibilities before you. This degree of BME is a useful "passport" to your future professional career with your knowledge and special experiences, also with the relationships and lifelong international friendships you made here at BME. So, I wish you a lot of success, recognition, and health in both your professional and private life.

I hope you will come back later as postgraduate students or as scientific or architectural partners, or simple to show your family the city and university where you spent such important and memorable years.

Finally, let me share with you an important message of Kurt Vonnegut, my favourite writer:

"Don't worry about the future. Or worry, but know that worrying is as effective as trying to solve an algebra equation by chewing bubble gum."

> *Dr. Ágnes Gyetvai Balogh* Vice-Dean for International Education Faculty of Architecture

### from Sophia Ariadne Thomas



Dear fellow graduates,

It is an honor to have been selected to address everyone on this important day. I am especially grateful, as it gave me an incentive to reflect on the last five years, and recall the good times, and the lessons learned along the way. It is easy to forget the positive, especially when uncertainty ruled over a significant part of our time here, so I urge you all to take a moment to recall some of your favorite memories.

As individuals from different backgrounds, graduating with degrees from various fields, we have had different experiences. However, I believe there is one thing we can all agree on: our university years have not been easy. We knew upon acceptance that it would be a tough ride, and especially with the added difficulties of a global pandemic and war, we should be immensely proud of ourselves for making it until the end. We are basically superheroes!

Life will continue to be just as unpredictable, if not more so, but through the challenges we have faced here we have learned resilience, persistence, and benevolence that will help us through our future endeavors.

I am confident that we will all find success in our respective fields, whether we end up working in our graduated disciplines or decide to go in a different direction; we are walking away from here as more than just engineers, scientists, or economists, we are leaving as well-rounded individuals, equipped to handle anything that life throws our way.

At the end of the day, our knowledge is the one thing that cannot be taken away, and BME has enriched us with invaluable knowledge. It is now our responsibility to go out into the world and use all the academic and life skills we have gained to the best of our ability, and leave our mark with empathy, consciousness, and pride for our alma mater.

I now invite all my fellow graduates to stand for a round of applause for all those who guided and supported us through the challenging years at BME, making it an unforgettable experience; dear professors, consultants, CAO staff, program coordinators, deans, member of the international mentor team, friends, family and loved ones, we thank you!

Sophia Ariadne Thomas



**Prof. György Alföldi DLA** Dean, Faculty of Architecture



Dr. Ágnes Gyetvai Balogh Vice-Dean, Faculty of Architecture

## Faculty of Architecture





Ann Samy Samour

ABBBB

50



Hanxiao Li



laroslava Krasikova



Marina Possatti de Oliveira

## Faculty of Architecture





Ann Samy Samour Faculty of Architecture



Hanxiao Li Faculty of Architecture



**laroslava Krasikova** Faculty of Architecture



Marina Possatti de Oliveira Faculty of Architecture



## Faculty of Chemical Technology and Biotechnology



The education of chemical engineers and chemists has a long-standing tradition in Hungary. Hungary's earliest chemistry department was established in 1763 at the Selmecbánya Mining School, the first school to offer practical instruction in the chemical laboratory. In 1769, a common department for chemistry and botany was founded at the University of Nagyszombat, which was resettled to Buda in 1777, and later to Pest. In 1846, the Department of General and Technical Chemistry was founded at Joseph II Industrial School, one of the Budapest University of Technology and Economics's pre-decessor institutions. Education of chemical engineers, separate from that of mechanical and civil engineers, reaches back to the academic year 1863-1864.

The Royal Joseph Polytechnic became a technical university in 1871. The academic freedom granted by this university-level status allowed students to freely select the subjects they wished to study. However, the need for an interrelated, logical sequence of subjects soon became evident, so in 1892 a compulsory curriculum and timetable was introduced. From the foundation of the Faculty until 1948, only a four-year-term of studies, without specializations, was offered. Following the educational reforms of 1948, the departments of Inorganic Chemical Technology, Organic Chemical Technology, and Agricultural and Food Chemistry were established. The Inorganic Chemical Technology Department is no longer a part of the Faculty because in 1952 its tasks were taken over by the University of Chemical Industry in Veszprém. Further reforms in the 1960s extended chemical engineering studies to the MSc level and introduced the range of specialized studies identified below. A PhD program has also been established. Studies in English at the Faculty of Chemical Engineering began in the academic year 1985-1986.

Students in the BSc program receive a thorough introduction to areas basic to chemical engineering before they begin their specializations in the fifth semester. Courses of the following branches are available to students learning in the English formation, depending on the number of applicants (at least 3 applicants) at BSc (7 semesters) levels: Chemical and Process Engineering, Industrial Pharmaceutics, Materials Science.

Students in the BSc chemical engineering program receive a thorough core curriculum. These include natural sciences as chemistry, mathematics and physics, and engineering fundamentals as unit operations, process control. We assure, that our students besides a profound theoretical knowledge, can acquire up-to-date laboratory skills, get acquainted with the machines and apparati used in the chemical industry, know the principles needed for their optimal operation, and develop expertise in a more specific technology within the chemical, food and light industries.

The studies are completed by performing an individual bachelor thesis project and submission of the thesis. Graduation is completed after all required credits are gained, by a successful defense of the thesis and a final examination before the Final Examination Board of professors and eminent industrialists.

In the Msc formation (4 semesters) The Modern Chemical Technology specialization offers the following elective modules (groups of subjects): analytics, biotechnology, materials science, pharmaceuticals, technology.

Chemical engineering MSc students get a high level knowledge in natural sciences, engineering, informatics and economics as well as in humanities. On an international comparison our curriculum is chemistry focused, and it is especially suitable for motivated applicants having carrier plans in research and development or project management.

The studies are completed by performing an individual master thesis project and submission of the thesis. Graduation is completed after all required credits are gained, by a successful defense of the thesis and a final examination before the Final Examination Board.

All programs are organized in the credit system providing a relatively high degree of freedom in subject selection, but prerequisites (at BSc level) have to be taken into account when the individual study program is set. Further information on the Faculty can be found at our website: http://ch.bme.hu/en/



### on behalf of the Faculty of Chemical Technolgy and Biotechnology



Dear Graduated Students,

First of all, on behalf of the community of the Faculty of Chemical Technology and Biotechnology I would like to congratulate you on your graduation. You have obtained a diploma of BME, which is accepted and recognized all over the world. Be proud of this diploma, and be also proud of yourself, that you could earn it working hard during the semesters.

Generally it is fundamentally hard, if somebody learns in a foreign country, in a foreign language, even in a foreign cultural environment. You have started your studies here several semesters ago, and I hope, as the semesters passed, this foreign environment became more and more familiar, as it generally happen classes by classes, year by year. You have found new friends, you could know a little bit Hungary through the events organized for you, or by your own curiosity. I think this helped you in the adaptation resulting that the higher semesters became a little bit easier. But in your case these last semesters became, however, again extremely hard because of the pandemic situation. Chemistry is a practice-oriented scientific area which can hardly be learned well online, without the manual work in different laboratories. Thus these semesters required extra and tedious activity not only from you, but from the teachers, too. But fortunately, you could successfully overcome this last big barrier.

Now, using this big, but usual cliché, you have reached a new milestone. Some of you start to find a job, or already have it, while some of you continue learning in a master or PhD formation.

I hope, that as in the previous years, some of you want to apply to our further formations. We are ready to continue the common work, hopefully under normal conditions.

Of course many of you will start to work. Nowadays there are big problems all over the world, which require the action of innovative and creative engineers. To avoid the emerging pandemic situations, or at least to reduce their seriousness, to keep the environment clean with cleaner and safer processes, to develop more efficient and cleaner methods for the energy production and consumption, simply to keep the sustainability of the Earth while making the daily life easier, so many challenges standing in front of the chemists. To resolve these problems, or at least most of them, this is a very big and important task for you. So don't be afraid, you will have a plenty of jobs in the future.

All in all, whatever are your future plans, I wish you in my name and also in the name of our faculty a happy and successful professional and private life. And keep in your good mind BME, your Alma Mater.

Prof. Zoltán Hell

**Course Director** 

Faculty of Chemical Technology and Biotechnology

### from Mik Liner Lauschner Miranda



My fellow graduates,

Congratulations!

This is the first thing I would like to say today. However, I would like to emphasize that these congratulations are not only for the graduation but for the journey each one of us had till we got here. For this reason, I would like to congratulate us all for our braveness in leaving our home country, our family, and our friends behind, to go after a dream. Only the ones who did it know how hard it is. I would like to congratulate us for accepting the challenge of coming to Hungary, facing a different culture, living in a place where most of us had no idea how to speak the language and even though we manage to adapt to it. And last but not least, I would like to congratulate us all, on the reason we are here today, for our graduation.

I would like to take this moment to reflect on how crazy the achievement we are just realizing is. Facing a challenge far from home, in a language different from our native one, doing it abroad in a country where most of us did not know any person before we arrived here. In spite of all these challenges, we did it. Yes,we did it! We are graduating from the Budapest University of Technology and Economics.

Take this day to remember the challenges we faced, but remember especially the good moments we had here, the ones moving to Hungary brought to us. The opportunity to see a different part of the globe, to be in contact with people and cultures from the most distant places, the possibility to travel within Hungary and around Europe, and especially for the friends we did here. Friends from places I bet you never expected you would have. For the good moments, we had in this university, laughing among these halls, and of course, getting super annoyed together, with the upcoming tests and exams in this same place. Friends that faced many challenges with us, and that for sure we will take for life.

To conclude, I just want to say congratulations to all of us. We did it! But remember, this is just one step of many we will take toward a brighter future, and all the knowledge and experience we got here is something that no one can take from us. From now on, it only depends on us. And do not forget, we are the only ones representing our own dreams, and the future waits for us, but this time more experienced, older, and wiser.

Mik Miranda



Prof. András Szarka Dean, Faculty of Chemical Technology and Biotechnology



Dr. Alfréd Kállay-Menyhárd Vice-Dean, Faculty of Chemical Technology and Biotechnology

### Faculty of Chemical Technology and Biotechnology — BSc





Akan Mustashev



Almat Apseit



**Bled Dyla** 



Guldana Alimbetova



Leonardo Gaspar Rodrigues



Mik Liner Lauschner Miranda



Soogeun An



Thuy Anh Do



Prof. András Szarka Dean, Faculty of Chemical Technology and Biotechnology



Dr. Alfréd Kállay-Menyhárd Vice-Dean, Faculty of Chemical Technology and Biotechnology

Faculty of Chemical Technology and Biotechnology — MSc





Adél Piedl



Ayan Karimli



llies Djaffar



Jiangjiang Wang



Nazrin Afandiyeva



XinJie Wang



Zekun Liu

## Faculty of Chemical Technology and Biotechnology





Adél Piedl Faculty of Chemical Technology and Biotechnology



Akan Mustashev Faculty of Chemical Technology and Biotechnology



Almat Apseit Faculty of Chemical Technology and Biotechnology



**Bled Dyla** Faculty of Chemical Technology and Biotechnology



**Ayan Karimli** Faculty of Chemical Technology and Biotechnology



**Guldana Alimbetova** Faculty of Chemical Technology and Biotechnology



**Ilies Djaffar** Faculty of Chemical Technology and Biotechnology



**Leonardo Gaspar Rodrigues** Faculty of Chemical Technology and Biotechnology



**Jiangjiang Wang** Faculty of Chemical Technology and Biotechnology



**Mik Liner Lauschner Miranda** Faculty of Chemical Technology and Biotechnology



**Nazrin Afancliyeva** Faculty of Chemical Technology and Biotechnology



**Thuy Anh Do** Faculty of Chemical Technology and Biotechnology



**Soogeun An** Faculty of Chemical Technology and Biotechnology



XinJie Wang Faculty of Chemical Technology and Biotechnology



**Zekun Liu** Faculty of Chemical Technology and Biotechnology





## Faculty of Electrical Engineering and Informatics



The Faculty of Electrical Engineering, founded in 1949, has been renowned for excellence in research and education throughout the years of changes in the scope of engineering. Over this period, the faculty has earned a widespread international reputation for its high academic standards and scientific achievements.

Spearheading the movement to establish a modern education system, it has offered a comprehensive English curriculum since 1984. In 1992 the name of the faculty was changed to Faculty of Electrical Engineering and Informatics to recognize the growing importance of computer science. The education programs in English include a 3.5-year BSc, a 2-year MSc, and a 4-year Ph.D. program in the fields of electrical engineering and computer science engineering.

The undergraduate BSc Program (7 semesters) aims at providing comprehensive knowledge with sound theoretical foundations. The specializations in Electrical Engineering are infocommunication systems, embedded and controller systems, and power engineering. Studies in Computer Science and Engineering include specialization in infocommunication and software engineering. Each specialization contains courses focusing on the field of interest followed by a laboratory course and project subjects.

The MSc Program (4 semesters) advances electrical engineering, computer science, and information technology knowledge. The Electrical Engineering program offers major specializations in embedded systems, infocommunication systems, and electrical machines and drives; while the Computer Science and Engineering program offers specializations in Applied Internet Architecture and Services, and Applied informatics.
The post-graduate Ph.D. program is available in all domains offered in the MSc program.

Since research and development require innovative engineering expertise, one of the major concerns of the faculty is to endow students with high-level mathematical skills in modeling complex engineering systems. This objective implies the use of the system and algorithmic theory in addition to thorough knowledge in physics. The search for optimal solutions in the highly complex architectures necessitates not only engineering but also economic considerations.

Several strategies have been designed to help students develop high-level mathematics, physics, and computation skills. Besides theoretical knowledge, they need to carry out design and development activities in communication, instrumentation, and power industries to further perfect their practical skills.

Scientific groups are formed to encourage the students to do independent but supervised laboratory work. The set of the project subjects is one of the core parts of the studies which are dedicated to independent problem solving with the armory of modern workstations and software packages. The expertise of handling these tools is inevitable in pursuing an engineering career.

The faculty maintains close contact with well-known multinational companies and smaller industrial players to strengthen the transfer of knowledge and know-how between the university and industry. As a result, many industry experts offer their experience and knowledge as part-time lecturers, project supervisors, and examination committee members.



#### on behalf of the Faculty of Electrical Engineering and Informatics



Dear Graduating Students, Ladies and Gentlemen,

I would like to congratulate you on your graduation on behalf of all the BME Faculty of Electrical Engineering and Informatics citizens.

The road to a technical university degree is not easy. When you entered the university as a first-year student, the opening celebration speeches drew attention to the following:

- You will be a student of a university with a long history.
- We will teach you to think systematically.
- You will acquire theoretical and practical knowledge that enables you to become an international-level engineer.
- In addition to learning, you can also become a member of communities.

The graduation ceremony is another important milestone; graduation is the coronation of a joint effort of the student, family, and university staff. I hope we have shown you all the beauty and responsibility of engineering life. I am also confident that you will become innovative and creative engineers. The quality of your diploma will be confirmed; the degree of BME VIK is a valuable "passport" to your future professional life. During your university years, in addition to the study, you made professional relationships and lifelong international friendships.

Please be proud that you graduated from the Faculty of Electrical Engineering and Informatics of the Budapest University of Technology and Economics!

I wish you, young colleagues, a lot of success, recognition, and health in both your professional and private life.

Dr. Eszter Gerhátné Udvary,

Associate Professor, Course Director

Faculty of Electrical Engineering and Informatics

#### from Yves-Lucas Haag



Dear Rector, Deans, all academic and administrative staff, families and class of 2023,

First, let me express my gratitude to be chosen to write this farewell message on behalf of the graduating students of the Faculty of Electrical Engineering and Informatics. I would like to thank the faculty, all staff and professors for their help, guidance and advice through the years. All of you were helping us to make not only sense of the bits and bytes this wonderful faculty taught us, but also of the time we are all living in.

As we changed during our journey the world around us changed as well. The global pandemic forced us to not only overcome academic obstacles but also find our way in an uncertain world. It sure does sound tedious to say "we are all in this together", but we were. We found ourselves too often in front of cameras instead of a tangible face to face. But this faculty, the university, the projects and exams brought us closer together or at least gave us a useful distraction from all the uncertainties around us.

Being here today means that one chapter ends, but a new one only has begun. The future lies ahead of all of us, and it is up to you what you make of it. You have hands to shape your future, legs that will carry you the extra mile and dreams which have the ability to carry you even further, as far as your imagination and courage are capable of. No one forces you to dream bigger than life, but since we all have the knowledge and skills to sculpture a little idea into something extraordinary, we should not shy away from giving our dreams a chance to leave some traces.

Once again, I would like to thank each and everyone who helped us during our journey, we will never forget you and always be grateful.

Finally, there is nothing left to say than congratulations! Be proud, be kind.

Yves-Lucas Haag



**Prof. Charaf Hassan** Dean, Faculty of Electical Engineerring and Informatics



**Prof. Gábor Horváth** Vice-Dean, Faculty of Electical Engineerring and Informatics

## Faculty of Electrical Engineering and Informatics — BSc



Ahmed Borchani



Udolisa







Asad Idrees Razak



Eniola Chukwuemeka Mustapha



Giorgi Bestavashvili



Mohamed Rehaoulia



Muneeb Ali



Munkh Orgil Batbileg



Nikola Dordevic



Sahejpal Singh Arneja



Samer Bahri



Samran Samran



Vladislav Galkov



Wali Ullah



Xinyu Qiu



Yuan Gao



Yves-Lucas Haag



**Zhexiong Xue** 



**Prof. Charaf Hassan** Dean, Faculty of Electical Engineerring and Informatics



**Prof. Gábor Horváth** Vice-Dean, Faculty of Electical Engineerring and Informatics

### Faculty of Electrical Engineering and Informatics — MSc



d n n n h n

50

Aray Tokbulatova



Shahbaz Ahmad



Victor Acheme Achegbulu

## Faculty of Electrical Engineering and Informatics





Ahmed Borchani Faculty of Electrical Engineering and Informatics



**Akolisa Olisaeloka Udolisa** Faculty of Electrical Engineering and Informatics



Alghaith Ahmad Faculty of Electrical Engineering and Informatics



Amani Brik Faculty of Electrical Engineering and Informatics



**Alireza Jamshidi** Faculty of Electrical Engineering and Informatics



Aray Tokbulatova Faculty of Electrical Engineering and Informatics



**Asad Idrees Razak** Faculty of Electrical Engineering and Informatics



**Giorgi Bestavashvili** Faculty of Electrical Engineering and Informatics



**Eniola Chukwuemeka Mustapha** Faculty of Electrical Engineering and Informatics



**Mohamed Rehaoulia** Faculty of Electrical Engineering and Informatics



**Muneeb Ali** Faculty of Electrical Engineering and Informatics



**Nikola Dordevic** Faculty of Electrical Engineering and Informatics



Munkh Orgil Batbileg Faculty of Electrical Engineering and Informatics



**Sahejpal Singh Arneja** Faculty of Electrical Engineering and Informatics



Samer Bahri Faculty of Electrical Engineering and Informatics



**Shahbaz Ahmad** Faculty of Electrical Engineering and Informatics



Samran Samran Faculty of Electrical Engineering and Informatics



Victor Acheme Achegbulu Faculty of Electrical Engineering and Informatics



Vlacislav Galkov Faculty of Electrical Engineering and Informatics



**Xinyu Qiu** Faculty of Electrical Engineering and Informatics



Wali Ullah Faculty of Electrical Engineering and Informatics



**Yuan Gao** Faculty of Electrical Engineering and Informatics



**Yves Lucas Haag** Faculty of Electrical Engineering and Informatics



**Zhexiong Xue** Faculty of Electrical Engineering and Informatics





## Faculty of Transportation Engineering and Vehicle Engineering



The Faculty of Transportation Engineering and Vehicle Engineering (founded in 1951) has been training engineers in transportation, vehicle engineering and logistics. There are three basic specifications:

- BSc in Transportation Engineering (only in Hungarian),
- BSc in Vehicle Engineering (only in Hungarian),
- BSc in Logistics Engineering (only in Hungarian),

As the second stage of the linear training courses (BSc), there are four master training courses (MSc):

- Transportation Engineering master specialty (Hungarian and English),
- Vehicle Engineering master specialty (Hungarian and English),
- Logistics Engineering master specialty (Hungarian and English),
- Autonomous Vehicle Control Engineer (only English).

With adequate BSc qualification, certified engineering qualification (MSc) can be obtained in 2 years (4 semesters) at these master training specialities. All the fundamental and complementary education continued by the Faculty is carried out under the rules of the ECTS (European Credit Transfer System).





#### on behalf of the Faculty of Transportation Engineering and Vehicle Engineering



Dear graduates, colleagues, family, and friends,

Congratulations to you all. I would also like to thank all of the staff who have worked tirelessly to help all of you students and have worked exceptionally hard. They are the heart and soul of this University, as they are fully committed to our mission of continuously improving the education level. Your teachers have served as both teachers and colleagues and as mentors and friends in these challenging days.

We are here to award our graduating students' diplomas, which we will do shortly. The basic idea that all of you learnt here is that you should focus on what you are doing and precisely know what you are not knowing. We were committed to providing our students with the best possible education to prepare them for their future careers in transportation or vehicle engineering.

To meet the needs of our students and future employers, the faculty members are constantly thinking about how to improve what they teach. Employability is central to our program, and to equip our students to meet the industry's challenges, we need to provide them with appropriate practical lessons and enhance their understanding through experiential learning. To support these aims, we also need to examine and recreate the knowledge base that informs our teaching, and thus research is increasingly becoming essential to our program.

Finally, I hope you enjoyed your time, learnt a lot, and will be able to use the knowledge that you gathered here wisely.

"The only true wisdom is in knowing you know nothing." — Socrates

Dr. Ádám Török

Vice-Dean for Scientific and International Relations,

Faculty of Transportation Engineering and Vehicle Engineering

#### from Abdallah Amjed Rashed Mohammad



Dear Vice-Rectors, Faculty Deans, Professors, Families, Graduates, and guests in this Ceremony,

I feel honoured to be sharing this special moment with you all and delivering the farewell speech on behalf of every student on our last day of university life.

First of all, I would like to take this opportunity to express my appreciation to all professors in the faculty for the motivation and continuous support throughout our academic journey. Their unconditional support and encouragement have seen us succeed. I am also grateful to the Stipendium Hungaricum Scholarship for giving everyone this great opportunity to make our dreams come true. Thank you BME for welcoming us in Hungary, becoming our second home, providing a high level of education, and making this chapter in our lives a very special and unique experience.

Secondly, congratulations to all graduates on successful completion of the course. We enjoyed the University years, but the time has come to say our goodbyes. I know our journey wasn't always easy, especially while commencing education during the COVID-19 pandemic but here we are, closing this wonderful chapter full of memories and experiences, and excellent education. Our journey does not stop here. In fact, it is just the beginning. Armed with a good foundation and solid knowledge we are entering a new chapter of our lives. I am sure that we are all capable of facing the odds, overcoming difficulties and succeeding in our unique goals.

While we come from different countries and backgrounds, we all share the same aspiration for the future as we enter a new phase of our lives. Some of us will pursue their studies, others will begin their career, some will travel abroad or go back home. Wherever life takes you, reflect on your journey up to this point in time and make sure to be a good human being going forward! Be capable enough to serve the people and your family. Go and show the world what you can do!

Finally, I am very thankful to everyone for giving me an opportunity to grow and achieve in what I set out to do. I have watched my teachers work hard to support and encourage us and found everyone here so eager to help. I have seen ups and downs but believe they have played an important role in making me an independent and confident person. I want to give the credit of my success to this institute, my parents, the Palestinian people, my friends and everyone who made this journey an unforgettable experience for me and everyone.

I have some inspirational lines for you:

"Live as if you were to die tomorrow. Learn as if you were to live forever."

Abdallah Amjed Rashed Mohammad



**Prof. István Varga** Dean, Faculty of Transportation Engineering and Vehicle Engineering



**Dr. Ádám Török** Vice-Dean, Faculty of Transportation Engineering and Vehicle Engineering

Faculty of Transportation Engineering and Vehicle Engineering





1 11 11

Abdallah Amjed Rashed Mohammad



Abdul Rehman Shah Syed



Banu Akhmetova



Harem Omer Abdalla



Youssef Mohammad AlMougharbel

# Faculty of Transportation Engineering and Vehicle Engineering





**Abdallah Amjed Rashed Mohammad** Faculty of Transportation Engineering and Vehicle Engineering



**Abdul Rehman Shah Syed** Faculty of Transportation Engineering and Vehicle Engineering



**Banu Akhmetova** Faculty of Transportation Engineering and Vehicle Engineering



Harem Omer Abdalla Faculty of Transportation Engineering and Vehicle Engineering



**Youssef Mohammad AlMougharbel** Faculty of Transportation Engineering and Vehicle Engineering

## Faculty of Natural Sciences



The Faculty of Natural Sciences, one of the newest faculties at the Budapest University of Technology and Economics, was established in 1998 and now employs about 200 full and part time faculty members. The Faculty provides classes in Physics, Mathematics and Cognitive Science and is designed to meet the needs of its own and other faculties.

Courses are offered on BSc and MSc degree levels. The Faculty provides post-graduate scientific training as well. Currently more than 100 PhD students are pursuing personal programs in different areas of sciences. The Faculty also offers short courses on specific topics of current interest.

The Faculty of Natural Sciences administers its own BSc and MSc programs in Physics, Mathematics, Applied Mathematics and Cognitive Science. A continuing educational program is also offered in Reactor Physics and Reactor Technology. For many years the "Eugene Wigner International Training Course for Reactor Physics Experiments" has also been organized on a yearly basis.

The BSc in Physics program, a traditional curriculum, leads to a BSc degree in 6 semesters. The facilities and scientific-tutorial background of the Institute of Physics and the Institute of Nuclear Techniques offer unique opportunities in areas like low temperature physics, acousto-optics, holography, nuclear techniques or medical physics. A further advantage of our Physics BSc Program is the engineering background provided by the Budapest University of Technology and Economics. From the forth semester students can choose specialized courses in the topic of Advanced mathematics, Advanced physics, Computer programming, Optics, Material science, Nuclear technology, and Medical physics.

In additional 4 semesters an MSc in Physics degree can be earned. This program provides comprehensive knowledge, built upon strong theoretical and experimental bases in four areas of specialization. Students who choose the specialization "Physics" get acquainted with theoretical tools of modern physics and with state of the art experimental methods. In addition to the obligatory courses students can choose specialized professional courses in the topic of Quantum physics, Solid state physics, Statistical physics, Nanotechnology and material science, Optics and photonics, Nuclear technology, and Medical physics. A post-graduate PhD programme in Physics is available in all domains offered in the MSc program.

The BSc in Mathematics program, a traditional curriculum, leads to a BSc degree in 6 semesters. This program is recommended first of all to those who are interested in a deeper understanding of some branches of mathematics and in doing theoretical research and are probably going to continue their studies in a Mathematics or an Applied mathematics MSc program. Moreover, the BSc program is also recommended to students who are eager to apply their knowledge in industry or finance.

In additional 4 semesters an MSc in Mathematics or MSc in Applied Mathematics degree can be earned. A large variety of subjects are offered in the MSc in Mathematics, covering the topics algebra and number theory, analysis, geometry, probability theory and statistics, discrete mathematics, operations research. There is a large flexibility in choosing subjects according to the personal interests of the students.

In the MSc in Applied Mathematics program the students who choose the "Applied Analysis" specialization will meet applications of mathematical analysis in natural sciences, finance and industry. Graduates from the "Operations Research" specialization are able to create models for problems in controlling systems or optimization. Students who specialized in "Financial Mathematics" can analyze financial processes or insurance problems and are able to interpret the results. Graduates from the "Stochastics" specialization can recognize and study random laws in various phenomena. The language of courses of the specializations "Applied Analysis" and "Operation Research" is Hungarian, while the specializations "Financial Mathematics" and "Stochastics" is English.

MSc in Computational and Cognitive Neuroscience program currently available only in Hungarian. The aim of this master program is to train researchers skilled in complex analysis of human cognition and knowledge relying on the methods of science. Students may complete courses in all major domains of cognitive science including cognitive psychology, neuroscience, linguistics and the philosophy of science. Students will be equipped with both theoretical knowledge and practical skills such as statistical analysis and research ethics. Graduates will be able to carry out research in various areas of cognitive science combining theoretical insights and methods of biological (neuroscience, experimental psychology, developmental studies), and formal (mathematics, logic, philosophy of science, linguistics) disciplines. Graduates' competences allow them to undertake doctoral studies, and to work in a variety of applied domains including medicine, biotechnology and education.

The Institute of Nuclear Techniques organises several postgraduate degree programs. The two-semester Nuclear Power Plant Operation program and the four-semester Reactor Technology and the Nuclear Technology Management programs are offered to professionals working in the nuclear industry. The professional subjects include e.g. reactor physics, thermohydraulics, radiation protection, radiochemistry, reactor technology, nuclear safety and laboratory experiments.

The Institute of Nuclear Techniques also organises – or participates actively in the organisation of – several international courses as well. Worth mentioning are the HUVINETT (Hungarian Vietnamese Nuclear Engineering Train the Trainers) courses, where more than 150 Vietnamese educational professionals attended in the previous years. In addition, the participants of the training courses offered by the international EERRI consortium (Eastern European Research Reactor Initiative) perform experiments in the Training Reactor of BME. In this consortium institutes of 5 Eastern European countries cooperate, with the organisatory and financial aid of the International Atomic Energy Agency (IAEA).



#### on behalf of the Faculty of Natural Sciences



Dear Graduating Students, Ladies and Gentlemen,

At this short ceremony, we hand you your well-deserved diploma. You certainly keep it in mind that there has been a long, persistent work behind it. It took you a lot of effort, hard work, completing homeworks, tests, project assignments, and exams, writing a thesis. You gained a wealth of new knowledge in the meantime and you got enriched with a number of new skills. Your success today involves, of course, the dedicated work of your mentors and professors. In the background, your parents, relatives and friends were always there helping you through the difficulties. A special thank should go to them now.

You are now starting your career in a world that is changing at an amazing pace. It is full of challenges for the mankind including how to provide sustainable development in several areas, how to found a circular economy, how to fight the pandemic and climate change and so on.

When studying Mathematics or Physics you got used to an abstract way of thinking and acquired complex problem-solving skills. This will help you in a wide range of fields – sometimes seemingly far from Mathematics and Physics – to have a view of certain problems that focused experts of the field might not have. While this is a chance, it is also a responsibility to look for the best solution, to keep track of all possible outcomes and to promote a logical way of thinking wherever you are. Please remember that the knowledge and the skills you acquired at the BME should always serve to build a better world around you. We hope that you knowledge will help you contribute to the above-mentioned global challenges.

We sincerely hope that you have attained a positive attitude toward Hungary, our food and customs and that you are holding a lot of good memories. We encourage that you retain the contact with your former professors, we are eager to profit from any professional contacts in the future.

On behalf of the staff of the Faculty of Natural Sciences, I congratulate you on your graduation. We are all glad for your beautiful success. We wish you good luck, recognition and much joy for your further work and studies.

*Prof. Attila Aszódi* Dean Faculty of Natural Sciences

96

#### from Sadaf Arjmandabasi



Honourable Rector, Deans, all academic and supporting staff and the class of 2023,

I am delighted for the opportunity to share a few words on behalf of the 2023 class. I would like to thank Stipendium Hungaricum to have provided us with such an opportunity to learn and explore a new culture and environment. My gratitude to all my professors for which they have tried their best to sustain an acceptable level of education during this unforeseen situation of pandemic. Also, I send my appreciation to all the good people who helped me through this huge change in my life considering the cultural differences and language barrier.

Two and a half years is past since the beginning of my studies at BME. During which I had the chance to meet kind, dedicated, knowledgeable, and of course understanding professors and academic members to educate me with patience and due diligence. Loving Hungarians who understood the obstacles that newcomers might face and made our life much easier. Certainly, this journey was a unique and memorable one which I am going to remember and spread all around the world. Not only it changed my life, it also taught me so many lessons besides science.

I am sincerely honoured to be a part of an amazing scientific group and gain a lot of experience and knowledge under the leadership of Prof. András Halbritter and supervision of Dr. László Pósa for their support and guidance.

Studying at Budapest University of Technology and Economics has not been easy but for sure it has opened doors towards a brighter future. I am sure that along this road we all stumbled but here we are at the finishing line, wiser and more experienced. Although, I am happy to be graduating, I am sad to have to leave a wonderful group of people with whom my master studies have been much enjoyed.

I would love to send my appreciation to my wonderful mother and father with their unlimited support and blessings even from 3,762.3 km away. I have been fortunate to have my incredible sister, Talaye walking shoulder to shoulder with me and making this journey joyous and brightened my world with her presence.

Finally, congratulations to the class of 2023 on graduating from one of the most interesting universities. Well Done! Hope you all have reached the clarity to pursue what your heart seeks the most.

Sadaf Arjmandabasi



**Prof. Attila Aszódi** Dean, Faculty of Natural Sciences



**Dr. Ferenc Simon** Vice-Dean, Faculty of Natural Sciences

## Faculty of Natural Sciences





Myratberdi Jepbarov

A language

-



Sadaf Arjmandabasi

101.30:

## Faculty of Natural Sciences





Myratberdi Jepbarov Faculty of Natural Sciences



Sadaf Arjmandabasi Faculty of Natural Sciences



## Faculty of Economic and Social Sciences



Based on the long tradition of providing education in the fields of economics, management, and social sciences, in 1998 the Budapest University of Technology and Economics established a new faculty, the 'Faculty of Economic and Social Sciences' employing 300 instructors and researchers. Parallel to the traditional five-year university training, the two-cycle system of the Bologna model (for BSc/BA and MSc/MA degrees) was introduced in 2006. The accredited full-time degree programmes in Economics, Engineering Management, Communication, and Media Studies, Teachers Training in Vocational Fields are carried out according to the latest European standards. Besides its training programmes, the Faculty co-operates closely with all the engineering faculties of the University providing courses in management, economics, social sciences, languages, and physical education.

The Faculty of Economic and Social Sciences pays special attention to the integration of theoretical and practical knowledge in its curricula and the Faculty has established strong professional relationships with the participants of various economic fields (profit and non-profit oriented institutions, banks, etc).

#### **Education and Research Activities**

The total number of participants of different graduate-, postgraduate and distance learning forms of training launched by the faculty is about 4500. The number of full-time students of basic training of the faculty itself has been increasing.

BME GTK offers several Master's programmes (Master in Management and Leadership, Master in Finance, Master in Regional and Environmental Economics, Master in Engineering Management (strating from 2023/24)) as well as a Business and Management Ph.D programme in English for both inernational and Hungarian students. Our programmes focus on interdisciplinary themes, as well as on economic, technical and social innovation to equip our students with the most relevant and up-to-date knowledge and skills to tackle the rapidly changing business and social environment of the coming decades.

One of our outstanding international and disciplinary broadening programme is the Intensive Seminar Program, which have been offered since 1996 to our master students. During the one-week-long programme, international and local experts are invited to deliver thought-provoking lectures about key challenges of leaders in different industries and business functions.

#### Languages, translation and interpreting

The Centre for Modern Languages offers a wide range of opportunities for the development of language skills. French, German, Italian, Spanish and Hungarian as a foreign language are taught at levels from A1 to C1. Courses are also offered in Languages for Specific Purposes (LSP), such as Professional Writing, English for University Studies, Business English, Deutsch im Unternehmen, etc. The Centre is also hailed as one of the leading translator and interpreting centers. Training in translation and interpreting is offered after BA or BSc level, in both full-time, part-time and distance learning, in five language pair combinations. Students can also sit for accredited language exams from B1 to C1 level, at the BME Language Examination Centre.

#### **Physical Education**

The University offers a wide range of curricular and extra-curricular forms of physical education. The Department of Physical Education co-operates with the University Sports Club and other student sports organizations.



#### on behalf of the Faculty of Economic and Social Sciences



Dear Graduating Students, Dear Young Colleagues,

First of all, on behalf of all members of the Faculty of Economic and Social Sciences (GTK), I would like to congratulate you on your successful graduation.

The GTK is one of the youngest faculties of the University although its history dates back to the early years of the last century. By establishing the first Faculty of Economic Sciences in 1934 in the country, the Hungarian Royal Palatine Joseph University of Technology and Economics, the predecessor of BME, has pioneered social sciences education in Hungary. Apart from providing degrees in economics and business studies, the Faculty also played a role in teaching students of the engineering faculties of the university.

The Faculty provides an educational experience that fits into the interdisciplinary environment defined by the engineering faculties at the university. At present, the Faculty has more than 3000 students studying in 6 undergraduate (BA/ BSc), 11 graduate (MA/MSc), and one doctoral programme (Ph.D.) taught by more than 100 professors in the fields of economic and social sciences. Three of our master's degree programmes (Finance, Management and Leadership, Regional and Environmental Economics) and the Ph.D. programme belong to the English language education portfolio of the Faculty. We are glad to announce that these opportunities can further develop with the Master programme in Engineering and Management starting in the 2023-2024 academic year.

Building upon the rich heritage of our Faculty and BME, our mission is to contribute to the solution of the societal challenges of the 21st century by facilitating cross-disciplinary learning and collaboration across the engineering, natural science, and social science domains represented by the eight faculties of BME. The close cooperation with engineering and natural science faculties helps to foster the synergies between technology, economic and social sciences and motivate the integration of modern technologies into the curriculum. To enhance excellence in management education and development we are members of the European Foundation for Management Development (EFMD), the Global Association of Risk Professionals (GRASP FRM), and the CFA Institute.

Our programmes focus on technical and social innovation to equip our students with the most relevant and up-to-date knowledge and skills to tackle the rapidly changing business and social environment of the coming decades. I hope that due to your knowledge and skills you can participate in the transformation and use your skills to find the solutions for the recent and upcoming challenges. I do not only wish you success in your professional life but also an open mind to understand the complexity of the world and perseverance to make it better.

Dr. Mária Szalmáné Csete

Associate Professor, Vice-Dean for International Affairs

Faculty of Economic and Social Sciences

from

# **Chenhe Ge**

Honorable Rector, Vice-Rectors, Dean, Vice-Deans, Directors, Professors, Families, Friends, and the class of 2023.

It is a great honor for me to express my congratulations to the class of 2023 on behalf of my Faculty, the Faculty of Economic and Social Sciences. I would like to take this chance to express my appreciation to all professors, teaching assistants, and all administrators who guided us along the journey. I feel so lucky to be one of the students at Budapest University of Technology and Economics!

Dear Graduates, I want to give a big congratulations to everyone, including myself, we finally did it! The world that we live in is filled with dangers, COVID-19, global warming, failed exams, etc. Despite all the odds, we still manage to graduate, so let us give us a big round of applause! Charles Dickens said: "It was the best of time, it was the worst of time, it was the age of wisdom, it was the age of foolishness." But no matter how, today we will be done with our career as a student and it is the time for us to take the world, to find and pursue our passions, to quote-unquote leave a legacy!

Tomorrow, all of us will welcome a new life. No matter what the road ahead is, it is waiting for us to leave footprints. It may not be perfect, but it is the real life. Please always remember that the opportunity to achieve greatness is always within our grasp. I hope that you will remain positive, optimistic, humble, and grateful for the rest of your life, to leave those with whom you cross paths with little more happiness and hope.

Finally, I would like to say congratulations again and the year and a half I spent with the class 2023 at BME was splendid and unforgettable. I wish you all the very, very, very best from the bottom of my heart!

Chenhe Ge



**Prof. Tamás Koltai** Dean, Faculty of Economic and Social Sciences



Dr. Mária Szalmáné Osete Vice-Dean, Faculty of Economic and Social Sciences

## Faculty of Economic and Social Sciences




Ali Yasin Ali Asiri



Chenhe Ge



Juan Daniel Sanchez Guizar



Kanan Hasanov



Khudayar Latifov



Matlab Gurbanli

# Faculty of Economic and Social Sciences





Ali Yasin Ali Asiri Faculty of Economic and Social Sciences



**Chenhe Ge** Faculty of Economic and Social Sciences



**Juan Daniel Sanchez Guizar** Faculty of Economic and Social Sciences



Kanan Hasanov Faculty of Economic and Social Sciences



**Khudayar Latifov** Faculty of Economic and Social Sciences



Matlab Gurbanli Faculty of Economic and Social Sciences

Graduates of the Budapest University of Technology and Economics



#### Faculty of Civil Engineering

Alvin Kamau Karuga Ait Lamine Youssef Ahmad Dayoub Alaa Abdulwahed Ali Qasem Saif Amer Khaled Mohammad Elmanaseer Abdul Muneeb Amr Khaled Mohamed Mohamed Owais Ari Akram Abbas Belal Alahmad Bidali Jedi Kisia Carites Rodrigues Miranda B Alves Dan Brian Munene Daria Golitsyna Darshan Sudarshnaiah Setty Egor Stolpovskii Elvis Angwenyi Onwonga Fadi Ftouhi Fatimah Nana Abdulrahim Festo Kassimu Lubiri Hesham Salem Al-Abd Al-Shabibi Irvin Marcelo Quillupangui Caiza Jackson Musyoka Kioko Juma Saleh Ali Khan Naveed Maiah Basel Jamal Issa Maria Ulfah Marwan Masa Rados Mohamed Ahmed Osman Ahmed Abdelaziz Muhammad Armaya'u Ramlah Hamed Fouad Saeed Sabrina Simöes Leite De Caldas Sakher Mahmoud Nazzal Alkousheh Shahin Reham Shahzada Junaid Silvia Dayana Astudillo Riera Steven Mungai Thuku Yazji Osama

#### Faculty of Mechanical Engineering

Albará Rami Jamil Ghazal Alvssa Marie Lacson Misolas Daniel Reuben Michael Gábor Ábel Edelmayer Hamza Samer Awni AlSilawi Ishfaq Ahmad Bhat Mario Magdy Tadros Aziz Tadros Mohamed Badr Gomaa Abdelkhalik Mohammadreza Omrani Mohd Basit Wani Muhammad Saad Aziz Sevmur Mahammadov Steven Nashwan Hazim Algis Butrus Taimour Moh'd Abdel Karim Aljanadieh Umair Rashid Zahraa Ali Jawad Almukhtar

#### Faculty of Architecture

Ann Samy Samour Hanxiao Li Iaroslava Krasikova Marina Possatti de Oliveira Oleksandra Vakariuk Siavash Dadpour

### Faculty of Chemical Technology and Biotechnology

Adél Piedl Akan Mustashev Almat Apseit Ayan Karimli Bled Dyla Eunwhee Park Guldana Alimbetova Ilies Djaffar **Jiangjiang Wang** Leonardo Gaspar Rodrigues Mik Liner Lauschner Miranda Nazrin Afandiyeva Soogeun An Thuy Anh Do XinJie Wang Zekun Liu

### Faculty of Electrical Engineering

and Informatics Ahmed Borchani Aiya Makhmudova Akolisa Olisaeloka Udolisa Alen Assemov Alghaith Ahmad Alireza Jamshidi Amani Brik Aray Tokbulatova Asad Idrees Razak Ashwin Varma Eniola Chukwuemeka Mustapha Giorgi Bestavashvili Hangze Wu Hao Ding Kang Li Khaleel Mohammad Khaleel Almousa Liubov Rukhlina Minh Hoang Trinh Mohamed Rehaoulia Muneeb Ali Munkh-Orgil Batbileg Nikola Dordevic Sahejpal Singh Arneja Samer Bahri Samran Samran Shahbaz Ahmad Victor Acheme Achegbulu Vladislav Galkov Wali Ullah Xinyu Qiu Yuan Gao **Yves Lucas Haag Zhexiong Xue** 

## Faculty of Transportation Engineering and Vehicle Engineering

Abdallah Amjed Rashed Mohammad Abdul Rehman Shah Syed Anoosha Banu Akhmetova Bauyrzhan Saparbek Harem Omer Abdalla Youssef AlMougharbel

#### Faculty of Natural Sciences

Myratberdi Jepbarov Sadaf Arjmandabasi

#### Faculty of Economic and Social Sciences

Ali Yasin Ali Asiri Ana Gobechia Chenhe Ge Dóra Gyakovácz Eszter Kiss Eszter Valéria Krémer Juan Daniel Sanchez Guizar Kanan Hasanov Kata Somogyi Khudayar Latifov Kristóf Kovács Maryam Taghiyeva Matlab Gurbanli Noor Ul Wara















# **Opening ceremony**

















## Student life at BME



"As international students we came as strangers and now we leave as friends pawns in the first year, ministers in the second year and campus kings in our Final year." - Alvin Kamau Karuga





"The last day of exam is always special. It always feels so good to finish the exam and start the vacation. Having all friends, who are supporting me through all the difficult times, and graduating together will create a special memory that I will never forget all my life." - Mohamed Badr Gomaa Abdelkhalik



"Budapest University of Technology and Economics remains to be my best learning institution in Hungary, it has the best lecturers who have always been helping, guiding and advising me during my study period. They really helped me learn skills ranging from critical decision making to problem solving techniques not forgetting managerial skills as well. " - Nelson Ndege Orang'o





"Hungarian language class it was my favorite class, i really enjoyed. I am glad that I was a part of this program and this university." - Ilies Djaffar



"The shared memories I have with my best friends whilst in class and around the university campus is one I will always remember. Another memory would be the interactions with my professors and all the knowledge I gained because of them. I will be grateful forever. " - Albara' Rami Jamil Ghazal





"Yes, I have loads of memories throughout my years at BME. I have very fond memories of being a student to some of the great teachers and mentors. I had also the opportunity to be a Lab Instructor and instruct many young individuals and future graduates. I with couple of other students founded very first English Student Club called "GDSC BME" and carried out some incredible events. I also spent one year as a HOOK student mentor. Hence to conclude my time at BME has nothing but one incredible period." - Asad Idrees Razak



"My time at Budapest University will always be remembered very fondly. I loved being a student and continue to be a student of life! The very institution that has shaped my life and my perspective throughout my memorable journey as an international student. " - Ishfaq Ahmad Bhat



# **University life at BME**















### Budapest University of Technology and Economics













































# **Our life in Hungary**



"I am greatful for having the opportunity to study at the best engineering university in Hungary, besides a few challenges, I gained a lot of knowledge, had a lot of fun and made a lot of friends, and I will cherish that for life." - Linea Dute Mwaetako





"At BME, I was able to surround myself with wonderful people, further my knowledge, and develop into the person I've always wanted to be. You have my sincere gratitude!" - Batbileg Munkh-Orgil



"As a hungarian student I loved to being together with international students and learn about their cultures." - Adél Piedl





"One of the best faculties i have ever studied. It provided me with alot of exposure and knowledge. I would like to thank my professors for inculcating in us this much knowledge and providing their precious time whenever needed." - Noor Ul Wara



"Meeting and getting to know people from different countries and cultural backgrounds. Making friends for life thanks to the peaks and troughs of BME life. Taking part in a variety of laboratory practices and experiments that I could only experience at the facilities of BME." - Gábor Ábel Edelmayer





"Taking breaks and breathing some fresh air while studying in the evening at building E. Working on establishing Sollertia university club, to include Hungarian and International students and work on our skills."

- Ahmed Borchani



"There is a lot to remember regarding my studies at BME, I remember the time we spent together with friends playing football most of the weekends just to refresh our minds, the hard time that we had to spend most of the time in the library just studying but at the end of the day, it is worth whatever happened to me at BME." - Ainur Kairlapova







"My time at Budapest University will always be remembered very fondly especially the last semester when we meet my faculty in person. There were times when it seems impossible to continue but institute has taught me one thing never give up and nor to late." - Ishfaq Ahamd Bhat



"Everything was a big experience in my life."

- Silvia Dayana Astudillo Riera







"It is one of the greatest experiences i had. I liked a lot the cultural mix and different background for each one of us in the class. " - Youssef Mohammad AlMougharbel



"My studies here at BME has been a really interesting experience. I have acquired new and competitive skills that has improved my relevance in my chosen career. I would recommend studying at BME as a worthy choice for any international student! " - Victor Acheme Achegbulu





"This graduation milestone at BME was achieved through a series of tremendous hard-work, determination and ultimate sacrifice! Cheers to all graduates of BME, a success from this great institution is an absolute guarantee that you can make it anywhere else in your future lives!" - Jackson Musyoka Kioko



"BME is my second home and the people there are my second Family, I will never forget how home is like and I will always remember this journey of my life in Budapest generally and in BME particularly. Thank you great people for this opportunity." - Abdallah Amjed Rashed Mohammad







### Budapest University of Technology and Economics



















### from the BME Staff!



**Department of International Relations:** Bíbor Bánfiné Klekner, Dóra Pivarcsiné Fekete, Rita Marositsné Moldvay, Médea Lívia Terczy, Ádám Bajusz, Diána Gali



**Department of International Academic Affairs:** Sarolta Kóbori, Anna Bíró, Renáta Daru-Dudás, László Gergely Vígh



International Mentor Team: Georgina Garai, Dávid Pirityi



**Faculty International Coordinators:** Katalin Kovács (VIK), Barbara Kissné Farkas (VIK), Fanni Szondy (VIK), Gyöngyi Tamás (ÉPK), Adrienn Török (GPK), Rita Nemes (ÉMK), Noémi Girst (GTK), Olivér Fenyvesi (ÉMK), Ágnes Szabóné Kismarton (ÉMK), Eszter Gerhátné Udvary (VIK), Dr. Zoltán Hell (VBK)



**Central Academic Office:** Borbála Ruszin, Zsanett Sztraka, Nikolett Keres, Éva Buza, Johanna Misják, Nóra Gáspár, Ágnes Csonka, Viktória Ait-Vaskó, Rita Ruszin, László Kunsági





18

Repty July

Ninyi Jossel usoa

Getchname Gydravite

Throughout its 241 year existence, the Budapest University of Technology and Economics has been an influential force in Central European higher education. Since its foundation as the Institutum Geometricum in 1782, the university has welcomed domestic and foreign students alike. It is one of the most prestigious institutions of engineering education in the region, and the flagship university for the training of engineers and social scientists in Hungary. Several world famous scientists, including Nobel Prize laureates and many household names, call the Budapest University of Technology and Economics their alma mater. The diploma certificates issued by the university are well known and respected across the globe.

Presently, the university consists of eight faculties, covering six fields of engineering sciences, as well as natural sciences and social sciences. As always, the aim of the university remains to provide excellent standards of education to train the experts of the future.



BME Graduates' Yearbook Academic Year 2022-2023 · Volume 1

м Ú Е G Y Е Т Е М 1 7 8 2