# BME Graduates' Yearbook

Academic Year 2024-2025

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 2024-2025

Volume 1



#### BME Graduates' Yearbook Academic Year 2024-2025 · Volume 1

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## Contents

| Farewell message from the Rector   | 4   |
|--|-----|
| Farewell message from the Vice-Rector for International Relations  | 6   |
| Farewell message from Founder and ex-CEO of Tresorit, angel investor, BME Alumnus from Faculty of Electrical Engineering and Informatics | 8   |
| Farewell message from the Director of the Department of Academic Affairs<br>for Education in Foreign Languages                           | 10  |
| Farewell message from the Chairman of the Students' Union (EHK)  | 12  |
| Farewell message from the Lead Mentor of the IMT   | 13  |
| Farewell message from the Graduated Student  | 14  |
| About the Budapest University of Technology and Economics  | 16  |
| Graduates of the Budapest University of Technology and Economics   | 19  |
| Faculty of Civil Engineering   | 20  |
| Faculty of Mechanical Engineering  | 36  |
| Faculty of Architecture  | 48  |
| Faculty of Chemical Technology and Biotechnology   | 58  |
| Faculty of Electrical Engineering and Informatics  | 66  |
| Faculty of Transportation Engineering and Vehicle Engineering  | 84  |
| Faculty of Natural Sciences  | 92  |
| Faculty of Economic and Social Sciences  | 100 |
| Graduates of the Budapest University of Technology and Economics   | 112 |
| Opening Ceremony   | 116 |
| Student life at BME  | 118 |
| University life at BME   | 126 |
| Our life in Hungary  | 130 |
| Good-bye from the BME Staff!   | 136 |



### from the Rector

Dear Graduate Students,

I would like to warmly congratulate you on receiving your degree from Budapest University of Technology and Economics. This degree will serve as an excellent passport and letter of recommendation for you, whether you plan to pursue an academic career or continue your path as an innovator in your chosen profession.

As I greet you, I am reminded of when I first arrived in Hungary 38 years ago, in a world that was completely unknown to me, without a suitcase - because it was lost on my arrival. Even without a suitcase and despite the adventurous start, I still remember coming here to study, learn, make friends, experience a new and different culture, and obtain a degree in engineering.

I received my degree in electrical engineering in 1992, in the very same hall where we are greeting you now. After graduation, I continued my doctoral studies and started working as a research fellow at my alma mater. Now, as the Rector of BME, I am responsible for educating over 20,.000 students.

You have every right to be proud of graduating from BME, a **university that gave the world four Nobel Prize laureates**. Recently, Ferenc Krausz, an alumnus of this esteemed institution, and Katalin Karikó, the Honorary John von Neumann Professor at BME, were awarded the Nobel Prize.

With the solid foundation in science education that we inherited, we provide competitive knowledge and impart our values of quality and dedication. Since 1984, our University has continuously offered education in English. Students from every continent and almost every country can benefit from the degrees they have proudly obtained at BME.

You have grown to love engineering, natural sciences, business studies, and, hopefully, Hungary in general. You've made friends, gained experience in Central and Eastern Europe and become open to a continuously changing and globalized world.

As **alumni of Budapest University of Technology and Economics**, the knowledge and skills you have acquired will give you an excellent foundation for your future professional career.

Engineers, innovators, and economic specialists frame the economy of any competitive and stable country. Remember this when you return home and make sure to invest the knowledge you have acquired here both in your own country and wherever life takes you.

**Be our ambassadors**, keep your interest in the new technologies, and don't shy away from challenges. Always thank your parents, relatives, and friends for their support and encouragement throughout your education.

To conclude my remarks, let me return to the suitcase analogy. What did BME put in your suitcase? I hope the answer includes collaboration - your ability to work together; diversity - your ability to bridge different cultures; and inclusion - an extensive network of contacts.

Along with all of the above and with a suitcase full of collective memories and smiles, you will undoubtedly prove that you have been a proud citizen of BME and deservedly so.

> Prof. Hassan Charaf Rector



### from the Vice-Rector for International Relations

![](_page_7_Picture_3.jpeg)

Ladies and Gentlemen, Esteemed Faculty, Proud Families, and most importantly, Dear Graduates,

Today, we gather to celebrate not just an academic milestone, but a moment of transformation. You, our graduates, stand at the threshold of possibility, ready to step into the world armed with knowledge, resilience, and the drive to innovate. On behalf of the Budapest University of Technology and Economics, I sincerely congratulate you for completing your studies and receiving your well-deserved diplomas very shortly. Allow me to share with you some thoughts which came to my mind using the spirit of this place where you are sitting right now.

Here in the K Building Aula, you are surrounded by symbols of excellence—I am pretty sure you have walked through here several times during your studies and I just wonder if you ever looked around and stood for moment to examine the sculptures that honor some of the greatest minds who paved the way for progress, many of whom have left a mark not only on Hungary but on the world.

If you haven 't done it, let us do it now! Please look around...

Among these figures is the illustrious Bánki Donát, a name synonymous with ingenuity. Known as the co-inventor of the carburetor, Bánki revolutionized the internal combustion engine, shaping modern transportation and engineering. His work epitomizes the power of interdisciplinary thinking—combining physics, mechanics, and innovation to create something that transformed industries globally. For you, graduates, the lesson is clear: never underestimate the impact of blending ideas from diverse fields. The solutions to the world's most pressing challenges often lie at the intersection of disciplines.

Another luminary immortalized here is Zipernowsky Károly, who alongside his colleagues Miksa Déri and Ottó Bláthy, co-developed the transformer. This groundbreaking invention made the widespread use of electricity possible, bringing light to homes, industries, and cities worldwide. Zipernowsky's work reminds us that collaboration is often the key to innovation. As you leave BME, remember that the power of collective effort can amplify individual brilliance and lead to groundbreaking achievements.

Then there is Dr. Stoczek József, whose dedication to mathematics and education cemented his legacy as a pioneer in shaping technical education in Hungary. As the first Rector of our institution, he laid the foundation for the rigorous academic standards we uphold today. His life's work speaks to the impor-

tance of mentorship and nurturing future generations of thinkers and doers. Graduates, as you forge your paths, take with you the commitment to inspire and uplift others, just as Dr. Stoczek did.

Let us not forget Steindl Imre, the architectural genius behind the Hungarian Parliament building. His work is a testament to the fusion of artistry and engineering. It stands as a reminder that science and creativity are not opposites but partners in achieving greatness. As you move forward, dare to think creatively and embrace beauty in the pursuit of functionality.

Each sculpture in this hall is not just a tribute but a lesson—a silent mentor imparting wisdom through their enduring achievements. These figures remind us that greatness is not achieved overnight. It is the result of relentless curiosity, hard work, and the courage to challenge conventional thinking. They, too, stood where you stand now, filled with hope and uncertainty, before embarking on journeys that would define them.

As graduates of BME, you inherit their legacy. You are now part of a lineage that includes inventors, architects, educators, and pioneers. The knowledge and skills you have acquired here have prepared you to confront challenges that we cannot yet imagine. Whether you choose to revolutionize technology, lead groundbreaking research, or inspire the next generation, remember that your potential is boundless.

But with great potential comes great responsibility. We live in a world that urgently needs your ideas, your leadership, and your dedication. Climate change, energy sustainability, technological ethics, and global health challenges—these are but a few of the pressing issues awaiting innovative solutions. As you step into this complex world, draw strength from the examples of those honored in this Aula. Let their courage to dream, their resilience in the face of failure, and their unwavering pursuit of excellence guide your way.

In closing, I urge you to carry with you the spirit of this institution and the lessons imparted by these icons of science and art. Be curious. Be collaborative. Be bold. The world needs engineers, scientists, managers, financial experts, who can not only solve problems but also envision possibilities, leaders who value both precision and compassion, and innovators who are unafraid to leave their mark.

Congratulations, and think about how quickly the time flew by since you have entered BME – unfortunately it will not slow down, just the opposite. This moment is solemn, and we celebrate you and all my colleagues at BME who made this possible. Nevertheless, this moment, as any other moment, mercilessly will pass.

As we honor your achievement today, we embrace you as our alumni tomorrow and look ahead with anticipation and determination. Where you go and what you do, will not only elevate your careers but will also uphold the reputation and stature of this instituition, which is your alma mater from now on.

Congratulations, graduates, and may your futures be filled with continued success and fulfillment.

Prof. András Nemeslaki Vice-Rector for International Relations

from

Founder and ex-CEO of Tresorit, angel investor, BME Alumnus from Faculty of Electrical Engineering and Informatics

![](_page_9_Picture_4.jpeg)

Congratulations!

BME is not easy. You did it.

I remember when I got my master's here, in this very same hall. It was a relief to finally get through all of it. I mean, I enjoyed most part of it, and I honestly miss it a bit. Especially, the nights when friends from other universities called me out, and I had to say no to stay with my books or computer programming my homework through the weekend— but it was all over.

Next to relief, I also felt pride. I was proud of myself. I made it. Before I got to BME, I thought I was a very clever person. Here, I met people who were even more clever. Here I met geniuses in great number, brightness I could never imagine of.

And I saw students, much more clever than I am, failing. Dropping out. Leaving BME forever. I felt proud because compared to them, I did not give up.

You can be proud of yourself because you made it. Be proud because you did not give up, you did not choose the simpler path. There are lot of ways to describe BME, but I am pretty sure you would not describe it as simple. But you knew it when you chose this university—it is hard.

Here, you learned about overseeing the financials of a multinational, coding the next superintelligence, designing an airplane, or running a nuclear reactor. None of these are meant to be easy. Humanity wants to go with rockets to conquer other planets. Today is the 55th year, 7th month, and 4th day anniversary of the moon landing... (what a round number), on this special day we look at Mars. Your knowledge is needed in the next chapter of humanity.

Kennedy's speech is still true today, still true for you: *"We choose to go to the moon in this decade and do the other things not because they are easy, but because they are hard."* You chose BME not because it is easy, but because it is hard. You wanted to take on this challenge to stand out from the crowd and achieve something.

You did it.

I remember when I received my master's here, in this hall 11 years ago. I was standing on this very same stage, making a speech like now, as a good student of that vintage. 2 years before that, with others I have founded a cloud-cryptography company from my Bachelor thesis. I created a company next to the university, and 2 years after my BSc, when I finished my master's and standing here, I had roughly 40 employees. Most of them were students like myself. Most of them were sitting in the first row, as students getting excellent with highest honors degrees.

I created a successful international software company, not just because of what I learned here. That is part of it. My company because very successful, because of the team I had. The bright student from that first row, and more. Without that team, I could've not made it. BME is more than just learning a lot and skipping parties during weekends (and weekdays, of course). It is about the network, the ambition, and the drive you get from others who are attending or have attended here.

You will not oversee the financials of a multinational or run a nuclear reactor alone. You will work in a team. And BME gave you a great network of bright people—use it to build your own team. Look around. Look at the graduate sitting right next to you. Greet each other. Network with each other. Congratulate each other. Because together, you will build the next chapter of humanity.

Lám István

Founder and ex-CEO of Tresorit, angel investor, BME Alumnus from Faculty of Electrical Engineering and Informatics

![](_page_10_Picture_6.jpeg)

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

![](_page_11_Picture_3.jpeg)

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

![](_page_12_Picture_9.jpeg)

### from the Chairman of the Students' Union (EHK)

![](_page_13_Picture_3.jpeg)

Dear Graduates,

Today is a day of celebration, reflection, and gratitude. On behalf of the Students' Union of the Budapest University of Technology and Economics, it's my absolute honor to stand here today and congratulate you on reaching this extraordinary milestone in your lives.

Think back to your first semester. Remember how terrifying everything felt? You probably got lost in Building K at least once, panicked over your first exam, or wondered if you'd accidentally enrolled in a marathon instead of university. Let's be honest: there were times when it felt impossible. Whether it was tackling that seemingly unsolvable problem set, staring at an endless to-do list, or pulling all-nighters just to make it to a deadline, we've all been there. But look at you now—you did it. And yet, here you are, standing at the finish line.

But today isn't just about looking back—it's about looking forward. You've earned a degree from BME, and that's a pretty big deal. You're now part of an alumni network full of innovators, problem-solvers, and world-changers. No pressure, right? But seriously, the skills you've gained here—resilience, creativity, and maybe even how to function on zero sleep—will take you further than you can imagine.

Your time here at BME was not just about acquiring knowledge. It was about innovation, collaboration, and personal growth. You've not only mastered your fields of study but also contributed to the vibrant and dynamic community that makes BME such a special place. Whether it was through research, student organizations, or simply the bonds you built with your peers, you have left your mark on this university.

As you leave today, don't forget the people who've been by your side. The friends who struggled with you, laughed with you, and helped you survive those moments when quitting seemed easier than finishing. These are the friendships that last a lifetime—don't let them fade.

And finally, a word of advice: stay curious, stay bold, and don't be afraid to fail. As Einstein said: *"Life is like riding a bicycle. To keep your balance, you must keep moving."* 

Congratulations once again, and may your future be filled with success, innovation, and boundless opportunities.

### from the Lead Mentor of the IMT

![](_page_14_Picture_3.jpeg)

Dear BME Leaders, Dear Ladies and Gentlemen, and most importantly, Dear Graduates,

We would like to greet you on behalf of the International Mentor Team.

We met a lot of you on your very first day in Hungary, at the airport, where some of you might have felt lost, lonely or even frightened so far away from home. We did our best to support you, and we hope your journey at BME and in Hungary has been a positive and memorable experience.

Looking back, we cherish the moments we shared with you, the international students of BME in the past few years. These experiences would not have been possible without your active participation and enthusiasm! It was so good to see you every month on some past time activities. We also had larger events, like the international balls, where we could see the festive outfits of a lot of different cultures.

During the International Weeks, we celebrated the diversity of BME by showcasing the art, music, and culinary traditions of different nations. The International Dinners allowed us to savor some of your finest dishes, creating unforgettable moments of cultural exchange and enjoyment. These events brought us immense joy, and we hope they were equally meaningful for you.

We sincerely hope, this is not farewell, only goodbye, as you will always be welcome to participate in our events in the future.

Lastly, we would like to congratulate you all for this great achievment. We hope, you will always think back with good memories to our University.

Thank you.

Hunor Veress

Lead Mentor BME International Mentor Team

### from Abdul-Jalal Jarimi Umar

![](_page_15_Picture_3.jpeg)

Honourable Rector of BME, Deans of faculty, BME Professors, Graduating students, Ladies and Gentlemen,

Today marks a moment of celebration, reflection, and gratitude. As I stand here, I can't help but think back to our very first days at BME; stepping into a new world filled with excitement, uncertainty, and anticipation. Like many of us, I remember wandering through the maze-like hallways of Building K, trying to find my classroom. I got lost more times than I care to admit, but in those moments, I discovered something even more valuable, the kindness and support of my fellow students. That sense of community has stayed with us throughout our time here, reminding us that we are never alone on this journey.

Walking through Building K over the years, we have been surrounded by the legacy of brilliant minds. The sculpture of Albert Einstein stands as a tribute to curiosity and perseverance, reminding us that the pursuit of knowledge knows no boundaries. Alongside him, the hall honours Hungarian pioneers like Donát Bánki, whose invention of the carburettor transformed engineering. These figures serve as a powerful reminder that innovation is born from courage and a relentless pursuit of ideas; values we have all embraced during our time at BME.

Our success would not have been possible without the dedication of our professors. Their unwavering guidance, patience, and mentorship have shaped us into the individuals we are today. They challenged us to push our limits, encouraged us to think critically, and inspired us to achieve excellence. For this, we are truly grateful.

Equally important are the families who stood by us, even from miles away. Though separated by distance, their love, encouragement, and sacrifices have been the pillars of our strength. Whether through a late-night call or a simple message of support, they reminded us that no matter where we are, we are never too far from home.

A special thanks must also go to the BME International Mentor Team (IMT). Moving to a new country, adapting to a different culture, and finding our place in a foreign environment was not always easy. But thanks to IMT, we were welcomed into a community that made Budapest feel like home. Their support, guidance, and friendship have been invaluable in helping us navigate this journey.

We must also express our sincere appreciation to the Stipendium Hungaricum Scholarship program. We were selected as some of the best students in our countries and given the opportunity to study at one of the finest universities in Europe. This scholarship has not only provided us with quality education but has also allowed us to grow personally, experience new cultures, and build international networks that will last a lifetime.

Speaking of Budapest, this city has become more than just a place where we studied—it has become a part of us. The cobbled streets, the stunning Danube views, and the vibrant culture will forever hold a special place in our hearts. It is here that we formed lifelong friendships, created unforgettable memories, and found a second home.

As we reflect on our time at BME, we must also acknowledge the opportunities that have shaped our paths. The EELISA University Alliance program has been one such opportunity, fostering collaboration beyond borders and disciplines. Through this initiative, we have engaged with brilliant minds across Europe, tackling real-world challenges and expanding our horizons. It has been an honour to be part of such a transformative experience.

To my fellow graduates, as we step into the next phase of our lives, let us carry forward the lessons we have learned; the resilience forged through challenges, the friendships that strengthened us, and the unrelenting spirit of curiosity that has driven us. Success is not just measured in degrees and accolades but in the journey itself; the sleepless nights, the shared laughter, and the moments of triumph that have defined our time here.

Congratulations to the Class of 2025. We have made it, together. Thank you.

Abdul-Jalal Jarimi Umar Faculty of Mechanical Engineering BSc

![](_page_16_Picture_7.jpeg)

![](_page_17_Picture_1.jpeg)

![](_page_17_Picture_2.jpeg)

### 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 one of 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.

#### Several Nobel Prize laureates have been associated with the BME:

| Dennis Gábor  | (physics),  |
|---------------|-------------|
| Eugene Wigner | (physics),  |
| György Oláh   | (chemistry) |
| Ferenc Krausz | (physics)   |

#### Notable personalities have also studied or taught at the BME:

John von Neumann inventor of the computer,

Edward Teller nuclear physicist,

Leo Szilárd known for his work on nuclear chain reactions,

Marcell Breuer architect,

Theodor von Kármán aerodynamic scientist,

Ernő Rubik inventor of the famous "magic cube",

Donát Bánki co-inventor of the carburetor,

Károly Zipernowszky one of the inventors of the transformer,

Dénes Mihály one of the inventors of television

#### About the Budapest University of Technology and Economics

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 nu-merous 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 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.

There are more than 40 English language training programmes at BME, with Bsc/BA, Msc/MA and PhD ones among them. The most recently launched ones are:

- Physicist-Engineer BSc in close collaboration with our industrial partners, it focuses on rapidly developing technological areas such as quantum and nanotechnology, data science and artificial intelligence, photonics, sustainable energetics, and nuclear technology.
- Professional Pilot BSc with a balanced combination of basic engineering, mechanics, computer and data science, aviation technology, as well as management, it gives the theoretical and practical knowledge both to build a career as a professional pilot and to work in air operations or ground handling.
- Medical Physics MSc recommended for students interested in the practical applications of basic physical knowledge, it aims to prepare for performing clinical tasks as scientists participating in academic and industrial research, developing and operating methods, equipment and measuring devices using modern technology.

In addition 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
- PhD programs, guidance and instruction for scientific research fellows.

Further information can be found at our website: https://xplore.bme.hu

### Leaders of the University

![](_page_19_Picture_1.jpeg)

Prof. Hassan Charaf Rector

![](_page_19_Picture_3.jpeg)

Miklós Verseghi-Nagy Chancellor

![](_page_19_Picture_5.jpeg)

**Prof. András Nemeslaki** Vice-Rector for International Relations

![](_page_19_Picture_7.jpeg)

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

![](_page_19_Picture_9.jpeg)

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

![](_page_19_Picture_11.jpeg)

**Prof. Gergely Zaránd** Vice-Rector for Scientific Affairs

## Graduates

### of the Budapest University of Technology and Economics

![](_page_20_Picture_3.jpeg)

## Faculty of Civil Engineering

![](_page_21_Picture_1.jpeg)

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 can 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 can 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.

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.

![](_page_22_Picture_13.jpeg)

### on behalf of the Faculty of Civil Engineering

![](_page_23_Picture_3.jpeg)

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

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![](_page_25_Picture_0.jpeg)

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

![](_page_25_Picture_2.jpeg)

**Prof. Balázs Kövescli** Vice-Dean, Faculty of Civil Engineering

![](_page_25_Picture_4.jpeg)

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

### Faculty of Civil Engineering — BSc

![](_page_25_Picture_7.jpeg)

![](_page_26_Picture_0.jpeg)

Aibar Zahkshybay

![](_page_26_Picture_2.jpeg)

Alisher Akhmetov

![](_page_26_Picture_4.jpeg)

Alpamys Parmankul

![](_page_26_Picture_6.jpeg)

Amgalantuul Purevsuren

![](_page_26_Picture_8.jpeg)

Azhar Khamzina

![](_page_26_Picture_10.jpeg)

Dana Bekenova

![](_page_26_Picture_12.jpeg)

Hosam Mahmod Mohamed Mahmod

![](_page_26_Picture_14.jpeg)

Marina Daniliuc

![](_page_26_Picture_16.jpeg)

**Pichvichit Ho** 

![](_page_26_Picture_18.jpeg)

Tuguldur Altansukh

![](_page_26_Picture_20.jpeg)

Yan Yang

![](_page_26_Picture_22.jpeg)

Zhengyi Liu

![](_page_27_Picture_0.jpeg)

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

![](_page_27_Picture_2.jpeg)

**Prof. Balázs Kövescli** Vice-Dean, Faculty of Civil Engineering

![](_page_27_Picture_4.jpeg)

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

### Faculty of Civil Engineering — MSc

![](_page_27_Picture_7.jpeg)

![](_page_28_Picture_0.jpeg)

Abu Zar

![](_page_28_Picture_2.jpeg)

Ádám Tar

![](_page_28_Picture_4.jpeg)

Ayana Ospanova

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Frank Khalil Yousif Kakoni

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Gábor Isó

![](_page_28_Picture_10.jpeg)

Lina Zouaghi

![](_page_28_Picture_12.jpeg)

Lord Konin

![](_page_28_Picture_14.jpeg)

Mohammad Adnan Abu Alkhail

![](_page_28_Picture_16.jpeg)

Mohammad Rizwaan Mubeen Ahmed Siddiqui

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Munesh

![](_page_28_Picture_20.jpeg)

Petra Hédl

![](_page_28_Picture_22.jpeg)

Sadig Nuraliyev

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Taif Abdullah Bazoon

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Zyad Magdy Awad Gad Elhessy 11

# Faculty of Civil Engineering

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![](_page_29_Picture_3.jpeg)

**Aibar Zahkshybay** Faculty of Civil Engineering BSc

![](_page_29_Picture_5.jpeg)

**Alisher Akhmetov** Faculty of Civil Engineering BSc

![](_page_30_Picture_1.jpeg)

**Alpamys Parmankul** Faculty of Civil Engineering BSc

![](_page_30_Picture_3.jpeg)

**Amgalantuul Purevsuren** Faculty of Civil Engineering BSc

![](_page_30_Picture_5.jpeg)

**Azhar Khamzina** Faculty of Civil Engineering BSc

![](_page_30_Picture_7.jpeg)

**Dana Bekenova** Faculty of Civil Engineering BSc

![](_page_31_Picture_1.jpeg)

Hosam Mahmod Mohamed Mahmod Faculty of Civil Engineering BSc

![](_page_31_Picture_3.jpeg)

**Marina Daniliuc** Faculty of Civil Engineering BSc

![](_page_31_Picture_5.jpeg)

**Pichvichit Ho** Faculty of Civil Engineering BSc

![](_page_31_Picture_7.jpeg)

**Tuguldur Altansukh** Faculty of Civil Engineering BSc

![](_page_32_Picture_1.jpeg)

**Yan Yang** Faculty of Civil Engineering BSc

![](_page_32_Picture_3.jpeg)

**Abu Zar** Faculty of Civil Engineering MSc

![](_page_32_Picture_5.jpeg)

**Zhengyi Liu** Faculty of Civil Engineering BSc

![](_page_32_Picture_7.jpeg)

Ádám Tar Faculty of Civil Engineering MSc

![](_page_33_Picture_1.jpeg)

**Ayana Ospanova** Faculty of Civil Engineering MSc

![](_page_33_Picture_3.jpeg)

**Frank Khalil Yousif Kakoni** Faculty of Civil Engineering MSc

![](_page_33_Picture_5.jpeg)

**Gábor Isó** Faculty of Civil Engineering MSc

![](_page_33_Picture_7.jpeg)

**Lina Zouaghi** Faculty of Civil Engineering MSc

![](_page_34_Picture_1.jpeg)

**Lord Konin** Faculty of Civil Engineering MSc

![](_page_34_Picture_3.jpeg)

**Mohammad Adnan Abu Alkhail** Faculty of Civil Engineering MSc

![](_page_34_Picture_5.jpeg)

**Mohammad Rizwaan Mubeen Ahmed Siddiqui** Faculty of Civil Engineering MSc

![](_page_34_Picture_7.jpeg)

**Munesh** Faculty of Civil Engineering MSc

![](_page_35_Picture_1.jpeg)

**Petra Hédl** Faculty of Civil Engineering MSc

![](_page_35_Picture_3.jpeg)

**Sadig Nuraliyev** Faculty of Civil Engineering MSc

![](_page_35_Picture_5.jpeg)

**Taif Abdullah Bazoon** Faculty of Civil Engineering MSc

![](_page_35_Picture_7.jpeg)

**Zyad Magdy Awad Gad Elhessy** Faculty of Civil Engineering MSc


# Faculty of Mechanical Engineering



The Mechanical Engineering Programme at the Budapest University of Technology and Economics began in 1863. The Faculty of Mechanical Engineering was established soon after, and official operations began in the academic year 1871-1872. The Faculty is justly proud of its continuous, progressive and more than 150-year history and now offers undergraduate and graduate programs in both Hungarian and English.

The Faculty of Mechanical Engineering offers 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 Modelling) started in February 2009. Students can start their studies either in the fall or spring semester. Individual postgraduate PhD programs, usually completed in four years, are also available for those with an MSc degree and who 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 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 Mechanical Engineering Modelling MSc programme courses 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 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 is bad, too.' Modern computational methods are prevalent in the industry since they allow inexpensive and high-fidelity analysis in the design phase. However, without a profound knowledge of the underlying physical laws and the limits of these softwares, one cannot expect proper predictions.

Computational methods are reliable if they are appropriately tested, and the principles of their applied algorithms and procedures are well understood. This process 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 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 modelling machines in motion and time-varying processes are based on solid and fluid mechanics, thermodynamics and electronics. Modelling means understanding and actively applying the related theories supported by differential equations and numerical methods in mathematics. Modelling also needs 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 of design, technology, and informatics since the model should not be so complex that the available software cannot solve them within a reasonable time and for a reasonable cost.

The above principles affected the development of this master course. After the 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 offered in English only, based on the foundations provided by the solid traditions of some successful former Faculty of Mechanical Engineering courses at BME. This course is also compatible with many master courses in mechanical engineering in the European Union (see, for example, Uni. of Bristol, Uni. of Bath, ENS Cachan, TU Karlsruhe, Uni. of Hannover, and TU Munich).

Our Faculty offers its engineering education excellence rooted in the industry. It also aims at a unique position of training decision-makers and technological leaders of tomorrow. Our aim during 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 – locally and globally.



# Farewell message

### on behalf of the Faculty of Mechanical Engineering



Since enrolling at the BME, you have heard us addressing you as "Dear Colleagues!" countless times. 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 beginning, we respect you and your commitment to becoming mechanical engineers and consider you an equal partner. Like you, we have given the best of our knowledge, and we celebrate your diplomas and your inauguration as engineers with you on this day. First of all, I congratulate you on your success!

The World has changed a lot recently; our and our beloved one's health was endangered, and we are already facing a novel, even more threatening danger. These challenges have shown that peace and prosperity cannot be taken for granted. As mechanical engineers, we are problem-solving professionals; we must 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, and find and serve righteous purposes. I look forward to seeing great things from you!

Prof. Imre Orbulov Dean Faculty of Mechanical Engineering





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



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

## Faculty of Mechanical Engineering — BSc





Abdul-Jalal Jarimi Umar



Alireza Hadidi Ghombavani



Ferenc Sándor Bucsky



Haoyang Wang



Luka Radulovic



Manas Mishra



Mateo Alejandro Andrade Galvez

The second



Omoteniola Bright Fatoki



Róbert Hotváth



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



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

## Faculty of Mechanical Engineering — MSc





Gul Zaman Khan



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Shakir Reyaz
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Waqas Mohd

# Faculty of Mechanical Engineering





**Abdul-Jalal Jarimi Umar** Faculty of Mechanical Engineering BSc



Alireza Hadidi Ghombavani Faculty of Mechanical Engineering BSc



**Ferenc Sándor Bucsky** Faculty of Mechanical Engineering BSc



Haoyang Wang Faculty of Mechanical Engineering BSc



**Luka Radulovic** Faculty of Mechanical Engineering BSc



**Manas Mishra** Faculty of Mechanical Engineering BSc



**Mateo Alejandro Andrade Galvez** Faculty of Mechanical Engineering BSc



**Omoteniola Bright Fatoki** Faculty of Mechanical Engineering BSc



**Róbert Horváth** Faculty of Mechanical Engineering BSc



**Gul Zaman Khan** Faculty of Mechanical Engineering MSc



**Shakir Reyaz** Faculty of Mechanical Engineering MSc



**Waqas Mohd** Faculty of Mechanical Engineering MSc



# 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 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 does not 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 is not BSc program offered in English language. During the Integrated MSc Program, students can choose at the beginning of the seventh semester from the following specialisations: • Real-Estate Development • Sustainable Architecture • Urban Design.

#### 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
- Sustainable Architecture
- Urban 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.



# Farewell message

### 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 completed project, 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





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



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

## Faculty of Architecture



### Faculty of Architecture — MSc



Erdenebat Khishigdorj



Ludilayne De Andrade Soares

Faculty of Architecture — OTM



Salwa Assaf



Tomas Makram Soliman Metry

# Faculty of Architecture





**Erdenebat Khishigdorj** Faculty of Architecture MSc



**Ludilayne De Andrade Soares** Faculty of Architecture MSc



Salwa Assaf Faculty of Architecture OTM



**Tomas Makram Soliman Metry** Faculty of Architecture OTM



## 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, a Budapest University of Technology and Economics's predecessor institution. 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 specializations 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 apparatuses 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/* 



## Farewell message

#### 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





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



### Faculty of Chemical Technology and Biotechnology — BSc



David Sebastiao Simao da Cruz



Thi Da Thao Lam

### Faculty of Chemical Technology and Biotechnology — MSc



Eduard Nikulochkin



Joelle Chayya



Frehiwot Yeshaneh Ayenew



Ruyu Dai

## Faculty of Chemical Technology and Biotechnology





**David Sebastiao Simao da Cruz** Faculty of Chemical Technology and Biotechnology BSc



**Thi Da Thao Lam** Faculty of Chemical Technology and Biotechnology BSc



**Eduard Nikulochkin** Faculty of Chemical Technology and Biotechnology MSc



**Frehiwot Yeshaneh Ayenew** Faculty of Chemical Technology and Biotechnology MSc



**Joelle Chayya** Faculty of Chemical Technology and Biotechnology MSc



**Ruyu Dai** Faculty of Chemical Technology and Biotechnology MSc

## 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, info communication 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.



# Farewell message

on behalf of the Faculty of Electrical Engineering and Informatics



Dear Graduating Students,

You're finally here at the end of your studies. You have spent many years working hard for this moment. You may be feeling some anxiety and excitement about what possibilities the future holds for you. Your ambition has brought us all together and we all know how many difficulties you have had to face in a foreign country and how many obstacles you have had to overcome to get to this present moment. It is your dedication and perseverance that led you all through the way to your degree.

Today doesn't represents the end of your school days, but the beginning of new heights for you as you are moving on to the next stage of your lives.

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 method how you can acquire theoretical and practical knowledge that enables you to become an international-level engineer. I hope we have shown you all the beauty and responsibility of engineering profession.

And here we are now, at the coronation of a joint effort of the student, family, and university staff – the graduation. With the valuable "passport" you all have, your degree will open up opportunities for you where you can express your creativity and your ability of innovation. You have proven yourself to be dedicated students who have the capacity to do great things in life.

Never forget the passion and commitment you have given to learning and studying at BME. Therefore, always make sure the same dedication guides your further studies and career. Moving on to a new sphere of career and dreams can be a challenging process but I am convinced that you will all succeed.

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

I wish you the best of luck in all of your future endeavors.

Farewell and good luck!

Dr. Eszter Gerhátné Udvary,

Vice-Dean for International Affairs on behalf of the Faculty of Electrical Engineering and Informatics





**Prof. Sándor Imre** Dean, Faculty of Electical Engineerring and Informatics



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



**Dr. Eszter Gerhátné Udvary** Vice-Dean for International Affairs, Faculty of Electrical Engineering and Informatics

### Faculty of Electrical Engineering and Informatics — BSc


Abraham Ayegba Onuh



Ali Ashouri



Almat Narmatov



Ansar Amantur



Artyjom Alekszandrovics Csarkovszkij



Basit Usman



Bhaskar Sharma



**Diamand Mean** 



Elif Gultekin



Fareeda Ahmed Emadeldin Badr



Janibyek Bolatkhan



Jena Woodroffe



**Prof. Sándor Imre** Dean, Faculty of Electical Engineerring and Informatics



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



**Dr. Eszter Gerhátné Udvary** Vice-Dean for International Affairs, Faculty of Electrical Engineering and Informatics

### Faculty of Electrical Engineering and Informatics — BSc



Kateryna Denysiuk



Maria Sonia Mangane



Nafez Mousa Sayyad



Rachad Khaddaj

100



Ruvejda Gjyrevci



Shynggys Samarkhanov



Victor Oswago



**Prof. Sándor Imre** Dean, Faculty of Electical Engineerring and Informatics



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



**Dr. Eszter Gerhátné Udvary** Vice-Dean for International Affairs, Faculty of Electrical Engineering and Informatics

### Faculty of Electrical Engineering and Informatics — MSc



Emmanuel Oppong Acheampong



Hira Mehboob



Jean Marie Vianney Twahirwa



Kamil Mustafayev

60



Keokanitha Chhay



Murad Huseynli

77



Nurlan Yagublu



Xinyu Gan

## Faculty of Electrical Engineering and Informatics





**Abraham Ayegba Onuh** Faculty of Electrical Engineering and Informatics BSc



**Ali Ashouri** Faculty of Electrical Engineering and Informatics BSc



Almat Narmatov Faculty of Electrical Engineering and Informatics BSc



**Ansar Amantur** Faculty of Electrical Engineering and Informatics BSc



Artyjom Alekszandrovics Osarkovszkij Faculty of Electrical Engineering and Informatics BSc



**Basit Usman** Faculty of Electrical Engineering and Informatics BSc



**Bhaskar Sharma** Faculty of Electrical Engineering and Informatics BSc



**Diamand Mean** Faculty of Electrical Engineering and Informatics BSc



**Elif Gultekin** Faculty of Electrical Engineering and Informatics BSc



**Fareeda Ahmed Emadeldin Badr** Faculty of Electrical Engineering and Informatics BSc



**Janibyek Bolatkhan** Faculty of Electrical Engineering and Informatics BSc



**Jena Woodroffe** Faculty of Electrical Engineering and Informatics BSc



Kateryna Denysiuk Faculty of Electrical Engineering and Informatics BSc



**Maria Sonia Mangane** Faculty of Electrical Engineering and Informatics BSc



**Nafez Mousa Sayyad** Faculty of Electrical Engineering and Informatics BSc



**Rachad Khaddaj** Faculty of Electrical Engineering and Informatics BSc



**Ruvejda Gjyrevci** Faculty of Electrical Engineering and Informatics BSc



**Shynggys Samarkhanov** Faculty of Electrical Engineering and Informatics BSc



**Victor Oswago** Faculty of Electrical Engineering and Informatics BSc



**Emmanuel Oppong Acheampong** Faculty of Electrical Engineering and Informatics MSc



**Hira Mehboob** Faculty of Electrical Engineering and Informatics MSc



**Jean Marie Vianney Twahirwa** Faculty of Electrical Engineering and Informatics MSc



Kamil Mustafayev Faculty of Electrical Engineering and Informatics MSc



**Keokanitha Chhay** Faculty of Electrical Engineering and Informatics MSc



**Murad Huseynli** Faculty of Electrical Engineering and Informatics MSc



**Nurlan Yagublu** Faculty of Electrical Engineering and Informatics MSc



**Xinyu Gan** Faculty of Electrical Engineering and Informatics MSc



# 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 (Hungarian/English),
- BSc in Vehicle Engineering (Hungarian/English),
- BSc in Logistics Engineering (Hungarian/English),
- BSc in Professional Pilot (English)

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

- Transportation Engineering master speciality (Hungarian/English),
- Vehicle Engineering master speciality (Hungarian/English),
- Logistics Engineering master speciality (Hungarian/English),
- Autonomous Vehicle Control Engineer (English).

A certified engineering qualification (MSc) can be obtained in 2 years with adequate BSc qualification. 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).





## Farewell message

on behalf of the Faculty of Transportation Engineering and Vehicle Engineering



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

Dear graduates, colleagues, family, and friends,

Many thanks for choosing BME. Congratulations to you all. I would also like to thank all of the colleagues who have worked tirelessly to help all of you 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 education. Your teachers have served as colleagues, mentors, and friends in the previous 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 to focus on what you are doing and precisely know what you do not know. We were committed to providing our students with the best education to prepare them for future transportation or vehicle engineering careers.

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 the focus of 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.

"A great man is always willing to be little." — Ralph Waldo Emerson

Prof. Ádám Török

Vice-Dean for Scientific and International Relations, Faculty of Transportation Engineering and Vehicle Engineering





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



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

Faculty of Transportation Engineering and Vehicle Engineering MSc





Arnes Ezequiel Satumbo Miguel



Ruihan Lin



Tábata Juliany Moreira Silva

# Faculty of Transportation Engineering and Vehicle Engineering





Arnes Ezequiel Satumbo Miguel Faculty of Transportation Engineering and Vehicle Engineering MSc



**Ruihan Lin** Faculty of Transportation Engineering and Vehicle Engineering MSc



Tábata Juliany Moreira Silva Faculty of Transportation Engineering and Vehicle Engineering MSc



## Faculty of Natural Sciences



The Faculty of Natural Sciences employs about 250 full and part time faculty members. The Faculty provides classes in Physics, Mathematics and Cognitive Science and is committed to meet the needs of its own and other faculties.

Courses are offered on BSc, MSc and PhD 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" was also 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 fourth semester students can choose specialized courses in the topic of Advanced mathematics, Advanced physics, Computer programming, Optics, Material science, Nuclear technology, and Medical physics.

From 2023, we start a new, 7 semester long BSc program in English, "physicist-engineer", offered for international students, too. The program focuses on rapidly developing technological areas such as quantum and nanotechnology, data science and artificial intelligence, photonics, quantum optics and materials science, sustainable energy, and nuclear technology. Several companies have endorsed with the programme to provide internship and possible future employment for the prospective graduates

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. In the Nuclear Technology Management post-graduate degree program combination of nuclear technology and management knowledge and skill. This specific program has been endorsed by the International Atomic Energy Agency as 7th in the World.

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).

# Farewell message

### 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 had taken you a lot of effort, hard work, completing home-works, 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 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 off climate change.

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 your 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 you to retain the contact with your former professors, we are eager to get in touch with you as professionals 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





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



**Dr. Anna Babarczy** Vice-Dean, Faculty of Natural Sciences

### Faculty of Natural Sciences BSc



### Faculty of Natural Sciences — BSc



Chau Tuan Do



Yogesh Kumar

Faculty of Natural Sciences — MSc



Ankit Sharma



**Collins Ikachai** 



Nazi Omarova

# Faculty of Natural Sciences





**Chau Tuan Do** Faculty of Natural Sciences BSc



**Yogesh Kumar** Faculty of Natural Sciences BSc



Ankit Sharma Faculty of Natural Sciences MSc



**Collins Ikachai** Faculty of Natural Sciences MSc



**Nazi Omarova** Faculty of Natural Sciences MSc

# 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 Vocation-al 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 (GTK) 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).

#### **Mission Statement**

Our mission is to contribute to the sustainable solution of the challenges of the coming decades through our interdisciplinary educational, research and innovation activities across the fields of engineering, economics and social sciences represented by the University. Our aim is to strengthen our position in the Hungarian and international higher education market by educating the best Hungarian and international students and by providing high quality, competitive undergraduate, master's and doctoral programmes. Our programmes focus on technological and social innovations to prepare our students to act responsibly and ethically in the rapidly changing business and social environment of the coming decades.

We strive to make the most of the opportunities offered by the cooperation between the fields of economics, social sciences and engineering. High-quality research in an international context addressing the economic, social and environmental problems of long-term sustainability can contribute to understanding and addressing both existing and emerging challenges.

Our vision is to become the catalyst for developing innovative professional and social communities. Excellence, Interdisciplinarity and Sustainability are the three main strategic principles.

Our mission is to educate responsible, well-rounded students who are committed to excellence. To be at the forefront of multidisciplinary, collaborative research and innovation. The mission of BME's Faculty of Economic and Social Sciences can be formulated along the following five key values:

- 1. Promoting and supporting excellence in education, research, innovation and social engagement.
- 2. Creating a dynamic and flexible environment for the students and the academic staff to adapt to new challenges and opportunities.
- 3. Unique opportunities and programmes to help students and lecturers excel and advance their careers.
- 4. Providing versatile teaching and research opportunities that enable students to acquire a wide range of knowledge and skills.
- 5. To create an open and inclusive community that encourages diversity, dialogue and cooperation, both professionally and in the public sphere.

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

The total number of participants of different graduate-, postgraduate and distance learning forms of training launched by the Faculty is around 4000.

BME GTK offers severa Master's programmes (Master in Management and Leadership, Master in Finance, Master in Regional and Environmental Economics, Master in Engineering Management) as well as a Business and Management Ph.D. programme in English for both international and Hungarian students. The BME GTK master's programs integrate practical learning experiences through corporate partnerships, industry guest lectures, and project-based courses, despite not having a mandatory internship component. Considering the international Bachelor programmes the Engineering Management is going to start in the 2025-2026 academic year.

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, which have been offered since 1996 to our master students. During this programme, international and local experts are invited to deliver thought-provoking lectures about the key challenges of leaders in different industries and business functions for nearly 400 master's students each autumn. The GTK is responsible for the development of various soft skills in the institution. Small group training courses are available in interdisciplinary groups with the engineering faculties, as well as optional courses in small groups, targeted at the development of communication skills or specific areas of communication skills, and foreign language learning is available in the Centre of Modern Languages. Students can also sit for accredited language exams at the BME Language Examination Centre. A further customized way of developing managerial soft skills (e.g. EQ, debating, communication, time management) is available as part of the Intensive Seminar. The structure of the Intensive Seminar allows and requires that each student attends at least one skills development workshop, which can be complemented by others as required.

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.

The BME, and consequently the Faculty as well is strongly research oriented. Most of the professors are engaged in applied or in theoretical research activity. Research results appear directly in the teaching programmes of the courses, or indirectly in journal papers, books and other teaching materials authored by our colleagues.

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.





# Farewell message

### 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.

As part of the BME, GTK plays a key role in the university's mission to be a global leader in education. BME's emphasis on obtaining and maintaining prestigious international accreditations reflects its dedication to upholding the highest standards in both teaching and research. Our Faculty is proud to be at the forefront of these efforts, continuously improving the quality of our programmes to meet international benchmarks. Beyond the core educational offerings in management, economics, and finance, GTK also prioritizes interdisciplinary education, recognizing that the most pressing global challenges require expertise across multiple fields. The university encourages collaboration between schools, allowing students to draw on BME's strength in engineering, technology, and the sciences to complement their studies in economics and management. This interdisciplinary approach fosters a well-rounded education, preparing students to become versatile leaders capable of addressing complex, multifaceted problems in both business and society. As a result, the Faculty of Economic and Social Sciences continues to attract a diverse and talented student body, further enhancing BME's reputation as a leading institution in Hungary and beyond.

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 around 4000 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. Four of our master's degree programmes (Finance, Management and Leadership, Regional and Environmental Economics, Engineering Management) 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 Bachelor programme in Engineering and Management starting in the 2025-2026 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. In line with the GTK's signatory membership in UN PRME (Principles for Responsible Management Education), the seven principles of PRME, such as purpose, values, and responsible management, are embedded in the curricula to ensure ethical and sustainable practices. Furthermore, the UN SDGs are also integrated into the programmes. The Faculty also focuses on the integration of the BGA (Business Graduates Association, division of AMBA) validation method, ensuring that the programmes are benchmarked against global best practices, including aspects of innovation, societal impact, and continuous improvement.

Considering the BME GTK's vision, we aspire to be a catalyst for fostering innovative, ethical, and sustainable professional and social communities. By prioritizing excellence, interdisciplinarity, and sustainability (as strategic principles), we will drive positive change and responsible development. Our mission is to cultivate responsible, well-rounded, and ethically minded students who excel in their fields. We are committed to pioneering multidisciplinary, collaborative research and innovation that addresses global challenges with sustainability and social responsibility at its core.

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

The ornamental chain of the Faculty of Economic and Social Sciences



**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 -MSc




Aalif Hossain Shaan



Brian Kibet



Dorottya Csonka



Gergő László Károlyi



Kitti Karakas



Loretta Kovács



Nihad Asgarli



Nikolett Karolina Zsóka



Ohemaa Ekua Asantewaa Anyan



Yuliang Wu

## Faculty of Economic and Social Sciences





Aalif Hossain Shaan Faculty of Economic and Social Sciences MSc



Brian Kibet Faculty of Economic and Social Sciences MSc



**Dorottya Csonka** Faculty of Economic and Social Sciences MSc



**Gergő László Károlyi** Faculty of Economic and Social Sciences MSc



**Kitti Karakas** Faculty of Economic and Social Sciences MSc



**Loretta Kovács** Faculty of Economic and Social Sciences MSc



**Nihad Asgarli** Faculty of Economic and Social Sciences MSc



**Nikolett Karolina Zsóka** Faculty of Economic and Social Sciences MSc



**Ohemaa Ekua Asantewaa Anyan** Faculty of Economic and Social Sciences MSc



**Yuliang Wu** Faculty of Economic and Social Sciences MSc



Graduates of the Budapest University of Technology and Economics



#### Faculty of Civil Engineering

Abu Zar Ádám Tar Ahmad Maisara Adel Khalil Aibar Zhaksvbav Ali Mohamed Ali Sayed Alia Al Ashkar Alisher Akhmetov Aliva Seitzadinova Alpamys Parmankul Amgalantuul Purevsuren Annette Chemtai Masai Ansar Bashir Mir Ayana Ospanova Azhar Khamzina Dana Bekenova Frank Khalil Yousif Kakoni Gábor Isó Hosam Mahmod Mohamed Mahmod Imola Dózsa László Barbély Lina Zouaghi Linkai Li Lord Konin Maksudur Rahman Marina Daniliuc Márk Kutasi Márton Schrott Máté Ferenc Péter Mohammad Adnan Abu Alkhail Mohammad Rizwaan Mubeen Ahmed Siddigui Mubeen Ahmed Mokhtar Abdulhakim Mohammed Saleh Munesh Petra Hédl **Pichvichit Ho** Sadig Nuraliyev Sanda Colomiicenco Seitzadinova Aliya Siddigui Mohammad Rizwaan Mubeen Ahmed Syed Musaib Hussain

Taif Abdullah Bazoon Tuguldur Altansukh Utku Erdemli Ya Ponleu Yin Yan Yang Yuanhao Zhang Zhengyi Liu Zyad Magdy Awad Gad Elhessy

#### **Faculty of Mechanical Engineering**

Abdul-Jalal Jarimi Umar Alireza Hadidi Ghombavani Faranak Soltani Ferenc Sándor Bucsky Gul Zaman Khan Haoyang Wang Luka Radulovic Manas Mishra Mateo Alejandro Andrade Galvez Omoteniola Bright Fatoki Róbert Horváth Salameh Daher Shakir Reyaz Waqas Mohd Yernur Yeskermessov

#### **Faculty of Architecture**

Erdenebat Khishigdorj Ludilayne De Andrade Soares Salwa Assaf Tomas Makram Soliman Metry

#### **Faculty of Chemical Engineering**

Aigerim Temirbay David Sebastiao Simao da Cruz Dulguun Erdenebayar Eduard Nikulochkin Emilia Pascal Frehiwot Yeshaneh Ayenew Joelle Chayya Nándor Illyés Ruyu Dai Thi Da Thao Lam Tilekbergen Abishev

### Faculty of Electrical Engineering and Informatics

Abdullah Mohamed Mahmoud Yehia Elmaghrby Abraham Ayegba Onuh Ahmad Monther Rashad Faddah Ali Ashouri Almat Narmatov Ansar Amantur Artyjom Alekszandrovics Csarkovszkij Basit Usman Bálint Boczka Bhaskar Sharma Bikash Kumar Mahanti **Diamand Mean** Elif Gultekin Emmanuel Oppong Acheampong Fareeda Ahmed Emadeldin Badr Hana Becha Hira Mehboob Janibyek Bolatkhan Jean Marie Vianney Twahirwa Jena Woodroffe Kamil Mustafayev Kateryna Denysiuk Keokanitha Chhay Leri Kokhreidze Maria Sonia Mangane Mihailo Jankovic Mikayil Gamkharli Murad Huseynli Nafez Mousa Sayyad Nurlan Yagublu Octavio Da Fonseca Rodrigues Da Costa Pavle Kovacevic Rachad Khaddai Ramiz Raed Tariq Samaien Ruohan Liu Ruveida Givrevci

Rysaskar Salimbay Shynggys Samarkhanov Victor Oswago Wael Ben Kraiem Xinyu Gan

### Faculty of Transportation Engineering and Vehicle Engineering

Arnes Ezequiel Satumbo Miguel Peidong Zhang Ruihan Lin Tábata Juliany Moreira Silva

#### Faculty of Natural Sciences

Abdelrahman Salah Mohammed Elsaid Ankit Sharma Chau Tuan Do Collins Ikachai Giorgi Chikobava Nazi Omarova Yogesh Kumar

#### Faculty of Economic and Social Sciences

Aalif Hossain Shaan Adél Kemenczky Anel Nurgaliyeva Bence Bea Blanka Hunfalusi Brian Kibet Dorottya Csonka Gergő László Károlyi Kitti Karakas Loretta Kovács Nazila Musayeva Nihad Asgarli Nikolett Karolina Zsóka Noel Abonvi Ohemaa Ekua Asantewaa Anyan Sabina Novruzova Sebastian David Posso Calderon Yuliang Wu





## **Opening ceremony**

















## Student life at BME



"I began my journey at BME in 2020, during the challenges of the pandemic, and have experienced both the best and toughest days here. Spending countless hours in the university's stunning library remains one of my fondest memories. I am deeply grateful to my professors for their guidance and for sharing their invaluable knowledge. Studying at this historic institution has been an honor and a transformative experience."

- Azhar Khamzina





"My time at BME was filled with challenges that often felt overwhelming, but every hurdle taught me something valuable. The long nights spent solving complex problems pushed me beyond my limits and shaped my resilience. Each failure became a stepping stone to new skills and deeper understanding. The support of my peers and the guidance of my professors gave me the courage to keep going. Looking back, I'm proud of how those challenges transformed me into a stronger and more capable person"

- Salwa Assaf





"Being a student at BME is very challenging and tough at times, but overall, it was a great experience for me. There were many happy days and some tough ones too. I will always cherish my time as a student and the memories I made. Thank you, BME!"

- Tuguldur Altansukh











"Studying at BME has been a transformative experience, blending rigorous academics with unforgettable moments. One of my favorite memories is collaborating with peers on challenging projects, where our shared determination turned obstacles into achievements. The vibrant international community enriched my perspective, creating lifelong friendships and cultural exchanges. Late nights spent preparing for exams in the library taught me resilience and the value of hard work. Above all, BME has been a place where I discovered not just knowledge but also my potential to grow and succeed."

- Nihad Asgarli





"I want to thank every person I met here in Hungary. And special thanks to my Mother, Father and Sisters. Special thanks to my friends: Ayman, Zyad & Ahmad and all my professors especially Prof. Ákos Török for his support and guidance and kindness."

- Zineb Ouled Ben Hammad





"Knowledge is definitely not the only thing we acquire at BME. Five years have made me grow a lot. Thank you to all the friends who have come along. We have fought together, laughed together, and supported each other until today. Wishing me and my friends a bright future."

- Wang Haoyang















# **University life at BME**



"It was great to spend here more than 2 years getting my master's degree. I want to express my appreciation for helping with my thesis to my supervisor and to other professors who were kind to support me."

- Eduard Nikulochkin





"It's a wonderful experience filled with challenges and happiness. The way I managed my journey here give me immense confidence and courage to take with me for the future. This place has lot to offer but it depends on you how much you strive for that. Nonetheless it's an exceptional journey and will have a special corner in my heart going forward in my life. "

- Mohd Waqas





"Completing my master's at BME was a challenging yet deeply rewarding journey, marked by determination and growth. Along the way, I was grateful to share the experience with a friend whose support meant so much."

- Nikolett Zsóka



"BME wasn't just a university—it was a vibrant playground for ideas, passions, and friendships that will stay with me forever."

- Munesh





"One of my favourite memory about the studies at BME is trip to Istanbul with all classmates, it was very exciting and interesting to explore new country and culture together."



## **Our life in Hungary**



"Studying in BME has taught me a lot of lessons about the real world and what it takes to overcome challenges. It was here that I learned not only the technical knowledge of my field but also how to face obstacles with resilience and determination. These experiences allowed me to meet many people from different backgrounds, and make friends and connections. Each challenge, whether studying or personal, helped me grow, and turned me into a more confident and capable person. BME has been more than a university to me, it has been a journey of self-discovery and changes."

- Mean Diamand















"During my studies at BME, working on the double tunnel design thesis was a transformative experience. I faced challenges such as mastering advanced geotechnical modeling techniques, integrating multidisciplinary knowledge, and navigating the complexities of ensuring structural stability in varying geological conditions. Collaborating with professors and peers helped me overcome these obstacles while expanding my technical expertise and critical thinking. The rigorous academic environment taught me resilience and the importance of attention to detail. Completing this thesis not only deepened my passion for engineering geology but also prepared me to tackle real-world challenges with confidence and precision."

- Taif Abdullah Bazoon





"During my time at BME, I experienced significant personal growth, particularly in developing my analytical capabilities. The rigorous coursework and hands-on projects pushed me to think critically and approach problems methodically, strengthening my ability to analyze complex situations. I felt that the quality of education at BME was exceptional, as the professors not only emphasized theoretical knowledge but also practical application, which helped me bridge the gap between theory and practice. Through challenging assignments and teamwork, I became more resilient and learned to manage time effectively, balancing multiple tasks under pressure. Overall, my experience at BME deeply enhanced my technical skills and confidence in tackling real-world challenges."

- Nuraliyev Sadig















"BME was a life-changing period, filled with challenges, and unforgettable memories I'll treasure forever. I am deeply grateful for the friends I made and the people who shaped this journey. Above all, BME brought me to the most amazing person who made this city feel like home, supported me, and became the one I want to share the rest of my life with. Thank you BME! "

- Ruvejda Gjyrevci





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Throughout its 243 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.



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