



**Faculty of Mechanical Engineering
PhD Degree**

PhD Degree

The Faculty of Mechanical Engineering (GPK) at the Budapest University of Technology and Economics (BME) offers degree programs in both Hungarian and English. Most students from abroad choose to study in English.

The BME GPK is a strongly research-oriented university that has conferred doctoral degrees since the 19th century in various fields of engineering.

The academic staff of our Faculty are doing research in the most relevant fields of the mechanical engineering discipline, and related applied sciences. PhD candidates are welcome to take part in this research work in order to prepare for the PhD procedure.

PhD at the BME GPK is a degree that can be earned by sufficiently proving the candidate's ability for self-standing scientific work that must be demonstrated by writing a thesis summarising the candidate's research results. Furthermore, it is necessary to pass a set of qualifying examinations in some basic and applied sciences related to the field of the submitted thesis. Candidates are to publish their results prior to the submission of their theses.

Applicants for the PhD program must hold an MSc degree issued by an academic institution and must possess an overall understanding of, and a high competence in, their field of knowledge. They must also be capable of using research techniques. Admission requirements include excellent grades (mainly or exclusively A's), an excellent MSc (or equivalent) final project, and/or the achievement of good initial results in research. Besides their professional achievements, applicants should also demonstrate a sense of responsibility for the advancement of scientific knowledge.

PhD candidates carry out their studies and research on an individual basis under the guidance of a professor or a senior member of the academic staff at the faculty concerned. This research work must contribute to scientific knowledge in general, and it must be recognized as such by the international scientific community. In order to prove this, doctoral candidates must present their research results at national and international conferences and symposia, and they are expected to publish the significant and major achievements of their work in internationally referred professional periodicals.

Besides the research work, the PhD supervisor usually recommends the participation in various courses related to the research topic. In such a case, the appropriate examinations must be successfully completed, the results of which will be documented in the transcripts of the candidate. Similarly, the advancement in individual study and research will be documented on a semester basis by the supervisor.

Working towards a PhD degree requires at least 3 years (6 semesters) of study. This time might be considerably longer, depending on the topic and the candidate's personal diligence. It is possible to set individual PhD study plans for candidates who spend certain parts of their preparation period at other institution/s, e.g. their own original research-oriented affiliation or another university.

Upon completing all necessary work for the PhD thesis, this dissertation must be prepared according to the formal requirements in the Doctoral Code of the Budapest University of Technology and Economics.

According to the procedural code of our university, every PhD candidate individually must apply to the Doctoral Board of the faculty concerned. However, the recommendation of the supervising professor and department, including the attachment of the protocol of the departmental public presentation of the thesis (with the comments and recommendations of several departmental and/or internal referees, and other professional experts of the field) is a strong expectation.

The doctoral board will appoint an independent examination board for each candidate which consists of the President, two examiners and several jury members. Final decision lies on this board after hearing the public presentation and defense of the thesis work and the subject examination.

The conferred degree is declared and testified by a corresponding PhD diploma at the next solemn ceremony of the university by the Rector of the University concerned.

NOTE:

Individual research topics and their overall conditions are formulated in negotiations between candidates and supervisors at BME.

BME GPK guidelines for acceptance to the PhD programme

1. The primary condition of admission to post-graduate studies is that the applicant must hold an MSc-degree in Mechanical Engineering, or in some closely related fields. Minimum requirement is at least “good” (min. 3.51 out of 5.00 or equivalent) qualification of the diploma.
2. Applicants are expected to have a definite scope of research in the following fields:
 - mechanical engineering (materials science and technology, solid or fluid mechanics, thermal engineering, combustion, process engineering, building services, manufacturing, engineering design, polymer science and technology),
 - mechatronics (robotics, system and control technology, optics, measurement, instrumentation technologies, biomechatronics),
 - energy engineering (heat and power generation, energy systems)where they would like to advance their knowledge. They are requested to present a proposal, specifying a domain of interest with some research objectives, milestones and deliverables during the postgraduate studies. The suggested topic should have sufficient preliminaries in their university studies.
3. Applicants with experience and initial results are asked to submit a short summary of preliminary research activities together with relevant reports, published papers, which give help in the admission process.
4. Applicants should also submit two recommendations given by renowned academic personnel.
5. It is highly preferable when applicants have already agreed with the future supervisor prior to the application.
6. Each admission is valid only for the forthcoming academic year (starting right after the letter of acceptance).
7. Application procedure is as follows:

Application deadline: 1st July for Fall semester, 15th October for Spring semester.

Application fee, processing, postage: EUR 100 (non-refundable). The application will be considered and communication is assured when application fee has been transferred to the bank account of BME, and submitted all the required documents.

Documents to submit:

- application form (online) completely filled (be careful that your personal data appear correctly as are in your passport because they will be the form to appear in your transcripts and degree certificate)
- copy of your passport
- one of the following documents of internationally recognized English language proficiency:
 - a) TOEFL iBT test score of 90, or PBT score 550,
 - b) Cambridge First Certificate “B”,
 - c) IELTS score of 5.0
- official transcripts, degrees/diplomas of any higher education already completed. Notarized English translation
- 4 recent photographs
- curriculum vitae (autobiography/résumé)
- two letters of recommendation
- Study Plan (agreed with the supervisor)

NOTE: Notarization is necessary for every school leaving document even if the original is in English. Notification of your acceptance/rejection will be sent to you after your complete application has been reviewed. All necessary further information will be attached to the letter of acceptance.