# Regulation No. 9/2005 regarding entrance examinations for the academic year 2006/2007

The regulation sets the rules governing the entrance examinations and conditions for admission to study in the following study programmes taught at the Faculty of Mechanical Engineering (hereinafter referred to as FME), Brno University of Technology (hereinafter referred to as BUT) in the academic year 2006/2007:

- bachelor's study programmes;
- follow-up master's study programmes;
- master's study programme.
- 1. **Admission of applicants for study** at FME is governed by the Act No. 111/1998 Sb. on higher education institutions (hereinafter "Act") its fifth part, and by the BUT Statute, FME Statute, and this Regulation. Admission to study is by the entrance examination, which (according to Article 7 of the BUT Statute):
  - a) is announced in compliance with Section 49 para 5 of the Act;
  - b) is initiated on the applicant's request.

Para a) refers to the admission procedure on the basis of the entrance examination. Para b) refers to applicants who are studying in a study programme, want to terminate their study and continue it in a similar study programme at FME.

- 2. **Structured study.** At the present time, the first year of a five-year master's study programme is not open. All students are admitted to the first year of a bachelor's study programme at FME. The structured study requires students to complete two stages:
  - bachelor's study (three years);
  - follow-up master's study (two or three years).

The total length of study is similar to the former master's study programmes.

- 3. **Branches within the bachelor's study.** Bachelor branches are divided into two types:
  - Professional bachelor (hereinafter abbreviated as "P") is practice-oriented and is intended for those applicants who want to start their careers immediately after graduating. The graduates from the professional type of the bachelor's study programme may continue their studies in a three-year follow-up master's study programme at FME (they can choose from three branches) and obtain the Master's degree (Ing.).
  - General bachelor (hereinafter abbreviated as "G") is intended for those applicants who want to obtain the Master's degree (Ing.) as soon as possible. The graduates from the general type of the bachelor's study programme may continue their studies in a two-year follow-up master's study programme at FME (they can choose from approximately 20 branches) and obtain the Master's degree (Ing.).

### Bachelor's study programme "Engineering" comprises the following branches:

- *Mechanical Engineering* (G)
- *Industrial Design in Mechanical Engineering* (G) (1<sup>st</sup> year of study is shared with the branch "*Mechanical Engineering*")

- *Applied Computer Science and Control* (P)
- Power Engineering and Process Engineering (P)
- Air Traffic (P)
- *Machine and Equipment Construction* (P)
- *Manufacturing Technology* (P)
- Technical Applied Ecology (P)

Bachelor's study programme "Applied Sciences in Engineering" comprises the following branches:

- Physical Engineering (G)
- *Mathematical Engineering* (G)
- *Mechatronics* (G)
- *Materials Engineering* (G)

The first year of study is shared by all professional branches and is called "Engineering".

# 4. Selection of a branch within the bachelor's study programme.

- a) Applicants who want to obtain the Master's degree (Ing.) as soon as possible: The applicant shall state the selected general type of study "Mechanical Engineering" in the application form. The graduates from the bachelor's study may then study one from 20 branches within the two-year follow-up master's study programme.
- b) Applicants who want to study "Industrial Design in Mechanical Engineering": The applicant shall state the selected general type of study "Mechanical engineering". General branches "Mechanical Engineering" and "Industrial Design in Mechanical Engineering" share the first year of study scheme. During the first year of study, students interested in "Industrial Design in Mechanical Engineering" have to take a talent-proof examination. If they pass, they well be admitted to study the branch "Industrial Design in Mechanical Engineering". If not, they will continue to study the branch "Mechanical engineering". The graduates from the bachelor's study programme "Industrial Design in Mechanical Engineering" may continue their studies in the same branch in a two-year follow-up master's study programme.
- c) Applicants who want to study "Physical Engineering", "Mathematical Engineering", "Mechatronics", "Materials Engineering": The applicant shall state the selected branch in the application form. The study in the given branches is organised independently from the first year of study already, and the graduates may continue their studies in the same branch in a two-year follow-up master's study programme.
- d) Applicants who want to study some of the professional branches: The applicant shall state the branch "Engineering" in the application form. This is the first year shared by all professional branches, and students shall select the branch of the bachelor's study programme during the first year. The graduates from the professional type of the bachelor's study programme may continue their studies in one of the three branches taught in a three-year follow-up master's study programme.
- 5. **Study Mode.** The study is divided into a full-time and a combined mode. **The full-time study** is based on a regular attendance and continuous contact with teachers. This study mode is open in all branches and mainly suits immediate secondary school graduates.
- 6. **The combined study** is a combination of full-time and distant study (1:2) and is an equivalent of the former external study. The full-time part of the study (one third of the total) takes place once a week in the form of sessions and managed consultations, in one of the following consultation centres: Brno (at FME), Jihlava, Žďár nad Sázavou, Uherský

Brod. The distant part the of study (two thirds of the total) is organized in the form of a controlled self-study. Combined mode of study is open in the following branches:

# The branch open in the consultation centre in Brno:

- *Manufacturing Technology* (professional bachelor)
- Applied Computer Science and Control (professional bachelor)
- *Machine and Equipment Construction* (professional bachelor)
- Branches within the three-year follow-up master's study programme "Mechanical Engineering".

The branch open in the consultation centres in Jihlava, Uherský Brod and Žďár nad Sázavou:

• *Manufacturing Technology* (professional bachelor)

Condition for opening 1<sup>st</sup> year of the combined mode of study in Jihlava, Uherský Brod and Žďár nad Sázavou: If the number of students admitted for the combined study in the given consultation centre does not reach 25, the study will not be open there. These students will be offered on registration to study in a combined mode at FME in Brno.

Condition for opening a bachelor branch in a combined mode of study: First year of the combined study is shared by all branches and the study of the selected branch starts in the second year. The branch will not be open if selected by less than 20 students during the first year of study in the given consultation centre. These students will be offered to study another branch in a combined mode or to study in Brno.

Condition for opening of a branch in a three-year follow-up master's study in a combined mode: The study plan of the first year of study comprises compulsory and compulsory-optional courses of the common scheme, and the study of the selected branch starts in the second year. The branch will be open in Brno consultation centre if selected during the first year of the follow-up master's study by at least 20 students.

- 7. **The entrance procedure fee.** Based on the Rector's Decision No. 4/2005 the entrance procedure fee for admission process at BUT was for the academic year 2006/2007 set as follows:
  - CZK 550.- when submitting a paper application form;
  - CZK 400.- when applying electronically.

The fee has to be paid by all applicants going through the entrance procedure (it therefore shall be paid also by applicants admitted free of a written entrance examination). The fee shall be paid by a post money order or by a bank transfer. It the applicant fails to pay the entrance procedure fee in the prescribed term, the admission procedure will be terminated. According to the BUT Statute the fee is non-returnable, i.e. once it is paid it cannot be returned to the applicant. When applying in a paper form, the applicant shall enclose a photocopy of the post money transfer or a photocopy of the bank transfer statement. When applying electronically, the applicant follows instructions in the electronic application form and is not required to send a photocopy of documents proving the payment.

- Account number for applying in a paper form: 111043724/0300, constant code: 379, variable code do not enter, specific symbol: 13005.
- Account number for applying electronically: 27-7495740247/0100, constant code, variable code, and specific symbol will be assigned after filling the electronic application form.
- 8. **The maximum of students to be admitted.** The maximum number of students that can be admitted to the first year of study at FME in the academic year is 1300.
- 9. **The entrance examination** (Section 48 and 49 of the Act) and admission to study is conditional on completion of full secondary or full vocational education.

10. **Open days.** Open days for prospective students will be organised at FME on 16.12.2005 from 9:30h, and on 20.1.2006 from 12:30h in the FME buildings, Technická 2, 616 69 Brno. The open days are intended for secondary schools students and their parents to learn about the branches taught at FME and about possible study at FME.

# 11. Applying for the first year of study within bachelor's study programmes (entrance procedure according to para 1a).

(a) Paper and electronic application form.

Prospective students may apply for study in a paper form or electronically.

- Paper application form is a nationally valid form "Application for Study at Higher Education Institution". The application forms are available at the FME Academic Department. Paper application forms shall be mailed to the Academic Department, Faculty of Mechanical Engineering, Brno University of Technology (the following address written in Czech shall be used: Fakulta strojního inženýrství VUT v Brně, Studijní oddělení FSI, Technická 2, 616 69 Brno) or delivered to the FME Academic Department.
- Electronic application form shall be filled in and sent via Internet. It is available at the link accessible from <a href="http://www.fme.vutbr.cz/">http://www.fme.vutbr.cz/</a>.
- (b) <u>Term for submission of application forms.</u>

Duly completed application forms shall be submitted by **31 March 2006.** The entrance procedure starts on the delivery of the application form.

(c) Application requirements.

The application form shall be duly completed, especially the following parts:

- Secondary school code (IZO) and area of study;
- Secondary school yearly study results in mathematics and physics;
- Study programme: its title, i.e. one of the following:
  - "Engineering" (i.e. a three-year bachelor's study programme);
  - ◆ "Applied Sciences in Engineering" (i.e. a three-year bachelor's study programme).
- The box "Type of study programme" shall be filled with *bachelor's*.
- The box "Study" shall be filled with the selected mode of study, i.e. *full-time* or *combined*.
- Combined mode of study may be selected only with professional branches of bachelor's study programmes "Manufacturing Technology", "Machine and Equipment Construction" and "Applied Computer Science and Control" (see para 6 above). All applicants selecting the combined mode of study shall state in the application form also the place where they wish to study (under the box "Study"), i.e. Brno, Žďár nad Sázavou, Jihlava or Uherský Brod.
- All applicants shall fill in the box "Area of study" with the selected branch (see para 4 above). The applicants who want to study a professional branch within the bachelor's study programme, fill in the common branch "Engineering"
- The applicant is required to truthfully fill in the box "Previous study at institutions of higher education".
- State of health-medical certification is not required at FME.
- A photocopy proving the payment of entrance procedure fee shall be enclosed to the paper application form (see point 7 above).
- (d) <u>During the entrance examinations the applicant shall submit</u> an officially verified photocopy of a secondary school-leaving certificate and two photographs 4.5 x 3.5 cm. If the entrance examination in the given school year takes place before the term of

secondary school-leaving examination, the applicant shall enter the entrance examination in an alternative term (see point 13).

(e) <u>If the application form shows any technical deficiencies</u>, the faculty will return it to the applicant for rectification or completion. If the prospective student fails to rectify the deficiencies in the prescribed term, the admission procedure will be terminated.

#### 12. Entrance examination within the admission procedure.

### (a) General

The admission procedure includes according to para 1a) an entrance examination. The entrance examinations at the faculties FME, FIT, FEEC and FCE BUT are equivalent, which enable acknowledgement of the results achieved for possible transfer of the application form to one of the above mentioned faculties. The Dean may acknowledge the results achieved in the entrance examination taken at other faculties and based on them to make a decision on admitting the applicant to FME.

## (b) Conditions for exemption from the entrance examinations

The entrance examinations will be exempted if the applicant passed the secondary school-leaving examination from mathematics and physics and were marked with 1 or 2 from one of these subjects at least. This fact shall be documented by submitting the secondary school-leaving certificate during the entrance procedure. Exceptionally, regarding the previous study results, the Dean may decide on the exception from the entrance examination.

#### (c) Entrance examination characteristics

The examination is written and tests the knowledge of mathematics and physics, in the scope of a grammar school curriculum. It comprises test-like questions and the mathematic tasks and problems for solving. Mathematics test takes 60 minutes and physics test takes 75 minutes. There is a 15-minute break between the two parts. The test is evaluated by 0 to 25 points, the maximum number of points to achieve in both parts is therefore 50. The authorised workers of the Institute of Mathematics and the Institute of Physical Engineering, FME, will prepare a set of equivalent assignments of the written tasks, different for each term of the entrance examination. The sets of assignments are strictly confidential until opening of envelops in front of the prospective students. During the entrance examination from mathematics students cannot use any aids or tools (such as tables or calculators), during the entrance examination from physics students may use a pocket calculator only.

#### (d) Examination committee

The examination committee has three members including a chairperson and two teachers: one from the institute of Mathematics, one from the Institute of Physical Engineering. The chairperson and the members of the examination committee are appointed by the Dean. The examination committee revises the written entrance examinations and maintains records stating the results of the entrance examination and all facts relevant for admission.

#### (e) Pass mark to meet the requirements for admission to study at FME

In order to pass the entrance examination at FME, the prospective student has to achieve a particular number of points both in mathematics and physics. General branches of the bachelor's study programme require at least 20 points achieved in total from both subjects at the entrance examination. Professional branches of the bachelor's study programme require at least 15 points achieved in total from both subjects at the entrance examination. All applicants wishing to study a general branch of the bachelor's study programme, who achieved 15 to 19 points inclusive in total from both subjects, will be admitted to the professional branches of the bachelor's study programme.

#### (f) Announcement of entrance procedure results

Each applicant will be acquainted with the result of his/her entrance examinations, i.e. the number of points achieved, on the day when it takes place. Each applicant will also be notified by the chairperson of the examination committee, if he/she passed the test or not. The applicant may inspect the materials decisive for the admission to study (see Section 50, para 6 of the Act). The applicant then certifies under his/her hand in the "Admission Process Record" that he/she has been informed about the entrance examination records. Applicants' results in points are also available on the faculty web site.

- 13. **Term of entrance examination.** Only duly registered applicants will be invited to the entrance examination. The applicants will be invited in written by a registered letter, one month before the entrance examination at the latest. The invitation will include the day and hour when the applicant shall be present. A regular term has been set for 19 22 June 2006. An alternative term has been set for 29 June 2006. Possible absence from the entrance examination may be excused in written in advance. Such an excuse will be revised by the Dean and properly excused applicant will take the entrance examination in the alternative term. If the applicant does not appear without any excuse or if his/her excuse has not been accepted, the entrance procedure will be terminated.
- 14. Additional term (i.e. 2<sup>nd</sup> round) of entrance examination. Exceptionally, if the capacities of the faculty enable it, the Dean may set a second round of the entrance examination. Application deadline for the 2<sup>nd</sup> round and the date of the entrance examination will be announced by 1.7.2006 on the faculty web sites, the official board, and immediately published in daily press. The entrance examination in the possible second round will be subject to the same conditions as set for the first round.
- 15. **Admission to the follow-up master's study programme.** Applicants for the follow-up master's study programme will be admitted on the following conditions:
  - They completed a university bachelor's study programme in the area of engineering sciences (or a university bachelor's study programme in the area mathematical-physical or natural sciences when applying for "Physical Engineering", "Mathematical engineering" and "Materials Engineering").
  - They acquired credits for completed courses within the general and technical basic courses in the scope and scheme prescribed for the given bachelor's study programmes at FME.

Application deadline: by **15. 7. 2006**; the applicants are obliged to provide a certified copy of the university diploma, certificate of completed examinations and a document confirming the payment of the entrance procedure fee. The admission procedure will be completed in accordance with para 1b) free of entrance examinations.

Graduates from the general type of bachelor's study programmes at FME will be admitted to two-year follow-up master's study programmes, graduates from the professional type of bachelor's study programmes at FME will be admitted to three-year master's study programmes. Graduates from other faculties will be admitted to three-year follow-up study programmes. The Dean may require these applicants to complete particular general and technical courses within the follow-up study.

16. Admission to further branch within the master's study. An applicant who graduated from a master's study programme majoring in engineering sciences at any university, will be admitted to the second stage of the master's study programme free of the entrance

examinations. The branch shall be selected in compliance with the Dean's regulation. The admission procedure will be completed in accordance with para 1b). The application deadline is by 15. 7. 2006. The applicant is obliged to provide a certified copy of the university diploma, certificate of completed examinations and a document confirming the payment of the entrance procedure fee. The Dean may decide on the acknowledgement of the study in the first stage of the master's study programme at student's request (Section 20 of the Rules for Studies and Examinations BUT). The decision will be recorded in the student's record book.

- 17. **An applicant who graduated from a study programme** majoring in mathematical-physical sciences at any university, will be admitted free of entrance examinations. The applicant is obliged to provide a document confirming the payment of the entrance procedure fee.
- 18. An applicant who already studied at university in a bachelor's or master's study programme majoring in mathematical-physical or engineering sciences, and completed his/her studies without a graduation, will be subjected to the entrance examination. The admission procedure will be completed in accordance with para 1a). The application deadline is by 31. 3. 2006. The applicant is obliged to provide a certificate of completed examinations and a document confirming the payment of the entrance procedure fee. The Dean may decide on the acknowledgement of a part of competed study or of some completed examinations at student's request (Section 20 of the Rules for Studies and Examinations BUT). The decision will be recorded in the student's record book. If the applicant applies for study in higher year (and satisfied the conditions for acknowledgement of lower years of study), he/she has to achieve at least 20 points in total at the written examination.
- 19. An applicant who is currently studying in a study programme majoring in engineering sciences, wants to terminate his/her study and continue it in a similar study programme at FME (applicant who wants to move to FME), will be admitted to the study programme at FME free of entrance examinations at his/her request according to para 1b). The applicant is obliged to meet the requirements for enrolment in further year of study set at the university studied. The application deadline for the admission to FME is by 31. 8. 2006. The applicant is obliged to provide a certificate of satisfying the conditions for enrolment in further year of study set at the university studied, a certificate of completed examinations and a document confirming the payment of the entrance procedure fee. The Dean may decide on the acknowledgement of a part of competed study or of some completed examinations at student's request. The decision will be recorded in the student's record book. Applicants who moved from FME to other university for unsatisfactory study results at FME, will not be allowed back to FME. These applicants may start their study at FME via the entrance procedure according to para 1a) on the basis of an entrance examination.
- 20. **Students in the lifelong learning at FME** in the programme *Mechanical engineering basics* in the academic year 2005/2006 will be admitted to the accredited study programme free of entrance examinations and free of entrance procedure fee. These applicants shall submit the application after completion of the lifelong learning programme, by **31. 8. 2006** at the latest. The application form shall include the student's record book from the lifelong learning programme, application for enrolment in the respective year of study, and a certificate of examinations completed within the study at FME.
- 21. **Applications for acknowledgement of examinations.** All applications regarding acknowledgement of examinations must be submitted in a standard form to the FME

Academic Department by the end of the first week of the instruction. Exception may be approved by the Dean. When considering the application, the Dean will take account of the study results and the date of examinations; he/she may also ask the respective FME institute/department for an opinion. Applications for acknowledgement of examinations completed at different faculties must be substantiated with a certified document describing the course curriculum.

- 22. **Admission decision.** Decision on admission or non-admission to study at FME will be mailed personally to applicants by 30 days after verification of admission requirements (Section 50 para 5 of the Act). If the applicant does not collect the mailed admission decision, it will be released on the official board, and the date of release will be considered as a delivery date. The admission decision includes the ground of the decision and instructions regarding the possibility to seek review.
- 23. **Request for review of decision (appeal).** The request shall be addressed to the Dean in 30 days after the delivery of the decision. The Dean may grant the request and change the decision, or else he/she will transfer the request to the Rector's decision. When considering the request it shall be verified that the decision has not been rendered in conflict with the Act, or with the university or faculty internal regulations. The essential part of this process is verification of the results achieved in the entrance examination.

# 24. When the admission procedure shall be terminated.

- Non-completeness of the application form or failing to pay the entrance procedure fee.
- Admission to FME will not be possible with students who owe the faculty some fees regarding their previous study. The admission procedure will be terminated.
- The admission procedure will be terminated with FME students who applied for study in a programme currently studied.
- 25. **Admission to study.** Admitted applicant becomes a student of FME on the date of enrolment (see the Act on higher education institutions). The prospective students will be informed about the terms of enrolment in the Decision about admission to study and will be announced on the faculty web sites in the link "Study".
- 26. Conditions for studies of foreign students in the Czech language are stipulated in Section 49 para 2 of the Act and Article 12 of the BUT Statute, regarding the admission of foreign students for the study in the Czech language and under the same conditions valid for local students, in case of:
  - a) acknowledgement (recognition) of completed secondary education;
  - b) fulfilling the conditions required for admission of local students; and
  - c) successful examination in the Czech language at the Institute for Language and Preparatory Studies, Charles University in Prague, or at duly accredited language school, or as a part of the secondary school leaving examination passed in the Czech Republic, or at some of the BUT language departments providing courses of Czech as a foreign language.

Citizens of the Slovak Republic are required to fulfil condition b) only.

d) Conditions for studies of foreign students in a foreign language. A study programme for foreign students performed in a foreign language is charged an annual tuition fee of € 5000 (Section 58 para 5 of the Act). Admission of the students is governed by conditions set up in this Regulation, is free of charge and completed in the English language.

The Regulation has been approved by the FME Academic Senate on Dec 8, 2005 (see Section 27 para 1, e) of the Act).

prof. Ing. Josef Vačkář, CSc., m. p. FME Dean