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# DIRECTIVE OF THE DEAN CONCERNING BACHELOR AND FOLLOW-UP MASTER STUDY PROGRAMS AT THE CZECH TECHNICAL UNIVERSITY, FACULTY OF BIOMEDICAL ENGINEERING

#### Article 1

# **BASIC PROVISIONS**

- 1. Study at the Czech Technical University in Prague Faculty of Biomedical Engineering (further referred to only as "CTU FBME") is implemented in accredited bachelor and follow-up master study programs in full-time and part-time forms. The study programs accredited at CTU FBME are listed on the faculty web page (https://www.fbmi.cvut.cz/cs/fakulta/informace-pro-verejnost). Study programs are divided into individual fields of study or specialisations or there are independent study programs, which are not divided into fields of study or specialisations.
- 2. The conditions of studies are stipulated primarily in the internal regulations of the CTU in Prague, which are:
  - a) Study and Examination Rules for students of the CTU in Prague (further only as "SER CTU").
  - b) Disciplinary Rules for CTU students.
  - c) Scholarship Rules of the CTU in Prague.
  - d) This directive outlining the details, which are an integral complement to the SER CTU and other internal regulations of the CTU in Prague.

# Article 2

#### ORGANISATION OF STUDY

1. The recommended study plans for study programs in all forms are published on the web page <a href="http://bilakniha.cvut.cz/en/f7.html">http://bilakniha.cvut.cz/en/f7.html</a> based on the data saved in IS KOS of the CTU (further only as "KOS"). This web page <a href="http://bilakniha.cvut.cz/en/f7.html">http://bilakniha.cvut.cz/en/f7.html</a> also lists the tutors teaching all courses in the given academic year, as well as the tutors responsible for the course (who are marked as guar.). The listed tutors must fulfil the conditions stipulated in the Order of the Dean No. 1/2013 on labour law relations of tutors at CTU FBME, their further obligations, and qualification requirements for lecturing in all study

programs as well as carry out the individual activities in compliance with the Decision of the Dean N. 1/2020 - on the powers of vice deans, rights and obligations of the department heads, program supervising departments, program supervisors, deputy supervisors, course supervisors, and program and branch boards and according to the powers set in the Order of the Dean N. 12/2021 on determination of the field of study and program supervising departments at CTU FBME.

2. Study plans of individual study programs (or rather specialisations or programs, which are not divided into fields of study or specialisations) are named after the commencement of the 1 st year. Based on the granted accreditation / prolongation of the validity of the accreditation of the individual study programs, the recommended lengths of classes in the semesters are set as follows:

Bachelor study program Biomedical and Clinical Technology (BMKT)			
Field of study	N. of weeks of classes N. of weeks of class (winter semester) (summer semester)		
Biomedical Technician (BMT), full-time study	14 weeks	14 weeks	
Optics and Optometry (OPT), full-time study	14 weeks	14 weeks	
Biomedical Informatics (BMI), full-time study	14 weeks	14 weeks	
Biomedical Informatics (BMI), part-time study	7 weeks (classes 1 x in 2 weeks)	7 weeks (classes 1 x in 2 weeks)	
Information and Communication Technology in Healthcare (ICTM), full-time study	14 weeks	14 weeks	

Bachelor study program Biomedical Technology (BMT)				
N. of weeks of classes N. of weeks of classes				
	(winter semester) (summer semester)			
full time study	14	14 weeks/		
full-time study	14 weeks	3 rd year 10 weeks		

Bachelor study program Biomedical Technology (ABMT)				
N. of weeks of classes N. of weeks of classes				
	(winter semester) (summer semester			
full time a study	14,000,000	14 weeks/		
full-time study	14 weeks	3 rd year 10 weeks		

Bachelor study program Specialisation in Healthcare (SVZ)				
Field of study	N. of weeks of classes	N. of weeks of classes		
Field of Study	(winter semester)	(summer semester)		
Physiotherapy (FZT),	14 weeks /	10 weeks /		
full-time study 3 rd year 10 weeks 3 rd year 12 weeks				

Radiological Assistant (RA), full-time study	14 weeks	10 weeks
Paramedic (ZZ), full-time study	14 weeks / 2 nd and 3 rd year 10 weeks	10 weeks
Medical Laboratory Technician (ZL), full-time study	14 weeks	10 weeks / 1 st year 11 weeks

Bachelor study program Physiotherapy (FZT)				
N. of weeks of classes N. of weeks of classes				
	(winter semester) (summer semester)			
full time a study	14 weeks	10 weeks/		
full-time study	3 rd year 10 weeks	3 rd year 11 weeks		

Bachelor study program Paramedic (ZZ)			
N. of weeks of classes N. of weeks of classes			
	(winter semester)	(summer semester)	
full-time study	14 weeks	10 weeks	
Tun-time study	3 rd year 10 weeks	TO Weeks	

Bachelor study program Population Protection (OO)				
Field of study	N. of weeks of classes (summer semester)  N. of weeks of classes (summer semester)			
Planning and Management of Crisis Situations, full-time study	14 weeks	10 weeks		
Planning and Management of Crisis Situations, part-time study	7 weeks (classes 1x in 14 days on Fri and Sat)	7 weeks (classes 1x in 14 days on Fri and Sat)		

Bachelor study program Medical Laboratory Diagnostics (LDZ)			
N. of weeks of classes N. of weeks of classes			
	(winter semester) (summer semester)		
full-time study	14 weeks	10 weeks/ 3 rd year 2 weeks	

Bachelor study program Radiological Assistance (RA)		
N. of weeks of classes N. of weeks of classes		
	(winter semester)	(summer semester)
full-time study	14 weeks	10 weeks /
,	3 rd year 10 weeks	

Bachelor study program Optics and optometry (OPT)				
N. of weeks of classes (winter semester)  N. of weeks of classes (summer semester)				
full-time study 14 weeks 14 weeks/				

	3 rd	year 10 weeks
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Bachelor study program Informatics and Cybernetics in Healthcare (IKZ)		
Specialisation	N. of weeks of classes	N. of weeks of classes
-	(winter semester)	(summer semester)
Biomedical Informatics (BMI),	14 weeks	14 weeks/
full-time study	14 Weeks	3 rd year 10 weeks
Information and Communication	14 weeks	14 weeks/
Technology (ICT), full-time study	14 WEEKS	3 rd year 10 weeks

Bachelor study program Safety and Protection of Population (BOO)		
	N. of weeks of classes (winter semester)	N. of weeks of classes (summer semester)
full-time study	14 weeks	12 weeks/ 2 nd and 3 rd year 10 weeks
part-time study	7 weeks (classes 1x 14 days on Fri and Sat)	7 weeks (classes 1x 14 days on Fri and Sat)

Follow - up master study program Biomedical and Clinical Technology (BMKT)		
Field of study	N. of weeks of classes (winter semester)	N. of weeks of classes (summer semester)
Instruments and Methods for Biomedicine, full-time study	14 weeks	14 weeks
Biomedical Engineer (BME), full- time study	14 weeks	14 weeks
Systematic Integration of Processes in Healthcare, full-time study	14 weeks	14 weeks
Systematic Integration of Processes in Healthcare, part-time study	7 weeks (classes 1x in 14 days on Fri and Sat)	7 weeks (classes 1x in 14 days on Fri and Sat)

Follow - up master study program Biomedical and Clinical Informatics (BMKI)		
Specialisation	N. of weeks of classes (winter semester)	N. of weeks of classes (summer semester)
Assistive Technologies (AST), full-time study	14 weeks	14 weeks/ 2 nd year 10 weeks
Software Technologies (SWT), full-time study	14 weeks	14 weeks/ 2 nd year 10 weeks
Nanotechnology (NNT), full-time study	14 weeks	14 weeks/ 2 nd year 10 weeks

Follow - up master study program Civil Emergency Planning (CNP)		
N. of weeks of classes N. of weeks of classes		
	(winter semester)	(summer semester)
full-time study	14 weeks	1 st year 10 weeks/2

		nd year 8 weeks
	7 weeks	7 weeks
part-time study	(classes 1x per 14 days	(tuition 1x per 14 days
	on Fri and Sat)	on Fri and Sat)

Follow - up master study program Protection of Population (00)		
Field of study	N. of weeks of classes (winter semester)	N. of weeks of classes (summer semester)
Civil Emergency Planning (CNP), full-time study	14 weeks	12 weeks / 2 nd year 7 weeks
Civil emergency planning (CNP), part-time study	7 weeks (classes 1x in 14 days on Fri and Sat)	7 weeks (classes 1x in 14 days on Fri and Sat)

Follow - up master study program Systematic Integration of Processes in Healthcare (SIPZ)		
	N. of weeks of classes	N. of weeks of classes
	(winter semester)	(summer semester)
full-time study	14 weeks/	10 weeks
	2 nd year 12 weeks	
	7 weeks	7 weeks
part-time study	(classes approx. once	(classes approx. once
	in 2 weeks on Fri and	in 2 weeks on Fri and
	Sa)	Sa)

Follow - up master study program Systematic Integration of Processes in Healthcare (ASIPZ) study in English		
	N. of weeks of classes (winter semester)	N. of weeks of classes (summer semester)
full-time study	14 weeks/ 2 nd year 12 weeks	10 weeks

Follow - up master study program Biomedical Engineering (BME)		
N. of weeks of classes N. of weeks of classes		
	(winter semester)	(summer semester)
full time a atual	12 weeks	12 weeks
full-time study		2 nd year 10 weeks

Follow - up master study program Biomedical and Clinical Engineering (ABME) study in English		
	N. of weeks of classes (winter semester)	N. of weeks of classes (summer semester)
full-time study	14 weeks	14 weeks 2 nd year 0 weeks

Follow - up master study program Applied physiotherapy (AFZT)		
N. of weeks of classes N. of weeks of classes		
	(winter semester)	(summer semester)
full-time study	14 weeks	10 weeks

#### PRELIMINARY REGISTRATION TO COURSES

- 1. To create the timetable efficiently, the preliminary registration for courses in all study programs is regularly performed through KOS during the teaching part of the semester.
- 2. Each CTU FBME student is obliged to participate in the preliminary registration according to the Decree of the vice-dean for studies and pedagogy. Thereby, he/she expresses interest in registering for the course (required optional course or optional course) in the subsequent semester. Student, who fails to register for the course during the preliminary registration, will not be registered for the course in case of insufficient capacity. If the demand prevails, the head of the department supervising the course will decide upon inclusion into the course by the end of the second week of the semester at the latest.
- 3. Before these registrations, every department is obliged to determine through KOS, which courses will be opened, and what the initial capacity will be. When the preliminary registration is over, each department must determine the final capacity of the course through KOS. It must also determine the courses (optional and required optional), which will be offered for registration. Students exceeding the capacity or in the case of an unfilled course, students can register for a different course (this concerns required optional or optional courses).
- 4. In the bachelor study program, Informatics and Cybernetics in Healthcare students of the first year must choose their specialisation for the second year by March 31, at the latest. They will indicate their choice on the form called "Specialisation selection Informatics and Cybernetics in Healthcare (IKZ)". The signed form can be handed over to the study department in person, sent by mail or email with a scanned signature of the student from the university email address of the student. Specialisation will be opened only if at least 10 students select it. Should the number of registered students in both specialisations be less than 10, the specialisation, which was chosen by more students, will be opened. If the number of registered students is equal, the study program guarantor shall decide upon the opening of the relevant specialisation.

#### Article 4

# STUDY PLANS, COURSE OF STUDIES, ASSESSMENTS, GRADED ASSESSMENTS, EXAMINATIONS

1. Classes take place according to the study plans (recommended passes published on <a href="http://bilakniha.cvut.cz/en/f7.html">http://bilakniha.cvut.cz/en/f7.html</a>) for the given academic year. Participation in lectures is recommended. On special occasions, a lecture given by an eminent personage can be marked as compulsory. Such

- a determination falls within the powers of the head of the department supervising the field of study or program, which is not divided into fields of study or the vice dean for studies and pedagogy. For study programs, or rather fields of study, accredited with approval of the Ministry of Health of the Czech Republic, where the prescribed number of lessons must be fulfilled, the lectures can be ordered as compulsory based on the decision of the head of the department supervising the field of study or program, which is not divided into fields of study but only under the condition that the attendance of the students concerned will be duly kept, evaluated, and made accessible. All forms of tutorials are compulsory. Specific conditions are declared pursuant to Article 5 of this directive.
- 2. Pursuant to the SER CTU article 7, par. 3c, it is possible to require active participation in the tutorials and to check home assignments. If the student is not prepared, nor equipped with the necessary aids that have been declared well in advance, his/her participation in the tutorial will be denied and he/she must participate in a tutorial on a compensatory date according to the capacity of the individual dates of the tutorials. The same also applies if the student is late for the class, which prevents him/her from full participation in the lesson, or it would interfere with the course of the lesson for the whole class. However, the provision of article 13, paragraph 3 of SER CTU is not thereby affected. It is forbidden to make video and audio recordings of the lectures, tutorials, etc. without the prior consent of the tutor.
- 3. Ungraded assessments and graded assessments for the courses registered in the semester are usually granted in the last teaching week of the semester. The student is obliged to get ungraded assessments and graded assessments from the courses registered in the semester by the end of the respective examination period at the latest. The tutor, who oversaw the tutorials, grants an ungraded assessment /graded assessment. In exceptional cases (e.g., absence of the tutor due to illness, business trips, etc.); it is granted by the tutor responsible for the course, or by the head of the department supervising the course. If the tutor is no longer working at CTU FBME, this situation must be solved exclusively by the department supervising the course or field of study or program, which is not divided into fields of study.
- 4. If the course is completed by an assessment and examination, the student is obliged to get the assessment before the regular date of the examination.
- 5. Students can take examinations and resit examinations during an examination period, exceptionally during the last week of the semester. In the case of the so-called "block teaching", it is possible to take assessments, graded assessments, and examinations, upon agreement with the examiner immediately after finishing this block (applicable mainly in the part-time study). The exceptions are fields of study or programs, which are not divided into fields of study with a shorter semester declared directly in the accreditation. In such a case, this fact, in the form of a modified examination period, is recorded in the FBME academic year Schedule. It is possible to take examinations for the courses registered in the winter semester even during

- the examination period of the summer semester (except for the single-semester extraordinary study, which is a part of the Lifelong Learning Program (further only as the "LLP")). Examinations for the courses registered in the summer semester must be taken solely during the examination period of the summer semester.
- 6. Should the student wish to take the opportunity pursuant to Article 10 (9) of the Study and examination rules of the CTU, then he/she must have at least one resit date available. In the opposite case, it is not possible to apply for the board examination. The student will submit the application (universal application form) to the secretariat of the department supervising the course. The head of the department will propose a three-member board to the dean (one chairperson and two members - one member must be a tutor participating in the teaching of the course) within 14 days from the receipt of the application at the latest. The dean will appoint the board (the letter of appointment will be prepared for signature by the dean by the secretariat of the department). If the examiner would be the head of the supervising department, the dean himself/herself proposes the board. The secretariat of the department will then immediately inform the student through the university email about the composition of the board for the resit board examination and about its date. If the exam is in the form of an oral examination, the audio-visual recording is made, which will be saved for 60 days at the secretariat of the department supervising the given course. In the case of a written examination, the student is entitled to acquaint oneself with its correction within 5 working days at the latest. The final grade of the board examination will be recorded to KOS by the secretariat immediately and the application form together with other written documents will be passed to the study department for filing.
- 7. In justified cases, upon submission of an application in writing (universal application form), the vice dean for studies and pedagogy can set a different date for completion of the course.
- 8. A student registers for an examination solely through KOS system. There must be all regular examinations and resit dates for the whole examination period listed at least 7 days (a week) at the latest prior to the first course examination date or possibly, the resit date (if it is a course from the winter semester and the resit date is in the summer semester). The same rule applies to other, subsequently enlisted dates (particularly resits). It is necessary to highlight the last exam date in KOS.
- 9. The examiner or the tutor granting the ungraded assessment, or graded assessment must clearly state prior to the written part of the examination, assessment/graded assessment (it means at any time before or on a given day) the conditions what the student can use, what not, etc. Should a student fail to fulfil these conditions, he/she will be expelled and given the grade F.
- 10. The student is obliged to identify oneself by showing an identity document (valid ID card, passport, driving licence, or student's card) pursuant to art.8 (1) of Study and Examination Rules of the CTU (SER CTU) before taking an assessment/graded assessment/examination. If the student fails to prove

- his/her identity by a document, he/she will be denied from participating in the assessment/graded assessment or examination.
- 11. When writing the tests, an adequate amount of time must be given for the whole test but also for the individual questions. Instructions for each test must be archived. It must be clear from each corrected test which answer was wrong and the number of points given for each question and for the whole test as well and the subsequent evaluation. Every student is entitled to inspect all the tests that he/she has written and become familiar with their evaluation, including marking wrong answers. Copies or notes made from these tests can only be made with the consent of the course guarantor. However, the periods for inspections are different. In case of tests taken during the semester or in case of assessment tests, the students have the right to inspect them immediately after their evaluation. In the case of examination tests, it is possible to inspect these tests immediately or 48 hours after that examination date at the latest. Evaluation of the tests must be made public to the students within 2 subsequent working days at the latest from the date of writing the test.
- 12. Every tutor is obliged to record the result of the assessment, graded assessment, or examination in KOS at least within two subsequent working days. In the case of externs, this is done by the secretariat of the department supervising the respective course or by an authorised tutor. In case the student does not accept the evaluation registered in KOS, he/she must inform the relevant tutor orally or by email that he/she does not accept the given grade within 48 hours at the latest from registration of the grade in KOS. The tutor will then immediately change the grade to F in KOS (see Art. 10 (7) of Study and Examination Rules of CTU). If the student gets the grade F due to his/her failure to appear for the examination and did not deregister timely in KOS or failed to submit an excuse (see art. 10 (8) of SER CTU), the tutor is obliged to state this fact in KOS in the folder "Comments" together with the grade of the examination.
- 13. If the student takes the opportunity pursuant to article 13 (10) of the SER CTU on course recognition, it is necessary to meet the deadline of 5 years from passing the respective course (two years in the case of a course passed within the extraordinary study, which is a part of the LLP). The passed course must have the same or higher level of completion and similar syllabus as the course at FBME, the evaluation must not be lower than "2" according to the older scale or "C" according to the scale in correspondence with ECTS scale (see SER CTU, art.11). In the case of courses passed within the extraordinary study, which is a part of the LLP, those courses are recognised, which were graded A, B, C, D, or E up to 60 % of the total credit load of the given study program. The application (application form for recognition of courses and recognition sheet) must be submitted within the first 14 days of the semester through the Study department. Student's booklet or confirmed list of the grades and the confirmed syllabus of the course from previous studies (if the course is not from the FBME) and the grading scale (if the course is not from the CTU) must be submitted together with the application. Only courses taken in equal studies, i.e., in bachelor studies from bachelor studies or

higher, and in follow-up master studies from the follow-up master studies or master study program, or higher can be recognized. The syllabus shall be assessed by a tutor responsible for the course, who is obliged to send his/her opinion within 14 days from receiving the application from the Study department of FBME through the secretariat of the department supervising the field of study or program, which is not divided into fields of study. In the case of a positive opinion, the study department will record the recognised study result in KOS. The student is obliged to check the record in KOS immediately and if it does not correspond, contact the study department without undue delay. Due to this process, it is necessary that the student starts attending the course already from the beginning of the semester and subsequently after getting the result of the application concerning recognition either continues in attending it or not. In the opposite case, he/she can face sanctions for failure to meet the conditions of the assessment.

- 14. In the case of repeated registration for the course, the student must pass the course within the scope set in the current study plan. The current tutor, who is responsible for the course defines the details. This also concerns the possibility of recognition or nonrecognition of the assessment, but only in the case of a course registered on the second registration and completed by the assessment and examination. In such a case, the student is obliged to solve this situation by applying for recognition of the assessment (application form for recognition of the assessment in case of the second registration of the course) within the first 14 days of each semester at the latest to the secretariat of the department supervising the course. The tutor responsible for the tuition of the course assesses the application and is obliged to submit the decision on recognition to the secretariat of the department supervising the course within 14 days at the latest from the acceptance of the application. The secretariat of the department shall inform the student about the decision through the university email and will immediately pass the application for recognition of the assessment to the study department for file. In the case of a positive response, the secretariat of the department supervising the course will record the assessment in KOS. The student is obliged to check the record in KOS immediately after the receipt of the email, and if it does not correspond, contact the secretariat of the department without due delay. When considering the application for recognition of the assessment, it is necessary to evaluate the changes to the content, to attributes of the course, changes to the assessment requirements, or a change in a tutor. Due to this process, it is necessary that the student starts attending the course from the beginning of the semester and after receiving the result of the application for recognition either continues in attending the course or not. In the opposite case, the student puts himself/herself at risk of sanction for failure to meet the conditions for granting the assessment and thus non-granting the assessment.
- 15. If the student is sent to study at a university abroad, within the scope of valid programs and agreements, he/she must submit the comparative sheet for studies abroad to be approved by the vice dean for studies and pedagogy 14

- days at the latest prior to the deadline for submission of the application prior to any application for studies abroad or at least a month in advance in the case of the non-application stays. In addition, he/she must pass the language tests according to the applicable instructions.
- 16.Transfers from a different university, other CTU faculty, or within the FBME from one study program to another study program or within a given study program from one field of study/specialisation to another field of study/specialisation are not allowed. In exceptional cases (especially due to serious health or social reasons or due to parenthood), it is possible to allow the switch from one form of study to another, e.g., from full-time study to a part-time study under the condition that it exists and based on the application of the student (universal application form). The decision-making process in this matter is regulated by art.15 of the SER CTU. Internship must be also completed if prescribed.
- 17. In compliance with the Universities Act n. 111/1998 Sb. as amended and pursuant to the CTU Status, the student survey takes place namely to evaluate the teaching in the given semester. The survey is organised and evaluated by the CTU FBME students and they do the necessary corrections of any inappropriate texts, which are inconsistent with the main purpose of the survey, which is to evaluate the teaching at FBME in individual courses and arrange the conditions for studies at the CTU FBME. The complete methodology for the implementation of the survey and all results and evaluations of previous surveys are on the web page https://anketa.is.cvut.cz/.

# **COURSES**

- 1. The tutor responsible for the course is obliged to arrange publishing (for the bachelor or follow-up master program course in a week preceding the beginning of a semester) following materials as prescribed in the Schedule for the academic year through the lecturers and/or tutors of the respective courses (if the course does not have lectures) and after the approval of the head of the department supervising the respective field of study or program, which is not divided into fields of study (if the course is arranged by a different department, it is then carried out by the department supervising the course):
  - a. schedule of the lectures, tutorials, and other teaching forms, highlighting compulsory attendance in the individual parts except for the lectures which are recommended (see Art. 7 (5) of the SER CTU) as well as who is responsible for the classes and where the classes are. All forms of teaching, including excursions must be included in this time schedule,
  - b. written assignments topics and dates of their assignment and submission, including evaluation criteria,
  - c. schedule for continuous checks, and evaluation of studies carried out in the tutorials. There must be at least two dates for written tests that are decisive for granting/non-granting of the assessment in case it is used for

this purpose. All 14 weeks must be used for writing the tests, possibly a different number of weeks in case of fields of study and programs, which have a shorter teaching part of the semester, see art. 2 (2) of this directive.

- d. examination requirements, conditions for granting the assessment, or graded assessment,
- e. list of required literature, or requirements concerning knowledge from other courses (see prerequisites),
- f. manner of evaluation during the semester, examination share in the overall assessment and overall assessment according to the valid ECTS grading scale,
- g. presentations in electronic form. This is not necessary in case that there are study materials in the form of the college textbook or study support materials, university textbooks, or monographs in the Czech language, which are available in the library in at least 5 copies, or there is an electronic version within EIZ CTU or Moodle, or the book is still available in shops. All these publications must be listed as part of the recommended literature.
- h. materials for preparation and implementation of tutorials and other materials (assignments for the tutorials and instructions for laboratory work must be publicized only if there is no textbook containing these instructions available),
- i. for the part-time study, every tutor responsible for the teaching of the course shall publicize the study materials for the respective course as these were approved within the accreditation procedure, with possible supplements and updates.
- 2. Every tutor is obliged to publicise the exact dates of consultation hours during the semester and examination period (see Dean's order n. 1/2013 on Labour relations of tutors at CTU FBME, their further responsibilities, and qualifications for lecturing in all study programs, and forms of studies carried out in the Czech language at FBME CTU).
- 3. All forms of studies are compulsory in the part-time study. To document the attendance of students, the attendance sheet with signatures or a printout of the list of the electronic attendance sheet signed by the tutor in charge in each field of study/program in the part-time study must be made accessible at the end of the semester at the secretariat of the department supervising the field of study or program, which is not divided into fields of study. The layout of the attendance sheet is up to the departments. However, a random check of the attendance sheets must be allowed within one week of notification of such a request by the vice-dean for studies and pedagogy to the head of the department supervising the field of study/program, which is not divided into fields of study which arranges the classes, and which prepares the schedule. An excused absence is permitted in the scope of 2 days only within the given semester. For the study program CNP and study fields PŘKS, BMI, CNP and SIPZ this includes one Friday and one Saturday within the semester. The tutors will allocate substitute assignments for the absence. In case of an emergency that would make the participation of

students in the lessons, or in the medical institution, state institution, or in the Czech Republic impossible, the head of the department supervising the field of study or program, which is not divided into fields of study, will handle each case individually.

#### Article 6

# REGISTRATION FOR COURSES

- 1. The registration means registration in at least one compulsory, required optional course, or optional course in accordance with the study plan (see http://bilakniha.cvut.cz/en/f7.html). Changes to the course registration can be made only during the first 14 days of the semester through the study department and by means of a submitted application (form for adding or cancelling courses). The signed application can be handed over in person at the study department, sent by mail or email with a scanned signature from the university email address of the student. In the case of a course with the limit capacity or the capacity close to its limit (typically 10 students), the changes to the registration are subject to the approval of the department which guarantees the course. In such a case, the student must apply - on an application form (universal application form) - at the relevant department, which will immediately arrange its handover to the study department with the opinion. The study department will cancel or register the course in KOS in both cases. The student is obliged to check the record in KOS without undue delay and if the registered courses do not correspond, immediately contact the study department.
- 2. The registration dates are set by the Schedule for the FBME academic year. Organisation of the registration, the passage of the students, and other specifying requisites are set by Decree of the dean.
- 3. With respect to the condition of continuity of the selected courses, the socalled prerequisites of the courses are introduced (pursuant article 4, par. 4b SER CTU). This continuity is implemented in KOS and is clear from the the web individual information on pages of the (https://predmety.fbmi.cvut.cz/en and http://bilakniha.cvut.cz/en/f7.html). Prerequisites do not apply to international students who study CTU FBME on short-term stays (Erasmus+, internships, etc.) The meaning of the individual types of co-requisites and prerequisites is as follows (see help in KOS – item Relations of the courses):

Abbreviation	Name	Description	Importance
P	P prerequisite	the selected course, the registration for the following courses in	Course B is a P prerequisite of course A if course B must be registered earlier (in some of the preceding semesters) then course A.
Z	Z prerequisite	The condition for registration for the given course is the fact that the student obtained	

		the course assessment in some of the proceeding semesters:	obtaining an assessment from course B in some of the preceding semesters.
А	A prerequisite	The condition for registration for a given course is that the student in some of the preceding semesters successfully completed the course:	Course B is an A type prerequisite of course A if the condition for the registration for course A is successful completion of course B in some of the preceding semesters.
K	Corequisite	The selected course must be registered at latest together with:	Course B is an A type corequisite if course B must be registered earlier (in some of the preceding semesters) or simultaneously (in the same semester) with course A.
N	Prohibition of registration	The selected course must not be registered together with:	Course B is in "prohibition of registration relationship" with course A if course A must not be registered if course B has already been completed or course B is registered in the same semester in which course A is registered. This relationship is not symmetrical.
Q	Previous grading	The selected course can be graded only after obtaining a grade from the following course:	Course B is in the relationship of "previous grading" to course A if the date of completion of course B must be prior to completion of course A.
S	Previous grading	The selected course can be passed only after having passed this course:	Course B is in the relationship of "previous passing" of course A, if the date of passing course B must be prior to the date of passing of course A.
М	Prohibition of concurrent registration	The selected course cannot be registered together with:	Course B is in the relationship of "prohibition of concurrent registration" with course A if course A must not be registered if course B is registered in the same semester in which course A is registered. This relationship is symmetrical.
R	Replacement	The selected course is a replacement for the following:	Course A replaces course B if, during the check of study plans, completion of course A should be regarded as the completion of course B

	which is in the study pla	n.
	The relationship is n	ot
	symmetrical.	

Relationships P, A, Z, K, S, N, M are automatically checked during the check of the registration and during the attempt to register the course. The selected course is course A (first course), the course which is in relation to it is course B (the second course). This text was adapted from the currently valid iKOS Help.

- 4. The student can register a course, which he/she discontinued in the past (twice at most). For this reason, the student must submit the application (universal application form) to the dean of the faculty through the study department prior to the semester in which this course is normally taught. A new registration for this course will be made based on this application and the results obtained based on the preceding registration will be cancelled and the grade F will be entered. Subsequently, the student will have to pass the course again in full. Credits for each course are counted only once. If the course is taught in more forms, all these forms are, for the purposes of reporting, considered as one course. A student in a bachelor study program can register for a different form of the same course in the follow-up master studies if the course covers the same issue. A student of the follow-up master study program must not register for courses, which s/he has already passed in the bachelor studies or their equivalents. This does not apply to the optional course "physical education".
- 5. The optional courses are listed as one set of courses for all or selected study programs. If the student chooses them, they become part of his/her study plan, and credits for these courses are included in the so-called passage credits pursuant to Art. 14 (4) of SER CTU. It is possible for a CTU FBME student to register in any compulsory and required optional course within CTU in the form of an optional course. Equally, any course within CTU that is coherent with a student s profile, can be recognized as a required optional course. In this case, the student will apply to recognise the course to the study department (universal application form). The head of the department supervising the field of study or program, which is not divided into fields of study (or his deputy), the supervisor of a field of study or program, which is not divided into fields of study (or his deputy or deputy for the given specialisation in case the study program is divided into specialisations) will express his/her opinion on the application. It will then be approved by the vice dean for studies and pedagogy.
- 6. The registration in the schedule is performed through KOS in the manner of preference of students based on the weighted sum of credits acquired in the last two semesters. The more successful a student is, the better schedule he/she can create. All 1st-year students winter semester can enter the schedule simultaneously since they have no results based on which they can be assessed.
- 7. The student has the right to complete the studies in the study program and the field of study (or rather a specialisation or program, which is not divided into fields of study or specialisations) which s/he commenced. In case of a

change in accreditation, the so-called course equivalents between the individual accreditations can be employed or a passage to a new accreditation with respect to the study plan based on an application of the student can be arranged (universal application form). In such cases, an adjustment of prerequisites can be asked for. This mainly concerns students who recommence after interruption of studies. In case of cessation of the existence of the accreditation, the procedure pursuant to art.3a of the SER CTU applies.

### Article 7

#### FINAL STATE EXAMINATIONS

- 1. Final state examination (hereafter only FSE) verifies students knowledge and skills required by the syllabus of the bachelor or follow-up master study program and if he/she can apply the acquired knowledge in practice and in the future job.
- 2. Proposals concerning the appointment of FSE examination board members are submitted by the head of the department supervising the relevant field of study or program, which is not divided into fields of study by the end of April at the latest, firstly to the vice dean for studies and pedagogy for a check and subsequently to the dean for approval.
- 3. The FSEs consists of the bachelor project presentation and defence (in case of bachelor studies), and a master's thesis presentation and defence (in case of follow-up master studies). There is also an oral examination in the thematic areas of theoretical grounds and profile courses of the studied field (or rather a specialisation or program, which is not divided into fields of study or specialisations) and possibly a practical examination, depending on the field of study or program, which is not divided into fields of study. The dean of FBME sets, based on the proposal of the head of the department supervising the field of study or program, which is not divided into fields of study, oral examination topics that will be published by the end of the teaching part of the semester preceding the FSEs the latest. The student takes the examination from two, three, or four thematic areas, according to the studied field (or rather a specialisation or program, which is not divided into fields of study or specialisations). In case of the possibility to select the topics, the student is obliged to do so through KOS.
- 4. A student registers for FSEs through KOS during the registration for the semester in which the FSEs occur at the latest. June dates are binding for all CTU FBME students. September dates are only replacement dates for very exceptional cases or rather resit dates. The standard substitute date is June of the following academic year. Any rescheduling or cancellation of the date is possible only based on an application (Application form Application to reschedule the FSE) submitted to the dean with the opinion of the supervisor of the work (if it concerns a final work) and the head of the department supervising the field of study or program, which is not divided into the field of study stating a serious reason. The application form must be submitted to the study department (in justified cases even later) 1 month prior to the

submission of the bachelor project or master's thesis at the latest. The condition for being admitted to the FSEs is successful passing of all compulsory courses and the prescribed number of required optional courses within the limit set by the Schedule for the academic year according to the Study plan of the field of study (or rather specialisation or program, which is not divided into fields of study or specialisations) and acquiring minimally:

- a. 180 credits during the studies, including a bachelor project in the bachelor field of study Biomedical informatics and Information and Communication Technology in Healthcare (ICTM) and Biomedical Informatics (BMI) and in the bachelor study program Informatics and Cybernetics in Healthcare (IKZ);
- b. 180 credits during the studies including a bachelor project plus completing internships in the bachelor field of study Biomedical Technician (BMT) and Biomedical Technician (ENG) and in the bachelor study program Biomedical Technology (BMT) and Biomedical Technology (ENG);
- c. 180 credits during the studies including a bachelor project and including completing internship in the bachelor field of study Optics and Optometry (OPT), Physiotherapy (FZT), Radiological assistant (RA), Paramedic (ZZ), Medical Laboratory Technician (ZL) and Planning and Management of Crisis Situations (PŘKS), and in the bachelor study program Medical Laboratory Diagnostics (LDZ), Optics and Optometry (OPT), Radiological Assistance (RA), Paramedics (ZZ), Physiotherapy (FZT) and Safety and Protection of Population (BOO);
- d. 120 credits during the studies, including the master's thesis in case of follow-up master field of study Instruments and Methods for Biomedicine (PMB), Systematic Integration of Processes in Healthcare (SIPZ) and Biomedical Engineer (BME);
- e. 120 credits during the studies, including the master's thesis in case of the follow-up master study program Biomedical and Clinical Informatics (BMKI) and Biomedical and Clinical Engineering;
- f. 120 credits during the studies including the master's thesis and completing the internship in case of follow-up master study field/program Civil Emergency Planning (CNP), a follow-up master study program Biomedical Engineering (BME), Applied physiotherapy (AFZT), Systematic Integration of Processes in Healthcare (SIPZ) and Systematic Integration of Processes in Healthcare (ENG).

The student is obliged to close his/her study plan through KOS within a time limit set by the Schedule for the academic year. See other details concerning the FSE on the web page https://www.fbmi.cvut.cz/en/students/thesis?section=final.

5. The student is invited to the FSEs for a specific date (date, room, time) through KOS and the website of the faculty <a href="https://www.fbmi.cvut.cz/en/students/thesis?section=final">https://www.fbmi.cvut.cz/en/students/thesis?section=final</a>. It contains the list of students and their distribution to the individual boards according to the studied field (or rather specialisation or program, which is not divided)

into fields of study or specialisations), see <a href="https://www.fbmi.cvut.cz/en/students/thesis?section=final">https://www.fbmi.cvut.cz/en/students/thesis?section=final</a> and through KOS. The departments supervising the field of study or program, which is not divided into fields of study, arrange everything within 10 days prior to the FSE of the relevant field of study/program. The same procedure applies to students studying in a foreign language.

#### Article 8

#### **BACHELOR AND MASTER THESES**

- 1. The academic staff of the faculty or externs propose the topics of the bachelor projects and master theses. They pass the proposals to the department supervising the relevant field of study or program, which is not divided into fields of study by the end of the summer semester, which precedes the academic year of the FSE. The department shall discuss the proposals, approve, and publish them during the first month of the winter semester of the relevant academic year in case of bachelor studies, and by the end of the teaching in the summer semester of the preceding academic year in case of the follow-up master studies and the bachelor field of study Medical Laboratory Technician and the bachelor study program Laboratory Diagnostics in Healthcare.
- 2. The students are obliged to select the topic of their bachelor project within the teaching period in the winter semester of the 3<sup>rd</sup> year at the latest. In the case of a master's thesis, the students are obliged to select the topic within the teaching period of the winter semester of the 2nd year at the latest. The details of this process stem mainly from the continuity of related courses such as projects, year projects, and seminars to these projects in the form of assessment requirements. This implies that these requirements can set earlier deadlines for selection of the topic of the final (qualification) projects in the individual fields of study or programs, which are not divided into fields of study. The exceptions are students of Medical Laboratory Technician and the study program Laboratory Diagnostics in Healthcare, who are obliged to select the topic of the bachelor project by the end of the examination period of the summer semester of the 2<sup>nd</sup> year. Another exception is the selection of bachelor project topic in the field of study Biomedical Technician and Biomedical Technician and in the study program Biomedical Technology and Biomedical Technology, in which there is a requisite of continuity with the semestral project and thus the selection is postponed to the end of January. Another exception is also the selection of the topic of the master's thesis in the field of study/program Civil Emergency Planning and the study program Applied Physiotherapy where the student must select the topic of the master's thesis by the end of the first part of the examination period of the summer semester of the first year.
- 3. The student, having a bachelor project or master's thesis topic, proposed by an external workplace, can be assigned a bachelor project or master's thesis supervisor from the academic staff of CTU FBME, and the extern will be a consultant. The head of the department supervising the relevant field of

- study or program, which is not divided into fields of study, can decide in justified cases and in cooperation with the field of study/program supervisor, that an extern will directly be a supervisor.
- 4. One thesis supervisor can simultaneously have only 15 bachelor projects and master theses in total. In justified cases and upon the application of the supervisor of the relevant field of study or program, which is not divided into fields of study, the head of the department can grant an exception concerning the maximum number of final works supervised by one academic staff. The total of final works supervised by one person, however, must not exceed 20. Works that were not defended successfully but whose author is still a student of the relevant study program within which the work was submitted were also included. Persons, who only have a bachelor's degree, must not supervise the final projects.
- 5. The student must sign the receipt of the bachelor project topic assignment at the secretariat of the department supervising the field of study or program, which is not divided into fields of study on a prescribed form at the beginning of the semester at the latest (typically during the first week of the summer semester of the 3<sup>rd</sup> year), in which he/she registered the bachelor project as a course. The topic of the bachelor thesis signed by the student, department head and the dean will be passed to the study department by the individual departments to be filed in the student's file.
  - The validity of the topic is limited to three subsequent semesters. Students of the field of study Medical Laboratory Technician and the study program Laboratory Diagnostics in Healthcare will get the bachelor project topic assignment at the beginning of the winter semester of the third year (typically during the first week of the winter semester). The validity of the bachelor project topic assignment for the field of study Medical Laboratory Technician and the study program Laboratory Diagnostics in Healthcare is limited to 4 subsequent semesters. A student must sign the master's thesis assignment on a prescribed form at the secretariat of the department supervising the field of study or program, which is not divided into fields of study at the beginning of the summer semester of the 2<sup>nd</sup> year (typically during the first week of the summer semester). The topics of the master thesis signed by the student, department head and the dean will be passed to the study department by the individual departments to be filed in the student's file. The validity is limited to 3 subsequent semesters. Students of the field of study/program Civil Emergency Planning and the study program Applied Physiotherapy shall obtain the master's thesis topic assignments at the beginning of the winter semester of the 2-nd year (typically during the first week of the winter semester). Its validity is limited to 4 subsequent semesters. In the bachelor project or master's thesis assignment, there is a clause: "assignment valid until "according to the above-stated rules."
- 6. If the change to the topic of the bachelor project or master's thesis is required, the student must submit the application (universal application form) to the dean through the study department one month prior to the submission date of the project/thesis at the latest (in justified cases possibly later). This date is stated in the Schedule for the FBME academic year. The

head of the department supervising the given field or program, which is not divided into fields of study (or his deputy or deputy for the given specialisation, if the field of study is divided into specialisations) and the project /thesis supervisor expresses his/her opinion regarding the application. The application to change the topic of the project/thesis is only submitted in case of a distinctive change to the topic and not in case of changes in wording. Adjusted BP/MT assignment, signed by the student, department head and the dean shall be passed to the study department by the relevant department to be filed in the student's file.

- 7. The student registers the bachelor project as a course in a semester, in which he/she is supposed to graduate. The same applies in the case of a master's thesis registration. The supervisor of the thesis grants an assessment for the bachelor project or master's thesis, which meets all formal requirements. In exceptional cases, e.g., absence of the thesis supervisor due to an illness, business trip, and in the case of external supervisors, the assessment is granted by the supervisor of the field of study or program, which is not divided into fields of study, or his deputy (or a deputy for the given specialisation if the study program is divided into specialisations) or by the head of the department supervising the field of study or program, which is not divided into fields of study, or his deputy. This assessment must be recorded in KOS. On its basis, the secretariat of the relevant department supervising the field of study or program, which is not divided into fields of study, can accept the bachelor project or master's thesis. Generally, the rule applies that in case of external supervisors the assessment must be recorded in KOS by the secretariat of the relevant department supervising the field of study or a program, which is not divided into fields of study upon their information. If the thesis supervisor (extern) is absent, or in the case of failure to receive the opinion, the supervisor of the field of study or program, which is not divided into fields of study, his/her deputy (or a deputy for the given specialisations if the study program is divided into specialisations) or the head of the relevant department supervising the field of study or program, which is not divided into fields of study, assess the formal requirements based on which the assessment is granted or not granted in KOS. Simultaneously, there applies a rule that the level of elaboration must not be conditioned by granting or non-granting assessment. The quality of elaboration is assessed solely upon the reviews of the supervisor and the reviewer. A student, who was granted F in both reviews, has the possibility to defend such a project/thesis before the final state examination board.
- 8. The student writes the bachelor project or master's thesis in the Czech, Slovak, or English language, pursuant to art.16 (4) of the SER CTU. In the case of writing in the English language, the project/thesis contains the topic assignment in the English language.
- 9. The student is obliged to submit a bachelor project or master's thesis by the deadlines given by the Schedule for the respective academic year of FBME. Should a student fail to submit the bachelor project or master's thesis in the given period with no apology, or his/her apology will not be accepted, the student gets the grade F. The apology is submitted to the dean of the faculty

- through the study department upon application (universal application form or possibly the form called Application to reschedule the FSE), which will request the opinion of the head of the department supervising the respective field of study or program, which is not divided into study fields and the final work supervisor.
- 10.In compliance with sec. 47 b (publicising of final works) of Act N.111/1998 Sb., it is possible to postpone the publishing of the bachelor project or master's thesis or its part for the duration of the obstacle that prevents its publishing for a period of 3 years at maximum. If the final work requires deferred publishing (e.g., the results of the work will be used for submission of a patent application), the student must submit the application for deferred publishing within 14 days at the latest before the submission of the project/thesis (universal application form) to the study department including the opinion of the thesis supervisor. The application must contain the specific reasons which are the reasons for the deferred publishing and the period of deferral must be stated (it can be a maximum of 3 years). Based on the submitted application and the opinion of the supervisor, the dean shall decide whether reasons for deferred publishing exist. In case of a positive response, the student shall load the work into the PROJECTS database and submit two printed versions to the relevant department supervising the given field of study or program, which is not divided into field of study. On the day of submission of the work to the department supervising the field of study or program, which is not divided into fields of study, the student will be given the licence agreement for signature giving the right to use the school piece of work. The secretariat will then load the final work to KOS and mark the time of deferral. After the defence of the final work, one copy will be locked at the department supervising the field of study or program, which is not divided into fields of study and the second one will be handed over to the study department, which will ensure sending the final work to the Ministry of Youth and Education of the Czech Republic through the rectorate, where the work will be filed. After the lapse of the time limit of the deferral, the thesis will automatically be transferred to the Digital library of the CTU (DSpace repository) and made public.
- 11. Students are obliged to observe the formal requisites set out for the bachelor projects and master theses. The department, supervising the field of study or programs, which are not divided into field of study, publishes these requisites by the end of the teaching part of the winter semester of the third year (for bachelor projects) and the second year (for the master's theses). These mainly define the structure of the work, i.e., the obligatory chapters and components of the content, extent, metadata, and defined descriptive texts, bibliographic citations, and bibliographic sources, or possibly other specific requirements according to the field of study/specialisation/program. If the student fails to fulfil any of the formal requirements, it means non granting the assessment. Furthermore, a student must submit all requisites in written (printed) and electronic form and write the bachelor project or master's thesis in accordance with the specifications of CTU FBME:

- Bachelor project: <u>https://www.fbmi.cvut.cz/en/students/thesis?section=bachelor.</u>
- o Master's thesis: https://www.fbmi.cvut.cz/en/students/thesis?section=master.

Student's works have to comply with the Dean's order n. 4/2016 on electronic forms of submitted CTU FBME students 'works, Order of the dean N. 2/2013 on the procedure for detecting plagiarism in qualification works of the students of CTU FBME in the Czech study programs, with the Rector's order N. 6/2006 on publishing the final works at CTU and the Order of the rector N. 4/2016 on using the CTU logo and introducing the Graphic manual of the CTU identity.

- 12. Students submit the bachelor projects and master theses in an electronic form by 12.00 (noon) of the day stated as the deadline for submission of these works in the Schedule for the academic year of FBME in the PROJECT system (<a href="http://projects.fbmi.cvut.cz/">http://projects.fbmi.cvut.cz/</a>). Until this date, it is possible to repeatedly upload the modified electronic version. The original file will only be overwritten. The electronic version must be an exact copy of a single page printed version submitted, and it also contains the unsigned BP/MT assignment, which the student will download from the Projects database in the PDF format. The electronic version is submitted as a PDF file (possibly a ZIP file can be added in case of extensive appendices being part of the project/thesis). A standard limit of one file is up to 100 MB. If videos or photographs, etc. are part of it, it is necessary to compress them so that the uploaded file is smaller and the downloading time (for supervisors and reviewers of the final works from PROJECTS system) is shorter. It is not necessary to submit these appendices in the best resolution and quality. In case of extensive appendices, it is necessary to contact the support service on the projects@fbmi.cvut.cz. Prior to submission of the thesis, the student must fill in the relevant fields in PROJECTS system: abstract and keywords in Czech and English languages and choose the language of the work. The printed version of the final work can be submitted to the secretariat of the department supervising the field of study or program, which is not divided into fields of study only after having loaded the electronic version of the work to PROJECTS (including the filled-in editing fields and according to the nature of the topic and appendices) and after the student has been granted an assessment in KOS database in compliance with art.8 (7) of this directive. The final works can be submitted by 15:00 at the latest on the day, which is marked as the deadline for submission in the Schedule for the academic year of the FBME. Other details concerning the rules of submission of the final works are listed on:
  - o Bachelor projects: <a href="https://www.fbmi.cvut.cz/en/students/thesis?section=bachelor">https://www.fbmi.cvut.cz/en/students/thesis?section=bachelor</a>.
  - o Master

theses: <a href="https://www.fbmi.cvut.cz/en/students/thesis?section=master">https://www.fbmi.cvut.cz/en/students/thesis?section=master</a>.

Findings from the system THESES are published in the system PROJECTS together with the disclosure of the reviews (see the Dean's directive n. 2/2013). The employee in charge, determined by the department head

- supervising the field of study or program, which is not divided into field of study (see the web pages of the individual departments), shall assess the findings from the THESES system. The result will be stated together with the evaluations from the supervisor and the reviewer, and it will serve as the basis for the final state examination board negotiations.
- 13.Upon bachelor project or master's thesis submission, the supervisor shall prepare an opinion in the PROJECT system which he/she will sign and send to the secretariat of the relevant department supervising the given field of study or program, which is not divided into fields of study. The signed review (signature in own hand or a certified electronic signature based on the qualified certificate not scanned) in the documentary form must be submitted to the relevant secretariat of the department one working day before the final state examination date at the latest. The supervisor predominantly comments on students attitude to the bachelor project or master's thesis. The review is written in a language in which the field of study is accredited and which the student is studying.
- 14. The head of the department supervising the field of study or program, which is not divided into field of study, will appoint a reviewer by the date of submission of the thesis at the latest. The reviewer will write a review of the bachelor project or master's thesis in the PROJECT system and will send it signed to the secretariat of the department supervising the field of study or program, which is not divided into fields of study. The signed review (signature in own hand or a certified electronic signature based on the qualified certificate not scanned) in the documentary form must be submitted to the relevant secretariat of the department one working day before the final state examination date at the latest. The reviewer predominantly evaluates the professional level of the thesis, and if the topic assignment has been fulfilled. The review is written in a language in which the field of study is accredited and which the student is studying.
- 15. The head of the department supervising the field of study or program, which is not divided into fields of study, enables the student to become familiar with the supervisors evaluation and the reviewers assessment in the PROJECT system, 5 days prior to the date of FSEs at the latest. Apart from the students who elaborated the project / thesis, their supervisors, reviewers, and FSEs board members of the given field of study or program, which is not divided into fields of study, can become familiar with the assessments of a bachelor project or master thesis before the FSEs date. This can be done by personal inspection, by requesting the electronic form at the secretariat of the department supervising the field of study or program, which is not divided into fields of study, or through the system for assigning individual works at FBME (system PROJECTS).
- 16.All bachelor projects and master theses are made public in printed form, including all appendices and reviews in the local library of CTU at FBME. The defended bachelor projects and master theses are freely accessible in electronic format in the CTU digital library (institutional repository, <a href="https://dspace.cvut.cz/?locale-attribute=en">https://dspace.cvut.cz/?locale-attribute=en</a>).

#### COURSE OF THE FINAL STATE EXAMINATION

- 1. In all study programs, the FSEs begin with the bachelor project or a master's thesis presentation and defence. During the presentation and defence, a student comments on the reviewer's and the supervisor's comments and answers questions. It includes the opening presentation of the student, reading the reviews of the supervisor and the reviewer, answers of the student to questions written in the reviews, and discussion of the FSE board members with the student about the topic. The presentation and defence and examinations are in the language, in which the field of study is accredited and in which the student studied. After the defence, there is an examination from 2, 3, or 4 thematic areas that the student stated on FSEs application form according to the field of study (or rather the specialisation or program which is not divided into fields or specialisations). The FSE takes place in one day.
- 2. In the bachelor study program Physiotherapy, the FSEs opens with a practical examination, which takes place in one day, on a date different from the other parts of FSEs. The student has 30 minutes reserved for written preparation before the theoretical part of FSEs. The preparation must be on stamped papers intended only for this purpose. These will be subsequently filed in the FSEs report. The possibility to prepare oneself applies to the entire bachelor study program Specialization in Healthcare and the bachelor study program, Laboratory Diagnostics in Healthcare, Physiotherapy and Paramedic, Radiological Assistance, Safety and Protection of Population and follow-up master study program Population Protection and program Civil Emergency Planning.
- 3. The supervisor listed in the topic assignment, and the reviewer, approved by the department supervising the field of study or program, which is not divided into fields of study, can be present to the presentation and defence and the FSEs board negotiation.
- 4. On the day of FSE, the student must identify oneself to the secretary of the board according to the rules listed in art. 4 (10) of this Directive.
- 5. A report is prepared on the course of the final state examination in a language in which the study program is accredited and which the student is studying.
- 6. At the end of FSEs, every student is informed about the achieved results from both the presentation and defence and individual thematic areas. The student is obliged to confirm this notification by signing the FSEs report. This applies to both parts of the FSEs.
- 7. SER CTU, art. 16 and 17 set out further details of the FSE.
- 8. In justified and exceptional cases, it is possible to carry out Final state examinations by means of Microsoft Teams. Preparation and course of the FSE on this platform is regulated by the Methodology of the vice-rector for bachelor and master studies N. 2/2020 concerning remote and semi contact FSE at the CTU (General rules and procedures Microsoft Teams). The document describes the course of the distance and semi contact FSE at the CTU by means of MS Teams, which is the only possible platform for the FSE at

- the CTU. Justified cases mean particularly: FSE held for students in the distance form (replacement of the physical presence of the student, secretary, and board members) or semi contact form (replacement of physical presence of the members of the board) in the case of extraordinary measures declared by the government of the Czech Republic or the relevant ministries, as well as if there are such obstacles on the part of the supervisor or the reviewer, which prevent him/her to appear at the FSE and his or her presence is necessary.
- 9. At least one month prior to the FSEs, an official application of the student for the FSEs held in the distance or semi contact form must be available (universal application form) by which his/her free will and consent to such a procedure of FSEs are expressed, as well as consent to recording the course of the FSE for the possible needs of the public authority in the exercise of its powers (see the Act N. 188/2020 Sb.) and possibly the relevant disciplinary board (this applies only to the distance form the FSE and semi-contact with the exclusion of the public), with the installation of Microsoft Teams, possibly other applications, which are accessible to the student free of charge and which are necessary for the FSE (for example Whiteboard) to his/her computer and connection by two independent channels(through Microsoft Teams and mobile phone, which will be used in the case of outage of the main channel).
- 10. For the distance presentation and defence of the final work, it is necessary that the student hands over uploads the documents for the presentation and defence to the meeting in Microsoft Teams, folder Files at least 24 hours prior to the presentation and defence.
- 11. In the case of a distance FSE, the preparation of the student before the exam will not take place.
- 12. The student must be logged in to the local application of the Microsoft Teams by his/her CTU username to ensure the basic form of verification of the identity of the student. Prior to the commencement of the distance FSE, another verification of the identity of the student is necessary. This will be ensured by the fact that there must be at least one member of the board, who knows the student from contact teaching, and then the student must show his/her identity document on the screen, which bears his/her name and surname, photograph, and date of birth. These data must correspond with the data, which are listed in the records of the study department of the faculty. The given member of the board and the secretary of the board will carry out the verification of the identity and will record the results including the data in the FSE report.
- 13. As for the technical background, technical equipment and accessories including possible technical support must be available during the FSE, so that every member of the board hears and sees the presenting and examined person. The supervisor and the reviewer must also see the presenting student directly and must have the possibility to communicate with the student interactively to answer the questions.
- 14. If replacing the physical presence of the supervisor or the reviewer, it must be ensured that the supervisor and/or the reviewer can clearly see and hear

the presenting student, and thus all technical devices with camera and microphone must be targeted at the student. At the beginning of the defence, the identity of the supervisor and/or reviewer will be verified by showing an ID on the screen. The result will be recorded in the Report on the course of the FSEs. Simultaneously, the supervisor, and/or the reviewer will be introduced to all members of the board. In the further course of FSEs, it is not necessary for all members of the board to be in contact with the supervisor and/or reviewer of the student's work. This condition is essential for the student and the supervisor and/or reviewer.

- 15. According to this directive, the supervisor and the reviewer can participate in the possible negotiation of the board and inform the student online about his/her result.
- 16.In the case of sound or image loss, equivalent communication must be ensured. Otherwise, the presentation and defence must be repeated, however, as a continuation under the same conditions, including the board and rules, and not as a resit of the FSEs. The reason is not the student's fault, but the so-called "force majeure".
- 17. The above-mentioned articles on the substitute and exceptional manner of implementation of the FSE do not affect fulfilling all other conditions to initiate the process of the student's participation in FSE.

#### Article 10

#### SCHOLARSHIP FOR EXCELLENT STUDY RESULTS

- 1. The scholarship for excellent study results is granted in accordance with the Scholarship regulations of CTU in Prague.
- 2. A decisive period, for which the scholarship for excellent results can be granted, is an academic year and the decisive date for evaluation through KOS is the 5<sup>th</sup> of October, by which all study records from the previous academic year must be registered. Only completed and not recognised courses are included in the evaluation of the study results.
- 3. Scholarship for excellent study results can only be awarded to students who studied at FBME CTU at the decisive period and who continue in the same bachelor, follow-up master study programs during the decisive period or if they completed bachelor studies in the decisive period and continue in the follow-up master study program. In other cases, the scholarship is not granted. These are: studies of the graduate from the follow-up master study program in another bachelor or follow-up master study program, studies of the graduate from the bachelor studies in another bachelor studies in another bachelor or follow-up master studies after unsuccessful completion of the bachelor or follow up master studies.
- 4. The scholarship for excellent study results is paid as a one-off payment by the end of November to the account, which the student has in KOS by October 5.

- 5. Scholarship for excellent study results is granted even to self-paying students studying in the English language (this does not apply to CEMACUBE program and LLP) should they fulfil the conditions.
- 6. The decision on granting the scholarship for excellent study results will be picked up by the student at the study department of CTU FBME in person after having received an electronic invitation to the university email address. In justified cases, another person on behalf of the student, who will submit the authenticated power of attorney, which will be intended only for this purpose, can pick up the decision.
- 7. The amount of scholarship for excellent results is determined by this table:

Weighted average	Amount per month	Number of months in the academic year
1,00	CZK 4 000, -	10
1,01 - 1,20	CZK 2 000, -	10
1,21 - 1,50	CZK 1 000, -	10

#### SPECIFIC SCHOLARSHIP TO SUPPORT STUDIES IN THE CZECH REPUBLIC

- 1. The scholarship to support studies in the Czech Republic is provided in compliance with the Scholarship rules of the CTU in Prague (Art. 4, (2e)).
- 2. The decisive dates for evaluation of the entitlement to the scholarship are January 15 for the winter semester and May 15 for the summer semester. On these dates, the student must not have any overdue liability to the faculty and must have submitted all prescribed documents necessary for studies at CTU FBME to the study department.
- 3. The scholarship is granted, in case of fulfilment of the above-mentioned conditions, only to students: self-payers studying in the English language (does not apply to CEMACUBE program students and LLP), and only those studying in the standard length of studies.
- 4. The scholarship is paid as a one-off payment once in a semester on the following dates: at the end of January for the winter semester and at the end of May for the summer semester to the account, which the student has in KOS.
- 5. The student shall pick up the decision on granting the scholarship at the study department of CTU FBME in person after having received the invitation in an electronic form sent to the university email address.
- 6. The amount of scholarship is set in the following table:

7.

Academic year 2021/2022	amount for the winter semester	amount for the summer semester
Bachelor study programs in the	CZK 20 000, -	CZK 20 000, -

English language – self-payers		
Master study programs in the English language – self-payers	CZK 25 000, -	CZK 25 000, -

#### REWARDING OF THE GRADUATES

- 1. Graduates are rewarded to express the acknowledgment of a student's qualities, his/her general approach to studies, and the quality of the final work.
- 2. The rewards are as following:
  - a) The Dean's award (weighted average up to 1,3 and excellent master's thesis).
  - b) The Dean's award (weighted average up to 1,5 and excellent bachelor project).
  - c) Excellent master's thesis.
  - d) Excellent bachelor project.
- 3. The dean decides on granting the reward.
- 4. Granting of the reward pursuant to the par. 2a 2d, is recommended by the vice dean for studies and pedagogy to the dean based on the proposals of FSE boards upon evaluation of the achieved results during the studies, as well as the quality of the bachelor project or master's thesis. Solely one reward can be proposed by the vice dean for studies and pedagogy for each field of study/specialisation or program, which is not divided into fields of study or specialisations, pursuant to the art. 2a 2d, for both dates of the FSEs (June and September). If the FSE board session is in multiple days within one date of FSE, then it is necessary to submit solely one proposal for all days of the sessions of the board to the study department. The conclusion of the board might be that the board proposes students either to all categories of rewards, or to some of the categories, or to no category.
- 5. The amount of reward pursuant to the art. 2a, is 8 000 CZK, pursuant to the art. 2b it is 6 000 CZK, pursuant to the art. 2c it is 6 000 CZK, and pursuant to the art. 2d it is 4 000 CZK. The rewards are paid from the FBME scholarship fund.
- 6. The rewards are paid once per year after the end of the FSE in September and by the end of October at the latest to the account, which the student had in KOS before the final state examination. Graduates will be informed about the reward by email.

#### Article 13

#### **OBLIGATIONS OF THE STUDENTS**

1. Besides the duties stipulated by the Act on Higher Education N. 111/1998 Sb. as amended, the SER CTU and this directive, each student of FBME is obliged:

- a) to follow the official board of FBME throughout the whole studies (on <a href="https://www.fbmi.cvut.cz/en/students/news">https://www.fbmi.cvut.cz/en/students/news</a>, news for students on the FBME websites, notifications through the university e-mail, and study component KOS). The student is obliged to follow the instructions given.
- b) to use the university e-mail address from the fbmi.cvut.cz or cvut.cz domain throughout the whole studies.
- c) to participate in the preliminary registration for compulsory, required optional courses, and optional courses.
- d) to attend the basic training on operation safety (BOZP in Czech) and fire protection (PO in Czech), as well as training and testing pursuant to sec. 3, or 4 (according to the studied field), Reg. 50/1978 Sb., on the professional competence in electrical engineering, on the day of registration in the 1<sup>st</sup> year of studies, or on a replacement date, but prior to the beginning of the semester. In case of failure to attend, a student must not attend the laboratory tutorials. This training is confirmed in KOS by granting an assessment in the compulsory course 17BOZP and in the case of English language track in the course 17ABOZP.
- e) to attend the instructions on the operating conditions and possible risks in the FBME laboratories.
- f) to report any changes in personal data within 8 days to the study department, mainly any changes concerning name and surname, changes to the mailing address used for serving documents, and changes to the permanent residence (address) which is used as a basis for processing accommodation scholarships. The student is also obliged to inform about establishing the data box.

#### **COMPLETION OF STUDIES**

- 1. The student is obliged to return items borrowed from the department supervising the given field of study or program, which is not divided into fields of study, as well as from other departments, library, and IT department.
- 2. Persons appointed to hand over the diplomas outside the official graduation ceremony are the study department staff who are authorised by the dean.
- 3. The graduate is invited to the graduation ceremony through a notice on <a href="https://www.fbmi.cvut.cz/en/students/news">https://www.fbmi.cvut.cz/en/students/news</a>.

#### Article 15

#### FINAL PROVISIONS

- 1. This directive cancels all previous directives of the dean concerning the bachelor and follow-up master study programs at the Czech Technical University in Prague Faculty of Biomedical Engineering.
- 2. This directive was discussed and approved by the Academic Senate of the CTU FBME on 14. 9. 2021.

- 3. The validity of this directive is determined by the day of signature by the FBME CTU Dean (validity date).
- 4. This directive is effective as of the academic year 2021/2022, i.e., commencing on 20. 9. 2021 (date of effectiveness).

In Kladno on 16. 9. 2021

prof. MUDr. Jozef Rosina, Ph.D, MBA FBME CTU Dean

In the case of a discrepancy in the language versions, the Czech language version prevails.