

Regulations for additional modules in the Master's program Information and Communications Engineering

Background

The Master's program Information and Communications Engineering (M-IC) is a three-semester Master's program with 90 credits (ECTS). According to the studies regulations of the M-IC students who graduated from a first degree program with less than 210 credits (ECTS) have to accomplish additional modules (worth 30 ECTS credits) to obtain the 300 credits required for the Master's degree.

The required additional modules will formally be stipulated by the dean of the faculty, and the required additional modules will have to be successfully completed before the application for admission to the final examination including the Master's thesis.

Procedure for stipulating the additional modules

Students who have to complete additional modules will have to sign a corresponding letter in the registrar's office when picking up their enrollment documents. Usually, the signed letter will be handed over to the student. Alternatively, the letter will directly be transferred to the faculty's office and a copy remains with the student.

As requested in the letter the students will have to contact the academic advisor for agreeing the additional modules. The signed letter will stay with the academic advisor. Students should make a copy for their own records before.

In agreement with the student the academic advisor will define the additional modules step-by-step, whenever there is a suitable time for the student to complete one or more additional modules. For instance, the student may complete two additional modules in his/her first semester, and he/she completes further additional modules in subsequent semesters. He/she may also complete all the additional modules in the first semester, or in the last semester of his/her studies. When to enrol in the additional modules is basically up to the student, his/her schedule, and the modules offered.

Once the student and the academic advisor agreed on an additional module, that decision is binding, and this module will be added to a preliminary list of additional modules. The decision can only be changed for important reasons, e.g. because the module is no longer offered, there are no places available in the module, or when there is an overlap between this module and a required module which would cause a delay in the studies. The change of the stipulation of additional modules will have to be agreed with the academic advisor.

Once all the required additional modules were agreed upon, the academic advisor fills out the letter received by the registrar's office, i.e. he/she enters all the modules in the table on this letter. The letter will be signed by the student and the academic advisor. Finally, the original letter goes to the dean who signs as well, and the letter will be returned to the studies admin. Students will receive a copy of the signed letter.

Finally, students obtain a certificate about their additional modules together with their certificate when graduating from the M-IC program.

Regulations for the selection of additional modules

In general, the selection of additional modules must be coordinated with the academic advisor M-IC prior to the first enrolment in the module. The student must provide appropriate certificates from his/her first degree. The dean conclusively stipulates the modules as binding.

Primarily, the additional modules will be assigned to close the gaps between knowledge obtained from the first degree program and knowledge required for the M-IC. Therefore, regularly, additional modules will usually be assigned from appropriate technical modules of the study program

- Bachelor Electrical Engineering – Communications Engineering / Electronic Systems (semesters 4-6, mainly in German, partly in English)

of the Beuth University of Applied Sciences.

If all the knowledge required for the M-IC was obtained by the first degree program already, or if these modules cannot be sensibly attended due to e.g. lack of language skills, additional modules shall be selected from other technical modules of the study programs

- Bachelor Electrical Engineering – (semester 4-6, mainly in German, partly in English),
or
- Master Information and Communications Engineering (if not required or elected as required-elective module in this program) – in English,

of the Beuth University of Applied Sciences, and these will be accepted as additional modules. The contents of the additional modules shall not be the same as those from the first bachelor program, however, little overlap is acceptable.

Alternatively, students who require additional modules may do a supervised internship in line with the regulations for this module in semester 7 of the Bachelor Electrical Engineering – Communications Engineering, see particular regulations below.

In exceptional and justified cases, e.g. when places are not available in the modules mentioned above, in case of language problems or difficulties with the schedule, or when the content matter is particularly important for other parts of the studies (e.g. the thesis), modules with technical content may be selected from other degree programs of the Beuth University of Applied Sciences, in particular from the study programs

- Master Data Science – in English
- Bachelor Computer Engineering (semester 4-6) – in German
- Master Computer Engineering – in German.

There is no valid claim for the students to enroll in the courses selected as part of the additional modules; the lecturers conclusively decide about enrolment. If enrolment is not possible, students must select other courses as additional modules, and they have to agree this with the academic advisor without delay.

Accrediting modules from additional studies as additional modules

Credits obtained from additional studies at other Universities after graduating from the first degree program will be approved as additional modules in accordance with the general regulations set out in §39 of the framework studies and exam regulations (RSPO2016) if the contents of the respective modules correspond to the regulations above.

Students must submit appropriate documents (including content and credits) that verify these modules from other Universities. These documents must be submitted to the academic advisor together with an informal letter applying for accrediting these modules as additional modules.

Regulations for a supervised internship as an additional module

Internships during the master's degree program can be accredited with 15 credits for the module "Supervised Internship" (module as part of the 7th semester in Bachelor of Electrical Engineering B EL EK / KT) if this is selected as an additional module. In this case, the conditions for the supervised internship apply, essentially as they apply to the B EL EK / KT degree program, see further below. Registration and administrative processing of the internship is within the responsibility of the internship advisor (B EL EK / KT) as in the bachelor program.

Practical working experience can be accredited with 15 credit points as a "Supervised Internship" (module in the Bachelor of Electrical Engineering), see further below. In this case, again the conditions for the supervised internship apply, see further below. Registration and administrative processing of the internship is within the responsibility of the internship advisor (B EL EK / KT) as in the bachelor program. The required practical experience working hours must be verified by appropriate documents (in English or German) submitted by the student, in accordance with the regulations for the supervised internship in the bachelor program.

Duration

Minimum 12 continuous weeks, Monday to Friday, 7.5 h per day; in total, 450 working hours (not including holidays, illness, etc.) must be demonstrated.

Working hours

Usually, students work on five days per week in the training company during the company's regular working hours. Attendance lectures or labs at the University is precluded during the working hours.

Nature and objective of occupation

Students should be engaged in an engineering-related practical activities e.g. in the following areas:

- research & development,
- planning, work preparation, manufacturing, quality assurance,
- programming, testing of devices, machinery and equipment,
- initial operation, maintenance or configuration of plants, systems and networks,
- technical sales

Within a project framework, students should work on well formulated subtasks in agreement with the project team. Students should get to know different working areas of the company or institution and should receive information about them being embedded in the company's overall operation. In addition to specialized subject knowledge, methodical and social skills should also be imparted (e.g. planning tools, team work, project management, quality assurance, company organization, working atmosphere, corporate culture, etc.).

Quality requirements

The training company (institution) must have staff who, by virtue of their qualifications, is in a position to supervise the students during their practical work so to ensure that the training corresponds to the goal of the supervised internship. The knowledge acquired up to this point in the course of studies and the students' professional inclinations shall be adequately considered when defining the tasks. During their practical activity, the students are to be provided with an engineering-related place to work.

Application

For a successful internship, timely and independent search for suitable places in companies is crucial. Support will be offered by all professors of the faculty having their individual company contacts, and in particular by the internship advisor, as well as the university's own career service with job offers, job application training etc.

The student applies to the company with a descriptive cover letter, a curriculum vitae in a tabular form, a copy of the last grade certificate and uncertified copies of certificates of practical activities or training. Often a first personal contact by phone or email is useful.

Application for admission and contract

In case of a successful application, i.e. when the student receives a confirmation for the internship, he/she applies for admission to the internship via the internship advisor of the faculty (form via the dean's office or the faculty's internet pages). After examining the admission requirements, the student completes a tripartite training contract (between the university, the company and the student), which can be downloaded from the download area of faculty VII as a pdf file. The three contract copies with their own signatures and the signatures of the company must be brought to the dean's office for signature by the internship

advisor on behalf of the Beuth Hochschule.

Some companies (institutions) only create their own two-sided contracts (only between company and student). These must be shown to the internship advisor and will usually be acknowledged.

Out-of-town occupation

After consultation with the internship advisor activities outside Berlin and abroad are possible, and they are also desirable.

Supervisors

The training company (institution) should provide professional and organizational supervision by a supervisor. In addition, faculty VII will appoint a specialist teacher from faculty (student's suggestion in the application for admission desired), who will visit the student at the working place and assist with any questions that arise. Any direct exchange between the company/institution and the supervisors at the University of Applied Sciences, if needed, will take place without delay.

Payment

The training company (institution) might pay some remuneration (training allowance). The income during the internship is initially taxable but may be refunded if below the annual maximum limit. A corresponding tax declaration must be submitted to the tax authorities.

Insurance

As a mandatory intern, the student will continue to have the status of a student during the internship, i.e. there are no special insurance, social insurance etc. to pay.

Internship report

The student will prepare a report on the content and the course of the internship (15 pages technical content). The report must be checked, signed and stamped by the training company before submission to the supervisor at the Beuth HS.

Assessment of the internship

Successful completion of the module "supervised internship" is granted if

- the company will submit an assessment sheet (available in the download area of the faculty VII in pdf format) to the University supervisor containing information on the duration, content and success of the internship with an overall grade of the company which may be taken into account by the University supervisor. The assessment sheet must include the number of hours actually worked, description of the work in keywords, and a final grade. It must be signed and stamped by the company. A detailed company certificate for his/her own records should be issued for the student but that

- is not required for the University.
- an internship report signed by the company's supervisor (15 pages of technical content) is submitted by the student to the University supervisor, and the supervisor assesses the report as sufficient, and
- towards the end of the internship (possibly directly at the company's site and in the presence of the company supervisor), a short presentation of approx. 15 minutes duration is held by the student about the internship, and the presentation is assessed by the University supervisor as sufficient.

The final grade of the module "Supervised internship" is calculated by the University supervisor as an average of the internship report (50%), and presentation (50%). The final grade will be reported to the internship advisor.

Accrediting practical working experience

On application (informal application to the dean of the faculty VII), practical working experiences may be accredited as a supervised internship, if:

- the content of these experiences meets the objective and quality criteria of the internship, see above,
- the corresponding activities included 15 weeks in full-time form (1 week = 5 working days, 1 working day = 7.5 hours => 562.5 hours) or, in the case of part-time, an equivalent period in a maximum of three separate periods,
- the start of the activities is after the 2nd semester of the first degree program, or after the end of a relevant training as a technician, or similar training,
- appropriate certificates of the employer are available, and the documents include a qualified assessment,
- students submit an internship report (15 pages of technical content) about their activities, and the appointed University supervisor assesses this report as sufficient.
- the student gives a short presentation to at least the University supervisor of about 15 minutes about the practical activities.

The application with the necessary documents must be submitted via the dean's office of faculty VII. The final grade of the module "supervised internship" is then calculated by the appointed University supervisor as an average from internship report (50%), and presentation (50%). The final grade will be reported to the internship advisor.

Legal basis

- Studies and examination regulations of the Master's Program "Information and Communications Engineering" at the Beuth University of Applied Sciences Berlin
- Studies and examination regulations and module handbook of the Bachelor Program "Electrical Engineering" at the Beuth University of Applied Sciences Berlin
- Framework studies and examination regulations (RSPO 2016)

All documents are available on the homepage of the Beuth University of Appl. Sciences Berlin.