Conducting Examination
on Programming in the Base Semester
for Full-Time and Part-Time Groups

Examination on the subject *Procedural Programming Using C* in the base semester for full/part-time groups consists of two parts: practice and theory.

Let's consider the sequence of conducting examination.

Practical task is given to the students 3-4 weeks (earlier is fine as well) prior to the examination on theory. Practical task should contain 2-3 complicated tasks. Tasks of the *sorting arrays* type are not alright. Good examples of tasks are the Battleship game (with a computer and person) and a phonebook (add, delete, search, sort, save data in a file, load data form a file, and so on). Students do this task at home. In case the students struggle to complete the task, they can ask the teacher questions. At that, when answering questions, the teacher must not write code instead of the student.

Teacher settles a date of the final submission of the practical task. The student prepares all tasks included in the examination by that date. The teacher analyzes the source code of the student's programs, checks functionality of the introduced solutions, and asks questions about the student's source code and product. Regarding the results of the check, the student receives a mark for the practical part.

Common practice is to give the same tasks to all students of the group, but it is possible to give an individual task to each student, it is to the teacher's discretion. The students' wish to work on a big practical task as a team is most welcome. In this case, the teacher prepares a task for the team of students, ensures that each student has his/her own large amount of work, and allocates responsibility for a specific part of the task.

Students, who have passed the practical part, are allowed to take the theoretical part. The objective of this part of the examination is to emulate a real job interview and to test the student's level of competence in the subject.

During the examination, the teacher can ask questions on the whole learned material. The list of potential questions is not handed out to the students. The student should be ready to answer any question of the whole material. To answer the theoretical part of the subject, 20 minutes are set aside for each student. Shifts are possible. A good practice when conducting the theoretical part of the examination is to invite the Head of the

Chair of Programming of the branch. In this case, the examination is conducted by two persons: the teacher of the course and the Head of Chair. Both of them can ask questions and both take part in the assessment of the student. The presence of the Head of Chair pushes the student out of his/her comfort zone since a virtual stranger administers the examination. Besides, it helps us to better prepare the student for a future job interview. At the same time, the Head of Chair gains an impression of the given group's attainment level, he/she can draw a conclusion on potential problems of material presentation by the teacher, and give recommendations on how to eliminate them.

Regarding the results, the student receives a mark on the theoretical part.

The final mark in the subject is an average mark received by the student in practice in theory.

Given assessment method (theory + practice) should be applied to all subjects within the Software Development specialization.