

# **Peer Review Report**

# GÜMÜŞHANE UNIVERSITY

# **COMPUTER TECHNOLOGY AND PROGRAMMING**

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#### **0.** INTRODUCTION

# **0.1.** PROGRAM INFORMATION

The information provided about the program is sufficient.

#### 2. STUDENTS

a. Pro Students admitted to the program should have the infrastructure to acquire the outcomes (knowledge, skills, and behaviors) that the program aims to provide within the expected timeframe. The indicators considered in the admission of students should be monitored, and their development over the years should be evaluated.

Since the measurement and evaluation standards were accepted, the given answer was deemed sufficient.

b. The policies applied in the evaluation of student admissions through horizontal and vertical transfers, double major, minor, and student exchange practices, as well as the courses taken and credits earned at other institutions and/or programs, should be clearly defined and implemented.

The necessary information regarding the evaluation of courses taken and credits earned in other institutions or programs through horizontal and vertical transfer, double major, minor, and student exchange practices has been sufficiently explained.

c. Measures should be taken by the institution and/or program to encourage and facilitate student mobility through agreements and partnerships with other institutions.

Student mobility can be encouraged through agreements made with other institutions. Students can be encouraged to participate in centrally coordinated programs such as Erasmus and Farabi.

d. Consulting services should be provided to guide students in course and career planning.

The explanation provided is sufficient.

e. The success of students in all courses and other activities within the scope of the program should be measured and evaluated using transparent, fair, and consistent methods.

The information regarding the measurement and evaluation of students' academic success is sufficient.

f. In order to make decisions about students' graduation, reliable methods should have been developed and implemented to determine whether all the conditions required by the program have been met.

Compliance with standards in measurement and evaluation is ensured and is sufficient as seen in the student information system.

# 3. PROGRAM EĞİTİM AMAÇLARI

a. For each program to be evaluated, program educational objectives must be defined.

The educational objectives of the program have been sufficiently explained.

b. These objectives should align with the career goals and professional expectations that the program's graduates are expected to achieve in the near future.

The educational objectives of the program are deemed suitable for the career goals and professional expectations of its graduates.

c. It should be in harmony with the core duties of the institution, faculty, and department.

The alignment of the department's core tasks can be seen in the provided link. (https://kelkitaydindoganmyo.gumushane.edu.tr/tr/sayfa/b%C3%B6l%C3%BCmler-1/bilgisayar-teknolojilerib%C3%B6l%C3%BCm%C3%BC/?birim=bilgisayar-programciligi-programi)

d. The program should be determined by involving various internal and external stakeholders in the process.

The provided information is sufficient. However, the stakeholders of the application can be expanded, matured, and developed.

e. It should be published in an easily accessible manner.

From the perspective of system users, it is clear, understandable, and accessible.

f. The program should be updated at appropriate intervals in accordance with the requirements of its internal and external stakeholders.

The opinions of the public and the private sector are taken into account regarding the updates. In this regard, the provided information is sufficient.

#### 4. PROGRAM OUTPUTS

a. Program outcomes should encompass all the necessary knowledge, skills, and behavioural components required to achieve the program educational objectives and should be defined in a way that includes the relevant Assessment Outcomes (such as MÜDEK, FEDEK, SABAK, EPDAD, etc.). Programs can define additional program outcomes unique to themselves, provided they are consistent with the program educational objectives.

The information provided about the program outcomes is sufficient to cover the knowledge, skills, and behavioral components necessary to achieve the program's objectives.

b. A measurement and evaluation process should be established and implemented to periodically determine and document the level of achievement of program outcomes.

The statement made regarding the evaluation of the program's outputs is sufficient.

c. Programs must demonstrate that their students, who have reached the graduation stage, have achieved the program outcomes.

The output of the program can be evaluated in this way by the internships conducted by students who have reached the graduation stage.

#### 5. CONTINUOUS IMPROVEMENT

a. Evidence should be provided that the results obtained from the established measurement and evaluation systems are used for the continuous improvement of the program.

The statement made is sufficient.

b. These improvement efforts should be based on systematically collected, concrete data, particularly in areas related to Criterion 2 and Criterion 3, as well as all areas of the program that are open to development.

More detailed evidence related to the subject can be presented.

#### 6. EDUCATION PLAN

a. Each program should have an educational plan (curriculum) that supports the program's educational objectives and program outcomes. The educational plan should include the common components provided at this level and the discipline-specific components.

A link showing the educational plan/curriculum that supports the program's educational objectives and outcomes can be presented as evidence.

b. The educational methods to be used in the implementation of the educational plan should be able to ensure that the desired knowledge, skills, and behaviors are imparted to the students.

The explanation and evidence provided regarding the matter have been deemed sufficient.

c. There should be an education management system that will ensure the implementation of the education plan as intended and provide continuous development.

It is observed that the implementation of the education plan was shaped by taking into account the views of the stakeholders.

d. The Education Plan,It should include at least one year or at least 32 credits or at least 60 ECTS credits of basic science education.

The provided information is sufficient.

e. At least one and a half years or at least 48 credits or at least 90 ECTS credits worth of basic (engineering, science, health, etc.) sciences and vocational training appropriate to the relevant discipline. It should include.

The statement made is sufficient.

f. The educational program should include general education that complements the technical content of the program and aligns with its objectives.

The required answers can be found at the provided link. (<a href="https://kelkitaydindoganmyo.gumushane.edu.tr/tr/sayfa/b%C3%B6l%C3%BCmler-1/bilgisayar-teknolojileri-b%C3%B6l%C3%BCm%C3%BC/?birim=bilgisayar-programciligi-programi">https://kelkitaydindoganmyo.gumushane.edu.tr/tr/sayfa/b%C3%B6l%C3%BCmler-1/bilgisayar-teknolojileri-b%C3%B6l%C3%BCm%C3%BC/?birim=bilgisayar-programciligi-programi</a>)

g. Students should be prepared with a core application/design experience that incorporates the relevant standards and realistic constraints and conditions, using the knowledge and skills they have acquired in previous lessons.

The program can evaluate the knowledge and skills acquired by the students through the internship application.

#### 7. TEACHING STAFF

a. The faculty must be sufficient in number, each at an adequate level, to maintain the faculty-student relationship, student advising, university service, professional development, and relationships with industry, professional organizations, and employers, covering all areas of the program.

There is a sufficient level of academic staff available.

b. The teaching staff should possess sufficient qualifications and ensure the effective continuation, evaluation, and development of the program.

The explanation section states that the academic staff possess sufficient knowledge and training, and the information is adequate.

c. The criteria for the appointment and promotion of faculty members should be determined and implemented to ensure and improve the aforementioned.

An explanation regarding the appointments of academics is sufficient.

#### 8. INFRASTRUCTURE

a. Classrooms, laboratories, and other equipment should help create an adequate and learning-oriented atmosphere to achieve educational goals and program outcomes.

The infrastructure and equipment necessary for the program training are at an adequate level.

b. There should be an appropriate infrastructure that allows students to engage in extracurricular activities, meets their social and cultural needs, creates an environment for professional activities, supports their professional development, and revitalizes the student-faculty relationship.

They are conducting work outside the scope of the program's training. Evidence that they are conducting work evidence, can be found at <a href="https://kelkitaydindoganmyo.gumushane.edu.tr/tr/">https://kelkitaydindoganmyo.gumushane.edu.tr/tr/</a>.

c. Programs should provide students with opportunities to learn how to use modern engineering tools. Computer and informatics infrastructures should be at a sufficient level to support the educational objectives of the program and to facilitate the scientific and educational activities of students and faculty members.

Developments related to the process have been adequately explained in the description section.

d. The library facilities provided to students should be at a sufficient level to achieve educational objectives and program outcomes.

The information provided in the description section is sufficient.

e. Necessary safety measures must be taken in the teaching environment and student laboratories. Infrastructure arrangements should be made for people with disabilities.

Based on the information provided in the explanation section, the scope of the application should be expanded, and computer laboratories should be used more effectively.

## 9. INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES

b. The administrative support of the university, constructive leadership, financial resources, and the strategy followed in their distribution should be at a level that ensures the quality of the program and its sustainability.

The explanations and practices regarding institutional support are sufficient for the program.

c. Resources should be sufficient to attract, retain, and support the professional development of a qualified teaching staff.

For the program education, the teaching staff are experts in their fields, the necessary programs for students have been prepared, and everything is sufficient for the program education.

Evidence:https://kelkitaydindoganmyo.gumushane.edu.tr/tr/sayfa/bsections-1/computer-technologies-department/?unit=computer-programming-program

d. Financial resources sufficient to provide, maintain, and operate the necessary infrastructure for the program should be secured.

The infrastructure necessary for the program is sufficient.

e. Support staff and institutional services that will meet the program requirements should be provided. Technical and administrative staff should be of sufficient number and quality to support the program outputs.

The hardware support and other assistance necessary for the development of the program and the

improvement of educational quality are sufficient.

# 10. ORGANIZATION AND DECISION-MAKING PROCESSES

a. The organization of the higher education institution, including the rectorate, faculty, department, and any other subunits, should be structured in a way that supports the realization of program outcomes and the achievement of educational objectives through all internal and inter-unit decision-making processes.

Detailed evaluations can be made regarding the subject.

### 11. PROGRAM-SPECIFIC CRITERIA

a. Program-specific criteria should be provided.

Explanations regarding program-specific criteria are sufficient.

### **RESULT**

The information provided in the explanation section about the achievements of students who successfully completed the program and the improvements related to the program is explanatory and sufficient.