

STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

VILNIAUS GEDIMINO TECHNIKOS UNIVERSITETO STUDIJŲ PROGRAMOS *MULTIMEDIJA IR KOMPIUTERINIS DIZAINAS* (612E14003) VERTINIMO IŠVADOS

EVALUATION REPORT OF *MULTIMEDIA DESIGN* (612E14003) STUDY PROGRAMME

at VILNIUS GEDIMINAS TECHNICAL UNIVERSITY

Grupės vadovas: Team leader:

Prof. Peeter Normak

Grupės nariai: Team members:

Prof. Elmar Cochlovius Juozas Breivė Algirdas Kursevičius

Prof. Kari-Jouko Räihä

Išvados parengtos anglų kalba Report language - English

> Vilnius 2014

| Studijų programos pavadinimas | Multimedija ir kompiuterinis dizainas |
|---|--|
| Valstybinis kodas | 612E14003 |
| Studijų sritis | Technologijos mokslai |
| Studijų kryptis | Informatikos inžinerija |
| Studijų programos rūšis | Universitetinės studijos |
| Studijų pakopa | Pirmoji |
| Studijų forma (trukmė metais) | Nuolatinė (4 m.), ištęstinė (6 m.) |
| Studijų programos apimtis kreditais | 240 ECTS |
| Suteikiamas laipsnis ir (ar) profesinė kvalifikacija | Informacinių technologijų bakalauras |
| Studijų programos įregistravimo data | Lietuvos Respublikos švietimo ir mokslo ministro 2011 m. gegužės 20 d. įsakymu Nr. SR-2229 |

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

INFORMATION ON EVALUATED STUDY PROGRAMME

| Title of the study programme | Multimedia Design |
|---|--|
| State code | 612E14003 |
| Study area | Technological Sciences |
| Study field | Informatics Engineering |
| Kind of the study programme | University studies |
| Study cycle | First |
| Study mode (length in years) | Full-time (4 years), part-time (6 years) |
| Volume of the study programme in credits | 240 ECTS |
| Degree and (or) professional qualifications awarded | Bachelor of Information Technologies |
| Date of registration of the study programme | 20 of May 2011, under the order of the Minister of the Ministry for Education and Science of the Republic of Lithuania No. SR-2229 |

Studijų kokybės vertinimo centras

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The Centre for Quality Assessment in Higher Education

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I. INTRODUCTION

The procedures of the external evaluation of the Vilnius Gediminas Technical University (hereafter, VGTU or the University) *Multimedia Design* (state code: 612E14003) Bachelor study programme were initiated by the Centre for Quality Assessment in Higher Education of Lithuania nominating the review panel formed by the head, Peeter Normak (Professor of Informatics, Institute of Informatics, Tallinn University, Estonia), Kari-Jouko Räihä (Professor of Computer Science, School of Information Sciences, University of Tampere, Finland), Elmar Cochlovius (Professor, Department of Computer Science, Furtwangen University, Germany), Juozas Breivė (Information Systems Administrator, Western Shipyard Group, Klaipėda, Lithuania), employer representative, and Algirdas Kursevičius (Kaunas University of Technology, Lithuania), student representative.

For the evaluation the following documents have been considered:

- 1. Law on Higher Education and Research of Republic of Lithuania;
- 2. Procedure of the External Evaluation and Accreditation of Study Programmes;
- 3. Methodology for Evaluation of Higher Education Study Programmes;
- 4. General Requirements of the First Degree and Integrated Study Programmes.

The basis for the evaluation of the study programme is the Self-Evaluation Report (hereafter, the SER), prepared in 2013, its annexes, the relevant legal acts, and the site visit of the review panel to the VGTU on 19 March 2014. The visit incorporated all required meetings with different groups: the administrative staff of the VGTU, staff of the Department of Graphical Systems, responsible for preparing the self-evaluation documents, teaching staff, students of three years of study (there were no 4th year students and graduates because of the novelty of the study programme) and employers. The review panel evaluated various support services (classrooms, laboratories, library, computer facilities), examined various other documents and materials. After the review panel discussions and additional preparations of conclusions and remarks, introductory general conclusions of the visit were presented. After the visit, the panel met to discuss and agree the content of the report, which represents the review panel consensual views.

VGTU is a public university that was founded in 1956 and that has ten faculties, which in turn contain autonomous academic units – departments.

The *Multimedia Design* is a four-year Bachelor programme that was started in 2011 and is currently conducted by the Department of Graphical Systems. This department belongs to the Faculty of Fundamental Sciences.

II. PROGRAMME ANALYSIS

1. Programme aims and learning outcomes

The aim of the programme *Multimedia Design* is to prepare IT professionals who have a sound expertise in multimedia and who are able to combine technical knowledge about multimedia systems with good understanding of the creative design process required for multimedia content creation. Successful first-cycle graduates shall fill the demand of the national labour market in the field. As it is explained in the SER and supported by the review panel, this field of technology is rapidly evolving and thus future professionals need to cope with non-traditional work environments and shall engage in continuing research and life-long learning. In addition, in the SER it is noted that the field of multimedia requires expertise in two different areas, namely engineering knowledge of informatics, as well as skills related to creative arts. The study programme tries to combine both areas and provide education and practical experience for both.

Several multimedia related programmes were started in Lithuania during the last couple of years. The programme at VGTU is one of the few that emphasizes design in its title, as opposed to technology. Various forms of visual design are covered well in the programme; for interaction design is left less weight.

The aims of the study programme are summarized in the SER – section 2.2. Next to the main focus to provide high quality first-cycle university education in information technology, five supplementary objectives are clearly stated and publicly available on the website (also in English language), along with a complete description of the curriculum.

The SER group cites various resources, such as Digital Europe's Vision 2020 report, E-Democracy: Vision for Lithuania 2010-2020 and the European Commission act European Digital Agenda, to illustrate the growing demand of Lithuania's IT industry for specialists in general. It can be assumed that this also includes demand for multimedia specialists in particular. It is noted that social partners who participated in the discussion stated that there is a need for the graduates of the programme.

The attention as well should be paid, that the staff of the Department of Graphical Systems responsible for defining and implementing the programme is trying to cooperate with IT enterprises and employers in reviewing the programme aims and the intended learning outcomes. However, taking into account that the study programme is new, it is too early to make conclusion, if it is done in a successful way. In addition, in the SER there are mentioned annual

reviews of the intended learning outcomes performed by the Study Programme Committee. The review panel believes that this should have a positive impact on the long-term evolution of the programme, as it is obvious that the intended learning outcomes need to be adjusted to the rapid progress of technology in this particular field. One example of upcoming technologies can serve the HTML5 programming language which essentially has replaced the Flash standard as a multimedia platform for various application domains. This change of technology should be represented stronger in future improvements of the study subjects.

In this context it might be helpful even more to increase the collaboration with local companies, private corporations, employers and social partners. These groups can deliver important advice regarding the future trends and upcoming technologies relevant to the profession. In addition, social partners could be encouraged to offer additional internships to students to gain more practical experience, provide interesting student projects or invite staff members for sabbaticals.

Intended learning outcomes of the programme are grouped into four categories (application of knowledge, research competencies, social skills and competencies, and special skills and competencies). In general, these intended learning outcomes are consistent with the type and level of the studies, its aims and objectives, and shall offer a solid foundation for a Bachelor degree in an applied field of informatics.

However, the creative aspects and challenges of designing and developing high-quality multimedia content also seem to be important for future employers. It is not evident in which way the acquisition of this particular knowledge and expertise is thoroughly reflected in the intended learning outcomes next to all the engineering-driven subjects. Since the programme is hosted by the Faculty of Fundamental Sciences, most of the topics relevant to the creative industries have to be delivered by other faculties of VGTU. While this type of inter-faculty collaboration can be a very beneficial and enriching experience for both the participating students, as well as the staff, the organisational and administrative challenges should be closely observed and should not to be underestimated. In addition, since the programme is called *Multimedia Design*, it might attract students with a strong focus on creative arts, who might be surprised by the majority of challenging engineering-driven topics. Here the review panel suggests clear and precise communication to interested applicants.

2. Curriculum design

The programme is designed to run over 4 years, and consists of 240 ECTS. This is the maximum allowed by Lithuanian law. There is also a part-time study mode to run over 6 years.

The programme consists of 19 ECTS for general training (general university study subjects), 183 ECTS for fundamental subjects of the study programme area (study subjects of study field), and 38 ECTS for mandatory special subjects of the study field (including 8 ECTS for free choice study subjects). This matches the legal requirements – the Order of the Minister for Education and Science of the Republic of Lithuania "General Requirements of First Degree and Integrated Study Programmes". There is some more (though not much) room for electives: 6 ECTS for the subjects of general training and 6 ECTS for the fundamental subjects. In practice there is even less chance for choice as some key courses – like Multimedia Design Basics – had to be made optional to make space for the mandatory basic engineering courses.

Some subjects, like Chemistry, are really far away from the core of the programme and are included only, as during in one of the meetings was claimed, because of the fact that they are mandatory, as the programme belongs to the study area of Technological Sciences. Such peculiarities should be removed, either by reconsidering the chosen study area, or making use of the Order of the Minister for Education and Science of the Republic of Lithuania "General Requirements of First Degree and Integrated Study Programmes", which provisions set conditions to create study programmes more flexible and meeting the needs of the labour market (currently, as the new regulations has not been approved).

There does not seem to be much undue overlap in the study subjects (analysis based on the description of the study subjects), though some dispensable overlapping appears within some of the study subjects, e.g. Production Practice 1 and 2. Moreover, although it became clear that there are different streams that connect certain study subjects together, such as in courses for web development or game development, but such streams are not made explicit in the documentation of the programme. Documenting the streams would help both current and potential students to grasp the essence of the programme and motivate them in studying study subjects that are prerequisites for later courses. It would also be beneficial to reconsider the order of some study subjects, which caused the problems for students. For instance, matrices were used in Procedural Programming study subject that was taught in the first semester, but the concept of matrices was taught only in the second semester (Linear Algebra and Vector Algebra study

subject). As another example, students felt that the Architecture of Computers and Computer Networks would have been a much more useful study subject in the first year of studies.

The preparation of Bachelor thesis is split into three different study subjects, which to the review panel seems a bit strange, but it appears to be a common practice in Lithuania. Nevertheless, the descriptions of the Bachelor Thesis 2 and Bachelor Thesis 3 share a lot in common. Their role should be clarified in the study subjects' descriptions.

The relation between the objectives of the programme and the intended learning outcomes of the study subjects are presented in Annex 2 of the SER, but in a form that is really difficult to grasp. A cross tabulation would have worked better. Some of the links seem inadequate. For instance, the objective "CG4. Analyze the local and global impact of multimedia on individuals, organization society" is related to more than 30 study subjects, including Physics 1 and 2, and Linear Algebra with Vector Algebra. Such lists render the linking rather useless. The connections should be reconsidered and streamlined.

As professional multimedia projects tend to be mostly team-oriented projects, it might be also beneficial to verify whether the current state of the programme provides sufficient opportunities to develop, train and demonstrate team competencies, cross-division communication skills and practical work experience or whether additional subjects, such as e.g. a larger-scale student team project can be used to enhance this aspect of the education, as was suggested by the teaching staff during the site visit. Some students mentioned during the meeting with the review panel that the share of practical training is too small. *Cleaning and streamlining* some of the study subjects might generate sufficient time to address these important topics.

The scope of the programme is sufficient to ensure the achievement of the intended learning outcomes, though the share of hard technology and soft human-oriented topics (e.g., user experience and art) somewhat could be adjusted, as suggested above. At the moment the students do not expect such emphasis on technology in the study programme because it does not have "technology" in its name. The title of the programme could also be more descriptive, for instance *Digital Media*.

Another aspect that should be considered in the coming years concerns the problem of merging the studies and professional work of the students. Currently most of the students are employed (some even full-time) and spend only few hours for individual work on home assignments (mostly 6-7 hours in a week). Finding the ways how to offer more freedom to the students to compose a "personal" programme is a challenge that should be dealt with.

The programme was launched in 2011, so it is understandable that the study subjects are mostly up-to-date and offer the possibility to cover the latest development, though this is not always apparent from the textbooks used. For instance, the textbooks by Chapman and Chapman are used in several study subjects. Although they are clear and quite popular, their style does not encourage students to get the information in the research literature. Multimedia is also a rapidly developing field, and the focus on Flash in the study subjects descriptions (the SER) at the expense of HTML5 makes some content already somewhat outdated.

3. Staff

Since it's inception in 2011 the *Multimedia Design* study programme is being ramped up from 142 overall participating students to 303 students in year 2013/14. The faculty has been successful to reflect this growth by increasing the total number of lecturers starting from 22 up to 47 now. This keeps the student/lecturer ratio nearly constant at approximately 6.2, which is positive. However, from the statistics can be concluded that the number of freshman students entering the programme has been decreasing from 127 in 2011 down to 95 in 2013, and this trend should be reversed in the near future.

The SER refers to 6 Professors involved in the programme, while Annex 6 of the SER – *Description of Lecturer's activities* only lists 4 Professors. The Department of Graphical Systems is responsible for implementing the *Multimedia Design* programme. However, on the webpage of the Department, only 2 professors are staff members. This might indicate that most of the professors contributing to the programme are based in other departments of the Faculty of Fundamental Sciences or in other faculties of VGTU. While this can be helpful to generate a cross-division culture for the programme, some contributing professors might lose the focus on the programme due to the other obligations. Only 2 out of 14 staff members teaching study field study subjects listed in Annex 6 of the SER do not possess a scientific (doctoral) degree. The legal requirement that at least 50% of study field study subjects should be taught by teachers with scientific degree is well satisfied.

Approximately half of the teaching staff are in the age below 41, while most of the Professors are older than 50. This means that there is a substantial body of staff pedagogical experience. The attention also should be paid that younger Associate Professors have important role in

securing sustainability of the study programme. So it is beneficial that 13 Associate Professors are already members of the staff. Most of the staff is teaching part-time only. However, contact hours are between 5 hours per week up to 12 hours. This should provide enough time and opportunity for advising and counseling the students.

There is some valuable academic exchange on the international level. While there were 11 outgoing visits during the past 5 years, 8 of them were accomplished by a single person. It might be that the broader use of visits could help to increase the international exposure of the teaching staff. At the same time, only 2 incoming visits have been listed in the SER, both of them in 2013.

The staff engaged in the programme are actively contributing to scientific publications and have reasonable publication records. Some of them have published in international journals and presented publications in international conferences. As it is mentioned in the SER, lecturers of the programme are participating in 3 research projects. A closer look reveals that only a single person of the staff is actively involved in these projects. A broader participation within the Department might be helpful to further stimulate professional development. Noticeable that the titles of these projects, however, do not immediately expose the relevance of their research topics to the field of graphical systems in general or to the *Multimedia Design* programme in particular.

Next to the research projects, the staff members participate in scientific conferences – mainly once or twice each year, where they present the results of their research. This is reflected in some but not in all of the CVs provided in the SER.

4. Facilities and learning resources

There are good conditions for students in the classrooms in terms of hygiene norms and technical conditions. The equipment is up-to-date, classrooms are renovated and equipped with wireless Internet connections allowing students to use their own devices during the classes. There are enough electricity sockets available for students. Facilities are also accessible for disabled people.

However, the review panel noted that the number of software licenses hardly covers the needs. For example, there are only 15 Corel Draw and 5 Autodesk Maya licenses. This very likely does not allow conducting practical work in bigger groups, making teaching unnecessarily expensive. Laboratory of Multimedia Design is equipped with Apple iMac computers for 25 students and that is not enough taking into account the fact that the number of students enrolled is much bigger than initially planned. This is recognized also by the Faculty administration and there appears to be a plan for upgrading the laboratory, both in terms of hardware and software.

Computers in computer labs were updated recently. The number of multimedia devices (microphones, video cameras, photo equipment) in the Laboratory of Multimedia Design is relatively small, but can be shared between the students during the exercises. On the other hand, the Laboratory of Mobile Applications needs more urgent upgrading, especially in terms of the quantity of hardware. For this purpose, support of social partners for upgrading the laboratory with the newest mobile technology and for applications testing can be used.

VGTU participates in Microsoft MSDN Academic Alliance programme. This offers good opportunities for using the latest Microsoft software being free of charge, both during the classes and for independent studies.

The library updates it's funds on a regular basis, according to the literature lists provided by the lecturers. Access to electronic recourses is possible both from the university network, and from the outside by using VPN and single sign-on. However, the share of magazines and books in multimedia is relatively modest mainly due to the novelty of the programme.

5. Study process and student assessment

Admission to the studies is on a competitive basis. The criteria for admission include the performance in secondary education in mathematics (weight 0.4), informatics (0.2), Lithuanian language (0.2) and foreign language (0.2). Admission procedures are held under the LAMA BPO. The number of admitted students has significantly decreased during the last 3 years, mainly due to the reduction of state financed study places (2011 - 122, 2013 - 80).

The study process and examinations are organized quite well. The schedules for examinations are composed with involvement of the students early enough and announced at least one month before the beginning of the session. Students have possibility to retake exams three times in case they have failed or not showed up. Individual work of students is sufficiently mentored. However, the dropout rate is relatively high, especially in part-time studies, varying between 50-70%. The main reasons for that are students' lack of motivation to study, low level of attendance and high tuition fee. As there is no fixed threshold of competitive score, high dropout rate is partly caused also because of the low academic abilities of some students.

There are three study subjects for practical training – Introductory Practice (3 ECTS), Production Practice 1 and Production Practice 2 (both 6 ECTS). The placement bases on the requests of the enterprises, and it is suggested to carry out the practices during summer holidays (July-August).

Research activity of students is restricted mainly to preparation of the course papers and the final thesis. In some cases, some research can be done during introductory and production practice as well. The review panel has not gathered additional information about the involvement of students in other type of (applied) research activities.

Students are well informed about the student mobility programmes. The University has exchange agreements with 56 European and 6 Turkish universities. The students during the meeting expressed low motivation for studying abroad. Moreover, the exchange is quite unbalanced – there are no incoming students in this study programme while 10 students have applied for going out the next semester. Absence of incoming students seems to be clear as all study subjects are offered just in Lithuanian.

The University has a career office that provides information about professional orientation and other academic matters through meetings, presentations, counselling and other forms. The students are more active in using this service on the final stage of the studies. In terms of social matters and sports, the University offers adequate psychological, health and cultural support. According to the students, there is a lack (and a need at the same time) for more scholarships. As the University can afford awarding few scholarships only (to about 10% of the students), establishing additional scholarships offered by social partners would be commendable. The attention as well should be paid to the dormitories – just full-time studies students can get the rooms at the dormitory. The dormitories in general are on acceptable conditions, but nevertheless need improvement.

The assessment system of students' performance seems to be clear and adequate. It is cumulative and on the 10-point scale; laboratory and individual works during the semester should constitute no less than 25% of the final examination mark. The assessment system is described in the document *VGTU Student Knowledge Assessment Procedures' Descriptor*, which is freely available on the University's webpage. Moreover, every lecturer explains structure of assessment mark for students during the first class. There is a possibility for students to appeal if they believe that their examinations are not assessed objectively.

6. Programme management

The programme management is clearly presented in the SER and it seems that the contributions of different stakeholders are taken into account in seeking to improve the study programme – the Study Programme Committee contains also an employers' and a students' representative, as well as lecturers from two other departments who are involved in the implementation of the programme. However, taking an active role in contacting potential employers of graduates could increase their possibility to participate in constructive improvement of the programme. The University should be more proactive in this and take initiative – usually the company people are just too busy to initiate new undertakings. As a concrete example, the companies referred to unused opportunities in offering continuing education courses to the company people on the latest achievements and development trends in the subject area.

Surveys to collect the feedback from students are organized regularly twice a year. Feedback is discussed in various forums, including (in summarized form) meetings of the Study Programme Committee. Although the Student Representation is informed about the general results of feedback, it appeared that there does not exist any formal procedure for informing students about the actions, which have been taken (or not taken) based on their provided feedback. Despite of the fact that students are not so eager to fill the surveys, the Department could also consider the possibilities to motivate students more for giving feedback, as currently only a minority (up to 20%) is doing that.

The programme was planned for 25 students intake per year, but the yearly intake is about 100 students. In terms of programme management, the Department has been able to adjust the plans so that this has not caused problems to the students.

The description of the programme on the website (<u>http://multimedija.vgtu.lt/en/comparison/</u>) provides a useful comparison of this particular study programme with related programmes at other universities in Europe and beyond. This is an indication of the careful planning of the programme at VGTU.

III. RECOMMENDATIONS

- 1. *Review the curriculum* and especially the role of each separate study subject in the programme so that intended learning outcomes of the programme and of the separate study subjects are mapped to each other in a meaningful way. Make explicit the various study streams that run through the programme, and communicate this to the interested parties.
- 2. *Streamline the programme* including reviewing the sequence of certain study subjects to improve pedagogical and didactic aspects and cancel study subjects with limited contribution to the programme objectives.
- Harmonise the name and the content of the programme. At the moment the content does not fully meet the expectations of the students: some students enrolled in the programme expected a stronger focus on the creative design and arts aspects, but not on multimedia technology and engineering aspects.
- 4. The panel recommends offering *some courses in English*, in order to give local students an opportunity to experience learning in English language and be able to receive incoming students.
- 5. *Upgrade the laboratories* with necessary hardware and software, taking into account the size of the students groups.
- 6. Review the availability (from critical point of view) of learning materials available to the students and take the actions for *updating the library* with the most significant multimedia design magazines and books.
- 7. Consider the possibility to *set a threshold for competitive score*, especially for the admission of part-time students.
- 8. Conduct a thorough *analysis of the reasons for students' dropout*, and take adequate actions to decrease it.
- 9. Intensify *cooperation with social partners*, especially seeking to guarantee that the teaching is compliant with the current technologies used in the companies, and to provide more internship options for students.
- 10. The academic staff is recommended to engage more actively in *international professional activities* (professional networks, conferences, staff exchange etc).

IV. SUMMARY

The aim of the *Multimedia Design* study programme is to prepare IT specialists, who have an extensive understanding about multimedia technologies design and creation, who integrate knowledge and skills about multimedia content creation, information technologies, computer design and digital information technologies. The development of the programme was based on an analysis of similar programmes in Lithuania and abroad. The expected competences of the graduates are considered in five perspectives (objectives), each described by a subset of intended learning outcomes from the list of 36, and each intended learning outcome is in turn accompanied by a list of study subjects that support achieving of it. The total list of these study subjects took more than 37 pages and contained in total more than 1000 items, making the whole table (Annex 2 in SER) difficult to manage and in fact almost useless.

As there are no graduates of the programme yet, as though the review panel got feedback about the programme from the students and employers only. Two of the employers that the panel met have offered places for production practice to students and were very positive about the students' competences. The employers also expressed their willingness to cooperate more closely with the University. On the other hand, the students were partly quite critical: the content of the programme does not fully comply with the name of the programme ("too much software development"), the order of the study subjects is not always justified etc. It is strongly suggested that students will heavily be involved in further development of the programme, in order to find a good balance between the creative and technological aspects of the programme.

The staff for delivery of the programme is in general adequately qualified, although relatively big part of the staff comes from other departments. That means that the department responsible for the programme (Department of Graphical Systems) does not control the professional competences and their development of a relatively big part of the staff members. Important here is that the teachers from other departments are actively involved in further development of the programme.

The premises – the quantity and quality of classrooms – are in good condition. However, the laboratories need upgrading as recommended above.

In terms of the study process and student assessment, the priority should be given to the measures that will increase the students' mentoring and decrease their dropout rate. Efforts should be made for communicating the programme outside the University, for bringing the

knowledge about the programme to as much as possible wide audience in order to attract the most motivated students.

The programme seems to be managed according to the standards and established procedures of the University. As though, the system is in place and starting its work regarding this study programme effectively enough. However, the most significant quality instrument – the feedback – is not yet fully implemented. At the same time the attention should be paid that the study programme is new and some conclusions cannot be made strongly because of the lack of time to check the way things work in reality.

Overall, the programme seems to have in it's interdisciplinarity a very good potential. However, realising its full potential includes taking concentrated actions described above.

V. GENERAL ASSESSMENT

The study programme *Multimedia Design* (state code – 612E14003) at Vilnius Gediminas Technical University is given **positive** evaluation.

Study programme assessment in points by evaluation areas.

| No. | Evaluation Area | Evaluation Area in Points* |
|-----|---|-------------------------------|
| 1. | Programme aims and learning outcomes | 3 |
| 2. | Curriculum design | 2 |
| 3. | Staff | 3 |
| 4. | Material resources | 2 |
| 5. | Study process and assessment (student admission, study process student support, achievement assessment) | 3 |
| 6. | Programme management (programme administration, internal quality assurance) | 3 |
| | Total: | 16 |

*1 (unsatisfactory) - there are essential shortcomings that must be eliminated;

2 (satisfactory) - meets the established minimum requirements, needs improvement;

3 (good) - the field develops systematically, has distinctive features;

4 (very good) - the field is exceptionally good.

Grupės vadovas: Team leader:

Prof. Peeter Normak

Grupės nariai: Team members:

Prof. Kari-Jouko Räihä Prof. Elmar Cochlovius Juozas Breivė Algirdas Kursevičius

VILNIAUS GEDIMINO TECHNIKOS UNIVERSITETO PIRMOSIOS PAKOPOS STUDIJŲ PROGRAMOS *MULTIMEDIJA IR KOMPIUTERINIS DIZAINAS* (VALSTYBINIS KODAS – 612E14003) 2014-05-15 EKSPERTINIO VERTINIMO IŠVADŲ NR. SV4-239 IŠRAŠAS

<...>

V. APIBENDRINAMASIS ĮVERTINIMAS

Vilniaus Gedimino technikos universiteto studijų programa *Multimedija ir kompiuterinis dizainas* (valstybinis kodas – 612E14003) vertinama **teigiamai**.

| Eil. | Vertinimo sritis | Srities įvertinimas, |
|------|--|-------------------------|
| Nr. | | balais* |
| 1. | Programos tikslai ir numatomi studijų rezultatai | 3 |
| 2. | Programos sandara | 2 |
| 3. | Personalas | 3 |
| 4. | Materialieji ištekliai | 2 |
| 5. | Studijų eiga ir jos vertinimas | 3 |
| 6. | Programos vadyba | 3 |
| | Iš viso: | 16 |

* 1 - Nepatenkinamai (yra esminių trūkumų, kuriuos būtina pašalinti)

2 - Patenkinamai (tenkina minimalius reikalavimus, reikia tobulinti)

3 - Gerai (sistemiškai plėtojama sritis, turi savitų bruožų)

4 - Labai gerai (sritis yra išskirtinė)

IV. SANTRAUKA

Multimedijos ir kompiuterinio dizaino studijų programos tikslas – parengti IT specialistą, disponuojantį išsamiu supratimu apie multimedijos technologijų projektavimą ir kūrimą, gebantį integruoti žinias ir įgūdžius apie multimedijos turinio kūrimą, informacines technologijas, kompiuterinį dizainą ir skaitmenines informacines technologijas. Programa buvo kuriama remiantis panašių programų analize Lietuvoje ir užsienyje. Numatomos studentų įgyti kompetencijos yra pateikiamos per penkias perspektyvas (uždavinius), iš kurių kiekvieną apibūdina tam tikri numatomi studijų rezultatai (iš 36 numatomų studijų rezultatų sąrašo). Kiekvienas numatomas studijų rezultatas atitinkamai yra susietas su tam tikru skaičiumi studijų dalykų, kurie užtikrina jo pasiekimą. Bendras studijų dalykų sąrašas yra pateikiamas daugiau nei 37 puslapiuose, kuriuose yra daugiau kaip 1000 elementų, todėl ekspertai norėtų atkreipti dėmesį, kad lentele (savianalizės suvestinės priedas Nr. 2) yra pernelyg sudėtinga naudotis.

Kadangi studijų programoje kol kas dar nėra absolventų, ekspertų grupei savo atsiliepimus apie studijų programą pateikė tik studentai ir darbdaviai. Du iš darbdavių, su kuriais susitiko ekspertai, pasiūlė vietas studentų gamybinei praktikai. Jie labai palankiai atsiliepė apie studentų programoje įgyjamas kompetencijas. Darbdaviai taip pat išreiškė norą glaudžiau bendradarbiauti su universitetu. Kita vertus, studentai apie studijų programą atsiliepė gana kritiškai: programos turinys ne visiškai atitinka programos pavadinimą (per daug programinės įrangos kūrimo), studijų dalykų išdėstymo seka ne visais atvejais yra pagrįsta ir pan. Ekspertų grupė primygtinai siūlo studentus labiau įtraukti į tolesnį programos tobulinimą, siekiant rasti tinkamą pusiausvyrą tarp programos kūrybinių ir technologinių aspektų.

Programą vykdančio akademinio personalo kvalifikacija yra pakankama, nors atkreiptinas dėmesys, kad gana didelė dalis dėstytojų yra iš kitų katedrų. Vadinasi, už programos vykdymą atsakinga katedra (Grafinių sistemų katedra) neturi daug įtakos pakankamai didelės dalies personalo profesinėms kompetencijoms ir jų ugdymui. Pažymėtina, kad dėstytojai iš kitų katedrų aktyviai dalyvauja tobulinant studijų programą.

Patalpos (auditorijų skaičius ir kokybė) yra geros būklės. Vis dėlto, kaip rekomenduota pirmiau, reikėtų atnaujinti laboratorijas.

Kalbant apie studijų eigą ir jos vertinimą, pirmenybė turėtų būti teikiama priemonėms, kurios didintų studentų mentorystę ir mažintų studentų nubyrėjimo rodiklius. Reikėtų daugiau dėmesio skirti informacijos apie studijų programą teikimui už universiteto ribų, siekiant kuo platesnės auditorijos ir labiausiai motyvuotų studentų pritraukimo.

Programos vadyba yra vykdoma pagal universiteto nustatytus standartus ir procedūras. Ekspertų grupė gali patvirtinti, kad programos vadybos sistema yra sukurta, o jos veikimas šiame programos vykdymo etape yra gana efektyvus. Vis dėlto pagrindinė studijų kokybės užtikrinimo priemonė – grįžtamojo ryšio teikimas ir jo pagrindu tobulinama studijų kokybė dar nėra pakankamai išplėtoti. Taip pat reikėtų nepamiršti, kad studijų programa yra nauja, ir dėl neilgo jos vykdymo, įvertinti kaip viskas iš tiesų veikia yra pakankamai sudėtinga.

Apskritai, programai būdingas pakankamai didelis potencialas dėl jos tarpdiscipliniškumo. Vis dėlto norint pasinaudoti minėtuoju potencialu, reikalinga imtis prieš tai ekspertų grupės aptartų priemonių.

III. REKOMENDACIJOS

- Peržiūrėti studijų programos sandarą, ypatingai kiekvieno atskiro studijų dalyko paskirtį programoje, siekiant prasmingai tarpusavyje susieti programos ir atskirų studijų dalykų numatomus studijų rezultatus. Būtina užtikrinti studijų programos paskirties aiškumą ir apie tai informuoti suinteresuotas šalis.
- Nustatyti aiškią studijų programos kryptį, įskaitant tam tikrų studijų dalykų sekos peržiūrėjimą, siekiant gerinti pedagogikos ir didaktikos aspektus, bei atsisakyti studijų dalykų, kurių indėlis siekiant programos tikslų yra minimalus.
- Suderinti programos pavadinimą ir turinį. Šiuo metu studijų turinys tik iš dalies atitinka studentų lūkesčius: kai kurie studentai, pasirinkę šią studijų programą, tikėjosi daugiau skiriamo dėmesio kūrybiniam dizainui ir meno aspektams, o ne multimedijos technologijoms ir inžinerijai.
- Ekspertai rekomenduoja *dėstyti bent keletą studijų dalykų anglų kalba*, suteikiant galimybę vietos studentams susipažinti su mokymosi užsienio kalba specifika, tuo pat metu pasirengiant priimti atvykstančius studentus.
- Atnaujinti laboratorijas jas aprūpinti reikiama technine ir programine įranga, atsižvelgiant į studentų skaičių.
- Peržiūrėti prieigą (kritiškai įvertinti) prie mokymosi medžiagos, kuria gali naudotis studentai, ir imtis priemonių *bibliotekai atnaujinti*, aprūpinant ją svarbiausiais su multimedijos dizainu susijusiais žurnalais ir knygomis.
- Apsvarstyti galimybę nustatyti *konkursinio balo ribą*, ypač priimant studentus į ištęstines studijas.
- 8. Atlikti išsamią *priežasčių analizę, dėl aukštų studentų nubyrėjimo rodiklių*, ir imtis atitinkamų priemonių šią tendenciją apriboti.
- Stiprinti *bendradarbiavimą su socialiniais partneriais*, siekiant užtikrinti, kad dėstymas atitiktų šiuolaikines įmonėse naudojamas technologijas, ir suteikti studentams daugiau praktikos galimybių.
- 10. Akademiniam personalui rekomenduojama aktyviau dalyvauti *tarptautinėje profesinėje veikloje* (profesiniuose tinkluose, konferencijose, personalo mainuose ir t. t.).

Paslaugos teikėjas patvirtina, jog yra susipažinęs su Lietuvos Respublikos baudžiamojo kodekso¹ 235 straipsnio, numatančio atsakomybę už melagingą ar žinomai neteisingai atliktą vertimą, reikalavimais.

¹ Žin., 2002, Nr.37-1341.