SKVC

KAUNO KOLEGIJOS

MULTIMEDIJOS TECHNOLOGIJOS PROGRAMOS

(653E10003)

VERTINIMO IŠVADOS

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EVALUATION REPORT

OF *MULTIMEDIA TECHNOLOGY*

(653E10003)

STUDY PROGRAMME

AT KAUNAS COLLEGE

Grupės vadovas:
Team Leader:

Juris Borzovs

Grupės nariai:
Team members:

Jüri Kiho

Brigita Šustickienė

Daiva Vitkutė-Adžgauskienė

Justinas Petravičius

Išvados parengtos anglų kalba
Report language - English

Vilnius
2012

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	**Multimedijos technologija**
Valstybinis kodas	653E10003
Studijų sritis	Technologijos mokslai
Studijų kryptis	Informatikos inžinerija
Studijų programos rūšis	Koleginės studijos
Studijų pakopa	Pirmoji
Studijų forma (trukmė metais)	Nuolatinė (3), ištęstinė (4)
Studijų programos apimtis kreditais	180
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Informatikos inžinerijos profesinis bakalauras
Studijų programos įregistravimo data	2005 m. rugsėjo mėn. 1 d.

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INFORMATION ON ASSESSED STUDY PROGRAMME

Name of the study programme	**Multimedia Technology**
State code	653E10003
Study area	Technological Sciences
Study field	Informatics Engineering
Kind of the study programme	College studies
Level of studies	First
Study mode (length in years)	Full-time (3), part-time (4)
Scope of the study programme in credits	180
Degree and (or) professional qualifications awarded	Professional Bachelor of Informatics Engineering
Date of registration of the study programme	September 1, 2005

CONTENTS

I. INTRODUCTION

Faculty of Technologies is a Kaunas College (hereinafter – KC) division for implementation of study process and applied-science research. Faculty of Technologies is one of the biggest at Kaunas College – it has more than 1600 students. Faculty of Technologies implements and continuously improves nine study programmes. *Multimedia Technology* study programme of Informatics engineering field is conducted at the Department of Media Technology.

The Lithuanian Centre for Quality Assessment in Higher Education formed an expert team (consisting of five experts, a student included) to review and assess the *Multimedia Technology* tudy programme (653E10003) at Kaunas College.

The Expert Team visited the Faculty of Technologies on October 5, 2012. Meetings with the College administration, self-assessment group, teaching staff, students, graduates and social partners were held. The expert team visited the laboratories and classrooms used by the programme.

First, the Expert Team met the administration of the College represented by 4 persons. Next a meeting with members of self-assessment group (6) took place. At this meeting, the Expert Team were given answers to the questions concerning less uncovered issues in the self-assessment report.

After that a meeting with 16 members of teaching staff took place. During the meeting teachers discussed some problems and requests for study programme.

The Expert Team also conducted interviews with some students of the programme. The group consisted of 8 full-time (two of them 1-st-year, two 2nd-year undergraduate, and four 3rd-year undergraduate students), 2 Erasmus students and 1 part-time student. The Expert Team was familiarized with students' attitude towards the programme; the students expressed mostly positive opinion.

The Expert Team had possibility to observe various support services (classrooms, computer services, library) as well as to familiarize with students' courses works and final works.

Finally the Expert Team met 4 graduates and 5 social partners of the programme.

At the conclusion of the visit, the Expert Team conducted a meeting with staff of the Faculty and introduced general remarks of the visit and highlighted some strengths and weaknesses of the Programme.

The findings of the Expert Team are reflected in the following chapters of this document. The self-evaluation report submitted by Faculty, the observations made at the time of

the visit, and the supplementary material received during the visit form the basis of these assessments.

II. PROGRAMME ANALYSIS

1. *Programme aims and learning outcomes*

The self-analysis report describes programme goals and learning outcomes of *Multimedia Technology* study programme and links it with the curriculum. The learning outcomes describe professional knowledge and competences as well as general skills. The programme description describes the learning outcomes and contents of each subject and gives detailed information on the content and working methods of the courses.

As indicated the self-analysis report (paragraph 2.1.2), the aim of *Multimedia Technology* study programme is „ to prepare specialists who are able to assess the need for the multimedia products or digital communication needs in the market and assess business opportunities, create and validate new product concepts, design, create and implement high quality products, product complexes, systems, and solutions that would satisfy the needs of competitive market."

Study programme aims and learning outcomes are clearly stated, defined and available to the public, and the information about studies is publicised using all available informational media: online, participating in associated structural activities, in informational advertisement brochures about the study programmes, during annual national career events and fairs.

According to the selfanalysis report, study programmes completely correspond to the Republic of Lithuania and Kaunas region outlook, labour market demand, employers' interests, students' needs, and are related to the goals of Kaunas region development until 2020.

During the meeting with teachers, students and stake holders was persuade that the programme considers demand of the labor market, interest of employers and students.

The contents and the qualifications offered by the programme are described by the learning outcomes perfectly well. The professional orientation of the programme is clearly described by the learning outcomes and meet the professional requirements of a graduate in *Multimedia Technology*. The learning outcomes of the programme as well as the subject level are consistent with the college type studies and meet the required level of qualifications

The programme goals and learning outcomes of *Multimedia Technology* programme described in the self-analysis report are linked to the content of the programme as well as professional knowledge, competences and general skills are described the learning outcomes too.

Unfortunatelly, the implementers of a programme were not able to show evidence how they came to programme's learning outcomes.

2. *Curriculum design*

The programme meets the requirements of legal acts such as: order of the Minister of Education and Science of the Republic of Lithuania, 19.02.2010, No. V-222, "On the approval of the list of branches of the study fields" and Law on Science and Studies of the Republic of Lithuania, 30.04.2009, No. XI-242.

The curriculum is based on a total of 180 ECTS credits which is equivalent to 4800 working hours. 15 credits are devoted to general college study subjects, 135 credits are devoted to study field subjects and 30 credits to special study subjects among which 9 credits are devoted to electives. The full-time programme covers 6 semesters with 30 credits each. The part-time programme lasts 8 semesters with workloads of 21 to 24 credits.

The curriculum of the full-time programme has a high proportion of practice hours which reflects the practical and professional orientation of the study programme. Out of the 2244 contact hours, 1254 hours are devoted to practical work and 610 hours to lectures. The remaining hours are individual consultation hours. 2556 hours are devoted to individual work. The part-time programme has the same distribution of credits with a higher proportion of independent work.

The main part of the general subjects of the college studies are studied during the first study year. Study field subjects are also studied during the first year.

After the first year of studies, an introductory practice (3 credits) is organized in the laboratories of the college. There are 27 credits for different industry practices. The studies of the subject is also started in the first semester. These subjects are: Engineering basics (in the first year of studies) and Engineering basics of informatics (in the second year of studies). Following the study programme, subjects of the detailed specialization within the informatics engineering (21 credits) are studied in the 3rd, 4th and 5th semesters. The alternative is allowed for the subjects of the detailed specialization, i. e. possibility to select one of the compulsory subjects in order to get better prepared for the graduation work. Free elective subjects are foreseen for 4, 5, and 6 semesters – one subject per semester. Volume of each free elective subject – 3 credits. For free elective subjects, in total 9 credits are allocated. Students of Multimedia Technology study programme participate in common free elective subjects registration system of Kaunas College and in 2011 selected from 154 subjects.

It is good that students can chose out of 154 subjects offered by Kaunas College. They can to deepen their knowledge in professional activities according to their interest.

The curriculum covers the main subjects of the *Multimedia Technology* field and gives the graduates a solid foundation in the field. The general college study subjects are not subject related and cover humanities and social science subjects as well as language competences.

In the study plan of *Multimedia Technology*, subjects are arranged cohesively and systematically. Each earlier delivered subject is to support previous skills and to assist reaching learning outcomes. Study subjects are interrelated; the accomplishment of learning outcomes depends on subject arrangement.

Most of the study subjects are arranged consistently. However, some subject descriptions presented should be developed (some items in the list of used literature are outdated). Course papers are not reflected in the subject descriptions also.

More contact hours should be given for English language. The final practice should be performed in the same semester as the final work is prepared.

Should be introduce new subject the "Discrete Mathematics" or topics of Discrete Mathematics should be insert into subject „Matematics".

All the subjects in the study process end up with exams. Weighting factor of the cumulative score of the exam should be not lower than 0,5 and not higher than 0,6. However, there are subjects with the cumulative score 0,8 or 0,2 (database systems 40%, electronic publishing 25%, graphic design 40%, information technologies in publishing (1, 2 semester) 20%, book design 80%, media communication 20%, programming (1, 2 semester) 40%, digital printing technology 40%, 3D animation 30%, business economics 40%, visualisation and modeling 30%, introduction to journalism 20%. Some subjects could be ended by the evaluation of the student independent work (a project).

Multimedia Technology learning outcomes meet the requirements for first-cycle college study programme.

According to the self-evaluation report to achieve learning outcomes, *Multimedia Technology* study programme teachers use various teaching/studying methods: lectures, practice, seminars, tutorials, and independent/self-study work. Subject aims and specifics define teaching/studying forms and methods. The teachers have prepared methodical material for e-learning subjects and actively use e-learning tools and virtual learning environment *Moodle*.

According the self-evaluation report (paragraph 2.2.6.), each year study programme content is reviewed by the committee of the programme, and the content of the study subject is revised by the subject teacher who takes into consideration the changes in the consumer environment and recommendations of study programme committee. Every study subject content is adjusted according to contemporary needs of the media environment.

The list of all compulsory and optional subjects might be left unchanged but it must be constantly modified, taking into consideration the latest developments and news. The structure of the programme as well as the sequence of the subjects taught is logical and reasonable enough.

3. Staff

Academic staff of the *Multimedia Technology* study programme corresponds to the requirements of the legal acts: the Law on Science and Studies, Kaunas College statute, regulations of the general requirements on degree-awarding in the first-cycle and in integrated studies.

The self analysis report (paragraph 2.3.1.) states that 30 teachers work (25 of them are regular teachers) in *Multimedia Technology* study programme (5 assoc. professors, 18 lecturers, and 7 assistants). The majority of the teaching staff holds a Master degree or an equivalent. Six teaching staff members hold a Ph.D. title (four of them are regular teachers). One teacher is pursuing a doctoral degree at the Moscow State University of Printing Arts (Faculty of Media Technologies) and will complete studies in 2013. All the teachers have no less than 3 years of practical work experience.

Looking at the CVs most of the teachers upgraded their pegagogical or professional qualification in training courses held in Lithuania, and /or abroad. The teachers developed their professional skills by participating in conferences, seminars, courses and internships. Teachers of *Multimedia Technology* study programme participated in the international exhibitions and business fairs which introduce the latest technologies and equipment. The teachers are members of professional organisations and associations.

The number of teachers is satisfactory to reach provided learning outcomes. *Multimedia Technology* study programme teachers have adequate qualification, create friendly environment for studies and help students to prepare for future profession.

The ratio of teachers' and students' numbers is optimal for the study programme of the informatics engineering field: in average, 1 academic staff member falls on 15,7 students (full-time studies) and 22,8 students (part-time studies) (paragraph 2.3.3.). This shows that teacher can spare enough time for students during the lectures and consultations.

According to the self-analysis report (paragraph 2.3.4.) teachers' turnover in the *Multimedia Technology* study programme is not big, the number of teachers increased from 26 (2007) to 30 (2011). During the five year period, two teachers terminated their employment contract, 7 new teachers started working. Teachers' turnover is due to increase in the student

number and to attract the best professionals with teaching experience and/or practical experience in the media market, as well as to focus on two teachers delivering one subject.

College gives a support to the professional development of its personnel. The Technology Faculty has designed the personnel's qualification upgrading plan for 2010-2013 and provides funding for teachers' formal and informal professional development as well as adjusts lecture timetable (as long as it does not interfere with the study process). In addition, 11 workplaces equipped with computers, have access to online dartabases and the appropriate software. Portable computers are available for teachers (paragraph 2.3.5.). The college is also engaged in Erasmus exchange programmes for teaching staff. However during the meeting with teachers were only two lectures, who engaged in Erasmus exchange programme.

According to the sel-analysis report teaching staff is evaluated by the college on a regular basis. Every year teachers prepare self-analysis of their own activity that helps to evaluate and/or self-evaluate their competences. Every five years there is an assessment of each lecturer, which also takes into account the lecturers' efforts regarding their own staff development. During the visit this information was confirmed.

According to the self-analysis report (paragraph 2.3.6.), *Multimedia Technology* study programme teachers constantly conduct applied research in the field of the subjects tought. During the assessment period, the teachers gave about 60 presentations in conferences, seminars, open lectures, prepared and published 40 articles related to the study programme. The teachers have issued 10 methodological publications and teaching aids for teaching subjects. About 40% of teaching/learning material is hosted in Moodle, the virtual learning environment.

Basic topics of the applied research are related to electronic and traditional printing, technological processes, materials and media techniques. During the assessment period *Multimedia Technology* programme teachers have been involved in consultancy activities.

After evaluating self-analysis report, the Expert team would propose for programme teachers to be more active in research work that is directly related to the multimedia technology.

During the meeting teachers requests: do not decrease contact-hours, more time for technical drawing, interactive learning tools for English, more practical hours for philosophy, e-learning tools.

4. Facilities and learning resources

According to the self-analysis report (paragraph 2.4.1.), the study programme lectures are delivered in 20 classrooms of different sizes and special laboratories: video-audio laboratory, e-Publishing laboratory, graphics laboratory, and the Publishing centre-printing shop. All the

auditoriums are equipped with multimedia equipment and internet access. It was also confirmed during the visit.

Library and the Centre of independent studies are equipped with 168 workplaces; 38 of them are equipped with computers and used for electronic publications search. The Reading room of the Technology Faculty library has 23 workplaces, 3 of them are computerised for e-publication search. Students may use a wireless internet in the premises of the Technology Faculty, the library and the dormitory.

The number of auditoriums and computers classrooms for the implementation of the study programme and achievement of goals is sufficient. The rooms used for studies meet the requirements of safety and health protection legislation.

According to the self-analysis report (paragraph 2.4.2.) all necessary software is installed in the computers to implement Publishing, Computer Graphics, Visualisation and Modelling, Animation study subjects.

The facilities for the study programme are adequate in size and quality to provide a high level learning experience. The material base is adequate to develop students' practical skills and achieve the intended learning outcomes.

The study programme includes four professional activity practices (30 credits). Information Commmunication Technologies practice (6 credits) is conducted in the computer classrooms. Multimedia Product Design practice 1,2 (15 credits) is performed in the computer classrooms and laboratories in cooperation with enterprises and organisations for which the multimedia products are designed. The equipment and working conditions correspond to real work environment. Final practice (9 credits) is performed in various enterprises and organisations: television, advertising agencies, publishing houses, architecture companies; companies related to production, tourism and medicine services.

Library of KC is a member of LABIIMSPP consortium and a member of Association of Lithuanian college libraries (LMBA).The library offers textbooks and learning resources for the students and gives access to professional journals. The literature is mostly in Lithuanian, but recently the library funds are added by English literature. Students and teachers can use 6 subscribed databases: EBSCO Publishing, Oxford Art Online, Oxford Reference Online, Grove Music Online, Taylor&Francis, and Emerald Management. Most textbooks or methodological publications are prepared by the lecturers and are available in sufficient numbers for the students in the library or online via Moodle.

Teachers and students request more frequent software equipment upgrade.

5. Study process and student assessment

Admission requirements meet the regulations of the Minister of Education and Science of the Republic of Lithuania which were updated in 2009. The applicants for admission are ranked according to the composite score of admission competition which consists of secondary school graduation examination on Lithuanian language, Mathematics and Information technologies and annual mark of the foreign language.

The general tendency of the number of students is increasing (from 140 in 2007 to 198 in 2011). The number of enrolled students shows the popularity of the programme.

The programme is offered in a full-time option and a part-time option. The part time option offers the same content but is spread over four instead of three years to allow students to work during their studies. The part-time programme is comprised of a larger portion of independent work. Studies are organised according the study timetable, accepted by faculty Dean.

Analysing the ratio of students accepted to the *Multimedia Technology* study programme and graduates (table 2.5.1.3), 58% students successfully graduated from full–time studies, meanwhile the number of graduates from part-time is just 28%. The number of full–time graduates remains stable ~60% except for the first graduates when the study programme was implemented. The number of the part-time students decreased from 40% to 18-16% (in 2009-2010). The main reasons for the termination or delay of studies are: poor economic situation, emigration, problems to combine work and studies.

During the study process students perform applied research works, the results of which are to be displayed in the final research part of professional bachelor graduation project. The best projects are introduced at "Inovacijos technologijos" (*Innovations in Technologies),* annual scientific-practical conference held in the Faculty. During the study process customised products are created by the students. These products are: representative DVDs, video films, visualisations, websites for the Department of Environmental Protection of Alytus Region, Skuodas Municipality, Baltija Television, Spearfishing Club *Neriam*, Kaunas Airport, Ambulance Station and other social partners. Students participate in various projects and contests (TV show *Jaunimas Kvadratu*, project *Technodžiunglės,* contest *StartUp Weekend* etc.), film and photograph events held at Kaunas University of Applied Sciences. They are involved in arranging, processing the material and creating video-photo archive.

Students have the opportunity to participate in mobility programmes. In the Faculty of Technologies, *Multimedia technology* is the leading programme concerning international activities: the most intensive student mobility (both outgoing and incoming). During the evaluation period 70 students have participated in mobility programmes (Erasmus, IP projects

and other international projects). 36 foreign students have joined the Erasmus programme or are participants in the projects. The number of incoming students have increased since 2011, when MT Department established 1st semester of Multimedia Technology programme.

Multimedia technology study programme students are provided with academic, social support and psychological assistance. According to the self–analysis report (paragraph 2.5.5.), dissemination of the information about *Multimedia technology* study programme, its organisation order and modifications is secured in the virtual environment of KC. Students have possibility to attend KC theatre study and choir, to select additional individual and group physical activities. After their lectures the students have free access to the Computer classes, Library, online Reading-room, the other Faculties' sources of Libraries and the Faculty of Technology gym. Moreover, they get discount to use the Kaunas University of Applied Sciences swimming pool. Students have a possibility to attend lectures according to individual timetable of lecture attendance. Individual counselling is implemented. Progressive and active students are awarded with scholarships. They can get a one-off subsidy or a one-off scholarship for achievements in social activity of KC and Faculty of Technology.

According to the self–analysis report (paragraph 2.5.6.), at the beginning of semester, teachers introduce students into the study subject programme, its aims, procedure of learning outcomes assessment, intended learning outcomes, assessment scheme of the study subject learning outcomes (influence of the intermediate knowledge assessments on the final grade), and assessment criteria. Not all of students confirmed it during the meeting. For the assessment of student's study subject achievement, accumulative (learning outcomes are assessed by means of intermediate knowledge assessments). Students provide feedback information to the teachers about the subject teaching by filling in appropriate questionnaires.

The self assessment report (table 2.5.7.1.) indicates, that 52% of graduates have found a job according to their speciality, 17,25 % have found another job, and 3,2% have continued the studies, and 19,25% during various periods have registered at the labour exchange office.

6. *Programme management*

The *Multimedia technology* study programme committee (newly confirmed in 2012) conducts supervision and development of the study programme. The Committee consists of the teachers who implement the study programme, students and the representatives of social partners. The Head of the Department takes responsibility for the study programme implementation and quality assurance. The responsibilities of each member of the committee has not been described in the self assessment report.

According to the self-analysis report, the members of the study programme committee, analyze the results of student and graduate feedback research, employers' recommendations, teachers' suggestions, documents regulating the study programme and its implementation, assess the needs and make proposals for the programme improvement.

The self-analysis report states, that stakeholdersare involved in the process of *Multimedia technology* study programme improvement. They participate in activities of the study programme committee, process of the graduation projects evaluation, give presentations at Department's conferences, present new products, technologies and ideas; make suggestions for improvements of study programme and subject contents. It was also confirmed by social partners during the meeting.

There is close relationship with Odense *Lillebaelt Academy* in Denmark who has implemented the analogous programme in their country. The representative of this Danish educational institution Henrik Hjorth is also a member of Multimedia technology study programme committee.

III. RECOMMENDATIONS

1. Qualification of teachers shoud be improved (particularly knowledge of English language), more attention should be payed to teachers' pedagogical skills development and the promotion of mobility.

2. The assessment system should be renewed. It would be wise to minimize the number of exams, the students knowledge on some subjects might be evaluated by the student's individual or project work.

3. The organization and management of the programme should be described clearly; responsibilities for members of programme committee should be assigned better. For example, one of programme committee member could be responsible for syllabuses of study subjects, another one - for the trends of graduates needs in the labour market, another one - for organizing practical trainings, material base, implementation of innovations in the study programme etc.

IV. SUMMARY

The learning outcomes clearly describe the professional orientation of the programme and meet the professional requirements of a graduate in Multimedia technology. The content of programme reflects the knowledge, skills and competences necessary for professional activity, matching the demand of the labour market and employer interests.

Most of the subject descriptions follow the guidelines in exemplarily good fashion and give students a comprehensive overview over content, learning outcomes, working methods, assessment and workload of the subjects. The programme is critically reviewed and reformed, as well as the content and the amount of seperate subjects is regularily modified too.

The curriculum should incorporate more widely the latest world trends and developments in general and in the specific subjects.

The number of teachers is satisfactory to reach provided learning outcomes. *Multimedia technology* study programme teachers have adequate qualification, create friendly environment for studies and help students to prepare for future profession.The programme has a sufficient number of professionally well-trained academic staff.

It is necessary to ensure a wider exposure of staff to academic and professional exchange and to practice in other countries. It is recommended to continue the development of the teachers' competence as well as to motivate their mobility.

The facilities for the study programme are adequate in size and quality to provide a high level learning experience. Software is suitable, and licensed; it also meets the needs of the study programme.

It is recommended regularly to renew computer equipment and software. Increase number of good auditoriums, further development of using Moodle for environmental teaching, to increase the amount of literature in English.

The organisation of the study process seems to be adequate to achieve the intended learning outcomes. The assessment scheme is transparently described and uses multiple assessment methods to check different competences of the students. The study programme documents and programme description are available on the college's website. The college also offers its students opportunities for international mobility. The academic and social support of the students seems to be appropriate.

Recommendations: further strengthening of the international mobility of the students, to develop students English knowledge skills.

Study programme quality is annually assessed by students, teachers and social partners. The formal structure of the programme is proper, the programme management gets internal input

from the students and from the staff, and also external input is good enough for improving the programme. It is nice to have a representative from Lillebaelt Academy of Higher Education, Denmark being participated in the study programme committee.

Student feedback should be more regular and its impact should be more visible. Low involvement of external stakeholders at operational level.

V. GENERAL ASSESSMENT

The study programme *Multimedia Technology* (state code – 653E10003) at Kaunas College is given **positive** evaluation.

Study programme assessment in points by fields of assessment.

No.	Evaluation Area	Evaluation Area in Points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	4
3.	Staff	4
4.	Material resources	4
5.	Study process and assessment (student admission, study process student support, achievement assessment)	4
6.	Programme management (programme administration, internal quality assurance)	3
	Total:	**22**

*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.

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