

STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Vilniaus Gedimino technikos universiteto  
***VEIKLOS PROCESŲ VALDYMO TECHNOLOGIJŲ***  
**STUDIJŲ PROGRAMOS (621E14006)**

**VERTINIMO IŠVADOS**

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**EVALUATION REPORT**  
**OF *BUSINESS PROCESS MANAGEMENT***  
***TECHNOLOGIES* MASTER STUDY PROGRAMME**  
**(621E14006)**

at Vilnius Gediminas Technical University

Grupės vadovas: Prof. Vladimir Oleshchuk  
Team Leader:

Grupės nariai: Prof. Jüri Kiho  
Team members: Dr. Lina Kankevičienė  
Adomas Svirskas  
Paulius Simanavičius

Išvados parengtos anglų kalba  
Report language - English

Vilnius  
2012

## DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Veiklos procesų valdymo technologijos
Valstybinis kodas	621E14006
Studijų sritis	Technologijos mokslų studijų sritis
Studijų kryptis	Informatikos inžinerija
Studijų programos rūšis	Universitetinės studijos
Studijų pakopa	Antroji
Studijų forma (trukmė metais)	Ištemptinė
Studijų programos apimtis kreditais	112 kreditų
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	informatikos inžinerijos magistras
Studijų programos įregistravimo data	2007 07 01

## INFORMATION ON ASSESSED STUDY PROGRAMME

Name of the study programme	Business process Management Technologies Programme
State code	621E14006
Study area	Technological Sciences
Study field	Informatics Engineering
Kind of the study programme	University studies
Level of studies	Second
Study mode (length in years)	Extended
Scope of the study programme in credits	112
Degree and (or) professional qualifications awarded	Master informatics engineering
Date of registration of the study programme	2004

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## I. INTRODUCTION

The Lithuanian Centre for Quality Assessment in Higher Education has invited four independent experts and one representative of students (hereinafter called Expert Team) from Estonia, Lithuania, Norway the Netherlands to review and assess the higher education second cycle study (Master) programme *Business process Management Technologies* (state code 621E14006, informatics engineering study field) at Vilnius Gediminas Technical University (hereinafter VGTU). The full-time study programme (further Programme) is arranged by the Faculty of Fundamental Sciences, VGTU, coordinated and conducted by the Department of Information Technology (further Department, DIT).

The Expert Team visited the Faculty on October 24-25, 2012<sup>1</sup>.

On October 24, the Expert Team met the administrative staff (4) of the Faculty represented by the Dean, Vice Dean, and a representative of the university administration. General issues, such as the history of the faculty, structure, financing, quality improvement measures, and reasons for students' intake decrease and dropouts, etc. were discussed.

All other activities during the visit were scheduled for October 24, except observation of various support services (classrooms, computer services, library), which took place on October 25. On October 24, a meeting with staff responsible for preparation of the Self-Analysis Report (5) was conducted. At this meeting, the Expert Team was given clear and exhaustive answers to the questions concerning less uncovered in the self-assessment report issues. After that, a meeting with 4 members of teaching staff of the Programme took place.

The Expert Team conducted also interviews with some students (2). The Expert Team was familiarized with students' attitude towards the Programme; the students expressed mostly positive opinions about the Programme. The Expert Team had possibility to familiarize with students' final works. Finally, in separate meetings, the Expert Team met 2 graduates and five social partners. They have expressed positive attitudes about the Programme.

At the conclusion of the visit, the Expert Team conducted a meeting with staff of the Faculty and presented general remarks related to the visit and highlighted some strengths and weaknesses of the programme under review.

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<sup>1</sup> During this period (October 24-25) the Expert Team had actually a joint visit concerning 3 study programmes at the Faculty. Some of the meetings with the Programme stakeholders were performed jointly.

In the following, the findings of the Expert Team are outlined. The Self-assessment report submitted by the 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-assessment report gives an adequate and highly detailed description of the programme aims and learning outcomes. The learning outcomes of the programme are very well substantiated and designed in agreement with the programme goals. Information about study programme is publicly accessible in the section “Studijų programos“ of the University website.

The programme aims and learning outcomes, generally, are based on professional requirements, public needs and the needs of the labour market. The Department has developed the programs and performed their execution, involving other units where necessary. The general structure and management of the education policy from the side of the Faculty are well organized and adequate. Topics of final work are coordinated with companies such as IBM, the Lithuanian Standards Board, Omnitel and others.

The programme aims and learning outcomes are consistent with the type and level of studies and the level of qualifications offered. The name of the programme, its learning outcomes, content and the qualifications offered are compatible with each other.

### ***2. Curriculum design***

The total scope of studies, the scope of individual modules and groups of modules (including theoretical subjects, course papers, practical work and final exams), final exams, student independent and auditorium work meet the regulations on studies legislation. Topics delivered in the subjects are up-to-date and sufficient to achieve respective learning outcomes. Forms and methods used in classes are satisfactory. Study units are spread evenly, their themes generally are not repetitive.

However, in the descriptions of the study subjects, the formulations of their learning outcomes should be more specific. The links between learning outcomes of the study subject and learning outcomes of the study programme should be stated. Prerequisites should be specified for each study subjects. Topics of lectures and practice work (if planned) for each subject should be

specified and the number of assigned hours should be indicated. The scope of the programme is sufficient to ensure learning outcomes.

The content of the programme generally reflects the latest achievements in science and technologies being an issue of higher level studies.

### **3. Staff**

The study programme is provided by the staff formally meeting legal requirements. The study programme corresponds to the research interests of the teaching staff. The staff members expertise are sufficient to assess or modify (if necessary) the whole teaching process, associated with the study programme. Over the past 5 academic years, all lecturers were certified. Their scientific and educational activities have been evaluated during the certification: scientific articles, monographs, textbooks, studies books, presentations in Lithuanian and international scientific conferences and experimental development activities.

Part of the academic staff in the master's programme *Business Process Management Technologies* is sufficiently young teachers. The average age of lecturers in the study programme of *Business Process Management Technologies* in 2010/11 is 50.2 years (54 years of professors, 42.6 years of associate professors).

The qualifications of the teaching staff are adequate to ensure learning outcome.

Substantial members of academic staff is participating in 8 Lithuanian and international research projects funded by the Lithuanian State Science and Studies Foundation, the Science Council and economic operators and 4 EU-funded studies and development projects. 11 lecturers take part in the implementation of the study programme of *Business Process Management Technologies*: 3 professors (27.3 %), 6 associate professors (54.5 %) and 2 lecturers (18.2 %). All lecturers are employed in Vilnius Gediminas Technical University, Faculty of Fundamental Sciences, and have the necessary teaching and research experience and appropriate qualifications to ensure the learning outcomes. Scientific activities of professors and associate professors correspond to the subjects taught.

All educators of *Business Process Management Technologies* studies improved their qualifications by participating in training, seminars/courses in Lithuania and abroad during the last five years. On the other hand, more teachers should participate in mobility programs.

#### ***4. Facilities and learning resources***

Studies of *Business process management technologies* is implemented by the distant method (full-time lectures, meetings, video lectures, asynchronous self-learning), therefore, the essential material resources for this programme are the hardware and software which are used for the development and delivery of asynchronous courses and video lecture broadcasts. Premises are mostly used for the development of teaching courses and broadcasts. Students usually study at their workplaces.

LieDM network classrooms are equipped according to hygienic requirements and have necessary hardware and software that enables active participation in video lectures.

The Distance Learning Centre classroom, where full-time meetings are held, is equipped in accordance with occupational safety and hygiene requirements. This classroom is a complete computer aided lecturer workstation with software and hardware tools for video broadcasts.

All university rooms are equipped with wireless EDUROAM Internet; the University lounges are equipped with work places for students, there are electrical outlets for laptop charging or wiring and informative displays which contain important information. Computer classrooms of the Faculty of Fundamental Sciences are fully equipped with computer hardware and software. Distance education courses are developed using Lotus Learning Space, IBM Workplace Collaborative Authoring Tool and the Moodle software. On other hand, focus more on other technologies and products than those from IBM (open source software, ORACLE, etc.) to adjust better to the labour market needs.

Students can access the Publications in the Information Reading Room, which offer various informatics literature, computer workstations, etc. VGTU students can use the library services. The library's opening hours are adapted to the needs of students. Students can access the VGTU staff publications database, VGTU scientific journals database, patent database, subscriptions and fixed access databases. Students can read complete electronic texts of publications prepared by the VGTU lecturers published in Technika University Publishing House, in the website [www.ebooks.vgtu.lt](http://www.ebooks.vgtu.lt). Participation in Microsoft IT Academy, IBM Academic Initiative, Oracle, SPSS, ILOG corporate programmes allows to use documentation, books, methodology and training materials resources of these corporations for educational purposes.

### **5. Study process and student assessment**

The admission procedure is complete, adequate and well organized.

The scientific and applicable scientific activities are included in the programme of studies, especially it is implemented in preparing the final thesis. Student science and applied science results are published in the “Informatika” conference of Lithuanian young scientists organised by the Faculty of Fundamental Sciences.

Students have opportunities to participate in student mobility programmes, but none of the *Business Process Management Technologies* students has travelled under the ERASMUS programme during the period of 2007-2011. The main reason is that they are working and can't leave jobs for such a long time. The University provides students with academic and social support. Support for students is also provided by the student representation office, whose objectives are the representation of academic and other interests of students.

The knowledge assessment system is criterion-proportional and according to it the students' knowledge level is assessed by the criteria set by the lecturer, and each grade meets the achievement of certain learning outcomes.

The graduates have good technical skills, but they lack entrepreneurial skills. The admission number to the program could be higher. Also, the study time could be shortened (from 2.5 years to 1.5 or 2 years).

### **6. Programme management**

Responsibilities for decisions and monitoring of the implementation of the programme are clearly allocated. Every year, student surveys are organized and their results on study methods and subject content applied by the lecturers are presented to the dean, the department head, the lecturer and the students' representative.

Information about the evaluation objectives of the studies programme, applied measures and obtained evaluation results is presented to the members of the dean's office, faculty studies committee, developers of the studies programme and social shareholders – lecturers, students and employers. Every year, student surveys are organised and their results on subject content and study methods applied by lecturers are presented to the dean, the department head, the lecturer and the students' representative.

Very good contacts and collaboration with the graduates and employers allow to improve quality of the programs. There seems to be good co-operation between the Faculty and Lithuanian business and IT companies such as Infobalt Association, companies UAB Omnitel, UAB Exigen, UAB IBM and others. Companies offer specific topics for course papers and final works of the programme students. Their final works are applicable in practice and useful for companies.

Social stakeholders (students, lecturers, employers, alumni and others) present lectures, agree on the topics of final theses, participate in the defence of final work, the studies committee of the faculty and the faculty council. Their opinion is considered during the renewal of the entire programme of studies except for separate subjects of studies and the studies materials. The internal quality assurance measures are effective and efficient. The main responsibility for the programme quality is carried out by the supervising department and the faculty studies committee members.

### **III. RECOMMENDATIONS**

1. Try to reduce the study time from 2.5 years to 1.5 or 2 years. It would increase the popularity of the study programme, allow to decrease the cost and increase a number of students.
2. Focus more on other technologies and products than those from IBM (open source software, ORACLE, etc.) to adjust better to the labour market needs.
3. Find possibilities to increase the demand of this programme, for example, to reduce the cost, to offer state places for entrants, etc.
4. Provide extended English abstract (at least 1-2 pages) in all master theses.

#### **IV. SUMMARY**

The higher education second cycle study (Master) programme *Business process Management Technologies* (state code 621E14006, informatics engineering study field) is provided at Vilnius Gediminas Technical University. The full-time study programme is arranged by the Faculty of Fundamental Sciences, coordinated and conducted by the Department of Information Technology. The programme is partly implemented in the form of distance learning, and focused on providing understanding the technical, technological, social, legal, and managerial aspects of business process management techniques and their application in developing and managing information systems.

The most positive aspects are: distance study mode allows to work and study at the same time; sufficiently wide knowledge of foundation allows integration of graduates into many IT areas; students have good teamwork skills and complement each other in work; there does exist a plan of faculty staff internal development and control; a system exists whereby students themselves could influence the quality assurance of the educational process; the Faculty of Fundamental Sciences is monitoring the outcome and performance activities of its graduates of the program; consequently, it may use such information to improve the quality of the programme.

The issues, which could be improved are: graduates have good technical skills, but they lack entrepreneurial skills; the admission number to the program could be higher; the study time is too long; concerning the curriculum design – the links between learning outcomes of the study subjects and learning outcomes of the study programme should be stated.

## V. GENERAL ASSESSMENT

The study programme BUSINESS PROCESS MANAGEMENT TECHNOLOGIES (state code – 621E14006) at Vilnius Gediminas Technical University 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	3
3.	Staff	3
4.	Material resources	3
5.	Study process and assessment (student admission, study process student support, achievement assessment)	3
6.	Programme management (programme administration, internal quality assurance)	3
	<b>Total:</b>	<b>18</b>

\*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:

Vladimir Oleshchuk

Grupės nariai:

Team members:

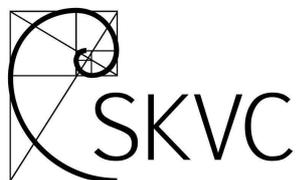
Jūri Kiho

Lina Kankevičienė

Adomas Svirskas

Paulius Simanavičius

**EXTRACT OF SECOND CYCLE STUDY PROGRAMME *BUSINESS PROCESS  
MANAGEMENT TECHNOLOGIES* (STATE CODES – 621E14006, 62407T106) AT  
VILNIUS GEDIMINAS TECHNICAL UNIVERSITY 2013-01-07 EVALUATION  
REPORT NO. SV4-2**



**STUDIJŲ KOKYBĖS VERTINIMO CENTRAS**

Vilniaus Gedimino technikos universiteto  
***VEIKLOS PROCESŲ VALDYMO TECHNOLOGIJŲ  
STUDIJŲ PROGRAMOS (621E14006)  
VERTINIMO IŠVADOS***

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(621E14006)**

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## DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

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Valstybinis kodas	621E14006
Studijų sritis	Technologijos mokslų studijų sritis
Studijų kryptis	Informatikos inžinerija
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Studijų pakopa	Antroji
Studijų forma (trukmė metais)	Iššęstinė
Studijų programos apimtis kreditais	112 kreditų
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	informatikos inžinerijos magistras
Studijų programos įregistravimo data	2007 07 01

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8. Provide extended English abstract (at least 1-2 pages) in all master theses.

<...>

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**VILNIAUS GEDIMINO TECHNIKOS UNIVERSITETO ANTROSIOS PAKOPOS  
STUDIJŲ PROGRAMOS VEIKLOS PROCESŲ VALDYMO TECHNOLOGIJOS  
(VALSTYBINIAI KODAI – 621E14006, 62407T106) 2013-01-07 EKSPERTINIO  
VERTINIMO IŠVADŲ NR. SV4-2 IŠRAŠAS**

&lt;...&gt;

**V. APIBENDRINAMASIS ĮVERTINIMAS**

Vilniaus Gedimino Technikos universiteto studijų programa *VEIKLOS PROCESŲ VALDYMO TECHNOLOGIJOS* (valstybinis kodas – 621E14006) vertinama teigiamai.

Eil. Nr.	Vertinimo sritis	Srities įvertinimas, balais*
1.	Programos tikslai ir numatomi studijų rezultatai	<b>3</b>
2.	Programos sandara	<b>3</b>
3.	Personalas	<b>3</b>
4.	Materialieji ištekliai	<b>3</b>
5.	Studijų eiga ir jos vertinimas	<b>3</b>
6.	Programos vadyba	<b>3</b>
	<b>Iš viso:</b>	<b>18</b>

\* 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**

Aukštojo mokslo antrosios pakopos studijų (magistrantūros) programa „Verslo procesų valdymo technologijos“ (valstybinis kodas 621E14006, informatikos inžinerijos studijų kryptis) įgyvendinama Vilniaus Gedimino technikos universitete. Nuolatinių studijų programą rengia Fundamentinių mokslų fakultetas, koordinuoja ir vykdo Informacinių technologijų katedra. Programa iš dalies įgyvendinama nuotolinio mokymosi forma ir daug dėmesio skiria verslo procesų valdymo metodų techninių, technologinių, socialinių, teisinių ir valdymo aspektų supratimui ir jų taikymui kuriant bei valdant informacines sistemas.

Teigiami šios programos aspektai: nuotolinių studijų forma leidžia dirbti ir mokytis tuo pačiu metu; pakankamai plačios pagrindinės žinios leidžia absolventams integruotis į daugelį IT sričių; studentai turi gerus komandinio darbo įgūdžius ir papildo vieni kitus darbe; sukurtas vidinis

Studijų kokybės vertinimo centras

fakulteto darbuotojų tobulėjimo ir kontrolės planas; sukurta sistema, kuri leidžia patiems studentams daryti įtaką ugdymo proceso kokybės užtikrinimui; Fundamentinių mokslų fakultetas stebi savo programos absolventų rezultatus ir veiklą, o tokia informacija gali būti naudojama programos kokybei gerinti.

Dalykai, kuriuos būtų galima tobulinti: absolventai pasižymi gerais techniniais įgūdžiais, tačiau jiems trūksta verslumo įgūdžių; į programą galėtų būti priimama daugiau studentų; studijų trukmė yra pernelyg ilga; studijų programos sandaroje turėtų būti nurodyta sąsaja tarp studijuojamų dalykų studijų rezultatų ir programos studijų rezultatų.

### **III. REKOMENDACIJOS**

1. Reiktų sumažinti studijų trukmę nuo 2,5 iki 1,5 arba 2 metų. Tai padidintų studijų programos populiarumą ir leistų sumažinti išlaidas bei padidinti studentų skaičių.
2. Reiktų daugiau dėmesio skirti kitoms technologijoms ir produktams, o ne tik IBM (atviro kodo programinei įrangai, Oracle ir t.t.), siekiant geriau prisitaikyti prie darbo rinkos poreikių.
3. Rasti galimybių padidinti šios programos paklausą, pavyzdžiui, sumažinti išlaidas, pasiūlyti valstybės finansuojamas vietas stojantiesiems ir t. t.
4. Visuose magistro baigiamuosiuose darbuose pateikti išplėstinę santrauką anglų kalba (ne mažiau kaip 1-2 puslapius).

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Paslaugos teikėja patvirtina, jog yra susipažinusi su Lietuvos Respublikos baudžiamojo kodekso<sup>1</sup> 235 straipsnio, numatančio atsakomybę už melagingą ar žinomai neteisingai atliktą vertimą, reikalavimais.

Vertėjos rekvizitai (vardas, pavardė, parašas)

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<sup>1</sup> Žin., 2002, Nr.37-1341