

STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Vilniaus Gedimino technikos universiteto
***NUOTOLINIO MOKYMOSI INFORMACINIŲ
TECHNOLOGIJŲ STUDIJŲ PROGRAMOS***

(621E14005)

VERTINIMO IŠVADOS

EVALUATION REPORT
***OF DISTANCE LEARNING INFORMATION
TECHNOLOGIES***
MASTER STUDY PROGRAMME (621E14005)
at Vilnius Gediminas Technical University

Grupės vadovas:
Team Leader:

Prof. Vladimir Oleshchuk

Grupės nariai:
Team members:

Prof. Jüri Kiho
Dr. Lina Kankevičienė
Adomas Svirskas
Paulius Simanavičius

Išvados parengtos anglų kalba
Report language - English

Vilnius
2012

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Nuotolinio mokymosi informacinės technologijos
Valstybinis kodas	621E14005
Studijų sritis	Technologijos mokslų studijų sritis
Studijų kryptis	Informatikos inžinerija
Studijų programos rūšis	Universitetinės studijos
Studijų pakopa	Antroji
Studijų forma (trukmė metais)	Nuolatinė (2 metai)
Studijų programos apimtis kreditais	120 kreditų
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Informatikos inžinerijos magistras
Studijų programos įregistravimo data	2004 m.

INFORMATION ON ASSESSED STUDY PROGRAMME

Name of the study programme	Distance Learning Information Technologies
State code	621E14005
Study area	Technological Sciences
Study field	Informatics Engineering
Kind of the study programme	University studies
Level of studies	Second
Study mode (length in years)	Full-time (2 years)
Scope of the study programme in credits	120
Degree and (or) professional qualifications awarded	Master informatics engineering
Date of registration of the study programme	2004

© Studijų kokybės vertinimo centras
The Centre for Quality Assessment in Higher Education

CONTENTS

I. INTRODUCTION	4
II. PROGRAMME ANALYSIS	5
1. Programme aims and learning outcomes.....	5
2. Curriculum design	5
3. Staff	6
4. Facilities and learning resources	7
5. Study process and student assessment.....	8
6. Programme management	9
III. RECOMMENDATIONS	10
IV. SUMMARY	11
V. GENERAL ASSESSMENT	12

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 and the Netherlands to review and assess the higher education second cycle study (Master) programme *Distance Learning Information Technologies* (state code 621E14005, informatics engineering study field) at Vilnius Gediminas Technical University (hereinafter VGTU) in cooperation with the Kaunas University of Technology (KTU). 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) with the help of teaching staff from KTU.

The Expert Team visited the Faculty on October 24-25, 2012¹.

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 6 members of teaching staff (two of those were from KTU) of the Programme took place.

The Expert Team conducted also interviews with some students (4). 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 one graduate and five social partners. They have expressed positive attitudes about the Programme.

¹ During this period (October 24-25) the Expert Team had actually a joint visit concerning 4 study programmes at the Faculty. Some of the meetings with the Programme stakeholders were performed jointly.

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.

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

Information about study programme is publicly accessible in the section “Studijų programos“ on 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 subjects (students, stakeholders, etc.) 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.

However, in the descriptions of the study subjects, the formulations of their learning outcomes should be adjusted (for example, learning outcomes Z1: Data management, Z2: Distance learning technology and etc. 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 subject. Topics of lectures and practice work (if planned) for each subject should be specified and the number of assigned hours should be indicated.

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. Study subjects are spread evenly, their content generally is not repetitive.

Forms and methods used in classes are highly satisfactory. The content and methods of the subjects/units are appropriate for the achievement of the intended learning outcomes. Teaching/learning process is organized in a distance way. All distance education courses of the study programme are available through the *Moodle* or *Lotus LearningSpace* environments, which makes it possible to study independently of time and location, communicate and collaborate in virtual environment with other students and teachers. The scope of the programme is sufficient to ensure learning outcomes.

3. Staff

The study programme is provided by the staff formally meeting legal requirements. Total amount of lectures is 13. 5 of the are professors and 8 associative professors. The number of the teaching staff is adequate to ensure learning outcomes.

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. This evaluation provides a high level of staff qualifications. A few lectures of department are editorial board members of scientific journal „*Science – Future of Lithuania*“. The qualifications of the teaching staff are adequate to ensure learning outcomes.

Considerable part of the academic staff in the master's programme *Distance Learning Information Technologies* consists of sufficiently young teachers and they have the knowledges necessary to provide courses. The average age of lecturers in the study programme of *Distance Learning Information Technologies* in 2010/11 is 46.5 years (56.6 years of professors, 36.8 years of associate professors).

The higher education institution creates conditions for the professional development of the teaching staff necessary for the provision of the programme. During the assessment period, the majority of teaching staff participated in various international activities. For the past 5 years, lecturers of the 2nd level programme of *Distance Learning Information Technologies* participated 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 study and development projects. On the other hand, more teachers should participate in mobility

programs. The analysis of data on lecturer travels for scientific and educational purposes shows that the average number of travels per year is 15. It should be noted that visits extended to 8 countries of the world, which include: Great Britain, Germany, Belgium, and Sweden.

4. Facilities and learning resources

Studies of *Distance Learning Information 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.

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. The library is open 24 hours a day so students can study at any time they feel it is more suitable for them. 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. 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. Very positive aspect is the integration of open and commercial course materials into

the study process. However there are other modern technologies and products that should be also covered (such as for example open source, Oracle – not only IBM).

Students are satisfied with the subjects that they have and the material resources that the university gives them. They felt quite satisfied with the study system that lets them see the subjects and some of the course material.

5. Study process and student assessment

The admission procedure is complete, adequate and well organized. However, since the programme is provided together with KTU, it is advisable to unify admission requirements of both institutions. For example, VGTU conditions of admission specify the requirements of bachelor programme subjects (Mathematics 15 ECTS, Information Technology 12 ECTS). KTU does not require this.

The research activities are included in the programme of studies, especially during preparing of the final thesis. The students have an opportunity to present their results at the „Informatika” conference of Lithuanian young scientists organised by the Faculty of Fundamental Sciences.

Students have restricted opportunities to participate in student mobility programmes and none of the *Distance Learning Information Technologies* students has travelled under the ERASMUS programme during the period of 2007-2011. The main reason is that mobility is restricted by the fact that participation in mobility programs is not intended for master studies, but on exceptional cases students may participate in Erasmus.

The University provides students with academic and social support. They get social support if they are in need of financial support. Furthermore they are able to take loans to pay for their studies. Support for students is also provided by the student representation office, whose objectives are the representation of academic and other interests of students. Also, lecturers advise students in virtual learning environment. 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 certain learning outcomes achieved.

There should be a bigger percentage of graduate students (in 2011 graduate 45 %, in 2012 – 63 %). University believes that the dropout rates are normal and they are due to students finding jobs and going to labour market.

Students are quite happy with their study program and they believe it will help them in the labour market.

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. And after that changes can be made to the study program depending on the students wishes and possibilities.

Information about the evaluation objectives of the study programme, applied measures and obtained evaluation results are presented for the members of the Dean's office, faculty study committee, developers of the studies program and social shareholders – lecturers, students and employers. Some data are presented on the websites of the university faculties, departments and units. Questions about the program aims and student satisfaction is included in the survey. Overall satisfaction on the study program is posted on the internet.

Updates for the programme are prepared jointly with representatives of KTU (Self-assessment report, par. 160). However, the joint (with KTU) management of the programme is not officially regulated, i.e. is carried out on an informal basis.

The evaluation and improvement processes involve stakeholders (students, lecturers, employers, alumni and others): they present lectures, discuss topics of final theses; participate in the defence committee for master theses and the studies committee of the faculty and the faculty council. Social stakeholders are the members of the faculty study committee and the Faculty Council.

III. RECOMMENDATIONS

1. Since it is a joint programme the joint diploma would be preferable. If it is not possible, the study subjects provided by KTU should be indicated in Diploma supplements.
2. Synchronize the programme (in terms of description) with offered at KTU, for example, admission requirements should be presented in the same way, adjust/sync-learning outcomes with those at KTU.
3. Inform students about Erasmus exchange possibilities.
4. In classes, more modern technologies and products should be covered (such as for example open source, Oracle – not only IBM).
5. Provide an extended English abstract (at least 1-2 pages) in all master theses.
6. There should be a possibility to take all exams in Vilnius.

IV. SUMMARY

The higher education second cycle study (Master) programme Distance Learning Information Technologies (state code 621E14005, informatics engineering study field) is provided at Vilnius Gediminas Technical University (hereinafter VGTU) in cooperation with the Kaunas University of Technology (KTU). The full-time study programme is coordinated and conducted by the Department of Information Technology of the Faculty of Fundamental Sciences (with the help of teaching staff from KTU). The programme is partly implemented in the form of distance learning, and provides a possibility for the specialists with informatics or informatics engineering qualification to expand and for others to deepen the knowledge in the application of informatics engineering in distance learning and acquire the necessary skills and abilities.

The most positive aspects are: curriculum design, good relations between teaching staff and students, study materials, organization of the programme (distance learning, Saturdays' classes), material resources, use of virtual learning environments, involvement of alumni and social partners, a plan of Faculty staff internal development and control.

The issues, which could be improved are: usage of modern distance teaching methods in all courses, more focus of online resources, involving into study process experts from industry and abroad, increase throughput of the programme. The self-assessment report contains many translation mistakes (e.g., Holly studies; "results of study programme" should be "learning outcomes of study programme", etc.)

V. GENERAL ASSESSMENT

The study programme DISTANCE LEARNING INFORMATION TECHNOLOGIES (state code – 621E14005) 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
	Total:	18

*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

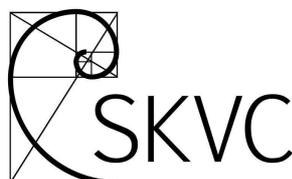
Grupės nariai: Jūri Kiho

Team members: Lina Kankevičienė

Adomas Svirskas

Paulius Simanavičius

**EXTRACT OF SECOND CYCLE STUDY PROGRAMME *DISTANCE LEARNING
INFORMATION TECHNOLOGIES* (STATE CODES – 621E14005, 62407T105) AT
VILNIUS GEDIMINAS TECHNICAL UNIVERSITY 2013-01-07 EVALUATION
REPORT NO. SV4-1**



STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Vilniaus Gedimino technikos universiteto
***NUOTOLINIO MOKYMOSI INFORMACINIŲ
TECHNOLOGIJŲ STUDIJŲ PROGRAMOS***
(621E14005)
VERTINIMO IŠVADOS

EVALUATION REPORT
***OF DISTANCE LEARNING INFORMATION
TECHNOLOGIES***
MASTER STUDY PROGRAMME (621E14005)
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

Studijų kokybės vertinimo centras

DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Nuotolinio mokymosi informacinės technologijos
Valstybinis kodas	621E14005
Studijų sritis	Technologijos mokslų studijų sritis
Studijų kryptis	Informatikos inžinerija
Studijų programos rūšis	Universitetinės studijos
Studijų pakopa	Antroji
Studijų forma (trukmė metais)	Nuolatinė (2 metai)
Studijų programos apimtis kreditais	120 kreditų
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Informatikos inžinerijos magistras
Studijų programos įregistravimo data	2004 m.

INFORMATION ON ASSESSED STUDY PROGRAMME

Name of the study programme	Distance Learning Information Technologies
State code	621E14005
Study area	Technological Sciences
Study field	Informatics Engineering
Kind of the study programme	University studies
Level of studies	Second
Study mode (length in years)	Full-time (2 years)
Scope of the study programme in credits	120
Degree and (or) professional qualifications awarded	Master informatics engineering
Date of registration of the study programme	2004

© Studijų kokybės vertinimo centras
The Centre for Quality Assessment in Higher Education

<...>

V. GENERAL ASSESSMENT

The study programme DISTANCE LEARNING INFORMATION TECHNOLOGIES (state code – 621E14005) 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
	Total:	18

*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.

IV. SUMMARY

The higher education second cycle study (Master) programme Distance Learning Information Technologies (state code 621E14005, informatics engineering study field) is provided at Vilnius Gediminas Technical University (hereinafter VGTU) in cooperation with the Kaunas University of Technology (KTU). The full-time study programme is coordinated and conducted by the Department of Information Technology of the Faculty of Fundamental Sciences (with the help of teaching staff from KTU). The programme is partly implemented in the form of distance learning, and provides a possibility for the specialists with informatics or informatics engineering qualification to expand and for others to deepen the knowledge in the application of informatics engineering in distance learning and acquire the necessary skills and abilities.

The most positive aspects are: curriculum design, good relations between teaching staff and students, study materials, organization of the programme (distance learning, Saturdays' classes), material resources, use of virtual learning environments, involvement of alumni and social partners, a plan of Faculty staff internal development and control.

The issues, which could be improved are: usage of modern distance teaching methods in all courses, more focus of online resources, involving into study process experts from industry and abroad, increase throughput of the programme. The self-assessment report contains many translation mistakes (e.g., Holly studies; "results of study programme" should be "learning outcomes of study programme", etc.)

III. RECOMMENDATIONS

7. Since it is a joint programme the joint diploma would be preferable. If it is not possible, the study subjects provided by KTU should be indicated in Diploma supplements.
8. Synchronize the programme (in terms of description) with offered at KTU, for example, admission requirements should be presented in the same way, adjust/sync-learning outcomes with those at KTU.
9. Inform students about Erasmus exchange possibilities.
10. In classes, more modern technologies and products should be covered (such as for example open source, Oracle – not only IBM).
11. Provide an extended English abstract (at least 1-2 pages) in all master theses.
12. There should be a possibility to take all exams in Vilnius.

<...>

**VILNIAUS GEDIMINO TECHNIKOS UNIVERSITETO ANTROSIOS PAKOPOS
STUDIJŲ PROGRAMOS NUOTOLINIO MOKYMOSI INFORMACINĖS
TECHNOLOGIJOS (VALSTYBINIAI KODAI – 621E14005, 62407T105) 2013-01-07
EKSPERTINIO VERTINIMO IŠVADŲ NR. SV4-1 IŠRAŠAS**

<...>

V. APIBENDRINAMASIS ĮVERTINIMAS

Vilniaus Gedimino Technikos universiteto studijų programa *NUOTOLINIO MOKYMOSI INFORMACINĖS TECHNOLOGIJOS* (valstybinis kodas – 621E14005) vertinama teigiamai.

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

* 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 „Nuotolinio mokymosi informacinės technologijos“ (valstybinis kodas 621E14005, informatikos inžinerijos studijų kryptis) įgyvendinama Vilniaus Gedimino technikos universitete (toliau - VGTU) bendradarbiaujant su Kauno technologijos universitetu (KTU). Nuolatinių studijų programą koordinuoja ir vykdo Fundamentinių mokslų fakulteto Informacinių technologijų katedra (kartu su KTU dėstytojais). Ši programa iš dalies įgyvendinama nuotolinio mokymosi forma ir suteikia galimybę informatikos arba informatikos inžinerijos kvalifikaciją turintiems specialistams

išplėsti, o kitiems gilinti žinias informatikos inžinerijos taikymo srityje mokantis nuotoliniu būdu ir įgyti reikiamus įgūdžius bei gebėjimus.

Teigiami šios programos aspektai: programos sandara, geri dėstytojų ir studentų santykiai, studijų medžiaga, programos organizavimas (nuotolinis mokymasis, užsiėmimai šeštadieniais), materialieji ištekliai, virtualaus mokymosi aplinkos taikymas, absolventų ir socialinių partnerių įtraukimas, vidinis fakulteto darbuotojų tobulėjimo ir kontrolės planas.

Dalykai, kuriuos būtų galima patobulinti: šiuolaikinių nuotolinio mokymosi metodų naudojimas visuose kursuose, daugiau dėmesio skirti interneto ištekliams, į studijų procesą įtraukti ekspertus iš pramonės ir užsienio, padidinti programos našumą. Savianalizės suvestinėje yra daug vertimo klaidų (pvz., „holly“ studijos; vietoj „studijų programos rezultatai“ turėtų būti „programos studijų rezultatai“ ir t. t.)

III. REKOMENDACIJOS

1. Kadangi programa yra jungtinė, būtų gerai, kad diplomą taip pat būtų jungtinis. Jei to padaryti neįmanoma, studijų dalykai, kurie dėstomi KTU, turėtų būti nurodyti diplomo priede.
2. Suderinti programą (aprašymų prasme) su KTU siūloma programa, pavyzdžiui, priėmimo reikalavimai turėtų būti išdėstyti tokiu pačiu būdu, studijų rezultatai suderinti su tais, kuriuos siūlo KTU.
3. Informuoti studentus apie „Erasmus“ mainų programos galimybes.
4. Užsiėmimuose turėtų būti įtrauktos šiuolaikiškesnės technologijos ir produktai (pavyzdžiui, atvirojo kodo, Oracle, o ne tik IBM).
5. Visuose magistro baigiamuosiuose darbuose pateikti išplėstinę santrauką anglų kalba (ne mažiau kaip 1-2 puslapius).
6. Turėtų būti suteikta galimybė visus egzaminus laikyti Vilniuje.

<...>

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

Vertėjos rekvizitai (vardas, pavardė, parašas)