

## STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

### **VILNIAUS UNIVERSITETO**

# INFORMACIJOS SITEMŲ VADYBOS PROGRAMOS (62609S102/621P10001) VERTINIMO IŠVADOS

# EVALUATION REPORT OF INFORMATION SYSTEM MANAGEMENT (62609S102/621P10001) STUDY PROGRAMME AT VILNIUS UNIVERSITY

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Išvados parengtos anglų kalba Report language - English

## DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	Informacijos sistemų vadyba
Valstybinis kodas	62609S102 (naujas kodas - 621P10001)
Studijų sritis	Socialiniai mokslai
Studijų kryptis	Informacijos paslaugos
Studijų programos rūšis	universitetinės studijos
Studijų pakopa	antroji
Studijų forma (trukmė metais)	nuolatinė (2)
Studijų programos apimtis kreditais <sup>1</sup>	80
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Informacijos paslaugų magistras
Studijų programos įregistravimo data	1997-05-19

<sup>&</sup>lt;sup>1</sup> – vienas kreditas laikomas lygiu 40 studento darbo valandų

#### INFORMATION ON ASSESSED STUDY PROGRAMME

Name of the study programme	Information System Management
State code	61209S102 (new code - 621P10001)
Study area	Social sciences
Study field	Information Services
Kind of the study programme	University studies
Level of studies	Master
Study mode (length in years)	Full-time (2 years)
Scope of the study programme in national credits	80
Degree and (or) professional qualifications awarded	Master of Information Services
Date of registration of the study programme	19-05-1997

Studijų kokybės vertinimo centras

The Centre for Quality Assessment in Higher Education

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#### I. INTRODUCTION

In accordance with the Lithuanian law on Higher Education and Research, dated 30 April 2009 (No XI-242), and in compliance with Order No. 1-94 of 30 October 2009, an Experts Team (here after: ET) appointed by the Centre for Quality Assessment in Higher Education has conducted an Evaluation of the study programme Information Systems Management (Code 62609S102), Study Field of Communication and Information, Vilnius University.

In conducting their evaluation of the Study programme, the ET has applied the methodological guidelines developed by the Centre for Quality Assessment in Higher Education to implement provisions of the Order No. ISAK-1652 of 24 July 2009 of the Minister of Education and Science "On the approval of the description of the procedure for the external assessment and accreditation of study programmes" (Official Gazette, 2009, No. 96-4083), following the Law on Science and Studies of the Republic of Lithuania (Official Gazette, 2009, No. 54-2140).

The ET would like to pay tribute to the Centre for Quality Assessment in Higher Education in Lithuania and, most especially to the Deputy Director of the Centre and to the Head of the Division for Studies Assessment, for the support given to the ET before and throughout the visit to Lithuania.

The External Assessment was conducted in the period November 2010 with in-country evaluation taking place during the period November 14 to November 20, 2010. The assessment included a one-day site visit to Klaipeda University on November 16, and a 3-day visit to Vilnius University on November 17-19, 2010.

This report does not necessarily paraphrase or re-present the range of information presented in the Report of the Self Assessment Group (here after: SAG). Instead, it focuses on issues raised in the Self Assessment Report (here after: SAR) as well as raising some issues not addressed in the SAR, but which came to the attention of the ET during the course of the Team's time in Lithuania, and specifically, during the course of the site visit.

We would like to express our appreciation to the authorities of the Faculty of Communication, Vilnius University for the manner in which we were made welcome and for the manner in which our queries and our exploration of various key issues were addressed in a professional and positive way by those with whom we came into contact with at the University.

The SAG has put an informative SAR together. It presents, in considerable detail, the nature, structure, aims and content of the programme being evaluated, the methods of study, delivery and assessment, issues with regard to quality, resourcing, student support and participation.

In addition to its examination of the SAR, the ET collected information, data and evidence on which to base its conclusions in the course of the site visit through meetings and other means:

- Meeting with administrative staff
- Meeting with the staff responsible for the preparation of the SAR
- Meeting with teaching staff
- Meeting with students
- Meeting with graduates
- Meeting with employers of those who have graduated from the programme
- Visiting and observing various support services (classrooms, library, computer services, laboratories, etc.)
- Examination and familiarization with students' final works, examination material, etc.

At the end of the site visit, the initial impressions of the team were conveyed to the administrative and teaching staff of the programme.

The SAR, as presented to the ET consists of a collective volume and 9 Volumes, 6 of which have been studied by this ET. The self-assessment report for the study programme

Information Management (Code 62609S103), is found in volume 5, together with the Information System Management programme (Code 62609S102).

This evaluation report only relates to the study programme Information System Management (Code 62609S102). This program is organized by the same Faculty and the same department as the Information Management programme (62609S103), has partly the same courses and completely the same quality management system. Therefore a large part of the observation in the report is equal to those in the report for 62609S103. Similarities and differences between the content of the two programs are discussed in the text below.

According to the collective volume of the Self-assessment report, in recent years, the study programmes of the Faculty of Communication have been revised and corrected on Recommendations of the Internal Total Study Programme Assessment carried out in 2005 and in 2008.

In the 2005 self-assessment of a part of the study programmes was carried out, including the Information Systems Management programme. The report was discussed and assessed by the Study Commission of the Faculty of Communication and by the division of the Faculty administering a study programme. On the basis of the Self-assessment 2005 the study programmes are being revised and updated. In 2008 a self-assessment of all study programmes was carried out at the Faculty of Communication, Vilnius University. On the basis of the self-assessment of study programmes, decisions on the curriculum review and renewal were adopted.

The self-assessment of the study programme Information System Management was conducted in 2008 for external evaluation, self-assessment data was specified.

During a meeting with the administrative staff during a site visit on 17<sup>th</sup> November, 2010, it was confirmed that two years ago a new development plan was made, together with an internal analysis of all curricula and discussion of what changes should be made; furthermore, ET was informed that a new reform is on its way towards a modular system.

#### II. PROGRAMME ANALYSIS

#### 1. Programme aims and learning outcomes

#### 1.1. Programme demand, purpose and aims

#### 1.1.1. Uniqueness and rationale of the need for the programme

In the SAR the programme purpose is described as: 'The purpose of the master study programme of Information System Management is to prepare the most highly qualified information system managers and administrators who are able to excel in the areas of planning, designing, installation, maintenance and management of information systems of the organization.'

The study program focuses on the supply side of information. It aims at educating Information supply specialists at the Master's level. As far as we know there is no other Masters programme in Lithuania with the same purpose. Other European universities, however, offer similar programmes. Vilnius University itself offers a Masters programme that focuses more on the demand side of Information. The distinction between the two programmes has to be watched closely. The SAR rightly argues that global development of the information society also has its impact on Lithuania and thus on the Lithuanian demand for this type of specialists. This is supported by market analysis both in Lithuania and in other European countries.

# 1.1.2. Conformity of the programme purpose with institutional, state and international directives

According to the SAR the following documents have been referred to when updating the Information System Management Masters study programme: the Republic of Lithuania Law on Higher Education (21.03.2000); the Republic of Lithuania Law on Science and Studies

(11.06.2002); consecutive study form descriptors (29.12.2000); Description of General Requirements for Master's Study Programmes (2005, No. ISAK-1551); the Bologna Declaration (1999); documents of the Bologna Process: Dublin Descriptors (2004); the Lisbon Strategy Implementation Programme, EUROSCIENCE 2003; the Statute of Vilnius University (2002); Study Regulations of Vilnius University (2003); the Strategic Action Plan of Vilnius University 2007–2013; and the Regulation of Vilnius University Study Programmes approved by the Senate Commission on 22 June 2006. Whilst the ET recognizes that some of these are now outdated laws, we have uncovered no evidence to suggest that the programme does not conform to current Lithuanian Law. He ET finds it surprising that given that reference is made to the Bologna process, the programme team has not used Dublin Descriptors and in future we would hope that the team will make use of them

#### 1.1.3. Relevance of the programme aims

According to the SAR 'The purpose of the master study programme of Information Systems Management is to prepare the most highly qualified information system managers and administrators who are able to excel in the areas of planning, designing, installation, maintenance and management of information systems of the organization.'

These aims are very wide in that they cover issues at the national information policy level as well as on the company/organization information policy level. They also cover topics from the information demand and from the information supply side. Although the breadth of the programme fits well in the context of a 'broadening' Masters programme, we wonder whether some 'narrowing' of the programme aims would be appropriate.

#### 1.2. Learning outcomes of the programme

#### 1.2.1. Comprehensibility and attainability of the learning outcomes

The intended learning outcomes are described in terms of knowledge, cognitive skills, practical skills and transferable competences. Specification in terms of the Dublin descriptors would have been preferable. Looking at the specific learning outcomes, we once again see the breadth of the programme. Although the purpose of the programme seems to be to educate students who are going to provide information to others in organizations, the programme level learning outcomes cover topics that are more oriented on the demand side like for example:

- A1 Changes in society determined by information and knowledge society, the demand for and impact of information technologies on the changing business, social, cultural and other areas of public life, the most important aspects of efficient management of information and communication technology resources; the importance of information, the functions of information systems and information technologies in business;
- A2 The genesis and structural features of information communities in old and modern societies, their expression and impact on global information society;
- *B1* Critically analyze the activities of political and public authorities, related to the technological aspects of creating knowledge society; political initiatives and decisions of public authorities related to the installation of information systems, efficiency of application of information systems in various levels;
  - C16 Apply basic theoretical propositions or models for grounding operational decisions.

Also we doubt whether so much attention should be given to information systems design in a world where standard applications, software as a service and cloud computing are becoming more and more common. Therefore we think less attention should be given to learning outcomes like:

- 'C8 Design an information system, properly execute project documentation of an information system, carry out project evaluation and supervision of implementation, and forecast the development of an information system;
  - C12 Create algorithms of information system models;
  - C13 Define and manage characteristics of the software design process;

These learning outcomes can be viewed as appropriate for a somewhat traditional view of Information Systems Management and therefore we recommend that at the earliest opportunity their significance in the programme is reduced so that new approaches such as Software as Service and Cloud Computing can be introduced.

In conclusion we find that comprehensibility and attainability of the learning outcomes are good but that some of the course topics might be reconsidered.

#### 1.2.2. Consistency of the learning outcomes

The SAR does not present a clear cross tabulation of learning outcomes at the programme level and learning outcomes of the individual subjects. This makes it hard to judge the internal consistency of the programme. Looking at the individual subject and explanations given by the teaching staff, we conclude that the internal consistency is satisfactory but has to be made more explicit.

#### 1.2.3. Transformation of the learning outcomes

Since the updated programme was only launched in 2009 it is not possible to give an opinion of the adaption of the programme to recent developments. We do remark, however, that recent developments like software as a service and cloud computing which have been of growing importance since the initiation of the programme could be addressed in coming revisions of the programme.

#### 2. Curriculum design

#### 2.1. Programme structure

#### 2.1.1. Sufficiency of the study volume

Considering the data presented in the SAR and the comments received from teachers and students, we conclude that the study volume is in accordance with legal acts and compliant with the learning outcomes. It is, however, rather surprising that the programme is taught over two years while generally this type of Masters Programme often are completed in one year. Discussions with students showed that some of them consider that the programme could be completed in one year.

#### 2.1.2. Consistency of the study subjects

There are no major problems with the sequencing of the courses. The positioning of the course on information systems audit could, however, be reconsidered. Information Systems auditing can only be understood when information design and management issues are known.

#### 2.2. Programme content

#### 2.2.1. Compliance of the contents of the studies with legal acts

The SAR reports that the following documents have been referred to when updating the Information System Management Masters study programme: the Republic of Lithuania Law on Higher Education (21.03.2000); the Republic of Lithuania Law on Science and Studies (11.06.2002); consecutive study form descriptors (29.12.2000); Description of General Requirements for Master's Study Programmes (2005, No. ISAK-1551); the Bologna Declaration (1999); documents of the Bologna Process: Dublin Descriptors (2004); the Lisbon Strategy Implementation Programme, EUROSCIENCE 2003; the Statute of Vilnius University (2002); Study Regulations of Vilnius University (2003); the Strategic Action Plan of Vilnius University 2007–2013; and the Regulation of Vilnius University Study Programmes approved by the Senate Commission on 22 June 2006. Again we note that at least some of these Laws are no longer valid however we can confirm that our investigations have not uncovered any evidence that the current

programme does not conform to current Lithuanian legal requirements. Nevertheless, we repeat our earlier comment regretting that no use has been made of the Dublin descriptors.

#### 2.2.2. Comprehensiveness and rationality of programme content

There is no clear relation between the table in SAR on "Knowledge and competences/skills provided by Master study programme of Information System Management" (pages 22-24) and the course topics. This makes it hard to judge the comprehensiveness and rationality of the programme. We want to make the following comments from our own observation:

In this programme the course on information systems modeling is only an elective while there is no course on information systems design. This fits in with our earlier remark on the relative unimportance of systems design.

From the SAR it is not very clear where governance issues like ITIL, COBIT, CMM are addressed. In the meeting with teachers we understood that these topics are treated albeit they are spread over different courses. Therefore we conclude that coverage of these topics is sufficient but that in future their presence within the programme this should be made more explicit in the programme documentation.

#### 3. Staff

#### 3.1. Staff composition and turnover

#### 3.1.1. Rationality of the staff composition

According to the SAR professors teach 21% of theoretical subjects and 20% of deepening theoretical subjects (the requirement is at least 20%) of the Information System Management study programme. Associate professors teach 66% of theoretical subjects. The research activities of all the teachers of the Masters study programme of Information System Management are related to the subjects they teach. The profiles of research and academic activities of programme teachers are presented in their curriculum vitae and annexes.

#### 3.1.2. Turnover of teachers

There is no written information on turnover. From the meeting with teachers we learned that turnover is not considered as a problem. Some turnover happens with external teachers from business. But this offers a good opportunity to replace teachers with poor teaching qualities.

#### 3.2. Staff competence

#### 3.2.1. Compliance of staff experience with the study programme

The SAR reports a lack of professors but also reports that slightly more than the required 20% of theoretical and deepening subjects is taught by professors while 66% of the theoretical subjects are taught by associate professors. The Department of Information and Communication expects to have 2 professors soon.

#### 3.2.2. Consistency of teachers' professional development

Teachers have ample opportunities to develop their professional and scientific skills. During the discussions with staff, it became clear that training in teaching skills is mainly provided to new teachers. We are of the opinion that somewhat more attention could be given to training and pedagogic skills development of the tenured teaching staff. Students reported marked variations in the performance of the teaching staff in terms of their ability to teach, their willingness to give feedback on assessments and their availability to offer advice to students. In the interests of improving the students' learning experience we believe that further staff development activities would lead to more consistent performance between staff and therefore an improved student experience.

#### 4. Facilities and learning resources

#### 4.1. Facilities

#### 4.1.1. Sufficiency and suitability of premises for studies

In general, the suitability of premises for studies is good. Lecture halls are of good quality, other teaching rooms are well-equipped and flexible, with projection and other equipment, and seem sufficient in number, although as some facilities are shared there is some competition with other departments. Library study facilities are good and conveniently located.

#### 4.1.2. Suitability and sufficiency of equipment for studies

There are ample labs equipped with modern computing facilities; neither teachers nor students voiced any complaints about either the availability of access to, or quality of, these resources.

#### 4.1.3. Suitability and accessibility of the resources for practical training

There appeared to be a good range of appropriate placement locations available, and good relations with employers sponsoring these. Students generally reported no difficulties in finding placements of an appropriate nature.

#### 4.2. Learning resources

#### 4.2.1. Suitability and accessibility of books, textbooks and periodical publications

Library stocks of printed materials seem appropriate and adequate to student numbers and demand. A shortage of textbooks and other printed materials in Lithuanian was commented on by some, but overall provision is sound.

#### 4.2.2. Suitability and accessibility of learning materials

A VLE (Moodle) is provided and student have external access to library databases both internally and externally via VPN. Some teachers also support other electronic delivery methods for materials (e.g. websites) as they prefer not to use Moodle "due to its complexity". We would suggest that this reflects a training issue and one instance of where a formal CPD policy (referred to in 3.3.2 above) might be applied beneficially.

#### 5. Study process and student assessment

#### 5.1. Student admission

#### 5.1.1. Rationality of requirements for admission to the studies

Students from all kinds of bachelor programs are admitted to this program. Students coming from the bachelors in the information and communication study field are admitted without any further requirements. Students from other bachelor programs have to pass an entrance exam. In practice only very few students use this opportunity.

#### 5.1.2. Efficiency of enhancing the motivation of applicants and new students

The program started only in 2009. In that year 11 students were admitted, 7 of whom from the information and communication bachelors. We believe that a more systematic approach to the promotion of the programme is possible.

#### **5.2. Study process**

#### 5.2.1. Rationality of the programme schedule

The programme schedule looks good. It is spread over two years. One could argue that conformance to European standard practice of 1 year Masters programme should be followed.

#### 5.2.2. Student academic performance

Because of the short period of existence of the programme it is hard to give an opinion about students' performance. Neither teachers nor students reported any problems in this respect. Employers indicated that alumni do not always meet all practical requirements but that this could easily be rectified at the beginning of their employment. According to the SAR 'Research constitutes 55% of the Information System Management study programme. While conducting research, Information System Management students apply and consolidate theoretical knowledge of the subject area, develop researcher's competences, critical thinking, competences of data analysis, synthesis and evaluation, and creativity. The students continuously conduct research each semester, whereas the fourth semester focuses on the preparation and defense of the final master thesis. Research project seminars are organized each semester, where research (relevance, methodology, etc.) is presented and discussed '. An annual conference is organized.

#### *5.2.3. Mobility of teachers and students*

VU Communication Faculty actively participates in ERASMUS programme, over 100 students and 30 teachers had an internship at universities from Amsterdam, Groningen and Saxon (The Netherlands Kingdom), Leicester and London (United Kingdom), Berlins Humboltun and Hanover (Germany), Lund and Borås (Sweden), Tampere and Oulu (Finland), Rome and Sienna (Italy). There were more than 160 foreign ERASMUS exchange students (mainly from Germany, Spain, Turkey and Poland), studied at the Communication Faculty and also 35 foreign teachers, who delivered lectures. It is not clear from the SAR, however, how many of these involved teachers or students from the ISM programme. Alumni, whom we met during the on site visit, informed us that in the past several students have taken advantage of these arrangements. None of the students, whom we met, had participated in an exchange. We are not aware of any foreign students attending the Masters programme. The main explanation probably is that most courses are taught in Lithuanian. In the longer term teaching Masters programmes in English should enable 2-way exchange of students.

#### 5.3. Student support

#### 5.3.1. Usefulness of academic support

Students generally reported that they are satisfied with the academic support they were getting. A problem with one teacher from another university was reported: it was hard to get into contact.

#### 5.3.2. Efficiency of social support

No substantive mention of student social support is made in the SAR, however the observed facilities were good and plentiful, with plenty of student social space in and around the department which was well used, social clubs and activities, refectories, etc. There was no complaint from the student body in regard of social facilities and support.

#### 5.4. Student achievement assessment

#### 5.4.1. Suitability of assessment criteria and their publicity

There is no explicit information on correlation of types of exams, criteria for exams and intended learning outcomes. But although there are no formal descriptions on assessment criteria there seem to be sufficient informal means of communication to assure that they are well understood. As long as the numbers of students are as small as they are at the moment we think this is fair. When the number of students increases, more formal ways of communication should be considered.

#### 5.4.2. Feedback efficiency

The same holds for feedback efficiency. Although incidental shortcomings are reported by students in general the feedback seems to be acceptable. Again, we recommend more formal, written feedback in case the number of students increases.

#### 5.4.3. Efficiency of final thesis assessment

According to the students we spoke to final thesis assessment seems to be good. The final theses we saw were of good quality and the marks given correspond to the level of work.

# 5.4.4. Functionality of the system for assessment and recognition of achievements acquired in non-formal and self-education

There was no indication in the SAR of any system for this activity, which was confirmed by conversations with teachers who indicated that the intention was that this would be addressed when the move to modular teaching happened. At present such issues are dealt with on a case-by-case basis and cases appear very rare – no students reported having need for this. The ET suggests that a clear written system for assessment and recognition of achievements acquired in non-formal and self-education should be developed and made widely available to students.

#### 5.5. Graduates placement

#### 5.5.1. Expediency of graduate placement

Interviews with students provide good evidence that graduate placement is effective and graduates consistently gain suitable jobs in appropriate organizations.

#### 6. Programme management

#### **6.1. Programme administration**

#### 6.1.1. Efficiency of the programme management activities

In the faculty, the quality of the study programme is effectively controlled by the study programme's committee, the branch department of Communication Faculty, faculty's Study Council commission, faculty's Dean for study affairs, Council of the faculty, which is also responsible for physical conditions and for the study process.

#### **6.2.** Internal quality assurance

#### 6.2.1. Suitability of the programme quality evaluation

In 2008, the Quality Management Centre was established, whose main activities would be: developing the valuation criteria and rates/indicators, collecting and processing/handling the information about study quality, quality management and assurance of the study quality at Vilnius University. At the moment, the responsibility for maintaining improving the study quality remains with the Faculty.

Additional evaluations are undertaken at the faculty level because there is a need for more detailed programme oriented information. Individual teachers also evaluate their courses, either in discussions or via printed questionnaires. In our view the two level organization of the quality evaluation is sufficient. The evaluation by the Quality Management centre provide for segregation of duties whilst the evaluation at Faculty level take care of more detailed and specific evaluations.

#### 6.2.2. Efficiency of the programme quality improvement

Evaluation results are reported back to all those concerned. There is, however, no formal mechanism to check on the follow-up of these findings The ET believes that there is scope for

the more formalized process to document that results have been received, reviewed and where appropriate acted upon. In British parlance, we would like to see "the feedback loop closed"; so for example not only is a course team made aware of feedback on a particular course but also the faculty programme team and where relevant the students are made aware of what actions have been taken as a result of the feedback.

#### 6.2.3. Efficiency of stakeholders participation.

Students participate in the evaluations by filling in questionnaires and discussions with the teaching staff. We did not find any proof of formal feedback of the evaluation findings to the students.

We are not aware of any formal evaluation efforts aimed at the teaching staff. Communication with teachers from other than the information and communication department seems to be limited. There are no formal ways of reporting back university or faculty evaluation results to the teaching staff. Neither are there feedback mechanisms for the evaluation results of individual teachers to the faculty or university as a whole. Although, looking at the limited numbers of students we do not recommend very formal evaluation procedures some more stringent procedures are recommendable in our view.

#### III. RECOMMENDATIONS

- 3.1. The ET strongly recommends that there is action to align the learning objectives at programme level with the learning objectives at course level.
- 3.2. The ET recommends that consideration is given to teaching the programme in English.
- 3.3. The ET recommends that the Faculty explores the feasibility and advantages of delivering the programme in one year rather than two though we recognize that this will need to be explored beyond the Faculty and indeed beyond the university in order to become implementable.
- 3.4 The ET recommends that consideration is given to greater formalization in the provision of feedback to students.
- 3.5 The ET recommends that consideration is given to more formal mechanisms for acting on feedback from the internal quality assurance procedures.

#### IV. GENERAL ASSESSMENT

The study programme *Information System Management* (state code – 61209S102 (new code - 621P10001)) 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	4
5.	Study process and assessment (student admission, study process student support, achievement assessment)	3
6.	Programme management (programme administration, internal quality assurance)	3
	Total:	19

<sup>\*1 (</sup>unsatisfactory) - there are essential shortcomings that must be eliminated;

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Team members: Assoc. Prof. Dorte Madsen

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<sup>2 (</sup>poor) - meets the established minimum requirements, needs improvement;

<sup>3 (</sup>good) - the field develops systematically, has distinctive features;

<sup>4 (</sup>very good) - the field is exceptionally good.