

Accreditation Expert Group Report on Higher Education Programme

Digital Logistics Management, Masters

Ltd Caucasus University (applicant), TH Wildau

Date(s) of Evaluation: October 22, 2021

Report Submission Date: 17 December, 2021

Tbilisi

HEI's Information Profile¹

Name of Institution Indicating its	Ltd Caucasus University (applicant)
Organizational Legal Form	(Joint Masters with The Technical University of Applied Sciences Wildau - State institution (Körperschaft öffentlichen Rechts))
HEI's Identification Code	CU - 205050567 (TH Wildau - DE 138 549 391)
Type of Institution	University

Higher Education Programme Information Profile

Name of the Programme	Digital Logistics Management
Level of Education	Masters
Qualification Granted ²	Master of Engineering Logistics
Detailed field and Code	0719: Engineering and engineering trades, not elsewhere classified
Indication of relevant secondary education	N/A
subject/subjects/group of subjects	
(In case of Integrated teacher Bachelor's and Master's	
programme and Teacher training programme)	
Language of Instruction	English
Number of ECTS Credits	120
Programme Status (Authorized/ Accredited/Conditionally	New
Accredited/New/Internationally accredited) indicating the	
relevant decision (Number, Date)	

Expert Panel Members

Chair (Name, Surname,	Prof. Dr. Rüdiger Lohmann, Lübeck University				
University/organization/Country)	of Applied Sciences, Germany				
Member (Name, Surname,	Davit Sikharulidze, Tbilisis State University,				
University/organization/Country)	Georgia				

 $^{^{1}}$ In case of joint programme, please indicate the HEIs that carry out the programme. If the joint programme is carried out in collaboration with the foreign HEI, indicating ID Number and Organizational-legal form is not obligatory

² If the programme is carried out in collaboration with the foreign HEI and the formulation of the qualification granted after the completion of the programme is different, the qualification is indicated according to the respective university

Member (Name, Surname,	Mzevar Gogilava, Tbilisi City Hall transport
University/organization/Country)	agency, Georgia
Member (Name, Surname,	Sophio Ugrekhelidze, EMIS, Georgia
University/organization/Country)	
Member (Name, Surname,	Bakar Duadze, Tbilisi State University, Georgia
University/organization/Country)	

Accreditation Report Executive Summary

General information on the education programme

The programme under evaluation is newly elaborated and Ltd Caucasus University is applicant for accreditation at NCEQE, although it is a joint Masters between CU and TH Wildau in Germany. Cooperation agreement has been submitted to NCEQE in prior to the eveluation procedures. The program has been developed because both partners (CU and TH Wildau) have detected a need of Georgian industry for graduatees specialized in logistics. As a consequence they have developed the present program leading to a "Master of Engineering Logistics".

The program is a 4 Semester 120 ECTS master program taught in English language by professors of each school involved. During the first three semesters the students attend engineering-, IT- and management classes. During their fourth semester the students write their master thesis. A part of the thesis work can be done in German companies. The final step of the program is the oral defense of the thesis .

• Brief overview of the accreditation site-visit

The evaluation was conducted via online means due to global pandemic, however life video footage was ensured from the sites of both universities along with the interviews with the CU and THW representatives.

To allow the panel members to perpare for the interviews a detailed program description has been submitted by CU and TH Wildau in well advance. The panel members had the chance to talk to different groups involved, ranging from heads of different branches of the involved schools to professors, industry partners and current as well as former students.

In addition to the interviews the panel members got the opportunity to participate in a virtual visit of both campus to get an impression of the existing facilities.

Summary of education programme's compliance with the standards

Standards 1 to 2 are substantially compliant with the accreditation requirements, standards 3 to 5 are fully compliant; 6 recommendations and 4 suggestions have been issued, 1 best practice has been identified during the evaluation.

Summary of Recommendations

• The program is designed in the application-oriented way of a German University of Applied Sciences. However, Georgian standards require a research-orientation. It is indispensable to

- close this gap in an appropriate way (e.g. scientific writing, research methodology, minor research projects preparing for the thesis work).
- It is also recommended to sharpen the engineering character of the program.
- It is highly recommended that admission preconditions to the presented MA program should be clearly defined: The entrance exam needs to be defined clearly (e.g. commission that decides, duration, goals of the exam, ...), also The preceding education and previous practical experience qualifying for the program needs to be described in more detail.
- Include Internship in curriculum
- Include oral defense of the master thesis in curriculum
- Specify requirements for choosing electives
- Sharpen the focus of the program (either focus on transport and warehousing and name the program accordingly or stay with term "Digital Logistics" and include other topics (operations, planning, monitoring, ...).
- Add research oriented courses (e.g. scientific writing, research methods, research projects,...) to the curriculum

• Summary of Suggestions

- o Change to 5 ECTS per course pattern
- Find a new comprehensive formula for the program that matches with the program or skip the old one because it is misleading
- Reconsider list of electives and give students the opportunity to concentrate on a specific field of logistics
- Even though the teaching staff is experienced and seems to qualified for the job, 11 people is a small base for the describe program. During the discussion the responsible persons of the program have pointed out, that they intend to run a "Train the Trainer" program to qualify Georgian experts to teach in the program. In order to develop a sustainable master's program a strong focus should be put on the program.
- Summary of best practices (If applicable)
- o It is noteworthy that they teach the PTV VISSUM program, which is widely used in Europe.
- In case of accredited programme, summary of significant accomplishments and/or progress (If Applicable)

N/A

Compliance of the Programme with Accreditation Standards

1. Educational programme objectives, learning outcomes and their compliance with the programme

A programme has clearly established objectives and learning outcomes, which are logically connected to each other. Programme objectives are consistent with the mission, objectives and strategic plan of the institution. Programme learning outcomes are assessed on a regular basis in order to improve the programme

1.1 Programme Objectives

Programme objectives define the set of knowledge, skills and competences the programme aims to develop in graduate students. They also illustrate the contribution to the development of the field and the society

Descriptive summary and analysis of compliance with standard requirements

The Joint Master's Program in Digital Logistics Management has been created because Georgia's economy is lacking people skilled in this area. This impression is shared by the experts on the panel and by the industry partner involved in the program.

The introduced program is a 4 semester, 120 ECTS program with a master thesis and an oral defence of the thesis at the end. The program covers a wide variety of logistic topics with a strong focus on transportation. Issues of industrial logistics are to some extent missing. Details will be given in Chapter 2.2. The program is a joint master's program administered by TH Wildau, Germany and the Caucasus University, Tbilisi, Georgia. It has been designed based on the concept of German Universities of Applied Sciences. These kinds of schools are known for science based, but application-oriented education. As a consequence of this approach, the curriculum doesn't contain any courses on scientific writing or research methods.

This does obviously not match with the Georgian approach to university teaching, because the Georgian approach – as pointed out during the discussion – rather focus' on a more research-oriented education. Thus courses as the ones mentioned above are missing.

In addition, the program claims to be an engineering program leading to an engineering degree. Nevertheless, the course list doesn't clearly mirror the engineering focus of the program. For example, in Germany a degree in "Wirtschaftsingenieurwesen", which is comparable to discussed program requires a minimum of 50% courses in mathematics, computer science, natural sciences or technology (see German Accociation of "Wirtschaftsingenieure", MINT courses).

The engineering focus of the Joint Master' Program in Digital Logistics however, is mainly based on computer science courses. It lacks courses in Operations Research or other math based optimization techniques which would perfectly fit to a research based approach. Also technology aspects don't seem to be addresses sufficiently. In general, the course titles are somewhat vague (e.g. Digital Warehouse Management", "Digital Risk and Change Management", "Global Logistics using IT-Systems", ...). Many courses might contain engineering content, but it is not clear. Therefore, it is strongly recommended to sharpen the engineering character of the program.

Eviden	nces/indicators
0	Self-evaluation Report
0	Joint MA Program
0	Interview Results
Recom	mendations:
0	The program is designed in the application-oriented way of a German University of Applied Sciences. However, Georgian standards require a research-orientation. It is indispensable to close this gap by including research oriented course (e.g. scientific writing, research methodology, minor research projects preparing for the thesis work)
0	It is also recommended to sharpen the engineering character of the program by putting more focus on engineering contents of the courses.
Sugges	tions for programme development:
0	None
Best Pi	ractices (if applicable):
0	Not applicable
In case	of accredited programme, significant accomplishments and/or progress
0	Not applicable
Evalua	tion
	\square Complies with requirements
	⊠ Substantially complies with requirements
	☐ Partially complies with requirements
	☐ Does not comply with requirements

1.2 Programme Learning Outcomes

- ➤ Programme learning outcomes describe knowledge, skills, and/or the sense of responsibility and autonomy, students gain upon completion of the programme;
- ➤ Programme learning outcomes assessment cycle consists of defining, collecting and analysing data;
- ➤ Programme learning outcomes assessment results are utilized for the improvement of the programme.

Descriptive summary and analysis of compliance with standard requirements

The learning outcomes are in general consistent with programme objectives and focus on the overarching knowledge, skills and/or the sense of responsibility and autonomy defined by the programme content. Shortcomings regarding fundamentals of research and engineering skills have been described already above.

But in general, it seems realistic, that students enrolled in the program will reach the described learning outcomes, given their first degree is an engineering or a business degree and/or they have gathered sufficient professional experience in logistics prior to their master studies.

Evider	nces/indicators
0	Self-evaluation Report
0	Joint MA Program
0	Interview Results
Recom	mendations:
0	
Sugges	tions for programme development:
0	Not applicable
Best P	ractices (if applicable):
0	None
In case	e of accredited programme, significant accomplishments and/or progress
0	None
Evalua	tion
	⊠ Complies with requirements
	☐ Substantially complies with requirements
	\square Partially complies with requirements
	\square Does not comply with requirements

Programme's Compliance with Standard

Standard	Complies with Requirements	Substantially complies with requirements	Partially Complies with Requirements	Does not Comply with Requirements
Educational programme objectives, learning outcomes and their compliance with the programme	X			

2. Teaching methodology and organization, adequate evaluation of programme mastering

Programme admission preconditions, programme structure, content, teaching and learning methods, and student assessment ensure the achievement of programme objectives and intended learning outcomes.

2.1 Programme Admission Preconditions

Higher education institution has relevant, transparent, fair, public and accessible programme admission preconditions

Descriptive summary and analysis of compliance with standard requirements

Caucasus University and Wildau University have signed agreement regarding joint program 3rd division of which in block "A" envisages that the students are enrolled in the program and registered at Caucasus University in accordance with the regulations in force in Georgia. A citizen of Georgia will be enrolled in a joint higher education program in accordance with the rules established by the legislation of Georgia. The other person will be enrolled in a joint higher education program in accordance with the legislation of the respective country.

The other preconditions for program admission process according to the Joint MA program have been described as follows:

- ☐ Any person having the Bachelor degree
- ☐ To pass the General Masters Examination held by the Legal Entity of Public Law The National Assessment and Examinations Center.
- ☐ Enrollment in the program without passing the general master's exam is carried out in accordance with the rules established by law.

[I] Successfully pass entrance exam relevant with the specialty of Information Technology Management (includes components of English comprehension and writing according to B2 level and general logical and quantitative reasoning questions; A person may be exempted from this condition if there is a language proficiency document (IELTS-6.0, TOEFL-78, other relevant B2 level international certificate or other circumstances set by university regulation))

Successfully completed an interview with the Master's Admissions Commission of the Caucasus School of Technology

☐ Mobility to the program is allowed in accordance with procedures set by the relevant law.

Expert panel members had questions regarding the above mentioned preconditions. It is vague what does it mean entrance exam relevant with specialty of Information Technology Management especially if any person holding any bachelor degree has the possibility to apply to the program. It has to be underlined when program curriculum mostly contains technical courses it is extremely important to clearly be defined what kind of knowledge applicants should demonstrate during interview in order to reach learning outcomes of the program. According to the interview results as the program coordinator explained one of the preconditions of the program admission is an interview with Master's Admission Commission of the University. So applicants will be filtered according to their background and knowledge during the interview. Commission will decide whether they will have the possibility to overcome the program curriculum and reach the learning outcomes. Finally, it was even mentioned that the program is suitable mostly for the applicants who have special knowledge in particular fields. Accreditation standard requires that program admission preconditions should take program characteristics into consideration and ensure admission of the students with relevant knowledge, skills and competences for mastering the program as well as program admission preconditions should logically be linked to program content, learning outcomes and the qualification to be awarded. Accordingly, it is highly recommended that admission preconditions to the presented MA program should be clearly defined. Namely it should be indicated what is meant under "entrance exam relevant with the specialty of Information Technology Management" and it would be better to specify the preceding education and professional experience that is reasonable for the applicants to have.

Evidences/indicator

- Self-evaluation Report
- o Joint MA Program
- Interview Results

Recommendations:

o It is highly recommended that admission preconditions to the presented MA program should be clearly defined: The entrance exam needs to be defined clearly (e.g. commission that decides, duration, goals of the exam, ...), also The preceding education and previous practical experience qualifying for the program needs to be described in more detail

Suggestions for programme development:

0	Non-binding suggestions for programme development
Best P	ractices (if applicable):
0	Practices, which prove to be exceptionally effective and which may become a benchmark or a model
	for other higher education programmes
In case	e of accredited programme, significant accomplishments and/or progress
0	Significant accomplishment and/or progress made by the programme after previous accreditation (If
	Applicable)
Evalua	ition
	☐ Complies with requirements
	\square Substantially complies with requirements
	☐ Partially complies with requirements
	☐ Does not comply with requirements

2.2 Educational Programme Structure and Content

Programme is designed according to HEI's methodology for planning, designing and developing of educational programmes. Programme content takes programme admission preconditions and programme learning outcomes into account. Programme structure is consistent and logical. Programme content and structure ensure the achievement of programme learning outcomes. Qualification to be granted is consistent with programme content and learning outcomes

Descriptive summary and analysis of compliance with standard requirements

The authors of the report describe the program structure as follows: "1st semester – engineering courses, 2nd semester – courses in general management and 3rd semester – IT and management courses". Unfortunately, this short and comprehensible formula doesn't match with the course list (e.g. first semester: Financial Management, Leadership; second semester: Traffic and Transport Planning, Road Rail Air Maritime Shipping, Global Logistics) It is strongly recommended to according to the structure described in the program or to adapt the structure to the program.

Furthermore, the authors of the program give a list of electives as vital part of the program. There is a list of 6 electives given. Two for the first semester and 4 for the second semester. However, it is not clearly which courses students have to take in order to fulfil graduation requirements. Also, it is not clear how the electives supplement the compulsory courses. T".

As already mentioned above, the program is lacking research-oriented courses to fulfil the Georgian requirements concerning the research orientation of the program. For example, courses in scientific writing, research methods, statistics or operations research should be added.

In addition, courses in operations management, supply chain planning and supply chain monitoring would be a good recommendation to round-up the program and to shift the focus of the program from mainly transportation to logistics in general.

Moreover, the discussed internship which might be part of the program needs to be included in the program description. The same applies to the oral defence of the thesis which hasn't been listed in the report either.

Finally, the panel members don't see any reason why all the course taught in the program got a workload of 6 ECTS. The more common option would have been to stick to 5 ECTS courses. This would also offer the opportunity to add further courses (e.g. the ones suggested above) to the program.

Evidences/indicators

- o Self-evaluation Report
- Joint MA Program
- Interview Results

Recommendations:

- Include Internship in curriculum
- o Include oral defense of the master thesis in curriculum
- Specify requirements for choosing electives
- Sharpen the focus of the program (either focus on transport and warehousing and name the program accordingly or stay with term "Digital Logistics" and include other topics (operations, planning, monitoring, ...).
- Add research oriented courses (e.g. scientific writing, research methods, research projects,...)
 to the curriculum

Suggestions for programme development:

- Change to 5 ECTS per course pattern
- Find a new comprehensive formula for the program that matches with the program or skip the old one because it is misleading
- Reconsider list of electives and give students the opportunity to concentrate on a specific field of logistics

Best Practices (if applicable):

Not applicable

In case of accredited programme, significant accomplishments and/or progress

Not applicable

Evaluation
☐ Complies with requirements
⊠ Substantially complies with requirements
☐ Partially complies with requirements
☐ Does not comply with requirements

2.3. Course

- > Student learning outcomes of each compulsory course/subject/module/concentration are in line with programme learning outcomes; Moreover, each course content and number of credits correspond to course learning outcomes;
- ➤ Teaching materials listed in syllabi are based on the core achievements in the field and ensure the achievement of intended programme learning outcomes.

Descriptive summary and analysis of compliance with standard requirements

The Master's program in Digital Logistics Management theoretically includes both compulsory and electivecourses. Compulsory courses were set at 72 credits. From here preparing a master thesis with 30 credits. Elective courses are defined by 18 credits.

The components of the syllabi of the program courses were studied by a group of experts. The learning outcomes and content of the courses are consistent with the learning outcomes of the program. A link between learning outcomes and courses of the master's program is given in the Curriculum map. The relationship between learning outcomes and courses is logically defined. Credits for the courses of the program are optimally distributed and correspond to the course content and learning outcomes. The literature referenced in the syllabi reflects core achievements in the field and is relevant to the course content. The courses of the program provide both the transfer of theoretical knowledge and the development of practical skills, as almost all courses cover case studies and prepare business projects.

Evidences/indicators

- o Master program of Digital logistic management
- Syllabi of the study courses;
- Curriculum map;
- Interview results.
- Course learning outcomes assessment results;

Recommendations:

o None

Suggest	ions for programme development:
0	None
Best Pr	actices (if applicable):
0	Not applicable
In case	of accredited programme, significant accomplishments and/or progress
0	Not applicable
Evaluat	ion
	ease mark the checkbox which mostly describes your position related to the programmes nce with this specific component of the standard
	☑ Complies with requirements
	☐ Substantially complies with requirements
	\square Partially complies with requirements
	\square Does not comply with requirements

2.4 The Development of practical, scientific/research/creative/performance and transferable skills

Programme ensures the development of students' practical, scientific/research/creative/performance and transferable skills and/or their involvement in research projects, in accordance with the programme learning outcomes

Descriptive summary and analysis of compliance with standard requirements

The Digital Logistics Management Master's Degree Program provides training courses focused on the development of practical skills. Part of the courses includes practical training.

 While completing the Master's thesis, as well as the practical assignments of some sectoral training courses, the student has the additional opportunity to work on various individual and team projects, to receive material-technical and intellectual support

It is also mandatory to write a master's thesis, which gives the student an additional opportunity to work on various individual and team projects, to receive material-technical and intellectual support.

Evidences/indicators

- The provision of the Caucasus University
- Statute of the School of Technologies
- o Program
- Syllabi of the study courses envisaged by the Program

Recommendations:

o Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

o Non-binding suggestions for programme development

Best Practices (if applicable):

o Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

 Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation

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	Substantially	v comr	lies	with	rea	uireme	nts
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☐ Partially complies with requirements

 \square Does not comply with requirements

2.5 Teaching and learning methods

Program is implemented using student centered teaching and learning (SCL) methods. Teaching and learning methods correspond to the level of education, course content, student learning outcomes and ensure their achievement

Descriptive summary and analysis of compliance with standard requirements

The analysis of the digital logistic management master's program and syllabi of the training courses shows that the appropriate teaching methods are selected based on the specifics of the study course. In particular, within the program, the academic staff uses the following teaching-learning methods: verbal/oral method, method of working on a book, method of written work, method of demonstration, method of discussion / debate, method of case study, explanatory method, problem-based teaching method. (PBL), Brain storming method, deductive teaching method, analysis and

synthesis method. Within this course mainly are used activities such as case studies and project preparation.

For example in the courses ,,Decision support system, financial management, Intermodal Transport and Terminal Management, Intermodal Transport and Terminal Management, Traffic Evaluation and Environmental Effects, Traffic and Transport planning Systems, Road Rail Air Maritime Shipping, Advanced Logistics Network Operations, Business Analytics and Digital Transformation" the following teaching methods are mainly used: Verbal or oral methods. Working on books. Discussions / debates, Case Study – Business Game (Fresh Connection) Calculations and Excel Solver, Plenary discussion, Self-study reading, Working on books. Calculations, Independent work. In the Enterprise Resource Planning (ERP) Systems, Project Management, strategic management courses, the following teaching methods are used: Working on books. Practical methods, Problem Based Learning (PBL), Cooperative Learning, Case study, Verbal or oral methods, Working on books, Writing, Practical methods, Discussions / debates, Team (Collaborative) work, Case Studies, Brain storming, Method of Demonstration, Induction, Deduction, Analysis, Synthesis, Explanatory method, Action-oriented teaching, Project Based Learning (PBL).

Teaching and learning methods used in the syllabi of each courses correspond to the level of education, course content, intended learning outcomes and ensure their achievement;

Evidences/indicators

- Master program of digital logistic management
- Interview results
- Course learning outcomes assessment results
- Syllabi of the study courses;

Recommendations:

o Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

o Non-binding suggestions for programme development

Best Practices (if applicable):

o Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

 Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation		
⊠ Complies with requirements		
\square Substantially complies with requirements		
\square Partially complies with requirements		
\square Does not comply with requirements		

2.6. Student Evaluation

Student evaluation is conducted in accordance with established procedures. It is transparent and complies with existing legislation

Descriptive summary and analysis of compliance with standard requirements

The evaluation criteria, which are described in the programme description document, are tailored to each course and explained in the respective course syllabi.

Students' knowledge is evaluated on a 100-point scale.

Positive evaluations are:

- (A) Excellent 91-100 points;
- (B) Very good 81-90 points;
- (C) Good 71-80 points;
- (D) Satisfactory 61-70 points;
- (E) Sufficient 51-60 points.

Negative evaluations are:

- (FX) Did not pass an exam − 41-50 points, that means that a student requires some more work before passing an exam and is granted the right to take one additional exam by working independently
- (F) Failed 40 and less scores of evaluation, which means that the work carried out by the student is not enough and he/she has to retake the course.

The academic course evaluation scale of 100 points includes two components: midterm evaluation (maximum 70 points) and final examination (maximum 30 points). Midterm assessment forms are current activities and mid-semester exam. The maximum points of the midterm exam and the distribution of the points of the current activities are described in detail in the respective syllabi.

Students have an opportunity to receive information on knowledge assessment mechanisms from an educational programme, syllabus, specific subject's lecturer or programme head.

The Examination Center of the University is responsible for organizing and holding written examinations. Examination results are recorded in the official Student Information System (https://programs.cu.edu.ge/cu/login) and are accessible by students.

The interview with students made it clear that the evaluation criteria are transparent and understandable to students. Those criteria are presented and explained to students during the first teaching week of each course. This ensures student awareness regarding achieved results, which may be used by students to resolve flaws and improve their results.

Students also have the opportunity to appeal their marks or give their opinion regarding a specific subject, syllabi or any other ideas they might have. The procedures are simple, accessible and clear. The teaching staff provides feedback to students after each assignment.teaching week of each course. This ensures student awareness regarding achieved results, which may be used by students to resolve flaws and improve their results.

Students also have the opportunity to appeal their marks or give their opinion regarding a specific subject, syllabi or any other ideas they might have. The teaching staff provides feedback to students after each assignment.

Evidences/indicators

- Self-evaluation report
- Study course syllabi
- https://programs.cu.edu.ge/cu/login
- o Interviews with students, academic staff and the self-evaluation team

Recommendations:

o Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

o Non-binding suggestions for programme development

Best Practices (if applicable):

o Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

 Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation
⊠ Complies with requirements
\square Substantially complies with requirements
\square Partially complies with requirements
\square Does not comply with requirements

Programme's Compliance with Standard

Standard	Complies with Requirements	Substantially complies with	Partially Complies with	Does not Comply with
		requirements	Requirements	Requirements
Teaching methodology and organization, adequate evaluation of programme mastering		X		

3. Student achievements and individual work with them

HEI creates student-centered environment by providing students with relevant services; programme staff ensures students' familiarity with the named services, organizes various events and fosters students' involvement in local and/or international projects

3.1 Student support services

Students receive appropriate consultations and support regarding the planning of learning process, improvement of academic achievement, employment and professional development

Students at the CU/THW are informed about the assessment systems and the conditions for improving academic achievement. The system of providing information to students is well structured. News is delivered via individual emails and official websites of two universities, allowing students to stay up-to-date with the latest news.

Students 'Ombudsman Office is established at the University for the purpose of consultation and assistance on the Georgian legislation in the field of higher education, protection of students' rights and their liabilities, student status and mobility.

Students are given an orientation meeting during which they are informed about basic information about the university. During the interview, they mentioned that they received information about organizational issues at the meeting.

Students receive effective assistance in the job search process. Students mentioned a number of vacancies offered by the university, as well as the personal assistance of teachers.

There is a coordinator staff at the university to assist the student in solving organizational issues, this issue is important for the international university as the initial adaptation is convenient for the non-local student.

The university has electronic information systems (https://cu.edu.ge/), all students are registered in this system. Electronic learning materials are uploaded on library website (https://opac.cu.edu.ge/).

Evidences/indicators

- Self-evaluation report
- o Interviews with students, academic staff and the self-evaluation team
- https://www.cu.edu.ge/en

Recommendations:

o Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

o Non-binding suggestions for programme development

Best Practices (if applicable):

o Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

o Significant accomplishment and/or progress made by the programme after previous accreditation

Evaluation

⊠ Complies with requirements
\square Substantially complies with requirements
☐ Partially complies with requirements
\square Does not comply with requirements

3.2 Master's and Doctoral Student supervision

Master's and Doctoral students have qualified thesis supervisors

Descriptive summary and analysis of compliance with standard requirements

The CU/TH WILDAU student chooses the topic of the master's work on the basis of consultation with the supervisor, based on his/her own interests. The topic title, leader and expert are approved at each council meeting for each graduate student. The head of the master's thesis can be a professor / associate professor (Georgian and German) or a person with a doctorate degree, having the relevant experience and qualifications in the field of master's thesis. The selection of the master thesis supervisor is made by agreement between the student and the supervisor.

An agreement is signed with the supervisor.

In the process of working on a master's thesis, the student is in constant contact with the supervisor, performs research and assignments under his direct supervision and guidance. A student presents the research results in stages in the prescribed manner. Each graduate student has a qualified supervisor from among the participating faculty members who have relevant research experience in the research topic.

Evidences/indicators

- Self-evaluation report
- o Interviews with students, academic staff and the self-evaluation team
- Personal files and studies of masters supervisors;

Recommendations:

o Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

o Non-binding suggestions for programme development

Best Practices (if applicable):

o Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

 Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation
☑ Complies with requirements
\square Substantially complies with requirements
\square Partially complies with requirements
\square Does not comply with requirements

Programme's Compliance with Standard

Standard	Complies with Requirements	Substantially complies with requirements	Partially Complies with Requirements	Does not Comply with Requirements
Student achievements and individual work with them	X			

4. Providing teaching resources

Programme human, material, information and financial resources ensure programme sustainability, its effective and efficient functioning, and achievement of intended objectives

4.1 Human Resources

- ➤ The program is implemented by suitably qualified individuals.
- > The number of academic / scientific and invited staff implementing the program ensures the conduct of the educational process defined by the educational program and the proper performance of the duties assigned to them
- > The program manager has the relevant knowledge and experience to develop the program
- Program students are provided by HEI with an adequate number of administrative and support staff of the relevant competence.

Descriptive summary and analysis of compliance with standard requirements

Both foreign and local academic staff with theoretical and practical experience in the relevant field are involved in the implementation of the Master of Education program in Digital Logistics Management The number of academic/scientific/invited staff is basically adequate to the number of students;

The permanent staff teaching in the program has a lot of teaching experience. The professors hold doctoral degrees of universities of their countries. They will be able to supervise master students of the program.

The qualification of invited staff or teachers is proved by relevant knowledge, experience and competencies necessary in order to help students achieve programe learning outcomes

The participants are involved in the development and implementation of the program, participating in various local and international projects, scientific conferences.

The given academic staff has qualifications in the relevant field and significant practical experience, publications, current research interests, which determines their active involvement in the educational process. For example, the German professors have to prove 5 years of work experience in industry, before they can become appointed as a professor.

Evidences/indicators

- Questionnaire for academic personnel.
- International mobility statistics.
- o Memorandums, agreements.
- o Reports on the work done by the Research Support Department
- Participation in the two-year Erasmus + funded project "Raising Research Capacity of Georgian HEIs through Developing R&D Units / HERD.
- Rules and procedure for internal university funding of research activities, approved by the Governing Board of Caucasus University (2018).
- Information posted on the University website about meetings / events held within the framework of international projects: https://www.cu.edu.ge/ka/news-page.

Recommendations:

o Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

Even though the teaching staff is experienced and seems to qualified for the job, 11 people is a small base for the described program. During the discussion the responsible persons of the program have pointed out, that they intend to run a "Train the Trainer" program to qualify Georgian experts to teach in the program. In order to develop a sustainable master's program a strong focus should be put on the program.

Best Practices (if applicable):

o Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

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4.2 Professional development of academic, scientific and invited staff

 \square Does not comply with requirements

- HEI conducts the evaluation of programme academic, scientific and invited staff and analysis evaluation results on a regular basis;
- ➤ HEI fosters professional development of the academic, scientific and invited staff. Moreover, it fosters their scientific and research work

Descriptive summary and analysis of compliance with standard requirements

Caucasus University has a mechanism for assessing and analyzing the quality of research and academic productivity of academic staff. This mechanism serves as an annual evaluation of the scientific activity of the academic staff. Caucasus University administration conducts semester surveys of students where they rate their lecturers. The academic manager of the program analyzes the results obtained and then the total results are shared with academic and invited staff.

The survey forms are submitted by the University and the results of the 2019 and 2020 surveys were obtained through these forms and the job evaluation and satisfaction report of the administrative, academic and invited staff. These reports provide an assessment of both the teaching and research activities of the academic staff. The university administration provides research results for professional development. In this regard, the institution has a personnel management policy, which includes general principles and rules of personnel management, staff selection and appointment procedures, stages, performance appraisal criteria, which ensures the recruitment, retention of qualified staff for academic, scientific, invited, administrative and support staff positions. , Increase motivation, develop, implement strategies and programs to improve working conditions.

There is a rule of internal funding to support the research activities of the academic and research staff of Caucasus University, as well as doctoral and postgraduate students. According to this rule, the competition for scientific-research grant projects is announced twice a year. In order to facilitate research activities, the institution provides access to electronic scientific databases for interested parties. The University holds an annual international conference for academic staff, as well as a student conference and university provides the publication of collection conference papers.

The institution constantly provides information to academic, scientific and invited staff on obtaining grant funding and conducts training for the preparation of grant projects. It also assists in the implementation of local and international grant projects and facilitates their involvement in international projects, exchange programs, international conferences and workshops.

Evidences/indicators

- System of evaluation and analysis of the quality of research activities and scientific productivity of the academic staff at Caucasus University;
- The results of the staff evaluation and also the results of staff satisfaction surveys
- o Interview results.
- o Memorandum of international cooperation
- o University web-site: https://www.cu.edu.ge/ka

Recommendations:

- o Proposal(s), which should be considered by the institution to comply with requirements of the standards
- Suggestions for programme development: none

Best Practices (if applicable):

o Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

 Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation

☐ Complies with requirements
☐ Substantially complies with requirements
\square Partially complies with requirements
\square Does not comply with requirements

4.3 Material Resources

Programme is provided by necessary infrastructure and technical equipment required for achieving programme learning outcomes

Descriptive summary and analysis of compliance with standard requirements

The library of Caucasus University has and maintains an appropriate print and electronic fund of the educational program, which is available for students, invited and academic staff.

In addition, the Wildau University of Applied Sciences is a recognized, state-run institution with sufficient experience in operating master's degree programs.

Especially in the field of logistics, the Wildau University of Applied Sciences has very good laboratory capacities.

The literature used within a each course was randomly checked by a group of experts in the library and we revealed that the library was provided with study materials. The study materials placed in the library ensure the achievement of the learning outcomes of the program; In addition, students have the opportunity to use international electronic library databases, which allows them to get acquainted with the latest scientific data in the relevant field. In the reading room, students have the opportunity to use the Internet and international electronic resources: EBSCO , ScienceDirect , Scopus, Sci-val Funding (Funding Institutional), HeinOnline, Taylor and Francis, Math Scientific Publishing (MSP)-Journals.

The self-assessment report submitted by the institution states that the following mandatory areas are allocated in the University building: 63 auditoriums, foyers up to 170 sq.m., conference hall, recreational spaces, administrative spaces, and storerooms, space for group work, sanitary facilities, library (265 sq.m.), laboratories, archives, 2 cafeterias (380 sq.m.). Caucasus Business School additionally has four rooms for startup accelerators, which are equipped with modern equipment, such as: VR technology, installation equipment, "Smart board" and others. It is also noteworthy that computers and the Internet are accessible to students and academics with software appropriate to the educational programs. The auditoriums are equipped with appropriate equipment (multimedia projector, computer, audio-video equipment, etc.). There is a computer lab and computer equipment relevant to the academic education program that meets modern requirements, is connected to the Internet, and is available to students, academic, visiting, and administrative staff. Computers are provided with appropriate software tools / applications. Auditoriums and computer classes are provided with local area network and internet. The above information is confirmed by online review of the material resources of the University.

Evidences/indicators

- Library, physical and technical resources;
- Access to international library and academic databases;
- Library Book Fund.

Recommendations:

0	None
Sugges	tions for programme development:
0	None
Best Pr	ractices (if applicable):
0	Not applicable
In case	of accredited programme, significant accomplishments and/or progress
0	Not applicable
Evalua	tion
	⊠ Complies with requirements
	☐ Substantially complies with requirements
	☐ Partially complies with requirements
	☐ Does not comply with requirements

4.4 Programme/faculty/school budget and programme financial sustainability

The allocation of financial resources stipulated in programme/faculty/school budget is economically feasible and corresponds to programme needs.

Descriptive summary and analysis of compliance with standard requirements

The Program budget considers revenues to be received from students' fees and all expenses, necessary for proper functioning. Financial calculations are based on the following data according to the Program:

- Contact hours, necessary for teaching and practical classes;
- Number of academic courses (compulsory, compulsory-elective);
- Reimbursement of lecture-hours;
- Material support to a student during studies;
- The University administration expenses;
- Expenses of Program development/accreditation/internationalization;
- Miscellaneous expenses admitted during the Program period,
- World-class professional literature and academic databases;
- Learning environment equipped with modern technologies created for students;
- Foreign partners and exchange programs;
- financial sustainability of the University, which provides the opportunity to develop programs;
- Rule and procedure for internal university funding of research activities

• International international connections of academic staff;

Also, "the University reserve fund" is considered in the Program budget, which is targeted to cover all expenses for the Program proper operations, in case of minimal number of students.

The Program budget may amended in parallel with the changes to the Program. The Program budget is approved by the University President, confirmed by the Order with an annex on the Program budget calculation. The above information is confirmed by online review of the material resources of the University

Evidences/indicators

 Order of the President of the Caucasus University 303 / 01-06 of December 3, 2020 on the approval of the Program budget.

Recommendations:

o Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

o Non-binding suggestions for programme development

Best Practices (if applicable):

o It is noteworthy that they teach the PTV VISSUM program, which is widely used in Europe.

In case of accredited programme, significant accomplishments and/or progress

 Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

Evaluation

Programme's Compliance with Standard

Standard	Complies with	Substantially	Partially Complies	Does not Comply
	Requirements	complies with	with	with
		requirements	Requirements	Requirements
Providing teaching	X			
resources				

5. Teaching quality enhancement opportunities

In order to enhance teaching quality, programme utilizes internal and external quality assurance services and also periodically conducts programme monitoring and programme review. Relevant data is collected, analysed and utilized for informed decision making and programme development on a regular basis.

5.1 Internal quality

Programme staff collaborates with internal quality assurance service(s) available at the higher education institution when planning the process of programme quality assurance, creating assessment instruments, and analysing assessment results. Programme staff utilizes quality assurance results for programme improvement.

Descriptive summary and analysis of compliance with standard requirements

Caucasus University has enacted an internal regulation regarding "Internal Mechanisms of Quality Assurance and their Efficiency Evaluation". The Act envisages the concept of quality assurance that "relies on Continuous improvement principle envisaging continuous evaluation and making decisions on the basis of the evaluation findings". The act defines the quality assurance goals, mechanisms, the rules for application those mechanisms. For the goals of quality assurance the processes of teaching and learning, research and governing/management are the subject of periodical internal evaluation. Herewith the efficiency of quality assurance mechanisms is the subject of evaluation as well. The relevant criterions are defined for the evaluation for each indicated process. The Act separately envisages mechanisms for e-learning. Quality assurance process relies on PDCA cycle principles.

University provides program staff participation in the process of drafting, implementing and development of the educational program whilst the results of the research and evaluation that were managed for the quality assurance goals are analyzed and applied for educational program development. The special questionnaires are elaborated for the evaluation processes that is provided by the Quality Assurance Department.

Program staff as well as students periodically evaluate educational programs, program staff and working process at the University. The results of the questioning and evaluation are collected and analyzed by the Quality Assurance Department whilst the final results are presented to the relevant people of the management and the necessary decisions are made based on those results if needed.

University has the internal regulation according to which the educational programs are planned, drafted, implemented and developed. Hereby the relevant person initiates program draft that is based

on the research of labor market and analysis of the employer demands. The document of labor market analysis was presented by the University, according to which transportation and logistics labor market is one of the important part of the whole Georgian labor market and the lack of relevant specialists has been raised for recent years up.

The procedures for amending and canceling of educational programs are regulated as well as the mechanisms are defined for further support of educational process for the students in case of program cancelation. University has developed the special electronic platform for drafting, amending and cancelation of the educational programs. Hereby the relevant procedures by responsible people are managed in an electronic way.

The interviews with various people during accreditation visit has demonstrated that all relevant people among program beneficiaries were involved in the program development and drafting process of self-evaluation form within their competence.

Program staff is permanently presented the evaluation results of their job and those results are used to plan necessary activities with program coordinator, quality assurance office and other relevant people for further development of the educational program.

Summarizing the results of documentation analysis and interviews it should be mentioned that Caucasus University has the relevant internal regulations that envisage quality assurance policy, relevant mechanisms, requirements and rules for applying those mechanisms that make transparent and complete system of quality assurance based on PDCA cycle.

Program drafting and designing process was managed according to the regulations of the Caucasus University but as the program will be fulfilled jointly Wildau University personnel was involved as well. Curriculum of MA program was elaborated with them. During interview Caucasus University QA Department representatives mentioned that during working process there were not specific contradictions between CU and Wildau University quality assurance systems that needed to overcome. The main difference between those two is that according to the German legislation "system accreditation and program accreditation are the two ways in which the review of a study program is currently carried out as part of an accreditation procedure. Both paths should remain open in the future. ...the process of system accreditation is intended to ascertain whether the university's internal quality management system is able to guarantee the achievement of the program-specific objectives. In the spirit of institutional autonomy, this format should be flexible in relation to approaches to teaching and learning on the one hand and quality management on the other, and should naturally conform to general requirements for quality assurance"3 On the other hand the purpose of the program accreditation is to review the qualification objectives whether they are in line with the academic degree level, the program is organized in the way that is suitable for achieving the qualification objectives, the study demads are relevant, degree program is comparable in the EHEA, etc.

As it was mentioned during interview Wildau University system- accredited which "...gives external confirmation that TH Wildau has the structures and processes relevant to teaching and degree programs that are suitable for achieving the qualification goals and ensuring high quality of the

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³ https://www.hrk.de/resolutions-publications/resolutions/beschluss/detail/reorganisation-of-the-accreditation-system/

degree programs. This gives students objective confirmation that the teaching in Wildau conforms to recognized international standards."⁴ The joint MA program will be the subject of self-accreditation by the University after one year.

In addition the agreement between those two Universities signed regarding the Joint MA program defines that both educational institutions shall establish a team responsible for teaching and learning quality assurance which will oversee the part of the program implemented by the relevant party.(section 4, article 4 of the Agreement).

Evidences/indicators

- Master program of Digital Logistics Management
- Self-evaluation Report;
- o Internal Regulation on "Quality Assurance Mechanisms and their Efficiency Evaluation"
- o Internal Regulation on "Educational Program Drafting, Implementing and Development"
- Results of the Quality Assurance Office Surveys
- o Results of the Interviews of Accreditation Visit

Recommendations:

o Proposal(s), which should be considered by the institution to comply with requirements of the standards

Suggestions for programme development:

o Non-binding suggestions for programme development

Best Practices (if applicable):

o Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes

In case of accredited programme, significant accomplishments and/or progress

 Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)

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⁴ https://en.th-wildau.de/university/about-us/profile/

Evaluation
⊠ Complies with requirements
\square Substantially complies with requirements
\square Partially complies with requirements
\square Does not comply with requirements

5.2 External quality

Programme utilizes the results of external quality assurance on a regular basis

Descriptive summary and analysis of compliance with standard requirements

According to the Georgian legislation external quality assurance is accreditation process that is used by the Caucasus University. Hereby the program planning and drafting was fulfilled in accordance to the acting accreditation standards.

While working on self-evaluation report and preparing program for accreditation process, MA program of Digital Logistics Management was compared to the 5 European, 1 American and 1 Chinese University educational programs. The results of the comparative analysis were considered for program designing goals. Relevant comparative analysis is attached to the self-evaluation report. MA program was assessed by external experts the evaluations of which are presented as well. Additionally, it is important that in the quality assurance mechanisms University has the regulation to send the program for external evaluation to the experts and make benchmarking from time to time when necessary. Wildau University academic personnel was involved in the program drafting process as well.

Except above mentioned, according to the legislation self-evaluation report should be presented to the LEPL National Center for Educational Quality Enhancement. As it was mentioned in substandard 5.1 Wildau University representatives mentioned dunring interview that Wildau University is system-accredited and the program will be the subject of the self-accreditation by the University after one year. Accordingly, it would be reasonable to describe the information about this process and the relevant results in the self-evaluation report that will be presented to the NCEQE according to the Georgian legislation.

Evidences/indicators

- Master program of Digital Logistics Management
- Self-evaluation Report;
- Internal Regulation on "Quality Assurance Mechanisms and their Efficiency Evaluation"
- o Internal Regulation on "Educational Program Drafting, Implementing and Development"
- Results of the Quality Assurance Office Surveys
- o Comparative Analysis (Benchmarking) of the MA program;

0	External Evaluations;						
0	Results of the Interviews of Accreditation Visit.						
Recom	Recommendations:						
0	Proposal(s), which should be considered by the institution to comply with requirements of the standards						
Sugges	tions for programme development:						
0	Non-binding suggestions for programme development						
Best Practices (if applicable):							
0	Practices, which prove to be exceptionally effective and which may become a benchmark or a model for other higher education programmes						
In case	of accredited programme, significant accomplishments and/or progress						
0	Significant accomplishment and/or progress made by the programme after previous accreditation (If Applicable)						
Evalua	tion						
	⊠ Complies with requirements						
	☐ Substantially complies with requirements						
	☐ Partially complies with requirements						
	☐ Does not comply with requirements						

5.3. Programme monitoring and periodic review

Programme monitoring and periodic review is conducted with the involvement of academic, scientific, invited, administrative staff, students, graduates, employers and other stakeholders through systematically collecting and analysing information. Assessment results are utilized for programme improvement

Descriptive summary and analysis of compliance with standard requirements

According to the internal regulation of the Caucasus University regarding educational program planning, drafting, implementing and developing it is envisaged the procedures for periodical monitoring and evaluation of the program. This means the involvement of all interested parties such as academic and invited personnel, administrative personnel, students, graduates and employers in the monitoring process and systematic survey of their point of view and their requirements, elaborating and analysis of the results of survey. Those results are applied for the development of the

educational program. In the end of each semester students evaluate the courses through special questionnaires, indicate their recommendations and requirements, whilst in the end of academic year the whole program is evaluated by the faculty. This self-evaluation report is presented to the Quality Assurance Office which after analysis of the report initiates relevant recommendations for further development of the program, if needed.

According to the relevant rules, labor market survey and relevant results were considered during program drafting for the curriculum designing and defining learning outcomes. Additionally, during interviewing employers it has been confirmed that they cooperate with the Caucasus University but it has to be mentioned as well that they were not involved in the program drafting and designing process. Thus it is reasonable to involve them in curriculum consideration and to discuss their requirements and points of view regarding the program, knowledge and skills the students should obtain after graduation.

University provides monitoring of the lectures via attending them. It is checked whether each lecture is provided in time. After each semester Quality Assurance Department monitors the students' academic performance, the results of which are processed according to the training courses, lecturers, schools.

Segregated data according to schools are reviewed by the school council and factors of University-importance are reviewed by the governing board. The evaluation results are used by the university administration to improve educational Programs and the academic process.

Monitoring and evaluation of the educational program is coordinated by QA Department whilst fulfillment of it is the responsibility of the specific faculty with the involvement of the relevant staff as well.

The University conducts annual survey of students, through which students evaluate the services they receive at the University: library, informational, consultation and other services, as well as students' life.

As the academic personnel of the Wildau University mentioned during interview students' evaluation and their points of view regarding courses and lecturers are very important for them and they always carefully consider the results of those evaluations.

Evidences/indicators

- Master program of Digital Logistics Management
- Self-evaluation Report;
- Internal Regulation on "Quality Assurance Mechanisms and their Efficiency Evaluation"
- Internal Regulation on "Educational Program Drafting, Implementing and Development"
- Student survey form and results;
- Graduate survey form and results;
- Employer survey form and results;
- Minutes of the self-evaluation work group meetings;
- Results of the Interviews of Accreditation Visit.

Recommendations:

0	Proposal(s), which should be considered by the institution to comply with requirements of the standards							
Suggestions for programme development:								
0	Non-binding suggestions for programme development							
Best P	ractices (if applicable):							
	(
0	Practices, which prove to be exceptionally effective and which may become a benchmark or a model							
	for other higher education programmes							
_								
In case	e of accredited programme, significant accomplishments and/or progress							
0	Significant accomplishment and/or progress made by the programme after previous accreditation (If							
	Applicable)							
Evalua	ation							
	⊠ Complies with requirements							
	\square Substantially complies with requirements							
	\square Partially complies with requirements							
	\square Does not comply with requirements							

Programme's Compliance with Standard

Standard	Complies with Requirements	Substantially complies with requirements	Partially Complies with Requirements	Does not Comply with Requirements
Teaching quality enhancement opportunities	√			

Enclosed Documentation (If Applicable)

HEI's Name: Ltd Caucasus University (applicant party), TH Wildau

Higher Education Programme Name, Level of Education: Digital Logistics Management, Joint Masters

Number of Pages of the Report: 35

Programme's Compliance with the Standard

Standard	Complies with Requirements	Substantially complies with requirements	Partially Complies with Requirements	Does not Comply with Requirements
1. Educational programme objectives, learning outcomes and their compliance with the programme	X			
2. Teaching methodology and organization, adequate evaluation of programme mastering		X		
3. Student achievements and individual work with them	X			
4. Providing teaching resources	X			
5. Teaching quality enhancement opportunities	X			

Chair of the panel:

Rüdiger Lohmann

Panel members:

Sophio Ugrekhelidze

Davit Sikharulidze

Mzevar Gogilava

Bakar Duadze

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