

REPORT OF EXTERNAL EVALUATION

FOR

PHD IN COMPUTER SCIENCE, WITH PROFILES
COMPUTER SCIENCE
AND
MANAGEMENT OF INFORMATION SYSTEMS

NEW YORK UNIVERSITY OF TIRANA

December 2016

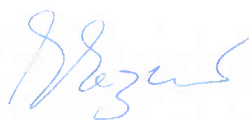
EXTERNAL EVALUATION REPORT
FOR STUDY PROGRAMME: PhD IN COMPUTER SCIENCE WITH PROFILES IN COMPUTER
SCIENCE AND MANAGEMENT OF INFORMATION SYSTEMS AT THE NEW YORK UNIVERSITY

Table licensing data for the study program:		
1	HEI applying:	New York University of Tirana
2	Faculty who offers:	Faculty of Law, Art and Social Sciences
3	Decision of Accreditation Councils/Order of Ministry of Education and Sport for licensing	DAC no. 316, date 16.03.2012 and DAC no. 329, date 08.06.2012 Order of MoES no. 567, date 19.11.2012
4	Title of the study program:	Computer Sciences with profiles: Computer Science, Information Management Systems
5	Study cycle:	Third cycle
6	Duration of the study program:	3 years
7	ECTS in total in first year:	60 ECTS
8	Form of study (fulltime/part time/in distance/):	Full time (lacking in the Order of licensing)
9	Language (Albanian/other):	Lacking in the Order of licensing. In the SER is cited "PhD program is in English.
10	The program is offered by the institution	YES
11	The program is offered in cooperation with other institutions	YES (*)
12	Joint degree:	NO
13	Double degree:	NO
14	Level on the National Framework of Qualifications	Level 8
15	Activation of the study program	2012-2013
16	The first generation of graduation	Yet
	etc	

The table above was filled by APAAL

(*) In Order of MAS Nr. 567 dated 19.11.2012:

- II. Programs of study [...] last for at least 3 academic years and include 60 credits for organized theoretical studies, of which at least 15 credits theoretical realized by foreign lecturers, with academic qualifications required for third cycle studies [...]
- III. University New York University of Tirana" will implement these programs in collaboration with the University of Bolton, United Kingdom, by bilateral agreement, concluded between Higher education institutions.




Introduction

University of New York Tirana (UNYT) is a private university, which was established based on the Decision of the Council of Ministers Nr. 397, date 15.08.2002, which recognized the right to perform its activity in the field of Higher Education, as well as on Decision Nr. 4201, date 14.10.2002, of the Ministry of Education and Science for the undergraduate programs in Business Administration, Accounting, Finance, Marketing, Management, Economics, Computer Science, English Language and Literature.

The doctoral study program in **Computer Science** with profiles in Computer Science and Management of Information Systems at UNYT has been licensed by the Ministry of Education and Science by force of the Ordinance No. 567, date 19.11.2012, pursuant the approval of UNYT's status as "University" by the Council of Ministers of the Republic of Albania, based on Decision No. 448, date 11.07.2012.

The two first circle of study programs in Computer Science are accredited. UNYT was first accredited by the Ministry of Education and Science based on the Order of the Minister of Education and Science Nr. 385, date 10.10.2006

The study program M.Sc. in Computer Science was licensed by the Decision Nr. 939/03.09.2009 of the Council of Ministers of the Republic of Albania and accredited by the Ministry of Education and Science based on Order Nr. 170, date 20.04.2012.

This External Evaluation Report (EER) contains an evaluation of quality of the PhD study program in Computer Science with profiles in Computer Science and Management of Information Systems, offered by New York University. This is the first external evaluation of this study program. PAAHE appointed experts to form the External Evaluation Group (EEG) and set the site visit date for 17-18 October 2016. The formal basis for this process of external evaluation are the State Quality Standards for Evaluation and Accreditation of Third-Cycle Study Programs of Higher Education Institutions, as well as in PAAHE's standards and procedures. During the first day of the site visit, EEG met the authorities of the University, IEG, doctoral students and academic staff. EEG visited the teaching facilities, research infrastructure and the Library. In the second day of its visit, EEG met the Council of Professors (CoP), Internal Quality Assurance Unit and Quality Assurance Committee, and they visited some offices as well, such as; the Doctoral Coordinator and Secretary Office and the Human Resources Office. The experts' opinions expressed in this report are formulated on the basis of the analysis of Self Evaluation Report (SER), documents provided by the university, documents published on the Web and documents presented during the site visit as well as additional information gathered from all the meetings performed at the University.

On 06.12.2016 a protocol letter No. 268/2016 Prot., "Response to EEG report of Doctoral Program in Computer Sciences" received by APAAL sent from University of New York, Tirana. Regarding most of the responses by the institution towards the External Evaluation Group, we would like to emphasize that we are fully aware of the challenges faced by New York University in the past and that many of the points made by the external evaluators must be understood as recommendations for the future respectively as encouragement to fully implement the strategic plans for the future that are approved by the senate. More specifically, the comments of the EEG to the responses are as follows:



1. We agree with the mentioned strategic plan for a second phase of the program's consolidation and development, which will consider increasing the budget for supporting research also based on identifying alternative sources of funding.
2. As we have also mentioned in various parts in the draft report, we agree with the plans for the future outlined in the response. We acknowledge that UNYT has a network of international faculty making contributions to this doctoral program – the point in the draft, however, was about structural involvement of external expertise, e.g., to examine the PhD theses.
3. The EEG has no comments regarding the response to this point, as the response does not express disagreement with the draft report.
4. The EEG has no comments regarding the response to this point, as the response does not express disagreement with the draft report. We understand the reasons for the past and the plans for the future. Yet, the EEG wants to reinforce that it is of great necessity to implement the planned measures to improve the situation.
5. Regarding the response to 5.1 a/b: We agree that the doctoral program is modest. However, being confronted with the current situation, where despite its modesty the program has had some serious problems, such as lack of sufficient staff for covering supervision and the study program, or lack of progress of some of the students, the EEG speculated that maybe the start was premature. But, what matters for the EEG is not so much the analysis of the past, as it is to express suggestions for improving the situation in the future respectively for reinforcing the necessity for the improvements that are being made or are planned for the future. Despite of whether the start was premature or not, given that the program is running and given the plans for the future, which have started being implemented, the EEG recommends to continue the program, while re-emphasizing that a thorough implementation of the planned measures is a pre-condition for success in the future. Regarding the other responses to point 5, we agree with the plans for the future – the EEG draft is about the report about the past and the current situation.
6. Regarding 6.1.c the EEG comments referred to cooperation with other PhD students, which are obviously not possible in a setting, where there are not externally funded projects, where several PhD students jointly perform research in the context of a bigger project. Regarding 6.1.g, the response is taken into consideration in the updated report.

MEMBERS OF EXTERNAL EVALUATION GROUP (EEG)

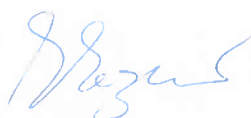
1. Prof. Dr.- Ing. Mira Mezini
2. Prof.As.Dr Elinda Kajo Meçe

The EEG was assisted by program officer Niko Hyka, from PAAHE/APAAL.

MANAGEMENT POLICIES AND ADMINISTRATION OF DOCTORAL SCHOOL

1. Mission and objectives of Doctoral school and programs of study offered

Description part




Terms of reference: Based on the SER and visits to institutions, EEG should analyze and evaluate the: aims and objectives of the Doctoral school, programs of study of third cycle offered and scientific research, strategies in the short, medium and long terms, the number of students over the years, HEI place (in the national and international contest).

The doctoral study program in Computer Science with profiles in Computer Science and Management of Information Systems at UNYT has been licensed by the Ministry of Education and Science by force of the Ordinance No. 567, date 19.11.2012, pursuant the approval of UNYT's status as "University" by the Council of Ministers of the Republic of Albania, based on Decision No. 448, date 11.07.2012.

The objectives of the School of Doctoral Studies are to promote, organize and manage advanced research programs and activities leading towards the obtainment of a PhD degree in Business Administration, in Computer Science, and in the Humanities and Social Sciences (with profiles in Law, and Political Science/International Relations, and Education), with particular emphasis in inter-disciplinary and cross-departmental activities. In so doing, it prepares graduates for teaching, research and consulting. Graduates of all doctoral programs are expected to make significant contributions to the advancement of scientific knowledge through research and to disseminate knowledge through teaching and publications. [ref. SER, pg8].

Evaluation according to the Standards

Standards/criterion	Evaluation according to standards ¹
Standard I.1 - General framework	
Criterion 1 The study program of third cycle (doctorate) is a new program or a reorganized program;	The doctoral study program in Computer Science with profiles in Computer Science and Management of Information Systems is a new program opened in the academic year 2012-2013 based on the Ordinance No. 567, dated 19.11.2012, of the Minister of Education and Science of the Republic of Albania. N/A At the current state, there are seven students [ref. SER, table on pg 70] enrolled in the program, all compliant to the regulation and policies of the UNYT as well to the national higher education legislation and all of them interested in contributing to UNYT's research pillars. Cohort I: 4 students are enrolled in the academic year 2013-2014, Cohort III: 3 students are enrolled in the academic year 2015-2016. There are only four academic staff involved in supervision. All full time academic staff holding a PhD from universities in one of the OECD countries and Associate Professor, have officially no more than two students under supervision. One of them, Prof.Ass. Biba, is involved in two more PhD projects as a
Criterion 2 If it is reorganized, the extent to which it affected the previous program.	
Criterion 3 The total number of students studying how doctor eight and number of those who attend this study program each year is in line with the policies of Higher Education Institutions (HEI) where the program is conducted as well as state policy for higher education and scientific research regarding recognition and validation of diploma and number of students studying for doctorate to one scientific mentor.	
Criterion 4 Doctorate study program is supported by national or international research groups accredited for research in relevant field or fields of studies;	
Criterion 7 Internal evaluation report of study program of the third cycle is reviewed by the Council of Professors.	

¹ IEG must writing for the fulfillment of each standard (based on criterions). At the end of their, need to write his opinions (summary), for fulfill the standards

second supervisor. Also, it appears that all three students on the second cohort actually would like to be supervised by Prof. Ass. Biba, which would definitively be a problem, as he is also quite heavily involved with teaching.

Three students of Cohort III: do not have a supervisor yet.

In SER [pg5, paragraph 2] is declared that the doctoral study is supported by Bolton University, UK and that the supervisory team includes international experts. However, at the moment there is no evidence shown for this study program. Bolton University seems to have supported NYT with advice on procedures for establishing the overall PhD degree, but there is no evidence for any support of the study program itself.

The self-evaluation report was reviewed and approved by the Council of Professors prior to its submission. The doctoral study program in Computer Science is regularly monitored and reviewed by the Council of the Professors

Conclusions of EEG:

The EEG has evaluated the criteria and the standards. The doctoral study program in Computer Science with profiles in Computer Science and Management of Information Systems has been opened for the first time in the academic year 2012-2013. There are seven students enrolled, divided in two cohorts. In cohort I there are four students, which have passed the qualification exam and have already been assigned a supervisor. However, the progress of their study program is very different. Only one of them is ready to complete the PhD, after having published three papers. Meanwhile, the other three, in cohort III, enrolled in 2016 do not have a supervisor yet.

Although in the SER is highlighted [pg. 12, (i)] as a strong point the reasonable and affordable number of doctoral students, in line with the legal requirements and the institution's capacities to provide academic guidance, EEG suggests that UNYT should enhance the capacity of research groups and it should increase the number of academic staff especially with professor, associated professor, or PhD degrees. From the impressions gained during the meetings with the authorities, the EEG's opinion is that this study program was prematurely launched, without a detailed study of the market needs, and without enough human resources; from what was declared from the authorities, this seems to have been an enforced move for the institution to retain the University status. This said, with the regulations encoded in the law of higher education in force, the institution is forced and willing to implement measurements that have the potential to ensure the sustainability and quality of the program in a long term. The prerequisite for this is the aforementioned increase of the academic staff and the establishment of mechanisms and corresponding funding for supporting research projects, at least in a moderate scale.



2. Academic Organisation chart of the Doctoral School

Description part

Terms of reference: Based on the SER and visits to institutions, EEG **should analyze and evaluate** the: the place of the Doctoral School in the organization chart of the HEI (University / Faculty / Department), data for the academic staff responsible for the doctorate, the number of Full-time Academic Staff (FAS), Part-time Academic Staff (PAS), Administrative employees (AE), teaching coordination with other units.

The doctoral study program in Computer Science with profiles in Computer Science and Management of Information Systems is run at the university level, by the Council of Professors. Council of Professors together with the dean of the Faculty of Law, Arts and Sciences and the head of Computer Science Department hold complete responsibility for its management.

Decisions are taken by the Council of Professors, which is composed of 11 members, 8 of them hold the Professor or Associate Professor Degree and the other 3 hold a PhD degree earned from universities in the OECD countries.

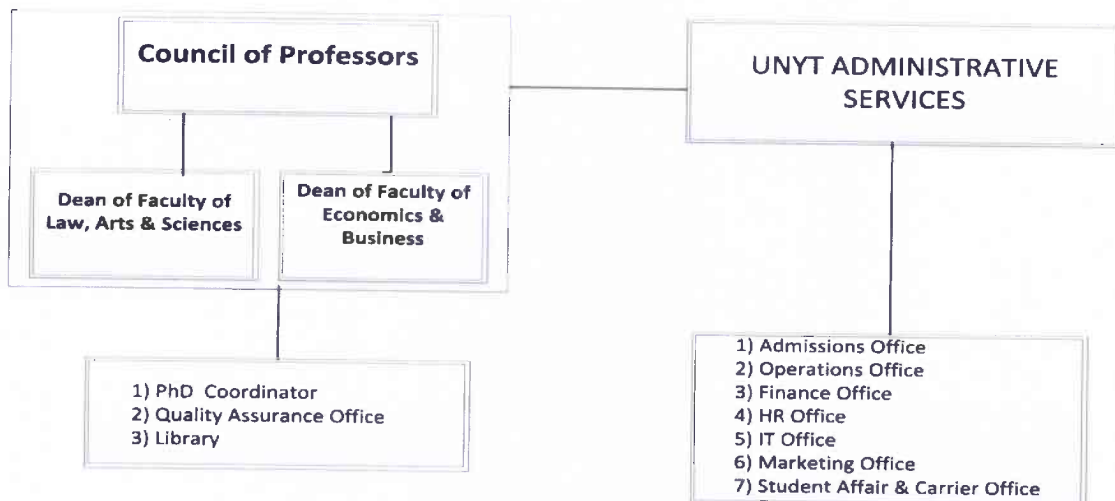
The Chair of the Council of Professors is chosen among the senior faculty and holds the title "Professor". The Chair is formally appointed by the Rector after nomination by the Council of Professors.

The table below shows the composition of the Council of Professors. [ref SER, table 2, pg. 14]

Name	Title and/or Degree	Position
Nertila Gjini	Professor, PhD	Chair
Fatos Tarifa	Professor, PhD	Member
Suzana Guxholli	Professor, Dr.	Member
Fejzi Kolaneci	Professor, Dr.	Member
Kosta Giakoumis	Assoc. Professor, PhD	Member
Juna Miluka	Assoc. Professor, PhD	Member
Marenglen Biba	Assoc. Professor, PhD	Member
Agim Mamuti	Assoc. Professor, Dr.	Member
Enila Cenko	PhD	Member
Ariana Cela	PhD	Member
Adam Ehrlich	PhD	Member

The chart below shows the place of the Doctoral School in the organization chart of the UNYT [ref. SER pg 14]

UNYT Doctoral School organizational chart

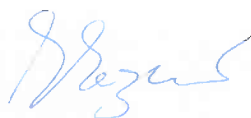


Evaluation according to the Standards

Standards/criterion	Evaluation according to standards
Standard III.1 - Management and financing tools for doctorate study program	
Criterion 1 Unit that organizes doctorate study program has accredited two first cycles of studies in the field, in which it offers the doctorate study program; Criterion 2 Unit that organizes the doctorate study program has adequate administrative premises to realize its good functioning; Criterion 3 In order to carry out the doctorate study program, the unit that proposes its opening engages the necessary personnel, ranging from teaching secretary that follows the third cycle progress; Criterion 4 Responsible bodies for its supervision are established in doctorate study program regulation; Criterion 5 Board of Professors, which is responsible for organizing and supervising doctorate study program has a sufficient number of members that cover all its issues. Minimum number of professors in PC should be 7 (seven). Board of Professors may be also raised to the level of higher education institution, when its main units do not meet the required number of full-time professors; Criterion 6 Board of Professors of the main unit that organizes and manages the doctorate study program meets periodically throughout the year;	The first cycle of studies, B.Sc. in Computer Science and Information Systems and second cycles of studies, M.Sc.in Computer Science are accredited. The present review is the first evaluation by PAAHE. On the basis of the SER and the direct inspection of the facilities it appears that UNYT offers sufficient opportunities for research and the academic development of its students. In 2014 the university moved to a new campus, which is modern, well-maintained but also subject to continuous improvement and enlargement. UNYT has undertaken all the necessary steps and has engaged the necessary personnel to support the ongoing doctorate program. Other services available to all students are offered by the PhD Programs' coordinator, the Office for Quality Assurance, the International and Career Office, IT Support Office, the Finance Office, the Student Information Office, the Marketing Office, etc.

	The Council of Professors responsible for organizing and managing the doctoral program operates at the university level and is composed of all the faculty members with the "Professor" degree and other faculty members holding a PhD degree from a university in one of the OECD countries. The current Council of Professors is composed of 11 members, 8 having "Professor" or "Associate Professor" degrees. The expertise areas of the CoP's members encompass the entire spectrum of disciplines in the three doctoral program of UNYT. The council has been established in compliance with the regulation of the Ministry of Education and Sports. Yet, the EEG would recommend that a CoP at the university level due to its necessarily broad composition cannot properly cover all specific issues of the programs under evaluation. The Council of Professors which is in charge to manage the doctoral study program, meets regularly at least twice a year to evaluate the progress report for each PhD student
Conclusions of EEG: The Doctoral Program in Computer Science with profiles in Computer Science and Management of Information Systems is run by the Faculty of Law, Arts and Science, which includes the Department of Computer Science. The faculty has accredited the first two cycles of studies. The institution has adequate infrastructure capacities to support scientific research. UNYT offers all the administrative services for this doctoral study program and other services available to all UNYT students. The Council of Professors is the body in charge to evaluate the quality of the program and the progress of each student enrolled in the program. CoP meets periodically to analyze progress made by the doctoral students. Everything related to student's progress is recorded by the Coordinator of doctoral school. UNYT has highly qualified academic staff actively engaged in research, scientific projects and publications, but the number of full time academic staff is still very low. CoP was established in conformance to the MAS standards, taking into consideration the number of members and their degrees, but it's worth mentioning that only two of them come from the Computer Science Department. EEG thinks that such a structure is not appropriate for monitoring the students' progress, beyond a formal approval of students' progress reports. Referring to the student who has completed the thesis and is ready to defend it, we foresee problems with setting up a defense committee by the CoP with three internal members of Computer Science department. This problem may be recurring without a significant increase of the staff with a Prof. or Prof.Ass. title.	

3. Quality of Academic and administrative (support) staff




Description part

Terms of reference: Based on the SER and visits to institutions, EEG should analyze and evaluate the: dates for qualifications of academic staff, FAS/PAS/AE rate, Academic Staff/student rate; work load for FAS, PAS and AE; staff recruitment criteria; Contracts, data base for human resource; etc.

The academic staff involved in the doctoral study program in Computer Science are holders of academic titles "Professor", "Associate Professor" or scientific degree "Doctor" or "PhD" awarded in universities in USA, UK, Japan, Italy, Germany, France, Greece etc., which are well-known in the world for quality, rich research and publishing activities.

According to SER, the data for the academic staff involved in the doctoral program in Computer Science for the period 2012-2016 are as follows:

- 2012-2013:** A total of 14 faculty members, out of which 5 Professors, 2 Associate Professors, 7 PhD holders. The ratio FAS/PAS/AE is 13/4/9. The ratio Academic staff/student is 17/4.
- 2013-2014:** A total of 13 faculty members, out of which 6 Professors, 2 Associate Professors, 5 PhD holders. The ratio FAS/PAS/AE is 13/0/9. The ratio Academic staff/student is 13/4.
- 2014-2015:** A total of 13 faculty members, out of which 5 Professors, 2 Associate Professors, 6 PhD holders. The ratio FAS/PAS/AE is 13/0/10. The ratio Academic staff/student is 13/4.
- 2015-2016:** A total of 12 faculty members, out of which 4 Professors, 4 Associate Professors, 4 PhD holders. The ratio FAS/PAS/AE is 12/0/10. The ratio Academic staff/student is 12/7.

Based on the data provided by the university, [ref SER, pg22-24, table 3/1-3/4] it is difficult to distinguish the number of academic staff who is really involved in this doctoral study program. From the meetings with the students, we learned that Prof. Asoc, Maringlen Biba teaches three of the theoretical courses included in this study program. From four students of the first group who have already been assigned a supervisor, two have him as a primary supervisor and the other two as secondary one. All three students in the second cohort expressed the desire to do their PhD also under the supervision of Prof.Ass. Biba. The EEG was left with the impression that the main load of the programs under evaluation rests on the shoulders of a single person.

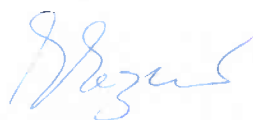
According to SER, [ref SER, pg. 20] the institution has explicit rules regarding the academic staff recruitment and rigorously follows them.

According to SER, [ref SER, pg. 20] the institution follows legal and transparent procedures for recruitment of its staff. The general and transparent criteria and procedures for the selection and recruitment of the faculty are presented in detailed regulations [Appendix 13].

SER [ref SER, pg. 20] provided the description of the procedure for the recruitment of the academic staff. UNYT keeps complete records on staff recruitments, vacancies, notifications, reports, etc.; they are available at the Human Resources Office.

During the visit to Human Resources office, EEG checked three academic staff files, two of which were recent recruitments. EEG realized that the recent recruitments' files were incomplete, there was no other hardcopy document rather than the job contract, a part of the documentation was available electronically in PC, but no documentation regarding the employment procedure was found.

In SER [ref SER pg. 22-24] some tables are provided regarding academic staff from year 2012 to 2016. Regardless of the quality of the staff and their degrees and titles, which are obtained in well-known



universities, EEG noticed that only three of them fit the requirements for this study program as the majority of them are experts in economic and social sciences.

The table below shows the academic staff as supervisors PhD in computer Science

Prof. PhD Nertila Gjini	Member of CoP and Supervisor
Assoc.Prof.PhD. Marenglen Biba	Member of CoP, Chair of Computer Science Department, and Supervisor
PhD. Ervin Ramollari	Faculty member and Supervisor

During its visit EEG was informed that recently Prof. Petraq Papajorgji and PhD Ilir Capuni were recruited as full-time staff. Both are highly qualified in specific fields of computer science. Also during discussions with the UNYT authorities the EEG learned during the visit about the plan to establish a faculty of Computer Science, of which the current CS Department will be one of the three departments. To comply with the law, this means that the number of academic staff in CS has to increase to 21, which the EEG evaluates very positively, as growing the academic staff is a key prerequisite for sustaining the PhD programs under evaluation.

Evaluation according to the Standards

Standards/criterion	Evaluation according to standards
Standard I.1 - General framework	
Criterion 6 The number and level of researchers engaged in this program constitutes a guarantee for program implementation (60% of them should be internal academic staff, engaged in research and holders of academic titles "Professor", "Associate Professor" or scientific degree "Doctor" or "PhD" awarded in universities well known in the world for quality and rich research and publishing activities in the relevant field;	The academic staff engaged in the program is highly qualified and very active in research activities. All the academic staff involved in the PhD program hold either the academic titles "Professor" and "Associate Professor" or a PhD / Doctor degree obtained from well-known universities mainly from the United States, the United Kingdom, and other OECD countries. As already mentioned, the current number of researchers engaged in this program does not constitute a guarantee for program implementation, but we understand that the university is putting serious efforts to improve the situation. We urge the authorities to do so. Otherwise, the program is not feasible in a long run.
Standard II.1 - Capacities for scientific research	
Criterion 2 The institution that offers programs of study of third cycle (doctorate), has sufficient academic staff with scientific titles and degrees;	The academic staff involved in doctoral programs of UNYT has obtained its PhD degrees from the well-known universities, but the number of academic staff for research in computer science fields is very low, even though UNYT has started to improve the situation
Criterion 3 The institution has sufficient administrative and research structures for activities provided in the study program to conduct research. The institution may organize	

joint programs of doctorate study with one or more other institutions, based on agreements between them;	UNYT has a well-organized structure and environment to support the research activities.
Conclusions of EEG: UNYT has highly qualified academic staff holding the academic titles “Professor” and “Associate Professor” or the PhD/Doctor degrees obtained from well-known universities in the West. The academic staff is actively engaged in research resulting in scientific output, but the number of academic staff for computer science is low. At the current state the academic staff has the required academic degree, although it is desirable to increase the number of staff with degrees in computer science. Based on changes of the legal framework, the EEG suggests that it is necessary and urgent to increase the number of full time academic staff with titles Prof. Dr. or Prof. Ass. Dr. This will also help in reducing the teaching load of the staff and leave more time for research. It is obvious that until now the main load of this study program was carried by one single person.	

4. Facilities, infrastructure, logistics and other services of doctoral school and program of study offered

Description part

Terms of reference: Based on the SER and visits to institutions, EEG **should analyze and evaluate** the: infrastructure, material resources, logistics and other services, information technology (IT), libraries, other services for students.

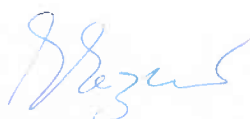
The campus of UNYT has adequate environment necessary for the students, academic staff and administrative staff. The data contained in SER concern all the doctoral study programs, so EEG could separate it only for this study program. The university provides all the administrative services needed to effectively run this study program.

Students have adequate environment, there are sufficient teaching facilities and research infrastructure as well as equipment to support the scientific research. EEG visited all the rooms used for the PhD program and inspected the library. The library is able to access some online resources. There is internet access for the students. Computers have the necessary software and specialized software, for example TURNITIN that helps the students to understand and avoid plagiarism.

All doctoral students are closely in touch with the Program Coordinator as well as with the Office of Career and Alumni.

Other services available to the students are those offered by the Office for Quality Assurance, the Career Office, the Office of IT Support, the Finance Office, the Admissions and Information Office etc.

The table below shows the facilities, infrastructure and logistics for doctoral school [ref SER pg 32, table 6]




Facilities for doctoral school or study program	Number or Square m ²
Conference rooms	2
Classrooms	11
Computer/internet laboratories	4
Library buildings	1
Corridors / halls	8
Sports facility	1
Areas for tertiary services (Library hall, reading rooms, theatre, sport area, cafeteria)	7
Rooms for student government activities	1
Recreational facilities such as cafeterias / fast-food/etc	1
Logistics Room (for photocopying machines, etc.)	2
Offices for Dean/ Chancellor/etc.	6
Administrative offices	11
Departments/ research center offices	6
Quality Assurance Unit Office	1
Meeting halls	5
Toilet units for staff	10
Toilet units for students	24
Parking area	4 levels
Rate m ² /per student	132 m ²

Other logistics database [ref SER pg 32, table 7]

Items	Quantity
PC available for doctoral students	15
PC furnished labs available for students	4
PC for academic staff	1 per person
PC for administration	1 per person
Printers	41
Photocopying machines	2
Overhead projectors	20
Video-projectors	16
Scanners	5

Evaluation according to the Standards

Standards/criterion	Evaluation according to standards
Standard II.2 - Didactic basis and technical support	

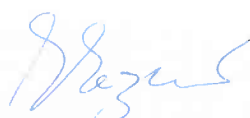
Criterion 1 Students admitted in the third cycle study program have necessary conditions to realize the study program with academic and research character; Criterion 2 Doctorate studies program provides harmonization of student's goals in scientific-research field, approved research projects and, at its conclusion, even the possibility of academic career and employment; Criterion 3 A scientific library with publications in hardcopy and electronic form and complete IT infrastructure available to of third cycle study program; Criterion 4 Students have sufficient technical support for scientific research development; Criterion 5 Researches that include laboratory researches are supported by sufficient scientific laboratory basis.	UNYT is sufficiently equipped with all the required technical equipment and furniture. The available equipment is suitable and is well-maintained. The facilities available are appropriate for all doctoral students. UNYT has onsite and online library, which is updated frequently with numerous most recent books, journals and other scientific and scholar publications. However, the university does not have access to online publication platforms most interesting for computer science such as ACM or IEEE. From discussions with staff, the EEG understood that such an access is considered too expensive to be feasible for a university of this size and that open access platforms are being used as a way to compensate for this lack of access. The doctoral students are in close contact with the Program Coordinator as well as Careers and Alumni officer for being informed about all the activities. The computer laboratories provide computers which have access to the internet and are installed with necessary software.
Conclusions of EEG: The infrastructure of UNYT is in a good condition. The university provides the necessary environment, services and conditions for an adequate research activity. UNYT has helpful and cooperative administrative staff and IT support services. Access to a large number of books is available via the library. However, the university does not have access to online publication platforms most interesting for computer science such as ACM or IEEE. From discussions with staff, the EEG understood that such an access is considered too expensive to be feasible for a university of this size and that open access platforms are being used as a way to compensate for this lack of access.	

5. Financing and management of financial resources

Descriptions part

Terms of reference: Based on the SER and visits to institutions, EEG **should analyze and evaluate** the: financial resources of Doctoral school, data over the years, expenditures, costs per students, financial auditing, managing capacities.

MEASURABLE INDICATORS [ref. SER, pg 35, table 7]




☒ **Financial resources, data over the three years**

Resources	Acadyear 2012-2013	Acad year 2013-2014	Acad year 2014-2015	Acadyear 2015-2016
Public funds				
Central government		€ 1,946.43		
Local government				
Non-public funds				
Grants on research and contracts	€ 10,852	€ 28,370	€ 28,370	€ 10,852
Consultations, services				
All kinds of tuition fees	€ 28,600	€ 28,650	€ 23,900	€ 6,400
Sponsorships				
Donations, assurance activities, NGOs etc.				

Ref. SER, [ref SER pg 34] at the end of each academic year UNYT makes a cost analysis of all the programs of studies. The cost analysis contains operational expenses and capital expenses.

The cost per student for every PhD-three-year program is presented in the table below:

Total cost / student for 3 years of PhD studies in Computer Sciences	9,341€
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[Ref. SER, pg. 36] UNYT performs internal and external auditing on annual basis. The *internal auditing* is performed by the Commission appointed from the Board of Shareholders, whereas the *external auditing* is performed by an independent Auditing Company running its activity in Albania.

From the meetings with the students, EEG noticed that greater financial support needs to be provided by the university in order to enable participation in conferences and in general to encourage mobility.

Evaluation according to the Standards

Standards/criterion	Evaluation according to standards
Standard I.1 - General framework	
Criterion 5 Doctorate study program is supported by a sufficient budget for research;	There is a budgetary provision at the disposal of the doctoral programs.
Standard II.1 - Capacities for scientific research	
Criterion 8 External funding received for scientific research is indicative of high level research activity and they are administered for the progress of relevant study program.	The doctorate study program is supported by a budget for research. However EEG cannot judge, whether this is a sufficient budget or not, because the data provided in the table is not specific for this study program
Standard III.1 - Management and financing tools for doctorate study program	

Criterion 7 Financial budget of doctorate study program is sufficient to achieve research objectives for each doctorate student; Criterion 8 Financial budget distribution structure of doctorate study program matches with scientific research policy and needs.	The budgetary provisions are for all doctoral programs. So, from the information provided in the self-evaluation is hard to judge. However, from discussions during the on-site visit the EEG learned that a budget for financing research projects or at least for supporting applications for research projects is not available. The university plans to establish a research support office for coordinating and managing project applications and implementations. The EEG thinks that this is a good step forward, but by no means a replacement for an internal funding scheme for research projects. The financial budget distribution of internal funds was aligned to UNYT's research priorities.
Standard III.3 - Financing of doctorate study program	
Criterion 1 Number of research works funded by the ministry; Criterion 2 Distribution of funds to host and supervision teams of scientific research works is done in a balanced way; Criterion 3 Number of research works funded under national research projects, benefited by scientific supervisors of doctorate students for this study program; Criterion 4 Number of research works funded under international research projects benefited by scientific supervisors of doctorate students for this study program;	There is one project funded by the Ministry of Culture at the University level, but none related to computer science. The data regarding this study program cannot be distinguished as the information is given at the University level. Not yet. There is one project: An Adriatic Network for Advancing Research Development and Innovation towards the Creation of new Policies for Sustainable Competiveness and Technological Capacity of SME. The academic staff participates in the project; so far there is no involvement of doctoral students.
Conclusions of EEG: There exists a University planned budget for all doctoral studies. However, EEG cannot judge, whether it is a sufficient budget or not, because the data provided in table is not specific for the study programs under evaluation. But from the meetings with the students, EEG noticed that greater financial support is needed for the students to participate in conferences and to support mobility. From discussions during the on-site visit the EEG learned that a budget for financing research projects or at least for supporting applications for research projects is not available. The university plans to establish a support office for coordinating and managing project applications and implementations. The EEG thinks that this would be a good step forward, but by no means a replacement for an internal funding scheme for research projects. No doctoral student was directly engaged in the externally funded project to facilitate doctoral research. There is no information about the amount of money spent on research conducted by doctoral students and academic staff involved in this study program. EEG suggests that more funds should be allocated for research projects as well as for participation in conferences. UNYT should increase the budget for supporting doctoral students in research work or to better use the opportunity for research funded under	

international research projects, which would benefit doctoral students.

6. Internal Quality Assurance System (IQAS)

Description part

Terms of reference: Based on the SER and visits to institutions, EEG should analyze and evaluate the: Internal Monitoring for Quality Assurance Unit (IQAU), its functions in doctoral school and study programs, self-assessment and continuous quality improvement.

UNYT monitors the quality of teaching through the Quality Assurance Committee (QAC) in cooperation with Quality Assurance officer/coordinator.

QAC is appointed by the Senate with the mission of enhancing and developing the quality system in UNYT, thereby serving the needs of the university's community and other interested groups.

QAC is responsible for the coordination of the overall procedures for the internal and external evaluation of academic and student support units guaranteeing compliance with the national and international legal framework ensuring a continuous quality improvement in UNYT in cooperation with all its institutional partners.

UNYT is partner institution in an Erasmus + project addressing fostering quality assurance in all aspect of higher education in particular research evaluation and PhD studies. [ref. SER]

DOCTORAL STUDY PROGRAM (ES)

7. Study program, its organization (for each study program)

Description part

Terms of reference: Based on the SER and visits to institutions, EEG should analyze and evaluate the: Title of Diploma (in Albanian and English), mission and objectives of the research program, the organization of the first year in doctorate school, the curriculum content of all its elements (subjects / modules, corresponding credits, sharing teaching hours per study forms, classes in /outside of auditorium under the forms of teaching), literature and other auxiliary materials, etc.

The doctoral study program in Computer Science with profiles in Computer Science and Management of Information Systems, is a postgraduate research program of the third cycle which is delivered by the Department of Computer Science.

In SER [ref SER pg. 43] is a description of scope and aim of the two profiles of this study program as well as all general components.



Academic Plan for the first Year [ref. SER pg. 47, table 8/1, pg. 48, table 8/2]

Student workload is assessed on the bases of the U.S. credit system. One American credit is equivalent to 2 ECTS and measures a workload of 15 lecture hours and 20-30 hours of independent student work, adding up to a total of 35-45 hours.

Year I			
	Subjects/ Modules in Computer Science	TYPE	Semester Credits (ECTS)
1	Quantitative Research Methods	CORE COURSES	1 6
2	Qualitative Research Methods		1 6
3	Teaching in Higher Education		1 6
4	Dissertation Seminar		2 6
5	Advanced Optimization Methods		2 6
6	Advanced Algorithms and Complexity Theory	COMPUTER SCIENCE	2 6
7	Artificial Intelligence		2 6
8	Advanced Computer Architecture		2 6
9	Machine Learning		2 6
10	Security Engineering		2 6
11	Natural Learning Processing		
12	Advanced Networking		2 6
Total*			60

Year I			
	Subjects/ Modules in Management of Information Systems	Type	Semester Credits (ECTS)
1	Quantitative Research Methods	CORE COURSES	1 6
2	Qualitative Research Methods		1 6
3	Teaching in Higher Education		1 6
4	Dissertation Seminar		2 6
5	Leadership Theories and Practices		1 6
6	Foundations of MIS	MIS	2 6
7	Decision Making Theory		1 6
8	Organizational MIS		2 6
9	Computer and Information Security		- 6
10	Advance Strategic Management		2 6
11	Advanced Networking		2

Academic Curriculum Plan, Related to the Relevant Academic Staff [ref. SER pg 49, table 9]

	Subject/Module	Responsible professor/s (Name Surname)	Title/ degree	Department	FAS or PAS
1.	Quantitative Research Methods	Magdy Roufaiel	PhD	Business Administration	F/T
		Ines Nurja	PhD	Economics & Finance	F/T
2.	Qualitative Research Methods	Erka Çaro	PhD	Humanities & Soc. Sc.	P/T
		Fatos Tarifa	Prof. PhD.	Humanities & Soc. Sc.	F/T
3.	Teaching in Higher Education	Kosta Giakoumis	Assoc. Prof. PhD	Humanities & Soc. Sc.	F/T
4	Dissertation Seminar	Agim Kukeli	Prof. PhD	Economics and Finance	F/T
		Ariana Cela	PhD	Business Administration	F/T
5	Advanced Optimization Methods	Marenglen Biba	Assoc. Prof. PhD	Computer Science	F/T
6	Advanced Algorithms and Complexity Theory	Marenglen Biba	Assoc. Prof. PhD	Computer Science	F/T
7	Artificial Intelligence	Marenglen Biba	Assoc. Prof. PhD	Computer Science	F/T
8	Advanced Computer Architecture	Elior Vila	PhD	Computer Science	F/T
9	Machine Learning	Marenglen Biba	Assoc. Prof. PhD	Computer Science	F/T
10	Security Engineering	Elior Vila	PhD	Computer Science	F/T
11	Natural Learning Processing	Marenglen Biba	Assoc. Prof. PhD	Computer Science	F/T
12	Advanced Networking	Elior Vila	PhD	Computer Science	F/T

Third year of PhD, Paper publications [ref. SER table pg 51]*Computer Science*



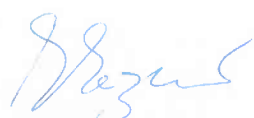
N	Surname	Name	Title of Publication	Journal Title	Country	Date
1	Skënduli	Marjana	A Named Entity Recognition Approach for Albanian	<i>Advances in Computing, Communications and Informatics</i>	Mysore, India	2013
			Review on Security Threats for Mobile Devices and Significant countermeasures on securing android mobiles (Book chapter).	<i>Automated Enterprise Systems for Maximizing Business Performance</i>	Pennsylvania U.S.	2015
			Machine learning for intrusion detection in MANET: A state-of-the-art survey.	<i>Journal of Intelligent Information Systems</i>	New York USA	2015
2	Nishani	Lediona	Statistical Relational Learning for Collaborative Filtering: A State-Of-The-Art Review (Book chapter14)	<i>Collaborative Filtering Using Data Mining and Analysis</i>	USA	2016
			Visual Data Mining For Collaborative Filtering: A State-of-the-art Survey (Book chapter 12)	<i>Collaborative Filtering Using Data Mining and Analysis</i>	USA	2016

Third year of PhD, Conference Presentations [ref. SER table pg 52]
Computer Science

N	Surname	Name	Title of Presentations	Conference Name	Country	Date
			Review on Security Threats for Mobile Devices and Significant countermeasures on securing android mobiles.	International Workshop on Enterprise Information Systems.	Tiranë Albania.	2014
1	Nishani	Lediona	Randomizing Ensemble-Based Approaches for Outlier Detection	4 th International Conference on Business, Technology and Innovation	Durrës Albania	2015
			Tackling outlier detection through stochastic ensemble-based approaches	3 rd International Conference on "Research and Education-Challenges towards the Future".	Shkodë Albania	2015
2	Skenduli	Mariana	A Named Entity Recognition Approach for Albanian	2013 International Conference: Advances in Computing, Communications and Informatics	Mysore India	2013

Evaluation according to the Standards

Standards/criterion	Evaluation according to standards
Standard I.4 - Design and realization of theoretical course of third cycle studies (Doctorate)	
Criterion 1 Programs of third cycle studies include 60 credits for theoretical organized studies; Criterion 2 Theoretical organized studies anticipate balanced ratio of classes for academic and scientific general and specific training; Criterion 3 Detailed teaching program is approved pursuant to bylaws in force; Criterion 4 Theoretical doctorate course is evaluated with a general theoretical examination in relevant field of study, organized by Dean's office and Professors' Council, with a commission consisting of 5 (five) professors in the relevant research field or approximate to it. Candidates who achieve over 80% points are allowed to attend the doctorate research studies. Those who do not reach this result receive a certificate for conducted modules, together with accumulated credits and interrupt doctorate studies.	The first year of the PhD program is composed of 60 credits in total for theoretical organized studies, 10 courses (counting for 6 credits each) are divided into 4 core courses, 4 concentration courses and 2 specialization ones. The students are allowed to proceed in their studies only after passing all the courses with a minimum of 80% (B-) and after passing the comprehensive exam. There are 4 core courses and 6 courses focused on and specialized in major areas and principal issues that pertain to students' field of study. All requirements of the doctoral program are in compliance with bylaws in force. After completing the required courses, the doctoral student has to pass a mandatory pass-or-fail comprehensive exam. The comprehensive exam is based on the key methodological, core and specialization components of the students' coursework. It is administered by the academic supervisor, in close cooperation with the Dean and the Department Chair of the respective faculty, and formalized by a Committee of 5 professors of the same field or areas closely related to it. A passing grade in the comprehensive exams is a prerequisite for advancement to years 2 and 3 in all doctoral programs.
Standard II.3 - Drafting and approval of proposed research project	
Criterion 1 Applicant who requires to be admitted to doctorate studies program has submitted the request for a particular research area and this has been discussed with him in the interview; Criterion 2 Scope of research is selected in such a way that doctorate studies program can support it; Criterion 3 Proposal is approved by Professors' Council if criteria prescribed and announced in regulation of doctorate studies are met. The following should be also confirmed: - Duration of study program; - Modalities of verification of research or creative activity of doctorate students; - Manner of final presentation of scientific research result that doctorate student will achieve;	UNYT's application form for admission to doctoral studies programs requires students to conceptualize and expose a research proposal (800-1000 words). CoP checks the research potentials of each candidate and whether his/her interests fit with the research profile of the school. The CoP reviews the dissertation project proposal and admits students when their research proposal matches the research conducted at UNYT and when there is available supervision. The rules of the doctoral program specify the details




Criterion 4 A member of academic staff with the title "Professor", "Associate Professor" or with scientific degree "Doctor" or ("PhD") awarded in the scientific field in which doctorate student follows the studies in universities known in the world, for quality and rich researching and publishing activities in the relevant field, is appointed by Board of Professors to supervise and support student's research work; Criterion 5 Doctorate student presents to Board of Professors the research development plan, designed by him and discussed with his supervisor; Criterion 6 Supervisor has advised repeatedly the students that he supervises for didactic duties and research activities as well as research methodology to ensure the progress of his studies in this program.	regarding the requirements and expectations from students in the course of the doctoral program. Upon submission of an application, a candidate confirms to "have understood the degree requirements of 90 [American] credits (180 ECTS) of regular courses (in no less than 1 year) with a grade of 8 out of 10 (in USA system with a grade B or above), passing of the comprehensive examination at the end of courses, conference presentations, journal publications and of the original written dissertation (all of the above to be completed no less than in 3 academic years)". Currently, 2 of the PhD students in the first cohort of the program under evaluation have passed the limit of three years. The CoP has analyzed the reasons and permitted extensions. The CoP officially appoints a competent supervisor prior to a doctoral student's comprehensive exam. All supervisors are selected taking into consideration their academic title or degree, their field of expertise and their interest to supervise a doctoral student in her/his own field or a field closely related with hers/his. The supervisor must be at the rank of a Professor or an Associate Professor or must have a PhD obtained from a university in one of the OECD countries in the relevant field of study. The Ph.D. candidate's status is awarded only after a student successfully completes the doctoral coursework and the respective comprehensive exams and revises the project proposal. In the specific cases when the thesis proposal is interdisciplinary, a supervisor and a co-supervisor are assigned by the Council of Professors. At the start of the supervisory process, a PhD candidate drafts a PhD Plan that contains details of every stage of the doctoral program of skills accomplishment, as well as respective time plans. Thesis plans are reassessed at the end of every academic year by way of submission of a Progress Report. The process is monitored by the CoP
Standard II.1 - Capacities for scientific research	
Criterion 1 A third cycle study program (doctorate) is integrated in research activity of Higher Education Institutions;	UNYT's Senate has approved the institution's Research Strategy for 2014-2017 and research pillars, a strategic

	document that coordinates research to be conducted on an individual basis organized in broadly delineated research pillars, thereby inviting cross disciplinary research.
Standard II.4 - Doctorate student's supervision and continuous evaluation of progress of doctorate studies	
Criterion 1 Scientific supervisor of student is responsible for directing, advising, assessment of student's needs and for developing and monitoring progress of student's research work. He has the academic title "Professor", "Associate Professor" or the scientific degree "Doctor" or ("PhD") awarded in Western universities and has a rich research and publishing activity; Criterion 2 All scientific supervisors have had the expertise, instruction and proper guidance for their role in realization of scientific research project of doctorate students; Criterion 3 Scientific supervisors work to update their knowledge and skills, based on institutional arrangements in order to enable the exchange of best practices and providing advice to support students effectively; Criterion 4 Board of Professors selects scientific supervisors, capable to supervise doctorate students' research work, based on assessment of their publishing and research activities inside and outside the country; Criterion 5 The main scientific supervisor and the other supervisor (when program of doctorate studies is offered by more than one university) guarantee that doctorate students receive sufficient support and guidance to facilitate their work to achieve success; Criterion 6 In all cases, the student must have only one identified contact point, who should be his main supervisor. If his main supervisor is not available, the student must know who will be the person to replace him; Criterion 7 University ensures that supervisor has enough time to supervise doctorate student; If the main leader is unable to continue supervision of student, or will be absent for a considerable period, he should be replaced by another his main supervisor before the period of awarding the diploma for scientific degree "Doctor"; Criterion 8 If relationship student-supervisor does not function well, at the request of student or his supervisor, supervisor is changed, provided that this does not affect the project progress; Criterion 9 Clear and transparent procedures are set for verification of knowledge or periodic evaluation of student (for example, an annual review by a panel called for this purpose or by a special commission set up by Professors' Council). Criterion 10 Doctorate student and his supervisor should be present during this process. The manner and periods of verification of knowledge or periodic evaluation of doctorate student are stipulated and specified in the beginning of doctorate studies program;	The doctoral students are supervised by the academic staff holding the "Professor Dr." or "Associate Professor Dr." title or the "Doctor" (PhD) scientific degree acquired in Western universities, as defined by the respective Directive of the Ministry of Education and Science of the Republic of Albania. The supervisors are selected so that their expertise adequately matches with the need of student supervision. In selecting the supervisor for a doctoral student, the UNYT's Council of Professors carefully reviews the supervisor's research publications and activities and their match with the research interests expressed by students in a formal statement at the time of application. In the specific cases when the thesis proposal is interdisciplinary, a supervisor and a co-supervisor are assigned by the CoP The supervisor collaborates on a close basis with the student, and via a thorough assessment of the student needs, makes sure to provide to the student all the guidance and support that the student needs to successfully complete his doctoral work and progress in the program. The workload of full time supervisors is considered carefully to ensure that the supervisor has enough time for proper and dedicated supervising. However, the EEG has the impression that in the period of time under evaluation the few full time supervisors available had a high workload; this is true especially for Prof. Ass. Biba. Scientific supervisors are also in charge of providing periodic assessment of student's progress in the program. In collaboration with the student, via formal meetings, the supervisor completes an annual progress report for each individual student. In this report, the supervisor also assesses student

Criterion 11 Continuous evaluation conclusions for realization of scientific research project of program of doctorate studies are clear and transparent including suspension, extension or withdrawal from doctorate studies; Criterion 12 Meetings between supervisors and doctorate students are documented, especially during the review of progress reports.	progress as either satisfactory or unsatisfactory. The annual progress reports are then reviewed in one of the periodic meetings of the Council of Professors. Students are continuously informed and aware about all their rights and duties. They have the right for a suspension period of their studies under well-documented reasons. Meetings and consultations between supervisors and students are organized regularly upon the request of the candidates. Their progress is assessed periodically, minimally once a year, through reviewing the progress reports. However, in case of academic matters, the issues have been brought up in the attention of CoP for discussions and decisions. Yet, given the current composition of CoP [ref SER pg. 14, table 2] the EEG believes that it does not have sufficient expertise to judge on the progress of the PhD projects content-wise and on the quality of the produced results/publications. This will hopefully improve when a Computer Science faculty is established and more academic staff is available in the area. Another suggestion to ensure a sufficient level of expertise when judging the level and quality of the progress of the ongoing PhD projects is to acquire external expertise on an individual basis.
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Conclusions of EEG:

The first year of the PhD program is composed of 30 American credits (60 ECTS) in total. The entire program has in total 90 American credits (180 ECTS) and the duration of the program is minimum three years. This study program is in conformance with the formal requirements contained in the relevant ministerial and university regulations relating to third cycle program. There are rigorous admission procedures, which are clearly documentation.

The workload of full time supervisors is considered carefully to ensure that the supervisor has enough time for proper and dedicated supervising. However, the EEG has the impression that in the period of time under evaluation the few full time supervisors available had a high workload; this is true especially for Prof. Ass. Biba. Given the current composition of CoP, the EEG believes that it does not have sufficient expertise to judge on the progress of the PhD projects content-wise and on the quality of the produced results/publications. This will hopefully improve when a CS faculty is established and more academic staff is available in the area. Another suggestion to ensure a sufficient level of expertise when judging the level and quality of the progress of the ongoing PhD projects is to acquire external expertise on an individual basis.

The actual staff's workload is very high to cope with teaching and supervising. In order for the category of "Professor" to be more focused on research projects together with the doctorate students, a reduction of their workload is necessary. Further, the EEG recommends that a committee at the faculty level should be




responsible for monitoring the progress of the ongoing PhD projects to ensure that this monitoring is based not only on formal regulations but also on sufficient expertise in the field. Also, it is recommended to establish some mechanisms for acquiring external evaluation of the PhD projects, be it in the process or at the end of the PhD studies of individual candidates.

8. Teaching – Learning outcome

Description part

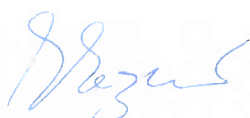
Terma reference: Based on the SER and visits to institutions, EEG should analyze and evaluate the: organization, teaching methods, quality of workload and realisation of it, teaching technologies, internal evaluation of teaching, students' participation in the activities of the doctoral school, control of student knowledge, student scientific leadership etj.

Based on documentations provided by UNYT, there are ten courses in their first year of study. The teaching plan is not detailed, but EEG is able to understand the workload of academic staff and students, taking in consideration the number of credits for each course. Student workload is assessed according to the U.S. credit system One American credit is equivalent to 2 ECTS and measures a workload of 15 lecture hours and 20-30 hours of independent student work, adding up to a total of 35-45 hours.

Teaching has been delivered to students in a variety method. A variety of teaching methods and assessment tools have been utilized including, but not limited to, in-class discussion and mock debates, reaction papers pertaining to assigned readings and book reviews, oral and written exams, research papers, literature reviews and annotated bibliographies, research design, oral presentations. Assessment is linked to the learning outcomes of each course as in the table [ref SER, pg. 65 table 11] below:

Learning Outcomes Control	In percentage
Active participation in class	10%
Assignments (e.g. Reflection papers, case studies etc.)	10%
Midterm Examination	20%
Research papers	30%
Final Examination	30%
In total	100%

1. Autobiography of yourself as learner.	10%
2. Teaching Philosophy with a critical, reflective commentary of its foundations.	10%
3. A Course Syllabus with Rationale.	20%
4. A class plan designed on the basis of the syllabus with a critical annotation on the teaching method appropriate to it.	10%



5. A sample testing and assessment tool with model answers, marking benchmarks and feedback rubrics.	20%
6. Out-of-Class peer observation.	10%
7. Teaching Portfolio	10%
8. In-Class participation.	10%

Evaluation according to the Standards

Standards/criterion	Evaluation according to standards
Standard I.2 - Continuous increase of theoretical level and promotion of students' team work are targets of a study program of third cycle, doctorate.	
Criterion 1 Level of scientific research development helps in student training to complete the study program successfully; Criterion 2 Students have the opportunity to participate in various research activities closely related to the specific area in which they attend doctorate studies, which help him/her to be trained for: - Acquisition of research methodologies for independent creative activities, such as scientific articles, presentations, standard approach for references, bibliography, indexes and content writing as the basis for doctor a thesis processing; - Independent work in laboratory; - Use of information resources (e.g. libraries and Internet) and information management; - Use of modern technologies for public presentations; - Acquisition of advanced methods of analysis and data processing; - Learning and mastery of specialized terminology associated with the research field of doctorate student; Criterion 3 Doctorate students participate in foreseen activities young and their research work. A doctorate student is free to participate as a listener or as a speaker in: - Lectures; - Seminars; - Interdisciplinary debates, organized in the framework of doctorate study program; - Other possibilities of learning such as following presentations of post doctorate students and research projects, even when it is not related directly to the student's research interest. - Scientific mentors advise students to take part in scientific activities and conferences that help them in their scientific research; Criterion 4 Students have gained skills for appropriate communication with a scientific level (<i>Student's communication skills include: the competency to write clearly and with an appropriate style, use of persuasive arguments and clear</i>	The level of scientific research in the university influences directly the student training during the coursework year and during the research conducted in the following years. However, the spectrum of scientific research is currently very limited due to the limitation of the resources available in terms of the academic staff involved in supervision. During the first year of studies, students participate in various research activities, such as conducting and completing thorough literature reviews; devising and formulating hypotheses; acquisition of advanced methods of analyzing and processing data, both in quantitative and qualitative research methods; writing research proposal and mini-theses; utilizing information resources via the extensive databases in UNYT library and elsewhere, and practicing presentation skills via the use of modern technologies. Doctoral students benefit from participating in scholarly activities. Supervisors encourage doctoral students to take part as presenters and/or listeners at conferences, workshops, and seminars conducted by UNYT and other HE institutions in Albania and abroad. However, funding for such activities is limited, if at all available. Other possibilities of learning such as following presentations of post-doctorate researchers and

articulation of ideas before the public concerned; the ability to debate and support others, involved in teaching, supervision or demonstrations);

Criterion 5 Students have acquired the ability to communicate correctly with others, and necessary skill for a scholar, but also in other situations (*being able to develop and maintain cooperation and working relationships with others, awareness that their behavior affects them and others and be willing to listen, to give and to take reactions and responses with sharpness*);

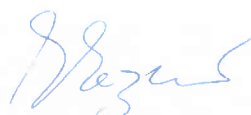
Criterion 6 Development of communication skills of doctorate students encouraged them to be engaged in teaching in study programs of first and second cycle (e.g. by engaging in teaching as lecturers, in support of professors guiding their thesis).

research projects, even when it is not related directly to the student's research interest, are not available due to the fact that, as far as the EEG is informed, there are currently no post-doctoral researchers involved in research at UNYT. Also, there seems to only limited financial support, if at all, for supporting students in scientific activities and conferences that help them in their scientific research, especially when the latter take place abroad.

In the course of their training program, doctoral students attain advanced communication skills. These skills include the abilities of:

- Writing clearly and in a style appropriate to purpose, e.g. progress reports, published documents, and thesis.
- Constructing coherent arguments and articulate ideas clearly to a range of audiences, formally and informally through a variety of techniques.
- Constructively defending research outcomes at seminars and viva examination.
- Contributing to promoting the public understanding of one's research field.
- Effectively supporting the learning of others when involved in teaching, mentoring or demonstrating activities.

PhD students acquire experience in teaching undergraduate or graduate students courses within their fields of expertise. In their teaching, PhD students are expected to demonstrate an ability to integrate their research into their teaching. Overall, the EEG cannot really judge whether the students actually acquire the ability to communicate correctly with others, and necessary skill for a scholar, but also in other situations beyond confirming that there are courses offered to train these skills. Especially, the EEG is not able to judge whether the students are able to develop and maintain cooperation and working relationships with others from the information available to the EEG. The EEG believes that due to lack of proper research groups, the possibilities to develop such skills during the research



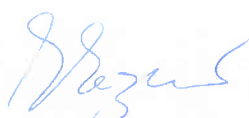
	phase of the PhD program are quite limited. PhD students are involved in teaching at UNYT, or in other HE institutions in Albania.
Conclusions of EEG: The supervisors encourage and try to support PhD students to participate in various scientific activities. The students are engaged in teaching activities in study programs of first cycle as lecturers. The level of scientific research in the university influences directly the student training during the coursework year and during the research conducted in the following years. However, the participation of students in research activities is limited especially due to lack of funding, which results in low participation in international conferences. Also, the spectrum of scientific research is currently very limited due to the limitation of the resources available in terms of the academic staff involved in supervision. Other possibilities of learning such as following presentations of post-doctorate researchers and research projects, even when it is not related directly to the student's research interest, are not available due to the fact that, as far as the EEG is informed, there are currently no post-doctoral researchers involved in research at UNYT. The EEG cannot really judge whether the students actually acquire the ability to communicate correctly with others, and necessary skill for a scholar, but also in other situations beyond confirming that there are courses offered to train these skills. Especially, the EEG is not able to judge whether the students are able to develop and maintain cooperation and working relationships with others from the information available to the EEG. The EEG believes that due to lack of proper research groups, the possibilities to develop such skills during the research phase of the PhD program are quite limited. EEG suggests that more funding is made available for participation in conferences and other scientific activities within Albania and abroad. Also, given the size of the department, we encourage more scientific exchange in the form of joint seminars across the available expertise areas. Also, the establishment of mechanisms such as Distinguished Lecture Series, where internationally renowned researchers in CS or related area are invited to present their work and spend few days at UNYT may be considered as a possibility to systematically expose PhD students to ongoing research in a broad spectrum of topics, ideally at the international level, and encourage scholar exchange.	

9. Students in Doctoral study program

Description part

Terms of reference: Based on the SER and visits to institutions, EEG **should analyze and evaluate** the: academic criteria and procedures for enrollment of student in doctoral school, quality of students enrolled, the number of students enrolled and who has finished in years, average duration of doctoral studies (in years), statistics, collaboration with students who have received diploma, student's information.

Admission criteria and procedures of students in the UNYT PhD program are clear, transparent, in full accordance with the legal requirements in place, and the PhD program Regulations. Detailed information is provided in the PhD program Regulations.




Currently, there are only 7 students enrolled. During the site visit EEG checked randomly two of the enrolled students' files and found them completed and conform to the rules and procedures. None of the registered students has graduated; only one of them has submitted the research work for the defense in department.

The following table shows the number of enrolled PhD students and the current affiliation of them in full time or part time bases with UNYT [ref. SER pg. 70]

	Computer Sciences	
	Affiliated with UNYT	Others
Cohort I	3	1
Cohort II	0	0
Cohort III	2	1
Unenrolled	0	0

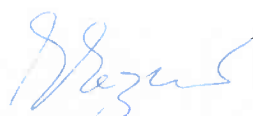
Based on the decisions of the Council of Professors, the most updated list of students of all Cohorts and the ones showing a satisfactory level of the academic progress have been reported to the relevant agencies at the Ministry.

Statistical Data for Doctoral Students

- (i) The total number of PhD students is seven: Cohort I: 4 students, Cohort II: 0 students, Cohort III: 3 students;
- (ii) The number of PhD students enrolled in the Computer Science coming from outside of the university is 5/7;
- (iii) Number of graduates each year: none
- (iv) The average duration of doctoral studies cannot be estimated at this point given that none of the enrolled students has graduated.
- (v) Number and percentage of PhD students who have interrupted their doctoral studies (0/7), but there are students with no visible progress.
- (vi) Number and percentage of students coming from Kosovo, the Albanian territories and the Diaspora is 1/7;
- (vii) There are no foreign students (from the Balkans or EU countries) in either doctoral program.

Evaluation according to the Standards

Standards/criterion	Evaluation according to standards
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Standard I.3 - Admission of students in a doctorate study program

Criterion 1 The student admitted to doctorate study program has completed second study cycle with average grade (> 80% of points) and was awarded the university degree "Master of Science"/ "Master of Fine Arts" or an equivalent degree, following completion of university studies that include a scientific thesis evaluated with 30-40 ECTS;

Criterion 2 Candidate who applies to continue the third cycle program, the doctorate, has profound theoretical knowledge in the relevant field of study. Some basic knowledge that doctorate student has is:

- a) Creative thinking;
- b) Development of critical sense about research;
- c) Connections between different fields of research;
- d) Skills developed for solving problems arising during research work;
- e) Competence to manage research complexity and to propose new ideas in research field;

Criterion 3 The student admitted to doctorate study program is ready to apply in practice the knowledge gained from research in relevant field of studies;

Criterion 4 Student owns the English language certified in the international level, at least "C1", based on internationally recognized tests and a second foreign language as French, German, Italian, Spanish or Russian. In social sciences it may be Latin, Ancient Greek, Persian or other languages needed for research in the area;

Criterion 5 Professors' Council set the criteria for admission to program of doctorate studies contained in regulation of doctorate program of studies;

Criterion 6 The applicant has received detailed information about doctorate program of study, before being admitted into it. He is fully informed regarding:

- a) Duration of study program;
- b) Conditions that student should meet before appearing in doctorate exam;
- c) Support that institution provides to the student through administrative and research structures for activities envisaged in the study program (laboratories, libraries, etc.).
- d) Modalities of exercise of research or creative activity of doctorate students, especially with regard to preparation of doctorate thesis;

Criterion 7 Admission criteria include also interviews and supports that can be provided by references and additional documents;

Criterion 8 Admission policies include also doctorate admission exam.

All the students admitted to this doctoral study program have completed "Master of Science" with average grade (> 80% of points).

The Council of Professors assesses these criteria by taking into consideration the previous field of degrees of the applicant, curriculum vitae, his/her list of publications (if any) and the applicant's doctoral thesis proposal. Whether this is sufficient for ensuring thorough judgment on the capabilities asked for in this criterion is hard to tell. Especially, as many of the documents that are used as input for the assessment naturally do not explicitly provide information on the criteria. Yet, other ways of testing these criteria would be too heavy, especially given the size of the PhD programs in question.

The Council of Professors assesses this criterion.

The students admitted to this doctoral study program have attained an English language certificate at a C.1. Level in the European Framework of Language Qualifications and issued by one of the international agencies recognized by the Ministry of Education and Sports, and evidence of command of minimally one but preferably two foreign languages (i.e. languages other than English and their mother tongue, if different from English) in at least an upper intermediate level.

Academic criteria for enrolments of doctoral students are in the document "Rules and Regulations of the PhD Programs".

The Council of Professors at UNYT is the responsible body for setting the criteria and overseeing that they are adequately followed during the admission process

All applicants to the UNYT PhD program receive, prior to admission, detailed information about the doctorate program of study contained in the programs' Rules and Regulations.

	Detailed information on these is provided on an individual basis by the UNYT Admissions office, and is also published in full on the UNYT's official website.
Standard II.5 - Final evaluation of students in this cycle of studies	
Criterion 1 Student provides evidence that he has acquired: - Profound knowledge in relevant scientific field; - Profound knowledge in some areas approximate to it; - Professional skills in using modern technology to solve critical problems related to his field of scientific research; - Innovation, to expand and update existing knowledge; - Autonomy, scientific, professional integrity and dedication for development of new ideas that encourage scientific research; Criterion 2 Student provides evidence that he has brought original scientific products, scientific works of a high scientific level through conducted scientific research, some of which have deserved or deserve publication in scientific national and international magazines; Criterion 3 Final evaluation of doctorate students is based above all on an assessment of their scientific research product; Criterion 4 On the basis of an agreement reached in the phase of the study program approval, scientific research result is presented as a dissertation thesis, or cumulative with 3 scientific articles published in international journals with impact factor coefficient above 1; Criterion 5 In case of doctorate examination with dissertation thesis, doctorate student meets the following conditions: - He has realized as first author at least three scientific papers or presentations (poster), of which two papers or presentations are held in a international scientific event, in a western country (symposium, conference, congress), accepted on the basis of a preliminary scientific assessment, published in "Proceedings", indexed with an ISBN code; - He has published as first author, at least three scientific articles in scientific journals. At least two of the articles have been published or accepted for publication in well-known western journals with editorial board; - He has prepared and presented to Faculty Board of Professors the dissertation, along with a summary, approved by scientific supervisor. Structure of dissertation and its summary are defined in doctorate study regulation; Criterion 6 Board of Professors defines two or three opponents, one of which is from outside the institution. Opponents are also members of the jury to assess dissertation. They have required academic titles and rich research and publishing activities inside and outside the country in the relevant field of study in which program doctorate studies is offered; Criterion 7 Opponents who have had a substantial involvement in the work of doctorate student, or whose work is the very	Assessment of the criteria includes assessment of the student performance during the courses, result on the comprehensive exam, and fulfillment of research work criteria. The final evaluation of the student is based on the assessment of their doctoral dissertation. The doctoral dissertation is the basis for the final evaluation as specified in the "Rules and Regulations of the PhD program". In order to proceed with the doctoral dissertation, the doctoral student must meet all the conditions in terms of research related activities. The Council of Professors approves, within one month of the submission of the thesis, the date of the doctoral dissertation at the Department. The Department assigns two of its members as reviewers of the doctoral dissertation. The reviewers and the supervisor of the doctoral student complete the performance report. In order to proceed with the doctoral dissertation, the doctoral student must meet all the conditions. Yet, it is not clear to what extent these conditions are checked in practice. For instance, the only student that has submitted the thesis reports only three publications, of which two are in a book that seems to have been co-edited by the advisor (it is unclear to what extent peer-reviewing and a strict selection process were conducted in this case). Overall, the EEG judges the outcome in terms of peer-reviewed publications of the PhD students in the program as low and not of sufficient quality. The structure and formatting of the dissertation are clearly specified in the Dissertation Format Guide

focus of research project;

Criterion 8 A dissertation copy is given to every opponent, giving enough time to read it and to write a separate report. Opponents should not communicate among themselves, with doctorate student or its scientific supervisor during this period. Opponents must verify the authenticity of data used in dissertation, observance of scientific research practice as well citations of scientific research works and articles of other authors.

Criterion 9 Opponents express clearly that scientific paper is free of plagiarism. If they notice and find that this has happened, they ask for termination of dissertation assessment;

Criterion 10 Dissertation is accompanied by a summary, about 10 pages in English. This review is published in the official website of the institution, in the section designated for information for this study;

Criterion 11 Scientific supervisor of the student should not be an opponent;

Criterion 12 When opponents have completed their reports, they are called by the Dean and Head of Board of Professors to agree to conduct oral examination;

Criterion 13 It is recommended, that a jury member of doctorate examination be from universities known in the world for quality and rich research and publishing activities in the relevant field, which has at least the scientific degree "Doctor" awarded in the scientific field in which doctorate student follows the studies and over 5 years academic and research experience. This criterion may not be applied to Albanology sciences. Assessment of doctorate student in examination is made open by consensus, provided that all members are pronounced for a passing grade. Even if one member has evaluated doctorate student by convincing arguments, with a failing grade, the final outcome will be failing;

Criterion 14 Opponents submit to dean of unit that organizes the program of doctorate studies and chairperson of doctorate examination jury a copy of their individual reports;

Criterion 15 Dissertation defense for obtaining the diploma for scientific degree "Doctor" is public. It is announced at least 4 weeks before and it is done in the presence of department interested members, students and teachers in the relevant Higher Education Institution;

Criterion 16 Evaluations that opponents can make include: granting diploma of scientific degree "Doctor", or resubmission of written scientific research paper after completion of their recommendations, or a further extension of study program, or denial of diploma for scientific degree "Doctor";

Criterion 17 A copy of dissertation of student who received a diploma for scientific degree "Doctor" is deposited in library of faculty, research institute, university research centers, university where study program is carried out and scientific paper and a copy in National Library. Scientific degree "Doctor" is not issued without dissertation being deposited in aforementioned institutions, published in paper and on disk (CD) and without

The Council of Professors approves a jury composed of five members and also appoints two of the jury members as opponents of the doctoral dissertation.

Opponents and the supervisor of the doctoral dissertation are required to submit a performance report. The supervisor of the doctoral student is also requested to complete this performance report.

Once the doctoral student has presented the doctoral dissertation and has answered the questions of the jury members, the jury members convene to reach a decision.

Final evaluation of the doctoral dissertation is made by consensus. Even if one of the jury members provides convincing arguments that the dissertation deserves a failing grade, then the final evaluation of the jury is of failing grade. The minimum acceptable grade is B- (80%).

Opponents write a report where express clearly that scientific paper is free of plagiarism.

The summary, about 10 pages in English is published in the official website

The supervisor should not be an opponent. See jury composition.

Prior to the defense day, the opponents submit to the Chair of the Committee and to the Dean of the respective Faculty Dean the signed version of the individual report.

The dissertation defense is a public event, which is announced at least 4 weeks before it takes place

The opponents write in the report their evaluation
A electronic and hardcopies of the dissertation are deposited in the Library of UNYT.

A copy of the dissertation is also deposited in the National Library of Albania.

making it public in the official website of respective higher education institution;	Information on the award of the degree and the summary of the doctoral dissertation are also published on the official website of UNYT.
Criterion 18 Scientific degree "Doctor" is not issued without being registered in National Register of Doctorates of Securities Commission Academic Assessment (KVTA) in MES.	The scientific degree "Doctor of Philosophy" is registered in the National Register of Doctorates of the National Council of Academic Titles' Assessment (KVTA) at MES.

Standard III.2 - Quantitative aspects of doctorate study program

Criterion 1 Total number of registered doctorate students and doctorate number for each year;	The total number of doctoral students in this study program is 7 students; Cohort I: 4 students, Cohort II: 0 students, Cohort III: 3 students;
Criterion 2 Number of registered doctorate students coming from outside the unit that has opened the doctorate study program;	The number of doctoral students coming from outside of the university in the Computer Science PhD Program is 5/7;
Criterion 3 Number of diplomas issued to receive "Doctor" degree for each year;	none
Criterion 4 Average duration of doctorate studies and trend of this indicator;	The average duration of doctoral studies and the trend of this indicator cannot be estimated at the time of writing this report.
Criterion 5 Number and percentage of those who gave up doctorate studies in the level of study program.	none

Standard III.4 - Internationalization of doctorate study program

Criterion 1 Number, expressed in percentage, of registered doctorate students coming from Kosovo and other areas where Albanians live and Albanian diaspora;	Number and percentage of students, who come from Kosovo, Albanian territories, as well as from the Albanian diaspora is 1/7, in the Computer Science PhD Program.
Criterion 2 Number, expressed in percentage, of registered doctorate students coming from Balkans region.	None.
Criterion 3 Number, expressed in percentage, of registered doctorate students coming from the EU countries;	None.
Criterion 4 Number, expressed in percentage, of registered doctorate students coming from other countries of the world;	None.

Conclusions of EEG:

The academic criteria and procedures for enrolment of doctoral students fulfill the requirements. Academic criteria for enrolments of doctoral students are in the document "Rules and Regulations of the PhD Programs". The Council of Professors at UNYT is the responsible body for setting the criteria and overseeing that they are adequately followed during the admission process. The current number of the enrolled students is manageable - only seven; a higher number of students is currently not feasible, as long as the planned expansion in terms of the permanent academic staff has not been fully implemented. The quantity and especially quality of publications by PhD students is currently not satisfactory. In order to

proceed with the doctoral dissertation, the doctoral student must meet all the defined conditions. Yet, it is not clear how well these conditions are checked in practice. Given the lack of sufficient expertise of the CoP (as the assessment body) in the specific area of the programs under evaluation, and the lack of school-specific standards used to judge the quality of publications (beyond the general criteria defined by regulations), the EEG questions the current procedures for judging on the quality of the publications. Overall, the EEG judges the outcome in terms of peer-reviewed publications of the PhD students in the program in average as low.

SCIENTIFIC RESEARCH POLICIES

10. Scientific research and involvement in them, the doctoral student research

Description part

Terms of reference: Based on the SER and visits to institutions, EEG **should analyze and evaluate** the: research policies of HEI /Doctoral School, publications over the years, acquired and implemented projects, participation of doctoral student in activities at home and abroad, the activities organized by the unit, etc..

Based on documentations, UNYT has established the following institutional research objectives:

1. Promote authentic research, scholarly publications and activities, and creative endeavor of students, faculty and university staff;
2. Enhance research culture at UNYT in line with its UNYT research strategy;
3. Increase the number of externally funded research projects in recognition of research excellence.

According to SER, more than thirty faculty members and doctoral students have participated in scientific activities, which mostly were held abroad. UNYT has been managing five externally funded projects; sixteen research projects are being implemented by faculty members and doctoral students of UNYT. Research productivity has increased over the years. In 2015, the number of published books and book chapters was 5. In 2016 the number increased to 12. In 2012-2013 the number of articles published in peer-reviewed journals was 8; this number increased to 14 in 2015, and 18 in 2016. Fifty-nine presentations were delivered only in 2015. During 2015-2016, UNYT has organized two *international conferences*.

However, these numbers refer to activities of the entire university and are not related to the programs under evaluation. Referring to the data for the doctoral study program under evaluation and the progress of students, only two of students from Cohort I(four students)have participated in international conferences and have published two articles in international peer-reviewed journals/conference, whereby the quality of one them is unclear (Advances in Computing, Communications and Informatics).



The following table shows the research output published in scientific and scholar peer-reviewed articles and the papers presented in international conferences by the students of the PhD program in the Computer Science.

Published Articles in Peer-Reviewed Journals [ref SER, pg 92]

Computer Science

N	Surname	Name	Title of Publication	Journal Title	Country	Date
1	Skënduli	Marjana	A Named Entity Recognition Approach for Albanian	<i>Advances in Computing, Communications and Informatics</i>	Mysore, India	2013
			Review on Security Threats for Mobile Devices and Significant countermeasures on securing android mobiles (Book chapter).	<i>Automated Enterprise Systems for Maximizing Business Performance</i>	Pennsylvania U.S.	2015
			Machine learning for intrusion detection in MANET: A state-of-the-art survey.	<i>Journal of Intelligent Information Systems</i>	New York USA	2015
2	Nishani	Lediona	Statistical Relational Learning for Collaborative Filtering: A State-Of-The-Art Review (Book chapter 14)	<i>Collaborative Filtering Using Data Mining and Analysis</i>	USA	2016
			Visual Data Mining For Collaborative Filtering: A State-of-the-art Survey (Book chapter 12)	<i>Collaborative Filtering Using Data Mining and Analysis</i>	USA	2016

Presentations at International Academic Conferences [ref SER, pg 92]

Computer Science

N	Surname	Name	Title of Presentations	Conference Name	Country	Date
			Review on Security Threats for Mobile Devices and Significant countermeasures on securing android mobiles.	International Workshop on Enterprise Information Systems.	Tirana Albania.	2014
1	Nishani	Lediona	Randomizing Ensemble-Based Approaches for Outlier Detection	4 th International Conference on Business, Technology and Innovation	Durrës Albania	2015
			Tackling outlier detection through stochastic ensemble-based approaches	3 rd International Conference on "Research and Education- Challenges towards the Future".	Shkodër Albania	2015
2	Skenduli	Mariana	A Named Entity Recognition Approach for Albanian	2013 International Conference:	Mysore India	2013

Evaluation according to the Standards

Standards/criterion	Evaluation according to standards
Standard II.1 - Capacities for scientific research	
Criterion 1 A third cycle study program (doctorate) is integrated in research activity of Higher Education Institutions; Criterion 4 The institution has the capacity to perform supervision of each doctorate student in research activities and respective didactic duties; Criterion 6 Academic staff must show achievements in the research field through such creative activities as: presentations, scientific publications, magazines, books or monographs; Criterion 7 Indicators of high level research activity are publications that contain statements from publishing and scientific research activity by other scholars outside doctorate study program, especially international, regarding the outcome of scientific research in the institution that offers doctorate programs;	Research work of all doctoral students is an integral and contributing part of UNYT research pillars document. The doctoral work is supervised by full time staff based on the respective research expertise. The number of doctoral students per supervisor does not exceed the limits set by the Ministry of Education and Sports, but the students enrolled this year do not have yet a supervisor. Academic staff presents their research work during seminars organized internally and at international conferences; also they publish their work in peer-reviewed journals as well as in book chapters, books or monographs. A detailed report of all research work presented or published in 2012-2016 by academic staff is made available. However, the current scientific output of the staff involved in the programs under evaluation is rather low, especially in the last three years (at least as judged by the information provided to EEG and Google scholars and DBLP). There is only one publication reported in DBLP after 2013. The reasons for this decrease need to be analyzed and way of increasing the publication output need to be conceived.
Conclusions of EEG:	
Research work of all doctoral students is an integral part of UNYT research pillars document. The academic staff of UNYT presents the research work in the seminars organized internally and in international conferences. Also they publish their research work in peer-reviewed journals, in book chapters, books or monographs. Academic staff and students collaborate among one another. The number of students involved in research and publications with their faculty members has increased.	




However, the current scientific output of the staff involved in the programs under evaluation is rather low as an indicator of research capacities needed to support a doctoral degree. This is true especially for the last three years (at least as judged by the information provided to EEG and Google scholars and DBLP). There is only one publication reported in DBLP after 2013 by the staff involved in the programs under evaluation. The reasons for this decrease need to be analyzed and way of increasing the publication output need to be conceived.

EEG strongly recommends undertaking significant efforts to increase the quantity and quality of publications. Without such measures in place, the EEG has serious doubts that sustaining the doctoral programs under evaluation makes sense and is feasible. We recommend considering the use of the ranking of CS conferences and journals defined and used by the Australian Science Foundation, available online under <http://www.core.edu.au/conference-portal> as a means to establish an internal common understanding of quality, for defining goals with respect to the quality level of publications that the staff wants to achieve in the near future, as well as a means for monitoring progress. Another source of monitoring the publication outcome could be DBLP, an online service that provides open bibliographic information on major computer science journals and proceedings (<http://dblp.uni-trier.de>). Such actions will at least raise the awareness about the quality of publication venues - in a medium term they should be considered as the basis for monitoring the intensity and quality of research. The efforts to increase the publication outcome should of course be supported by measures to provide the academic staff with the needed capacities for conducting high quality research.

EEG also suggests engaging in more collaborations with academic institutions and research institutes within and outside Albania.

11. National and international cooperation, in function of doctoral study

Description part

Terms of reference: Based on the SER and visits to institutions, EEG should analyze and evaluate the: Doctoral School's cooperation with institutions /national or international research organizations, invited academic staff, etc.

The doctoral study program in Computer Science with profiles in Computer Science and Management of Information Systems was set up in collaboration with the University of Bolton, UK. All students were given the option to also enroll with that university to obtain a dual doctoral degree upon successful completion of their doctoral studies. Financial considerations, however, prevented doctoral students from doing so; yet UNYT benefitted from the experience and expertise of the University of Bolton. [ref SER, pg 95]

The table below shows the cooperation with scientific institutions [ref SER, pg 97, table 15]

Institutions and scientific organizations, which is cooperating with	
Teaching & Research	SUNY/ESC
Teaching & Research	NYC
Teaching & Research	UNYP

Teaching	University of Greenwich
Teaching & Research	Bolton University
Teaching & Research	Institute of Political Sciences, Rennes
Teaching & Research	University of Herzing
Academic Monitoring	University of Fribourg, University of Juvaskula (Finland)
Student & Staff Mobility	Program Erasmus +
Research	ADRIATinn Consortium
Research	Ministry of Foreign Affairs
Research	Ministry of Culture
Research	Regional Directorate of Education, Berat
Research	University of Prishtina / Math and Natural Sciences Faculty
Research	National CENTER of Museums Onufri and Ethnographic, Berat
Research	Regional Directorate of National Culture, Berat
Internship & Research	Center "Shtëpia e Kuqe"
Internship & Research	Counselling Line for Women and Girls
Internship & Research	Observatory for Children's Rights (Observatory)
Internship & Research	Tirana English School

Evaluation according to the Standards

Standards/criterion	Evaluation according to standards
Standard III.4 - Internationalization of doctorate study program	
Criterion 5 Doctorate study program encourages doctorate mobility by paying a considerable amount of expenditures for academic training outside doctorate study program; Criterion 6 Doctorate study program encourages mobility of doctorate students by paying a considerable amount of expenditures for presentation of research results in national and international scientific activities (symposium, conference, congress); Criterion 7 The institution has an agreement, at least with one Western university, guaranteeing programs of exchange of academic staff and doctorate students and realization of joint research projects. For Albanological Sciences cooperation could also be with a Higher Education Institution or research centre in Kosovo and lands where Albanians live; Criterion 8 Doctorate study program creates the necessary space to develop joint doctorate study programs with homologous universities in the region, Europe and beyond; Criterion 9 Doctorate study program provides for 3-4 modules (not less than 15 ECTS) to be conducted, organized in theoretical studies and doctorate students have the exam by professors of partner universities, known in the world, for quality and research, publishing activities in the relevant field of study. Exception cited in criterion 7 applies for Albanological Sciences; Criterion 10 Doctorate study program promotes involvement of professors from foreign universities as scientific supervisors or as scientific collaborators of doctorate students.	It is written in the doctoral program's regulations that a student should devote such part of the PhD degree to study and research outside the University or the country. So far, none of the students of this study program has used the opportunity of mobility due to limited financial resources. Even though according to SER [pg 97], UNYT has provided scholarships to doctoral students from other study programs to help them afford their expenses while studying abroad. One of Cohort I students, was supported by paying conference fee and other fee to publish research work in international journals. However, no additional support was either solicited by or provided for doctoral students, other than what was provisioned in UNYT's budget [SER]. UNYT has signed a number of agreements with several universities, some of which also facilitated

	the exchange of faculty to the benefit of the doctoral program. However, there seems to be almost no real (positive) effect of these agreements for the programs under evaluation. The only exception seems to be the collaboration in the context of the ADRIATinn Consortium led by Prof. Ass. Biba – the key person for both programs under evaluation. In principle, the doctoral program's regulations, encourage the involvement of professors from foreign universities as scientific supervisors as well as to invite international experts for the theses defense. This possibility has not been used so far.
Standard II.1 - Capacities for scientific research	
Criterion 5 The institution has agreements with other academic or research institutions at home and abroad, supporting the exchange of academic staff and doctorate students and academic and research activities of doctorate school;	On bases of SER [pg 97, table 15], UNYT has a number of international agreements with universities and research institutes which refer to joint research projects, as well as staff exchanges. So far, there is no mobility case from the students of doctoral study programs under evaluation.
Conclusions of EEG: According to information provided in SER, UNYT has agreement with 20 institutions. All these agreements guarantee programs of exchange of academic staff and doctorate students and realization of joint research projects. Also, the doctoral program's regulations, encourage the mobility of the students as well as the involvement of professors from foreign universities as scientific supervisors as well as to invite international experts for the theses defense. However, in a pool of collaborations the EEG cannot extract the ones that are directly related to the internationalization of the study programs under evaluation. There seems to be almost no real (positive) effect of these agreements for the programs under evaluation. The only exception seems to be the collaboration in the context of the ADRIATinn Consortium led by Prof. Ass. Biba – the key person for both programs under evaluation. Even though it is possible to have students and academic staff exchange, so far the students have not used this opportunity, due to insufficient funds.	




SWOT ANALYSIS

Strengths

- UNYT has established appropriate procedures for selection, supervision, quality control, and for international exchanges.
- Good theoretical program for the coursework in the first year of the study programs.
- UNYT has good facilities.
- The academic staff involved in the programs under evaluation, although insufficient in terms of quantity, is well qualified.

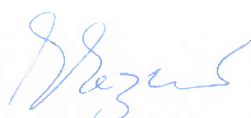
Weaknesses

- Very low number of full-time academic staff with the necessary qualification for being eligible to be involved in PhD supervision,
- As a result, bottlenecks in supervision and research capabilities, if not corrected, should be considered as a reason for discontinuing the program.
- Low number and quality of publications of both the academic staff and doctoral students.
- Low outcome in terms of the students that have completed or have clear timelines until their completion.
- Limited number of international collaborations directly related to the programs under evaluation.
- No internal funds are available for initiating or supporting research projects and/or travel to international conferences.
- Low level of external research funding acquired by the academic staff.
- There is currently no institutional support for participation in collaborative research projects, e.g., funded by the EU or other international research funding bodies.
- Monitoring of progress of PhD projects happens at the university level by the university-level Council of Professors, which has very limited expertise in the areas of the programs under evaluation.

Opportunities

The implementation of measurements for ensuring compliance with the new higher education law as well as the planned establishment of a faculty of computer science, which is a direct effect of the new law, offer very good opportunities for improving the situation, including:

- Increase of the number of the academic staff eligible to advise PhDs.



- Full-time employment of PhD candidates.
- Impossibility to do a PhD in parallel to a full-time job elsewhere.
- Plans to move the monitoring body from the university level to the level of the faculty.

Risks

The EEG sees very high risks for the sustainability and quality of the programs under evaluation, if the opportunities mentioned above are not turned to reality and recommendations made by EEG are not implemented. In this case, closing the programs should be considered as an option; another option could be to consider possibilities to establish joint programs with other universities in Tirana.

Recommendations

We recap the recommendations scattered all over the document here and conclude with:

- Increase the number of full time academic staff with titles Prof. Dr. or Prof. Ass. Dr.
- Enhance the capacity of research groups.
- Establish the mechanisms and corresponding funding for supporting research projects, at least in a moderate scale.
- Access to online publication platforms most interesting for computer science such as ACM or IEEE.
- Increase the budget for supporting doctoral students in research work or to better use the opportunity for research funded under international research projects, which would benefit doctoral students.
- A committee at the faculty level should be responsible for monitoring the progress of the ongoing PhD projects to ensure that this monitoring is based not only on formal regulations but also on sufficient expertise in the field.
- Establish some mechanisms for acquiring external evaluation of the PhD projects, be it in the process or at the end of the PhD studies of individual candidates.
- Significant efforts to increase the quantity and quality of publications.
- Engaging in more collaborations with academic institutions and research institutes within and outside Albania.

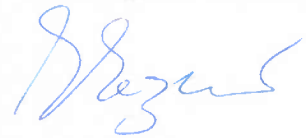
If the opportunities mentioned above are not turned to reality and the recommendations made by the EEG are not implemented in a short to mid term, closing the programs should be considered as an option. In general, the EEG recommends considering possibilities to establish joint programs




with other universities in Tirana. Given the overall restricted human resources and research expertise and capabilities available at UNYT and at other universities in Tirana, which also offer PhD programs in Computer Science and related areas, a joint program may be a viable and valuable alternative to offering several programs, each with very limited scope, capacities and quality for all involved institutions, at least for a certain period of time until enough capacities become available in Albania.

External Evaluation Group

Prof. Dr.- Ing. Mira Mezini



Prof. Asoc.Dr Elinda Kajo Meçe

