AGREEMENT ON A DUAL DEGREE

BETWEEN

Sumy State University, UKRAINE

AND

University of Koblenz-Landau, GERMANY

The Sumy State University, Rymskogo-Korsakova 2, 40007 Sumy, UKRAINE, represented by its Rector, Prof. Anatoliy Vasylyev and the University of Koblenz-Landau (Uni KO-LD), Rhabanusstraße 3, 55118 Mainz, GERMANY, represented by its President, Prof. Dr. Roman Heiligenthal, have decided to embark on an exchange of students that will culminate in the award of the degrees of both institutions under the conditions specified hereunder.

Article 1 Scope of the Agreement

This agreement applies to:

- >> Sumy State University students
- who have successfully finished the first year of their Master studies in "Applied Mathematics" or related fields at the Sumy State University (Ukraine);
- have an overall grade of 2,3 (good) or better acc. to the German grading system;
- and have a good command of English language, which corresponds to B2 level.
- ➤ Uni KO-LD students (Germans and other nationalities)
- who are matriculated (and have fulfilled the same entrance qualification as the applying Sumy State University students) in the Master program "Mathematical Modeling of Complex Systems" at Uni KO-LD;
- are in their 2nd Semester of studies;
- and have a good command of Ukrainian language, which corresponds to B2 level.

It is agreed that up to 8 students of each university will be admitted into the Dual Degree program per year.

Article 2 Selection Procedures

The Sumy State University students who have completed their first semester of Master have to apply for the Dual Master at the Uni KO-LD on a regular basis in the period from March to May 15th for the winter semester of the same year.

Uni KO-LD students also have to apply to the Master program in the period from May 15th to July 30th at the Sumy State University after they have successfully completed the first semester of studies.

Article 3 Organization of studies

Students of the Sumy State University joining the hereunder signed dual degree agreement will study the 3rd and 4th semester of their Master program at the Uni KO-LD in Germany. During this period students have to collect approx. 60 credit points (CP) acc. to the European Credit Transfer System (ECTS) for modules and/or a master's thesis. A list of selectable modules at Uni KO-LD is given in Annex 1 of this agreement.

Students from the Uni KO-LD joining the hereunder signed dual degree agreement will study 3rd and 4th semester of the Master program at the the Sumy State University in Ukraine. During this period students have to collect approx. 60 credit points acc. to the European Credit Transfer System (ECTS) for modules and a master's thesis. A list of selectable modules for the Sumy State University is given in Annex 2 of this agreement.

At both universities a mentor will supervise the students going for the Dual Degree program and assist them in selecting the most suitable modules from Annex 1 and 2.

Each Master thesis will be supervised by two supervisors - by the main supervisor from the Sumy State University and a second supervisor from the Uni KO-LD. The defense of a Master thesis will take place at the Sumy State University.

A Uni KO-LD supervisor ideally should join the defense of the student's thesis at the Sumy State University. If he/she is not able to attend, he/she has to write a short expertise on the Master thesis (approx. 1 page) which should include:

- the objectives of the thesis
- an assessment of up to which degree the student has fulfilled the expectation of the supervisor
- an indication of the main outcomes and benefits of the thesis
- an assessment on how much support was necessary to guide the student during his or her thesis
- a suggestion for the mark of the Master thesis acc. to the German grading system.

Article 4 Acknowledgment of student achievements

On the assumption of fundamental equivalence and based on mutual trust in the academic quality of the host university's curriculum it is agreed that the Sumy State University acknowledges examination results of dual-degree students at the Uni KO-LD and that the Uni KO-LD acknowledges examination results of dual degree students at the Sumy State University (see Annex 3).

For the purpose of recognition and transfer of national grades into the respective other system the partners agree on the credits and grades transfer system given in Annex 4.

All the results achieved at one university will be sent to the Registrar's Office of the other institution within 6 weeks of the end of the mobility phase as a transcript of records.

Article 5 Assistance at a host institution

The host institution will appoint a mentor from the Department for each student, to whom he/she may apply for advice or assistance during his/her stay in the host country. The mentors are responsible for the preparation of the individual study plans.

Article 6 Examination and Study regulations

During their studies at the Uni KO-LD, students will follow the current version of the examination and study regulations for the Dual Master program.

During their studies at the Sumy State University, students will follow the current version of the examination and study regulations for the Master program "Applied Mathematics" of that university.

Article 7 Degree

On successful completion of the semesters at the Uni KO-LD and the semesters at the Sumy State University (120 ECTS credits including the Master thesis) both universities will award the degree of "Master of Science".

In an appropriate manner both universities will state clearly in the relevant documents (diploma supplement, certificate, transcript of records) that the awarded degree is part of a Dual Degree Master Program between the Uni KO-LD and the Sumy State University.

Every student will receive a certificate as well as their final transcript of records from the Uni KO-LD for the Master Program "Mathematical Modeling of Complex Systems" with an addition stating that the study program was conducted in cooperation with the Master Program "Applied Mathematics" at the Sumy State University. Moreover, every student will receive a certificate as well as their final transcript of records from the Sumy State University for the Master Program "Applied Mathematics" with an addition stating that the study program was conducted in cooperation with the Master Program "Mathematical Modeling of Complex Systems" at the Uni KO-LD.

Both transcripts of records will contain all credits and grades obtained at both institutions. It will be clearly marked which results were achieved at the Uni KO-LD and which ones at the Sumy State University. All students will also receive a Diploma Supplement issued by the Uni KO-LD.

Article 8 Financial and other arrangements

Expenses for travel and accommodation must be covered by the student. The host institution will help the students obtain the same facilities foreseen for their own students.

It is a responsibility of the student to receive a visa for the respective host country. Neither the home nor the host university will cover visa fees. The host university will provide the student with an admission or an invitation letter necessary for obtaining a visa.

Due to German state legislation, all students taking part in the dual degree program must obtain German health insurance for the entire period of their studies. This insurance can be obtained upon arrival in Germany. It is highly advisable that each student also has insurance in Ukraine as well.

Students of the dual degree program will pay applicable administration fees to each institution only during their phase of attendance. No fees will be paid at the respective other institution while attending the host Institution. No tuition fees will be charged by either of the institutions for the Dual Degree Program.

Article 9 Monitoring of the Program

The persons responsible for the Program at both Institutions will meet at least once a year in order to:

- review the effectiveness of the teaching programs;
- examine the academic results achieved by the students in the light of the institutions' joint effort;
- propose further actions.

Article 10 Scholarly exchange

In order to promote joint actions in education and research, the Sumy State University and the Uni KO-LD will encourage:

- exchanges of students, university staff and researchers;
- study sessions, workshops, and seminars on previously agreed subjects;
- exchange of information, documents and scientific publications;
- student exchanges involving work experience or visits to companies.

The exchange of persons shall comply with the regulations and procedures in force at the home institutions.

Article 11 Efficacy and Interim Regulations

This Agreement will come into force immediately after the signature of the responsible University Authorities.

It will be valid for five years, and will be automatically renewed for another five years provided that the previous activities have been positively evaluated and that the two parties agree on a renewal.

This agreement may be amended by the mutual consent of the parties hereto. Any party may withdraw from this agreement at any time. The agreement will be terminated 6 months after the date of the written notification of the withdrawal to the partner Institution. In such an event, all actions previously undertaken shall nevertheless be completed. It will be ensured that students already committed to the Dual Degree Program will receive the opportunity to complete the program in due form.

Article 12 Disclaimer

The signing of this agreement does not entail any financial obligation for the parties.

Article 13 Miscellaneous

The parties agree to solve in a friendly manner any controversy rising from the Interpretation of the present agreement.

In case an agreement cannot be achieved, the claim will be submitted for arbitration; each party will appoint a member of the arbitration panel, and one member will be chosen by mutual consent.

This agreement is valid in English only.

FOR THE

SUMY STATE UNIVERSITY

Prof. Anatoliy Vasylyev

Rector

Date 21. 06. 2017

FOR THE

UNIVERSITY OF KOBLENZ-LANDAU

Prof. Dr. Roman Heiligenthal

President

Date 06.04.2017

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Annex 1: Modules to be taken at the University of Koblenz-Landau (Germany)

Title ¹	ECTS
Special Topics of Mathematics	9
Special Topics of Applied Mathematics	9
Specialization in Mathematics	9
Surface Science	6
Elective Course in Computer Science	6
Applied Differential Equations	9
Optimization	9
Numerics for Partial Differential Equations	9
Integer Optimization	9
Project Seminar	15
Master thesis and final oral exam	30
Solid State Physics	6

¹ Any changes should be sent via e-mail beforehand

Annex 2: Modules to be taken at the Sumy State University (Ukraine)

Title ²	ECTS
Modelling of Neural Networks	5
Basic Theory of Generalized Functions	5
Nonlinear Processes and Models	10
Computer Modeling Tasks of Applied Mathematics	10
Modeling of Physical Fields in Aviation and Rocket Tech.	10
Queueing Theory	5
Parallel and Distributed Computing	5
Numerical Methods for Solving Applied Problems	10
Applied Econometrics	10
Wavelet Analysis	5
Computer and Mathematical Modeling from Time Series	5
Organization of Science Activities	5
Scientific Research Work	10
Master thesis qualification work	10
Foreign language	5
Intellectual Property	5
Academic Writing and Publication of Scientific Results	5

² Any changes should be sent via e-mail beforehand

Annex 3: Module Recognition

SSU Modules	Credits	Koblenz-Landau Modules	Credits
Modelling of Neural Networks	5		
Basic Theory of Generalized			
Functions	5	Special Topics of Mathematics	9
		Special Topics of Applied	
Nonlinear processes and models	10	Mathematics	9
Computer Modeling Tasks of		10	
Applied Mathematics	10	Specialization in Mathematics	9
Modeling of physical fields in			
aviation and rocket tech.	10	Applied Theoretical Physics	6
		Selective Courses in Computer	
Queueing Theory	5	Science	6
		Selective Courses in Computer	
Parallel and distributed computing	5	Science	6
Numerical Methods for solving		20	
applied problems	10	Applied Differential Equations	9

Modules to be studied at the University of Koblenz-Landau and recognized at the Sumy State University			
SSU Modules	Credits	Koblenz-Landau Modules	Credits
Applied Econometrics	10	Optimization	9
Wavelet Analysis (Optional			
Module 1)	5	Integer Optimization	6
Computer and mathematical			
modelling from time series		Numerics for Partial Differential	
(Optional Module 2)	5	Equations	6
Foreign language	5		
Organization of science activities	5		
Scientific research work	10		
Master thesis qualification work	10	Master thesis final oral exam	30

Annex 4: Transfer of Grades

Examination Grades at the Uni KO-LD	Percentage at the Uni KO-LD	Percentage at the SSU	Examination Grades at the Sumy State University	
1,0	>95%-100%	90%-100%	5, A (excellent)	
1,3	>90%-95%			
1,7	>85%-90%	82%-89%	4, B (good)	
2,0	>80%-85%	-		
2,3	>75%-80%	74%-81%	4, C (good)	
2,7	>70%-75%	64%-73%	3, D (satisfactory)	
3,0	>65%-70%			
3,3	>60%-65%	60%-63%	3, E (satisfactory)	
3,7	>55%-60%	35%-59%	2, FX (unsatisfactory)	
4,0	>50%-55%			
5,0	failed	0%-34%	2, F (unsatisfactory)	

Annex 5: Transfer of Credits

Credits at the Uni KO-LD (1 CP is equivalent to 30 work hours)	Credits at the Sumy State University (1 CP is equivalent to 30 work hours)
1 CP	1 CP
2 CP	2 CP
3 CP	3 CP
4 CP	4 CP
5 CP	5 CP
6 CP	6 CP
7 CP	7 CP
8 CP	8 CP
9 CP	9 CP
10 CP	10 CP