EXECUTIVE AGREEMENT FOR THE MANAGEMENT OF THE DOUBLE DEGREE STUDY PROGRAM IN "PRODUCTION ENGINEERING AND MANAGEMENT"

GIVEN the Didactic Agreement for a Double Degree Program in "Production Engineering and Management" (hereinafter referred to as "Program"), signed by Università degli Studi di Trieste - Italy (hereinafter known as "UNITS") on 20.10.2010, and by Hochschule Ostwestfalen-Lippe - University of Applied Sciences - Germany (hereinafter known as "HS OWL") on 22.10.2010

Università degli Studi di Trieste (Italy)

and

Hochschule Ostwestfalen-Lippe - University of Applied Sciences (Germany)

jointly agree the following Agreement

Article 1 Principles

1.1 - Provision of laws, principles and definitions of this Executive Agreement are those specified by the Didactic Agreement quoted in the Preamble, of which this document constitutes an integral part.

Article 2 Purpose of the Agreement

2.1 - The purpose of this Agreement is to detail arrangements and administrative procedures specific to the management of the Program.

Article 3 Bodies of the Program

3.1 – Partner Universities appoint two Coordinators of the Program

Production Engineering and Management study program coordinator Università degli Studi di Trieste Dipartimento di Ingegneria e Architettura http://dia.units.it

Via A. Valerio, 10 I- 34127 TRIESTE TS ITALY

Production Engineering and Management study program coordinator Hochschule Ostwestfalen-Lippe Fachbereich Produktion und Wirtschaft www.hs-owl.de/fb7/ Liebigstr. 87 D-32657 Lemgo GERMANY Partner Universities will share names of their President or Vice President of the Academic Council and of the Teaching Commission after their appointment.

UNITS members of the Academic Council will be appointed after the effective assignment of teachings made by UNITS Engineering Faculty before the beginning of each academic year.

- 3.2 Pursuant to art. 4.3 and 4.5 of the Didactic Agreement President and Vice President of the Academic Council and the Teaching Commission are in charge for two academic years following which their offices will rotate.
- 3.3 All changes in these appointments for the first two academic years as well as appointments for the following two academic year periods based on the aforesaid rotation criteria will be agreed in writing by the Program Coordinators.
- 3.4 Partner Universities will share Curricula of their Teaching Staff committed to the Program draft on European Curriculum Vitae Format.
- 3.5 HS OWL professors teaching in the Program (at least 4) will send UNITS the signed UNITS form agreeing to teach on the Program.

Article 4 Marks of examinations

4.1 - Marks are given for individual examinations in Italy according to the Italian system, in Germany according to the German system. The two systems are transferable in a unique way. The correspondence between Italian marks x and German marks y is obtained by applying two identical formulas respectively: x = -4y + 34 and y = -0.25x + 8.5. The formulas lead to the following correspondence between Italian and German marks:

Italian Marks	German Marks
30 cum laude	1
30	1
29	1.25
28	1.5
27	1.75
26	2
25	2.25
24	2.5
23	2.75
22	3
21	3.25
20	3.5
19	3.75
18	4
17,	5

4.2 - If a mark has to be assigned by more than one examiner, the examiners agree on a common mark. If they do not agree the arithmetical mean is calculated from the individual marks of each examiner. The mean is then rounded to an integer if the Italian system is used, or the

quarter of an integer if the German system is used. If the mean is exactly half way between two marks, the better mark is taken as the rounded value.

Internships at Partner Universities are excluded from this calculation.

Article 5 Course Structure

5.1 - Didactic activities are organized into two academic years, each of which is divided into two semesters.

Semesters at HS OWL: Winter semester (WS) 01.09 - 28/29.02

Summer semester (SS) 01.03 – 31.08.

Semesters at UNITS (as an indication for lectures): 01.10-28/29.02 and 01.03-30.09

- 5.2 The curriculum of the Program is specified in Schedule 1, bearing in mind the following semester sequence:
 - 1st year Semester 1: at Home University
 - Semester 2: at UNITS
 - 2nd year Semester 1: at HS OWL
 - Semester 2: ordinarily at Home University; at Host University only with the permission of Host University (the student must make specific request to the Host University for the fourth semester)
- 5.3 The complete procedure of preparing the Master thesis and the final examination/colloquim will follow the provisions of the Home University (see points 10.5 and 10.6).
- 5.4 The Program attended by Italian and German students together, will be held in English. At UNITS all lectures are taught in English.

Article 6 Selection of participants

- 6.1 The Teaching Commission will resolve about other relevant 1st cycle study programs that could be the basis for the admission and which are not mentioned in art. 8.1 of the Didactic Agreement, bearing in mind the number of available places, which are 40 in total, namely 20 for each University.
- 6.2 UNITS will select students participating in the Program at the beginning of September prior to the start of each cycle of the Program according to the following criteria:

- the Board of Examiners will be composed by UNITS members of the Teaching Commission, with an English professor who will test the knowledge of English of any applicants who do not submit a B2 Certificate (FCE or similar) or have not passed the English course previously held by UNITS;

- applicants are required to meet both Participating Institutions' minimum B2 English language requirements as applicable (Certificates of knowledge of English accepted);

- evaluation based on academic merits of graduate applicants with a minimum Bachelor mark (in the fields specified by art. 8.1 of the Didactic Agreement and art. 6.1 of this Agreement) of at least 85/110 in ECTS Satisfactory range. A counselling interview will also take place. The listing of eligible candidates will consider upper Bachelor marks and, if there is a tie between candidates, the weighted average of obtained marks;

- evaluation based on academic merits of graduating candidates, who have obtained at least 150 CFUs with a weighted average of at least 23/30;

- eligible candidates will be added to the merit list until 20 UNITS available places have been reached;

- the merit list of EU_eligible candidate for enrolment will have a separate section for graduating applicants: should there still be any places available, the merit list will be updated in December and February after their graduation (with the minimum Bachelor mark required).

6.3 - HS OWL will adopt basically the same criteria, with an evaluation on academic merits (minimum Bachelor mark in the fields specified by art. 8.1 of the Didactic Agreement and art. 6.1 of this Agreement of at least 3.00) and proof of B2 level Knowledge of English (FCE). An English professor will test the knowledge of English of any applicant who do not submit a B2 Certificate. A counselling interview may also take place.

The first selection will take place by the beginning of September.

A second selection will take place by the end of February, particularly for HS OWL students with a 7 semesters Bachelor Degree in Wood Engineering, Production Technology and Industrial Engineering. No later than 4 weeks prior to the beginning of the 2nd semester, students will apply to be accepted into the Programme, provided that there still are places vacant.

- 6.4 Partner Universities will share their lists of eligible candidates quoting also their e-mail address.
- 6.5 Delayed enrolled students will make up 1st semester activities at Home University.

Article 7 Enrolment

- 7.1 Eligible students will enrol in the Program at their Home University by completing both UNITS and HS OWL enrolment forms.
- 7.2 Enrolments are valid for an academic year at UNITS, for a semester at HS OWL. HS OWL Home students will enrol at their University also for the 2nd semester of both Program years.
- 7.3 UNITS and HS OWL will send their respective forms to the Partner University, written also in English, as soon as possible.
- 7.4 Enrolment of eligible students will be completed according to the following administrative procedures:

HS OWL Home students

UNITS will send each HS OWL Home student a form for the payment of fees for the social body, social services and enrolment stamp duty

(http://www.cspn.units.it/en/didactic/ddmsp/451-application-form-from-hs-owl-to-units).

When coming to Italy HS OWL Home students shall request their Italian tax code from the local Tax Office.

At UNITS fees for social bodies and stamp duty are to be paid by all Program students for each year.

UNITS Home students

When arriving at HS OWL for the 3rd semester of the Program (1st of the 2nd academic year), UNITS students will contact HS OWL International Office and give in their European Health Insurance Card (which must be valid for the whole semester) in order to obtain a special certificate which needs to be handed over to HS OWL Registration Office. They will complete their registration by proof of payment for student body and social service as well as the semester ticket – valid for public transport throughout the state NRW

Article 8 Examinations during the studies and data exchange

- 8.1 Examinations will normally take place:
 at HS OWL: 2 weeks prior to the end of each semester (first call in February, additional call in accordance with the lecturer)
 at UNITS: sessions in periods 07.01-28.02 (3 calls); 01.06-31.07 (3 calls); 01.09-20.09 (1 call)
- 8.2 Examinations will take place and be recorded in accordance with each University's regulations.
- 8.3 Teachings carried out at HS OWL during the 3rd semester of the Program (1st of the 2nd academic year) are divided into sub modules: in each module students will choose 2 sub modules out of 3. For each sub module there will be a separate exam: HS OWL Home students are given one mark for each sub module but for UNITS Home students professors will calculate an average of the marks of the 2 sub modules to obtain only one mark to record.
- 8.4 Partner Universities will exchange exams results according to the following procedures.

HS OWL professors will share UNITS Home students' examination marks and enter them (converted into Italian grades) into a special UNITS on-line database, through an accreditation whose instructions in English will be sent them before the 3^{rd} semester of the Program (1^{st} of the 2^{nd} academic year). Upon completion of each session of examination, HS OWL will provide UNITS an English certificate with a transcript of credits and grades for each HS OWL Home Student (to be sent by post).

Upon completion of each session of examination, UNITS will provide HS OWL an Italian certificate with a transcript of credits and grades for the Student (to be sent by post). An English specimen of the Italian certificate will be sent to HS OWL by UNITS in advance.

Article 9 Exclusion from the Program

9.1 - Failure to pass an examination after 4 attempts will lead to exclusion from the Program. In case of modules consisting of three sub modules, two sub modules of which must be passed, the exclusion from the Program will result when the attempts for two chosen sub modules (4 attempts for each sub module) are used up without success.

In case of modules divided into sub modules, whose combination can be changed, one failed module leads out of the Program, where exclusion will result in case of failure to pass even one of the 2 sub chosen modules.

Article 10

Final Examination / Colloquium and award of the degree

- 10.1 The final examination / colloquium takes place at Home University.
- 10.2 Before the final examination / colloquium all Program students will forward to UNITS the on-line form, duly completed and signed by the student and the two Supervisors, respecting the requirements of the University Administration for issuing the Italian Diploma (see http://www.cspn.units.it/en/didactic/ddmsp/451-application-form-from-hs-owl-to-units)
- 10.3 The final examination / colloquium consists in the presentation of an original thesis work. The thesis is an independent academic work solving a complex problem using scientific methods.
- 10.4 The master theses will be jointly supervised by UNITS and HS OWL and will be drawn up (in English, with an abstract in the Home University language) under the guidance of a Supervisor, who is a professor of the Home University, and a Co-Supervisor, who is professor of the Partner University. Both Supervisor and Co-Supervisor will be part of the Board of Examiners at the final examination / colloquium. Co-Supervisor will be present in videoconference on all Board of Examiners. The candidate must apply to Teaching Commission for the designation of co-supervisor at the time of assignment of thesis subject.
- 10.5 At HS OWL after the thesis has been completed the colloquium can take place. The participants are the candidate, defending his/her thesis, and at least the two Supervisors. At the end of the colloquium the Supervisors decide on one common mark for thesis and colloquium. If they do not agree on one mark, the arithmetical mean of the different marks is taken according to the German procedure. This mark for thesis and colloquium is weighted with 18 credit points.
- 10.6 At UNITS after the thesis has been completed the candidate will defend his/her thesis with two different Boards of Examiners. The Pre-Master Thesis Board of Examiners is composed by the Supervisor and the Co-Supervisor (in videoconference) and two other examiners chosen by UNITS President or Vice-President of the Academic Council and will evaluate thesis and colloquium. At the end of the colloquium the Board of Examiners decides on the proposal of one common mark for thesis and colloquium. If they do not agree on one mark, the arithmetical mean of the different marks is determined according to the Italian procedure. The official presentation of the thesis will follow. The participants are the candidate, who will present his/her thesis, and a Board of Examiners composed by the Supervisor and the Co-Supervisor (in videoconference) plus five other Professors chosen by UNITS President or Vice-President of the Academic Council.
 - 10.7 Marks will be assigned according to the following procedures.

Calculation of the final mark at HS OWL

The candidate has received marks y1, y2, ..., yn for the modules of his/her study, the last being the mark for the thesis and colloquium.

n-1: number of marks (exams)

n : final exam mark (thesis)

Each mark has a weight *c1*, *c2*, ..., *cn* according to the credit numbers attached to each module, *cn*=18.

The internship is excluded from this calculation.

The final degree *Y* is calculated according to the formula:

 $Y = (y1*c1 + y2*c2 + \dots + yn*cn) / (c1 + c2 + \dots + cn)$

with a precision of two digits behind the comma (the third and further digits are neglected) and stated in the set of documents issued by HS OWL according to 10.11. *Y* is translated into the Italian system according to the formula L = (374 - 44Y)/3, rounded up to the next integer, and is stated in the set of documents issued by UNITS according to 10.11.

Calculation of the final mark at UNITS

marks of exams.

The candidate has received marks x1, x2,x10 (where 10 is the number of the exams) for the modules of his/her study. Each mark has a weight c1, c2,....c10 according to the credit numbers deriving from all

The internship is excluded from this calculation.

Sum of credits deriving from all exam	ns: 96
Credits for internship:	6
Credits for thesis:	18
Total credits for the Program:	120

$$X = (x1*c1 + x2*c2 + \dots + x10*c10) / (c1+c2+\dots+c10)$$

With a precision of one digit behind the comma.

The final degree (L) is calculated according to the formula:

$$L = \frac{108 \cdot X}{30} + P$$

The value of *L* is rounded to the integer. In any case the final mark is: $\min(L, 110)$ The maximum final mark is 110/110 or "110/110 e lode" ("honours" are given by an unanimous decision of the Board of Examiners).

Where:

X is the weighted average marks according to the ten exams credits, expressed in marks out of thirty

P = mark of the thesis examination given by the Board of Examiners, whose value can be up to 4 on the following basis:

- Time for the Master thesis examination (1 at the end of the 2^{nd} academic year, 0 otherwise)

- Plus 1 up 3 extra points accordingly to the quality of the work.

Note: proposed formulation is closer, not identical, to the standard of our Department. This is because the former formulation causes disparity among students of engineering. L values greater than 110 are exceptional and we need them for evaluation of **Honour "cum Laude"** depending to the number of Laude gained in the course.

With the highest ratings the strictly numerical values are not recognized as reliable because subjective dependant. ECTS European indications have suggested range of values for comparison of profit between several universities.

The final mark is stated in the set of documents issued by UNITS according to 10.11.

The final mark *Y* stated in the set of documents issued by HS OWL is calculated with a precision of two digits behind the comma (the third and further digits are neglected) according to the following formula Y = (374 - 3 * L)/44.

10.8 - At UNITS the Master Degree mark is officially given by the Master Thesis Board of Examiners immediately after the thesis presentation. The videoconference with the Co-Supervisor will assure immediate communication of the mark. At the end of each Master Thesis session UNITS will provide HS OWL with an Italian certificate quoting the final mark of Graduated Students (to be sent by post).
An English specimen of the Italian certificate will be cent to HS OWL by UNITS in advance.

An English specimen of the Italian certificate will be sent to HS OWL by UNITS in advance.

- 10.9 At HS OWL the Master Degree mark will be calculated by the administrative offices upon reception of the mark resulting from the thesis and colloquium. As soon as possible HS OWL will provide UNITS an English certificate quoting the final mark of Graduated Students (to be sent by post).
- 10.10 For the sole purpose of the assignment of grades for the degree the following conversion table is adopted:

Italian	HS OWL
110-Marks	Marks
L	Y
66	4,00
67	3,93
68	3,86
69	3,79
70	3,72
71	3,65
72	3,59
73	3,52
74	3,45
75	3,38
76	3,31
77	3,25
78	3,18
79	3,11
80	3,04
81	2,97
82	2,90
83	2,84
84	2,77
85	2,70
86	2,63
87	2,56

Italian	HS OWL
110-Marks	Marks
88	2,50
89	2,43
90	2,36
91	2,29
92	2,22
93	2,15
94	2,09
95	2,02
96	1,95
97	1,88
98	1,81
99	1,75
100	1,68
101	1,61
102	1,54
103	1,47
104	1,40
105	1,34
106	1,27
107	1,20
108	1,13
109	1,06
110	1,00
110 cum	1,00
laude	

At UNITS honours will be awarded upon Master Thesis Board of Examiners' proposal.

- 10.11 All Graduated Students will be issued the set of documents listed below.
 - UNITS will issue:
 - Diploma di Laurea Magistrale in Italian
 - Diploma Supplement in Italian and English
 - In UNITS Diploma Supplement didactic activities carried out at HS OWL will be referred to as "Didactic Activities carried at HS OWL".
 - HS OWL will issue the following documents:
 - Zeugnis (Certificate) in German*
 - Urkunde (Certificate) about the German Master Degree in German
 - Diploma Supplement in German
 - Diploma Supplement in English
 - Transcript of Records (in German*/English)
 - and, if applicable Appendix to Certificate over the final ECTS-Examination-Mark
 - * Course names (Fächernamen) in English
- 10.12 Partner Universities will agree on a common date of issue of these Italian and German documents (the same) which will also report the date of the final examination /colloquium.
- 10.13 UNITS and HS OWL will forward to the Partner University all sets of documents concerning Partner University Home students for their delivery.
- 10.14 Enrolment at UNITS allows Program students to obtain on-line Italian UNITS certificates (list of transcripts, degree) via internet through their personal ID and password.

Article 11 Fees and insurance

- 11.1 In compliance with art. 11 of the Didactic Agreement tuition fees are paid only at Home University.
- 11.2 In Italy every application needs the payment of a stamp duty. Therefore HS OWL students will pay to UNITS the fees as in <u>http://www.cspn.units.it/en/didactic/ddmsp/451-application-form-from-hs-owl-to-units</u>
- 11.3 On the other side, UNITS students will pay to HS OWL the fees for social bodies (students bodies, access to canteen, bus/trains of Lemgo and Bielefeld Region included) for each semester at HS OWL.
- 11.4 With reference to art. 11.3 after enrolling at UNITS, HS OWL Home students, as Italian students, are insured by UNITS against third-party liability and against accidents at work. This insurance is valid only during their didactic activities at UNITS.

Article 12 Evaluation

- 12.1 HS OWL and UNITS agree on common English evaluation forms, which are:
 an Examination Form (to be distributed to students at the end of every course)
 a General Program Form (to be distributed in the 3rd semester), whose results will be discussed with students.
 All forms, prepared by HS OWL will be previously sent to UNITS for their approval.
- 12.2 After having collected forms of didactic activities carried out in Italy, UNITS will send paper forms to HS OWL, who will process all data and communicate their aggregate results to UNITS.

Article 13 Students mobility

- 13.1 Partner Universities seek to find suitable accommodation for Host students, taking into consideration that currently roughly monthly rent rates are:
 - at UNITS about € 250
 - at HS OWL about € 250
- 13.2 All students must abide by all rules, regulations and policies at the Host Institution during their stay at the Host University, fault of which Home University will not be held responsible.
- 13.3 Partner Universities will share information about all benefits provided to their Home students as well as to Host students (e.g. grants, accommodation, etc.).

Article 14 Promotion and Advertising of the Program

- 14.1 UNITS and HS OWL will support each other's activities to recruit students into the Program.
- 14.2 UNITS will advertise the Program and prepare special leaflets that will be shared also with HS OWL.
- 14.3 HS OWL will buy and build an internet home page dedicated to the Program that will be shared with UNITS, in compliance with the technical specifications set out by UNITS / HS OWL and the Italian / German law.
- 14.4 All initiatives related to the Program will mention Partner Universities.
- 14.5 All certificates and diplomas issued by Partner Universities will mention the Program.

Article 15 Condition of Accreditation

15.1 - For German accreditation this Executive Agreement and its Schedules will be forwarded to AQAS Agency by HS OWL at its own expense.

Article 16 Final conditions and temporary rules

- 16.1 The Academic Council will prepare the Program Didactic Regulation in English, which the didactic rules of this Executive Agreement will be part of.
- 16.2 Until the coming into force of the Didactic Program Regulation UNITS and HS OWL Regulations will be applied.
- 16.3 This Executive Agreement has the same validity as the Didactic Agreement. It may be amended and/or extended by mutual consent in writing of the Parties.
- 16.4 This agreement is drawn up in English and signed in two (2) originals by the legal representatives of each Partner University.
- 16.5 The date of this Agreement is that affixed to the last signature.

Università degli Studi di Trieste

Il Magnifico Rettore Prof. Maurizio Fermeglia Hochschule Ostwestfalen-Lippe University of Applied Sciences The President Dr. Oliver Herrmann

Place and date

Place and date

Università degli Studi di Trieste

The Director of the Department of Engineering and Architecture Prof. Paolo Rosato Hochschule Ostwestfalen-Lippe University of Applied Sciences The Dean of the Faculty of Production Engineering and Economics Prof. Reinhard Grell

Place and date

Place and date