



Universidad de Jaén

Acta de la reunión de la Comisión de Coordinación Académica del Master Universitario en Ingeniería Industrial

Fecha: 17 de mayo de 2017
Hora: 09:30 h
Lugar: Escuela Politécnica Superior de Jaén Dependencia, A3-158

Asistentes a la Comisión:

- D. Jesús de la Casa Hernández, Coordinador del Máster de Ingeniería Industrial
- D. Juan Manuel Amézcuca Ogáyar, Organización de Empresas, Márketing y Sociología
- D. Juan Domingo Aguilar Peña, Ing. Electrónica y Automática
- D. Miguel Ángel Rubio Paramio Ing. Gráfica, Diseño y Proyectos
- D. Cándido Gutiérrez Montes, Secretario

Excusan su asistencia:

- D. Pedro Gómez Vidal, Ing. Eléctrica
- D. Francisco Espínola Lozano, Ing. Química

ORDEN DEL DÍA

1. *Estudio y elaboración de propuesta de doble máster internacional "MASTER IN INDUSTRIAL ENGINEERING + MASTER IN MECHANICAL ENGINEERING", entre la Universidad de Jaén y Università degli Studi della Campania "Luigi Vanvitelli" (Napoles, Italia).*

Se concluyen los trabajos iniciados y se confecciona una propuesta de doble máster internacional "MASTER IN INDUSTRIAL ENGINEERING + MASTER IN MECHANICAL ENGINEERING", entre la Universidad de Jaén y Università degli Studi della Campania "Luigi Vanvitelli" (Napoles, Italia), adjunta en Anexo I

2. *Aprobación, si procede, de propuesta del punto 1 para su elevación a Junta de Escuela.*



Universidad de Jaén

Se aprueba elevar la propuesta del punto 1 a la Junta de Escuela.

3. Ruegos y preguntas.

No hay ruegos y preguntas.

Siendo las 11.00 h y no habiendo más temas que tratar se levanta la sesión.

Jaén, 17 de mayo de 2017.

Jesús de la Casa Hernández

Coordinador del Master Universitario en Ingeniería Industrial

Cándido Gutiérrez Montes

Secretario de la Comisión de Coordinación Académica del Master Universitario en Ingeniería
Industrial

ANEXO 1

International Agreement

between

Universidad de Jaén
Escuela Politécnica Superior



Universidad de Jaén

and

**Università degli Studi
della Campania
“Luigi Vanvitelli”**
Scuola Politecnica e
delle Scienze di Base
Dipartimento di Ingegneria Industriale e
dell’Informazione



**UNIVERSITÀ DEGLI STUDI
DELLA CAMPANIA**
LUIGI VANVITELLI

**for the definition of a common didactic offer aimed
at a Double Degree in**

MASTER IN INDUSTRIAL ENGINEERING
MASTER IN MECHANICAL ENGINEERING

Scope of the agreement

This agreement is signed between the University of Jaén (*Universidad de Jaén*, UJA), represented by its Rector, Prof. Juan Gómez Ortega , and the University of Campania “Luigi Vanvitelli” (*Università degli Studi della Campania “Luigi Vanvitelli”*, UCLV), represented by its Rector Prof. Giuseppe Paolisso.

According to the framework agreement signed between the two institutions, this document aims to foster and strengthen the relationships between the two institutions and to reach the objectives of a shared, high level international education.

This agreement determines the code of conduct concerning the double master degree program, which involves the master degrees programs of LM 33 (Ing. Meccanica indirizzo Energetica) at Università degli Studi della Campania “Luigi Vanvitelli” and the master degree program of Master Industrial Engineering at the University of Jaén (UJA).

THE INSTITUTIONS AGREE AS FOLLOWING:

Article I.

The UCLV – Department of Industrial and Information Engineering, and the UJA – Jaen School of Engineering will cooperate, through the exchange of students, teaching and technical staff, to the sharing of a joint didactic offer (a *curriculum* in the remaining) with the final aim to provide a Double Master Degree in the area of Industrial Engineering.

The UCLV and the UJA will grant a master degree in *Mechanical Engineering* and in *Industrial Engineering* respectively to the students that will have followed a shared bi-national didactic offer, according to the statements in Appendix A of this agreement, and according to the national and local laws, in force at each institution.

Article II.

Prof. Alessandro Formisano will be the responsible person for UCLV and Italian affairs, and a person designated by the UJA (DMD-program manager) for UJA and Spanish affairs. A Joint Teaching Board (JTB) will be appointed by both institutions, composed by two professors from each institution. The board will reassess the agreement each 5th year, and on specific request from any of the institutions. In case of need, the aforementioned reassessment could be conducted in an annual basis.

The main contacts concerning the Double Master Degree are:

- UCLV Dean of the Faculty of Mechanical Engineering
- UJA Dean of the School of Engineering in Jaén

Article III.

Each institution will designate through the JTB its own students enabled to attend the courses and achieve the double master degree. Students will apply for the positions according to the rules defined in the Appendix A of this Agreement. Students will be admitted after a selection held by the Didactic Board or the corresponding authority, eventually via remote connection. Enabled students must satisfy the criteria defined by the JTB, detailed in Appendix A of this agreement.

The maximum number of enabled students is fixed to 5 per academic year, for each institution. This figure can be varied according to a mutual agreement between UCLV and UJA, according to the reciprocity criterion.

Article IV.

Students attending the Double Master Degree Program will be enrolled in their home Institution, but will have the same rights and duties of the hosting institution when attending the courses in the hosting institution, and the latter will grant visiting students from the other institution the same services as resident students. Any fee will be paid exclusively in the home institution, apart from taxes required for the recognition and issue of the Master Degrees. For any didactic, administrative or logistic need, each visiting students will be paired to a resident student (a tutor) designated by the JTB.

Article V.

Courses included in the common didactic activities will preferably be taught in English, unless otherwise explicitly agreed between visiting students and professor. Under explicit request, each institution will provide specific local language courses to allow visiting students to improve understanding of didactic material.

Article VI.

The shared didactic program is defined in the Appendix B, where the courses, their organization in semesters and syllabi (through links) agreed to achieve of both institutions are reported, together with any technical detail useful to the management of this agreement.

Appendix B defines:

- The correspondence between the didactic offers of UJA and UCLV;
- The objectives of the didactic path;
- The teaching activities activated in each institution, together with the related ECTS;
- The required mobility for the enabled students;

Appendix C contains the comparison and translation of grades for UCLV and UJA.

Article VII.

The students participating to the Double Master Degree Program will complete part of their study program at UJA and part at UCLV, according to the Appendix B, and according to the local rules of their home institution.

The students participating to the double degree program are obliged to spend at least one semester and at most two semesters (or achieve at least 27 ECTS and at most 60 ECTS) at the partner institution. These studies will replace an equal amount of studies, which normally would be taken at the home institution.

Courses attended and ECTS achieved at the partner institution will be completely recognized by the home institutions, according to the correspondence tables, for the Master Degree at home institution.

Article VIII.

At the end of the bi-national didactic path each student will prepare a Final Thesis (*Lavoro di Tesi* or *Trabajo fin de master*) under the supervision of at least a responsible professor from her/his hosting institution at the time and possibly one professor from the partner University. The Final Thesis will be defended at the hosting institution. Students can request a mixed Italian-Spanish commission.

Article IX.

The two institutions agree and commit to regularly exchange information and material related to the activities in the frame of this agreement, and to have regular discussions and meetings about didactic activities and management of the Double Master Degree, either through presence meetings at one of the institutions, or via remote meetings.

Article X.

In order to achieve the objectives of this agreement, parties commit to assist teachers and students participating in the Double Master Degree Program in matters concerning the lodging and administrative aspects during their stays at the hosting institution.

It is intended that students must take charge of the trip, lodging and other costs related to the stay at the hosting institution. Both parties commit to look for possible grants and financial support to help the students, including Erasmus grants and other founding schemes.

Similar costs for staff mobility will be covered by the home institutions, in the limits of the present laws and rules.

Article XII.

This agreement is valid for 5 (five) years starting from the last signature date of Rectors of the two institutions upon the annual mutual agreement of continuance, and following the approval of the corresponding Academic Senates or equivalent authority for this matter. At the end of the first 5 years, the agreement will be automatically renewed in an annual basis, also upon the annual mutual agreement of continuance, and following the approval of the corresponding Academic Senates or equivalent authority for this matter.

Any modification of the agreement requires the written approval of both institutions, while modifications of the appendixes require the additional written approval of the Joint Teaching Board.

The two institutions can proceed to the renewal of the agreement, after the written approval of both Academic Senates, at least 3 (three) months before the ending date. A dismissal of the Agreement from one of the institutions must be transmitted in a written form to the other, and must in any case not tamper any of the ongoing actions, until their closure.

The lists in the appendixes shall be reviewed, updated and mutually approved **annually** if necessary.

In both institutions 1 ECTS credit equals a students workload of 25 hours, which can include lectures, homework assignments, group work, virtual learning and independent studies plus evaluation/examination according to both institutions own specifications.

Article XII.

This agreement, written in English, Italian and Spanish, is signed in 4 (four) original copies, two of which are kept at each institution.

Signed in Caserta II _____	Signed in Jaén II _____
On behalf of UCLV	On behalf of UJA
The Rector Prof. Giuseppe Paolisso	The Rector Professor _____

Appendix A:

The following policy has been agreed on:

1.1 Application to join the scheme

- The application forms must be provided to the receiving party by the end of April for admittance the following semester.
- Acceptance or rejection of the applications will be provided to the sending party until the end of the semester, in which the student has submitted the application form.
- If the number of applications exceeds the agreed maximum amount of participating students, a priority shall be given to the students who would have the highest benefit from participating in the program. The sending party shall do the prioritization. In case that the number of applicants exceeds the agreed maximum, each side has the right to rank their students according to the criteria established, based on the number of passed examinations and grade point average.

1.2 Pre-transfer preparation (Conducted at, and by the home institution)

- Details of the subjects and courses to be studied, the methods of studying (e.g. length of lectures requirements for self-study) at the partner institution shall be introduced to participating students.

1.3 Introduction program (Conducted at, and by the host institution)

- The students joining the Double Master Degree (DMD) Program shall participate in an introduction program – providing information concerning studying and living in the receiving country – at the receiving institution.

1.4 Financial implications for the students transferring between the two Institutions

- Accommodation: The student will receive support by the home institution to find accommodation but it will be paid by the student him/herself.
- Travel: The students themselves shall cover all expenses international and national.
- Books and other teaching material including printing and copying expenses: paid by the students themselves.
- The students participating in the program shall cover other everyday life expenses. Both institutions can use some of the available funds for financing their own students.
- Health and accident insurance: students must hold a private health (sickness/hospitalization), repatriation, accident, travel and civil liability insurance policy covering the whole period of stay in the host institution.

2. Student privileges / obligations

During the exchange period, the students will have the same privileges and adhere to the same regulations as other Master Degree Program students in the receiving institution. Students will participate in all evaluations/examinations in the courses they have signed up for at the host institution.

3. Admission criteria - required ECTS points for the assignment

Each university permits its students to the DMD-Program, according to the criteria set out in this agreement. Students from the UJA are allowed to join in the program if they have passed half of the credits considered in their Master Degree program, i.e. at least 60 ECTS..

Students from the UCLV are allowed to join in the program if they fulfil more than 90% of the established curriculum in the credit system by the second year (fourth semester, 120 ECTS) and they successfully finished their engineering internship of the fifth semester with the defense of the report. **REVISE THIS PARAGRAPH UCLV!!!!**

All other students are excluded from the DMD program.

UJA students will preferably accredit knowledge in Italian or English (minimum level B1 according to the European Framework of Reference for Languages).

UCLV students will preferably accredit knowledge in Spanish or English (minimum level B1 according to the European Framework of Reference for Languages).

4. Formal regulations for correspondence of didactic activities, including the master degree thesis classification and procedures

Regulations concerning the master degree thesis:

For Spanish students preparing thesis at UCLV:

- The master degree thesis is carried out at the host university in English or Italian language. The topic of the thesis shall be defined at the host university;
- The scientific supervisors could be from both institutions - one from UJA and one from UCLV.
- The workload needed to complete the thesis shall equal to 10 ECTS-credits-
- The Master Degree is achieved through a colloquium, which is 2 ECTS credits worth. The examination can take place at UCLV.

Note: The entire workload of 12 ECTS- credits corresponds to the credit system of the UJA.

For Italian students at UJA:

- The master degree thesis is carried out at the host university in English or Spanish language. The topic of the thesis shall be defined at the host university;
- It is recommended the supervisors to be from both institutions.

- The workload of the master degree thesis will be 12 ECTS-credits and the remuneration of the colloquium is 6 ECTS-credits according to the credit system of UCLV.

5. **Exchange of grades at the end of each semester**

The grades will be given as shown in Appendix C, by using the system in operation in UCLV and UJA, respectively.

Transcript of Records (ToR) shows the performance of the student in the partner University – the courses she/he took, the grades and ECTS credits she/he received. The ToR is issued by the home institution before the student's departure and by Host University until the end of student's training. It will designate a person responsible for the administration of the ToR and their transfer into the partner university.

6. **Organization for conducting (holding) untaken exams at the partner university**

Repeat tests, which cannot be passed during the stay at the partner University, will be written with the same time as the regular testing. The colleague who writes the exam will preferably send the exam material to the contact person (or JTB) of its partner University. After completion of the test the contact person will preferably send back the scanned exam papers to the instructor.

The untaken exams at the partner university are conducted in written form, except for the master degree thesis. The date and time of the examination, as well as the organization for its holding are defined and prepared by the person in charge (supervisor) of the program in the partner University. He/She must inform the examining teacher, too. The content of the exam (questions, tests, tasks) will preferably be sent from the examiner to the person in charge (supervisor). After the end of the exam the person in charge (supervisor) will preferably return the materials to the examiner in a scanned form.

7. **Design for the diplomas**

Each of the Universities shall issue a diploma for a completed educational and qualification **Master Degree** in the higher education, according to the state requirements for the content of key documents, issued by higher educational institutions.

Both institutions will issue a diploma for a master degree in Mechanical Engineering in accordance with the Master Degrees studied.

A general statement in English will be added to the diploma in the form of a diploma supplement. It will contain the academic records for the studied subjects, the received grades and the name of the university, in which they are acquired.

In any case, the student must be an official student of the corresponding institution, i.e. that of the subject being assessed.

8. **Determination of Overall Grade**

The overall grade in the general application is obtained by the formula below:

$$\text{Overall degree} = \frac{\sum_{i=1}^n (\text{Grade}_{UJA,i} \times \text{Credit}_{UJA,i}) + \sum_{j=1}^m (\text{Grade}_{UCLV,j} \times \text{Credit}_{UCLV,j})}{\sum_{i=1}^n \text{Credit}_{UJA,i} + \sum_{j=1}^m \text{Credit}_{UCLV,j}}$$

Where courses studied in UJA are indicated by $i=1,2,\dots,n$, and courses studied in UCLV by $j=1,2,\dots,m$.

9. Date and place of graduation ceremony

Each of the Universities will issue the Master certificates and the diploma supplements when the full documentation, proving the successful conclusion of studying in the partner University, is received in the University. The date and the place for handing out the diplomas are specified according to the schedules and rules of the University. Each side should notify the partner university about that in the beginning of the school year. The diplomas could be mailed if required by the student, but the student will have to pay the postage costs.

Appendix B:

Status 2018, approved annually

Course program for Spanish students (UJA STUDENTS)

Universidad de Jaén		
Course	Type	ECTS
Ingeniería térmica y de fluidos aplicada	OPT.	4
Mecánica técnica	OPT.	4
Instalaciones eléctricas	OPT.	4
Electrónica analógica y digital	OPT.	4
Control automático y electrónica programada	OPT.	4
Gestión de la calidad	COMP.	5
Administración y gestión de empresas	COMP.	5
Complementos de matemáticas	OPT.	5
Complementos de informática	OPT.	5
Cálculo y ensayo de máquinas	COMP.	5
Tecnología química	COMP.	5
Automatización y control	COMP.	5
Sistemas electrónicos e instrumentación industrial	COMP.	5
Sistemas integrados de fabricación	COMP.	5
Tecnología eléctrica	COMP.	5
Tecnología hidráulica	COMP.	5
Instalaciones industriales	COMP.	5
Estructuras y construcciones industriales	COMP.	5
Dirección y gestión de proyectos	COMP.	5
Tecnología energética	COMP.	5
Ingeniería del transporte	COMP.	5
Sistemas integrados de producción	COMP.	5
Recursos humanos y prevención	COMP.	3
Università degli Studi della Campania "Luigi Vanvitelli"		
Course	Type	ECTS
Tecnologia meccanica 2	COMP.	9

Motori a combustione interna	COMP.	9
Prova finale	COMP.	12

Course program for Italian students (UCLV STUDENTS)

Università degli Studi della Campania "Luigi Vanvitelli"		
Course	Type	ECTS
Statistica e calcolo delle probabilità	COMP.	6
Dinamica dei sistemi elettromeccanici e sistemi elettrici industriali	COMP.	9
Costruzione di macchine 2	COMP.	9
Dinamica e controllo di sistemi meccanici	COMP.	9
Modellistica ed analisi termica dei sistemi	COMP.	9
Tecnologia meccanica 2	COMP.	9
Motori a combustione interna	COMP.	9
Impianti industriali 2	COMP.	9
Economia applicata all'ingegneria	OPT.	6
Energetica	OPT.	6
Azionamenti ed Elettronica Industriale	OPT.	6
Prova finale (6)	OPT.	6
Servizi generali di impianto	OPT.	6
Affidabilità e controllo della qualità	OPT.	6
Produzione di energia elettrica da fonti rinnovabili e convenzionali	OPT.	6
Universidad de Jaén		
Course	Type	ECTS
Tecnología química	COMP.	5
Automatización y control	COMP.	5
Ingeniería del transporte	COMP.	5
Trabajo fin de máster	COMP.	12

Appendix C

Comparison and translation of grades for UCLV and UJA

Grade UJA → UCLV		Grade UCLV → UJA		
UJA	UCLV	UCLV	UJA	Assessment Description
10	1.0	1.0	10	Excellent
9	1.3	1.3	9	Excellent
8,5	1.7	1.7	8.5	Very good
8	2.0	2.0	8	Very good
7.5	2.3	2.3	7.5	Very good
7	2.7	2.7	7	Good
6.5	3.0	3.0	6.5	Good
6	3.3	3.3	6	Good
5.5	3.7	3.7	5.5	Sufficient
5	4.0	4.0	5	Sufficient
4 or <4	5.0	4.0	4 or <4	Fail

Italian Grading Scale:

- 1: is given for very good to excellent performance
- 2: is given for good performance
- 3: is given for satisfactory performance
- 4: is given for passed performance: is given for failed performance

Spanish Grading Scale:

- 9 -10: is given for excellent performance
- 7.5-8.9: is given for very good performance
- 6-7.4: is given for good performance
- 5-5.9: is given for satisfactory performance
- <5: is given for failed performance

APPENDIX D IS NOT NECESSARY AS THE CORRESPONDING INFORMATION IS INCLUDED IN THE PREVIOUS ARTICLES. IN ADDITION, IT IS STATED THAT THE LOCAL INSTITUTION REGULATIONS ARE APPLIED TO EACH AND EVERY STUDENT. FURTHERMORE, THE APPENDIX D INCLUDED HEREIN CORRESPONDS TO A DEGREE INSTEAD OF A MASTER AND SHOULD BE ENTIRELY REVISED IN CASE IT IS INCLUDED.

