

**Double Diploma Cooperation Agreement between
Institut National des Sciences Appliquées de Rennes (France)
and
Universidad Politécnica de Madrid (Spain)**

Institut national des Sciences Appliquées de Rennes (hereafter INSA Rennes), established in Rennes, 20 Avenue des Buttes de Coësmes, 35078 Rennes, represented by M'Hamed Drissi, Director of the Institute,

and

Universidad Politécnica de Madrid (hereafter UPM) established in Madrid, Calle de Ramiro de Maeztu No. 7; 28040 Madrid, Spain, represented by Guillermo Cisneros, Rector of the University.

express both their intention to strengthen their institutional cooperation in the field of higher education and to develop student exchanges in keeping with the spirit of the European Union.

Preamble

UPM and INSA Rennes have decided to undertake student exchanges leading to double diploma cooperation, one from each institution including the diplomas described below in Article 1.

This agreement complements the Erasmus+ Agreement signed on March 10th 2014 between the two organizations. The following articles aim to identify the terms of implementing the agreement, the rights and responsibilities of both parties and define the conditions in which students of the two institutions can obtain one diploma from each institution.

Article 1. Diplomas

ETSIST of the UPM is habilitated by the Spanish Ministerio de Educación, Cultura y Deporte (Ministry of Education, Culture and Sport) to deliver the diploma Máster Universitario en Internet of Things (MSc. In Internet of Things) after fulfilling 60 ECTS including the Master Thesis according to the program.

INSA Rennes is habilitated by the Commission des Titres d'Ingénieur (CTI) to deliver the diploma Ingénieur de l'INSA Rennes after fulfilling a minimum of 120 ECTS including the "Projet de Fin d'Études" (last internship semester) according to the program.

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INSA is cohabilitated to deliver the Master by Research diploma i-MARS. The i-MARS master is administered by a consortium of the main universities and graduate schools in Brittany : Université de Bretagne Occidentale (UBO), Supélec, Université de Bretagne Sud (UBS), Telecom Bretagne and National Institute of Applied Sciences, Rennes (INSA).

INSA is cohabilitated to deliver the Master by Research diploma SIF. The SIF master is administered by a consortium of the main universities and graduate schools in Brittany : University of Rennes 1, University of Southern Brittany (UBS), ENS Rennes, National Institute of Applied Sciences, Rennes (INSA) and CentraleSupélec. The program is supported by an agreement with Inria.

This agreement covers the following programmes:

1. UPM Máster Universitario en Internet of Things (IoT)
2. INSA Rennes Electronics and Computer Engineering programme (EII)
3. INSA Rennes Computer Science Engineering programme (INFO)
4. INSA Rennes Communication and Network Systems (SRC)
5. INSA Rennes Master by Research "Ingénierie des systèmes complexes" (i-MARS)
6. INSA Rennes Master by Research in "Informatique" (Computer Science / SIF)

Article 2. Applications, Admission and Requirements

Student applications to the double diploma program should be presented to the exchange agreement coordinator of the home university in the period established for each teaching term. The home university will pre-select the candidates to participate in the program. Applications need to be approved by the hosting university. Students will be admitted to both UPM and INSA Rennes Master's programs, according to each university's prevailing admission criteria and the corresponding regulations.

A maximum of 4 students per year from each organization will be admitted on a full-time basis to this double diploma program (this number can be modified with the agreement of both parties).

The following students will be eligible to the program:

- UPM students having validated the seventh semester of a UPM Bachelor of Engineering Program (grado en ingeniería) program taught at ETSIST.
- INSA Rennes students having validated the eighth semester of the Electronics and Computer Engineering (Electronique et Informatique Industrielle - EII) department, or the Computer Science (Informatique - INFO) department, or the Communication and Network

Systems (Systèmes et Réseaux de Communication - SRC) and having spent at least three full semesters at INSA Rennes in 3rd and 4th years.

Article 3. Administrative and Academic Regulations - Fees

Throughout the study period in the host establishment, the visiting student is subject to the administrative and academic regulations of the host institution. The students following the double diploma program must be enrolled as full-time students in the host institution. They also remain enrolled in their home institution during the whole program. The host institution will ensure that the double diploma program students have the same access to institutional facilities than its own students.

Students in the double Degree Programme are liable for full tuition fees at their Home Institution and exempt from fees at the host Institution. The travel, residence, and medical fees are at the student's own expense. Students must comply with the laws of the host country, especially regarding medical coverage or any other compulsory insurance. For example UPM students will have to pay the CVEC (contribution à la vie étudiante et de campus, 91€ in 2019) in France.

Article 4. Tutoring the Students

The host institution will name a member of the teaching staff to tutor each student. The teacher will act as intermediary with the home institution during the entire study period at the host institution. The visiting students will have access to all the study resources available to students of both institutions.

Article 5. Program Implementation

The program implementation is shown visually in figures 1 to 3.

a) For UPM students moving to INSA

UPM students entering the double diploma program can choose 3 different paths at INSA:

1. Students can enroll in the EII or SRC department pursuing the INSA Engineering Diploma. They will have to attend 2 semesters at INSA, and then follow additional UPM credits, before or while doing a co-supervised final internship, defended as the final



master thesis (TFM) for UPM and as the *projet de fin d'études (PFE)* for INSA (Figure 1).

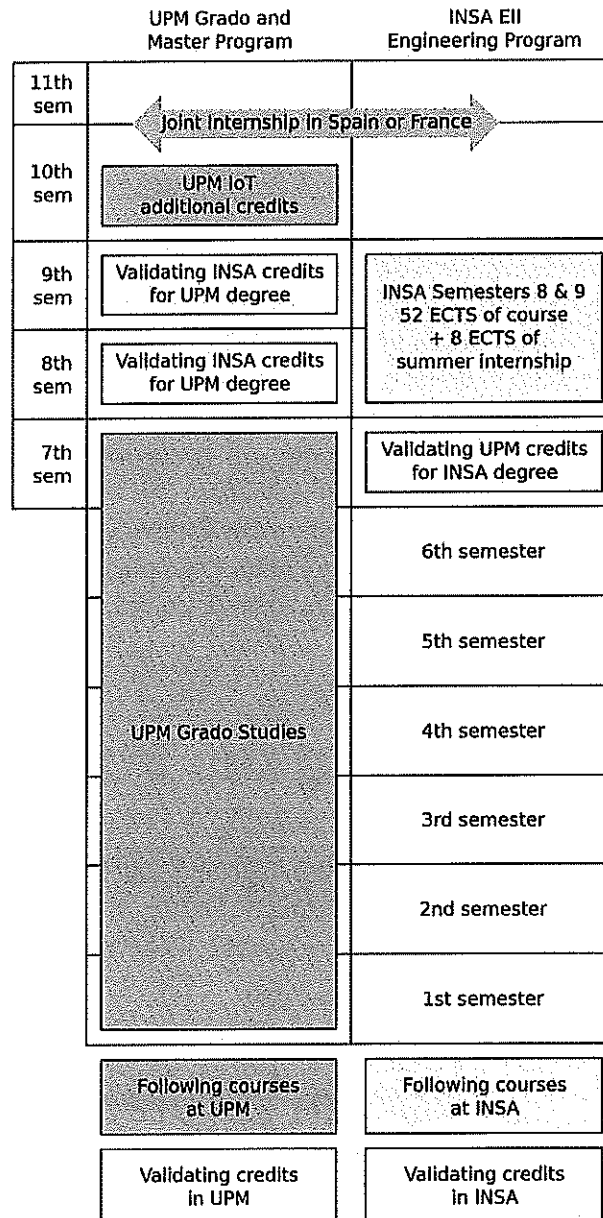


Figure 1: Students from UPM moving to INSA EII Engineering Diploma.

2. Students can enroll in the SIF master by Research programme¹. They will have to attend 2 semesters at INSA, and do a co-supervised master thesis (Figure 2).
3. Students can enroll in the I-Mars master by Research programme². They will have to attend 2 semesters at INSA, and do a co-supervised master thesis (Figure 2).

¹ <http://master.irisa.fr/>

² http://www.rennes.supelec.fr/ren/fi/seri/master_i-MARS.en.html

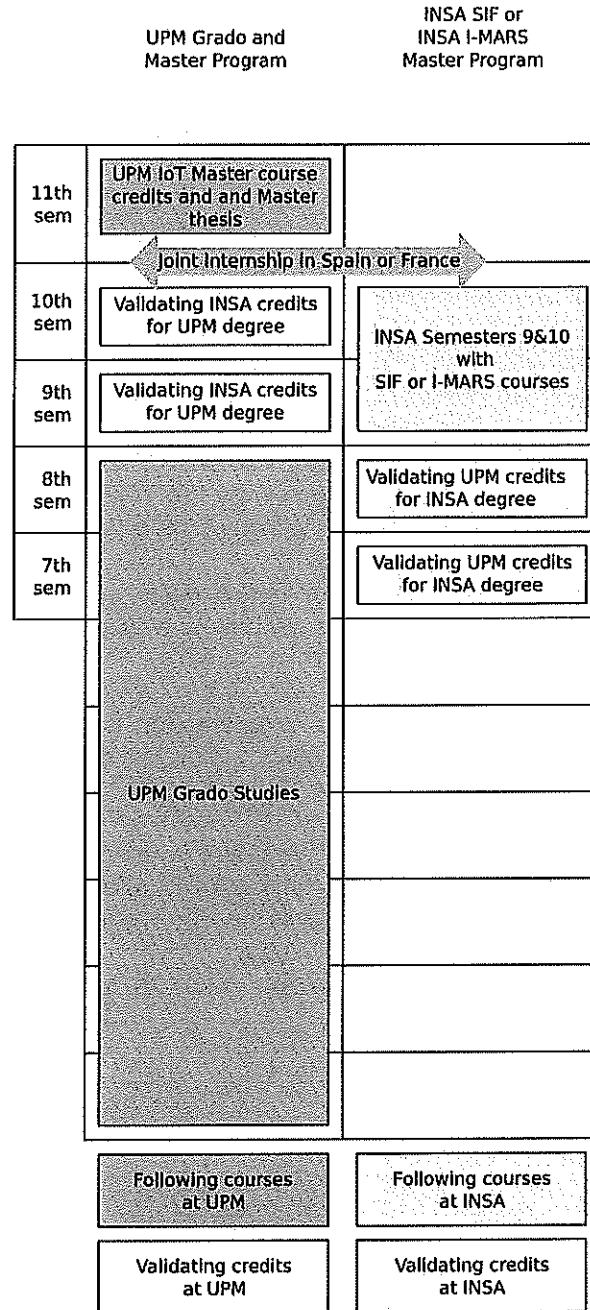


Figure 2: Students from UPM moving to INSA SIF master, or INSA i-MARS master.

The implementation of the 3 different paths is described below.

- Spanish students pursuing the INSA Electronics and Computer Engineering (EII) or Communication and Network Systems (SRC) Diploma: In the 7th semester, the UPM students admitted to the double diploma program follow the 7th UPM grado semester. This total of 30 ECTS will be validated as the 7th semester at INSA. After that the students follow the 8th and 9th semester "parcours formation initiale EII" at INSA, which are validated at



UPM as master's level courses, as shown in Figure 1. On the 8th semester, students defend orally (potentially remotely) their Undergraduate Final Thesis (PFG), before a Committee of the UPM based on their work on the summer internship between 8th and 9th semester.

After these, additional credits are followed at UPM, as well as the final internship that can be co-supervised by UPM and INSA and evaluated by a Committee of UPM. The internship should be organised so that students can submit a master's thesis according to UPM rules and INSA PFE rules. This Master's Thesis will be validated at INSA with the grade given by the UPM Committee, according to the official Transcript of Records, and after the Master's Thesis document has been received by UPM. When these conditions are met, the student is eligible to obtain the Master degree in IoT at UPM. After the completed master's thesis, and if the internal diploma regulations of INSA are met, the UPM students are eligible to obtain the INSA Engineering Diploma.

French Engineering diploma regulation rules impose :

- a minimum of N=28 weeks of internship during the whole studies. In the case of research oriented profile student, a part of the N=28 weeks can be done in a public research laboratory, with a minimum of 14 weeks in a private or public company.
- an English language proficiency proven by the TOEIC (B2 level, for example 800 points in 2019). The UPM students will have the exam at INSA in Semester 8 or 9, and INSA Rennes will pay one test.
- a French language proficiency for non French-speaking students: certification DELF, level B2. The UPM students will have the exam at INSA in Semester 8 or 9, and INSA Rennes will pay one test.

2. Students admitted to the double diploma program and enrolling in the SIF Master by Research program will first have to make validate their last 60 ECTS credits at UPM (UPM Grado Semesters 7 and 8). After that, the students follow 2 semesters at INSA (9th and 10th semesters) as specified for the second year of the SIF program, which are validated at UPM as master's level. Part of the 11th semester is used to follow additional credits at UPM and produce a master's thesis according to UPM rules. This will make the students eligible to obtain an UPM Master diploma and the SIF Master by Research diploma.
3. Same as above, with the I-Mars Master instead of the SIF Master.

b) For INSA students moving to UPM

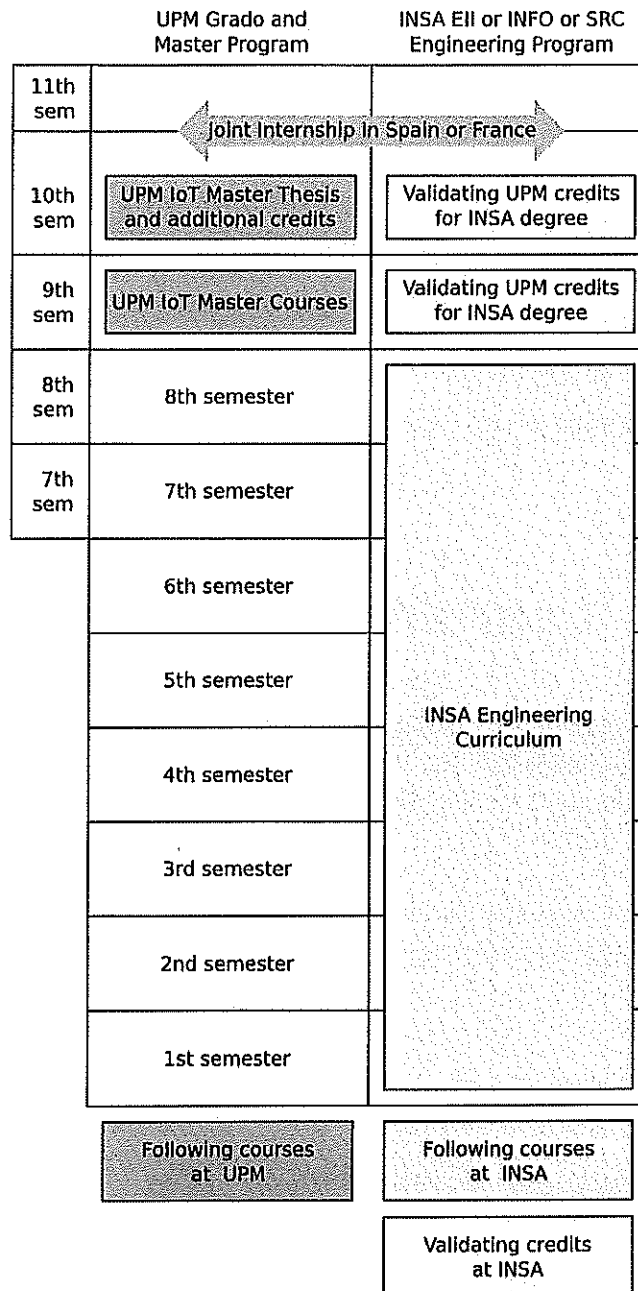


Figure 3: Students from INSA Rennes EII, INFO or SRC moving to UPM

The 7th and 8th semester studies at INSA are validated for the UPM Bachelor program.

During the 9th semester, INSA students entering the double diploma program are admitted to the first semester of the IoT master's degree program fulfilling 30 ECTS at UPM. This semester is validated at INSA.

During the 10th semester the student must develop the Master Thesis, validated as the Final Studies Project (PFE) at INSA and take additional UPM credits. After this semester the student defends the Master Thesis orally (potentially remotely) that is assessed by a committee of

INSA. This Master's Thesis will be validated at UPM with the grade given by the INSA Committee, according to the official Transcript of Records, and after the Master's Thesis document has been received by UPM. When these conditions are met, the student is eligible to obtain the Master degree in IoT at UPM.

French Engineering diploma regulation rules impose a minimum of N=28 weeks of internship during the studies. In the case of a research oriented student profile, a part of the N=28 weeks can be done in a public research laboratory with a minimum of 14 weeks in a private or public company. An additional Internship might be asked to students who do not fulfil the above rules after the 10th semester at UPM.

This implementation scheme is also described in Figure 3.

Article 6. Learning Agreement

A learning agreement signed by INSA Rennes, UPM and the student entering the program, will detail the courses and activities that the student should fulfill at each institution to validate the program. Any subsequent modification to this agreement needs to be accepted by the three parties.

The learning agreement must specify the whole higher-education curriculum of the student, past and future. It must be signed on both sides for each student.

Article 7. Continuation, Withdrawal, Termination of Candidature

Students of the double diploma program are required to follow the rules and regulations of both UPM and INSA Rennes students, including the conditions for continuation, withdrawal and termination of studies. If a student wishes to leave the double diploma program, he/she will be free to pursue a regular degree at his/her home institution, provided that existing regulations permit it.

Article 8. Governing Law

This Cooperation Agreement shall be governed by and construed in accordance with the laws of Spain and France



Article 9. Prevention and Safety

The host institution accepts no responsibility or liability whatsoever with regard to the extra-curricular activities that the students in the double degree program choose to attend at their entire responsibility.

Article 10. Program Organization

Representatives from the institutions shall meet, where possible, once a year in order to:

- assess the educational benefits of the double diploma program,
- discuss the academic achievements of the program students,
- discuss new actions to promote the double diploma program.

In case of insufficient results from a student or failure to comply with the student duties, this student may be excluded from the program and reintegrated to his/her home institution program.

Article 11. Graduation and Diploma

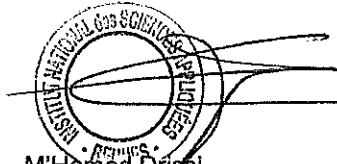
The double diploma program described in Article 5 is validated by both institutions for obtaining the diploma of each institution (Article 1). The internal regulation of each institution defines the requirements to obtain each diploma. The two diplomas will be awarded in the same academic year. The projected dates for granting both diplomas will be set in the learning agreements.

Article 12. Effective Date and Termination

This Cooperation Agreement will become effective upon signing and shall remain in effect for a period of 4 (FOUR) years from the date of the last signature. Both partner institutions may at any time review this Cooperation Agreement and the actions taken under it. Modifications to this Cooperation Agreement are made by mutual agreement and confirmed through an exchange of letters. The Cooperation Agreement may be extended by mutual consent by the two parties.



The Cooperation Agreement may be terminated by one of the two institutions. The termination notice period is one year. Both parties agree that in the event of any party wishing to terminate the Cooperation Agreement, students enrolled in the double degree program are allowed to proceed and graduate under their home institution program.

For INSA Rennes

M'Hamed Drissi
Directeur

Date: 16/12/2019

For UPM

Guillermo Cisneros
Rector

Date: 13.01.2020

