



Cooperation Agreement
CONCERNING DOUBLE DEGREE MASTER'S PROGRAMME COLLABORATION

between

Aalto University Foundation sr.
Aalto University School of Electrical Engineering,
Finland

and

UNIVERSITAT POLITÈCNICA DE CATALUNYA, BarcelonaTECH –
School of Telecommunications and Aerospace Engineering, Castelldefels,
Spain

Preamble

This Agreement has been concluded by and between Aalto University Foundation sr., operating as Aalto University, School of Electrical Engineering (hereinafter Aalto) and Universitat Politècnica de Catalunya School of Telecommunications and Aerospace Engineering (hereinafter EETAC-UPC) hereinafter referred to as Parties, in order to establish a double degree programme collaboration Petri Suomala, Vice president, education Aalto University and Francesc Torres Torres, Rector Universitat Politècnica de Catalunya.

This Agreement is compiled in accordance with

- Universities Act 558/2009, Finland
- Government Decree on University Degrees, Finland
- Aalto University rules and regulations regarding teaching and studying currently in force

and

- Article 20 of Organic Law 6/2001 on Universities of 21 December, Spain
- Articles 67 and 68 of Statutes of the Universitat Politècnica de Catalunya, which were approved by Governing Council Agreement, 43/2012, approving the modification of the Statutes of the UPC and the publication of the full text (in Official Gazette of the Catalan Government no.6140 of 1 June 2012, amended in Official Gazette of Catalan Government no. 6257 of 20 November 2012)

Article 1. Purpose and Scope of the Agreement

The purpose of this Agreement is to establish and to agree on the principles and terms of the double degree programme collaboration (hereafter Programme). The Programme will give selected students from both institutions the opportunity to acquire the Master of Science in Technology from Aalto and the Master's degree of Applied Telecommunication Engineering & Management from EETAC-UPC, through a planned programme of courses taken at both institutions designed to meet all curriculum requirements of both institutions.

This agreement is implemented within the legal requirements of both Parties. The provisions of this agreement shall not be construed so as to diminish the fully autonomous position of either Party.

Article 2. Management of the Programme

The degree programmes responsible for implementing the Programme are:

At Aalto: **Master's Programme in Computer, Communication and Information Sciences, selected study tracks as per Annex 1**

At EETAC-UPC: **Master's degree of Applied Telecommunication Engineering & Management**

Each institution shall nominate one academic and one administrative representative for the Programme. The representatives will be responsible for following the Programme and for ensuring that measures are taken in accordance with this Agreement. The representatives shall ensure advisory and other academic and administrative services to the students participating under this Agreement. Names and contact details of these representatives are in Appendix 1 to this Agreement.

These persons shall have the following functions, without prejudice to any other functions assigned to them:

- a) To solve any problems that may arise regarding the interpretation or application of the agreement.
- b) To follow up the implementation of the agreement and to ensure that measures are taken in accordance with this Agreement.
- c) In the event of the agreement's termination, to propose its continuation or the manner and deadline for completing the activities already under way.
- d) To establish and organise the activities that are the object of the agreement.
- e) To promote, draft and propose the content of the various specific agreements that are necessary for the implementation of this framework agreement
- f) To provide advisory and other academic and administrative services to students participating under this Agreement

Article 3. Terms for Implementing the Programme

3.1. Extent and Structure

The Programme is a two-year programme (120 ECTS) at master's level leading to two degree certificates, one from each institution. The Programme structure and content fulfil the requirements that both Aalto and EETAC-UPC have for their Master's programmes, in accordance with national

regulations. Students study at both universities according to the agreed curriculum and mobility plan. Programme structure and requirements are defined in Appendix 1.

The language of the Programme is **English**.

Students apply to the Programme during their first year in the local Master's programme/studies (defined in Article 2 above). As a rule, the first year university is called a student's "home university" and the second year university is the "host university". Students study first year (60 ECTS) at the home university and move to the host university for the second year of studies (60 ECTS, i.e. courses + master thesis).

The intended annual quota of students is maximum 2 students per institution. The number of students may be adjusted by mutual agreement. It is understood that a balance in the number of students is sought over the Agreement period.

The Parties have agreed to the mutual recognition of credits for incoming students from the partner university. Credit recognition is based on internal rules and regulations of partner universities and documents proving the correspondence with the content, ECTS credits and period of study, stated at the transcript of records, provided by the partner university.

The maximum credit transfer between Aalto and EETAC-UPC is 60 ECTS credits.

3.2. Student Selection and Admission

The selection and admission of students to the Programme will be conducted in accordance with the following principles:

- The Parties shall agree on the application procedure, including application deadlines, selection criteria and student quota. Admission requirements and procedures will be reviewed annually.
- Students must meet the admission criteria of the Master's programmes of both institutions.
- Students apply to the Programme at their home institution and the home institution is responsible for screening the applications and nominating candidates. The home institution provides the host institution a list of eligible and selected candidates. The admission of students to the Programme is always at the discretion of the host institution and subject to its admission decision.
- Students are selected and admitted to the Programme based on their academic background and results, motivation and language skills. Students must demonstrate a sound command of spoken and written English, at least the level B2 (CEF, Common European Framework).
- Students shall have a home (sending) institution and a host (receiving) institution defined.
- Prerequisite for the mobility from the home institution to the host institution is that the student has successfully completed all compulsory courses of the home institution.

Details of admission procedure are in Annex 1.

3.3. Financial Issues

Both institutions will follow their national policies and university regulations regarding tuition fees. All students must register and pay tuition and other applicable fees at their home university for the whole duration of their studies.

- At Aalto, incoming students from UPC must pay the compulsory Student Union fee.

- At UPC, incoming students from Aalto must pay the compulsory fee for the delivery of the UPC diploma.

While attending the host university, students are exempt from paying tuition to the host university.

3.4. Rights and Status of the Students

Students participating under this Agreement shall be enrolled as degree students. Students shall have the same rights and obligations as degree students in the respective institutions. Students will be admitted to the Programme on a full-time basis.

During the mobility, students will be responsible for covering the travel costs to the host country and living costs during their stay, including accommodation, books, equipment, consumables, health and travel insurance, student union fee (if applicable) and other personal expenses arising out of the exchange

Students participating in the Programme will be entitled to participate in any introductory programme (including language courses) that may customarily be arranged for international students at the host institution

3.5 Master's Thesis and Degrees

The Programme includes a master's thesis work done under co-supervision from both Parties. The thesis shall be prepared, performed and defended according to the rules and regulations of both Parties. The topic of the Master's thesis must always be approved in advance by both Parties. As a rule, the thesis is carried out at the host university, but exceptions to this rule may be negotiated on a case-by-case basis. The thesis is written in English. The thesis must be defended twice, once at each institution, following the rules at each institution; the evaluation at each institution is independent and will follow the institution's grading scale.

The successful completion of the Programme after all requirements have been fulfilled will lead to the awarding of a double degree: one from Aalto and one from EETAC-UPC. The degree certificates of both universities will be accompanied by a Diploma Supplement and a transcript of records, which will give information on the structure and contents of the Programme.

3.6 Control of results

At the end of the academic year, the host institution shall send to the home institution a copy of each student's transcript in English. The parties agree that exams/courses shall be graded and awarded credits according to the rules of the institution where the exam/course is carried out.

If a student does not earn all of the required credits at the host institution within the established period, under the agreement of both institutions an additional semester may be authorized to the student. In case that the student cannot pass the 60 ECTS at the host university after the authorized period, the double degree diploma from the host institution cannot be issued.

Article 4. Commitment and Responsibilities

The parties to this Agreement commit themselves to implementing the Programme and maintaining the content of the Programme substantially in the form approved at the time of signing of this Agreement. Furthermore, the Parties to this Agreement shall

- Provide the necessary means, resources and prerequisites to implement and operate the Programme.
- Be responsible individually and collectively for the quality of the Programme and for the high standards of degrees.
- Provide academic and administrative support and tutoring to the double degree students, ensuring that appropriate library and computer facilities are available for students.
- Keep accurate records of courses/credits completed and provide the double degree students an official transcript of their records.
- Provide host institution full information on the courses that students have taken in their home institution in order to coordinate the course choice at the host institutions.
- Provide information for students on admission, applying, student services and accommodation.
- Collect feedback from double degree students, teachers and other relevant stakeholders, analyze it jointly and use it for the further development of the Programme as part of the quality assurance.
- Promote the Programme in an appropriate way. Therefore, each institution authorizes the partner institution to use its name and logo for purposes related exclusively to the Programme.

Each party shall bear their own costs that may incur in the implementation of this Agreement.

Article 5. Intellectual property rights

This Agreement does not affect the institutions' or the student's ownership to any intellectual property and does not constitute or give rise to any transfer of ownership or user rights, unless specifically otherwise agreed in connection with a program or a course. In the event that there is a patentable invention, the parties shall always make separate agreement on the subject matter in writing.

Article 6. Applicable Law and Dispute Resolution

Any dispute arising out of this agreement shall be resolved amicably. Any dispute that cannot be solved by the responsible Departments shall be subject to negotiations between the Presidents of the Parties. In the event that amicable solution is not possible, the forum for the dispute shall be defendant's court. In case of dispute about interpretation of terms which has not been resolved amicably, this agreement shall be interpreted by the laws of the defendant (excluding its choice of law provisions). For the sake of clarity, students must always abide by the host university's laws and regulations.

Article 7. Limitation of Liability

No party shall be responsible to any other party for neither any direct nor any indirect or consequential loss or similar damage such as, but not limited to, loss of profit, loss of revenue or loss of contracts, provided such damage was not caused by a willful act or by gross negligence.

Each party shall be solely liable for any loss, damage or injury to third parties resulting from the performance of the said party's obligations by it or on its behalf under this agreement or from its use of data or intellectual property rights. For the sake of clarity, neither institution is responsible for student's acts or neglects.

No party shall be considered to be in breach of this agreement if it is prevented from fulfilling its obligations under this agreement by force majeure. Each party will notify the other party/parties of any force majeure without undue delay.

This Agreement does not create an obligation for either party to provide other resources than as specified in this Agreement. No supplementary funding commitments are created for either party by this Agreement.

Article 8. Data Protection

Each party undertakes to take all the necessary measures required by the legislation to ensure confidentiality and protection of personal data, and agrees to use and/or process the personal data only for the purpose that is necessary for managing and administering the exchange programme.

All data considered as personal data shall be processed in accordance with national laws and regulations including General Data Protection Regulation (EU) 2016/679 (GDPR).

Article 9. Effective Date, Amendment and Termination

This Agreement will become effective from the date of the last signature and shall remain in effect for a period of four years and four student intakes during the academic periods between 2021/22 and 2024/25. The Agreement may be amended by mutual written consent of both Parties. The Agreement may be terminated by the appropriate authorities of either Party giving one year notice to the other Party in writing. Both Parties agree, that in the event of either party wishing to terminate the Agreement, the students enrolled in the Programme will be allowed to proceed and graduate under the terms of this Agreement.

Article 10. Use of Corporate Image

Each partner grants its consent to using their institutional logo, whether electronic or printed, for the only purposes of marketing and promoting this double degree agreement and as separately instructed by the logo owner.

Any other cases in which the partners believe it is necessary to use the partner's logos, it must ask for the prior authorization of the University, through the Communication Service or similar, specifying the application in which they wish to use the logo (whether graphic or electronic or any other format) and for what they wish to use it.

The authorization, which must always be in writing, shall specify the use(s) being authorized, as well as the period during which the authorization shall remain valid, which must never be later than the period of validity of this agreement.

Article 11. Transparency

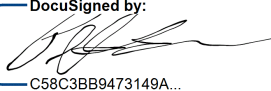
According to the laws that regulate “Transparency, access to public information and good governance”, the UPC will publish information on the signatory parts, including the economic conditions and all modifications that arise in future, related to this Collaboration Agreement.

Article 12. Original Copies of the Agreement, Dates and Signatures

This agreement is drafted in English. It may be signed digitally or in a scanned format and executed by exchange of pdf:s.

Signatures

Date: 22 April 2021
Place: kangasala

DocuSigned by:

C58C3BB9473149A...
Petri Suomala
Vice President, education
AALTO UNIVERSITY

Date: 27 de abril de 2021
Place: Barcelona

DocuSigned by:

280F633218B34BF...
Francesc Torres Torres
Rector
UNIVERSITAT POLITÈCNICA DE CATALUNYA

Date: 19 April 2021
Place: Espoo

DocuSigned by:

5CE42191E0CE494...
Jyri Härmäläinen
Dean
School of Electrical Engineering
Aalto University

Date: 23 de abril de 2021
Place: Castelldefels

DocuSigned by:

8123B0231A06490...
Luis Alonso Zárate
Dean
School of Telecommunication and
Aerospace Engineering, UPC

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Annex 1

Student admission to double degree Master's programme

Students are admitted to the local Master's programme defined in Article 2 according to the local admission criteria. The application procedure described below applies to the student selection **process from home university to host university for the second year studies**. The possible updates for the Annex 1 can be agreed by email for each application round. The parties of the agreement are responsible for informing the partner of possible modifications of the admission criteria and curriculum annually.

1. Aalto - Incoming students from EETAC-UPC to Aalto

Application schedule, application and selection procedure, selection criteria, student quota

Application schedule

The application period to the double degree programme will be organized in accordance with the main admission period of Aalto's University's Master's programmes, typically during December-January. The partner university will be informed about the exact dates yearly.

Application and selection procedure for second year students

The home university (**EETAC-UPC**) of the student nominates its students for the double degree programme. The online application form for double degree studies will be open during the application period. In addition to the online application form, the applicants are asked to submit the following, required application documents:

- 1) An officially attested copy of the Bachelor's degree or a certificate of equivalent studies and its authorized translation.
- 2) Official transcript of records (Bachelor and 1st year of Master) listing completed university studies and its authorized translation.
 - a. In addition, the double degree applicants are requested to submit a list of courses to be completed during the spring semester.
- 3) Curriculum vitae
- 4) Copy of passport or ID card

Successful applicants must demonstrate good English language skills. The language requirements and the application documents relating to them are defined annually. The application documents must arrive at Aalto University Admission Services before the application deadline. After the eligibility check, eligible applications are sent to the School of Electrical Engineering for the academic evaluation.

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Annex 1

The selected double degree students will be notified about their acceptance to Aalto University by e-mail and receive a letter of acceptance with detailed instructions on practical issues regarding studies at Aalto University.

Selection criteria

Student selection decisions are made based on the academic results, academic background, and motivation. In addition, students selected to the double degree programme must have completed their first year studies at their home university with good grades.

Student quota

In the application round 2020, the maximum student intake from partner university EETAC-UPC to Aalto is the following:

Major: (ELEC) Communications Engineering: 2

Additional intake can be considered on a case-to-case basis.

The student quota will be confirmed annually.

Aalto - Curriculum: Major Communications Engineering

First year studies (Aalto as home university)

1st year follows curriculum of major "Communications Engineering" 60 ECTS

Compulsory courses (except Masters thesis process) 28 cr + optional courses from the expertise areas to fulfill 60 cr)

<https://into.aalto.fi/display/enccis/Communications+Engineering+%28CE%29+2020-2022>

Second Year studies (Aalto as a host university)

The student makes a Personal Study Plan and completes 30 ECTS credits of the major Communications Engineering studies as agreed with the Professor in charge of track of the major. The personal study plan is confirmed by the academic coordinators of the double degree Programme of both Parties.

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Annex 1

Semester 1, year 2

<i>CODE</i>	<i>NAME</i>	<i>ECTS</i>	<i>PERIOD</i>
Major: Communications Engineering Tracks: <i>Communications ecosystem (ECO), Internet technologies (IT) & Wireless Systems (WS)</i>			
Compulsory courses (15 credits):			
ELEC-E0210	Master's Thesis Process	2	I-III / 2
ELEC-E7910	Special Project in Communications Engineering (topic is agreed based on students track: ECO, IT or WS)	10	I-V / 2
	Language course	3	I-II / 2
Optional courses (choose 15 credits):			
ELEC-E7330	Laboratory Course in Internet Technologies (recommended for IT students)	5	I-II / 2
ELEC-E7230	Mobile Communication Systems (recommended for WS students)	5	I / 2
ELEC-E7820	Operator Business P (recommended for ECO students)	5	I / 2
	Any course(s) from Communications Engineering major".		I-V / 2

Semester 2, year 2

	<i>Master's Thesis (co-supervised)</i>	30	II-V
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Aalto School of Electrical Engineering Contact persons

Agreement related issues: Anita Bisi, International Relations Manager, anita.bisi@aalto.fi

Responsible professor: Communications Engineering: professor Riku Jäntti riku.jantti@aalto.fi

Admission and selection: ELEC, Planning Officer Eeva Halonen, eeva.halonen@aalto.fi

Study coordination: CCIS Planning officer Eeva Halonen, eeva.halonen@aalto.fi

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Annex 1

2. EETAC-UPC - Incoming students from Aalto to EETAC-UPC

Application schedule, application and selection procedure, selection criteria, student quota

Application schedule

The application period to the double degree programme will be organized in accordance with the main admission period of MASTEAM programme, typically during January. The partner university will be informed about the exact dates yearly.

Application and selection procedure for second year students

The home university (**Aalto**) of the student nominates its students for the double degree programme. The online application form at EETAC-UPC for double degree studies will be open during the application period, typically during April. In addition to the online application form, the applicants are asked to submit the following, required application documents:

- 1) An officially attested copy of the Bachelor's degree OR Technical Engineering Degree in Telecommunications or ICT (Information and Communication Technologies) Engineering, specializing in Telecommunications Systems, Telematics (Computer Networks), Electronic Systems, Audiovisual Systems, or Science & Technologies of Telecommunications, or an official MSc Degree in Telecommunications or ICT Engineering. Any of the aforementioned degrees must have been obtained in an educational institution from a state belonging to the European Higher Education Area (EHEA).
- 2) With complementary coursework, other engineering degrees from EHEA or Telecommunications/ICT engineering degrees from outside EHEA. A Validations Committee will review the applications and may propose complementary coursework.
- 3) Official transcript of records (Bachelor and 1st year of Master if available) listing completed university studies and its authorized translation.
 - a. In addition, the double degree applicants are requested to submit a list of courses to be completed during the spring semester.
- 4) Curriculum vitae
- 5) Copy of passport or ID card

Language requirements: English language certification – Level B2 or higher. The language requirements and the application documents relating to them are defined annually. The application documents must arrive to UPC Admission Services before the application deadline (<https://eetac.upc.edu/en/mobility/incoming/procedures-incomings/admission-procedure>).

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Annex 1

Selection criteria

Student selection decisions are made based on the academic results, academic background, and motivation. In addition, students selected to the double degree programme must have completed their first year studies at their home university with good grades.

Student quota

In the application round 2020, the maximum student intake from partner university Aalto to EETAC-UPC is the following: 2

Additional intake can be considered on a case-to-case basis.

The student quota will be confirmed annually.

EETAC-UPC – Curriculum: Master in Applied Telecommunications and Engineering Management (MASTEAM)

First year studies (UPC as home university)

Mandatory courses (15 ECTS) plus optional course (45 ECTS). All courses are delivered in both semesters. <https://eetac.upc.edu/en/study/masters-degrees/masteam> - Program Structure

Second Year studies (UPC as a host university)

The student makes a Personal Study Plan and completes 15 ECTS from mandatory courses and other 33 ECTS credits chosen among a list of optional courses. The personal study plan is confirmed by the academic coordinators of the double degree Programme of both Parties.

Semester 1, year 2

CODE	NAME	ECTS	PERIOD
Compulsory courses (15 credits):			
300257 OPTIM	Optimization for Applied Engineering Design	3	A1
300258 NETENG	Network Engineering	3	A1
300259 WICOM	Next Generation Wireless communications and IoT	3	A1
300260 SENSORS	Sensors and Interfaces	3	A1
300261 ENTREP	ICT-based Entrepreneurship	3	A1

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Optional courses (choose to fulfill 15 credits):			
300262 OPTICAL	Optical Networks for Cloud-Based Services	3	A2
300265 IMAGE	Applied Image processing	3	A2
300267 ARASM	Augmented reality and smart objects	3	A2
300269 BODYSEN	Body sensor networks	3	A2
300270 CREA	Creativity and engineering	3	A2
300274 BUSINESS	Project on ICT-based business models	3	A2
300272 NETAUTH	Network security authentication and authorization	3	B2
300273 SDR	Software defined radio	3	B2
300268 SERVICE	Service engineering	3	B2

Semester 2, year 2

Optional courses (choose to fulfill 18 credits, must be different from previous semester):			
300262 OPTICAL	Optical Networks for Cloud-Based Services	3	A2
300265 IMAGE	Applied Image processing	3	A2
300267 ARASM	Augmented reality and smart objects	3	A2
300269 BODYSEN	Body sensor networks	3	A2
300270 CREA	Creativity and engineering	3	A2
300274 BUSINESS	Project on ICT-based business models	3	A2
300266 LOWPOW	Low power systems with energy harvesting	3	B1
300263 IOT-IP	IoT & Ubiquitous IP	3	B1

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Annex 1

300264 5GPLAN	5G mobile network planning	3	B1
300275 5GNET	Network Support for 5G	3	B1
300271 BIGDATA	Big data & Data mining	6	B1 + B2
300272 NETAUTH	Network security authentication and authorization	3	B2
300273 SDR	Software defined radio	3	B2
300268 SERVICE	Service engineering	3	B2
Compulsory (12 credits):			
<i>Master's Thesis (co-supervised)</i>		12	B2

EETAC-UPC - Contact persons

Agreement related issues: María Jesús Melo, Administrative International Coordinator, mjesus.melo@upc.edu

Responsible professor: Mario García Lozano, WiComTec Associate Professor, mariogarcia@tsc.upc.edu

Admission, Selection and Study coordination: Enrica Zola, Academic International Coordinator, eetac.international@upc.edu

3. Grading scales at Aalto and UPC

The following table will be used **as guidance** for the recognition of partner university marks within the national degree (courses and thesis):

ECTS	Aalto	UPC
A	5	9-10
B	4	8
C	3	7
D	2	6
E	1	5
F, fail	0, failed	<5