

Appendix A:

Dual Degree Agreement between

Instituto Superior Técnico (IST) and Kungl Tekniska Hogskolan (KTH)

Duration: Academic Year 08/09 to 10/11

Degree programme at IST:	Electrical and Computer Engineering (MEEC) Major: Telecommunications (120 ECTS)
Degree awarded:	M.Sc.
Language of instruction	English
Entrance admission criteria:	Bachelor of Science in Electrical and Computer Engineering Sciences
Degree programme at KTH:	Master Program in Wireless Systems (MWS) (120 ECTS)
Degree awarded:	Master of Science (2 years)
Language of instruction	English
Entrance admission criteria:	Bachelor of Science in Electrical and Computer Engineering Sciences
Number of students	2

Schematic Study Plan

Option 1			
Year	Institution	Studies	Remarks
1	KTH	Compulsory and elective courses	60 ECTS
2	IST	Courses + Master Thesis (co-supervised)	30+30 ECTS
Option 2			
Year	Institution	Studies	Remarks
1	IST	Compulsory and elective courses	60 ECTS
2	KTH	Courses + Master Thesis (co-supervised)	30+30 ECTS
The schematic study plan is applicable to students originated from KTH or IST indifferently. The detailed study plan must be defined by the academic coordinators for each student.			

Contacts:

<i>Academic responsible for the programme (MEEC):</i> Prof. António Rodrigues	<i>Academic responsible for the programme (MWS)</i> Prof. Mats Bengtsson
<i>Contact person:</i> Sílvia Santos, International Office (silvia.santos@ist.utl.pt)	<i>Contact person</i> Prof. Mats Bengtsson (mats.bengtsson@ee.kth.se)

Signatures:

Date: November 30 th , 2007	Date: November 30 th , 2007
For IST	For KTH
Prof. Carlos Matos Ferreira President, Instituto Superior Técnico	Prof. Dean, Kungl Tekniska Hogskolan

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FIRST YEAR STUDIES	
IST	KTH
Autumn Semester (minimum 30ECTS)	(minimum 60ECTS)
Radio Wave Propagation (6 ECTS)	Mandatory courses (36 ECTS):
Wireless Telecommunications Systems (6 ECTS)	EQ1220, Signal Theory, 7.5 ECTS
Digital Transmission (6 ECTS)	EQ2310, Digital Communications, 9 ECTS
Data Coding and Compression (6 ECTS)	IK2500, Radio Communication, Basic Course, 6 ECTS
	EQ2300 Digital Signal Processing, 7.5 ECTS
Optional Courses Students must take 6 ECTS among these courses	EQ2410 Advanced Digital Communications 6 ECTS
Telecommunications Systems (6 ECTS)	
Telecommunication Electronics (6 ECTS)	Mandatory courses in the "Wireless comm.. and networks" profile (25.5 ECTS):
Microwaves (6 ECTS)	EP2200 Queuing theory and Teletraffic systems 6 ECTS
Integrated Services Networks (6 ECTS)	EQ2420 Antenna theory 7.5 ECTS
Entrepreneurship, Innovation and Technology Transfer (6 ECTS)	IK2502 Wireless networks 12 ECTS
Autumn Semester (minimum 30ECTS)	Mandatory courses in the "Information Processing and Transmission" profile (24 ECTS)
Telecommunications Systems and Networks (6 ECTS)	EN2300 Speech Signal Processing, 6 ECTS
Computer Networks (6 ECTS)	EQ2400 Adaptive signal processing 6 ECTS
Signal Processing Electronic Systems (6 ECTS)	EQ2430 Project course on Wireless communications 12 ECTS.
Mobile Communication Systems (6 ECTS)	
Communication Theory (6 ECTS)	Elective courses from the list at http://www.ee.kth.se/wireless/curriculum_07.php

SECOND YEAR STUDIES	
IST	KTH
Students must obtain a minimum of 60 ECTS as follows: <ul style="list-style-type: none"> - A 30ECTS thesis done in co-supervision - Courses that may be taken either in the autumn or spring Semesters. 	
Courses available during the autumn semester	Mandatory courses:
Energy Systems for Telecommunications (6 ECTS)	
Engineering Management Projects (6 ECTS)	EQ2300 Digital Signal Processing (7.5 ECTS)
Entrepreneurship, Innovation and Technology Transfer (6 ECTS)	AK2036 EE Research Methodology and Theory of Science (7.5 ECTS)
Radio Wave Propagation (6 ECTS)	
Wireless Telecommunications Systems (6 ECTS)	At least 6ECTS from:
Digital Transmission (6 ECTS)	EP2200 Queuing theory and Teletraffic systems (6 ECTS)
Autonomous Systems (6 ECTS)	EN2300 Speech Signal Processing (6 ECTS)
Telecommunication Electronics (6 ECTS)	
Radio Wave Propagation (6 ECTS)	
Telecommunications Systems (6 ECTS)	
Telecommunications Management and Public Policies (6 ECTS)	In addition, at least 9 ECTS from the list at http://www.ee.kth.se/wireless/curriculum_07.php
Microwaves (6 ECTS)	
Data Coding and Compression (6 ECTS)	
Mechanisms for Quality of Service Support in the Internet (6 ECTS)	
Integrated Services Networks (6 ECTS)	
Courses available during the spring semester	
Telecommunications Systems and Networks (6 ECTS)	
Computer Networks (6 ECTS)	
Signal Processing Electronic Systems (6 ECTS)	
Mobile Communication Systems (6 ECTS)	
Communication Theory (6 ECTS)	
Antennas (6 ECTS)	
Audio and Video Communications (6 ECTS)	
Wireless Mobile Networks (6 ECTS)	
These and other courses are chosen in accordance with student's mentor	
Thesis 30 ECTS supervised by both partners	