

International Master regulation

- Mention Informatique:
 - Digital Security
 - o Data Science and Engineering
- Mention Réseau et Télécommunication:
 - Mobile Computing Systems
 - Internet of Things

ACADEMIC REGULATION

2020-2021

-

Table of Contents

1	CUR	RICULUM	.3
2		AINING THE INTERNATIONAL MASTER DEGREE	
	2.1 2.2	MINIMUM NUMBER OF CREDITS REQUIRED TO GRADUATE MINIMUM NUMBER OF CREDITS PER SEMESTER	.3
3	EXA	MS	.4
	3.1 3.2	TERMS	.4 .4
4	FAIL	.URES	.5
	4.1 4.2 4.3	FAILURES RELATED TO THE ACADEMIC CURRICULUM RESULTS	.5
5	CON	IDITIONS FOR EXCLUSION	.5
6	VAL	IDATION OF STUDENTS RESULTS	.5
Α	NNEX: I	NTERNATIONAL MASTER TEACHING PROGRAMS	.6

1 CURRICULUM

The 4 semester curriculum of the International Master degree is structured in Teaching Units (TU).

Teaching units are composed of teaching modules (language courses, non-technical and technical courses), or correspond to projects and internship activities.

ECTS credits are granted for each Teaching Unit.

The Academic Program (courses and projects Teaching Units) takes place over a period of 18 months as follows:

A Fall 1 semester, starting in the beginning of October through the end of February,

A Spring semester, starting at the beginning of March through the end of June, and

A Fall 2 semester, starting in the beginning of October through the end of February.

The internship takes place over a six-month period.

The internship itself must last at least 22 weeks (between March and August), and be carried out in an R&D lab or in a company. The Program Committee must approve the internship subject.

The language of instruction is English.

Participation in all activities is mandatory.

The International Master program is under the supervision of a Program Committee.

A Teaching Committee meets at the end of each semester to examine students results, and gives recommendations to the Program Committee.

2 Obtaining the International Master Degree

The Master degree Diploma is delivered to students who secure the required number of credits within the designated period based on the following terms.

2.1 Minimum number of credits required to graduate

A total of 120 ECTS credits are required to graduate. These credits are distributed as follows:

Academic curriculum - Fall 1 + Spring + Fall 2 semesters	ECTS
Technical Teaching Units	55
Language courses Teaching Units	3
Non-technical Teaching Units	15
Project Teaching Units	17

March through August	ECTS
Internship (22 weeks) Teaching Unit	30

2.2 Minimum number of credits per semester

For each semester, students must validate at least the credits from the Teaching Units of the corresponding semester.

Additional credits obtained by students are mentioned in the appendix attached to the Diploma.

EURECOM Curriculum Rules 3 / 17

Credits from the Teaching Units cannot be carried over from one semester to another.

A teaching unit is dedicated to Project activities and the corresponding credits are obtained each semester either through the same subject, or through a different project per semester.

3 Exams

3.1 Terms

Teaching Units are assessed based on written and oral exams of the teaching modules scheduled at the end of each semester.

Their organization is under the responsibility of the professors.

Grades are sent to students within two weeks following the end of term.

Teaching Units of Projects are evaluated based on a written report and an oral presentation.

Students must attend the examination sessions of the courses in which they are registered. Absences to exams without any valid reason notified in advance to the Program Committee or without a medical certificate invalidate the corresponding credits without the possibility of re-taking the exams at the makeup examination session.

Undesirable behavior during exams will result in their nullification, and disciplinary sanctions might be taken by the Program Committee.

Each exam and project is graded on a 20-point scale.

A grade of at least 10 over 20 must be obtained for each project or course to receive the corresponding credit.

Projects are evaluated on the basis of a written report and an oral presentation, according to the following criteria:

- Study of problematics (coefficient 2)
- Results (coefficient 2)
- Project management (coefficient 1)
- Written report (coefficient 1)
- Oral exam (coefficient 1)

For their projects to be accepted, students must obtain a final grade of at least 10/20 (and a minimum grade of 8 for each of the criteria).

Internships are defended in front of a jury made up of the academic head and an external expert who may be the industrial supervisor.

Internships are assessed on five criteria: time management, conceptual work, results, report, and presentation. The five grades are combined and weighted as follows:

- Coefficient 1 for overall management, oral presentation and report,
- Coefficient 2 for conceptual work and results.

To obtain the 30 ECTS credits of the internship Teaching Unit, students must receive a final grade of at least 10 over 20 and no less than 8 over 20 in one of the five criteria.

3.2 Makeup examination session

For each course of teaching units and the project, a makeup session is possible.

If after the makeup exam, a student does not obtain a grade of at least 10 over 20, the corresponding ECTS credits are not validated.

The organization of makeup exams is under the responsibility of the course professor at periods defined by the global academic schedule.

Semester projects can be re-taken according to the terms set with each professor.

4 Failures

4.1 Failures related to the academic curriculum results

Students fail a teaching unit when they do not obtain the minimum number of credits required after the makeup examination session of the courses. Students shall acquire the missing ECTS credits when the corresponding courses are scheduled.

Students in that situation may choose to repeat the same course or take another course provided it belongs to the teaching unit they failed.

In all cases, credits that have been obtained during the teaching program are still valid.

Students Fail the project teaching unit if they do not secure the corresponding ECTS credits after makeup session.

4.2 Failure related to the internship

If Internship work is deemed insufficient, (students received a final grade less than 10 over 20 or less than 8 over 20 in one of the five criteria),

the Program Committee may request that it be completed according to the terms and conditions which will be decided during the meeting. A full repetition is also possible, in this case, the student redo a complete internship.

4.3 Failure related to Language Obligation

Apart from satisfying the requirements of the Language Teaching Units in the 3 academic semesters, students must validate an English language B2 level via an external certificate (TOIC, TOEFL, other).

5 Conditions for exclusion

The Teaching Committee will examine these students' situations on a case by case basis and recommend to the Program Committee the students who should extend their studies partially a semester, a complete semester, or a complete academic year.

If after a one year extension period the students still fail, they can be excluded from the teaching program.

The Program Committee can decide to exclude a student for the following reasons:

- Insufficient number of credits based on the rules laid out in section 4 "Failures"
- Disciplinary reasons: breach of responsibilities written in the Academic Charter.

Students who are excluded are not allowed to continue their studies. Upon request, a student can obtain a credit certificate showing the credits validated.

6 Validation of students results

A Teaching Committee meets at the end of each semester to examine students results. It notifies the Program Committee about any possible failing cases as early as possible.

The Program Committee validates all the results required to graduate.

Date: 25/07/2020

Ulrich Finger

Student's Name and signature

Director EURECOM

EURECOM Curriculum Rules 5 / 17

Annex: International Master Teaching Programs

Annex: International Master Teaching Programs

Master Data Science and Engineering

Responsible: Raphael TRONCY

SEMESTER S1 FALL					
Teaching Units	Hours	ECTS	Teachers		
TU - Fundamentals I		10			
DBSYS - Database Management System Implementation	42	5	Paolo PAPOTTI		
MALIS - Machine Learning and Intelligent Systems	42	5	Maria ZULUAGA		
TU – Web Science and Mathematical Methods		10			
ImCod - Image Coding	21	3	Jean-Luc DUGELAY		
ImProc - Digital Image Processing	21	3	Jean-Luc DUGELAY		
Infotheo - Information theory	42	5	David GESBERT		
MathEng - Essential Mathematical Methods for Engineers	21	3	Nicholas EVANS		
Net_Prog- Hands on approach to computer networking	42	5	Marc DACIER		
Optim - Optimization Theory with Applications	21	3	Thrasyvoulos SPYROPOULOS		
SoftDev - Software development methodologies	21	3	Davide BALZAROTTI		
STATS - Foundations of Statistical Inference	21	3	Motonobu KANAGAWA		
WebInt – Interaction Design and Development of Modern Web Applications	21	3	Raphaël TRONCY		
TU - Fundamental in Business, Innovation and Project Management (I)		5			
B_INNOV - How to adopt the right posture and move from idea to market!	42	5	Séverine HERLIN		
ManagIntro - Introduction to Management	42	5	Kenneth POPE		
RDI - Responsible Digital Innovation: Risks, Ethics and Technology	21	3	Laura DRAETTA		
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE		
TU - Semester project (I)	80 h	5			
TU - Language French or other one* S1	22 h	1	Pascale CASTAING		
	External teachers				
S1 FALL total		31			

SEMESTER S2 SPRING					
Teaching Units	Hours	ECTS	Teachers		
TU - Machine Learning		10			
ASI - Advanced Statistical Inference	42	5	Maurizio FILIPPONE		
AML - Algorithmic machine learning	21	3	Pietro MICHIARDI		
DeepLearning - Deep Learning	21	3	Pietro MICHIARDI		
TU - Applications I		10			
3DGraph - 3-D and virtual imaging (analysis and synthesis)	42	5	Pascal GROS		
APPIOT - lot Application Protocols	21	3	Adlen KSENTINI		
Forensics - Cyber-crime and Computer forensic	42	5	Davide BALZAROTTI		
FormalMet – Formal methods and verification of systems	21	3	Rabea AMEUR		
Imsecu - Imaging security	21	3	Jean-Luc DUGELAY		
MALCOM - Machine Learning for Communication systems	42	5	Marios KOUNTOURIS		
Speech - Speech and Audio processing	21	3	Nicholas EVANS		
Net_Sec - Network Security: practical hands on approach	21	3	Marc DACIER		
WebSem - Semantic Web and Information Extraction technologies	21	3	Raphaël TRONCY		
TU - Fundamental in Business, Innovation and Project Management (II)		5			
Business - Business Simulation	42	5	Kenneth POPE/ Francis BIDAULT		
ProjMan - Project Management	42	5	Jean-Jacques AUREGLIA		
SATT - Sociological approaches of Telecom Technologies	21	3	Marc RELIEU		
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE		
TU - Semester project (II)	100h	6			
TU - Language French or other one* S2	22 h	1	Pascale CASTAING		
			External teachers		
S2 SPRING total		32			

SEMESTER S3 FALL					
Teaching Units	Hours	ECTS	Teachers		
TU - Fundamentals II		5			
Clouds - Distributed systems and cloud computing	42	5	Raja APPUSWAMY		
TU - Applications II		10			
BigSec - Security and Privacy for Big Data and Clouds	21	3	Melek ÖNEN		
Imcod - Image Coding	21	3	Jean-Luc DUGELAY		
Improc – Digital Image Processing	21	3	Jean-Luc DUGELAY		
Mobserv - Mobile application and services	42	5	Navid NIKAEIN		
SSP - Statistical signal processing	42	5	Dirk SLOCK		
SysSec - System and Network Security	42	5	Aurélien FRANCILLON		
WebInt - Interaction Design and Development of Modern Web Applications	21	3	Raphaël TRONCY		
Optim - Optimization Theory with Applications	21	3	Thasyvoulos SPYROPOULOS		
TU - Fundamental in Business, Innovation and Project Management (III)		5			
B_INNOV - How to adopt the right posture and move from idea to market!	42	5	Séverine HERLIN		
ManagIntro - Introduction to Management	42	5	Kenneth POPE		
RDI - Responsible Digital Innovation: Risks, Ethics and Technology	21	3	Laura DRAETTA		
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE		
TU Semester project (III)	100 h	6			
TU Language French or other one* III	22 h	1	Pascale CASTAING		
			External teachers		
		27			

SEMESTER S4 SPRING					
Teaching Units	Hours	ECTS	Teachers		
TU Master Thesis	22 week s	30			
S4 SPRING total		30			
TOTAL MASTER		120			

Master Mobile Computing Systems

Responsible: Navid NIKAEIN

SEMESTER S1 FALL					
Teaching Units	Hours	ECTS	Teachers		
TU Fundamentals		10			
Digicom - Digital communications	42	5	Raymond KNOPP		
MobCom - Mobile communication techniques	42	5	Petros ELIA		
TU Network and tools		10			
ATWireless - Advanced topics in wireless communications	42	5	David GESBERT		
InfoTheo - Information theory	42	5	David GESBERT		
MathEng - Essential Mathematical Methods for Engineers	21	3	Nicholas EVANS		
MobMod - Mobility Modeling	21	3	Jérôme HAERRI		
MobServ - Mobile application and services	42	5	Navid NIKAEIN		
MobSys- Mobile communication systems	42	5	Adlen KSENTINI		
Netmod - Network Modeling	42	5	Thrasyvoulos SPYROPOULOS		
Optim - Optimization Theory with Applications	21	3	Thrasyvoulos SPYROPOULOS		
SSP - Statistical signal processing	42	5	Dirk SLOCK		
TU Fundamental in Business, Innovation and Project Management (I)		5			
B_INNOV - How to adopt the right posture and move from idea to market!	42	5	Séverine HERLIN		
ManagIntro - Introduction to Management	42	5	Kenneth POPE		
RDI - Responsible Digital Innovation: Risks, Ethics and Technology	21	3	Laura DRAETTA		
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE		
TU Semester project (I)	80	5			
TU Language French or other one* S1	22	1	Pascale CASTAING		
			External teachers		
S1 FALL total		31			

SEMESTER S2 SPRING				
Teaching Units	Hours	ECT S	Teachers	
TU Radio Access		10		
Radio - Radio engineering	42	5	Florian KALTENBERGER	
SP4Com - Signal Processing for Communications	42	5	Dirk SLOCK	
TU Techniques		5		
AML – Advanced Machine Learning	21	3	Pietro MICHIARDI	
Coding - Chanel coding theory	21	3	Petros ELIA	
CompMeth - Computational Methods for digital communications	42	5	Raymond KNOPP	
DigitalSystems - Digital systems, hardware - software integration	42	5	Renaud PACALET	
WebSem - Semantic Web and Information Extraction technologies	21	3	Raphaël TRONCY	
TU Network Systems I		5		
ModAdv - Mobile Advanced Networks Mobile	21	3	Navid NIKAEIN	
APPIOT - lot Application Protocols	21	3	Adlen KSENTINI	
MobWat - Wireless Access Technologies	21	3	Jérôme HAERRI	
NetSoft – Network Softwerization	21	3	Adlen KSENTINI	
ProtIOT- lot Communication Protocols	21	3	Adlen KSENTINI	
TU Fundamental in Business, Innovation and Project Management (II)		5		
Business - Business Simulation	42	5	Kenneth POPE/Francis BIDAULT	
ProjMan - Project Management	42	5	Jean-Jacques AUREGLIA	
SATT - Sociological approaches of Telecom Technologies	21	3	Marc RELIEU	
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE	
TU Semester project (II)	100	6		
TU Language French or other one* S2	22	1	Pascale CASTAING	
			External teachers	
S2 SPRING total		32		

SEMESTER S3 FALL						
Teaching Units	Hours	ECTS	Teachers			
TU Software and Systems		5				
Clouds - Distributed Systems and Cloud Computing	42	5	Raja APPUSWAMY			
OS – Operating systems	42	5	Ludovic APVRILLE			
SecCom – Secure communications	42	5	Melek ÖNEN			
TU Advances in Mobile Computing		10				
ATWireless - Advanced topics in wireless communications	42	5	David GESBERT			
InfoTheo - Information Theory	42	5	David GESBERT			
Mobserv - Mobile application and services	42	5	Navid NIKAEIN			
MobSys - Mobile communication systems	42	5	Adlen KSENTINI			
SSP - Statistical signal processing	42	5	Dirk SLOCK			
Stand - Standardization activities	21	3	Jérôme HAERRI			
WiSec - Wireless Security	21	3	Aurélien FRANCILLON			
TU Fundamental in Business, Innovation and Project Management (III)		5				
B_INNOV - How to adopt the right posture and move from idea to market!	42	5	Séverine HERLIN			
ManagIntro - Introduction to Management	42	5	Kenneth POPE			
RDI - Responsible Digital Innovation: Risks, Ethics and Technology	21	3	Laura DRAETTA			
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE			
TU Semester project (III)	100	6				
TU Language French or other one* III	22	1	Pascale CASTAING			
			External teachers			
S3 FALL total		27				

SEMESTER S4 SPRING					
Teaching Units	Hours	ECTS			
TU Master Thesis		30			
S4 SPRING total		30			
TOTAL MASTER		120			

Master Digital Security

Responsible: Davide BALZAROTTI

SEMESTER S1 FALL					
Teaching Units	Hours	ECTS	Teachers		
TU Security I		10	Marc DACIER		
SecCom - Secure Communications	42	5	Melek ÖNEN		
SysSec - System and Network Security	42	5	Aurélien FRANCILLON		
TU Computing and Communications I		10	Davide BALZAROTTI		
CompArch - Computer architecture	42	5	Renaud PACALET		
ImCod - Image Coding	21	3	Jean-Luc DUGELAY		
ImProc – Digital Image Processing	21	3	Jean-Luc DUGELAY		
InfoTheo - Information Theory	42	5	David GESBERT		
NetMod - Network Modeling	42	5	Thrasyvoulos SPYROPOULOS		
Net_Prog - Hands on approach to computer networking	42	5	Marc DACIER		
OS - Operating systems	42	5	Ludovic APVRILLE		
SoftDev - Software development methodologies	21	3	Davide BALZAROTTI		
TU Fundamental in Business, Innovation and Project Management (I)		5			
B_INNOV - How to adopt the right posture and move from idea to market!	42	5	Séverine HERLIN		
ManagIntro - Introduction to Management	42	5	Kenneth POPE		
RDI - Responsible Digital Innovation: Risks, Ethics and Technology	21	3	Laura DRAETTA		
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE		
TU Semester project (I)	80	5			
TU Language French or other one* S1	22	1	Pascale CASTAING		
		External teachers			
S1 FALL total		31			

SEMESTER S2 SPRING				
Teaching Units	Hours	ECTS	Teachers	
TU Security II		10	Marc DACIER	
Forensics - Cyber - crime and computer forensics	42	5	Davide BALZAROTTI	
HWSec - Hardware security	21	3	Renaud PACALET	
ImSecu - Imaging for security applications: biometrics & watermarking	21	3	Jean-Luc DUGELAY	
Net_Sec - Network Security: practical hands on approach	21	3	Marc DACIER	
TU Computing and Communications II		10		
DigitalSystems - Digital systems, hardware - software integration	42	5	Renaud PACALET	
DeepLearning - Deep Learning	21	3	Pietro MICHIARDI	
APPIOT - lot Application Protocols	21	3	Adlen KSENTINI	
MobWat - Wireless access technologies	21	3	Jérôme HAERRI	
NetSoft – Network Softwerization	21	3	Adlen KSENTINI	
TraffEEc - Emission and Traffic Efficiency	21	3	Jérôme HAERRI	
WebSem- Semantic Web and Information Extraction technologies	21	3	Raphaël TRONCY	
TU Fundamental in Business, Innovation and Project Management (II)		5		
Business - Business Simulation	42	5	Kenneth POPE/Francis BIDAULT	
ProjMan - Project Manag	42	5	Jean-Jacques AUREGLIA	
SATT - Sociological approaches of Telecom Technologies	21	3	Marc RELIEU	
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE	
TU Semester project (II)	100	6		
TU Language French or other one* S2	22	1	Pascale CASTAING	
			External teachers	
S2 SPRING total	332	32		

SEMESTER S3 FALL				
Teaching Units	Hours	ECTS	Teachers	
TU Security III		10		
MobiSec - Mobile Systems and Smartphone Security	42	5	Yanick FRATANTONIO	
Wisec – Wireless system Security	21	3	Aurélien FRANCILLON	
BigSec - Security and privacy for Big Data and Cloud	21	3	Melek ÖNEN	
TU Data Science and Networking		5		
Clouds - Distributed systems and cloud computing	42	5	Raja APPUSWAMY	
MALIS - Machine learning and intelligent systems	42	5	Maria ZULUAGA	
WebInt - Interaction Design and Development of Modern Web Applications	21	3	Raphaël TRONCY	
InfoTheo - Information Theory	42	5	David GESBERT	
MobMod - Mobility Modeling	21	3	Jérôme HAERRI	
Mobserv - Mobile applications and services	42	5	Navid NIKAEIN	
Mobsys - Mobile communication systems	42	5	Adlen KSENTINI	
NetMod - Network Modeling	42	5	Thrasyvoulos SPYROPOULOS	
TU Fundamental in Business, Innovation and Project Management (III)		5		
B_INNOV - How to adopt the right posture and move from idea to market!	42	5	Séverine HERLIN	
ManagIntro - Introduction to Management	42	5	Kenneth POPE	
RDI - Responsible Digital Innovation: Risks, Ethics and Technology	21	3	Laura DRAETTA	
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE	
TU Semester project (III)	100	6		
TU Language French or other one* III	22	1	Pascale CASTAING	
			External teachers	
S3 FALL total	290	27		

SEMESTER S4 SPRING					
Teaching Units	Hours	ECTS			
TU Master Thesis	22 weeks	30			
S4 SPRING total		30			
TOTAL MASTER		120			

Master Internet of Things

Responsible: Adlen KSENTINI

SEMESTER S1 FALL				
Teaching Units	Hours	ECTS	Teachers	
TU Fundamentals		10		
OS - Operating Systems	42	5	Ludovic APVRILLE	
SysSec - System and Network Security	42	5	Aurélien FRANCILLON	
UE Software and Networking		10		
MobMod - Mobility Modeling	21	3	Jérôme HAERRI	
MALIS - Machine Learning and Intelligent Systems	42	5	Maria ZULUAGA	
MobServ - Mobile application and services	42	5	Navid NIKAEIN	
MobSys- Mobile communication systems	42	5	Adlen KSENTINI	
Netmod - Network Modeling	42	5	Thrasyvoulos SPYROPOULOS	
Net_Prog - Hands on approach to computer networking	42	5	Marc DACIER	
Optim - Optimization Theory with Applications	21	3	Thrasyvoulos SPYROPOULOS	
SoftDev - Software development methodologies	21	3	Davide BALZAROTTI	
TU Fundamental in Business, Innovation and Project Management (I)		5		
B_INNOV - How to adopt the right posture and move from idea to market!	42	5	Séverine HERLIN	
ManagIntro - Introduction to Management	42	5	Kenneth POPE	
RDI - Responsible Digital Innovation: Risks, Ethics and Technology	21	3	Laura DRAETTA	
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE	
TU Semester project (I)	80 h	5		
TU Language French or other one* S1	22 h	1	Pascale CASTAING	
			External teachers	
S1 FALL total		31		

SEMESTER S2 SPRING				
Teaching Units	Hours	ECTS	Teachers	
UE IoT Tools		10		
WebSem - Semantic Web and Information Extraction technologies	21	3	Raphaël TRONCY	
ProtIOT - IoT Communication protocols	21	3	Adlen KSENTINI	
APPIOT - IoT Application protocols	21	3	Adlen KSENTINI	
DeepLearning - Deep Learning	21	3	Pietro MICHIARDI	
TU General Techniques		10		
AML - Algorithmic machine learning	21	3	Pietro MICHIARDI	
Netsoft - Network Softwerization	21	3	Adlen KSENTINI	
ModAdv - Mobile Advanced Networks Mobile	21	3	Navid NIKAEIN	
MobWat - Wireless Access Technologies	21	3	Jérôme HAERRI	
Net_Sec - Network Security: practical hands on approach	21	3	Marc DACIER	
HWSec - Hardware security	21	3	Renaud PACALET	
TU Fundamental in Business, Innovation and Project Management (II)		5		
Business - Business Simulation	42	5	Kenneth POPE / Francis BIDAULT	
Law - General Introduction to Law: contracts, setting up business	21	3	Dominique SERIO	
ProjMan - Project Management	42	5	Jean-Jacques AUREGLIA	
SATT - Sociological approaches of Telecom Technologies	21	3	Marc RELIEU	
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE	
TU Semester project (II)	100	6		
TU Language French or other one* S2	22	1	Pascale CASTAING	
			External teachers	
S2 SPRING total		32		

SEMESTER S3 FALL				
Teaching Units				
TU Software and Systems	Hours	15		
CompArch - Computer architecture	42	5	Renaud PACALET	
Clouds - Distributed systems and cloud computing	42	5	Raja APPUSWAMY	
UMLEmb - UML for Embedded Systems	21	3	Ludovic APVRILLE	
MobMod - Mobility Modeling	21	3	Jérôme HÄRRI	
MALIS - Machine Learning and Intelligent Systems	42	5	Maria ZULUAGA	
Mobserv - Mobile application and services	42	5	Navid NIKAEIN	
MobSys- Mobile communication systems	42	5	Adlen KSENTINI	
SoftDev - Software development methodologies	21	3	Davide BALZAROTTI	
Stand - Standardization activities	21	3	Jérôme HÄRRI	
TU Fundamental in Business, Innovation and Project Management (III)		5		
B_INNOV - How to adopt the right posture and move from idea to market!	42	5	Séverine HERLIN	
ManagIntro - Introduction to Management	42	5	Kenneth POPE	
RDI - Responsible Digital Innovation: Risks, Ethics and Technology	21	3	Laura DRAETTA	
TeamLead - Personal Development and Team Leadership	42	5	Kenneth POPE	
TU Semester project (III)	100	6		
TU Language French or other one* SIII	22	1	Pascale CASTAING	
			External teachers	
S3 FALL total		27		

SEMESTER S4 SPRING			
	Teaching Units		
TU Master Thesis	22 weeks	30	
S4 SPRING total		30	

TOTAL MASTER	120	
--------------	-----	--