



International Master regulation

- *Mention Informatique:*
 - *Digital Security*
 - *Data Science and Engineering*

- *Mention Réseau et Télécommunication:*
 - *Mobile Computing Systems*
 - *Internet of Things*

ACADEMIC REGULATION

2017-2018

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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 July and December), 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

July through mid-December	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.

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:

Ulrich Finger
Director
EURECOM

Annex: International Master Teaching Programs

Master Data Science and Engineering

Responsible: Pietro MICHIARDI

SEMESTER S1 FALL			
Teaching Units	Hours	ECTS	Teachers
TU Fundamentals		10	Pietro MICHIARDI
Clouds - Distributed systems and cloud computing	42h	5	Pietro MICHIARDI
MALIS - Machine Learning and Intelligent Systems	42h	5	Bernard Merialdo
TU Systems and mathematical methods		10	
CompArch - Computer architecture	42 h	5	Renaud PACALET
ImCod - Image Coding	21h	3	Jean-Luc DUGELAY
ImProc – Digital Image Processing	21h	3	Jean-Luc DUGELAY
InfoTheo - Information Theory	42 h	5	David GESBERT
MathEng - Essential Mathematical Methods for Engineers	21 h	3	Nick EVANS
Netw_I - Introduction to computer networking and internet	42 h	5	Marc DACIER
Optim - Fundamentals of Optimization	21 h	3	Laura COTTATELLUCCI
OS - Operating Systems	42 h	5	Ludovic APVRILLE
SecCom - Secure communications	42h	5	Refik MOLVA
Stat - Statistical data analysis	21 h	3	Patrick LOISEAU
SysSec - System and Network Security	42 h	5	Aurélien FRANCILLON
WebInt –Interaction Design and Development of Modern Web Applications	21 h	3	Raphaël TRONCY
TU Fundamental in Business, Innovation and Project Management (I)		5	
Entrep - Entrepreneurship and Capital Venture	21 h	3	Charles LUMBERS
Green_It - Sustainable ICT's	21 h	3	Laura DRAETTA
Innov - Innovation and product development	21 h	3	Pierre CHAIX
ManagIntro - Introduction to Management	42 h	5	Ken POPE
Property - Intellectual property Law	21 h	3	Dominique SERIO
TeamLead - Personal Development and Team Leadership	42 h	5	Ken POPE / Andrew PRIOR
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	
AML - Algorithmic machine learning	42 h	5	Pietro MICHIARDI
ASI - Advanced Statistical Inference	42 h	5	Maurizio FILIPPONE
TU Applications I		10	
3DGraph - 3-D and virtual imaging (analysis and synthesis)	42 h	5	Pascal GROS
DeepLearning - Deep Learning	21 h	3	Benoit HUET
Forensics - Cyber-crime and Computer forensic	42 h	5	Davide BALZAROTTI
FormalMet - Formal methods and verification of systems	21 h	3	Rabea AMEUR
ImSecu - Imaging for security applications watermarking & biometrics	21 h	3	Jean-Luc DUGELAY
NetSoft - Network Softwerization	21 h	3	Adlen KSENTINI
SecAppli - Security applications in networking and distributed systems	21 h	3	Refik MOLVA
Speech - Speech and Audio processing	21 h	3	Nick Evans
WebSem - Introduction to semantic Web Technologies	21 h	3	Raphaël TRONCY
TU Fundamental in Business, Innovation and Project Management (II)		5	
Business - Business Simulation	42 h	5	Ken POPE/ Andrew PRIOR
Law - General Introduction to Law: contracts, setting up business	21 h	3	Dominique SERIO
ProjMan - Project Management	42 h	5	Jean-François SOULARD / Jean-Jacques AUREGLIA
SATT - Sociological approaches of Telecom Technologies	21 h	3	Marc RELIEU
TU Semester project (II)	100 h	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 Applications II		15	
ADST- Advanced Data science topics	21 h	3	Benoît HUET
CompArch - Computer architecture	42 h	5	Renaud PACALET
Imcod - Image Coding	21 h	3	Jean-Luc DUGELAY
Improc – Digital Image Processing	21 h	3	Jean-Luc DUGELAY
InfoTheo - Information Theory	42 h	5	David GESBERT
Mobserv - Mobile application and services	42 h	5	Navid NIKAEIN
OS - Operating Systems	42 h	5	Ludovic APVRILLE
SecCom - Secure communications	42 h	5	Refik MOLVA
SoftDev - Software development methodologies	42 h	5	Davide BALZAROTTI
Stat - Statistical data analysis	21 h	3	Patrick LOISEAU
SysSec - System and Network Security	42 h	5	Aurelien FRANCILLON
WebInt - Interaction Design and Development of Modern Web Applications	21 h	3	Raphaël TRONCY
TU Fundamental in Business, Innovation and Project Management (III)		5	
Entrep - Entrepreneurship and Capital Venture	21 h	3	Charles LUMBERS
Green_It - Sustainable ICT's	21 h	3	Laura DRAETTA
Innov - Innovation and product development	21 h	3	Pierre CHAIX
ManagIntro - Introduction to Management	42 h	5	Ken POPE
Property - Intellectual property Law	21 h	3	Dominique SERIO
TeamLead - Personal Development and Team Leadership	42 h	5	Ken POPE / Andrew PRIOR
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 weeks	30	
S4 SPRING total		30	
TOTAL MASTER		120	

Master Mobile Computing Systems

Responsible: Christian BONNET

SEMESTER S1 FALL			
Teaching Units	Hours	ECTS	Teachers
TU Fundamentals		10	
Digicom - Digital communications	42h	5	Raymond KNOPP
MobCom - Mobile communication techniques	42h	5	Petros ELIA
TU Network and tools		10	
ATWireless - Advanced topics in wireless communications	42h	5	David GESBERT
InfoTheo - Information theory	42h	5	David GESBERT
MathEng - Essential Mathematical Methods for Engineers	21h	3	Nicholas EVANS
MobMod - Mobility Modeling	21h	3	Jérôme HAERRI
MobServ - Mobile application and services	42h	5	Navid NIKAEIN
MobSys- Mobile communication systems	42h	5	Christian BONNET
Netmod - Network Modeling	42h	5	Thrasylvoulos SPYROPOULOS
Optim - Fundamentals of Optimisation	21h	3	Laura COTTATELLUCCI
SSP - Statistical signal processing	42h	5	Dirk SLOCK
Stat - Statistical data analysis	21h	3	
TU Fundamental in Business, Innovation and Project Management (I)		5	
Entrep - Entrepreneurship and Capital Venture	21 h	3	Charles LUMBERS
Green_It - Sustainable ICT's	21 h	3	Laura DRAETTA
Innov - Innovation and product development	21 h	3	Pierre CHAIX
ManagIntro - Introduction to Management	42 h	5	Ken POPE
Property - Intellectual property Law	21 h	3	Dominique SERIO
TeamLead - Personal Development and Team Leadership	42 h	5	Ken POPE / Andrew PRIOR
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 Radio Access		10	
Radio - Radio engineering	42 h	5	Florian KALTENBERGER
SP4Com - Signal Processing for Communications	42 h	5	Dirk SLOCK
TU Techniques		5	
Coding - Chanel coding theory	42 h	5	Laura COTTATELLUCCI
DigitalSystems - Digital systems, hardware - software integration	42h	5	Renaud PACALET
CompMeth - Computational Methods for digital communications	42 h	5	Raymond KNOPP
TraffEEc - Emission and Traffic Efficiency	21h	3	Jérôme HAERRI
WebSem - An Introduction to Semantic Web technologies	21h	3	Raphaël TRONCY
TU Network Systems I		5	
ModAdv - Mobile Advanced Networks Mobile	21 h	3	Navid NIKAEIN
Moblp - Mobile Networking Mobile Networking	21 h	3	Christian BONNET
MobWat - Wireless Access Technologies	21 h	3	Jérôme HAERRI
NetSoft – Network Softwerization	21h	3	Adlen KSENTINI
TU Fundamental in Business, Innovation and Project Management (II)		5	
Business - Business Simulation	42 h	5	Ken POPE / Andrew PRIOR
Law - General Introduction to Law: contracts, setting up business	21 h	3	Dominique SERIO
ProjMan - Project Management	42 h	5	Jean-François SOULARD / Jean-Jacques AUREGLIA
SATT - Sociological approaches of Telecom Technologies	21 h	3	Marc RELIEU
TU Semester project (II)	100 h	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 Software and Systems		5	
Clouds - Distributed Systems and Cloud Computing	42h	5	Pietro MICHIARDI
OS – Operating systems	42h	5	Ludovic APVRILLE
SoftDev - Software development methodologies	42h	5	Davide BALZAROTTI
SecCom – Secure communications	42h	5	Refik MOLVA
TU Advances in Mobile Computing		10	
AT-Wireless - Advanced topics in wireless communications	42h	5	David GESBERT
InfoTheo - Information Theory	42 h	5	David GESBERT
Mobserv - Mobile application and services	42h	5	Navid NIKAEIN
MobSys - Mobile communication systems	42h	5	Christian BONNET
SSP - Statistical signal processing	42h	5	Dirk SLOCK
Stand - Standardization activities	21h	3	Jérôme HAERRI
Stat - Statistical data analysis	21h	3	Melek ÖNEN
TU Fundamental in Business, Innovation and Project Management (III)		5	
Entrep - Entrepreneurship and Capital Venture	21 h	3	Charles LUMBERS
Green_It - Sustainable ICT's	21 h	3	Laura DRAETTA
Innov - Innovation and product development	21 h	3	Pierre CHAIX
ManagIntro - Introduction to Management	42 h	5	Ken POPE
Property - Intellectual property Law	21 h	3	Dominique SERIO
TeamLead - Personal Development and Team Leadership	42 h	5	Ken POPE / Andrew PRIOR
TU Semester project (III)	100 h	6	
TU Language French or other one* III	22 h	1	Pascale CASTAING
			External teachers
S3 FALL total		27	

SEMESTER S4 SPRING			
Teaching Units	Hours	ECTS	
TU Master Thesis	22 weeks	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	Refik MOLVA
SecCom - Secure Communications	42 h	5	Refik MOLVA
SysSec - System and Network Security	42 h	5	Aurélien FRANCILLON
TU Computing and Communications I		10	Davide BALZAROTTI
CompArch - Computer architecture	42 h	5	Renaud PACALET
ImCod - Image Coding	21 h	3	Jean-Luc DUGELAY
ImProc – Digital Image Processing	21h	3	Jean-Luc DUGELAY
InfoTheo - Information Theory	42 h	5	David GESBERT
NetMod - Network Modeling	42 h	5	Thrasylvoulos SPYROPOULOS
Netw_I - Introduction to computer networking and Internet	42 h	5	
OS - Operating systems	42 h	5	Ludovic APVRILLE
SoftDev - Software development methodologies	42 h	5	Davide BALZAROTTI
TU Fundamental in Business, Innovation and Project Management (I)		5	
Entrep - Entrepreneurship and Capital Venture	21 h	3	Charles LUMBERS
Green_It - Sustainable ICT's	21 h	3	Laura DRAETTA
Innov - Innovation and product development	21 h	3	Pierre CHAIX
ManagIntro - Introduction to Management	42 h	5	Ken POPE
Property - Intellectual property Law	21 h	3	Dominique SERIO
TeamLead - Personal Development and Team Leadership	42 h	5	Ken POPE / Andrew PRIOR
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 Security II		10	Refik MOLVA
Forensics - Cyber - crime and computer forensics	42 h	5	Davide BALZAROTTI
HWSec - Hardware security	21 h	3	Renaud PACALET
ImSecu - Imaging for security applications: biometrics & watermarking	21 h	3	Jean-Luc DUGELAY
SecAppli - Security applications in networking and distributed systems	21 h	3	Refik MOLVA
TU Computing and Communications II		10	
DigitalSystems - Digital systems, hardware - software integration	42 h	5	Renaud PACALET
DeepLearning - Deep Learning	21 h	3	Benoit HUET
Moblp - Mobile networking	21 h	3	Christian BONNET
MobWat - Wireless access technologies	21 h	3	Jérôme HAERRI
NetSoft – Network Softwerization	21h	3	Adlen KSENTINI
TraffEEc - Emission and Traffic Efficiency	21h	3	Jérôme HAERRI
WebSem - Introduction to semantic Web Technologies	21 h	3	Raphaël TRONCY
TU Fundamental in Business, Innovation and Project Management (II)		5	
Business - Business Simulation	42 h	5	Ken POPE / Andrew PRIOR
Law - General Introduction to Law: contracts, setting up business	21 h	3	Dominique SERIO
ProjMan - Project Management	42 h	5	Jean-François SOULARD / Jean-Jacques AUREGLIA
SATT - Sociological approaches of Telecom Technologies	21 h	3	Marc RELIEU
TU Semester project (II)	100 h	6	
TU Language French or other one* S2	22 h	1	Pascale CASTAING
			External teachers
S2 SPRING total	332 h	32	

SEMESTER S3 FALL			
Teaching Units	Hours	ECTS	Teachers
TU Data Science and Engineering		5	Pietro MICHIARDI
Clouds - Distributed systems and cloud computing	42 h	5	Pietro MICHIARDI
MALIS - Machine learning and intelligent systems	42 h	5	Bernard MERIALDO
Stat - Statistical data analysis	21 h	3	Melek ÖNEN
WebInt - Interaction Design and Development of Modern Web Applications	21h	3	Raphaël TRONCY
TU Networking		10	
InfoTheo - Information Theory	42 h	5	David GESBERT
EmSim - Emulation and simulation methodologies	21h	3	Jérôme HAERRI
MobMod - Mobility Modeling	21h	3	Jérôme HAERRI
Mobserv - Mobile applications and services	42 h	5	Navid NIKAEIN
Mobsys - Mobile communication systems	42 h	5	Christian BONNET
NetMod - Network Modeling	42 h	5	Thrasylvoulos SPYROPOULOS
TU Fundamental in Business, Innovation and Project Management (III)		5	
Entrep - Entrepreneurship and Capital Venture	21 h	3	Charles LUMBERS
Green_It - Sustainable ICT's	21 h	3	Laura DRAETTA
Innov - Innovation and product development	21 h	3	Pierre CHAIX
ManagIntro - Introduction to Management	42 h	5	Ken POPE
Property - Intellectual property Law	21 h	3	Dominique SERIO
TeamLead - Personal Development and Team Leadership	42 h	5	Ken POPE / Andrew PRIOR
TU Semester project (III)	100 h	6	
TU Language French or other one* III	22 h	1	Pascale CASTAING
			External teachers
S3 FALL total	290 h	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 h	5	Ludovic APVRILLE
SysSec - System and Network Security	42 h	5	Aurélien FRANCILLON
UE Software and Networking		10	
ADST - Advanced Data Science Topics	21 h	3	Benoit HUET
EmSim - Emulation and simulation methodologies	21h	3	Jérôme HAERRI
MobMod - Mobility Modeling	21h	3	Jérôme HAERRI
MALIS - Machine Learning and Intelligent Systems	42h	5	Bernard MERIALDO
MobServ - Mobile application and services	42h	5	Navid NIKAEIN
MobSys- Mobile communication systems	42h	5	Christian BONNET
Netmod - Network Modeling	42h	5	Thrasylvoulos SPYROPOULOS
Netw_I - Introduction to computer networking and internet	42 h	5	Marc DACIER
Optim - Fundamentals of Optimization	21 h	3	Laura COTTATELLUCCI
SoftDev - Software development methodologies	42 h	5	Davide BALZAROTTI
TU Fundamental in Business, Innovation and Project Management (I)		5	
Entrep - Entrepreneurship and Capital Venture	21 h	3	Charles LUMBERS
Green_It - Sustainable ICT's	21 h	3	Laura DRAETTA
Innov - Innovation and product development	21 h	3	Pierre CHAIX
ManagIntro - Introduction to Management	42 h	5	Ken POPE
Property - Intellectual property Law	21 h	3	Dominique SERIO
TeamLead - Personal Development and Team Leadership	42 h	5	Ken POPE / Andrew PRIOR
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 - Introduction to semantic Web Technologies	21 h	3	Raphaël TRONCY
ProtIoT (IoT Communication protocols)	21 h	3	Christian BONNET
APPIOT (IoT Application protocols)	21 h	3	Adlen KSENTINI
DeepLearning - Deep Learning	21h	3	Benoit HUET
TU General Techniques		10	
AML - Algorithmic machine learning	42 h	5	Pietro MICHIARDI
Netsoft - Network Softwerization	21h	3	Adlen KSENTINI
ModAdv - Mobile Advanced Networks Mobile	21 h	3	Navid NIKAEIN
Moblp - Mobile NetworkingMobile Networking	21 h	3	Christian BONNET
MobWat - Wireless Access Technologies	21 h	3	Jérôme HAERRI
SecAppli - Security applications in networking and distributed systems	21 h	3	Refik MOLVA
HWSec - Hardware security	21 h	3	Renaud PACALET
TU Fundamental in Business, Innovation and Project Management (II)		5	
Business - Business Simulation	42 h	5	Ken POPE / Francis BIDAULT
Law - General Introduction to Law: contracts, setting up business	21 h	3	Dominique SERIO
ProjMan - Project Management	42 h	5	Jean-François SOULARD / Jean-Jacques AUREGLIA
SATT - Sociological approaches of Telecom TechnologiesS	21 h	3	Marc RELIEU
TU Semester project (II)	100 h	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 Software and Systems		15	
ADST - Advanced Data Science Topics	21 h	3	Benoit HUET
CompArch - Computer architecture	42 h	5	Renaud PACALET
Clouds - Distributed systems and cloud computing	42h	5	Pietro MICHIARDI
UMLEmb - UML for Embedded Systems	21h	3	Ludovic APVRILLE
MobMod - Mobility Modeling	21h	3	Jérôme HAERRI
MALIS - Machine Learning and Intelligent Systems	42h	5	Bernard MERIALDO
Mobserv - Mobile application and services	42 h	5	Navid NIKAEIN
MobSys- Mobile communication systems	42h	5	Christian BONNET
SoftDev - Software development methodologies	42 h	5	Davide BALZAROTTI
Stand - Standardization activities	21h	3	Jérôme HAERRI
TU Fundamental in Business, Innovation and Project Management (III)		5	
Entrep - Entrepreneurship and Capital Venture	21 h	3	Charles LUMBERS
Green_It - Sustainable ICT's	21 h	3	Laura DRAETTA
Innov - Innovation and product development	21 h	3	Pierre CHAIX
ManagIntro - Introduction to Management	42 h	5	Ken POPE
Property - Intellectual property Law	21 h	3	Dominique SERIO
TeamLead - Personal Development and Team Leadership	42 h	5	Ken POPE / Andrew PRIOR
TU Semester project (III)	100 h	6	
TU Language French or other one* SIII	22 h	1	Pascale CASTAING
			External teachers
S3 FALL total		27	

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