

ALMA MATER STUDIORUM - UNIVERSITA' DI BOLOGNA

DEPARTMENT OF STATISTICAL SCIENCES

Master

in

QUANTITATIVE FINANCE

QF Coordination Unit Department of Statistical Sciences University of Bologna

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1. Contacts

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In order to keep up with the latest news regarding academic activities, we suggest you to check regularly the following web pages:

- Master's Degree in Quantitative Finance > <u>https://corsi.unibo.it/2cycle/Qfinance</u>
- University of Bologna > <u>http://www.unibo.it/en/homepage</u>

2. DOUBLE DEGREE PRESENTATION

The Master's Degree in Quantitative Finance has undersigned two Agreements of Interuniversity Cooperation that permit students to get a degree both from the home and from one of the partner universities – hence, a double degree.

The agreements are as follows:

- 1) ARIMA Agreement
 - <u>University of Economics</u>, Katowice, Poland (UEK)
 - <u>University of Applied Sciences BFI</u>, Vienna, Austria (UAS bfi).
- 2) Agreement of Interuniversity Cooperation
 - Ludwig-Maximilians-Universitat, München, Germany (LMU)
 - <u>Université</u> D'Evry Val-D'Essonne, <u>Université</u> Paris Saclay, <u>École</u> Nationale Supérieure <u>d'informatique pour l'industrie et l'entreprise</u>, Evry, France (UEVE)

2.1 The Aim of the Project

Thanks to these agreements, the students of the Master in Quantitative Finance who decide to enroll in one of the partner universities' courses are given the opportunity to receive an academic degree from both the home and host institution.

To make this possible, the Parties offer equivalent curricula. Even though the foreign courses are structured in a different way, each university guarantees the correspondence of its course to the overall contents and learning outcomes defined in the ECTS description (see section 2.6 Reference tables). All the courses will be taught in English (except for some learning activities at Evry).

Each University selects the students according to its own criteria. Generally speaking, the admission process is based on academic merit, past work, extracurricular experiences and motivation letter.

2.2 Who can apply

To be eligible for the DD Programme, students must be enrolled in <u>the first year of the Master's Degree</u> in Quantitative Finance. The exchange period goes from a minimum of one semester to no longer than a full academic year.

2.3 When and how to apply

In order to apply for the Double Degree Programme, students have to submit the Application within the Erasmus+ call. This is because, to provide financial support, we undersigned *Erasmus+ agreements* with the same universities of the *Double Degree*.

For this reason, students shall apply to the Erasmus+ Programme and then, if they meet the requirements, they will be admitted to the DD Programme too (which will get you the double certification).

The Erasmus+ call is usually published between January and February each year.

As for the structure of the call, you may choose up to two destinations and indicate which period you would prefer to spend abroad (semesters). The number of places available for each exchange Programme is mentioned in the call.

Universities usually admits up to four students for the DD Programme.

Munich and Evry Universities are of strictly quantitative orientation and have a high number of courses that require a deep knowledge in mathematical subjects.

A first cycle degree in Mathematics or Statistics or Engineering is strongly recommended and at least 28/30 in *mathematics and probability* is required by the University of Munich (Lmu).

A first cycle degree in mathematics is recommended and a knowledge of the French language is required by the University of Evry.

All the Partner Universities offer the possibility to spend there the second semester of the second year and therefore allow you to do your final exam/thesis abroad. The degree will then be recognized by the University of Bologna, which will issue the second final certificate (Double Degree).

2.4 Erasmus+ Scholarship



Be careful!

Do not confuse the "DD Programme" and the "Erasmus+ Programme".

Erasmus+ is an exchange Programme and does not give you an additional title – you can use the Erasmus+ scholarship to fund your DD if you meet the requirements, though.

Please remember that winning an Erasmus+ Scholarship grants you the Erasmus+ scholarship and the admission to the Erasmus+ Programme, not to the DD.

Therefore, even if admitted to the Erasmus+ Programme for one of the above-mentioned destinations, all the students willing to take part in the DD Programme have to check with the Programme Coordinator, if they can be admitted to the DD Programme too. Students have to notify their intention of attending the DD Programme.

Usually students selected for Wien and Katowice within the Erasmus+ call are automatically accepted by the partner institutions in the framework of the DD agreement too. Evry and Munich, instead, check the curricula of selected students and they have the last word on the admission.

According to the Erasmus+ call the amount of each scholarship changes in relation to the country of destination (check the Erasmus+ call)

2.5 How to choose your study plan

Once the Programme Coordinator has informed you that you have been selected for the Double Degree Programme, the first thing to do is to make sure that the host University receives your personal data from the University of Bologna. You should then refer to the Partner University to follow on with the DD admission procedure.

Remember to contact them **with adequate advance notice**, specifying your status (Erasmus+/DD and Erasmus+), in order to start the right procedure.

The next step is to choose the courses you will attend and to fill in both the Erasmus+ Learning Agreement and the Double Degree Form (DDF), following the reference tables and consulting the Programme Coordinator. Once it has been approved, you have to fill in the Learning Agreement in the same way. Please find below an example of the **Double** Degree Form (pag.20). In order to obtain the Double Degree you must fulfil the following requirements:

Spend at least one semester at the host University

Get at least 30 ECTS for one semester or 60 ECTS for hole year

Do not forget about this while selecting the subjects!

Below you can find the suggested Study paths for all destinations. Exceptions to these are allowed only in special cases, due to educational – scientific reasons. If you do not choose one of the suggested paths, the reference tables (pag.9) will help you to fill in the double degree form.

From UNIBO to UAS (Vienna) – 3rd Semester

Module at UAS	Торіс	ECTS	
Module 1	Programming and databases	4	
Madula 2	Multivariate methods	5	
wodule z	Time series and analysis	3	
Module 7	Bank management	5	
	Risk controlling and Organization of Market Risk	2	
	Risk controlling and Organization of Credit Risk	3	
	Operational Risk for Banks	2	
Choose 6 ECTS between:			
Modulo 9	Management Life Risk + Management Non-life	21212	
Nouule o	Risk+ALM and Insurance Management	5+5+5	
Module 9	Integrating Aspects of Asset Management	6	

From UNIBO to UAS (Vienna) – 4th Semester

Module at UAS	Торіс	ECTS
Module 10	Advanced Topics	6
	Master thesis	18
	Diploma exam	6

From UNIBO to UEK (Katowice) – 3rd Semester

Module at UEK	Торіс	ECTS
Module 1	Programming and databases	4
Madula 2	Multivariate methods	5
would z	Time series and analysis	3
Module 7	Bank management	5
	Risk controlling and Organization of Market Risk	2
	Risk controlling and Organization of Credit Risk	3
	Operational Risk for Banks	2
Choose 6 ECTS b	etween:	
Module 8	Management Life Risk + Management Non-life Risk	3+3
Module 9	Integrating Aspects of Asset Management	6

From UNIBO to UEK (Katowice) – 4th Semester

Module at UEK	Торіс	ECTS
Module 10	Advanced Topics	6
	Elective	6
	Seminar	18

From UNIBO to UPSaclay	, UEVE, ENS	SIIE (Evry) – 3rc	l Semester
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Тс	ppic	ECTS	ECTS
Méthodes numériques de pricing et calibration de modèles	Pricing and calibration methods in fi- nance	6	
Calcul Stochastique	Stochastic calculus	6	
Finance de l'assurance	Finance of insurance	6	3
Marchés financiers et finance actua- rielle	Financial markets and actuarial finance		3
Gestion des risques	Risk management	6	
Modélisation de la courbe des taux	Interest rate modeling		3
Deep learning	Deep learning	6 out of	3
Econométrie financière	Financial Econometrics		3
Machine learning	Machine learning	6	
Anglais financier	Financial English	3	
Projet informatique	IT project	3	
Programmation informatique	Programming	6	

From UNIBO to UPSaclay, UEVE, ENSIIE (Evry) – 4th Semester

Торіс		ECTS	ECTS
Analyse stochastique	Stochastic analysis	4	
Contrôle stochastique	Stochastic control		2
Modélisation finance d'entreprise et de l'assurance	Corporate finance and insurance modeling	4	2
XVAs, FRTB, et analyse regulatory quant	XVAs, FRTB, and regulatory quant analysis	4	
Produits dérivés	Financial derivatives	4	
Techniques de machine learning pour le pricing d'options, la calibration de mo- dèles, et la couverture	Machine learning techniques for option pric- ing, model calibration, and hedging	4 out of	2

Données Haute Fréquence et carnets d'ordre	High-frequency data and limit order books		2
Gestion d'actifs avancée	Advanced asset management		2
Préparation au TOEIC	Preparation to TOEIC	2	
Cutting edge finance	Cutting edge finance	4	
Stage professionnel	Internship	12	

From UNIBO to LMU (Munich) – 3rd Semester

Topics	ECTS
Stochastic Calculus and Arbitrage Theory in Continuous Time	9 ECTS
Advanced Topics in Mathematics A	9 ECTS
Statistical Inference	9 ECTS
Advanced Topics in Computer and Data Science A	9 ECTS
Advanced Topics in Mathematics B	6 ECTS
Advanced Topics in Financial Mathematics B	6 ECTS
Advanced Topics in Computer and Data Science B	6 ECTS
Internship	6 ECTS
Actuarial Mathematics A	3 ECTS
Actuarial Mathematics B	3 ECTS
Actuarial Mathematics C	3 ECTS
Seminar	3 ECTS

From UNIBO to LMU (Munich) – 4th Semester

Topics	ECTS
Master Thesis	27 ECTS
Seminar	3 ECTS
TOTAL NUMBER OF ECTS	30 ECTS

2.6 Reference tables

The information contained in the following tables will help you to fill in the Double Degree Form. Equivalent exams are highlighted with the same color. You can choose courses from both the first and the second year.

In order, you will find the reference tables for the ARIMA Agreement Universities (Katowice, and Vienna) and for the parties to the Agreement of Interuniversity Cooperation (Munich and Evry). To facilitate the comparison of the courses the table regarding the University of Bologna is provided at the beginning of each section.

2.6.1 ARIMA Agreement Universities:

	1ST YEAR
Mathematics and Brobability (I.C.)	Calculus
Mathematics and Frobability (I.C)	Probability
Stochastic Processes and Econo-	Econometrics
metrics (I.C.)	Stochastic Processes
Financia	Market Regulation
Actuarial and Financial Mathemat-	Financial Mathematics
ics (I.C.)	Actuarial Mathematics
Corporate Finance and Risk Man-	Corporate Finance
agement (I.C)	Financial Risk Management
Economi	cs of Financial Markets
	2ND YEAR
Numerical Analysis (LC.)	Computer Programming
······································	Numerical Methods
	Statistics of Financial Markets
	Advanced Topics in Liquidity Management in the Post Crisis Era
	Market microstructure and algorithmic trading
Electives - Choose 12 ECTS among	Advanced Interest Rate Models and Markets
	Econometrics of Financial Markets
	Advanced Methods of Risk Management 1
	Credit Derivatives
	Computational Finance
	Advanced Risk and Portfolio Management
Electives:	Introductions to Machine Learning
Choose 12 ECTS among these ac-	Advanced Machine Learning
tivities or among the other ones	Fundamentals of IR Models
activated in the framework of the	Internship (300 h)
course	Credit Risk
	Topics in Liquidity Risk
	Workshop in Quantitative Finance
CHOOSE & ECIS among:	Advanced Topics

UNIBO - University of Bologna

Internship (150 h)
Thesis and Final Exam

UEK – University of Katowice

	1ST YEAR	ECTS	Semester
	Fundamentals of Mathematics and Statistics	4	1
M1 Fundamentals in Quantitative	Fundamentals of Finance	5	1
Methods and Finance	Fundamentals of Economics	3	1
	Programming and Databases	4	1
M2 Financial Foonametrics	Multivariate Methods	5	1
M2 Financial Econometrics	Time Series Analysis	3	1
M2 Derivativa Prining	Equity and Foreign Exchange Derivatives	2	1
M3 Derivative Pricing	Fixed Income and Credit Derivatives	4	1
	Measurement of Market Risk	4	2
M4 Dick Messurement	Measurement of Credit Risk	4	2
M4 Risk measurement	Measurement of Non-Life Risk	2	2
	Measurement of Life Risk	3	2
	Introduction to Asset Management	2	2
	Asset class Interest Rate Products	2	2
	Asset class Equity	2	2
M5 Asset Management	Asset class Foreign Exchange	1	2
	Asset class Credit Products	2	2
	Alternative Investments	2	2
	Structured Products	2	2
M6 Desservels Methods	Financial Reporting Standards	2	2
Mo Research Methods	Research Seminar	2	2
	2nd Year		
	Bank Management	5	3
M7 Asset Liability Management	Risk Controlling and Organization of Market Risk	2	3
and Risk Mgmt For Banks	Risk Controlling and Organization of Credit Risk	3	3
	Operational Risk for Banks	2	3
MO ALM and Disk Management for h	ALM and Insurance Management	3	3
M8 ALM and RISK Management for In-	Management Life Risk	3	3
	Management Non-Life Risk	3	3
MQ Applied Accet Management	Integrating Aspects of Asset Management	6	3
Ma Applieu Assel Management	Legal Framework and Ethics	3	3
M10 Applied Research in Asset	Advanced Topics	6	4
and Risk Management	Elective	6	4
	Seminar	18	4

UASS-University of Applied Sciences (Wien)

	1ST YEAR	ECTS	Semester
	Fundamentals of Mathematics and Statistics	4	1
M1 Fundamentals in Quantitative	Fundamentals of Finance	5	1
Methods and Finance	Fundamentals of Economics	3	1
	Programming and Databases	4	1
M2 Financial Feanamatrica	Multivariate Methods	5	1
M2 Financial Econometrics	Time Series Analysis	3	1
M2 Devivative Driving	Equity and Foreign Exchange Derivatives	2	1
No Derivative Pricing	Fixed Income and Credit Derivatives	4	1
	Measurement of Market Risk	4	2
M4 Dials Magazimentant	Measurement of Credit Risk	4	2
M4 RISK Measurement	Measurement of Non-Life Risk	2	2
	Measurement of Life Risk	3	2
	Introduction to Asset Management	2	2
	Asset class Interest Rate Products	2	2
M5 Asset Management	Asset class Equity	2	2
	Asset class Foreign Exchange	1	2
	Asset class Credit Products	2	2
	Alternative Investments	2	2
	Structured Products	2	2
	Financial Reporting Standards	2	2
M6 Research Methods	Research Seminar	2	2
	2nd Year		
	Bank Management	5	3
M7 Asset Liability Management	Risk Controlling and Organization of Market Risk	2	3
and Risk Mgmt For Banks	Risk Controlling and Organization of Credit Risk	3	3
	Operational Risk for Banks	2	3
	ALM and Insurance Management	3	3
M8 ALM and Risk Management for In-	Management Life Risk	3	3
Surances and Pension Funds	Management Non-Life Risk	3	3
	Integrating Aspects of Asset Management	6	3
My Applied Asset Management	Legal Framework and Ethics	3	3
M10 Applied Research in Asset	Advanced Topics	6	4
and Risk Management	Elective	6	4
	Seminar	18	4

2.6.2 Agreement of Interuniversity Cooperation (Munich & Evry)

UNIBO - University of Bologna

Year 1			
Course	Туре	Modules	ECTS
Mathematics and probability	Compulsory-	Calculus	6
	Integrated		
		Probability	6
Actuarial and financial mathematics	Compulsory-	Financial mathematics	6
	Integrated		
		Actuarial mathematics	6
Corporate finance and risk management	Compulsory-	Corporate finance	6
	Integrated		
		Financial risk management	6
Economics of financial market	Compulsory	Economics of financial markets	6
Stochastic processes and econometrics	Compulsory-	Econometrics	6
	Integrated		
		Stochastic Processes	6
Financial market regulation	Compulsory	Financial market regulation	6
Year 2	I		
Numerical analysis	Compulsory-	Computer programming	
	Integrated		6
	Compulsory-	Numerical methods	
	Integrated		6
12 ECTS to be chosen among (List A):	1		
Econometrics of financial markets	Elective	Econometrics of financial markets	6
Statistics of financial markets	Elective	Statistics of financial markets	6

Avanced interest rate models and markets	Elective	Advanced interest rate models and markets	6
Credit derivatives	Elective	Credit derivatives	6
Fundamentals of interest rate models and markets	Elective	Fundamentals of interest rate models and markets	6
Advanced methods of risk management 1	Elective	Advanced methods of risk manage- ment 1	6
Computational finance	Elective	Computational finance	6
Advanced machine learning	Elective	Advanced Machine Learning	3
Market microstructure and algorithmic trading	Elective	Market microstructure and algorithmic trading	6
Advanced topics in liquidity management in the post crisis era	Elective	Advanced topics in liquidity manage- ment in the post crisis era	6
General electives: 12 ECTS among the follo	owing list or t	he list A or B:	
	20237		
Internship		Internship	12
Introduction to machine learning Introduction to machine learning			
Advanced machine learning		Advanced machine learning	3
Credit risk		Credit risk	6
Topics in liquidity risk		Topics in liquidity risk	3
Choose 6 ECTS among (List B):			
Workshop in quantitative finance		Workshop in quantitative finance	6
Internship		Internship	6
Advanced topics		Advanced topics	6
Thesis and final examination Thesis and final examination			18
Total number of credits			120

Paris Saclay (Evry)

Pathway 1

Course		Semestres	ECTS
S1 - Semester 1	S1 - Semester 1		
Programmation avancée et projet	Advanced programming and project	S1	4
Processus stochastique	Stochastic process	S1	4
Analyse des données	Data analysis	S1	4
Recherche Opérationnelle	Operations research	S1	4
Méthodes de Régression Régularisées	Generalised linear models and extensions	S1	4
Projet informatique et méthodes agiles	IT project and agile methods	S1	4
Analyse Fonctionnelle	Functional analysis	<u>S1</u>	4
Langues	languages	S1	3
Economie-Gestion	Economics and management	S1	3
TOTAL ECTS S1		S1	30
S2 - Semester 2	S2 – Semester 2		
Stage entreprise ou laboratoire	Internship	S2	10
Calcul Stochastique	Stochastic calculus	S2	4
Analyse des EDP	PDE analysis	<u>52</u>	4
Modélisation Statistique	Statistical modelling	S2	4
Méthodes de simulation	Simulation methods	<u>\$2</u>	4
Instruments et Modèles financiers	Financial models and instruments	S2	4
Complément en Recherche opération- nelle	Advanced operations research	S2	4
Projet Recherche	Research project	S2	4

Pattern Recognition and Biometrics	Pattern Recognition and Biometrics	S2	4
TOTAL ECTS S2		S2	30

Pathway 2

Course		Semestres	ECTS
S1 - Semester 1	S1 - Semester 1		
Introduction au C++	Introduction to C++	S1	3
Probabilités	Probability	S1	5
Modèles linéaire	Linear models	S1	5
Optimisations et applications numériques	Optimisation and numerical applications	S1	3
Méthodes numériques	Numerical methods	S1	3
Introduction à l'apprentissage statistiques	Introduction to statistical learning	S1	3
EDP méthodes hilbertiennes	Hilbertian methods in PDEs	S1	3
Analyse Fonctionnelle	Functional analysis	S1	3
Anglais	English	S1	2
Marchés financiers	Financial markets	S1	3
TOTAL ECTS S1		\$1	30
S2 - Semester 2	S2 - Semester 2		
Stage entreprise ou laboratoire	Company or laboratory internship	S2	12
Processus Stochastique	Stochastic process	S2	4
Series temporelles	Time series	S2	2
Apprentissage statistique et méthodes ré- gularisée	Statistical learning and regularization	S2	3
Analyse Fonctionnelle 2	Functional analysis 2	S2	2

Mathématiques financières		S2	3
	Financial mathematics		
Programmation avancée en C++		S2	2
	Advanced programming in C++		
Analyse numérique des EDP et éléments fi-	Numerical analysis of PDEs and finite ele-	S2	3
nis	ments		
Anglais	English	S2	2
TOTAL ECTS S2		S2	30

S3 - Semester 3 QF	S3 - Semestre 3 QF	ECTS	ECTS
Méthodes numériques de pricing et calibra- tion de modèles	Pricing and calibration methods in fi- nance	6	
Calcul Stochastique	Stochastic calculus	6	
Finance de l'assurance	Finance of insurance	6	3
Marchés financiers et finance actuarielle	Financial markets and actuarial finance		3
Gestion des risques	Risk management	6	
Modélisation de la courbe des taux	Interest rate modeling		3
Deep learning	Deep learning	6 out of	3
Econométrie financière	Financial Econometrics	-	3
Machine learning	Machine learning	6	
Anglais financier	Financial English	3	
Projet informatique	IT project	3	
Programmation informatique	Programming	6	
S4 - Semester 4 QF	S4 - Semestre 4 QF	ECTS	ECTS
Analyse stochastique	Stochastic analysis	4	

Contrôle et modéliation stochastique en fi- nance et en assurance	Stochastic control an	4	
XVAs, FRTB, et analyse regulatory quant	XVAs, FRTB, and regulatory quant analy- sis	2	
Produits dérivés	Financial derivatives	4	
Techniques de machine learning pour le pri- cing d'options, la calibration de modèles, et la couverture	Machine learning techniques for option pricing, model calibration, and hedging	4 out of	2
Données Haute Fréquence et carnets d'ordre	High-frequency data and limit order books	4 001 01	2
Gestion d'actifs avancée	Advanced asset management		2
Préparation au TOEIC	Preparation to TOEIC	2	
Cutting edge finance	Cutting edge finance	4	
Stage professionnel	Internship	12	

1. Semester		ECTS
Stochastic Calculus and Arbitrage Theory in Continuous Time	compulsory	9
Statistical Inference	compulsory	9
Mathematical Seminar A	compulsory	3
Electives I: 9 ECTS to be chosen among		
Financial Mathematics	elective	3
Actuarial Mathematics A	elective	3
Elective Topics in Business Administration (Theory) I	elective	6
Fachspezifische Grundlagen: Finance and Insurance	elective	9
Microeconomics	elective	6
Macroeconomics	elective	6
Econometrics	elective	6
2. Semester		ECTS
Numerical Methods in Financial Mathematics	compulsory	9
Statistical Models for Financial Mathematics	compulsory	6
Electives II: 9 ECTS to be chosen among		9
Quantitative Risk Management	elective	9
Fixed Income Markets	elective	9
Electives III: 9 ECTS to be chosen among		6
Finance and Insurance I	elective	6
Advanced Topics in Computer Science	elective	6
3. Semester		ECTS
Internship	compulsory	6

LMU- Ludwig-Maximilians-University (Munich)

Electives IV: at least 24 ECTS to be chosen among the fol- lowing and Electives I & III, at least 9 ECTS from WP 13-20			
Advanced Topics in Mathematics A	elective	WP13	9
Advanced Topics in Mathematics B	elective	WP14	6
Advanced Topics in Financial Mathematics A	elective	WP15	9
Advanced Topics in Financial Mathematics B	elective	WP16	6
Advanced Topics in Financial Mathematics C	elective	WP17	3
Mathematisches Seminar B	elective	WP18	3
Actuarial Mathematics B	elective	WP19	3
Actuarial Mathematics C	elective	WP20	3
Selected Topics in Statistical Computing	elective		3
Elective Topics in Statistics and Probability	elective		6
Statistical Methods for Financial Mathematics	elective		6
Advanced Topics in Computer and Data Science A	elective		9
Advanced Topics in Computer and Data Science B	elective		6
Elective Topics in Business Administration (Theory) II	elective		6
Elective Topics in Business Administration (Theory) III	elective		6
Elective Topics in Business Administration (Applied The- ory) I	elective		3

4. Semester		ECTS
Master thesis	compulsory	27
Seminar (Defence of the Master thesis)	compulsory	3
Total Number of Credits		120

2.6.3 The Form

Once you have chosen the courses you can start filling in the form. Here you have an example of a filled-in form.



STUDENT'S PERSONAL DETAILS

Name and Sumame: E-mail Address: Registration number at the University of Bologna: Host University:

DETAILS OF THE STUDY PROGRAMME ABROAD

Scheduled length of stay: from......till.....

Planned Activity at the host University		Recognised course equivalent in Bologna		
Course titles	ECTS	Course titles	ECTS	
Thesis and diploma		Workshop in	6	
exam	24	Quantitative Finance	0	
		Thesis and final exam	18	
M10-Applied		Elective Course		
Research in Asset and	6		6	
Risk Management				
TOT.	30		30	

Official Approval by the University of Bologna Prof.ssa Silvia Romagnoli Date and Signature

Official Approval by the Host University Date and Signature of the Coordinator

3. BACK IN BOLOGNA

You are finally back. Let's see what is left to do.

3.1 Mandatory documents

For the **Erasmus+ Scholarship**, the procedure for recognition of the exams needs to be carried out on the <u>AlmaRM</u> platform (you may find all the relevant information there). If you wish to do your *final exam at the Host University*,

please make sure that the University of Bologna has recognized the courses you attended abroad **before** your graduation abroad.

These are the documents you must provide.

- Certificate of Period. This will allow you to receive the second tranche of the scholarship.
- **Transcript of Records**. This needs to be handed in to the DD Commission and is important for the assessment of the courses you took abroad.

Please find below the *conversion tables* for the exams you took at the Host University.

Description	Bologna	Katowice	Wien
Highest level (cum laude)	30 e lode	5	1
Excellent	29-30	5	1
Very good	26-28	4,5	2
Good	24-25	4	2
Satisfactory	21-23	3,5	3
Sufficient	19-20	3	4
Barely passing	18	3	4
Fail	0-17	2	5

ARIMA Agreement

Description	Bologna	Evry	München
Highest level (cum laude)	30 e lode	20-19	1,0
Excellent	30	18	1,0
Very good	28-29	17	1,3
Good	25-26-27	14-15-16	2,3-2,0-1,7
Quite good	24	13	2,7
Satisfactory	21-23	11-12	3,0 - 3,3
Sufficient	19-20	10	3,7
Barely passing	18	10 or (*)	4
Fail	0-17	0-9	5

Agreement of Interuniversity Cooperation

1.2 Recognition of the Double Degree Programme

The procedure for the recognition of the Double Degree Programme depends on the period you spent abroad. If you spent your:

- 1) Fourth semester (second semester of the second year) or entire second year: thesis abroad
- Read carefully the guidelines for the <u>Final Graduation</u>: procedure and deadline and apply online according to the deadlines (*domanda di laurea*);
- In case you graduate abroad first, you have to provide to the Program Coordinator_the original version of the final graduation certificate at least 2 weeks before the expected graduation date at the University of Bologna.
- Please make sure that the University of Bologna has recognized the courses you attended abroad.
- You may attend the graduation ceremony (*proclamazione*) at the University of Bologna according to the Graduation Session you applied for (not compulsory). You must inform Maria Luigia Loiudice if you want to take part to the graduation ceremony.

2) Third Semester (first semester of the second year)

 After the graduation at the University of Bologna, send your Final Transcript to the Host University in order to obtain their Degree. You will be able to download the transcript directly from Studenti Online one week after the Graduation Session.

Five months after your graduation, it will be possible to collect the parchment (pergamena - the original handwritten diploma) at the Segreteria Studenti di Economia, Management e Statistica (student registry office). You may write (from your Unibo email address) to: segescosta@unibo.it with Dr. <u>Maria Luigia Loiudice</u> in copy , writing your:

- o NAME
- o SURNAME
- o DATE OF GRADUATION
- o ADDRESS.
- $\circ \quad$ and attach a photocopy of the identity card

Each of the foreign University's partner follows a different procedure to release the Degree according to their regulation.

3.3 Graduation Deadlines and other information

The deadlines for the graduation sessions are on QF website. You can start the procedure for the graduation even if you have not taken all the exams yet. It is the **third deadline** (about twenty days before the actual graduation date) that is relevant for the completion and recognition of the exams.

Please check the deadlines on QF website