

Master's Degree in Aerospace Engineering

Info session for 2nd year students cohort

Forlì, September 22nd 2016

ALMA MATER STUDIORUM ~ UNIVERSITÀ DI BOLOGNA • CAMPUS DI FORLÌ esente materiale è riservato al personale dell'università di bologna e non può essere utilizzato ai termini di legge da altre persone o per fini non istituzionali

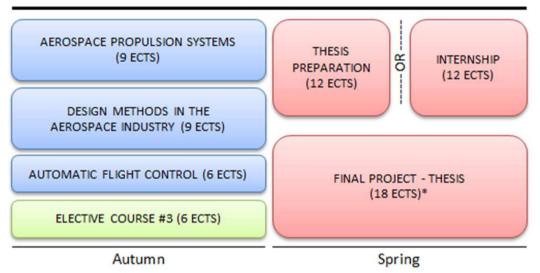


Summary

- Welcome back
- Elective exams and study plan
- Activities of the 12 CFU guided choice: Internship and Thesis preparation
- Health and Safety in the Workplace Training
- Funds opportunities, companies and institutions
- Final project and Major Master's thesis
- Upcoming events



Master's Degree Programme content



Year 2

* STUDENTS CAN CHOOSE AMONG:

- STANDARD THESIS

- MAJOR MASTER THESIS



Elective exams

comp	ulsory Courses				
		PERIOD	TYPE	SSD	CFU
73348	Aerospace Propulsion Systems	1	В	ING-IND/07	9
73192	Automatic Flight Control	1	С	ING-INF/04	6
73194	Design Methods in the Aerospace Industry	1	в	ING-IND/15	9
30800	Final Project	1	Е		18
electiv	tudent can select among the courses listed below and / or other c	PERIOD	TYPE	SSD	CFU
electiv		-			
electiv	ve modules.	PERIOD	TYPE	SSD	CFU
electiv 73205 77957	Aerospace Technologies and Materials	PERIOD 1	D	SSD ING-IND/04	CFU 6
electiv 73205 77957 73208	Aerospace Technologies and Materials Embedded Electronic Systems for Aerospace Applications	PERIOD 1 1	D D	SSD ING-IND/04 ING-INF/01	CFU 6 6
electiv 73205 77957 73208 77956	Aerospace Technologies and Materials Embedded Electronic Systems for Aerospace Applications Spacecraft Attitude Dynamics and Control	PERIOD 1 1 1	TYPE D D D	SSD ING-IND/04 ING-INF/01 ING-IND/05	CFU 6 6
electiv 73205 77957 73208 77956	Aerospace Technologies and Materials Embedded Electronic Systems for Aerospace Applications Spacecraft Attitude Dynamics and Control Spacecraft Subsystems and Space Mission Design	PERIOD 1 1 1	TYPE D D D	SSD ING-IND/04 ING-INF/01 ING-IND/05	CFU 6 6
electiv 73205 77957 73208 77956	Aerospace Technologies and Materials Embedded Electronic Systems for Aerospace Applications Spacecraft Attitude Dynamics and Control Spacecraft Subsystems and Space Mission Design	PERIOD 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TYPE D D D	SSD ING-IND/04 ING-INF/01 ING-IND/05	CFU 6 6 6



To be submitted online on https://studenti.unibo.it

The application can be made: From October 17th till November 18th 2016 From February 13th till March 10th 2017

Please note: in order to complete the study plan students must have completed their enrolment and paid the due tuition fees

NO EXCEPTIONS ARE ALLOWED



Internship

The curriculum internship is designed for students regularly enrolled on the 2nd year of the programme and want to spend **a period of vocational training**. To do this with an organization having an agreement with the University or in one of the University labs, students must be authorized by their degree programme Internship Committee.

 The period of internship must be spent with companies or organizations enjoying an agreement with the University (external internship) or in one of the labs of the School of Engineering of Forlì (internal internship). In both case, student will choose an academic tutor (professor) and if the internship is carried out in a company, the student must point out a company contact person.

- If students choose to do an internal internship, they must directly contact their professor/academic tutor.



Internship

If the company chosen by the student does not have an agreement with the University, **an agreement must be signed before the start of the internship**.

The steps required to open an agreement and activate the internship are described at:

http://www.engineeringarchitecture.unibo.it/en/internships/curriculuminternship-2013-forli-campus

Where you can also find the <u>request form</u>

The internship is then managed through the internship online platform: <u>https://tirocini-</u> <u>studenti.unibo.it/tirocini/studenti/loginStudenti.htm;jsessionid=2BEB272331C881CC53E70E995457182</u> <u>9.prod-formazione-tirocini-joss12</u>

Please also consult the new Internship Regulations available at <u>file:///C:/Users/giulia.chiadini2/Downloads/Nuovo%20Regolamento%20Scuol</u> <u>a%20IngArch%20(2).pdf</u>



Internship

Keep in mind that:

- The student must have already chosen the activity in his/her study plan at the moment of the request; he/she will have to wait the specific period for the study plan submission/change if he/she needs/want to change the 12 CFU activity.
- The internship cannot last 20% more than the scheduled time (300 hours)
- The Internship and thesis preparation Committee meets every 1st Monday of the month
- The intership cannot begin before collecting the attendance book. This can be collected about a week after the Internship Committee approval
- The internship must be completed within 12 months from the starting date. At the end of the activity, students must submit the attendance book, the assessment of the academic tutor and the report of the activities carried out in the company/lab.



Thesis Preparation

The Thesis Preparation course unit is aimed to those students regularly enrolled on the 2nd year of the programme who are interested in carrying out a **wider research project or investigation**; that can be achieved by obtaining 12 CFU/ECTS from the Thesis Preparation activities and 18 CFU/ECTS from the Final Project.

The overall student work corresponds to the involvement in a **8 month full-time period of research project** (about a quarter of the official duration of the Master's degree), resulting in the recognition of a quarter of the Master's degree total CFU/ECTS.

Requesting students must have passed **9 out of 12 courses** planned in their study plan. The student transcript must be submitted together with the request form at the time of thesis preparation request.



Thesis Preparation

The expected individual workload is a 2 month full-time period (from 300 to 350 hours). Each student will nominate an academic tutor **(either professor) or adjunct professor)**, who will also necessarily supervise the Thesis for the Final Examination.

The regulations, the request form and the recognition form are available at: http://corsi.unibo.it/2cycle/AerospaceEngineering/Pages/thesis-preparation.aspx

Students must read the regulations carefully.

At the end of the activity, students must submit the attendance book, assessment of the academic tutor and a **written research report** describing the activities carried out for the expansion of their knowledge.

The Internship and thesis preparation Committee meets every 1st Monday of the month.



Dissertation-related internship

This kind of internship is designed for students who wish to experience a curriculum internship with a company and in that way prepare for their final exam/dissertation.

The internship may last up to **12 months** must be completed by the deadline set by the School for the thesis approval by the academic tutor. Read all the details in the School website: <u>http://www.engineeringarchitecture.unibo.it/en/internships/dissertati</u> <u>on-related-internships-2013-forli-campus</u>

This kind of internship is not included in the study plan and **does not** confer credits, but only insurance coverage.

Students may not graduate before the date set for finishing this work experience.



12 CFU guided choice activities

	Internship	Thesis Preparation
No. of CFU required for application	No min. CFU	9 out 12 CFU
No. of hours	300	300-350
Type of activity	Vocational training in a	In-depth bibliographic research and individual study
Where	university lab or company	university lab or company
Procedure	Specific modules and deadlines	Specific modules and deadlines



Recongnition of work experience in lieu of the internship/thesis preparation

Work experience may be recognised in lieu of doing a curriculum internship or thesis preparation (according to the student's study plan), if it is **deemed appropriate** to the degree programme learning objectives, is certified according to law and meets the requirements set by the degree programme board.

Requirements:

- the work experience done **no more than 2 years prior to the date of application**;

- role accepted: professional aeronautical-space engineer

To have taken part in training courses is not deemed equivalent to internship training, nor is any form of teaching support role in schools or training institutes of any kind.

The application form can be found at:

http://www.engineeringarchitecture.unibo.it/en/internships/recogniti on-of-work-experience-in-lieu-of-an-internship-2013-forli-campus



Contacts

For all the procedures regarding thesis preparation, thesis and major master's thesis, please contact the

Teaching Secretariat

Ground floor, Via Fontanelle 40- Forlì Ms. Cinzia Raggi

Ph. +39 0543 374413

ingarc.vpce.segrdidattica-fo@unibo.it

For the internship and dissertation-related internship, the Teaching Secretariat ia available for information, but the procedures is managed by the

> Internship and Placement office of Forlì Campus Contact person for engineering school: Rosita Gabelli <u>accf.forlitirociniplacement@unibo.it</u> Ph. +39 0543 374135



Health and Safety in the Workplace Training

All the students with an internship activity in his/her study plan, are requested to do a mandatory **general training.**

All the students enrolled on the Aerospace Engineering course, having an activity carried out in a high/medium risk laboratory in his/her study plan, are requested to do a mandatory **specific training**.

There isn't an order for carrying out the training. The general training is permanent and can be spent in any company. The specific training has a 5-year validity. It can be recognised or not by future company according to the specific type of activity that the company deals with.

More information on <u>http://www.engineeringarchitecture.unibo.it/en/bulletin-board/health-and-safety-in-the-workplace-training-course-aimed-at-students</u>

If you have any questions, please write to veronica.rossi5@unibo.it

Funds opportunities for internship and thesis preparation abroad

Erasmus+ mobility for trainship

You can spend 3 months in a European-based company/institution/university and get funds from the EU. The Call has been published on Sept. 12th 2016.

Interested students must contact a EU company/institution/university and design a draft. Submission of applications (including the project proposal) by October 28th 2016.

If selected, students can carry out the internship starting from January 2017 up to June 2017 (and must be finished by September 2017). The internship will be recognised in the student study plan.

Find out more at <u>http://www.unibo.it/en/international/foreign-internships/general-information-erasmus-mobility-traineeships</u> List of possible companies

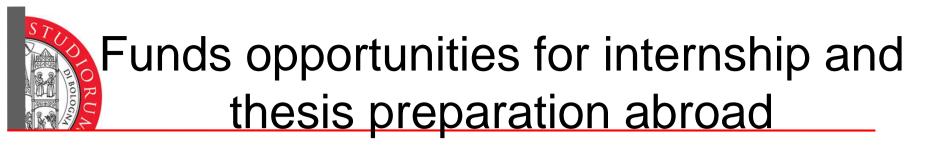


Study grants for research period abroad

The School of Engineering and Architecture allocates funds for those approaching graduation who would like to spend a short period abroad as preparation for their degree dissertation (up to 6 months).

To apply, students must submit a proposal drafted with the supervisor at the hosting institution. If selected, they will be allocated a grant depending on duration and destination of the proposal.

Calls for applications in spring and autumn published on http://www.engineeringarchitecture.unibo.it/en/calls-for-applications/thesis-abroad-call-for-application-cesena-forli-1



Erasmus+ mobility for studies

You can spend a period abroad in one of the partner universities also for thesis or internship activities.

The Call is generally published in January. Students should check among the possible European universities with a B.A. with our study course and apply to one which also offers internship and/or thesis preparation.

If selected, students will receive a grant depending on destination and duration.

Please check the offers available and read the Call for applications carefully at: <u>http://www.unibo.it/en/international/Studying-abroad/General-information-on-</u> <u>Erasmus/Participation-methods</u>



Companies and institutions

Students should speak in advance with the professors of the area/field of interest for guidance and advice for any of these activites and funds opportunities.

These are some of the companies and institutions that hosted or even employed some of our past students:

Eumetsat	Lamborghini
Avio	Airbus
Dallara	Rolls Royce
Riba Composites	AgustaWestland-Leonardo
Piaggio Aeronautica	Thales Alenia
GarradHassan Italia	Royal Melbourne Institute of
Helicopters Italia	Technology
Curti Spa	

A list companies with vacancies and graduate scheme can be found at this <u>page</u>: <u>http://corsi.unibo.it/2cycle/aerospaceengineering/Pages/internship-</u> opportunities.aspx?scope=Current



Final Project (Thesis) 18 ECTS

The Final project (thesis) is **an individual project** carried out by the students and that must be submitted and discussed during the graduation ceremony in order to obtain the 18 ECTS and the completion of the degree.

The Aerospace Engineering degree programme admits, for the Final project, the differentiation between **`Standard Thesis**' and **`Major Master's Thesis**'.

The difference involves the contents, developed more deeply in the 'Major Master's Thesis', the temporal commitment, which is estimated in 6 months full-time for the 'Major Master's Thesis', and the different evaluation of the theses themselves, since the 'Major Master's Thesis' also requires the assignment of an Examiner.



Major Master's Thesis

	Standard Thesis	Major Master's Thesis
Application to the Final project	According to the Final examination regulations	At least 2 months in advance before the scheduled graduation date
Thesis submission	According to the Final examination regulations	At least 3 weeks before the scheduled graduation date
Duration	At least 2 months	6 months
Points to be assigned to the Thesis	0 to 4	0 to 7
Examiner	No	Yes



Final examination Regulations

- <u>http://corsi.unibo.it/2cycle/AerospaceEngineering/Pages/how-to-be-allowed-to-take-final-examination.aspx</u>
- <u>http://corsi.unibo.it/2Cycle/AerospaceEngineering/Documents/Final</u> %20Examination%20Regulation%20LM%20Aerospace%20Enginee ring.pdf



Upcoming events

Informative desks

CUSB, ER.GO, CLA, students associations 3rd and 4th October 2016 at the Teaching Hub

European Researchers Night

https://eventi.unibo.it/notte-ricercatori-2015/forli

September 30th- Predappio (Forlì)

Visit of the Caproni tunnel where the CICLoPE (Centre for International Cooperation in Long Pipe Experiments) is located. Presentations, music and food.



Questions?







Thank you!

www.unibo.it/AerospaceEngineering