

UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Study Plan Guidelines

**Department of Civil, Environmental and Architectural
Engineering (ICEA)**

Mathematical Engineering

International Desk ICEA



Presentation:

You will receive an email with the presentation of today

Student Guide “How to compile your study plan”:

under “[Study plan](#)”

and

STEM Course “[International Desk @ ICEA](#)”



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What is a Study Plan?



The **Study Plan** is the complete list of educational activities required to graduate. Each degree programme includes a number of educational activities such as exams, laboratories, course units, workshops, internships, thesis or other activities.



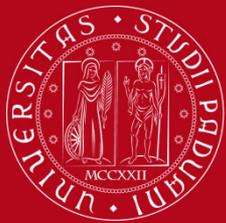
Some educational activities are **compulsory**, others are **optional** (choosing between X courses) or **elective** courses.



Filling out your Study Plan is **mandatory!**

Please be aware that you **cannot** take an exam if **you have not submitted** your study plan and/or it has not been approved yet!

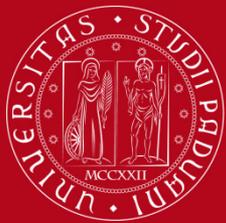




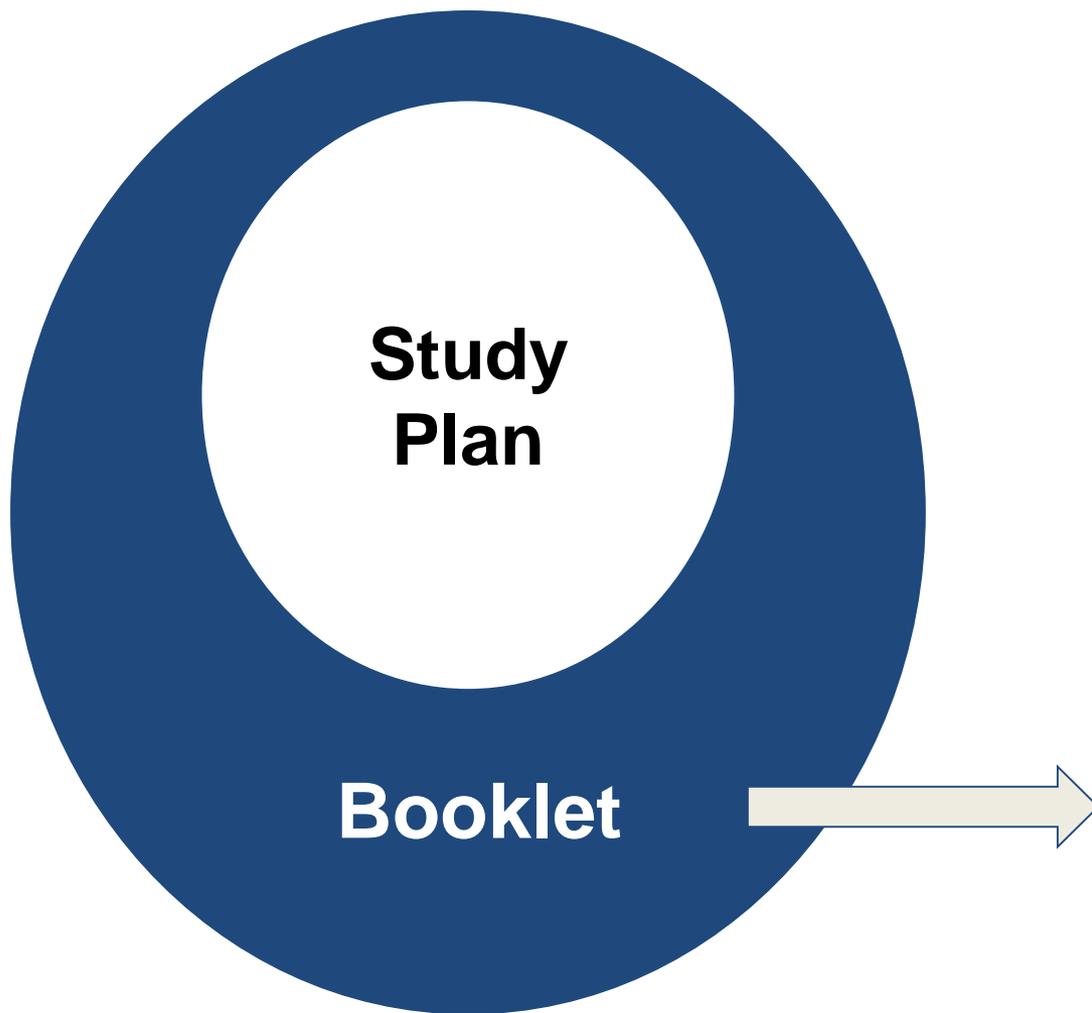
The Study Plan is the complete set of educational activities you must carry out in order to earn the **credits (ECTS/CFU)** required to graduate:

- [Bachelor's degree: 180 CFU]
- [Master's degree: 120 CFU]
- [Single-cycle degree: 360 CFU]





Booklet vs Study Plan



The Booklet can be **richer than the Study Plan** because it contains all the exams foreseen in the study plan but it can **also** contain **extra exams** that do not contribute to the degree credits, GPA and final grade.

An exam can be removed from the Study Plan but can remain in the Booklet.



Who needs to submit the Study Plan and when do you have to submit it

All students are required to fill in the study plan. You will fill in the study plan for the first time at the beginning of your student career for **both of your academy years** of the Master degree.

Please note that the study plan procedure **opens in late October and closes on the 30th September of the following year.** During this period, you can modify your study plan.

The Study Plan must be filled in and presented via [**UNIWEB**](#), which is accessed using your University credentials (username and password).

Once you **register for graduation**, the study plan cannot be modified anymore. Please make sure that your study plan is **complete and correct** before registering for graduation!





Types of Study Plan: Automatically Approved Study Plan

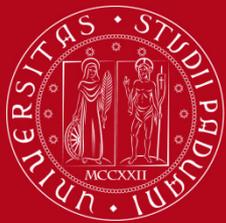
The Study Plan can be:

- **Automatically approved Study Plan (recommended) or**
- **Submitted Study Plan - under approval of the Academic Committee**

In the **automatically approved Study Plan**, the elective course units **must be** selected from those recommended by the **Educational Rules of the Study Programme, i. e. the elective courses offered by the course programme.**

The list of elective courses is specified in the study plan procedure.

The Study Plan, once confirmed by the student, is **automatically approved.**



In the **Submitted Study Plan** subject to the approval of the **Academic Committee** the student has the possibility to insert in the Study Plan course units beyond the course offer of the Master degree, including the entire [UNIPD academic offer](#).



The Study Plan will be evaluated by the competent **Academic Committee** in order to be approved. The student will receive an automatic notification by email.

Useful tip: Choose an elective course unit that:



- is **coherent** with your educational path
- **can be chosen** as an elective (check the [Syllabus](#))



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How to fill in the Study Plan



The Master degree in Mathematical Engineering contains **two study tracks**:

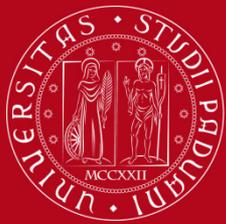
- **Mathematical Modelling for Engineering and Science**
- **Financial Engineering**

This presentation refers to the procedure of the study track “**Mathematical Modelling for Engineering and Science**” to demonstrate to students how to fill in the study plan.



Students of the study track **Financial Engineering that will attend their 2nd year at ESILV (Paris)** can follow the indications for the first year of their programme. All activities are mandatory and simply have to be added to the study plan. The second year activities conducted at ESILV will be integrated by adding the “Project Erasmus”. The same procedure is valid for the “Internship”.

Students of the study track **Financial Engineering that will attend their 2nd year at UNIPD** should fill in a Submitted Study Plan following the same instructions as provided for the curriculum Mathematical Modelling.



Step 1. Access on Uniweb

Open the [Home Page](#) of Uniweb,

Click on “Login”.

Step 2. Login with the SSO:

Insert your “*name.lastname*” and select “*@studenti.unipd.it*”.

You can select the language of your choice as well.



Step 3. Start the procedure

Once logged in, from “Home” click on “Study Plan” or click on the menu button, “Home” and then “Study Plan”.

Welcome Name Lastname (Student ID: XXXXXXXX)

Welcome to your reserved area.
In order to edit your personal details click on "Home" --> "Master data"
Information about your degree course and course units are available on the website <http://didattica.unipd.it>

Personal details Show details ▶

Control panel Hide details ▼

Process	Status	To do list
Fees	● situazione regolare	display
Career plan	● editable	study plan
Available terms	● 0 available terms	
Term registration	● 0 bookings	

Student status Show details ▶

Messages Hide details ▼

Sender	Title	Date
No messages		

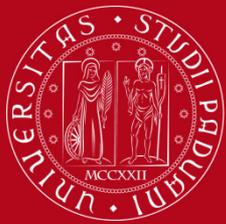
[other messages](#)

Notes Hide details ▼

Notes

Note text	Date
No notes	

Once there, click on “New Study Plan”.



Step 4. Select the type of Study Plan

At this point, you can choose the type of Study Plan: automatically approved (first option) or subject to approval by the **Academic Committee** (second option).

To choose the first option, click on '**automatically approved study plan**' and then click on "OK".

The guided procedure allows to include educational activities according to the rules established by the Master Programme Regulation.

The screenshot shows the Uniweb interface for selecting a study plan. The header includes the University of Padua logo, the Uniweb logo, and a menu icon. The main content area displays the following information:

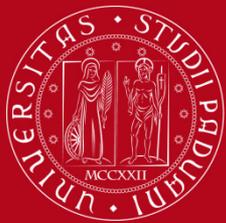
Choice of the course units: Name Lastname - [MAT. XXXXXXXX]

In order to complete your study plan, please select now one of the following plans and click on "ok"

Study plans

	Description	Apri
<input checked="" type="radio"/>	AUT-MM - AUTOMATICALLY APPROVED STUDY PLAN - MM track Track: MATHEMATICAL MODELLING FOR ENGINEERING AND SCIENCE NOTA: MATHEMATICAL MODELLING track. Select this kind of study plan if you wish to choose the elective modules among those offered by Mathematical Eng.	
<input type="radio"/>	PROP-MM - SUBMITTED STUDY PLAN - MM track Track: MATHEMATICAL MODELLING FOR ENGINEERING AND SCIENCE NOTA: MATHEMATICAL MODELLING track. Plan to be approved by the Academic Committee.	

OK



Step 5. Select the mandatory courses of the first year (1)

First, the mandatory courses for the **1st academic year** will be listed. Since these courses are obligatory, click on **“Next rule”** to add them to the study plan.

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Uniweb

» > Piano di Studio > Rule

Choice of the course units – Study Plan of Name Lastname - [MAT. XXXXXXXX]

PLEASE NOTE
The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.

Rule - No.1 - Year of course1
Compulsory modules - 1st year - for both tracks - Compulsory educational activities:

- ANALYTICAL AND STOCHASTIC MATHEMATICAL METHODS FOR ENGINEERING (INP5070357) - [CFU: 12]
- INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS (INP5070341) - [CFU: 9]
- NUMERICAL METHODS FOR DIFFERENTIAL EQUATIONS (INP5070378) - [CFU: 6]
- SYSTEM IDENTIFICATION AND DATA ANALYSIS (INP8084399) - [CFU: 9]

Next rule

Information about the study plan you are completing

Percorso di Studio	MATHEMATICAL MODELLING FOR ENGINEERING AND SCIENCE
scelto:	
Year of offer:	2022
Cohort:	2022



Step 6. Select the mandatory courses of the first year (2)

Follow the procedure as previously by clicking on “**Next rule**” to add the mandatory courses.



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Uniweb



MENU

» [Piano di Studio](#) » Rule

Choice of the course units – Study Plan of Name Lastname - [MAT. XXXXXXX]

PLEASE NOTE
The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.

Rule - No.2 - Year of course1
Compulsory modules - 1st year - "Mathematical Modelling" track - Compulsory educational activities:

- MATHEMATICAL PHYSICS (C.I.) (INP5070520) - [CFU: 12]
- NUMERICAL METHODS FOR CONTINUOUS SYSTEMS (INP5070384) - [CFU: 6]
- STATISTICAL MECHANICS OF COMPLEX SYSTEMS (INP5070381) - [CFU: 9]

[Previous rule](#) [Next rule](#)

Information about the study plan you are completing

Percorso di Studio scelto: MATHEMATICAL MODELLING FOR ENGINEERING AND SCIENCE

Year of offer: 2022

Cohort: 2022

Activities formerly selected
List of teaching activities you have selected while completing your study plan. They are classified by year of course and ordered by code.

Course units – Year of course 1

Code	Description				
INP5070357	ANALYTICAL AND STOCHASTIC MATHEMATICAL METHODS FOR ENGINEERING				
INP5070341	INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS				
INP5070378	NUMERICAL METHODS FOR DIFFERENTIAL EQUATIONS				
INP8084399	SYSTEM IDENTIFICATION AND DATA ANALYSIS				



Step 7. Select the English language qualification

As part of the mandatory courses, you will also find the **English language qualification**. Click on **“Next rule”** to proceed.

UNIVERSITÀ DEGLI STUDI DI PADOVA

Uniweb

MENU

» Piano di Studio » Rule

Choice of the course units – Study Plan of Name Lastname - [MAT. XXXXXXXX]

PLEASE NOTE
The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.

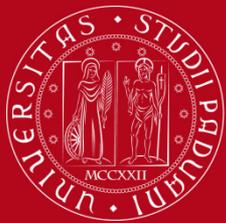
Rule - No.3 - Year of course1
English language - Compulsory educational activities:

ENGLISH LANGUAGE B2 (PRODUCTIVE SKILLS) (INP4068317) - 15/11/2022 - Pass - [CFU: 3]

Previous rule Next rule



In order to fulfill this requirement, an English test with the University Language Centre (CLA) can be taken or the recognition of a valid English certificate can be requested. More information can be found [here](#). Click on **“Next rule”** to proceed with the study plan compilation.



Step 8. Select the mandatory courses of the second year

Now, you will be able to select the mandatory courses of the second year. You can **choose two courses** out of the three listed.

» » Piano di Studio » Rule

Choice of the course units – Study Plan of Name Lastname - [MAT. XXXXXXXX]

PLEASE NOTE

The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.

Rule - No.4 - Year of course2

• modules - 2nd year - "Mathematical Modelling" track - Choose exactly 2 Blocks from among the following ones

Choose two modules out of these three

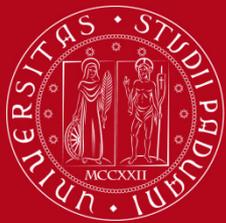
Rule options:

- ADVANCED FLUID MECHANICS (INP5070421) - [CFU: 9]
- ADVANCED SOLID MECHANICS (INP5070425) - [CFU: 9]
- ELECTROMAGNETISM (INP5070424) - [CFU: 9]

Previous rule

Next rule

Click on **“Next rule”** to add the ones selected to your study plan.



Step 9. Choose elective courses

Before finalizing the study plan, the elective courses have to be chosen.

In total, **12 CFU are available**. For the **Automatically Approved Study Plan**, the courses can be chosen from the list shown in Uniweb.

» Piano di Studio » Rule

Choice of the course units – Study Plan of Name Lastname - [MAT. XXXXXXXX]

PLEASE NOTE
The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.

Rule - No.5 - Year of course2

"Affini" modules - 2nd year - "Mathematical Modelling" track - Choose exactly 12 CP from among the following exams

You can choose 12 credits (CFU) from this list. If you wish to choose modules outside this list, please go back to the beginning and select the "SUBMITTED STUDY PLAN"

Rule options:

- COASTAL FLOODING HAZARD (INP5070429) - [CFU: 6]
- COMPUTATIONAL ASTRODYNAMICS (INP5070432) - [CFU: 6]
- GROUNDWATER HYDROLOGY (INP5070428) - [CFU: 6]
- LABORATORY OF ASTROPHYSICS 1 (INP5070433) - [CFU: 6]
- WATER RESOURCES MANAGEMENT (INP5070437) - [CFU: 6]

CFU Min: CFU Max:

Once selected, click on **“Next rule”** to finalize the procedure.



Step 10. Choose the 9 CFU as a free choice

In your course programme, you have also **9 CFU of free choice**. You can select among the following courses shown in Uniweb. The list might be subject to changes.

Please note that you need **a minimum of 9 CFU** and can register **a maximum of 14 CFU**.

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Uniweb

» Piano di Studio » Rule

Choice of the course units - Study Plan of Name Lastname - [MAT. XXXXXXXX]

PLEASE NOTE
The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.

Rule - No.6 - Year of course2

Elective modules proposed by Mathematical Eng. - Choose from 9 up to 14 CP from among the following exams

You can choose min 9 max 14 credits (CFU) either from this list or from the entire Unipd offer. If you wish to choose modules outside this list, please go back to the beginning and select the "SUBMITTED STUDY PLAN"

Course options:MATHEMATICAL ENGINEERING [IN2551]

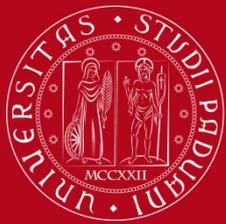
- ADVANCED QUANTUM PHYSICS (INP5070467) - [CFU: 6]
- ADVANCED SOLID MECHANICS (INP5070425) - [CFU: 9]
- COASTAL FLOODING HAZARD (INP5070429) - [CFU: 6]
- COMPUTATIONAL ELECTRICAL ENGINEERING (INP5070442) - [CFU: 9]
- COMPUTATIONAL METHODS FOR MATERIALS SCIENCE (INP5070468) - [CFU: 6]
- ENVIRONMENTAL FLUID MECHANICS (INP5070464) - [CFU: 6]
- GROUNDWATER HYDROLOGY (INP5070428) - [CFU: 6]
- METHODS AND MODELS FOR COMBINATORIAL OPTIMIZATION (INP5070470) - [CFU: 6]
- NUMERICAL METHODS FOR HIGH PERFORMANCE COMPUTING (INP5070472) - [CFU: 6]
- SCIENTIFIC COMPUTING AND OBJECT ORIENTED PROGRAMMING (INP5070419) - [CFU: 6]
- STOCHASTIC DIFFERENTIAL EQUATIONS, WITH NUMERICS (INP5070418) - [CFU: 9]
- STOCHASTIC METHODS FOR FINANCE (INP5070417) - [CFU: 9]
- WATER RESOURCES MANAGEMENT (INP5070437) - [CFU: 6]

CFU Min: CFU Max:

Previous rule

Next rule

Example:
If you choose two courses of 6
CFU, you will reach 12 CFU in total.



Step 11. Add the final project

The last step is to add the **Final project**, which is your thesis. Since it is mandatory, you can click on “**Next rule**” to add it.

» Piano di Studio » Rule

Choice of the course units – Study Plan of Name Lastname - [MAT. XXXXXXXX]

PLEASE NOTE
The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.
Rule - No.5 - Year of course?

Prova finale - Compulsory educational activities:

You finished to fill in your study plan. Remember to click on «FINAL CONFIRMATION» to confirm the Study Plan. Only if you chose a "SUBMITTED STUDY PLAN" you will receive an email after the evaluation by the Academic Committee.

FINAL EXAM (IN37106948) - [CFU: 21]

Information about the study plan you are completing

Percorso di Studio Environment and sustainability
scelta:
Year of offer: 2022
Cohort: 2022

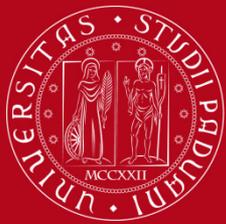
Activities formerly selected
List of teaching activities you have selected while completing your study plan. They are classified by year of course and ordered by code.

Course units – Year of course 1

Code	Description				
INP9087498	CIRCULAR AND SUSTAINABLE WASTE MANAGEMENT				
INQ0090558	ECOTOXICOLOGY AND HEALTH RISK ASSESSMENT				
INP9087410	ENVIRONMENTAL ECONOMICS AND RESOURCE VALUATION				
INP7082044	REMEDIATION OF CONTAMINATED SITES				
INP9087758	RENEWABLE ENERGY TECHNIQUES				
INP9087412	WATER AND WASTEWATER TREATMENT				
INQ0093091	ITALIAN LANGUAGE				
INP7082050	DESIGN OF STRUCTURES FOR ENVIRONMENTAL PROTECTION				
INP7082045	GEOLOGY AND GEOCHEMISTRY				

Course units – Year of course 2

Code	Description				
INP9087778	AIR POLLUTION CONTROL				
INQ2100761	ENVIRONMENTAL GEOTECHNICS				
INP9087764	ENVIRONMENTAL IMPACT AND LIFE CYCLE ASSESSMENT				
INP9087763	ENVIRONMENTAL PROJECT WORK				
INP9087768	RECYCLING AND REUSE OF RAW MATERIALS				



Step 12. Confirm your study plan

Before concluding the procedure, you will see an overview of all the courses selected, indicating compulsory and selected teaching activities.

In order to conclude the procedure, select **“Confirm study plan”**.



This step is essential to insert your study plan in Uniweb and be able to register for exams.

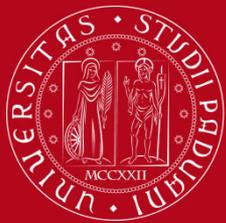
Course units - Year of course 1		Key: Chosen Teaching activities Compulsory teaching activities			
Course unit code	Description				
INP5070357	ANALYTICAL AND STOCHASTIC MATHEMATICAL METHODS FOR ENGINEERING				
INP5070341	INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS				
INP5070378	NUMERICAL METHODS FOR DIFFERENTIAL EQUATIONS				
INP8084399	SYSTEM IDENTIFICATION AND DATA ANALYSIS				
INP5070520	MATHEMATICAL PHYSICS (C.I.)				
INP5070384	NUMERICAL METHODS FOR CONTINUOUS SYSTEMS				
INP5070381	STATISTICAL MECHANICS OF COMPLEX SYSTEMS				
INP4068317	ENGLISH LANGUAGE B2 (PRODUCTIVE SKILLS)				

Course units - Year of course 2		Key: Chosen Teaching activities Compulsory teaching activities			
Course unit code	Description				
INP5070421	ADVANCED FLUID MECHANICS				
INP5070424	ELECTROMAGNETISM				
INP5070432	COMPUTATIONAL ASTRODYNAMICS				
INP5070433	LABORATORY OF ASTROPHYSICS 1				
INP5070467	ADVANCED QUANTUM PHYSICS				
INP5070419	SCIENTIFIC COMPUTING AND OBJECT ORIENTED PROGRAMMING				
INZ7106948	FINAL EXAM				

Previous rule

Cancel study plan

Confirm study plan



Procedure to fill in the Submitted Study Plan

In order to fill in the Submitted Study Plan, you have to select the second option when starting the procedure and click on “Ok”.

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Uniweb

» Piano_Carriera » Scelta Schema di Piano

Choice of the course units: Name Lastname - [MAT. XXXXXXXX]

In order to complete your study plan, please select now one of the following plans and click on "ok"

Study plans

	Description	Apri
<input type="radio"/>	AUT-MM - AUTOMATICALLY APPROVED STUDY PLAN - MM track Track: MATHEMATICAL MODELLING FOR ENGINEERING AND SCIENCE NOTA: MATHEMATICAL MODELLING track. Select this kind of study plan if you wish to choose the elective modules among those offered by Mathematical Eng	
<input checked="" type="radio"/>	PROP-MM - SUBMITTED STUDY PLAN - MM track Track: MATHEMATICAL MODELLING FOR ENGINEERING AND SCIENCE NOTA: MATHEMATICAL MODELLING track. Plan to be approved by the Academic Committee.	

OK

Reminder!



While the Automatically Approved Study Plan proposes a course offer for the 12 CFU elective courses and 9 CFU of free choice offered **only by the Master Degree**. The Submitted Study Plan allows choosing elective **courses offered at different Departments other than the ICEA**.



Procedure to fill in the Submitted Study Plan

The procedure is the same until **Step 9**.

Once at **step 10**, the procedure will suggest selecting the **elective courses of 12 CFU**.

There are two options available:

Option 1:

Choose one course suggested in the list (step 10) and then proceed by clicking on “**Next rule**” to choose a second elective course from the academic offer of degree courses of other Departments of the University of Padua (step 11).

Option 2:

Select both courses from the academic offer of degree programmes of other Departments of the University. In order to do so, click “**Skip forward**” (step 10) to arrive at the page indicated in step 11.



Step 10. Choose elective courses

» Piano di Studio » Rule

Choice of the course units – Study Plan of Name Lastname - [MAT. XXXXXXXX]

PLEASE NOTE
The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.
The sum of the choices made from the following rules must be between 12 - 17 CFU

- Rule No.6: Affini consigliati Choose from 6 up to 12 CP
- Rule No.7: Affini in Ateneo Choose from 6 up to 17 CP

Rule - No.6 - Year of course2

“Affini” modules proposed by Mathematical Eng. - Choose from 6 up to 12 CP from among the following exams

You can choose 12 credits (CFU) either from this list or from the entire Unipd offer. If you don't want to choose any module from this list, click on "next rule"

Rule options:

- COASTAL FLOODING HAZARD (INP5070429) - [CFU: 6]
- COMPUTATIONAL ASTRODYNAMICS (INP5070432) - [CFU: 6]
- GROUNDWATER HYDROLOGY (INP5070428) - [CFU: 6]
- LABORATORY OF ASTROPHYSICS 1 (INP5070433) - [CFU: 6]
- WATER RESOURCES MANAGEMENT (INP5070437) - [CFU: 6]

CFU Min: CFU Max:

The sum of the choices made from the previous rules of this restriction is 0 CFU

First, you will see the elective courses proposed by the Master degree programme.

You can select one of the courses above or proceed by clicking on “**Skip forward**” to see the offer of other degree courses.



Step 11. Choose elective courses from other degree programmes

» Pieno di Studio » Rule

Choice of the course units – Study Plan of Name Lastname - [MAT. XXXXXXXX]

PLEASE NOTE
The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.
The sum of the choices made from the following rules must be between 12 - 17 CFU

- Rule No.6: Affini consigliati Selected: 12 CFU
- Rule No.7: Affini in Ateneo Choose from 6 up to 17 CP

Rule - No.7 - Year of course2

"Affini" modules offered by other study courses at Unipd - Choose from 6 up to 17 CP from among the following exams

You can choose 12 credits (CFU) from this list. If you wish to add an exam that is not in this list, please write to: didattica@dicea.unipd.it and to mario.putti@unipd.it. If the exam is suitable for the Study Course Rules, and approved by the Academic Committee, it can be added.

Course options: DATA SCIENCE [SC2377]

- MATHEMATICAL MODELS AND NUMERICAL METHODS FOR BIG DATA (SCP7079406) - [CFU: 6]
- STOCHASTIC METHODS (SCP7079197) - [CFU: 6]

Course options: ELECTRICAL ENERGY ENGINEERING [IN1979]

- THERMONUCLEAR FUSION (INN1027624) - [CFU: 6]

Course options: MATHEMATICAL ENGINEERING [IN2551]

- NUMERICAL METHODS FOR HIGH PERFORMANCE COMPUTING (INP5070472) - [CFU: 6]

Course options: PHYSICS [SC2382]

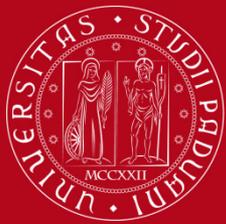
- ADVANCED PHYSICS LABORATORY A (SCP7081700) - [CFU: 6]
- APPLIED ELECTRONICS (SCP7081701) - [CFU: 6]
- ASTROPARTICLE PHYSICS (SCP7081703) - [CFU: 6]
- GENERAL RELATIVITY (SCP7081661) - [CFU: 6]
- INTRODUCTION TO MANY BODY THEORY (SCP7081699) - [CFU: 6]
- INTRODUCTION TO NANOPHYSICS (SCP7081718) - [CFU: 6]
- NUCLEAR ASTROPHYSICS (SCP7081704) - [CFU: 6]
- QUANTUM FIELD THEORY (SCP7081702) - [CFU: 6]
- SOLID STATE PHYSICS (SCP7081660) - [CFU: 6]
- STRUCTURE OF MATTER (SCP7081438) - [CFU: 6]
- SUBNUCLEAR PHYSICS (SCP7081697) - [CFU: 6]

CFU Min: CFU Max:

The sum of the choices made from the previous rules of this restriction is 12 CFU

In order to add courses not in the list, please write to the Students & Teaching Staff Office: didattica@dicea.unipd.it. If the exam is suitable for the Study Course Rules, and approved by the Academic Committee, it can be added.

Here you can find the list of courses suggested from other degree programmes and departments. Please remember you need to fulfill **12 CFU**.



Step 12. Choose 9 CFU of free choice

Here you have the same two options as outlined in slide 22.

Choice of the course units – Study Plan of Name Lastname - [MAT. XXXXXXXX]

PLEASE NOTE
The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.
The sum of the choices made from the following rules must be between 9 - 14 CFU

- Rule No.9: A scelta proposta! Choose from 6 up to 14 CP
- Rule No.10: A scelta in Ateneo Choose from 6 up to 14 CP

Rule - No.9 - Year of course2

Elective modules proposed by Mathematical Eng. - Choose from 6 up to 14 CP from among the following exams

You can choose min 9 max 14 credits (CFU) either from this list or from the entire Unipd offer. If you don't want to choose any module from this list, click on "next rule"

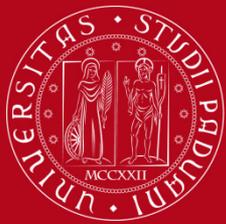
Course options: MATHEMATICAL ENGINEERING (IN2551)

- ADVANCED QUANTUM PHYSICS (INP5070467) - [CFU: 6]
- COASTAL FLOODING HAZARD (INP5070429) - [CFU: 6]
- COMPUTATIONAL ASTRODYNAMICS (INP5070432) - [CFU: 6]
- COMPUTATIONAL ELECTRICAL ENGINEERING (INP5070442) - [CFU: 9]
- COMPUTATIONAL METHODS FOR MATERIALS SCIENCE (INP5070468) - [CFU: 6]
- ELECTROMAGNETISM (INP5070424) - [CFU: 9]
- ENVIRONMENTAL FLUID MECHANICS (INP5070464) - [CFU: 6]
- LABORATORY OF ASTROPHYSICS 1 (INP5070433) - [CFU: 6]
- METHODS AND MODELS FOR COMBINATORIAL OPTIMIZATION (INP5070470) - [CFU: 6]
- NUMERICAL METHODS FOR HIGH PERFORMANCE COMPUTING (INP5070472) - [CFU: 6]
- SCIENTIFIC COMPUTING AND OBJECT ORIENTED PROGRAMMING (INP5070419) - [CFU: 6]
- STOCHASTIC DIFFERENTIAL EQUATIONS, WITH NUMERICS (INP5070418) - [CFU: 9]
- STOCHASTIC METHODS FOR FINANCE (INP5070417) - [CFU: 9]
- WATER RESOURCES MANAGEMENT (INP5070437) - [CFU: 6]

CFU Min: CFU Max:

The sum of the choices made from the previous rules of this restriction is 0 CFU

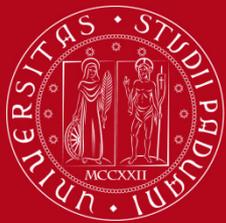
You will first see again the course choices offered by the Master degree. Select one course and then **“Next rule”** or click on **“Skip forward”** to select from the full academic offer of the University of Padua.



Step 13. Choose 9 CFU of free choice from the entire academic offer

In this step you click on “Add activity”.

The screenshot shows the 'Choice of the course units' step in the study plan wizard. The page header includes the University of Padua logo, the name 'UNIVERSITÀ DEGLI STUDI DI PADOVA', the 'Uniweb' logo, and a 'MENU' button. The main content area is titled 'Choice of the course units – Study Plan of: Name Lastname - [MAT. XXXXXXXX]'. Below the title, there is a warning message: 'If the rule has not been fulfilled, you will be asked to select a degree course to display the list of the course units of each course track. If the rule is optional, you can skip forward to the next one.' A 'PLEASE NOTE' section follows, stating: 'The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page. The sum of the choices made from the following rules must be between 9 - 14 CFU'. Two rules are listed: 'Rule No.9: A scelta proposti Selected:9 CFU' and 'Rule No.10: A scelta in Ateneo Choose from 6 up to 14 CP'. Below this, a 'Rule - No.10 - No year of course' section explains that elective modules from other study courses can be chosen. A paragraph in Italian clarifies the minimum of 9 CFU for free choice and the selection process. A list of instructions includes: 'Selection of teaching activities from the booklet', 'Selection of the degree course', and 'Selection of the teaching activity'. At the bottom of the main content area, there are three buttons: 'Previous rule', 'Skip', and 'Add activity'. The 'Add activity' button is highlighted with a green circle. Below the main content, there is an 'Information about the study plan you are completing' section showing 'Percorso di Studio: MATHEMATICAL MODELLING FOR ENGINEERING AND SCIENCE', 'scelto:', 'Year of offer: 2022', and 'Cohort: 2022'. At the very bottom, it states 'The sum of the choices made from the previous rules of this restriction is 9 CFU'.



Step 14. Choose 9 CFU of free choice from the entire academic offer

Now, you can see the entire academic offer of the University. You can click on the degree programmes to see the individual course offer.

UNIVERSITÀ DEGLI STUDI DI PADOVA Uniweb

★ » [Study plan](#) » Course units choice

Choice of the course units – Study plan of Name Lastname - [MAT. XXXXXXXX]

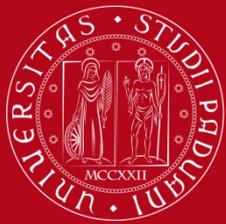
This page shows the list of the degree courses: click on one of them to see the teaching activities it offers.

[D150000] - DEPARTMENT OF MEDICINE

- [IE0376] PREVENTIVE AND ADAPTED PHYSICAL ACTIVITY
- [ME1844] NURSING
- [ME1853] Dietetic
- [ME1857] BIOMEDICAL LABORATORY TECHNIQUES
- [ME1859] IMAGING AND RADIOTHERAPY TECHNIQUES
- [ME1869] HEALTH PROFESSIONS OF TECHNICAL SCIENCES (DIAGNOSTIC)

[D210000] - DEPARTMENT OF BIOLOGY

- [IE1839] BIOTECHNOLOGY
- [SC1161] Natural Science
- [SC1165] BIOLOGY
- [SC1166] MOLECULAR BIOLOGY
- [SC1177] Sanitary Biology
- [SC1178] NATURAL SCIENCE
- [SC1179] EVOLUTIONARY BIOLOGY
- [SC1731] INDUSTRIAL BIOTECHNOLOGY
- [SC2445] MOLECULAR BIOLOGY
- [SC2596] MARINE BIOLOGY
- [SC2649] NATURAL AND ENVIRONMENTAL SCIENCES
- [SC2650] ENVIRONMENTAL SUSTAINABILITY AND EDUCATION



Add a course of free choice from the University's academic offer

Once you selected a degree programme, you can see the course list and add one by clicking on the **green plus**.

» » [Piano di studio](#) » Scelta Attività Didattiche

Choice of the course units Name Lastname - [MAT. XXXXXXXX]

This page shows the teaching activities you can choose within each track.

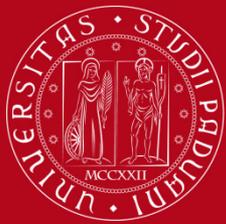
Selected course units		
Description	Credits (CFU)	Delete
[SC02119739] COMPLEMENTARY MATHEMATICS	6	

Course units you can select from the degree course MATHEMATICS Mathematics [Degree course structure: 2022]		
Description	Credits (CFU)	Aggiungi
[SCQ0093998] ADVANCED ANALYSIS	8	+
[SCQ2101559] ADVANCED STOCHASTIC PROCESSES	7	+
[SCQ0094306] ALGEBRAIC GEOMETRY 1	8	+
[SCQ0094305] ALGEBRAIC GEOMETRY 2	6	+
[SCQ0093999] CALCULUS OF VARIATIONS	8	+
[SCQ0094309] COMMUTATIVE ALGEBRA	8	+
[SCQ0094308] COMPLEX ANALYSIS	6	+
[SCQ0093658] CRYPTOGRAPHY	6	+
[SCQ1098739] DEVELOPMENT OF MATHEMATICAL THOUGHT	6	+
[SCQ0093962] DIFFERENTIAL EQUATIONS	6	+
[SCQ0093963] DIFFERENTIAL GEOMETRY	8	+
[SCQ0094084] DYNAMICAL SYSTEMS	7	+
[SC01119740] ELEMENTARY MATHEMATICS FROM A SUPERIOR POINT OF VIEW	6	+
[SC02119885] EXPERIMENTS FOR THE TEACHING OF PHYSICS	6	+
[SCQ0094119] FUNCTIONS THEORY	8	+
[SCQ0094081] HAMILTONIAN MECHANICS	6	+
[SCQ0093960] HARMONIC ANALYSIS	6	+
[SCQ0094302] HOMOLOGY AND COHOMOLOGY	6	+
[SCQ0094303] INTRODUCTION TO GROUP THEORY	8	+
[SCQ0094080] INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS	8	+

Remember!

It is advised to choose courses which are **in line with the study programme** of the Master degree in Mathematical Engineering in order to have the elective courses approved.

In order to confirm your choice click on “**Back to the rule**”. The courses selected will be shown in a summary before moving on with the procedure. To remove the course previously chosen click on “**Delete**”. Click on “**Change degree course**” to go back to the overview.



Step 15. Confirm your choice

By clicking on next rule, you will add the courses selected in the study programme and proceed with the last steps of finalizing your study plan.

Choice of the course units - Study Plan of: Name Lastname - [MAT. XXXXXXXX]

If the rule has not been fulfilled, you will be asked to select a degree course to display the list of the course units of each course track. If the rule is optional, you can skip forward to the next one.

PLEASE NOTE
The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.
The sum of the choices made from the following rules must be between 9 - 14 CFU

- Rule No.9: A scelta proposti Selected:6 CFU
- Rule No.10: A scelta in Ateneo Choose from 6 up to 14 CP

Rule - No.10 - No year of course
Elective modules offered by other study courses at Unipd - Choose from 6 up to 14 CP from among the courses on offer

Il numero minimo di CFU "a scelta libera" è 9. I corrispondenti insegnamenti possono essere selezionati sia tra quelli offerti dal Corso di Studio che tra quelli erogati in Ateneo. Di seguito potrai selezionare i crediti liberi solo tra gli insegnamenti non offerti dal Corso di Studio. Se intendi invece selezionare solo insegnamenti offerti dal Corso di Studio, ti invitiamo a tornare alla regola precedente.

- Selection of teaching activities from the booklet
- Selection of the degree course
- Selection of the teaching activity

Previous rule Add activity Next rule

Information about the study plan you are completing:

Percorso di Studio scelto: MATHEMATICAL MODELLING FOR ENGINEERING AND SCIENCE
Year of offer: 2022
Cohort: 2022

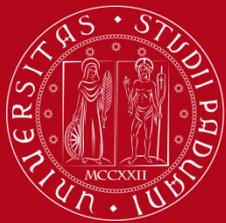
Selected activities:

Activities selected within the current rule	CFU	Delete
[SC02119739] COMPLEMENTARY MATHEMATICS	6	
TOTAL	6	

The sum of the choices made from the previous rules of this restriction is 6 CFU



It is only possible to proceed to **“Next rule”**, if two elective courses amounting to **12 CFU** as well as **9 CFU** of free choice have been selected.



Step 16. Select the final project

As a last step, you will add the final project. Click on “**Next rule**” to finalize the study plan.

» Piano di Studio » Rule

Choice of the course units – Study Plan of Name Lastname - [MAT. XXXXXXX]

PLEASE NOTE
The use of the browser keys to go forward or backward in wizard can cause anomalies or errors in filling in the study plan. Keep to the navigation suggested in the page.

Rule - No.11 - Year of course2

Master thesis - Compulsory educational activities:
You finished to fill in your study plan. Remember to click on «FINAL CONFIRMATION» to confirm the Study Plan. Only if you chose a «SUBMITTED STUDY PLAN» you will receive an email after the evaluation by the Academic Committee.

FINAL EXAM (INZ7106948) - [CFU: 15]

Information about the study plan you are completing

Percorso di Studio MATHEMATICAL MODELLING FOR ENGINEERING AND SCIENCE
scelte:
Year of offer: 2022
Cohort: 2022

Activities formerly selected
List of teaching activities you have selected while completing your study plan. They are classified by year of course and ordered by code.

Course units without year of course

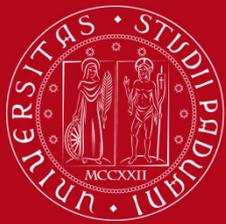
Code	Description
SC02119739	COMPLEMENTARY MATHEMATICS (Corso: MATHEMATICS [SC2651])

Course units – Year of course: 1

Code	Description
INP5070357	ANALYTICAL AND STOCHASTIC MATHEMATICAL METHODS FOR ENGINEERING
INP5070341	INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS
INP5070378	NUMERICAL METHODS FOR DIFFERENTIAL EQUATIONS
INP8084399	SYSTEM IDENTIFICATION AND DATA ANALYSIS
INP5070520	MATHEMATICAL PHYSICS (C.I.)
INP5070384	NUMERICAL METHODS FOR CONTINUOUS SYSTEMS
INP5070381	STATISTICAL MECHANICS OF COMPLEX SYSTEMS
INP4068317	ENGLISH LANGUAGE B2 (PRODUCTIVE SKILLS)

Course units – Year of course: 2

Code	Description
INP5070421	ADVANCED FLUID MECHANICS
INP5070424	ELECTROMAGNETISM
SCP7081700	ADVANCED PHYSICS LABORATORY A (Corso: PHYSICS [SC2382])
SCP7079406	MATHEMATICAL MODELS AND NUMERICAL METHODS FOR BIG DATA (Corso: DATA SCIENCE [SC2377])
INP5070467	ADVANCED QUANTUM PHYSICS



Step 17. Confirm your study plan

The last page of the procedure includes an overview of all the courses for both academic years as well as the list of elective courses selected. In order to finalize the study plan, click on **“Confirm study plan”**.

Study plan of: Name Lastname - [MAT. XXXXXXX]

In this page you can complete your study plan when the procedure is open for your degree course. If you have just completed your study plan, please click on "Confirm study plan" at the end of this page. If you have a statutory study plan (completed by the student office), you do not need to submit it to the registrar office. If you are an exchange student or your study plan refers to a Specialisation School (Post-Lauream), you do not need to print it nor to send a copy since the relevant office will automatically acquire it.

Show the approved study plan

Status: **DRAFT**

Type of study plan: **Statutory study plan selected via web**

Degree course track selected: MATHEMATICAL MODELLING FOR ENGINEERING AND SCIENCE

Last modification date: 12/05/2023

Year of offer: 2022

Cohort: 2022



This step is essential to insert your study plan in Uniweb and be able to register for exams.

Course units without year of course		Key: <input type="checkbox"/> Chosen Teaching activities <input type="checkbox"/> Compulsory teaching activities	
Course unit code	Description		
SC02119739	COMPLEMENTARY MATHEMATICS (Corso: MATHEMATICS [SC2651])		

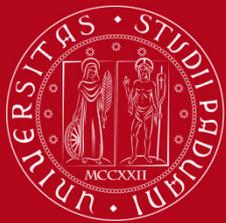
Course units - Year of course 1			
Course unit code	Description		
INP5070357	ANALYTICAL AND STOCHASTIC MATHEMATICAL METHODS FOR ENGINEERING		
INP5070341	INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS		
INP5070378	NUMERICAL METHODS FOR DIFFERENTIAL EQUATIONS		
INP8084399	SYSTEM IDENTIFICATION AND DATA ANALYSIS		
INP5070520	MATHEMATICAL PHYSICS (C.I.)		
INP5070384	NUMERICAL METHODS FOR CONTINUOUS SYSTEMS		
INP5070381	STATISTICAL MECHANICS OF COMPLEX SYSTEMS		
INP4066317	ENGLISH LANGUAGE B2 (PRODUCTIVE SKILLS)		

Course units - Year of course 2			
Course unit code	Description		
INP5070421	ADVANCED FLUID MECHANICS		
INP5070424	ELECTROMAGNETISM		
SCP7081700	ADVANCED PHYSICS LABORATORY A (Corso: PHYSICS [SC2382])		
SCP7079406	MATHEMATICAL MODELS AND NUMERICAL METHODS FOR BIG DATA (Corso: DATA SCIENCE [SC2377])		
INP5070467	ADVANCED QUANTUM PHYSICS		
IN27106948	FINAL EXAM		

Previous rule

Cancel study plan

Confirm study plan



A "draft" Study Plan is a NOT a submitted plan!

If you do not need to make any change, click on "**Confirm Study Plan**" at the bottom of the page.

- Clicking on "**Cancel Plan**", you undo your current selection of the educational activities and you have to complete again your plan.
- Clicking on "**Print Plan**", you can print your Study Plan.

Once you click on "**Final Confirmation**" you can double-check that the Study Plan was correctly filled in by refreshing the page. If the status is "**APPROVED**", the Study Plan is correctly filled.



How to change the Study Plan

Give a feedback

You will be asked to express anonymously your opinion on the Study Plan procedure through the questionnaire.

Change the Study Plan

Within the time window defined by the Department Regulation it is always possible to modify your study plan or create a new one.

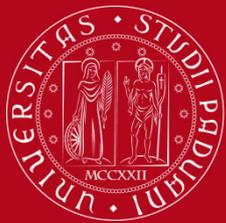
- Log in on [UNIWEB](#)
- Click on “**Study Plan**”
- Click on “**Modify Study Plan**”. You will be asked to complete a **NEW** Study Plan.

Attention: you'll have to repeat the whole procedure from the start

Course units – Year of course 2	
Course unit code	Description
INP5070421	ADVANCED FLUID MECHANICS
INP5070424	ELECTROMAGNETISM
INP5070432	COMPUTATIONAL ASTRODYNAMICS
INP5070433	LABORATORY OF ASTROPHYSICS 1
INP5070467	ADVANCED QUANTUM PHYSICS
INP5070419	SCIENTIFIC COMPUTING AND OBJECT ORIENTED PROGRAMMING
IN27105948	FINAL EXAM

Modify study plan

Print study plan



Key points

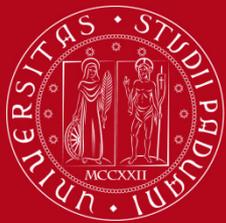
- Filling out your Study Plan is **mandatory**
- The Study Plan must be filled in and presented via [UNIWEB](#)
- A "draft" Study Plan is a **NOT** a submitted Plan!
- In order to sit the exams you **must** submit the study plan





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Common doubts



- 1. Is it possible to add to my study plan a course unit held in Italian if I know the language?**
 - Yes, it is possible
- 2. How can I check the prerequisites of a course unit?**
 - Check out the course syllabus: <https://en.didattica.unipd.it/off/2024/LM/IN/IN2551>
- 3. What can block my study plan?**
 - Not being in line with your tuition fees for example, please always make sure!
- 4. How many extra plan course units can I add to my booklet? Is there a limit? How are they considered?**
 - The current regulation of the Student Career sets a limit of 24 CFU per academic year for courses chosen outside of your own study programme. It is recommended to focus on your standard curriculum first. They are considered as “fuori piano”, i. e. extracurricular.
- 5. Who can I contact for any doubts or question?**
 - [International Desk @ ICEA](#)
 - [Student & Teaching Staff Office](#)
 - [Prof. Antonia Larese](#) (for any questions on the Submitted Study Plan)



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Any further questions?



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**Thank you for your
attention!**

International Desk @ ICEA