

Regulations of the 2-year Master of Arts Program in Economics, Data, and Policy

Last updated: August 29, 2024

Basic Information

Name of the Program: MA in Economics, Data, and Policy (2 year).

Abbreviation: MA EDP (2yr) U.S. accreditation: 2023 Austrian accreditation: 2023 Program duration: 2 years

1. Overview of the program

The duration of the MA in Economics, Data, and Policy 2-year program is two academic years. The academic year is partitioned into three terms: Fall, Winter, and Spring term.

Incoming 1st year students start their studies with a Pre-session in Mathematics course before the Fall term of their 1st academic year. Students write a placement test during the first class to decide whether to take the basic or the advanced level course or whether they qualify for a waiver. Those aiming to choose the Research (pre-PhD) track in the 2nd year are strongly advised to take the advanced pre-session course. The course ends with an examination. Students cannot continue in the program without passing this exam. If they fail on the first try, a single retake is possible.

During the program students must complete all mandatory courses. Progress through the program is as follows:

Year 1:

- Fall: mandatory and mandatory elective courses only;
- Winter and Spring: elective and mandatory elective courses (in addition to any mandatory courses).

In the summer between Year 1 and Year 2, students may complete an internship and receive credit for it.

Students must choose one of the following tracks until the end of the 1^{st} academic year, 30 June, to pursue in the 2^{nd} year:

- Data Science Track
- Research (pre-PhD) Track

- Global Economic Policy Track
- Finance Track

Annex 1 contains more information on the various tracks.

Year 2:

- Fall: elective and mandatory elective courses (in addition to any mandatory courses). Students who wish to participate in a study-abroad exchange program should time it for this term.
- Winter: elective and mandatory elective courses (in addition to any mandatory courses). At the beginning of the term students must propose a thesis research topic and start working on their MA thesis with the help of their assigned supervisor(s).
- Spring: devoted solely to thesis work. Students must enroll in the mandatory thesis seminar. The thesis defense is integrated into the thesis seminar in the form of an oral presentation. The thesis submission deadline is at the beginning of June.

2. General requirements

2.1 Credit and GPA requirements

Credit requirements

Students must take a minimum of 60 US/120 ECTS credits during the two years of the MA program. More specifically, students must take at least 30 US/60 ECTS taught credits during their 1st year and 24 US/48 ECTS taught credits during the Fall-Winter terms of their 2nd year. Thus, 54 US/108 ECTS taught credits must be acquired in total by the end of the Winter semester of the 2nd year, unless the student was unable to complete the required credits due to a properly documented medical condition.

In the Spring term of the 2^{nd} year, students are awarded 2 US/4 ECTS taught credits for the mandatory Thesis seminar course and an additional 4 US/8ECTS credits for completing and submitting their thesis. Thus, together with the 54 US/108 ECTS taught credits, students will have completed at least 60 US/120 ECTS credits by the end of their 2^{nd} year.

GPA requirements

Students must achieve a minimum GPA of 2.66 for the 30 US/60 ECTS taught credits completed in the $1^{\rm st}$ year, for the 56 US/112 ECTS taught credits completed in total, as well as for the 60 US/120 ECTS credits completed overall. In other words, students cannot have a cumulative GPA lower than 2.66 at the end of the $1^{\rm st}$ year; at the end of the Winter term of the $2^{\rm nd}$ year, and at the end of the $2^{\rm nd}$ year.

2.2 Examinations

Graded courses in the MA in Economics, Data, and Policy generally end with a written final examination (or final paper). Assessment of a course may include, apart from the final examination, a midterm examination, homeworks, assignments, tests, term papers and seminar presentations, as decided by the instructor and stated on the respective course syllabi.

Examinations are in writing and taken in the classroom. Strict conditions regulate the exams:

- Students must leave all belongings behind before entering the exam room.
- As a rule, students may not keep the exam questions after the end of the written exam.
- Cheating in any form during the examination leads to an automatic failure, and possibly further disciplinary actions. If repeated, this might lead to an expulsion from the University contingent on the decision of the CEU Disciplinary Committee.
- Graded exams of the 1st year MA mandatory courses can be checked by students for one week after grades are published (unless otherwise specified by the instructor).
- In case of sickness, students are required to notify their coordinator before the exam begins and later provide a medical certificate.
- Missing an exam without giving prior notice results in an automatic failure.

Instructors may specify additional rules on their course syllabi.

2.3 Unsatisfactory progress

A maximum of one retake exam per course (mandatory, elective or mandatory elective) is allowed. Retaking exams in more than three (3) mandatory courses is not allowed. A failed retake examination in a <u>mandatory course</u> will result in automatic dismissal from the program. A failed retake examination in an <u>elective course</u> will lead to zero earned credits from the course towards the diploma, but the course will still count towards the total credits when calculating the GPA, thus lowering the student's GPA. A failed retake examination in a <u>mandatory elective course</u> will result in automatic dismissal from the program in case no other mandatory elective can be substituted from the same group of mandatory electives. In case another mandatory elective can be substituted, a failure will have the same consequences as a failure in an elective course.

The minimum passing grade for a mandatory course is C+ (equivalent to 2.33 grade points). If a student passes a retake exam, they will receive RP (2.33 points) and this grade will be shown on the transcript.

All retake examinations are to be scheduled within a month after the exam results are published (holidays excluded).

As a rule, class attendance is mandatory. The specific attendance requirement for each course is set by the instructor and is explained in the syllabus.

2.4 Changing course registration

Once the registration and drop period is over, students admitted to a late starting course may change their registration status (from grade to audit, from audit to grade, or drop)

- until the end of the week in which the first 100-minute session started, initiated by the sending email to Program Coordinator (no fee, no approval from instructor needed need)
- until mid-way through the course (with a late registration fee as regulated by SRP and written approval from the instructor), initiated by sending the Professor's approval to Program Coordinator

No further changes allowed after a course is half-way over.

2.5 Relevant CEU regulations

The general rights and obligations of students are outlined in <u>Student Rights</u>, <u>Rules</u>, <u>and Academic Regulations</u>; Annex 2 describes the default grading scheme. Cheating and plagiarism are not tolerated in the program. In all suspected cases an official process will be opened. Sanctions include failing the course or even being expelled from the university, for details see the <u>CEU Code of Ethics</u> and the <u>CEU Plagiarism Policy</u>. A full list of all CEU policies relevant to students can be found online.

2.6 Transfer to another track

If a student wants to change the selected track, they can request this in writing from the Program Director and from the Head of Department on the following conditions:

- The change must take place before the end of the 2nd week of classes in the Fall term of the 2nd year --- no track changes are allowed past this date.
- The student must have taken all the necessary prerequisites in the 1st year of the newly requested track.

2.7 Completing more than one track

It is generally not recommended to attempt the completion of more than one track. Nevertheless, it is, in principle, possible to complete more than the officially selected one track if the student fulfills the course requirements for both tracks.

3. Coursework

Mandatory, elective and mandatory elective courses offered in the MA in Economics, Data, and Policy program count both toward the degree and the GPA. Credits taken above the required number of credits also count toward the GPA. Students can register for a given course only once over their period of study.

3.1 Mandatory courses

The following mandatory courses are to be taken by all students:

1st year:

- Pre-session in Mathematics (basic or advanced)
- Data Analysis 1, 2 (or Advanced Econometrics 1 and 2)
- Data Analysis 4 (basic or advanced)
- Microeconomics (or Advanced Microeconomics)
- Macroeconomics (or Advanced Macroeconomics)
- Academic Writing

This is a total of 15 US credits in the 1st year (unless advanced courses are taken as substitutes).

2nd year:

- Academic Writing
- Thesis Seminar
- Thesis

This is a total of 7 US credits in the 2nd year.

In addition, there are track-specific mandatory courses; see Annex 1 for details.

3.2 Mandatory Elective courses

Apart from the mandatory and elective courses, students must choose from a list of mandatory electives. There are two sets of mandatory elective courses in the 1st year. Students must choose one course from each pair (for 2 US credits each):

- Coding for Economists OR Scientific Python,
- Current Economic Issues Seminar OR PhD Research Seminar.

Most other mandatory electives are track-specific and are offered in the 2nd year.

On the Global Economic Policy, Data Science and Finance tracks, students must take 6 US credits from the corresponding mandatory elective course offering.

On the Research track, students must take 14 US credits from the corresponding mandatory elective course offering, 6 of which must be PhD-level courses.

3.2.1 Internship as a mandatory elective

Students may choose an approved internship as a mandatory elective course for (up to) 2 US credits. The internship should be completed during the Summer after the 1st year. In case the internship overlaps with the Fall term of the 2nd year, the internship cannot interfere with the student's academic obligations in the program, and the explicit approval of the program director is required. The details of the internship approval process can be found in Annex 2.

3.3 Elective courses

Students should start taking elective courses in the Winter term of their 1st year. The number of electives taken must be sufficient to complete the 30 US/60 ECTS taught credit requirement in the 1st year and the 54 US/108 ECTS taught credit requirement by the end of the Winter term of the 2nd year.

Per university-level regulation, students are entitled to take courses outside their program without formal approval up to a limit of 4 US/8 ECTS credits per year. These credits are counted as elective credits toward the degree.

Courses outside the Economics, Data, and Policy program are those that do *not* appear in the program's "diet" (i.e., the official course list accessible in Time Edit and SITS). Courses that are officially cross-listed from other departments are part of the diet. Thus, the 4-credit quota applies to courses that are not cross-listed (and are typically offered by other departments).

In exceptional cases, students may petition the program director to take additional credits outside the program, but this is generally not allowed, unless a very strong reason is provided (e.g., the course is indispensable for the planned thesis research).

4. Master's thesis and defense

4.1 Thesis supervision

At the beginning of the Winter term of their 2nd year (or the 1st year in case of the 1-year program), students submit the proposed title of their MA thesis together with a short research plan. The Department assigns an MA thesis supervisor to each student based on this proposal. For further information on the student-advisor match and the thesis writing process please see the Thesis Guidelines HERE.

Students may request to work under the supervision of a CEU professor outside the department, but this is subject to the approval of the Head of Department. In exceptional cases a change of supervisors is possible if a request is filed with the Head of Department with sufficient justification.

In working on their master's thesis, students must follow the timeline set out in the <u>THESIS</u> <u>CALENDAR</u>. Students must submit a thesis outline and a first draft to their supervisors by the appropriate deadlines. At the same time, students must participate in the mandatory Thesis seminar and give presentations as detailed below.

Failure to comply with these rules or lack of communication with the supervisor may result in the supervisor's withdrawal from supervision. Students without supervisors cannot submit a thesis. Supervisors are assigned only once a year, at the beginning of the Winter term, so a decline of supervision means that the student cannot submit a thesis before the following academic year.

4.2 Thesis submission

The final thesis must be submitted in two ways:

- An electronic copy of the thesis must be uploaded to the Electronic Thesis Database (ETD).
- An electronic copy of the thesis must be submitted to the program coordinator. The exact way of doing this will be communicated ahead of time (email, CEULearning, etc.)

Both submissions must be identical and must be completed by 4 p.m. on the day specified in the MA Thesis Calendar. Late submission and upload will be punished by subtracting a grade every 48 hours.

4.3 Thesis defense and grading

The oral thesis defense is integrated into the mandatory Thesis seminar. The Thesis seminar is run by two faculty members (henceforth, 'thesis czars' or 'czars') who also organize and evaluate the defense. The overview of the process is as follows. There are at least 3 required presentations during the thesis seminar:

- Initial idea,
- Progress report,
- Defense presentation.

Depending on the number of students, students may be partitioned into groups. For each group, one czar is designated to attend all required presentations. The defense presentation takes place at least one week before the submission deadline. At the defense, students are expected to deliver a polished presentation with meaningful results but can still receive comments to be incorporated into the final version of the thesis. The defense presentation is open to the public.

The thesis grade is made up of two components – the defense presentation and the supervisor's report on the final thesis. One czar is in charge of each defense. This czar takes notes, asks questions, and provides comments with the aim of improving the final submission. The defending student should incorporate these comments into the final version of the thesis to the extent possible. The final thesis is due by the submission deadline, at the beginning of June, as specified in the Thesis Calendar. The student's supervisor then submits a written thesis report to the czars and recommends a grade. The final grade is assigned by the respective czar based on i) the defense notes and ii) the supervisor's report. The final grade may be substantially different from the supervisor's recommendation if warranted by the live presentation and/or the relative rank of the thesis in comparison to other students.

4.4 Thesis submission deferment

By university regulations, students can defer the thesis submission and defense for up to two years after completing their coursework. The request should be sent before the final title of the thesis is due.

Deferred theses can be submitted and defended only twice during an academic year:

- (i) during the regular thesis defense and submission period in the Spring term (end of May/beginning of June);
- (ii) at the end of the Fall term, as specified in the MA Thesis Calendar.

The evaluation procedure for a deferred thesis is similar to the regular one. In case of a Spring defense, the deferred thesis should be defended in the Thesis seminar organized that year and then submitted by the regular submission deadline. In case of a Fall defense, the thesis should be defended in front of the faculty members who ran the Thesis seminar in the Spring term of the previous academic year and then submitted officially to the Electronic Thesis Database. Of course, in the case of a deferred thesis as well, the supervisor's report is used in part to determine the grade.

ANNEX 1

TRACKS

- 1. The **Data Science** track gives cutting edge data science skills to analyze and correctly interpret economic data. It prepares students to become business intelligence analysts, data scientists, data engineers or business consultants.
- 2. The **Research** (**pre-PhD**) track puts special emphasis on quantitative skills and exposes the students to the frontiers of economic research. This track prepares for a PhD or for technical research jobs in the public and private sector. If one decides to go on to a PhD in Economics at CEU, most of the coursework will be counted towards it.
- 3. The **Global Economic Policy** track gives a broad view of the economy and a deep understanding of the economic policy process. It also provides students with the analytical ability to evaluate economic policies. The track is an ideal steppingstone if one wants a job in government (ministries, central banks), in international organizations or in the private sector (banks, consulting firms, etc.).
- 4. The **Finance** track gives a detailed view of the financial system based on the principles of economics. One will understand how finance can serve society, preparing for analyst jobs in central banks, commercial banks and consulting firms.

1st year

Year 1	Mandatory	Mandatory elective	Elective
Pre-session	Mathematics (basic/adv) (0)	-	-
Fall	Microeconomics (4) *	Coding for Economists (2) or	-
	DA 1 & 2 (2+2) *	Scientific Python (2)	
	Academic writing (1)		
Winter	Macroeconomics (4) *	Current Econ Issues Seminar (2) or	4 credits
	DA 4 (basic/adv) (2) *	PhD Research Seminar 2 (2)	
	Game Theory (2) **		
Spring			6 credits

Students must complete 30 credits in their 1st year.

^{*} Very well qualified students may choose an advanced PhD-level course as a substitute for some of these courses. The substitute courses are: Advanced Microeconomics, Statistics for Econometrics & Advanced Econometrics 1, Advanced Macroeconomics, Advanced Econometrics 2. This is based on individual decision, Please contact your Program Coordinator. ** Game Theory is a mandatory course only for those students who aim for the Research track, and they only need to take 2 credits of Elective courses in the Winter term of the 1st year.

2nd year

Global Economic Policy track

Year 2	Mandatory	Mandatory elective	Elective
Fall	Economic Policy Seminar (2)	Policy Internship (2)	0-6 credits
		Intl Econ Integ (2)	
		Fiscal Policy (4)	
		Forecasting (2)	
		Impact Eval R (2)	
Winter	Global Economy (2)	Econ Pol and Global Strategy (2)	0-6 credits
	International Econ Pol (2)	Development (4)	
	Academic Writing (1)	Competition Pol (2)	

Students must take 24 credits altogether in the Fall and Winter terms of their 2nd year, from these at least 6 credits must be from Mandatory elective courses.

Research (pre-PhD) track

Year 2	Mandatory	Mandatory elective	Elective
Fall	Statistics for Econometrics (2)	Adv Econometrics 1 (2)	0-6 credits
		Adv Macroeconomics (4)	
		Adv Microeconomics (4)	
		Research Internship (2)	
		PhD electives	
Winter	Academic Writing (1)	Adv Econometrics 2 (2)	0-6 credits
		PhD electives	

The Research track requires the most foresight and planning. Students who aim to take the Research track should in their 1st year take the more advanced course of every pair offered, i.e., advanced Pre-session in Mathematics, advanced DA 4, Scientific Python, and PhD Research Seminar 2. In addition, in their *1st year*, students must also take the Game Theory course offered in the Winter term.

Students must take 24 credits altogether in the Fall and Winter terms of their 2nd year. In total, 14 Mandatory elective credits must be completed, with at least 6 credits from the advanced (i.e., PhD-level) skills courses (Advanced Econometrics 1, 2, Advanced Macroeconomics, Advanced Microeconomics).

Data Science track

Year 2	Mandatory	Mandatory elective	Elective
Fall	DE 1 & 2 (2+2)	Research Internship (2)	0-6 credits
		Forecasting (2)	
		Statistics for Econometrics (2)	
		Adv Econometrics 1 (2)	
Winter	DA 3 (2)	Machine Learning for Natural Language	0-6 credits
	Academic Writing (1)	Processing 1 & 2 (2+2)	
		Machine Learning Tools (2)	
		Adv Econometrics 2 (2)	

Students must take 24 credits altogether in the Fall and Winter terms of their 2nd year, of these at least 6 credits must be from Mandatory elective courses.

Finance track

Year 2	Mandatory	Mandatory elective	Elective
Fall	Fin Mgment (2)	Fin Reporting (2)	2-6 credits
	Port Thry (2)	Adv Reporting (2)	
Winter	Corp Fin (2)	Asset Pricing (2)	0-6 credits
	Academic Writing (1)	Intl Finance (2)	
		Banking Fin Inst (2)	
		Game Theory (2)	

Students must take 24 credits altogether in the Fall and Winter terms of their 2nd year, of these at least 6 credits must be from Mandatory elective courses.

All tracks

Year 2	Mandatory	Mandatory elective	Elective
Spring	Thesis seminar (2) Thesis (4)	-	-
	Academic Writing		

The Spring term of the 2^{nd} year is devoted to writing the thesis.



ANNEX 2

MA in Economics, Data, and Policy Internship guidelines

General requirements

The Internship as mandatory elective carries 2 US/4 ECTS credits and considered as taught credit.

It is the responsibility of each student to find an internship placement which allows the complete and timely fulfillment of the requirements.

CEU cannot provide financial assistance for those doing an internship beside the amount specified in the stipend package of the students. Limited amount of grants is usually available via ERASMUS Internship Grants (http://acro.ceu.edu/erasmus-for-ceu-students) and there is opportunity to apply for travel grants as well during the academic year.

The duration of an internship is minimum 20 and maximum 40 working days. Trainees and host institutions should plan working hours on the assumption of a 40-hour week. This serves as a guideline as working arrangements may vary depending on the host institution. It is possible to do the internship on a part-time basis. In this case the total number of working hours should add up to the equivalent of an internship done on a full-time basis.

Students can commence their internship from *early June in their 1st year* of studies and should be completed at the latest by the early days of the Fall term of the 2nd year. However, internships should mainly be done during the Summer, as completing the internship during the study period is difficult and must not interfere with the student's coursework.

5.2 Guidelines while conducting the internship

Students should ensure that they arrive at a clear agreement (written or oral) with their host institution regarding their tasks and responsibilities. The host institution should name a supervisor or tutor. Students should refrain from any activities which might damage either the host institution or the reputation of CEU. Students should consult their Course Instructor if experiencing difficulties with their host institution. Problems should be addressed at an early stage.

5.3 Forms, report and deadlines

Once a student has agreed on an internship with a host institution, they must fill in the Internship Selection Form (Appendix I). It shall be signed by a representative of the host institution and, afterwards, by the departmental Course Instructor who will formally approve the student's internship placement. The signed form needs to be returned to the departmental office. **The latest date for submission is May 30**. After completing the internship, students

must complete the *Internship Completion Form* (Appendix II). It shall be signed by a representative of the host institution.

<u>In addition, students will need to prepare a one-page report on their internship.</u> Afterwards, students must submit the form together with the report to the Program Coordinator. The form and the report require the approval of the Course Instructor who will review and sign them afterwards. **The latest possible date for submission is the end of November.**



Appendix I.

Internship Selection Form

Student name:	
Name and place (city and country) of organization:	
Website of internship organization (if applicable):	
Period of internship:	
Description of internship activities:	
Signature of Economics Department	
Course Instructor	
Name of responsible person at internship	Signature of responsible person AND
organization (in PRINTED letters)	stamp of internship organization

PLEASE SUBMIT TO PROGRAM COORDINATOR BY MAY 30

Appendix II.



Internship Completion Form

I hereby confirm that the internship with the below d	letails has been completed:
Student name:	
Name and place (city and country) of organization:	
Period of internship:	
Name of responsible person at internship	Signature of responsible person AND
organization (in PRINTED letters)	stamp of internship organization
Signature of Economics Department	
Course Instructor	
Attachment: One-page report on internship	

PLEASE SUBMIT TO PROGRAM COORDINATOR BY NOVEMBER 30.