

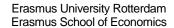
Study Guide 2023-2024 Tinbergen Institute Research Master's Program



Study Guide 2023-2024

Tinbergen Institute Research Master's Program June 2023







University of Amsterdam Amsterdam School of Economics





Preface

It is a pleasure to welcome you to a new year of graduate studies at the Tinbergen Institute (TI), the graduate school and research institute in economics, jointly operated by the schools of economics of the Erasmus University Rotterdam (EUR), University of Amsterdam (UvA) and Vrije Universiteit Amsterdam (VU).

The TI Research Master program is a two-year, research master in economics, econometrics and finance that endows students with the skills needed to write a PhD thesis. In the first year of the TI Research Master, students receive rigorous training in the core topics of microeconomics, macroeconomics, econometrics and, optionally, finance. Students with a strong background in econometrics can choose the econometrics track. Students who aim to pursue a major in finance substitute two core courses in micro- or macroeconomics with two courses in finance. In its second year, students specialize in their choice from TI's many fields of research through field course work and a Research Master thesis.

Throughout both years students receive training in professional skills (how to write and present research, how to manage research data). They also familiarize themselves with ethical issues in education and research.

The three faculties participating in TI have PhD positions available for students who have completed the TI Research Master. Most students who perform well in the program find a supervisor at one of the three faculties (usually the Research Master thesis supervisor will act as PhD supervisor).

TI offers job market training to PhD students in the last year of their appointment. This training program consists of workshops where students learn how to prepare for the academic job market, followed by mock interviews in which students learn to present themselves and their research in front of a committee.

Finally, we would like to draw your attention to the two annual TI Lectures Series in economics and econometrics. Each is a series of two- or three-day lectures by leading researchers. We plan to have both lecture series in block V.

Rotterdam, June 2023

Benoît Crutzen
Director of Graduate Studies

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Tinbergen Institute research master's program

Study guide 2023-2024

Registration with the universities

The Tinbergen Institute (TI) research master is a joint program in economics, econometrics, and finance of Erasmus University Rotterdam (EUR), University of Amsterdam (UvA) and Vrije Universiteit Amsterdam (VU). Students are registered at three universities (EUR, UvA and VU). Erasmus University is the host university for the TI program and charges the tuition fee. The students' grades are registered by Erasmus University. The degree that is awarded after the final examination is a joint degree (MSc) of the three partners.

Tuition fees are due until the final examination, the thesis, has been passed. The tuition fees are determined annually by the Dutch government and the universities.

The TI research master program has its own Director of Graduate Studies (DGS), and Admission Board. The Examination Board and Educational Board serve both the BDS and Tinbergen Institute research master program.

Intended learning outcomes

The purpose of the TI research master program is to prepare students for PhD research and an academic career in economics, econometrics, and finance. Structure and content of the research master program are derived from this objective. The research master program is connected to PhD research positions in the three participating faculties but also prepares for research positions or a PhD at highly ranked universities elsewhere.

The TI program offers a research training equivalent to training in the first two years of PhD programs at top US economics faculties. This implies a first year of rigorous and common training in core subjects of economics, econometrics, and finance at a high level that can only be managed by a selected group of students. In the second year, students specialize in their choice TI's many fields of research through field courses and supervised research for a final thesis.

TI graduates are able to set up and conduct innovative academic research. They have a profound knowledge and understanding of state-of-the-art theories and methods in their field of specialization. Furthermore, they are able to communicate their findings orally and in publishable research papers. Finally, students know what constitutes unethical and unacceptable behavior in the profession.

Below we list the intended learning outcomes for the program.

Intended learning outcomes for the Tinbergen Institute Research Master's Program

Research Master graduates are able to set up and conduct innovative academic research in their field of specialization. Furthermore, they are able to communicate their findings orally and in writing. They have a profound knowledge and understanding of state-of-the-art theories and methods in their field of specialization. Research Master graduates have the ability to write research papers, initially under academic supervision, that can be submitted to international, peer-reviewed journals for publication. The program contains three tracks: Economics, Econometrics and Finance.

1. Knowledge and understanding

Research master graduates have

- 1.1 an overview of the core of economics/econometrics/finance that allows them to broadly read and understand the current scientific literature and follow scientific debates in their field of specialization.
- 1.2 in-depth and systematic knowledge of an area within economics/econometrics/finance that allows them to successfully embark on independent study of at least one specialized field of research.

2. Applying knowledge and understanding

Research master graduates are able

- 2.1 to outline a relevant research question in their field of specialization.
- 2.2 to operationalize the research question and to select and apply correctly complex and advanced techniques and methodology.

3. Making judgements

Research master graduates are able

- 3.1 to independently set up and carry out scientific research projects in the chosen field of expertise.
- 3.2 to critically evaluate research outcomes.

4. Communication

Research master graduates are able

- 4.1 to write research papers that are well structured; texts are written in a fluent and academic style.
- 4.2 to orally present research findings in a coherent and lively presentation and to give accurate and to the point response to comments and questions before an audience of academic researchers.

5. Learning skills

Research master graduates

- 5.1 have the skills required for further study in a largely self-directed or autonomous manner.
- 5.2 respect and practice matters of scientific integrity, ethics, responsible data management and privacy.

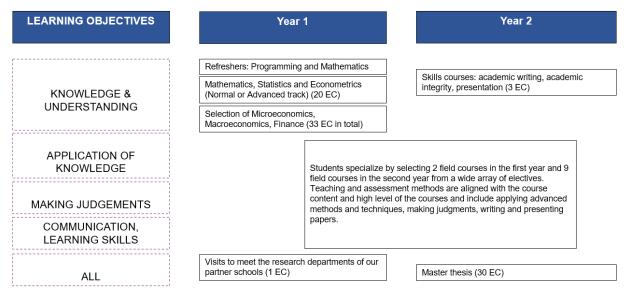
Program structure

The first year of the program offers a rigorous training in the core subjects and tools of economics, econometrics, and finance. This ensures that students embark on their PhD research and subsequent academic career with a sufficiently broad understanding of economics to broadly follow academic discourse in economics. Knowledge of the core subjects is required as a foundation for specialized research in the domain of economics, econometrics, and finance and to initiate independent research. In the second-year students develop their research skills and deepen their knowledge in the research areas they are interested in. They also write a thesis. Field courses and specializations reflect the researchers and research groups at the faculties participating in TI. This allows students to find a supervisor for their thesis and subsequently a PhD position at one of the faculties. Since TI is a joint program of three faculties, the program is able to offer a wide array of field courses and specializations.

The thesis (30 ECTS) is the final examination of the program and shows that the student is able to carry out independent research and can make a contribution to the scientific debate. TI aims at theses of exceptional quality such that, after further polishing, they can be published in an international, peer-reviewed scientific journal and can be part of the PhD thesis. The defense of the thesis before an audience of experts is part of the final assessment.

PROGRAM OVERVIEW





Diversity

The diversity of TI's student body and teaching staff is one of the defining elements of the institute. TI aims to provide a welcoming environment in which all students can develop their full potential, both as individuals and as members of the academic community. All members of TI – students, staff, and faculty – strive for equal treatment of all, irrespective of ethnicity, nationality, gender and gender identity, sexual orientation, socioeconomic background and disability. TI actively takes steps to ensure that the diversity of the student body is respected by all members of the institute.

The Tinbergen Institute Research Master's program in 2023-2024

In case of any difference between this study guide and the Academic and Examination Regulations for 2023-2024 (AER), the AER prevails. The second-year requirements in the AER of 2023-2024 apply to the students who are in their second year in the program in 2023-2024.

Calendar for 2023-2024

All regular TI courses are taught in blocks of eight weeks, with lectures during the first six (core courses) or seven weeks (field courses); the eighth week of each block typically serves as an exam week. The exception is block V: to accommodate all field courses and the two lecture series, this block is extended by approximately two weeks. Core course teachers may not assign graded homework in the week prior to the exam.

Under normal circumstances and unless otherwise stated explicitly by the DGS, in person course attendance is mandatory; this applies to all core and field lectures, to the skills courses and to the Introduction to TI research groups (visits to the research departments of the schools). Attendance is registered. First-year (core) courses have weekly tutorials, taught by a teaching assistant, in which students work on and discuss homework assignments.

The calendar for 2023-2024 is:

Block 0	August 28-September 1	Introduction and refresher courses in Programming and Mathematics
Block I	September 4-October 20	Lectures
	October 23-27	Exams
Block II	October 30-December 16	Lectures
	December 18-22	Exams
	December 25-January 5	Christmas Holidays
Block III	January 8-February 23	Lectures
	February 26-March 1	Exams
Block IV	March 1-April 19	Lectures
	April 22-26	Exams
Block V	April 29-May 3	Spring Break
	May 6-July 12	Lectures and Exams

The course schedule is available on Erasmus University's <u>timetable</u> (login with ERNA account) or via the Erasmus University's <u>course guide</u> (select current academic year).

First year of the program

In case of any difference between the first-year requirements in this study guide and the first-year requirements as stipulated in the Academic and Examination Regulations for 2023-2024 (AER), the AER prevails.

For course descriptions we refer to the website and Intranet (account required).

In the first year of the program students have to complete 60 ECTS: 13 core courses (53 ECTS), 2 field courses (6 ECTS), and the Introduction to TI research groups (visits to the research departments of the schools) (1 ECTS). We offer in the week preceding Block I refresher courses in Mathematics and in Programming in Econometrics.

Core course sequences in year one are:

- Mathematics Statistics Econometrics I-III
- Advanced Mathematics Asymptotic Statistics Advanced Econometrics I-III
- Microeconomics I-IV
- Macroeconomics I-IV
- Finance I-II

At the start of the academic year, students choose between the Economics and the Econometrics track and whether they will take the Finance track. The choice of track will be discussed with the DGS before the beginning of block 1.

Students in the Econometrics track take the Advanced Mathematics course, Asymptotic Statistics and the Advanced Econometrics courses. While it is recommended to take the Asymptotic Statistics course in the first year, students can opt to take Statistics in the first year and Asymptotic Statistics as a field course in the second year.

Students in the Finance track substitute two of the block III and IV courses in Macroeconomics or Microeconomics with Asset Pricing and Corporate Finance Theory. The choice of the Finance track is independent of the choice of Econometrics track and students can select both if they wish to.

In block V, students select two field courses out of a <u>designated list of field courses</u>. Please note that at least two first year field courses must be completed with a grade 6 or higher. First year field courses cannot be replaced by first year core courses, second year field courses or by a field paper. Students who fail first year field courses need to retake a first-year field course in the second year of the program.

Throughout the first year, students join organized visits to the research departments of the partner schools. During these visits, students are introduced to all research groups connected to the program, meet with scholars and learn about the ongoing research projects.

Osiris and Canvas

Study results are registered in Osiris. Students are encouraged to regularly check if all results in Osiris are up to date and correct.

Osiris is also used by students to register for courses, to address the Examination Board with individual requests and to apply for graduation.

Canvas is the digital learning environment for all courses in the curriculum. Teachers use Canvas for announcements, to publish course material, assignments and grades. Students upload their homework in Canvas. All assignments uploaded by students are automatically checked for plagiarism.

Students use their @student.eur account to access Osiris and Canvas.

The first-year curriculum and tracks: Economics, Econometrics, Finance

The standard first-year Research Master track in Economics consists of the following core courses:

Course name	Instructor(s)	ECTS	Block
Microeconomics I (Individual Decision Making and General Equilibrium)	Karamychev/Van Veelen	5	ı
Microeconomics II (Game Theory)	Moraga	4	П
Microeconomics III (Information and Contract Theory)	Sloof/Sisak	4	III
Microeconomics IV (Behavioral Economics)	Wakker/Offerman	4	IV
Macroeconomics I (Stochastic Neoclassical Growth Models)	Brügemann	4	II
Macroeconomics II (Macroeconomic Policy)	Stoltenberg	4	III
Macroeconomics III (Frictions and Resource Allocation)	Bartelsman/Gautier	4	IV
Macroeconomics IV (Financial Frictions in Macroeconomics)	Chen/Wang	4	V
Fundamental Mathematics	Wagener	4	0/1
Statistics	Nunez Queija	4	I
Econometrics I	Camehl	4	П
Econometrics II	V.d. Klaauw/Bloemen	4	III
Econometrics III	Koopman	4	IV

For the **Econometrics track**, students with a sufficient background in mathematics, statistics and econometrics replace Fundamental Mathematics, Statistics and/or Econometrics I, II and III with:

Course name	Instructor(s)	ECTS	Block
Advanced Mathematics	Wagener	4	ı
Asymptotic Statistics	Khismatullina	4	ı
Advanced Econometrics I	Bos/Koning	4	II
Advanced Econometrics II	Kleibergen/Pick	4	Ш
Advanced Econometrics III	Koopman/Boswijk	4	IV

Students who choose the **Finance track** substitute the block III and IV courses in Macroeconomics or Microeconomics with:

Course name	Instructor(s)	ECTS	Block
Asset Pricing	Laeven/Vellekoop	4	III
Corporate Finance Theory	Vladimirov/Gryglewicz	4	IV

In block V, the Macro IV core course is compulsory and students choose two field courses from the following <u>list</u>:

Course name	Instructor(s)	ECTS	Block
Behavioral Macroeconomics and Complexity	Hommes	3	V
Economics of Education	Plug/Oosterbeek	3	V
Experimental Economics	V.d. Ven/Dur	3	V
Empirical Asset Pricing	Andonov/Eiling	3	V
Empirical Corporate Finance	Eisert/Koudijs/Oberndorfer/ Verwijmeren	3	V
International Economics	Klaassen/Emami Namini/Bosker	3	V
Market and Systemic Risk Management	De Vries/Zhou	3	V
Spatial Economics	De Groot/Poelhekke/Verhoef	3	V
Topics in Distributional Macroeconomics	Greimel/Huber/Perotti	3	V
Topics in Organization and Markets	Onderstal//Crutzen/Delfgaauw	3	V

On top of the above field courses, students can elect to take one of the following TI lectures (if not for credits, attendance is highly recommended):

TI Economics Lectures 2024	tba	V
TI Econometrics Lectures 2024	tba	V

Program for year 1 in chronological order:

Block	Micro/Macro/Finance	Econometrics or Advanced Econometrics	Seminar
0		Programming in Econometrics (refresher) Mathematics (refresher)	
I	lMicro I	Fundamental or Advanced Math Statistics or Asymptotic Statistics	
П	Micro II, Macro I	IFconometrics Lor Advanced Econometrics L	Introduction to research dep
III	Two courses out of the following: Micro III, Macro II, Asset Pricing	IFconometrics II or Advanced Econometrics II	Introduction to research dep
	Two courses out of the following: Micro IV, Macro III, Corporate Finance Theory	lEconometrics III or Advanced Econometrics III	Introduction to research dep
V	Macro IV, Field course 1 and 2		Workshop on Research Idea

All core courses will be concluded by a sit-in examination. Apart from the sit-in examination, results of homework assignments form part of the examination and contribute to the final grade for a course. The final grade for a core course is composed of the average grade for the homework assignments (15%) and the grade for the sit-in examination (85%).

Introduction to the research departments of the schools (1 EC)

Students visit the research departments of the three schools supporting the TI research master program. These visits allow students to explore the research conducted in the three schools, to meet their researchers and discover all their fields of specialization. These meetings also allow potential supervisors to scout talented students. Each faculty visit will entail meetings with multiple departments and research groups. Aim of the visits to the departments is to facilitate the matching process between students and prospective supervisors and to introduce researchers to students who they did not (yet) encounter in the classroom.

Altogether, these visits count for 1 EC.

Workshop on Research Idea

In the first week of block V a 1- or 2-hour workshop on the basics of how to come up with a good research idea and how to write an academic paper will be organized. This workshop is part of the Research Clinic (see second year, page 15).

Maintaining a healthy work-life balance

A research master program is very demanding, especially in combination with a change of country and (study) culture. To help you to recognize stress symptoms on time we offer a presentation by a PhD study advisor in block I of the program. Our Intranet pages refer to university student counsellors and to workshops that are offered by the universities for students looking for personal support.

Registration for and withdrawal from courses

Students need to register for all courses by themselves at least three weeks before the start of the block. Registration is through <u>Osiris student</u> and is linked to the Canvas page for the course. Not registering for a course or registering beyond the deadline causes complications.

Assessment, grading, credits, and retakes

All courses are graded on a 1.0-10.0 scale, where 1.0 indicates very poor performance, 6.0 is the lowest passing grade, and 10.0 refers to outstanding performance. The final grade for a course block is rounded to the nearest multiple of .0 or .5, with the following exceptions: any grade between 5.0 and 5.5 is rounded to a 5; a 5.5 is rounded to a 6; the lowest possible grade is 1.0. Grades for homework or midterm examinations do not need to be rounded.

Tinbergen Institute does not schedule retakes. Failed exams in the first year cannot be retaken in the same academic year. Instead, students should retake failed first year courses in their second year in the program. Students who miss an examination due to for instance a verifiable illness may apply to the examination board for a retake in the same academic year. The procedure is described below and on the Intranet. Students cannot retake examinations that they have already passed or for which they have earned credits.

Right of inspection

As soon as possible and within 28 days of the announcement of the results of a written examination, the student can, by request, inspect his/her assessed work, the questions and assignments set, as well as the standards applied for marking. Inspection of the assessed work can only take place while the student is supervised by the examiner or an employee of the TI education office. A student may lodge an appeal against the way in which the result was reached within six weeks of the announcement of the result; see details below.

Transition to the second year of the program

Students need to have passed with a grade 6 or higher at least 48 ECTS from the first year curriculum and need to have completed the 'Introduction to TI research groups' in order to enter the second year and have access to the second year field courses. Moreover, additional, specific entrance requirements for each field course will be determined in the field course manual.

Compensation rule

For the core courses in blocks 1-5 of year one in the curriculum, a compensation rule applies. Under this rule, students who meet the conditions for access to the second year of the program within their first year of enrollment can compensate up to three fives. Each five must be compensated with a seven and a half or higher. The details of the compensation rule are:

- Students may compensate one five in the core course sequences econometrics and advanced econometrics with a seven and a half or higher within the econometrics or advanced econometrics sequence.
- Students taking all four courses in the microeconomics and all four courses in the macroeconomics course sequences may compensate at most two fives by two grades seven and a half or higher within the course sequences microeconomics/macroeconomics. These two fives can be in the same sequence.
- Students taking one or two finance courses, can compensate at most two fives by a grade 7,5 or higher in the microeconomics, macroeconomic and finance courses, provided that they have at least one sufficient grade (six or more) within the course sequence microeconomics, macroeconomics and finance.

Any compensated 5.0 counts as a 5.0 in the computation of the student's GPA.

Students who do not meet the requirements for access to the second year of the program within their first year of enrollment, must retake all first-year exams which they did not pass with a sufficient grade (6.0 or higher).

Second year of the program

The second year offers a broad range of field courses with a diversity in teaching and assessment methods. Students take courses for 27 ECTS from these field courses. Teaching occurs in working groups of usually 5-15 students, which stimulates active student participation. The final thesis (30 ECTS) is a research project, set up by the student under experts' supervision. The matching of students and supervisors, while largely the results of individual conversations between the two parties, is supported by the DGS.

Students have to comply with the requirements of the academic year that coincides with their second year in the program. Thus, the rules in this section apply to the 2022 cohort of Research Master students.

Field courses

In general, students have access to second-year field courses only after being granted access to year two of the program. Furthermore, students have to meet the entrance requirements specified for a course they want to register for.

The TI field courses for 2023-2024 are listed <u>here</u>. Note that field courses with fewer than five registered students may be cancelled.

Up to 9 ECTS can be obtained by taking courses not included in the TI curriculum. Students who want to take external courses for credits need permission from the Examination Board (see below). The TI lectures series can be taken for credits. The maximum number of ECTS obtained in the TI lecture series that may contribute to the 27 ECTS field course requirement is 6. With a few exceptions, students can take a TI core course as a field course (for 3 EC)

Skill courses

The following courses are part of the Research Clinic (which yields 3 ECTS in total) and are mandatory preparatory courses for the thesis writing:

- An academic writing course,
- An academic integrity course,
- A presentation course (which includes a training workshop for teaching).
- Workshop on how to come up with a good research idea (first year, block V)

The purpose of the lectures on Academic Integrity is to stimulate students to think about professional behavior in science. The lectures on Academic Presentation and Writing and the research idea workshop provide skills that the students will need in their scientific career to present effectively at conferences and seminars and to write scientific papers to the highest standard.

Seminars

Research fellows organize a wide variety of seminar series and conferences. Student participation in seminars is highly recommended. However, no course credits are allocated. Seminar schedules can be found here.

Taking external courses

Students can take external courses for a maximum of 9 ECTS. Taking external courses for credits needs to be approved by the examination board (see below). Deadline to submit requests to the Examination Board is June 30 of the previous academic year. Please note that the university offering the course may charge a tuition fee for the course and additional requirements for participants may apply. Carefully check the university deadlines and inform the DGS if fees are required. Please note that it is the student's responsibility to register on time for the course. The schedule for external courses (exam weeks, lecture free week, starting date) may not be aligned with the TI schedule.

- Courses at Erasmus University Rotterdam: check here.
- Courses at Vrije Universiteit: check here.
- Courses at University of Amsterdam: check <u>here</u>.
- Courses of the national MasterMath program: check <u>here</u>.

Credits for field courses

TI allocates typically 3 credits to any field course, including external courses, irrespective of the number of credits allocated to the same course elsewhere (an exception is made for the MasterMath courses). This also holds for TI core courses followed as field course by students for whom this course was not part of their core. The idea underlying this is that TI requires students to take nine different courses in their second year to specialize in their areas of interest as well as to broaden their perspective. To avoid any discussion about the relative load of different credits in different programs, TI adopts a simple uniform policy of allocating 3 ECTS to every field course.

Field papers or research internship

Students are allowed to replace at most one field course by a field paper or a research internship.

The **field paper** elaborates on a previously completed field course. The requirements for a field paper are provided in the assessment form and rubric. A field paper is an original theoretical or empirical contribution (in about 15-20 pages). The paper is connected to a TI field course that the student has passed but stands on its own and is an extension of material taught in the course. The teacher of the field course grades the field paper. All field papers are checked for plagiarism.

Students ask the DGS for approval to write a field paper for credits after having found a supervisor. Students contact the supervisor and agree on a topic and deadline. The supervisor reports the grade for the field paper to courses@tinbergen.nl.

During a **research internship** a student contributes about 75 hours to an ongoing or starting research project of a TI research fellow at one of the TI departments. The student writes a maximum three-page research report (may be in bullets) including a brief self-evaluation section, which critically assesses the student's role. The research internship is graded with a fail or pass. There are a few restrictions to the research internship: the work for the research internship cannot be reused for the final thesis and students do not get any financial compensation for the research internship.

Students ask the DGS for approval for a research internship after having found a supervisor. the research internship is assessed by a coordinator together with the supervisor. The result (fail/pass) is reported by the supervisor to courses@tinbergen.nl.

Assessment, grading, credits, retakes and inspections in the second year

Assessment methods for field courses are a combination of class participation, presentations in class, essay assignments and take-home or sit-in examinations. No retakes are scheduled for field courses.

Field courses are graded along the same lines as core courses. Tinbergen Institute does not schedule retakes. Instead, students can take another field course or write a field paper or do an internship to replace the failed course.

Inspections follow the rules for the core courses explained above.

Registration for and withdrawal from courses

Students decide in June of their first year in the program on a full program of field courses amounting to a maximum of 27 ECTS including extra courses, TI lectures, a field paper or internship (if applicable) and external courses. Students need to register for retakes (if applicable) on top of the 27 ECTS. Changes in the selection of courses afterwards require explicit support in writing of the student's supervisor and needs the DGS' approval.

Important note: field courses may be cancelled in case fewer than five students sign up for a course. If a course is cancelled, an additional course can be selected by affected students.

Matching to a (PhD) thesis supervisor

Typically, second-year students match up with a thesis supervisor before the end of December in the second year. The matching is largely a result of individual conversations between the student and the supervisor. While there is no formal registration process, the DGS supports the matching process by helping students identify faculty members who could be a good match for their research interests. To achieve this, the DGS remains in close contact with each student until a match is found. The DGS keeps track of every student progress on this front.

The three faculties participating in Tinbergen Institute have PhD positions available for students who have completed the TI research master program. In many cases, the thesis supervisor will fulfill the role of PhD thesis supervisor. The DGS updates the students towards the end of the first year about the number of expected PhD positions at the three universities. Students are advised to check with their thesis supervisor under what conditions they can transfer to a paid PhD position with that same supervisor. Students are also encouraged to investigate externally funded PhD opportunities available at the schools. To facilitate this, potential supervisors present to TI students their externally funded PhD projects.

Note that PhD positions are given by the faculties and that TI has no influence over the number of positions or the distribution of positions to specific supervisors. In a typical year, all students who perform well and pass the research master program can transfer to a PhD position. However, as the faculties and not TI provide PhD positions, TI cannot guarantee a PhD position for all students.

Students are strongly advised to complete all modules of the program before the end of the second academic year (i.e. in 24 months). Any extension beyond August 31 complicates the matching to PhD employment positions and involves the payment of tuition fees for (part of) the third academic year.

Thesis writing and graduation

We refer to the thesis manual for more detailed procedures and requirements (Intranet and Canvas).

The final thesis (30 ECTS) is an assessment in which students integrate all learning outcomes of the program. The thesis is the final examination of the program and shows that the student is able to carry out independent research and can make a contribution to the scientific debate.

The thesis will be presented in a pre-defense; this is a public event. The pre-defense can only take place with the approval of the thesis supervisor. The pre-defense should result in a to-do list for the student towards completing the thesis. The **final thesis** will be uploaded in Canvas and will be checked for plagiarism.

Assessment:

Weight pre-defense: 20%Weight final thesis: 80%

Students apply for graduation in Osiris two weeks before the submission of the thesis and always before August 1 if they want to graduate within the same academic year.

The timeline for students who wish to graduate before September 1 of the next academic year:

- Deadline for the pre-defense is July 1;
- Deadline to apply for graduation in Osiris is August 1 or at least 2 weeks before the final thesis is submitted:
- Deadline to submit the final thesis is August 15.

Not keeping to the deadlines will result in paying tuition fees for the next academic year.

TI organizes one graduation ceremony each year, usually in November.

The Academic and Examination Regulations

The Academic and Examination Regulations (AER) for the TI research master program are published on the <u>Intranet</u>. The AER lists the requirements for the program, rules for cum laude, has an extensive chapter on plagiarism and defines the rights of the students.

Plagiarism

Students are strongly advised to carefully study the chapter in the AER that defines plagiarism. Plagiarism is considered as a serious offense. The DGS gives a lecture on ethics and plagiarism on the introduction day (Monday of block 0).

The Examination Board

The Examination Board serves two research master programs: the TI program and the Business Data Science program. The Examination Board is responsible for the quality of examinations and diplomas. The Examination Board consists of four members, one of each faculty participating in the research master programs and one external member. The responsibilities and tasks of the Examination Board are explained in the Rules and Regulations for the Examination Board (available upon request). The Annual Report of the Examination Board is also available upon request.

Students may contact the Examination Board for the following reasons:

- The Examination Board decides on deviations from the curriculum that may have a bearing on the diploma. Therefore, any requests for items such as taking courses provided by third parties for credits and exemptions from mandatory courses in the curriculum must be approved by the Examination Board.
- Students who miss an examination due to e.g. verifiable illness may ask for a re-sit in the same academic year.
- The Examination Board will rule on requests for adaptations with regard to examinations for students with a disability.

Requests must be submitted in Osiris. Instructions on how to submit a request to the Examination Board can be found on the <u>Intranet</u>. The Examination Board will decide within three weeks of receiving the request.

The Examination Board may take measures against a student in case of fraud, plagiarism or misbehavior.

Lodging an Appeal

An appeal may be lodged against the way in which the result for an examination was reached or against any Examination Board decision. A detailed notice of appeal should be submitted to the <u>Examination Appeals Board</u> (CBE) of the Erasmus University. The procedures of the Appeal Board need to be followed carefully. Please read the instructions and deadlines on the Intranet. In general, the appeal must be lodged within six weeks after the decision which is appealed has been made.

Educational Board

The Educational Board serves the same two research master programs as the Examination Board.

The Educational Board consists of six members. Three members are from the programs' teaching staff and/or research fellows; three members are research master students in one of the programs. Student members are nominated by the students after elections and are appointed by the Faculty Board of the university of enrolment. Student members are appointed for two years. Members are listed on the website. The rules and regulations as well as the annual report of the Educational Board are available on the Intranet.

The Educational Board issues advice, both solicited and unsolicited, to the Directors of Graduate Studies on all matters concerning the educational program, with the objective to maintain or improve the quality of the program. The Educational Board's advice may concern all aspects of the program including composition of the curriculum, student facilities and teacher quality.

The student members organize an annual comprehensive program evaluation, the outcome of which is discussed in the Educational Board meeting.

Students are free to contact Educational Board members with any concerns they may have about the program.

Student Council

The <u>Student Council</u> is an independent student body that both informs and advises students and organizes regular social events. For composition and agenda see the website.

Facilities

The institute supports students with various facilities, such as <u>office space</u> and reimbursement of travel expenses between Amsterdam and Rotterdam for coursework (<u>see Intranet</u>).

Admission

The TI research master program is a selective program. Selection of students is done in a careful selection process. <u>Admission requirements</u> are listed on the website.

Funding

Tinbergen Institute awards <u>scholarships</u> to selected students based on individual merit. Scholarships and tuition waivers are granted by Tl's Admission Board. Students who accept a Tl scholarship or tuition waiver are obliged to sign and thereby accept Tl's scholarship regulations.

For second-year students, additional funding is offered by the institute and the faculties through research and/or teaching assistantships. These jobs offer valuable teaching and research experience. Students are encouraged to check job openings at the three faculties. Open positions are also advertised on the Intranet.

Job market training

Tinbergen Institute supports PhD students in preparing for the international (academic) job market by organizing presentation sessions (PhD presentation afternoons and an annual PhD Jamboree), by providing information sessions and by offering mock interview sessions. Requirements and details are announced in the Institute's Intranet.

The graduate school and institute for economic research of the Erasmus University Rotterdam, University of Amsterdam and VU University Amsterdam.

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