Study Guide 2020-2021

Tinbergen Institute Research Master's Program
August 2020 (update December 2020)
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 is dedicated to prepare students for PhD thesis research. 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 advanced 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.

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 Research Master program find a supervisor at one of the three faculties (usually the Research Master thesis supervisor will act as PhD supervisor) and continue in a PhD track in Tinbergen Institute.

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 annual TI Lectures Series. Also this year, we have invited leading researchers who will teach 3-day lectures to an audience of TI students. In May/June 2021 (to be scheduled), Robert S. Pindyck will give a lecture with the title ‘The Economics of Climate Change’.

Rotterdam, July 2020
Andreas Pick
Director of Graduate Studies
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Tinbergen Institute research master’s program

Study guide 2020-21

The Tinbergen Institute (TI) research master program is a joint program in economics, econometrics, and finance of Erasmus University Rotterdam (EUR), University of Amsterdam (UvA) and Vrije Universiteit Amsterdam (VU). It is organized by and at TI, which is the graduate school and research institute in economics of these three universities.

Students in the program are registered at one of the three universities. The university where the student is registered awards the MSc degree. A tuition fee is charged to all students. 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.

TI has its own Director of Graduate Studies (DGS), Admission Board, Examination Board and Educational Board.

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 three-year 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 in their field of specialization. Furthermore they are able to communicate their findings orally and in publishable research papers. They have a profound knowledge and understanding of state-of-the-art theories and methods in their field of specialization.

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 3 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 study. In the second year students further specialize in (at least) one field of economic research and write a research paper. 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 second year offers 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 thesis is written under supervision of one of the institute’s research fellows. Defence of the thesis before an audience of experts is part of the final assessment.

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 institution.
The Tinbergen Institute Research Master’s program in 2020-2021

In case of any difference between this study guide and the Academic and Examination Regulations for 2020-21 (AER), the AER prevails.

Calendar for 2020/2021

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 2 weeks. Core Course teachers may not assign graded homework in the week prior to the exam.

Course attendance is mandatory; this applies to all core- and field courses, to the Academic Writing course, the Academic Presentation course, the Academic Integrity course, and the Introduction to TI research groups seminar series. Attendance is registered via attendance sheets. First-year (core) courses have weekly tutorials, taught by a teaching assistant, in which students work on and discuss homework assignments.

The calendar for 2020/2021 is:

<table>
<thead>
<tr>
<th>Block</th>
<th>Dates</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 0</td>
<td>Aug 24-28</td>
<td>Introduction and Programming course</td>
</tr>
<tr>
<td>Block I</td>
<td>Aug 31 – Oct 16</td>
<td>Lectures</td>
</tr>
<tr>
<td></td>
<td>Oct 19 – 23</td>
<td>Exams</td>
</tr>
<tr>
<td>Block II</td>
<td>Oct 26 – Dec 11</td>
<td>Lectures</td>
</tr>
<tr>
<td></td>
<td>Dec 14 – 18</td>
<td>Exams</td>
</tr>
<tr>
<td></td>
<td>Dec 21 – Jan 1</td>
<td>Christmas Holidays</td>
</tr>
<tr>
<td>Block III</td>
<td>Jan 4 – Feb 19</td>
<td>Lectures</td>
</tr>
<tr>
<td></td>
<td>Feb 22 – 26</td>
<td>Exams</td>
</tr>
<tr>
<td>Block IV</td>
<td>Mar 1 – Apr 16</td>
<td>Lectures</td>
</tr>
<tr>
<td></td>
<td>Apr 19 – 23</td>
<td>Exams</td>
</tr>
<tr>
<td>Block V</td>
<td>Apr 26 – 30</td>
<td>Spring Break</td>
</tr>
<tr>
<td></td>
<td>May 3 – July 16</td>
<td>Lectures and Exams</td>
</tr>
</tbody>
</table>

The course schedule is available on the TI Intranet page (access only for TI affiliates).

First year of the program

In the first year of the program students have to complete 60 ECTS: 13 core courses (52 ECTS), 2 field courses (6 ECTS), the Principles of Programming in Econometrics course (1 ECTS), and the Introduction to TI research groups seminar series (1 ECTS).

At the start of the academic year, students choose between the Econometrics and the Advanced Econometrics track and whether they will take the Finance track. The choice of track will be
discussed during the intake interview with the DGS (to be scheduled in the first weeks of September).

Students in the Econometrics track take the Advanced Mathematics course, Asymptotic Theory and the Advanced Econometrics courses. While it is recommended to take Asymptotic Theory course in the first year, students can opt to take Statistics in the first year and Asymptotic Theory 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 Theory and Corporate Finance Theory. The choice of the Finance track is independent of the choice of Econometrics track.

In block V, students select 2 field courses out of a designated list of field courses.

All first-year students attend the Introduction to TI research groups seminar series. These seminars allow students to explore the research conducted in the three faculties potential supervisors and fields of specialization, and it allows potential supervisors to scout talented students.

At the end of the first year, only students who have earned at least 48 ECTS from the first year courses and who attended the Introduction to TI research groups seminar series can continue to the second year of the program. Students will also need to meet any additional entrance requirements specific to each field course.

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

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

<table>
<thead>
<tr>
<th>Course name</th>
<th>Instructor(s)</th>
<th>ECTS</th>
<th>Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Programming in Econometrics</td>
<td>Bos</td>
<td>1</td>
<td>I</td>
</tr>
<tr>
<td>Microeconomics I (Individual Decision Making and General Equilibrium)</td>
<td>Karamychev/Tuinstra</td>
<td>4</td>
<td>I</td>
</tr>
<tr>
<td>Microeconomics II (Game Theory)</td>
<td>Moraga</td>
<td>4</td>
<td>II</td>
</tr>
<tr>
<td>Microeconomics III (Information and Contract Theory)</td>
<td>Sloof/Watanabe</td>
<td>4</td>
<td>III</td>
</tr>
<tr>
<td>Microeconomics IV (Behavioral Economics)</td>
<td>Wakker/Offerman</td>
<td>4</td>
<td>IV</td>
</tr>
<tr>
<td>Macroeconomics I (Stochastic Neoclassical Growth Models)</td>
<td>Brügemann</td>
<td>4</td>
<td>II</td>
</tr>
<tr>
<td>Macroeconomics II (Macroeconomic Policy)</td>
<td>Stoltenberg</td>
<td>4</td>
<td>III</td>
</tr>
<tr>
<td>Macroeconomics III (Frictions and Resource Allocation)</td>
<td>Bartelsman/Gautier</td>
<td>4</td>
<td>IV</td>
</tr>
<tr>
<td>Macroeconomics IV (Financial Frictions in Macroeconomics)</td>
<td>Van Wijnbergen</td>
<td>4</td>
<td>V</td>
</tr>
<tr>
<td>Fundamental Mathematics</td>
<td>Wagener</td>
<td>4</td>
<td>I</td>
</tr>
<tr>
<td>Statistics</td>
<td>Spreij</td>
<td>4</td>
<td>I</td>
</tr>
<tr>
<td>Econometrics I</td>
<td>Schnücker</td>
<td>4</td>
<td>II</td>
</tr>
<tr>
<td>Econometrics II</td>
<td>V.d. Klaauw/Bloemen</td>
<td>4</td>
<td>III</td>
</tr>
<tr>
<td>Econometrics III</td>
<td>Koopman</td>
<td>4</td>
<td>IV</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course name</th>
<th>Instructor(s)</th>
<th>ECTS</th>
<th>Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Mathematics</td>
<td>Wagener</td>
<td>4</td>
<td>I</td>
</tr>
</tbody>
</table>
Students who choose the **Finance track** substitute the block III and IV courses in Macroeconomics or Microeconomics with:

<table>
<thead>
<tr>
<th>Course name</th>
<th>Instructor(s)</th>
<th>ECTS</th>
<th>Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Pricing</td>
<td>Laeven/Vellekoop</td>
<td>4</td>
<td>III</td>
</tr>
<tr>
<td>Corporate Finance Theory</td>
<td>Vladimirov/Gryglewicz</td>
<td>4</td>
<td>IV</td>
</tr>
</tbody>
</table>

In block V the Macro IV core course is compulsory and students choose two field courses out of the following list:

<table>
<thead>
<tr>
<th>Course name</th>
<th>Instructor(s)</th>
<th>ECTS</th>
<th>Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Macroeconomics and Complexity</td>
<td>Hommes</td>
<td>3</td>
<td>V</td>
</tr>
<tr>
<td>Economics of Education</td>
<td>Plug/Oosterbeek</td>
<td>3</td>
<td>V</td>
</tr>
<tr>
<td>Experimental Economics</td>
<td>Sonnemans/V.d. Ven</td>
<td>3</td>
<td>V</td>
</tr>
<tr>
<td>Empirical Asset Pricing</td>
<td>Andonov/Eiling</td>
<td>3</td>
<td>V</td>
</tr>
<tr>
<td>International Economics</td>
<td>Klaassen/Emami Namini/Bosker</td>
<td>3</td>
<td>V</td>
</tr>
<tr>
<td>Market and Systemic Risk Management</td>
<td>De Vries/Zhou</td>
<td>3</td>
<td>V</td>
</tr>
<tr>
<td>Spatial Economics</td>
<td>De Groot/Fischer/Verhoef</td>
<td>3</td>
<td>V</td>
</tr>
<tr>
<td>Topics in Organization and Markets</td>
<td>Onderstal/Swank</td>
<td>3</td>
<td>V</td>
</tr>
</tbody>
</table>

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

| TI Economics Lectures 2021                   | Pindyck              | V    |
| TI Econometrics Lectures 2021                | tba                  | V    |

**Program for year 1 in chronological order:**

<table>
<thead>
<tr>
<th>Block</th>
<th>Microeconomics/Macroeconomics/Finance</th>
<th>Econometrics or Advanced Econometrics</th>
<th>Seminar</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>I</td>
<td>Principles of Programming</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Micro I</td>
<td>Fundamental or Advanced Math</td>
<td>Seminar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Statistics or Asymptotic Theory</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Micro II, Macro I</td>
<td>Econometrics I or Advanced Econometrics I</td>
<td>Seminar</td>
</tr>
<tr>
<td>III</td>
<td>Two courses out of the following:</td>
<td>Econometrics II or Advanced Econometrics II</td>
<td>Seminar</td>
</tr>
<tr>
<td></td>
<td>Micro III, Macro II, Finance*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Two courses out of the following:</td>
<td>Econometrics III or Advanced Econometrics III</td>
<td>Seminar</td>
</tr>
<tr>
<td></td>
<td>Micro IV, Macro III, Finance*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Macro IV, Field course 1</td>
<td>Field course 2</td>
<td></td>
</tr>
</tbody>
</table>

* The two finance courses have to be taken in combination.
Introduction to TI research groups seminar series
The seminar series introduce the research groups at the three TI faculties to the first year students. In the seminars, TI fellows relate ongoing research projects in their research groups. Aim of the seminar series 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 class room.

The research seminars are organized at TI Amsterdam and TI Rotterdam. Attendance is mandatory and will be checked by means of attendance sheets. Signing off for fellow students is considered fraud and will disqualify both students for the 1 ECTS for the seminars. Further penalties may be imposed by the examination board.

Registration for and withdrawal from courses
Tinbergen Institute research master students register for courses by means of the registration mode in Osiris student. First-year students do not have to register for courses in blocks I and II; starting from block III onwards, students have to register for the courses of their choice.

Assessment, grading, credits, and retakes in the core
All courses are graded on a 1-10 scale, where 1 indicates very poor performance, 6 is the lowest passing grade, and 10 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; a 0.5 does not exist. 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 re-sit in the same academic year. See procedure below and on the Intranet. Students cannot re-sit examinations that they have already passed or for which they have earned credits.

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%).

A compensation rule applies to students who have completed the ‘Introduction to TI research groups’ and have earned at least 48 ECTS for first year courses by August 1 of the first academic year. Under the compensation rule, students may compensate at most one 5 with a 7.5 or higher within the core course sequences econometrics and advanced econometrics. In addition, within the core course sequences microeconomics/macroeconomics/finance students may compensate at most two fives with a 7.5 or higher each obtained in any of the courses of these core course sequences. For more details we refer to the AER 2020-21.

Right of inspection
As soon as possible and within 28 days of the announcement of the results of a written examination, the student can, on 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 with the Examination Board against the way in which the result was reached within six weeks of the announcement of the result.
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 30 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 2019 cohort of Research Master students.

Field courses

In general, students are only allowed to register for a field course if they have earned at least 48 ECTS of first year’s credits including the seminar series. Furthermore, students have to meet the entrance requirements specified for a course they want to register for.

The TI field courses for 2020-21 are listed here. Note that TI may cancel field courses with fewer than five registered students. Students have to complete 4 field courses within a research major. The research majors (corresponding to the TI’s research fields) are the following:

- Behavioral Economics
- Complexity
- Econometrics
- Empirical Microeconomics
- Finance
- Macroeconomics
- Organizations and Markets
- Spatial Economics

Students graduating in the Econometrics track take Asymptotic Theory and the Advanced Mathematics and Advanced Econometrics core courses (see above) and complete a research major in Econometrics. Students graduating in the Finance track choose the Finance track in the first year (see above) and complete a major in Finance.

In principle, all major options are open as long as students meet the entrance requirements determined for field courses within that major.

With a few exceptions, students can take a TI core course as a field course. Students who want to take external courses for credits need permission from the Examination Board (see below). The maximum amount of ECTS obtained in the TI lecture series that may contribute to the 30 ECTS field course requirement is 6.

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. 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 10 different courses in their second year to specialize in their areas of interest as well as to broaden their perspective. To avoid any discussion

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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**
Students are allowed to replace one field course by a field paper which 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. The field paper does not count towards the research major requirements. All field papers are checked for plagiarism.

Students register for a field paper at the start of the year and commit later to a topic and supervisor. Students contact the teacher during the course to agree on a topic and deadline. The supervisor reports the grade for the field paper 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 to replace the failed course.

Inspections follow the rules for the core courses explained above.

**Registration for and withdrawal from courses**
Second year students register via Osiris for a full program of field courses amounting to a maximum of 36 ECTS including extra courses, a field paper (if applicable) and external courses before the beginning of the academic year. Registrations for retakes (if applicable) come on top of the 36 ECTS. Registration deadline: August 15, 2020. Changes in the selection of courses after this date requires explicit support in writing of the student’s supervisor and needs the DGS’ approval. If the lecturers of the TI lectures are not known by that date, students can postpone the registration of two field courses until the lecturers have been named.

Important note: field courses may be cancelled in case less than 5 students sign up for a course. If a course is cancelled, an additional course can be selected by affected students.

Students who want to withdraw from one of their registered courses should inform Carine Horbach by email (courses@tinbergen.nl) no later than the first Sunday after the first lecture.

In general, students are only allowed to register for field courses if they have earned at least 48 ECTS of first year’s credits including the seminar series. Furthermore, students have to meet the entrance requirements that are specified for each individual course.

**Thesis writing**
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. We refer to the thesis manual for the procedures and requirements (Intranet). All theses are checked for plagiarism.

**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 can only support the matching process effectively if all students inform Judith van Kronenburg (thesis@tinbergen.nl) via email of their matching process. If there are difficulties in the matching process, students contact the DGS (dgs@tinbergen.nl).

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.

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

**Skill courses**

The following courses are mandatory preparatory courses for the thesis writing (the associated ECTS are included in the 30 ECTS for the final thesis):

- An academic writing course
- An academic integrity course
- A presentation course.

The purpose of the lectures on Scientific Integrity is to stimulate students to think about professional behavior in science. The lectures on Academic Presentation and Writing 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](#).
The Academic and Examination Regulations

The Academic and Examination Regulations (AER) for the TI research master program are published on the Intranet. 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. TI is using electronic software to detect plagiarism in assignments, written examinations and papers submitted by students. Plagiarism identified or suspected is always reported to the Examination Board. The Examination Board decides on appropriate measures against the student.

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 Academic and Examination Regulations and in the Rules and Regulations for the Examination Board (available upon request). The Annual Report of the Examination Board is 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 replacement of parts of the curriculum through courses provided by third parties, exemptions, postponement of deadlines should be sent to 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.
- In case of a dispute with the lecturer: students try to settle disputes about examinations with the lecturer first and contact the Director of Graduate Studies if the dispute remains. Students may submit disputes to the Examination Board for arbitration.

The Examination Board may take measures against a student in case of fraud, plagiarism or misbehavior. Requests for exemptions or deviations from the curriculum must include a motivation. The Examination Board will make a decision within three weeks of receiving the request. Requests must be addressed to examinationboard@tinbergen.nl.
Educational Board

The Examination 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 2 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 Student Council 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 office space and reimbursement of travel expenses between Amsterdam and Rotterdam for coursework.

Admission

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

Funding

Tinbergen Institute awards scholarships to selected students based on merit. Scholarships and tuition waivers are granted by TI’s Admission Board. Students who accept a TI scholarship or tuition waiver are obliged to sign and thereby accept TI’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 (weekly lunch seminars and an annual PhD Jamboree), by providing a budget to participate in international job market events (usually the EEA meetings in Europe and the AEA meetings in the US) and by offering mock interview sessions. Requirements and details are announced in the Institute’s Intranet.