Master’s program
Informatics

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Office of academic affairs - Informatics
Secretary of the examination board

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http://www.in.tum.de
Contact Persons

- **Infopoint - first contact center**
- **Academic Affairs Office**
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- **Secretary of the Examination Board**
  - Claudia Philipps
  - Monika Hanesch (for part-time students)
- **Academic Counseling**
  - Dr. Angelika Reiser
- **International Affairs**
  - Lena Krone (international degree students)
  - Martina von Imhoff (study abroad)
- **Consecutive Recognition**
  - complete application at Infopoint
Master ‘s program Informatics

• Goals of the program:
  – qualifying for entry into professional practice or research
  – provide comprehensive view of the discipline’s interrelated issues
  – learn to work independently according to academic principles

• Content of the program:
  – Examinations: 90 Credits (ECTS)
  – Master ‘s Thesis: 30 Credits
  – Possibly additional bridging courses: max. 30 Credits

• Duration:
  – Regular time of Studies: 4 Semester
  – At the latest in 7th Semester

• Academic title:
  – Master of Science or Master of Science (TUM)
    (Professional Status: Engineer)
Curriculum Master Informatics

16 Credits  Interdisciplinary Project
30 Credits  Master’s Thesis

16 Credits  Interdisciplinary Project
30 Credits  Master’s Thesis

5 Credits  Master-Seminar
10 Credits  Advanced Practical Course

18 Credits  Elective courses in Informatics

8 Credits  2nd area
8 Credits  3rd area

One of these areas has to be „Formal Methods and Applications“ or „Algorithms and Scientific Computing“

53 Credits  Area of Specialization

9 Credits  From all areas
10 Credits  Free choice

8 Credits  2nd area
8 Credits  3rd area

18 Credits  Elective courses in Informatics

One of these areas has to be „Formal Methods and Applications“ or „Algorithms and Scientific Computing“

6 Credits  Soft Skills (Support Electives)

Will be done in 6 months

Orientation
## Curriculum Master Informatics

<table>
<thead>
<tr>
<th>Credits</th>
<th>Course Description</th>
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<tbody>
<tr>
<td>5</td>
<td>Master-Seminar</td>
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<td>10</td>
<td>Advanced Practical Course</td>
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<td><strong>Elective courses in Informatics</strong></td>
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<tr>
<td>18</td>
<td><strong>Area of Specialization</strong></td>
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<td></td>
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<td>One of these areas has to be</td>
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<tr>
<td></td>
<td>„Formal Methods and Applications“</td>
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<tr>
<td></td>
<td>or „Algorithms and Scientific Computing“</td>
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<tr>
<td>53</td>
<td><strong>Orientation: practice</strong></td>
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<tr>
<td></td>
<td>9 Credits</td>
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<tr>
<td></td>
<td>10 Credits</td>
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<tr>
<td></td>
<td>From all areas</td>
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<tr>
<td></td>
<td><strong>2nd Advanced Practical Course</strong></td>
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<tr>
<td></td>
<td>18 Credits</td>
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<td></td>
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<tr>
<td>30</td>
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<td></td>
<td>Will be done in 6 months</td>
</tr>
</tbody>
</table>
Curriculum Master Informatics

- **5 Credits**: Master-Seminar
- **10 Credits**: Advanced Practical Course
- **53 Credits**: Elective courses in Informatics
  - **18 Credits**: Area of Specialization
  - **8 Credits**: 2nd area
  - **8 Credits**: 3rd area
  - **9 Credits**: Orientation: basics
  - **10 Credits**: Free choice from all areas
  - **8 Credits**: One of these areas has to be „Formal Methods and Applications“ or „Algorithms and Scientific Computing“
- **16 Credits**: Interdisciplinary Project
- **30 Credits**: Master’s Thesis
  - Will be done in 6 months
- **6 Credits**: Soft Skills (Support Electives)
Curriculum Master Informatics

- **5 Credits**
  - Master-Seminar

- **10 Credits**
  - Advanced Practical Course

- **53 Credits**
  - Elective courses in Informatics
    - 18 Credits
      - Area of Specialization
      - 2nd area 8 Credits
      - 3rd area 8 Credits
    - One of these areas has to be “Formal Methods and Applications” or “Algorithms and Scientific Computing”

- **16 Credits**
  - Interdisciplinary Project

- **30 Credits**
  - Master’s Thesis
  - Will be done in 6 months

**Orientation: research**
- **9 Credits**
  - From all areas
- **10 Credits**
  - Guided research

**Soft Skills (Support Electives)** 6 Credits
Guided Research

Goals:
- Scientific literature research
- Development of an own (narrowly confined) result by means of scientific methods
- Structuring and writing of own scientific texts in English
- Presentation of the results in a short talk

Content:
- Student and advisor establish the topic and specify incrementally the task
- Student receives feedback on the results, suggestions for improvement opportunities and for further proceeding

- If meaningful and possible: submission of a article to a journal
- If meaningful and possible: participation with a paper at a conference
Curriculum Master Informatics

4 Credits
- Master-Seminar

10 Credits
- Advanced Practical Course

52 Credits
- Elective courses in Informatics
  - Area of Specialization
    - 18 Credits
      - 2nd area
      - 3rd area
  - One of these areas has to be „Formal Methods and Applications“ or „Algorithms and Scientific Computing“

16 Credits
- Interdisciplinary Project

30 Credits
- Master’s Thesis

Orientation: international
- Study abroad
- Soft Skills (Support Electives)

16 Credits
- Master’s Thesis
  - Will be done in 6 months
Curriculum Master Informatics

4 Credits
- Master-Seminar

10 Credits
- Advanced Practical Course

52 Credits
- Elective courses in Informatics
  - 18 Credits
    - Area of Specialization
  - 8 Credits
    - 2nd area
  - 8 Credits
    - 3rd area
- One of these areas has to be "Formal Methods and Applications" or "Algorithms and Scientific Computing"

Orientation
- 9 Credits
  - From all areas
- 10 Credits
  - Free choice

16 Credits
- Interdisciplinary Project

30 Credits
- Master's Thesis
  - Will be done in 6 months
- Soft Skills
  - (Support Electives)
Interdisciplinary Project (IDP)

- **Goal:** Bridging the gap between Informatics and its application
- **Standard application areas**
  - Mathematics
  - Electrical engineering
  - Medicine
  - Mechanical Engineering
  - Economics
- **On special request the IDP can also be taken in another area**
- **16 Credits**
- **Examination results include:**
  - Grades from lectures
  - Practical work
  - Documentation and Presentation
  - Grade calculation 3:7 (lecture:project) (starting from WS 16/17)
- **How-To for an IDP**
### Study Plan - Structure of the four Terms

<table>
<thead>
<tr>
<th>Sem</th>
<th>Informatics Methodology and Knowledge</th>
<th>Informatics Practice</th>
<th>Informatics Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Elective Courses (23)</td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>Elective Courses (12)</td>
<td>APC(10)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Elective Courses (8) Master’s Seminar (5)</td>
<td>o r 2\textsuperscript{nd} or continuing APC(10)</td>
<td>o r Guided Research (10)</td>
</tr>
<tr>
<td>4</td>
<td>Master’s Thesis (30)</td>
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</tr>
</tbody>
</table>

- Additionally in the 1st to 3rd semester: Support Electives (6) and IDP(16)
- Students are not bound to follow this plan, it is a recommendation
  - lectures can be heard according to the individual needs …
  - Master’s Thesis: 6 Months from registration to delivery
Continuous Assessment Procedure

- Module examinations will be taken concurrently with the program
- Types: written, oral, project, ...
- Mandatory registration of examinations
  - always in TUMonline (https://campus.tum.de)
  - MyTUM-login necessary
  - information on registration of examinations see http://www.in.tum.de/en/current-students/administrative-matters/exams.html

- Withdrawal
  - withdrawal due to illness (or other conclusive reasons)
  - early withdrawal without indication of reasons possible
  - information on withdrawal see http://www.in.tum.de/en/current-students/administrative-matters/exams.html
Repetition of Examinations

(§ 44 FPSO together with § 23 und § 24 APSO)

• Failed examinations of required modules have to be repeated at the next offered examination date
  – for required modules each semester a repeat examination is offered
  – in most cases until first week of lecture period of the following semester

• Repetition for the purpose of improving grades is not possible

• The number of repeat examinations is only restricted by the examination deadlines of § 10 APSO

Don‘t forget to register!
Examination Time Limits (APSO § 10)

- 2\textsuperscript{nd} semester: no examination passed → ir
- 3\textsuperscript{rd} semester: less than 30 credits → ir
- 4\textsuperscript{th} semester: less than 60 credits → ir
- 5\textsuperscript{th} semester: less than 90 credits → ir
- 6\textsuperscript{th} semester: examinations not yet taken → np
- 7\textsuperscript{th} semester: examinations not yet taken → ir

ir: irreversibly failed   np: not passed
Fundamentals Examinations - Bridging courses

- Fundamentals Examinations are listed in the letter of admission.
- They have to be passed in the first academic year.
- Failed Fundamentals Examinations may be repeated only once and at the next examination date within the first academic year.
- Pursuant to § 46 (3) FPSO admission to the Master’s Thesis is only possible after passing Fundamentals Examinations.
- Bridging courses are not part of the Master’s examination.
- Examination results are not being taken into consideration for the overall grade.
Certificate of the Final Examination

- lists grade and topic of the final thesis and the overall grade
- overall grade
  - calculated as the weighted grade average of the modules and the Master’s thesis
  - the grade weights of the individual modules correspond to the credits assigned to each module
- date on final certificate
  - day when all module and examination requirements have been fulfilled
  - number of semesters is not printed
- in addition the student will receive a Transcript of Records that lists all passed modules with credits and grades
Student Code of Conduct

• Do not cheat in exams!
• -> grade 5.0; only one repetition of the exam allowed
• Do not copy!
• Do cite correctly!

This also holds for code, seminar papers and Master‘s Thesis
Images have to be referenced, and possibly an allowance of the owner is necessary (legal consequences of copyright violation!)

Questions?
Successful Studies!