Introduction to the

International Master’s Programme in Data Science

Data Engineering
Machine Learning and Statistics

Programme coordinator:
Matteo Magnani <matteo.magnani@it.uu.se>
During the presentations

• Keep your microphone off.
• If you want to ask questions please write:
  – your questions or
  – “RTS” (request to speak) in the chat.
• These slides will be available from this afternoon on:
  – https://www.it.uu.se/student/welcome_masters (follow the link to the page about our programme).
• Links to material that is not public will be sent by email.
Outline

Today:
• Information from the coordinator.
• Information from the student counsellor.
• Information from the Union for Eng. and Science Students (UTN).
• Q/A.

Starting from next week: individual meetings.
• You choose your courses for the Autumn term.
• You can ask questions of personal concern.
• Information on how to book your meeting sent by email.
  – *If at the end of today you already know the courses you want to attend and have no additional questions, you can just send me the list of courses by email and do not need to book an individual meeting.*
Conditions

- Some of you have been admitted with a condition.
- Fee-paying students must have already paid their fee.
- If you have not uploaded your Bachelor degree or were missing programme-specific credits, upload them now.
  - “upload your degree diploma and complete transcript to your University Admissions account according to the rules regarding documents on universityadmissions.se, as soon as you have received them. If you have applied for your bachelor’s degree but not yet received it, please upload a signed letter from the graduation office at your home university that you have applied for such a degree and fulfil all necessary requirements.”
- Please inform me by email when you upload your complete transcript if you still have to do it.
Programme structure

Year 1
- Core Data Science
  - P1
  - Autumn
- P2
  - Spring
- P3
- P4

Year 2
- Specialisation (incl. project)
  - P1
  - Autumn
- P2
- P3
- P4
- Master’s thesis
  - Spring

40 study hours per week
**Year 1, semester 1 (Autumn)**

**Period 1 (30/8 - 26/10)**
- Introduction to Data Science, 10c (1MS041)
- Data, Ethics and Law, 5c (1DL002)
- Custom courses (10c) (see below)

**Period 2 (27/10 - 16/1)**
- Statistical Machine Learning, 5c (1RT700)

If you haven’t read some of these:

<table>
<thead>
<tr>
<th>Computer Programming II, 5c (1TD722)</th>
<th>Database Design I, 5c (1DL301)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear Algebra II, 5c (1MA323)</td>
<td>Several Variable Calculus, Limited Version, 5c (1MA324)</td>
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Otherwise:

<table>
<thead>
<tr>
<th>Modelling for Combinatorial Optimisation, 5c (1DL451)</th>
<th>Optimisation, 5c (1TD184)</th>
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</thead>
<tbody>
<tr>
<td>Software eng. and proj. management (5c, 1DL251)</td>
<td>Databases II, 5c (1DL400)</td>
</tr>
<tr>
<td>Mathematical modelling of football (5c, 1RT001)</td>
<td>Foundations of Mathematical Analysis, 5c (1MA322)</td>
</tr>
<tr>
<td>Probability Theory II, 5c (1MS036)</td>
<td>Inference Theory II, 5c (1MS037)</td>
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More info on courses by email
Year 1, semester 2 (Spring)

**Period 3**
- Data Engineering I (7.5c)
- Theoretical foundations of data science (7.5c)
- Other options:
  - Artificial Intelligence (7.5c)
  - Computer-Intensive Statistics And Data Mining (7.5c)

**Period 4**
- Data Engineering II (7.5c)
- High-performance and parallel computing (7.5c) (DE track)
- Reinforcement Learning (7.5c)
- Applied Linear Algebra for Data Science (7.5c) (ML&S track)

You will have to choose two courses per period, later during the Autumn. The list of courses is under finalization, you will get more details.
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