MTAT.03.270
Seminar on Enterprise Software
(3 ECTS)

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Next Steps

• Consultancy Sessions (optional, on request via Slack)
  • **11 May** - Individual Consultation for final reports (optional & on request by student only - first come first serve principle)
  • **18 May** - Individual Consultation for final reports (optional & on request by student only - first come first serve principle)

• Submission of Final Report (incl. Data Extraction Sheet)
  • **23 May** - Deadline for submitting final reports (submit before 23:59 – one report per team)
Context

Masters Seminar & Thesis (36 ECTS)

Professional Practice or Projects (18 ECTS)

Electives & Free-Choice Courses (18 ECTS)

Specialty Module 1: Enterprise Software (24 ECTS)

Specialty Module 2: Embedded Software (24 ECTS)

Core Module (4 courses, 24 ECTS)

To be done in fall term

Context

• Target Group of MSc Seminar 1 (MTAT.03.270 or ITX8301)
  • 1st year students in the MSc Software Engineering (SE) program
  • This seminar is mandatory for all students in the MSc SE program
  • This seminar is equivalent to the Master’s Seminar 1 taught at TalTech - the spring seminars are mutually exclusive (must take either UT or TalTech seminar)

• In the fall semester you are supposed to take the second seminar
  • You should by then have a MSc thesis topic
  • Fall seminar should be taken in the Chair where the master thesis supervisor is located; if it is the Chair of SE & IS, take ‘Research Seminar in Software Engineering’ (LTAT.05.023)
How to find a MSc thesis topic and a supervisor?
How to find a thesis topic?

• Start thinking about a topic now (2nd semester) or during summer (perhaps during internship)
• Get inspired by the courses you have taken (UT and TalTech)
• Talk to your teachers about potential topics they plan to offer
• Look up the UT ICS’ Research Groups (see next slides)
• Look up the UT ICS thesis topic database (starts to fill in August)
• Browse the UT thesis database (completed theses)
UT ICS Research Groups
https://cs.ut.ee/en/content/research

Research
Institute of Computer Science researchers on Google Scholar and ETIS.

Chair of Data Science
Data mining, machine learning, algorithms, bioinformatics and computational neuroscience are some of the things they are helping biologists determine the re-creation of cancer work on machine learning and artificial intelligence.

Bioinformatics (BiIT) Health data and Computational Neuroscience
Data Systems Group
Machine Learning
Computer Graphics and Virtual Reality
Autonomous Driving Lab
ELIXIR

Chair of Programming Languages & Systems

Chair of Distributed Systems
What to do if the computational task to be solved is so large, computationally intensive and time-consuming that one CPU is not enough to solve it? How to create functioning distributed computing environments using modern cloud computing systems, mobile devices for data collection and processing? The Distributed Systems Research Group is exploring how to effectively parallelize algorithms and programs.

Chair of Software Engineering & Information Systems
The members of the Software Engineering & Information Systems Chair conduct research and teaching in the field of software and information systems engineering with an emphasis on applying data science methods for business process management as well as software process and product analysis. In addition, members of the Chair conduct research and teaching in the field of information security with an emphasis on secure system design and requirements engineering, interdisciplinary research and development work in the intersection of information systems and software engineering, psychology and social sciences, as well as research in the field of computational social science employing data science techniques.

Software Engineering & Information Systems
Information Security Research Group
Research Group of Human-Centric Information Systems
Computational Social Science Group

Most Chairs consist of several groups
Example: Chair of Software Engineering & Information Systems

• **Software Engineering & Information Systems**
  - Team members: [https://sep.cs.ut.ee/Main/People](https://sep.cs.ut.ee/Main/People)
  - Thesis Topics (list of topics still growing): [https://sep.cs.ut.ee/Main/StudentProjects2022](https://sep.cs.ut.ee/Main/StudentProjects2022)

• **Information Security Research Group**

• **Research Group of Human-Centric Information Systems**

• **Computational Social Science Lab**
Example: Chair of Software Engineering & Information Systems

Student Projects (MSc/BSc Theses), Academic Year 2022-2023

Below is a list of project topics for Masters and Bachelors theses offered by the Software Engineering & Information Systems Research Group for students who intend to defend in June 2023. The projects are divided into:

- **Software Engineering Master's theses topics (30 ECTS)** offered by:
  - Dietmar Pfahl, Professor of Software Engineering
  - Kristina Rahkema, Junior Research Fellow of Software Engineering
  - Alexander Nolle, Associate Professor of Information Systems
  - Fredrik Mårtensson, Associate Professor of Information Systems (0.5)
  - Ezequiel Scott, Lecturer (Assistant Professor) of Software Engineering (0.25)
  - Hiba Anwar, Lecturer (Assistant Professor) of Software Engineering
  - Anastasija Nikiforova, Lecturer (Assistant Professor) of Information Systems
  - David Chapela de la Campa, Research Fellow in Information Systems
  - Orléans López Pintado, Research Fellow in Information Systems
  - Vinai Kumar Dwivedi, Junior Lecturer of Software Engineering
  - Basem Ahmed Bahra, Junior Lecturer of Software Engineering
  - Alejandra Dusue-Torres, Junior Research Fellow of Software Engineering
  - Ria Bidar, Adjunct Professor
  - Fabrizio Maggi, Adjunct Associate Professor
  - Tek 77

- **IT Conversion Master's theses topics (15 ECTS)**
  - Dietmar Pfahl, Professor of Software Engineering
  - Tek 77

- **Computer Science Bachelor's theses topics (9 ECTS)**

**https://sep.cs.ut.ee/Main/StudentProjects2022**
UT Institute of CS Graduation Theses Topics Registry

https://cs.ut.ee/en/content/studying -> Theses topics database -> Year 2022-2023

New topics are added continuously

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<td>MSc and BSc topics in software engineering and information systems</td>
<td>2022-2023</td>
<td><a href="mailto:dietmar.pfahl@ut.ee">dietmar.pfahl@ut.ee</a></td>
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Master (6)
Which seminar to take in Fall?
Seminar Choices

1st year – 2nd term (Spring)

- Seminar on Enterprise Software (MTAT.03.270)
- Master’s Seminar 1 (TalTech)
- Xor

2nd year – 1st term (Fall)

- Research Seminar in Software Engineering (LTAT.05.023)
- MTAT.03.280
- MTAT.03.242
- MTAT.03.242
- MTAT.06.046

2nd year – 2nd term (Spring)

- Master’s Seminar 2 (TalTech)

At UT, choose the seminar of the Chair in which you do your MSc thesis

If you are abroad (ERASMUS+ exchange):
Try to take a seminar at your host university

other seminars (if offered in the ICS on MSc level)
Questions?
Thank You!