

Welcome to the Master of Logic

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The Master of Logic Program (1995 —)

One Program

- Research in Logic

Two Faculties

- Science (Natuurwetenschappen)
- Humanities (Geesteswetenschappen)

Three Dimensions

- Interdisciplinary
- International (\mathcal{I} -Cube, or \mathcal{I}^3)
- Individual

People Involved

Constitution

Master of Logic (MoL)

Paul Dekker (director)

Tanja Kassenaar (coordinator)

Examinations Board (EB)

Benno van den Berg (chair)

Opleidingscommissie (OC)

Nick Bezhanishvili (chair)

OC student members

Simon Vonlanthen • Damiano

Fornasiere • **Two Vacancies** • Pepijn Vrijbergen (secretary)

Mentoring

Academic mentors • Maria • Bahram • Alexandru • Benno • Nick • Ulle
• Wilker • Raquel • Ronald • Dick • Benedikt • Julian • Katrin • Jakub
• Yde • Ronald • **Student mentors** • Antonio Cleani • Robert Schütz •
Max Siemers • Laura Vetter • Nikki Weststeijn • **Non academic mentors**

<https://msclogic.illc.uva.nl/careers/Non-Academic-Mentors/>

Study Program

- Compulsory Components (21 \leq x \leq 29 EC)
 - Logic, Language and Computation
 - Mathematical Proof Methods for Logic
 - Two or Three Track-dependent Courses
- Restricted Choice Electives (\pm 45 EC)
 - MoL elective courses
- Free-Choice Courses (0 \leq 18 EC)
- Research projects (6 \leq 24 EC)
- Seminars (0 EC)
- Master Thesis (30 EC)

Sum Total (120 EC)

Decision problems? Talk to your mentors!

Four Tracks

(with their Obligatory Track Components)

Logic and Computation (L&C)

Information Theory
Computational Complexity

Logic and Language (L&L)

Meaning, Reference and Modality
Structures for Semantics

Logic and Mathematics (L&M)

Set Theory
Proof Theory
Model Theory

Logic and Philosophy (L&P)

Meaning, Reference and Modality
Philosophical Logic

Many Electives

Advanced Neural and Cognitive Modelling • Advanced Topics in Computational Semantics • Advanced Topics in the Philosophy of Language • Basic Probability: Programming • Basic Probability: Theory • Capita Selecta: Set Theory • Category Theory • Causal Inference: Philosophical Theory and Modern Practice • Cognition and Language Development • Computability and Interaction • Computational Complexity • Computational Dialogue Modelling • Computational Social Choice • Concurrency Theory • Constrained courses • Deep Learning for Natural Language Processing • Distributed Algorithms • Dynamic Epistemic Logic • Epistemic Paradoxes and Philosophical Puzzles • Foundations of Neural and Cognitive Modelling • Game Theory • How Music Works: Music Cognition • Information Theory • Introduction to Modal Logic • Introduction to the Philosophy of Language • Knowledge Representation and Reasoning • Kolmogorov Complexity • Lambda Calculus • Logic and Conversation • Logic and Philosophy • Logic, Games and Automata • Logic, Language and Computation • Logical Verification • Machine Learning Theory • Mathematical Proof Methods for Logic • Mathematical Structures in Logic • Meaning, Reference and Modality • Model Theory • Natural Language Processing 1 • Natural Language Processing 2 • Philosophical Logic • Philosophy of Cognition • Philosophy of Mathematics • Philosophy of Techno-Science • Proof Theory • Protocol Validation • Quantum Computing • Quantum Information Theory • Rationality, Cognition and Reasoning • Recursion Theory • Rudiments of Axiomatic Set Theory • Semantics and Philosophy • Seminar Mathematical Logic • Set Theory • Structures for Semantics • Syntax-Semantics Interface 1 • Syntax-Semantics Interface 2 • Term Rewriting Systems • Thesis Master of Logic • Time • Topics in Modal Logic • Topology, Logic and Learning • Topos Theory • Wittgenstein on Ethics and Aesthetics

https://github.com/cschaffner/MoL0verviewPoster/raw/master/PDF/MoL0verviewPoster_current.pdf

Time and Scheduling

Academic Year: Six Blocks

Semester 1: September to January

Block 1 (8 weeks): regular courses	(12EC)
Block 2 (8 weeks): regular courses	(12EC)
Block 3 (4 weeks): project period	(6EC)

Semester 2: February to June

Block 4 (8 weeks): regular courses	(12EC)
Block 5 (8 weeks): regular courses	(12EC)
Block 6 (4 weeks): project period	(6EC)

The last week of each 8-week block is usually reserved for exams.
[Eight weeks is seven weeks in Humanities.]

Study Load [28 hrs \cong 1 EC 6 EC \cong 1 month 120 EC \cong 1 MoL]

This covers all time spent on the study. Excluding the time cycling to the lectures and including the time thinking of exercises when cycling to the lectures.

Social Behaviour

Collaboration

Collaboration and discussion among students is encouraged but plagiarism is not tolerated. MoL specific guidelines on permitted forms of collaboration are under construction.

<https://student.uva.nl/en/content/az/plagiarism-and-fraud/plagiarism-and-fraud.html>

Code of conduct

The ILLC/MoL aims to be a place where *everybody feels safe and respected*, AND ALSO IS. Disrespectful behavior is not tolerated.

<https://msclogic.illc.uva.nl/current-students/regulations/code-of-conduct/>

MoL Room

Access to the MoL students' 24/7-AGORA is very limited nowadays.

<https://msclogic.illc.uva.nl/current-students/facilities/facilities/#molroom-b>

COVID-19 Related Tricks and Tips

On-Line

- MoL is in Amsterdam, but courses are mainly on-line.
[https://datanose.nl/#timetable\(MSc Logic|1,36,2020\)](https://datanose.nl/#timetable(MSc+Logic|1,36,2020))
- If you cannot access Canvas, ask the lecturer for a Meeting ID.
`mailfrom: mol-ille@uva.nl, 2020-08-18`
- Join the digital MoL-Room, and hope that it works.
https://canvas.uva.nl/groups/69934/discussion_topics
- Housing, networking, commutation problems? Let us know.
mol-ille@uva.nl

Important Caveats

On-Site

- MPML (partially) and LoLaCo (restrictively) are on-site

Science Park 904 rooms C0.05 and C1.110

- The rooms have limited capacity, so there is an attendance list for LoLaCo.

<https://canvas.uva.nl/courses/17530/pages/attendance-list>

- One can trade and exchange places at the Presence Market

<https://canvas.uva.nl/courses/17530/pages/presence-market>

- Attendance for MPML is arranged by the lecturer.

<mailto:j.j.schloder@uva.nl>

- Entrances and exits with face masks *and iff* so requested

Next on the Program

After this Meeting

- Meet your academic mentor
- Select your courses
- Register for the courses
- Get yourself a bike

In this Meeting


- academic mentor – Ulle Endriss
- student OC members – Damiano Fornasiere &
Simon Vonlanthen
- second year student – Max Siemers
- former-MoL-now-PhD – Sirin Botan
- break-out rooms – Student Mentors



Bridging Disciplines

Disciplined

Interdisciplinary

A person in a black wetsuit is surfing a wave. They are holding a bright green and yellow electric guitar. The ocean is blue and the sky is clear.

X-ing Borders

Diversity

International



Common Logos = Individual Insight

Integrity

Individual

A photograph of two children, a girl on the left and a boy on the right, standing in a muddy area. Both children are covered in thick, brown mud. The girl has her right arm around the boy's left shoulder. They are both smiling. The background is a body of water with ripples. The text 'Mind the Gap' is overlaid in white in the upper middle section.

Mind the Gap

Communicating Agents

Interactive