1: Sep/Oct 2023
2: Nov/Dec 2023
4: Feb/Mar 2024
5: Apr/May 2024
not in 2023/24

Master of Logic 2023/24

version: 12 June 2023; design: C. Schaffner
Suggestions and comments are welcome!

Mandatory Courses of Tracks:
L&P: Logic & Philosophy
L&L: Logic & Language
L&C: Logic & Computation
L&M: Logic & Mathematics

Philosophy

all
1+2: Logic, Language and Computation (Dekker) [3EC]

1: [MoL-FGW] Introduction to the Philosophy of Language (Brouwer)

2: [MoL-FGW] Philosophy of Techno Science (Russo)

1: [MSc-PH] Philosophy of Science (De Haro)

2: [MoL-FGW] Ontology: Historical Perspectives (Skirke)

4: [MoL-FGW] Data-driven History of Ideas (Betti)

2: [MoL-FGW] Advanced Topics in Philosophy of Language (Betti)

Cognition

2: [MoL-FGW] Philosophy of Cognition (Schoonen)

1: [MoL-FGW] Rationality, Cognition and Reasoning (Krzyzanowska)

[MoL-FNWI] Causal Inference (Schulz)

2: [MSc B&CS] Cognition and Language Development (Schaeffer)

[MoL-FGW] Semantics and Cognition (TBA)

[MoL-FNWI] Computational Dialogue Modelling (Fernandez)

Computational Linguistics / AI

2: [MScB&CS] Foundations of Neural and Cognitive Modelling (Zuidema)

1: [MSc B&CS] Advanced Neural and Cognitive Modelling (Burgoyne)

6 (in June): [MScAI] Interpretability and Explainability in AI (Zuidema)

4: [MScB&CS] How Music Works: Music Cognition (Honing)

1:[MoL-FNWI] Basic Probability: Theory (Fontaine) [3EC]

2:[MoL-FNWI] Basic Probability: Programming (Fontaine) [3EC]

2: [MScAI] Natural Language Processing 1 (Shutova)

5: [MScAI] Natural Language Processing 2 (Sima'an)

2: [MScAI] Deep Learning 1 (Asano)

1: [MScAI] Machine Learning 1 (Bekkers)

5: [MoL-FNWI] Advanced Topics in Computational Semantics (Shutova)

4+5: [MastMath] Machine Learning Theory (van Erven) [8EC]

Philosophical Logic

all
1: [MoL-FNWI] Mathematical Proof Methods for Logic (Incurvati)

4: [MoL-FGW] Philosophy of Mathematics (Incurvati)

L&P
2: [MoL-FNWI] Philosophical Logic (Beckers)

2: [MoL-FGW] Philosophy of Logic (Schindler)

4: [MoL-FNWI] Topics in Formal Epistemology (Özgün)

4: [MoL-FGW] Semantics and Philosophy (Aloni, Dekker)

L&P L&L
1: [MoL-FGW] Meaning, Reference and Modality (Dekker)

4: [MoL-FNWI] Topology, Logic and Learning (Baltag)

2: [MoL-FNWI] Dynamic Epistemic Logic (Baltag)

L&L
5: [MoL-FGW] Structures for Semantics (Aloni)

2: [MoL-FNWI] Logic and Conversation (Roelofsen)

Theoretical Linguistics

1: [RM-Ling] Syntax-Semantics Interface 1 (Aboh)

4: [RM-Ling] Syntax-Semantics Interface 2 (Aboh)

Game Theory, Economics & Social Choice

5: [MoL-FNWI] Game Theory (Endriss)

2: [MoL-FNWI] Computational Social Choice (Endriss)

L&M, L&C
1+2: [BScWisk] Introduction to Modal Logic (Bezhanishvili)

2: [MoL-FNWI] Topics in Modal Logic (Venema)

Mathematical Logic

4: [MoL-FNWI] Mathematical Structures in Logic (Bezhanishvili)

[MoL-FNWI] Capita Selecta: Set Theory (TBA)

1+2: [MastMath] Category Theory (van den Berg) [8EC]

L&M
1: [MoL-FNWI] Rudiments of Axiomatic Set Theory (Jahnke)

4+5: [MoL-FNWI] Seminar Mathematical Logic (ten Cate) [3EC]

L&M
4: [MoL-FNWI] Proof Theory (Venema, Girlando)

5: [MoL-FNWI] Type Theory (van den Berg)

L&M
5: [MoL-FNWI] Model Theory (Jahnke)

4+5: [MastMath] Topos Theory (van Oosten) [8EC]

5: [MoL-FNWI] Recursion Theory (TBA)

Theoretical Computer Science

5: [MoL-FNWI] Automated Planning (Behnke)

1+2: [MoL-FNWI] Seminar Economics and Computation (Reiffenhäuser)

1: [MoL-FNWI] Algorithmic Game Theory (Schäfer)

L&C
5: [MoL-FNWI] Computational Complexity (de Haan)

4: [MScAI] Knowledge Representation and Reasoning (de Haan)

2: [Mol-FNWI] Computational Learning Theory, Logic and KR (ten Cate)

5: [MoL-FNWI] Functional Programming (Gattinger)

2: [MoL-FNWI] Advanced Algorithms (Reiffenhäuser)

L&C
2: [MoL-FNWI] Information Theory (Resch)

4: [MScCS-VU] Term Rewriting Systems (Endrullis)

5: [MScCS-VU] Distributed Algorithms (TBA)

2: [MScCS-VU] Logical Verification (TBA)

Quantum

4: [MoL-FNWI] Logical Foundations of Quantum Mechanics (Smets)

4+5: [MastMath] Quantum Information Theory (Ozols) [8EC]

1+2: [MastMath] Quantum Computing (de Wolf) [8EC]

4: [MoL-FNWI] Full Stack Quantum Computing (van de Wetering)

5: [MoL-FNWI] Quantum Cryptography (Speelman)