

## STUDY UNIT LIST (MA)

Symbols, abbreviations:

D = thesis

G = seminar-format course

K = lecture-format course with an examination

Z = final examination and defense

kon = consultation

k = required course

kv = required elective course (students are required to take x courses out of a list of y courses, where x is smaller than y)

v = elective course

### Various kinds of prerequisites explained:

- A course code without parentheses: a strong prerequisite, so the prerequisite has to be completed by the end of the semester prior to when the course is taken.
- A course code in parentheses: a weak prerequisite, so it has to be completed by the end of the semester in which the course is taken.
- A course code with „=” sign: the courses have to be taken in parallel.
- \*: The course can be taken after the completion of the background courses.

## LOGIC AND THEORY OF SCIENCE MASTER'S PROGRAM (MA)

FOR STUDENTS ADMITTED AFTER 2017

### THE INSTITUTE IN CHARGE OF THE MAJOR:

Institute of Philosophy

### GENERAL INFORMATION ABOUT THE MAJOR:

#### The name of the Master's program:

Logic and Theory of Science

#### The degree that can be obtained and how it is listed in the diploma:

- degree level: Master's degree (magister, master; abbreviated as: MA)
- designation of the major, as it appears in Hungarian (verbatim translation): humanities diploma, logic and philosophy of science
- designation of the major and degree, as it appears in English: Expert in Logic and Theory of Science

**Number of semesters of training:**

4 semesters

**The number of credits to be collected for the Master's degree:**

120 credits

**Language requirements:**

In order to obtain the Master's degree, the student is required to hold a state-recognized advanced-level, (C1) complex language proficiency certificate or equivalent high school transcript and diploma in English, and a further, state-recognized intermediate-level (B2) complex language proficiency certificate, or equivalent high school transcript and diploma.

**REQUIREMENTS CONCERNING THE THESIS AND THE FINAL EXAMINATION:****THESIS:**

The thesis requirements that go beyond those set out in the regulations by the Faculty of the Humanities are determined by the thesis regulations of the Institute of Philosophy.

**Formal requirements:**

Length: A minimum of 100 000 and a maximum of 200 000 characters, spacing: 1.5, font size: 12. One bound copy and one copy in paper boards should be submitted. The theses should also be submitted in pdf format through the online electronic platform's Thesis course, or via email addressed to the secretary of the Institute of Philosophy.

The cover page of the thesis should include the name of the author of the thesis; the title of the thesis in Hungarian and in the language of the MA program; the name of the thesis supervisor; the name of the university, the faculty and the MA program; and the date of submission.

**Substantive requirements:**

The thesis is a body of argumentative text consisting of scholarly articles as chapters, whose topic relates to several lecture-course (marked „K” in the study unit list) subjects within the Logic and Theory of Science Program. And beyond the required readings for these lecture-format courses, the thesis should show representative coverage of the foreign-language literature surrounding topic.

**Evaluation:**

The evaluation is on a five-grade scale. During the evaluation, the reviewers have to take into account whether students have satisfied the formal and substantive requirements for a thesis. Criteria of evaluation include: scholarly results, knowledge and professional use of the relevant literature, analytical and structured presentation of results and the relevant body of knowledge, possible directions for future research.

**The MA program's completion requirements:**

The final examination for the program is in an oral format.

The most central part of the exam is the defense of the thesis. Students have to demonstrate that they have acquired the core knowledge set out in the training requirements and the curriculum, and are able to explain their theses orally in nuanced and precise terms.

Beyond the defense of the thesis, the final examination also covers two previously designated topics for which the student has completed a lecture-format course (marked „K” in the study list). Students are asked questions to determine their level of comprehensive proficiency in these two topics.

**Evaluation at the final examination:**

Evaluation is on a five-grade scale. The examiners assess students' proficiency in the fields related to the topic of the thesis, as well as the students' level of professional preparation and ability to participate in scholarly discourse.

**CRITERIA FOR ELIGIBILITY FOR THE FINAL EXAMINATION AND DEFENSE:**

The criteria for eligibility for the final examination and defense are as follows: students have completed all the study and exam requirements set out in the program's curriculum (with the exception of the thesis, the state-recognized language proficiency certificate prescribed, and the final examination), and have completed all credits set out in the program's training and completion requirements (except for the credits for the thesis), and as a result of all this, hold a final transcript (called „absolutorium”) for the program; further, students hold a letter confirming that they have returned all goods borrowed from the institution.

**GRADE FOR THE DIPLOMA:**

The numerical grade written in the diploma is the average of two numerical grades: one received for the thesis and its defense, and another for the final examination for the program, rounded to the closest whole number, according to HKR, §84.

**INSTRUCTOR IN CHARGE OF THE M.A. PROGRAM:**

Prof. András Máté, department chair, associate professor

## STUDY UNIT LIST

Code BMI-	Name of Study Unit	Semester When Offered	Type of Grade	Obl./Elec.	Hours/Semester	Credits	Prerequisite(s)	Ideally taken up in ... semester	Host
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### I. BACKGROUND COURSES : 26 CREDITS

LOTD-101	Foundations of logic, seminar	1	G	k	45	3		1	Logika
LOTD-102	Foundations of logic, lecture	2	K	k	45	3		2	Logika
LOTD-103	Foundations of mathematics	1-2	K	k	45	3		1	Logika
LOTD-104	Introduction to Algebra	1-2	G	k	45	3		1	Logika
LOTD-105	Contemporary Metaphysics	1-2	K	k	45	3		1	Logika
LOTD-106	Philosophy of Mind	1-2	G	k	45	3		1	Logika
LOTD-107	Logic and Philosophy of Science Seminar I	1	G	k	45	4		1	Logika
LOTD-108	Logic and Philosophy of Science Seminar II.	2	G	k	60	4		2	Logika

**Total: 375 26**

### II. CORE COURSES: 40 CREDITS

LOTD-201	Introduction to the Philosophy of Social Science	1	K	k	45	4		1	Logika
LOTD-202	Theories of Meaning	2-3	K	k	45	4		2	Logika
LOTD-203	Metatheory 1.	2-3	K	k	45	4		2	Logika
LOTD-204	Metatheory 2.	3-4	K	k	45	4		3	Logika
LOTD-205	Philosophy of Science 1.	1-2	K	k	45	4		1	Logika
LOTD-206	Philosophy of Science 2.	2-3	K	k	45	4		2	Logika
LOTD-207	Basic Problems of Metaphysics	2-3	G	k	45	4		3	Logika
LOTD-208	Science and Metaphysics	3-4	K	k	45	4		4	Logika
LOTD-209	Logic and Philosophy of Science Seminar III.	3	G	k	45	4		3	Logika
LOTD-210	Logic and Philosophy of Science Seminar IV.	4	G	k	60	4		4	Logika

**Total: 465 40**

### III. SPECIALISATION COURSES: 28 CREDITS

Students are required to complete 7 (seven) of these units

LOTD-301	Advanced and Abstract Model Theory	3-4	K	kv	45	4		3	Logika
LOTD-302	Logical Foundations of Physical Theories – Special Relativity	3-4	K	kv	45	4		3	Logika

LOTD-311	Proof Theory and Logic Programming	3-4	K	kv	45	4		4	Logika
LOTD-312	Non-standard Analysis	3-4	K	kv	45	4		4	Logika
LOTD-313	Logical Foundations of General Relativity	3-4	K	kv	45	4		4	Logika
LOTD-321	Static and Dynamic Theories of Meaning	3-4	K	kv	45	4		3	Logika
LOTD-322	Foundations of Mathematics in First-order versus Higher-order Logic	3-4	K	kv	45	4		3	Logika
LOTD-331	Alternative Set Theories	3-4	K	kv	45	4		3	Logika
LOTD-332	Resolving Apparent Circularities in Foundations	3-4	K	kv	45	4		3	Logika
LOTD-333	Paradoxes, Circularity, Wellfoundedness	3-4	K	kv	45	4		3	Logika
LOTD-341	Algebraic logic	3-4	G	kv	45	4		3	Logika
LOTD-342	Structuralism, Categories, and Algebraic Logic	3-4	G	kv	45	4		3	Logika
LOTD-351	Absoluteness of Logics	3-4	G	kv	45	4		4	Logika
LOTD-352	Theory of Definitions. Applications in the Methodology of Sciences.	3-4	G	kv	45	4		4	Logika
LOTD-353	Computability	3-4	G	kv	45	4		4	Logika
LOTD-361	Physicalist Account of Mathematics	3-4	G	kv	45	4		4	Logika
LOTD-362	Frege Arithmetic	3-4	G	kv	45	4		4	Logika

LOTD-401	Compositionality	3-4	K	k	45	4		3	Logika
LOTD-402	Linguistics and Cognitive Science	3-4	K	k	45	4		4	Logika
LOTD-403	Rules, Representations, Formalisms	3-4	K	k	45	4		4	Logika
LOTD-404	Temporality in Natural Language	3-4	G	k	45	4		3	Logika
LOTD-405	Computational Knowledge Representation	3-4	G	k	45	4		3	Logika
LOTD-406	Meaning and reference	3-4	G	k	45	4		4	Logika

LOTD-501	Max Weber and the Methodology of Social Sciences	3-4	K	k	45	4		3	Logika
LOTD-502	Types of Explanation in the Social and Historical Sciences	3-4	K	k	45	4		3	Logika
LOTD-503	Rational Choice Theory	3-4	K	k	45	4		4	Logika
LOTD-504	Political Science with Economic Methods	3-4	K	k	45	4		4	Logika
LOTD-505	Methodological Individualism	3-4	K	k	45	4		4	Logika

LOTD-506	Game Theory and the Social Sciences – lecture	3-4	K	k	45	4		4	Logika
LOTD-507	Game Theory and the Social Sciences - seminar	3-4	G	k	45	4		3	Logika

LOTD-601	Quantum Mechanics as Non-classical Probability Theory	3-4	G	k	45	4		4	Logika
LOTD-602	Empirical vs. Theoretical Concepts of Physics	3-4	G	k	45	4		3	Logika
LOTD-604	No-go Theorems of Quantum Mechanics	3-4	K	k	45	4		4	Logika
LOTD-605	Interpretations of Quantum Theory - seminar	3	G	k	45	4		3	Logika
LOTD-606	Interpretations of Quantum Theory - lecture	4	K	k	45	4		4	Logika

#### IV. FREE ELECTIVES: 10 CREDITS

Freely chosen electives from the pool of MA courses offered by ELTE, Faculty of Philosophy (ELTE, BTK) - restrictions may apply (check with Institute/Department in charge of the course prior to taking up the course).

#### V. THESIS, FINAL EXAMINATION: 20 CREDITS

LOTD-901	Thesis	4	D	k	0	20		4	TH
LOTD-902	Final Examination	4	Z	k	0	0		4	TH

**Total: 0 20**