



Module Catalog

Master's Degree Program: Logic and Philosophy of Science (Master of Arts, M.A.)

(120 ECTS credits)

Based on the Examination and Study Regulations of June 15th 2026.

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Abbreviations and Explanations

CP	Credit Points, ECTS credits
ECTS	European Credit Transfer and Accumulation System
h	hours
SoSe	summer semester
SWS	weekly hours per semester
WiSe	winter semester
WP	compulsory elective
P	compulsory

1. The description of the assigned module parts follows the scheme below with regard to the respective ECTS credit information: ECTS credits not in parentheses are awarded upon passing the corresponding module examination or sub-module examination. ECTS credits in parentheses are for calculation purposes only.

2. Depending on the information in Appendix 2 of the Examination and Study Regulations, the information regarding the point in the course of study may constitute fixed regulations or mere recommendations. In the Module Catalog, this is indicated by the terms “standard semester” and “recommended semester.”

3. Please note: The Module Catalog serves as a guide for your course of study. For binding regulations, please consult exclusively the Examination and Study Regulations in their currently valid version. You can find these at www.lmu.de/studienangebot offered under your respective degree program.

Module: P 1 Master Forum I

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Colloquium	P 1.1 Central Topics in Logic and Philosophy of Science 1	WiSe	30 hours (2 SWS)	150 h	(6)

A total of 6 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 180 hours are required.

Type of module Required module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations None

Participation requirements None

Point in the course of study Recommended semester: 1

Duration The module spans 1 semester.

Course Content This module introduces students to central topics logic and philosophy of science. A seminar in this module is typically composed of a formal/mathematical part (in which students learn the technical details of relevant formal techniques, such as decision and game theory, probability theory and statistics, etc.) and a philosophical part (serving as a motivation or an application of a particular formal technique).

Intended Learning Outcomes The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. In particular, students are trained to master certain mathematical techniques that are relevant to logic and philosophy of science. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (here, in current debates in either logic or

	philosophy of science), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb, Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: P 2 Formal Methods I

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Lecture	P 2.1 Methods in Mathematical Philosophy 1	WiSe	30 h (2 SWS)	90 h	(4)
Seminar	P 2.2 Practice Session in Mathematical Philosophy 1	WiSe	15 h (1 SWS)	45 h	(2)

A total of 6 ECTS credits must be earned in this module. The contact hours amount to 3 weekly hours per semester. Including self-study, approximately 180 hours are required.

Type of module Required module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations None

Participation requirements None

Point in the course of study Recommended semester: 1

Duration The module spans 1 semester.

Course Content This module introduces students to (a) the meta-theory of propositional and first order logic, (b) the basics of set theory, (c) the theory of definitions and (d) the basics of modal logic. All of the above mentioned items are necessary for the successful completion of the master program.

Intended Learning Outcomes The goal of this module consists in familiarizing the students with: (a) standard proof-techniques for obtaining meta-logical results, (b) gain familiarity with set-theoretic notions in theory and practice, (c) learning the rules for formally correct definitions (with applications in both logic and set-theory), and (d) becoming a first glance in vast and powerful subject of modal logic which is a formal basis for many philosophical debates today.

Form of module examination Term paper or exam

Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb
Language(s) of instruction	English
Additional information	None

Module: WP 1 Logic I

Assignment to degree program

Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 1.1 Master Course Logic 1	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module

Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations

The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements

None

Point in the course of study

Recommended semester: 1

Duration

The module spans 1 semester.

Course Content

This module introduces students to current debates in logic. This is achieved by both presenting the logical topics and proofs with mathematical rigor and a thorough mathematical/logical training of the students. Typical subjects in this module are: modal logic, philosophical logics (such as epistemic logic, deontic logic, logic of conditionals, probability logic, relevant logic, etc.), theories of truth, set theory, constructive logics, arithmetic and recursion theory, incompleteness theorems.

Intended Learning Outcomes

The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (mathematical and logical) research. In particular, students are trained to master certain mathematical techniques that are

	relevant to logic. In general, students are trained (a) to perform a well- informed literature research, (b) to competently grasp the arguments in current debates in either logic, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb
Language(s) of instruction	English
Additional information	None

Module: WP 2 Logic II

Assignment to degree program

Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 2.1 Master Course Logic 2	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module

Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations

The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements

None

Point in the course of study

Recommended semester: 1

Duration

The module spans 1 semester.

Course Content

This module further introduces students to current debates in logic. Moreover, this module deepens and expands the areas discussed in Logic I. This is achieved by both presenting the logical topics and proofs with mathematical rigor and a thorough mathematical/logical training of the students. Typical subjects in this module are: modal logic, philosophical logics (such as epistemic logic, deontic logic, logic of conditionals, probability logic, relevant logic, etc.), theories of truth, set theory, constructive logics, arithmetic and recursion theory, incompleteness theorems.

Intended Learning Outcomes

The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (mathematical and logical) research. In particular, students are

	trained to master certain mathematical techniques that are relevant to logic. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in current debates in either logic, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb
Language(s) of instruction	English
Additional information	None

Module: WP 3 General Philosophy of Science I

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 3.1 Master's Course General Philosophy of Science 1	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 1

Duration The module spans 1 semester.

Course Content This module introduces students to the general philosophy of science. This subfield of philosophy of science deals with philosophical topics concerning several (perhaps all) scientific disciplines. The general philosophy of science includes (formal and social) epistemology, methodology, metaphysics, and ethics of science. The seminar in this module will focus on concrete subjects such as scientific reasoning, confirmation, explanation, models, theories, computer simulation, scientific realism, causation, probability, collaborative research, science and public policy, and risk assessment. In this module, we also offer seminars devoted to the work of influential philosophers of science (such as Carnap,

	Hempel and Popper) and “schools” (such as the Vienna Circle, Pragmatism, and Neo-Kantianism).
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (typically concerning more than one scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 4 General Philosophy of Science II

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 4.1 Master's Course General Philosophy of Science 2	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 1

Duration The module spans 1 semester.

Course Content This module introduces students to the general philosophy of science. This module deepens and expands topics discussed in General Philosophy of Science I. This subfield of philosophy of science deals with philosophical topics concerning several (perhaps all) scientific disciplines. The general philosophy of science includes (formal and social) epistemology, methodology, metaphysics, and ethics of science. The seminar in this module will focus on concrete subjects such as scientific reasoning, confirmation, explanation, models, theories, computer simulation, scientific realism, causation, probability, collaborative research, science and public policy, and risk assessment. In this module, we

	also offer seminars devoted to the work of influential philosophers of science (such as Carnap, Hempel and Popper) and “schools” (such as the Vienna Circle, Pragmatism, and Neo-Kantianism).
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (typically concerning more than one scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 5 Philosophy of the Special Sciences I

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 5.1 Master's Course Philosophy of the Special Sciences 1	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 1

Duration The module spans 1 semester.

Course Content This module introduces students to the philosophy of the special sciences – that is, to philosophical topics arising exclusively in one specific scientific discipline. The philosophy of the special sciences includes the philosophy of physics, climate science, chemistry, the life and medical sciences, psychology and the cognitive sciences, economics and the social sciences, computer science, and statistics. A seminar in this module will focus on concrete subjects such as specific problems of confirmation in the context of string theory, probabilities in quantum mechanics and statistical mechanics, simulations in climate science, randomized controlled trials in medical research, and frequentist versus Bayesian

	methods in statistics.
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (here, in one specific scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 6 Philosophy of the Special Sciences II

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 6.1 Master's Course: Philosophy of the Special Sciences 2	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules must be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 1

Duration The module spans 1 semester.

Course Content This module introduces students to the philosophy of the special sciences – that is, to philosophical topics arising exclusively in one specific scientific discipline. This module deepens and expands topics discussed in Philosophy of Special Sciences I. The philosophy of the special sciences includes the philosophy of physics, climate science, chemistry, the life and medical sciences, psychology and the cognitive sciences, economics and the social sciences, computer science, and statistics. A seminar in this module will focus on concrete subjects such as specific problems of confirmation in the context of string theory, probabilities in quantum mechanics and statistical mechanics, simulations in

	climate science, randomized controlled trials in medical research, and frequentist versus Bayesian methods in statistics.
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (here, in one specific scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Modules: P 3 Master Forum II

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Colloquium	P 3.1 Central Topics in Logic and Philosophy of Science 2	SoSe	30 h (2 SWS)	150 h	(6)

A total of 6 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 180 hours are required.

Type of module Required module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations None

Participation requirements None

Point in the course of study Recommended semester: 2

Duration The module spans 1 semester.

Course Content This module introduces students to central topics, logic and philosophy of science. In particular, this module further expands and deepens topics of the previous Master forum I. A seminar in this module is typically composed of a formal/mathematical part (in which students learn the technical details of relevant formal techniques, such as decision and game theory, probability theory and statistics, etc.) and a philosophical part (serving as a motivation or an application of a particular formal technique).

Intended Learning Outcomes The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. In particular, students are trained to master certain mathematical techniques that are relevant to logic and philosophy of science. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and

	scientific debates (here, in current debates in either logic or philosophy of science), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb, Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: P 4 Formal Methods II

Assignment to degree program

Master's degree program: Logic and Philosophy of Science
(Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Lecture	P 4.1 Methods in Mathematical Philosophy 2	SoSe	30 h (2 SWS)	90 h	(4)
Seminar	P 4.2 Practice Session in Mathematical Philosophy 2	SoSe	15 h (1 SWS)	45 h	(2)

A total of 6 ECTS credits must be earned in this module. The contact hours amount to 3 weekly hours per semester. Including self-study, approximately 180 hours are required.

Type of module

Required module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations

None

Participation requirements

None

Point in the course of study

Recommended semester: 2

Duration

The module lasts one semester.

Course Content

This module provides a philosophically oriented introduction to social choice theory – that is, to the interdisciplinary study of collective decision-making and aggregation methods. The course seeks to achieve a balance of formal and philosophical perspectives on social choice theory. The module familiarizes students with the formal/mathematical analysis of voting and aggregation methods (including, for instance, the Condorcet jury theorem and Arrow's theorem). Moreover, the module introduces students to selected philosophical debates that are informed by social choice theory (for instance, in philosophy of the social sciences, political philosophy, and social epistemology).

Intended Learning Outcomes

The goal of this module consists in introducing students to key formal concepts, methods and results of social choice theory and to selected philosophical debates to which the former

contribute. In particular, students will thereby acquire both formal and philosophical skills that are relevant to a variety of applications within and beyond philosophy.

Form of module examination	Term paper or exam
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Type of assessment	The module is graded.
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Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
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Module coordinator	Prof. Dr. Christian List
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Language(s) of instruction	English
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Additional information	None
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Module: WP 7 Philosophy of Logic and Mathematics I

Assignment to degree program

Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 7.1 Master's Course Philosophy of Logic and Mathematics 1	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module	Compulsory elective module with compulsory courses.
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Usability of the module to other degree programs

Compulsory elective regulations	The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.
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Participation requirements	None
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Point in the course of study	Recommended semester: 2
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Duration	The module spans 1 semester.
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Course Content	The focus of this module lies on the methodology, ontology and epistemology of formal sciences such as logic and mathematics. The goal here is not on the study of the formal details of a particular logical/mathematical theory but to study fundamental notions such as truth and proof in logic and mathematics. A typical course in this section is on the theorems of Gödel, Tarski and Gentzen and on current developments in the philosophy of logic and mathematics; such as, e.g. logical pluralism, semantic or syntactic foundation of logic, normativity of logic, foundations of mathematics.
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Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current
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	(mathematical and logical) research. In particular, students are trained to master certain techniques that are relevant to mathematical philosophy. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in current debates in philosophy of logic and mathematics, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb
Language(s) of instruction	English
Additional information	None

Module: WP 8 Philosophy of Logic and Mathematics II

Assignment to degree program

Master's degree program: Logic and Philosophy of Science
(Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 8.1 Master's Course Philosophy of Logic and Mathematics 2	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module

Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations

The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements

None

Point in the course of study

Recommended semester: 2

Duration

The module spans 1 semester.

Course Content

The focus of this module lies on the methodology, ontology and epistemology of formal sciences such as logic and mathematics. It deepens and expands topics discussed in the module Philosophy of Logic and Mathematics I. The goal here is not on the study of the formal details of a particular logical/mathematical theory but to study fundamental notions such as truth and proof in logic and mathematics. A typical course in this section is on the theorems of Gödel, Tarski and Gentzen and on current developments in the philosophy of logic and mathematics; such as, e.g. logical pluralism, semantic or syntactic foundation of logic, normativity of logic, foundations of mathematics.

Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (mathematical and logical) research. In particular, students are trained to master certain techniques that are relevant to mathematical philosophy. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in current debates in philosophy of logic and mathematics, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb
Language(s) of instruction	English
Additional information	None

Module: WP 9 Philosophy of Logic and Mathematics III

Assignment to degree program

Master's degree program: Logic and Philosophy of Science
(Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 9.1 Master's Course Philosophy of Logic and Mathematics 3	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module	Compulsory elective module with compulsory courses.
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Usability of the module to other degree programs

Compulsory elective regulations	The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.
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Participation requirements	None
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Point in the course of study	Recommended semester: 2
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Duration	The module spans 1 semester.
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Course Content	The focus of this module lies on the methodology, ontology and epistemology of formal sciences such as logic and mathematics. It deepens and expands topics discussed in the modules Philosophy of Logic and Mathematics I and II. The goal here is not on the study of the formal details of a particular logical/mathematical theory but to study fundamental notions such as truth and proof in logic and mathematics. A typical course in this section is on the theorems of Gödel, Tarski and Gentzen and on current developments in the philosophy of logic and mathematics; such as, e.g. logical pluralism, semantic or syntactic foundation of logic, normativity of logic, foundations of mathematics.
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Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (mathematical and logical) research. In particular, students are trained to master certain techniques that are relevant to mathematical philosophy. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in current debates in philosophy of logic and mathematics, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb
Language(s) of instruction	English
Additional information	None

Module: WP 10 Philosophy of Logic and Mathematics IV

Assignment to degree program

Master's degree program: Logic and Philosophy of Science
(Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 10.1 Master's Course Philosophy of Logic and Mathematics 4	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module	Compulsory elective module with compulsory courses.
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Usability of the module to other degree programs

Compulsory elective regulations	The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.
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Participation requirements	None
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Point in the course of study	Recommended semester: 2
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Duration	The module spans 1 semester.
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Course Content	The focus of this module lies on the methodology, ontology and epistemology of formal sciences such as logic and mathematics. It deepens and expands topics discussed in the modules Philosophy of Logic and Mathematics I-III. The goal here is not on the study of the formal details of a particular logical/mathematical theory but to study fundamental notions such as truth and proof in logic and mathematics. A typical course in this section is on the theorems of Gödel, Tarski and Gentzen and on current developments in the philosophy of logic and mathematics; such as, e.g. logical pluralism, semantic or syntactic foundation of logic, normativity of logic, foundations of mathematics.
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Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (mathematical and logical) research. In particular, students are trained to master certain techniques that are relevant to mathematical philosophy. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in current debates in philosophy of logic and mathematics, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb
Language(s) of instruction	English
Additional information	None

Module: WP 11 Rational Choice and Formal Epistemology I

Assignment to degree program

Master's degree program: Logic and Philosophy of Science
(Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 11.1 Master Course Rational Choice and Formal Epistemology 1	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module	Compulsory elective module with compulsory courses.
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Usability of the module to other degree programs

Compulsory elective regulations	The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.
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Participation requirements	None
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Point in the course of study	Recommended semester: 2
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Duration	The module spans 1 semester.
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Course Content	This module introduces students to topics in rational choice theory (and game theory) and formal epistemology. A seminar in this module is typically composed of a formal/mathematical part (in which students learn the technical details of relevant formal techniques, such as decision and game theory, probabilities and statistics, etc.) and a philosophical part (serving as a motivation or an application of a particular formal technique). It will focus on concrete subjects such as concepts of rationality, the concept of belief, rational belief revision, confirmation, evidence, coherence, reliability, among other topics.
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Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. In particular, students are trained to master certain formal techniques that are relevant to epistemology. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (here, in one specific scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 12 Rational Choice and Formal Epistemology II

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 12.1 Master Course Rational Choice and Formal Epistemology 2	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module	Compulsory elective module with compulsory courses.
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Usability of the module to other degree programs

Compulsory elective regulations	The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.
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Participation requirements	None
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Point in the course of study	Recommended semester: 2
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Duration	The module spans 1 semester.
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Course Content	This module introduces students to topics in rational choice theory (and game theory) and formal epistemology. The module deepens and expands topics discussed in the module Rational Choice and Formal Epistemology I. A seminar in this module is typically composed of a formal/mathematical part (in which students learn the technical details of relevant formal techniques, such as decision and game theory, probabilities and statistics, etc.) and a philosophical part (serving as a motivation or an application of a particular formal technique). It will focus on concrete subjects such as concepts of rationality, the concept of belief, rational belief revision, confirmation, evidence, coherence, reliability, among
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other topics.

Intended Learning Outcomes

The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. In particular, the module deepens and expands topics discussed in the module Rational Choice and Formal Epistemology I. Students are trained to master certain formal techniques that are relevant to epistemology. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (here, in one specific scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).

Form of module examination

Term paper or exam

Type of assessment

The module is graded.

Requirements for awarding ECTS credits

ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).

Module coordinator

Prof. Dr. Stephan Hartmann

Language(s) of instruction

English

Additional information

None

Module: WP 13 Rational Choice and Formal Epistemology III

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 13.1 Master Course Rational Choice and Formal Epistemology 3	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 2

Duration The module spans 1 semester.

Course Content This module introduces students to topics in rational choice theory (and game theory) and formal epistemology. A seminar in this module is typically composed of a formal/mathematical part (in which students learn the technical details of relevant formal techniques, such as decision and game theory, probabilities and statistics, etc.) and a philosophical part (serving as a motivation or an application of a particular formal technique). It will focus on concrete subjects such as concepts of rationality, the concept of belief, rational belief revision, confirmation, evidence, coherence, reliability, among other topics.

Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. In particular, students are trained to master certain formal techniques that are relevant to epistemology. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (here, in one specific scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 14 Rational Choice and Formal Epistemology IV

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 14.1 Master's Course Rational Choice and Formal Epistemology 4	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 2

Duration The module spans 1 semester.

Course Content This module introduces students to topics in rational choice theory (and game theory) and formal epistemology. A seminar in this module is typically composed of a formal/mathematical part (in which students learn the technical details of relevant formal techniques, such as decision and game theory, probabilities and statistics, etc.) and a philosophical part (serving as a motivation or an application of a particular formal technique). It will focus on concrete subjects such as concepts of rationality, the concept of belief, rational belief revision, confirmation, evidence, coherence, reliability, among other topics.

Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. In particular, students are trained to master certain formal techniques that are relevant to epistemology. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (here, in one specific scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 15 Themes in Analytic Philosophy I

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 15.1 Master's Course: Themes in Analytic Philosophy 1	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 2

Duration The module spans 1 semester.

Course Content This module introduces students to central themes in analytic philosophy. Many central themes in logic and philosophy of science are (historically and systematically) rooted in the analytic tradition – particularly, topics in analytic philosophy of language (such as theories of truth and meaning), epistemology (such as theories of knowledge and justification), and metaphysics (such as debates on realism and theories of causation). The central goal of this module is to emphasize the continuity and also the subtle differences between logic and philosophy of science, on the one hand, and analytic philosophy, on the other hand. Typical seminars are devoted to the work of influential analytic philosophers.

Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. The overarching learning goal consists in making the students aware of the continuity and also the subtle differences between logic and philosophy of science, on the one hand, and analytic philosophy, on the other hand. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb, Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 16 Themes in Analytic Philosophy II

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 16.1 Master's Course: Themes in Analytic Philosophy 2	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 2

Duration The module spans 1 semester.

Course Content This module introduces students to central themes in analytic philosophy. The module deepens and expands topics discussed in module Themes in Analytic Philosophy I. Many central themes in logic and philosophy of science are (historically and systematically) rooted in the analytic tradition – particularly, topics in analytic philosophy of language (such as theories of truth and meaning), epistemology (such as theories knowledge and justification), and metaphysics (such as debates on realism and theories of causation). The central goal of this module is to emphasize the continuity and also the subtle differences between logic and philosophy of science, on the one hand, and analytic philosophy,

	on the other hand. Typical seminars are devoted to the work of influential analytic philosophers.
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. The overarching learning goal consists in making the students aware of the continuity and also the subtle differences between logic and philosophy of science, on the one hand, and analytic philosophy, on the other hand. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb, Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 17 Themes in Analytic Philosophy III

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 17.1 Master's Course: Themes in Analytic Philosophy 3	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 2

Duration The module spans 1 semester.

Course Content This module introduces students to central themes in analytic philosophy. The module deepens and expands topics discussed in module Themes in Analytic Philosophy I and II. Many central themes in logic and philosophy of science are (historically and systematically) rooted in the analytic tradition – particularly, topics in analytic philosophy of language (such as theories of truth and meaning), epistemology (such as theories knowledge and justification), and metaphysics (such as debates on realism and theories of causation). The central goal of this module is to emphasize the continuity and also the subtle differences between logic and philosophy of science, on the one hand, and analytic

	philosophy, on the other hand. Typical seminars are devoted to the work of influential analytic philosophers.
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. The overarching learning goal consists in making the students aware of the continuity and also the subtle differences between logic and philosophy of science, on the one hand, and analytic philosophy, on the other hand. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb, Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 18 Themes in Analytic Philosophy IV

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 18.1 Master's Course: Themes in Analytic Philosophy 4	SoSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 2

Duration The module spans 1 semester.

Course Content This module introduces students to central themes in analytic philosophy. The module deepens and expands topics discussed in module Themes in Analytic Philosophy I- III. Many central themes in logic and philosophy of science are (historically and systematically) rooted in the analytic tradition – particularly, topics in analytic philosophy of language (such as theories of truth and meaning), epistemology (such as theories knowledge and justification), and metaphysics (such as debates on realism and theories of causation). The central goal of this module is to emphasize the continuity and also the subtle differences between logic and philosophy of science, on the one hand, and analytic

	philosophy, on the other hand. Typical seminars are devoted to the work of influential analytic philosophers.
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. The overarching learning goal consists in making the students aware of the continuity and also the subtle differences between logic and philosophy of science, on the one hand, and analytic philosophy, on the other hand. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb, Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Modules: P 5 Master Forum III

Assignment to degree program	Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)
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Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Colloquium	P 5.1 Central Topics in Logic and Philosophy of Science 3	WiSe	30 h (2 SWS)	150 hours	(6)

A total of 6 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 180 hours are required.

Type of module	Required module with compulsory courses.
Usability of the module to other degree programs	
Compulsory elective regulations	None
Participation requirements	None
Point in the course of study	Recommended semester: 3
Duration	The module spans 1 semester.
Course Content	This module introduces students to central topics logic and philosophy of science. A seminar in this module is typically composed of a formal/mathematical part (in which students learn the technical details of relevant formal techniques, such as decision and game theory, probability theory and statistics, etc.) and a philosophical part (serving as a motivation or an application of a particular formal technique). In particular, this module further expands and deepens topics of the previous Master forums.
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. In particular, students are trained to master certain mathematical techniques that are relevant to logic and philosophy of science. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and

	scientific debates (here, in current debates in either logic or philosophy of science), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb, Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: P 6 Preparation of the Master's Thesis

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	P 6.1 Current Literature and Research Questions	WiSe	30 h (2 SWS)	150 h	(6)

A total of 6 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 180 hours are required.

Type of module Required module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations None

Participation requirements None

Point in the course of study Recommended semester: 3

Duration The module spans 1 semester.

Course Content The students are prepared to write the master thesis. This includes regular meetings of the students and their supervisors. The focus in this module is on developing the research questions, structuring the master thesis and finding a suitable methodology in order to achieve a proper master thesis.

Intended Learning Outcomes The goal of this module consists in the preparation of the master thesis. In general, students are trained (a) to perform a well-informed literature research on the subject matter of the master thesis, (b) to competently grasp the arguments in current debates of the master thesis' subject matter, (c) to write an original master thesis (ideally as a preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).

Form of module examination Synopsis

Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	The supervisor of the Master thesis
Language(s) of instruction	English
Additional information	None

Modules: WP 19 Logic III

Assignment to degree program	Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)
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Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 19.1 Master Course Logic 3	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module	Compulsory elective module with compulsory courses.
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Usability of the module to other degree programs

Compulsory elective regulations	This module may be selected provided the following rules are observed: A total of six compulsory elective modules must be selected from the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.
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Participation requirements	None
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Point in the course of study	Recommended semester: 3
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Duration	The module spans 1 semester.
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Course Content	This module further introduces students to current debates in logic. Moreover, this module deepens and expands the areas discussed in modules Logic I and II. This is achieved by both presenting the logical topics and proofs with mathematical rigor and a thorough mathematical/logical training of the students. Typical subjects in this module are: modal logic, philosophical logics (such as epistemic logic, deontic logic, logic of conditionals, probability logic, relevant logic, etc.), theories of truth, set theory, constructive logics, arithmetic and recursion theory, incompleteness theorems.
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Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (mathematical and logical) research. In particular, students are
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	trained to master certain mathematical techniques that are relevant to logic. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in current debates in either logic, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb
Language(s) of instruction	English
Additional information	None

Module: WP 20 Logic IV

Assignment to degree program

Master's degree program: Logic and Philosophy of Science
(Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 20.1 Master Course Logic 4	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module	Compulsory elective module with compulsory courses.
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Usability of the module to other degree programs

Compulsory elective regulations	The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.
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Participation requirements	None
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Point in the course of study	Recommended semester: 3
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Duration	The module spans 1 semester.
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Course Content	This module further introduces students to current debates in logic. Moreover, this module deepens and expands the areas discussed in modules Logic I-III. This is achieved by both presenting the logical topics and proofs with mathematical rigor and a thorough mathematical/logical training of the students. Typical subjects in this module are: modal logic, philosophical logics (such as epistemic logic, deontic logic, logic of conditionals, probability logic, relevant logic, etc.), theories of truth, set theory, constructive logics, arithmetic and recursion theory, incompleteness theorems.
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Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (mathematical and logical) research. In particular, students are
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	trained to master certain mathematical techniques that are relevant to logic. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in current debates in either logic, (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb
Language(s) of instruction	English
Additional information	None

Module: WP 21 General Philosophy of Science III

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 21.1 Master's Course General Philosophy of Science 3	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 3

Duration The module spans 1 semester.

Course Content This module introduces students to the general philosophy of science. This module deepens and expands topics discussed in General Philosophy of Science I and II. This subfield of philosophy of science deals with philosophical topics concerning several (perhaps all) scientific disciplines. The general philosophy of science includes (formal and social) epistemology, methodology, metaphysics, and ethics of science. The seminar in this module will focus on concrete subjects such as scientific reasoning, confirmation, explanation, models, theories, computer simulation, scientific realism, causation, probability, collaborative research, science and public policy, and risk assessment. Typically, the

	seminar is devoted to the work of influential philosophers of science (such as Carnap, Hempel and Popper) and “schools” (such as the Vienna Circle, Pragmatism, and Neo-Kantianism).
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (typically concerning more than one scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 22 General Philosophy of Science IV

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 22.1 Master's Course General Philosophy of Science 4	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 3

Duration The module spans 1 semester.

Course Content This module introduces students to the general philosophy of science. This module deepens and expands topics discussed in General Philosophy of Science I-III. This subfield of philosophy of science deals with philosophical topics concerning several (perhaps all) scientific disciplines. The general philosophy of science includes (formal and social) epistemology, methodology, metaphysics, and ethics of science. The seminar in this module will focus on concrete subjects such as scientific reasoning, confirmation, explanation, models, theories, computer simulation, scientific realism, causation, probability, collaborative research, science and public policy, and risk assessment. Typically, the seminar is devoted to

	the work of influential philosophers of science (such as Carnap, Hempel and Popper) and “schools” (such as the Vienna Circle, Pragmatism, and Neo-Kantianism).
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (typically concerning more than one scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 23 Philosophy of the Special Sciences III

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 23.1 Master's Course Philosophy of the Special Sciences 3	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 3

Duration The module spans 1 semester.

Course Content This module introduces students to the philosophy of the special sciences – that is, to philosophical topics arising exclusively in one specific scientific disciplines. This module deepens and expands topics discussed in Philosophy of Special Sciences I and II. The philosophy of the special sciences includes the philosophy of physics, climate science, chemistry, the life and medical sciences, psychology and the cognitive sciences, economics and the social sciences, computer science, and statistics. A typical seminar in this module will focus on concrete subjects such as specific problems of confirmation in the context of string theory, probabilities in quantum mechanics and statistical mechanics, simulations in

	climate science, randomized controlled trials in medical research, and frequentist versus Bayesian methods in statistics.
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (here, in one specific scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Format of the module exam	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: WP 24 Philosophy of the Special Sciences IV

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Seminar	WP 24.1 Master's Course Philosophy of the Special Sciences 4	WiSe	30 h (2 SWS)	240 h	(9)

A total of 9 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 270 hours are required.

Type of module Compulsory elective module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations The module may be selected subject to the following rules: A total of six compulsory elective modules must be selected from among the compulsory elective modules WP 1 through WP 24. Two compulsory elective modules should be selected in each of the 1st, 2nd, and 3rd semesters of study.

Participation requirements None

Point in the course of study Recommended semester: 3

Duration The module spans 1 semester.

Course Content This module introduces students to the philosophy of the special sciences – that is, to philosophical topics arising exclusively in one specific scientific disciplines. This module deepens and expands topics discussed in Philosophy of Special Sciences I-III. The philosophy of the special sciences includes the philosophy of physics, climate science, chemistry, the life and medical sciences, psychology and the cognitive sciences, economics and the social sciences, computer science, and statistics. A typical seminar in this module will focus on concrete subjects such as specific problems of confirmation in the context of string theory, probabilities in quantum mechanics and statistical mechanics, simulations in

	climate science, randomized controlled trials in medical research, and frequentist versus Bayesian methods in statistics.
Intended Learning Outcomes	The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. Students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates (here, in one specific scientific discipline), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for awarding ECTS credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: P 7 Master Forum IV

Assignment to degree program

Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Colloquium	P 7.1 Central Topics in Logic and Philosophy of Science 4	SoSe	30 h (2 SWS)	150 h	(6)

A total of 6 ECTS credits must be earned in this module. The contact hours amount to 2 weekly hours per semester. Including self-study, approximately 180 hours are required.

Type of module

Required module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations

None

Participation requirements

None

Point in the course of study

Recommended semester: 4

Duration

The module spans 1 semester.

Course Content

This module introduces students to central topics logic and philosophy of science. A seminar in this module is typically composed of a formal/mathematical part (in which students learn the technical details of relevant formal techniques, such as decision and game theory, probability theory and statistics, etc.) and a philosophical part (serving as a motivation or an application of a particular formal technique). In particular, this module further expands and deepens topics of the previous Master forum.

Intended Learning Outcomes

The goal of this module consists in familiarizing the students with standard positions in the literature as well as with the current (philosophical and scientific) research. In particular, students are trained to master certain mathematical techniques that are relevant to logic and philosophy of science. In general, students are trained (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and

	scientific debates (here, in current debates in either logic or philosophy of science), (c) to write original research papers (in preparation for academic publishing), and (d) to present academic content (in preparation for giving research talks at academic conferences).
Form of module examination	Term paper or exam
Type of assessment	The module is graded.
Requirements for the award of ECTS credits	ECTS credits are awarded upon passing the module exam (or the compulsory and, if applicable, elective exam components) associated with the module.
Module coordinator	Prof. Dr. Dr. Hannes Leitgeb, Prof. Dr. Stephan Hartmann
Language(s) of instruction	English
Additional information	None

Module: P 8 Final Module

Assignment to degree program Master's degree program: Logic and Philosophy of Science (Master of Arts, M.A.)

Assigned module parts

Teaching and learning format	Course (Compulsory)	Frequency of offers	Class time	Self-study	ECTS
Master's Thesis	P 8.1 Master's Thesis	SoSe	-	600 h	(20)
Oral defense	P 8.2 Oral Defense	SoSe	-	120 h	(4)

A total of 24 ECTS credits must be earned in this module. The contact hours amount to 0 weekly hours per semester. Including self-study, approximately 720 hours are required.

Type of module Required module with compulsory courses.

Usability of the module to other degree programs

Compulsory elective regulations None

Participation requirements None

Point in the course of study Recommended semester: 4

Duration The module spans 1 semester.

Course Content This module contains (a) the completion of the Master thesis and (b) the disputation and the grading of the Master thesis.

Intended Learning Outcomes The goal of the final module consists in enabling the student to conduct self-directed and original research. As in the case of other modules, the writing of the Master thesis train the students to (a) to perform a well-informed literature research, (b) to competently grasp the arguments in specialized philosophical and scientific debates, (c) to write research papers (in preparation for academic publishing), and (d) to create academic content that can be presented as a research talks at academic conferences.

Form of module examination Master Thesis and Oral Defense

Type of assessment The module is graded.

Requirements for Awarding ECTS Credits	ECTS credits are awarded upon passing the module exam assigned to the module (or the assigned compulsory and, if applicable, elective exam components).
Module coordinator	The supervisor of the Master thesis
Language(s) of instruction	English
Additional information	None