Curriculum

from 1.1.2025 onwards

Doctoral Pilot Programme in Immunology (ImmuDocs) / Turku School of Economics

Doctoral degree 40 ECTS

Faculties and degrees:
Faculty of Medicine: Doctor of Philosophy, Doctor of Medical Science, Doctor of Odontology
Faculty of Science: Doctor of Philosophy
Faculty of Technology: Doctor of Philosophy, Doctor of Science in Technology
Turku School of Economics: Doctor of Science in Economics and Business Administration, Doctor of Philosophy and Doctor of Social Sciences

General description

Doctoral researchers of the Doctoral Pilot Programme in Immunology (ImmuDocs) carry out their doctoral studies in the Faculty of Medicine, Faculty of Science, Faculty of Technology or Turku School of Economics in research teams of high scientific quality. The doctoral researchers follow each faculty's study guide for postgraduate studies 2024-2027 for degree requirements, including requirements of the doctoral thesis. In addition to the provisions of the study guide, doctoral training is governed by this curriculum. The main objective of the doctoral pilot programme is to provide its doctoral researchers with a high level of scientific training in the fields of immunology and immunology-based drug development and diagnostics, thus providing the knowledge and skills for both professional research careers and other career paths requiring a high level of expertise.

Learning outcomes

After completing their doctoral studies, doctoral researchers

- have a broad knowledge of modern and applied immunology and an understanding and application of their key methods;
- acquire a scientific mindset and critical data analysis skills in line with good scientific practice;
- are well equipped to participate in the international scientific community, including conferences, research visits, laboratory courses, publication and peer review;
- are able to communicate their research results clearly and effectively to both the scientific community and the wider public;
- understand the full life cycle of immunology-based diagnostic and drug innovations, covering all relevant stages from concept to clinical application;
- understand the importance and impact of immunology on well-being, economy and society;
- are aware of career opportunities after the doctorate in the field of immunology.

Content

Doctoral Pilot Programme in Immunology includes general, research method and research field specific training. In addition to the doctoral thesis, doctoral researchers must complete a minimum of 40 credits of postgraduate studies, including a range of field-specific and optional courses tailored to support their research and career plans. Finnish language courses are recommended for non-native speakers of Finnish, for example 'Let's Start! Introduction to Finnish Studies, 1 ECTS' or 'Finnish 1, 4 ECTS'.

Information on teaching languages: English, Finnish

ImmuDocs postgraduate studies / Turku School of Economics

General Studies and Research Method Training		**4–14 ECTS**
Obligatory general studies		**4 op**
UGSY0001	Ethics of Academic Research	2
UGSB0000	Information Resources and Tools for Research	2
Recommended general studies		**0–10 ECTS**
IFDM1001	Presentations and Communication – Essential Tools and Tips	1
IFDM1003	InFLAMES Professional Development	1
IFDM1004	Publishing and Scientific Writing	1
IFDM1007	Key elements in leading a pharmaceutical company	1
UGSB0007	Leadership in contemporary working life	3
UGSH0006	Three Minute Thesis training	1
UGSL0002	Research Data Management	3
	Studies offered by the graduate school	0–10
Research Field Specific Studies		**36 ECTS**
Obligatory research field specific studies		**12 ECTS**
KT043134	Causal inference in healthcare	6
DPTS0001	Research seminars	6
Recommended research field specific studies		**24 ECTS**
IFDM1002	Business, Innovation and Market Access–Pharma Market and Value of Medicines	3
KT043127	Advanced Econometrics I	6
KT043132	Economics of the pharmaceutical sector	6
KT043133	Health economic evaluation and decision modelling	6
KT043136	Advanced health economics	6
PGS_1732	Kliinisen tutkimuksen statistiikan perusteet	2–3
KT045045	Econometrics 1/4	5
KT045046	Econometrics 2/4	5
KT045047	Econometrics 3/4	5
KT045048	Econometrics 4/4	5
KT045025	Microeconomics 1/4	5
KT045026	Microeconomics 2/4	5
KT045027	Microeconomics 3/4	5
KT045028	Microeconomics 4/4	5
KT045035	Macroeconomics 1/4	5
KT045036	Macroeconomics 2/4	5
KT045037	Macroeconomics 3/4	5
KT045038	Macroeconomics 4/4	5
PGS_2198	Basic Immunology	2
	Applied Immunology in Industry *Learning outcomes: By the end of the course, participants will have a comprehensive understanding of the diverse industrial applications of immunology and the fundamental principles of designing them. They will acquire a broad perspective on the significance of scientific practices and immunological quality control in them. Participants will also devel insights into industrial processes related to immune-based therapies and diagnostics, as well as the crucial role of immunology research in driving innovation.* *Study methods: Lectures + assignments* *Assessment scale: Pass/Fail* *Person in charge: Jukka Alinikula*	2
LTOH5301	International Scientific Congresses	2
LTOH5505	Researcher mobility, scientific work, or study trip	1–10
DPTS0016	Professional Training as an Expert	1–6
TKT21018	Elements of AI: Tekoälyn perusteet, MOOC	2
	Optional suitable studies, also at other universities	0–10