

METROPOLIA UNIVERSITY OF APPLIED SCIENCES

Make a difference with us

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Director, School of Real Estate and Construction



METROPOLIA IN A NUTSHELL

- The largest University of Applied Sciences in Finland
- Four education fields: Business, Culture, Health Care and Social Services, Technology
- **Staff: 1145**, of which 619 are full-time teaching staff. (2024)
- **Students: 41,186**, of which 18,195 are degree students, 17,267 are open UAS students and 5,724 have participated in continuing education and business services. (2024)
- Metropolia UAS Ltd. is owned by the municipalities of Helsinki Metropolitan area and Kirkkonummi.
- Realized turnover EUR 134,6 million (2024)



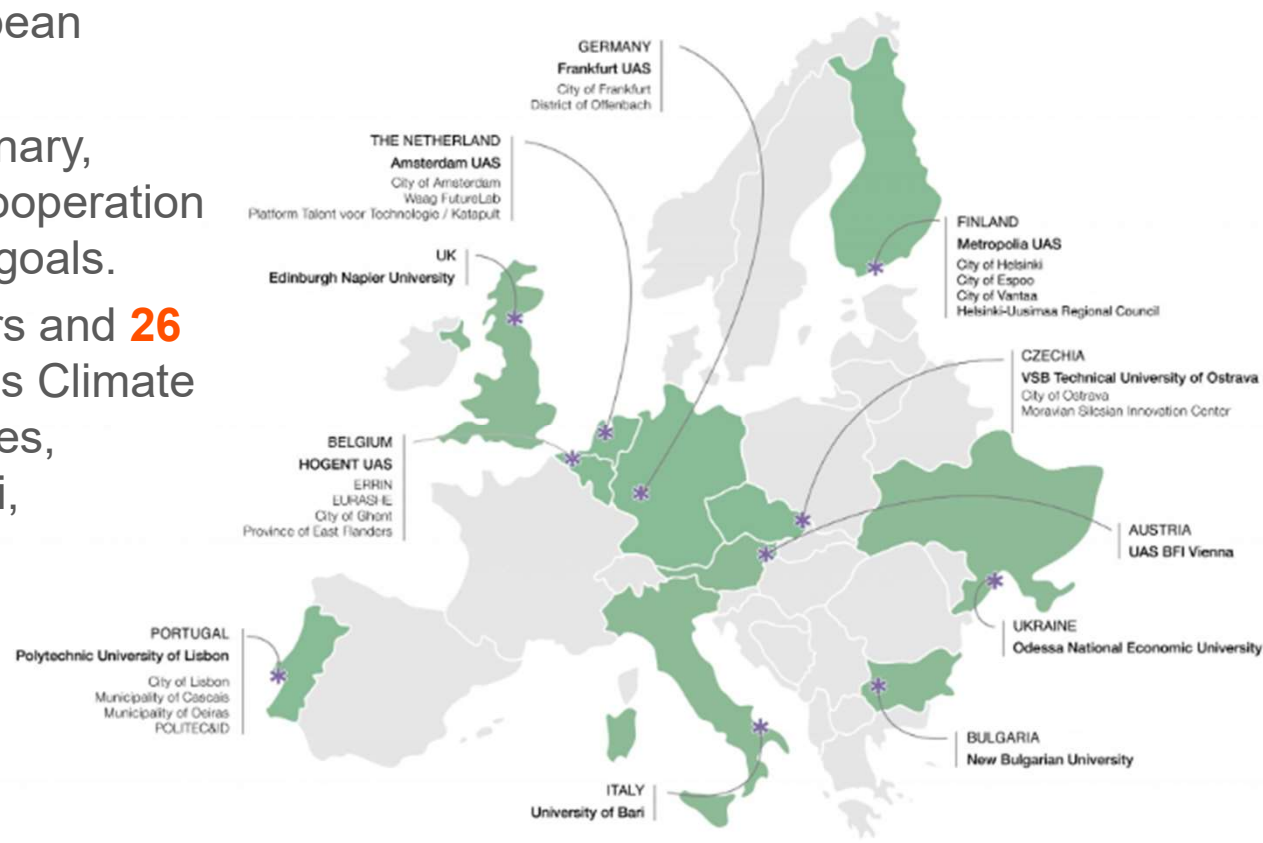
METROPOLIA'S FOUR EDUCATION FIELDS

	 Culture	 Business	 Technology	 Health care & Social Services	Total
2024	2121	1956	8202	5916	18195
2023	2036	1878	7999	5560	17473
2022	2016	1841	7877	5454	17188

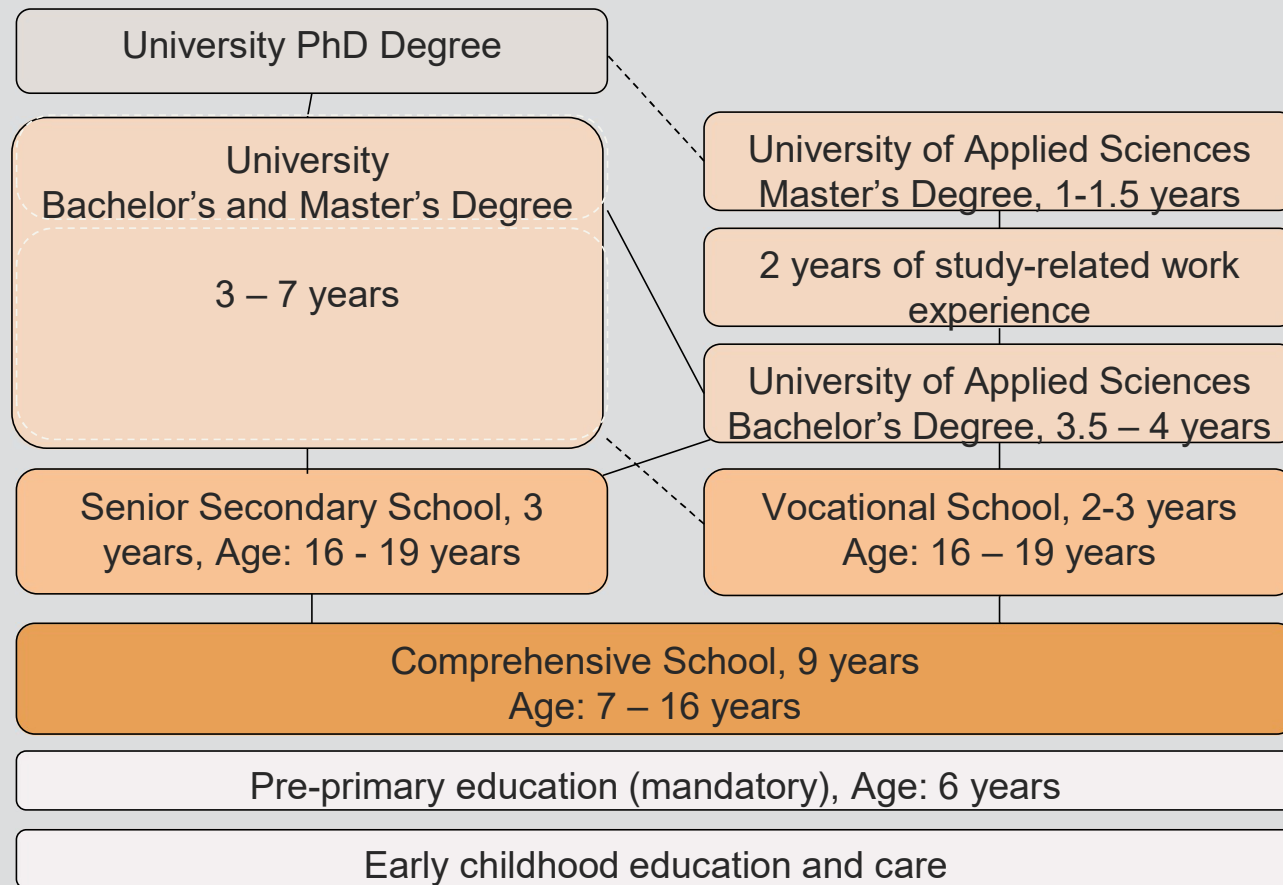
- 81 degree programmes in total, 23 in English
- Students: 41,186, of which 18,195 are degree students, 17,267 are open UAS students and 5,724 have participated in continuing education and business services.

U!REKA EUROPEAN UNIVERSITY ALLIANCE

- Metropolia is **the only Finnish higher education institute** acting as a chair in a European University alliance.
- **In U!REKA**, we develop multidisciplinary, European research and education cooperation to support our cities' climate-neutral goals.
- The alliance consists of **6** full partners and **26** associate partners, including the EU's Climate Neutral and Smart Cities mission cities, such as Amsterdam, Lisbon, Helsinki, Espoo and Vantaa.



FINNISH DUAL MODEL OF HIGHER EDUCATION



Key Characteristics of UAS Education



WORK-LIFE ORIENTATION

Strong emphasis on practical skills, internships, and real-world projects.



APPLIED RESEARCH & DEVELOPMENT

UAS institutions conduct RDI (Research, Development, and Innovation) projects in collaboration with companies and public sector organizations.



BACHELOR'S & MASTER'S DEGREES

UAS degrees follow the Bologna process and are internationally recognized. Master's degrees require at least two years of relevant work experience after the bachelor's.



CLOSE TIES WITH LOCAL INDUSTRIES

Curricula are co-developed with employers, and students often solve authentic problems from working life.

NATIONAL CAREER SURVEY 2025

90 % of Metropolia graduates from 2020 are employed.



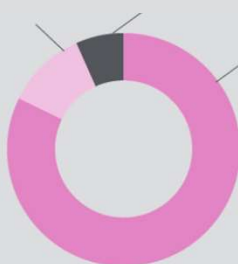
Yli **90%** vastaajista työelämässä
(työsuhteessa tai yrittäjänä)

Employment type

10 % temporary
or part-time

6 % entrepreneurs

74 %
full-time

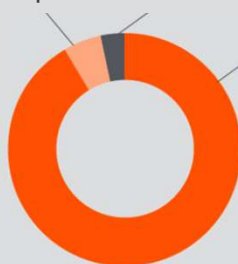


AMK-tutkinnon
suorittaneet

5 % temporary
or part-time

3 % entrepreneurs

87 %
full-time

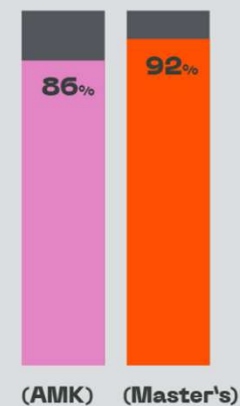


Master's-tutkinnon
suorittaneet

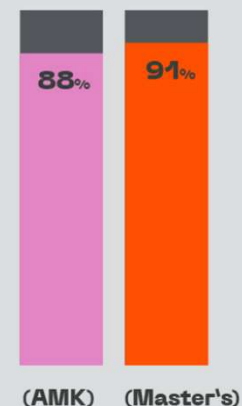
Education corresponds employment



Satisfaction to the degree



Satisfaction to the career



Ensuring employability with work integrated learning

Competence based curriculum with demonstration of skills

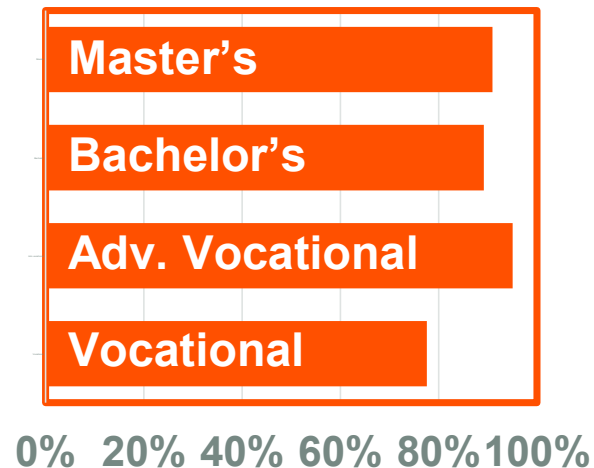
Engineering curriculum at Metropolia

→ Basic studies	80 cr	
→ Professional studies	90 cr	
→ Elective studies	15 cr	
→ MINNO project	10 cr	Co-operation and work integrated learning
→ Work placement	30 cr	
→ Thesis project	15 cr	
→ Total (4 years)	240 cr	

Learning activities

- Innovation project
- Industry assignments completed by students
- Internships
- Theses project
- Recognition of prior learning

Employed 1 yr after of graduation





www3.weforum.org/docs/WEF_Putting_Skills_First_2024.pdf

MINNO- Multidisciplinary Innovation Project 10 cr

- A multidisciplinary learning platform for undergraduate students
- 4,000 participating each year and nearly 90% of them completing project across
- 1,000 challenge providers work closely with learners
- Monitoring survey for 2020 graduates found that nearly 90% are employed after graduation.

metropolia.fi/en/rdi/innovation-project

Government and Education sector Lighthouses

LIGHTHOUSE 12

Metropolia University of Applied Sciences

MINNO



SCHOOL OF REAL ESTATE AND CONSTRUCTION

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Degree programmes

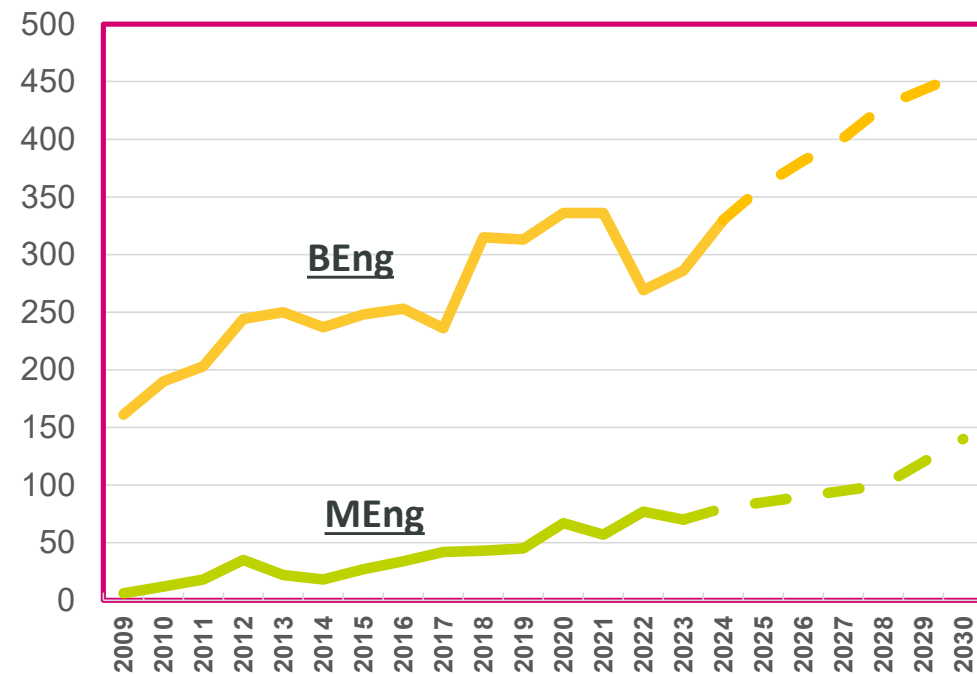
Bachelor in engineering (240 cr, 4 years)

- Civil engineering (management, design, infrastructure)
- **Construction IT / Smart Construction (in English)**
- Building services systems (HVAC, facility management)
- Construction architecture
- Land surveying and planning
- **Construction site management (210 cr, 3,5 yr, Finnish/English)**

Master in engineering (60 cr, 1 year)

- **Computing in construction (in English)**
- **Construction and real estate management (in English)**
- Building services systems (energy efficiency and renewables)
- Civil engineering (renovation)
- Land surveying (digital city planning)

2400 students
70+ top-level specialists
>400 graduates every year
→ increase to 500 by 2030



Examples of curricula

▼ T2426S6	Master's Degree Programme in Computing in ...	60 / 60
▼ T2426S6-1001	Advanced Professional Studies Choose all	20
TX00FE95	Computational Representations of Built Environments	5
TX00FE97	Managing and Sharing Construction Data	5
X000GN56	Orientation (Master's Studies)	1
TX00GO01	Data Gathering over Construction Lifecycle	4
TX00GO03	Digital Twins for the Built Environment	5
▼ T2426S6-1002	Optional Studies Select N credits	5
TX00FE99	Computational Design and Optimisation	5
TX00FX22	Artificial Intelligence in Construction	5
T2426S6-1003	Elective Studies Select N credits	5
▼ T2426S6-1004	Master's Thesis Choose all	30
XX00GJ97	Master's Thesis	25
TR00CN98	Research Methods	5

▼ TXU26S1	Construction Information Technology (in E...)	240 / 240
► TXU26S1-1001	Core Studies Select N credits	95
▼ TXU26S1-1002	Construction Information Technology (CIT) Ch...	60
► TXU26S1-1003	Civil Engineering Subjects Choose all	30
▼ TXU26S1-1004	Computing Basics Choose all	15
TX00FL42	Introduction to Python Programming	5
TX00FL43	Introduction to Software Systems	10
▼ TXU26S1-1005	Digital Construction Subjects Choose all	15
TX00FL44	Basics of BIM	5
TX00FL45	IT Applications for Structural Engineering	5
TX00FL47	Building Measurement and Modelling	5
▼ TXU26S1-1006	Optional Studies Select N credits	15
TX00FN17	Design of Reinforced Concrete Structures 2	5
TX00FN18	Artificial Intelligence and Robotics in Construction	5
TX00FN19	Introduction to Renovation Construction	5
TX00FL46	Introduction to Computational Design	5
TX00FM40	Lean Design and Production Management in Structural ...	5

Building information modeling – professional continuing education

Metropolia is the leading educator of BIM professionals in Finland

→ BIM basics

- online training, 3 cr
- building permit authorities, 5 cr
- developers, 3 cr
- infrastructure developers, 2 cr

→ BIM-based city planning basics, 5 cr

→ BIM coordinator, building construction, 15 cr

→ BIM coordinator, infrastructure, 15 cr

→ BIM in contracting, 6 cr

→ Training for developing the use of BIM software

We participate actively on defining the BIM user roles the requirements for knowledge, skills and abilities (KSA)

