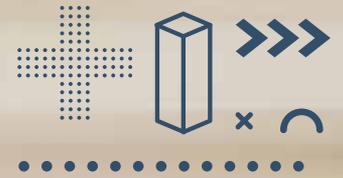




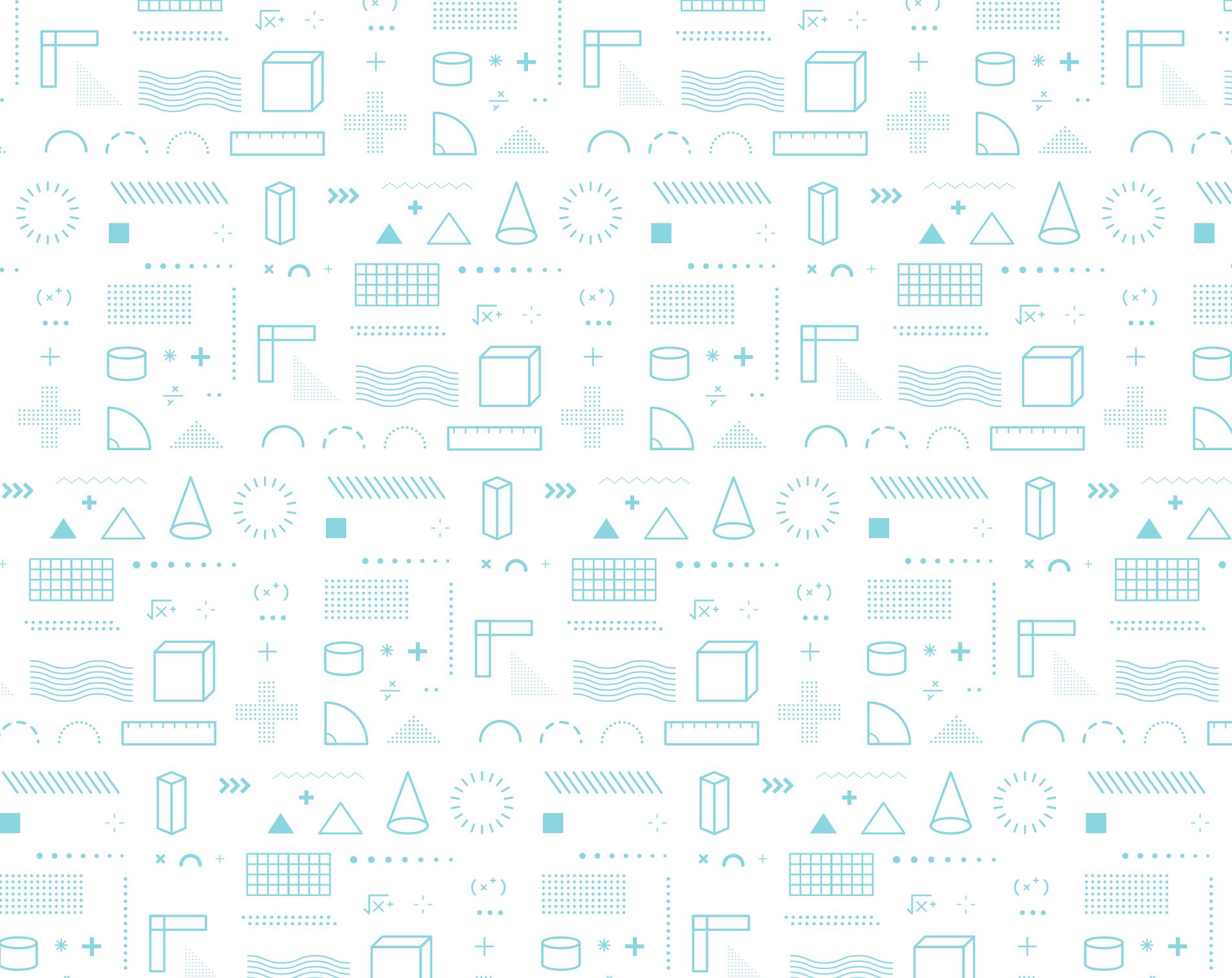
Me tekniikan takana



# TEK Graduate Survey 2021

Results





# **TEK Graduate Survey 2021**

## Results



# **TEK Graduate Survey 2021**

## Results

# Tek Graduate Survey 2021

Academic Engineers and Architects in Finland TEK and Finnish universities in technology together carry out a yearly feedback survey for graduated academic engineers and architects.

The feedback and results are utilized in developing university education and influencing the educational policy making.

TEK is responsible of accomplishing the survey and the universities are responsible of reaching their new graduates.

The survey is directed by a Directory Board having a representative from every participating university.

## **More information, results and resources:**

[www.tek.fi/graduate-survey](http://www.tek.fi/graduate-survey)

## **Contact:**

Arttu Piri, Analyst, TEK: [arttu.piri@tek.fi](mailto:arttu.piri@tek.fi)

# Participating universities and schools

## UNIVERSITIES AND SCHOOLS

Aalto University

School of Chemical Engineering

School of Electrical Engineering

School of Engineering

School of Science

School of Arts, Design and Architecture

1. Tampere University

2. LUT University

3. University of Oulu

4. University of Turku

5. Åbo Akademi University

6. University of Vaasa

## ABBREVIATION

Aalto ALL

Aalto CHEM

Aalto ELEC

Aalto ENG

Aalto SCI

Aalto ARTS

TAU

LUT

UO

UTU

ÅAU

UV

## LOCAL CONTACT

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Mari Martinmaa

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Hanna-Leena Hietaranta-Luoma

Annikka Nurkka

Reijo Saari

Saija Salonen

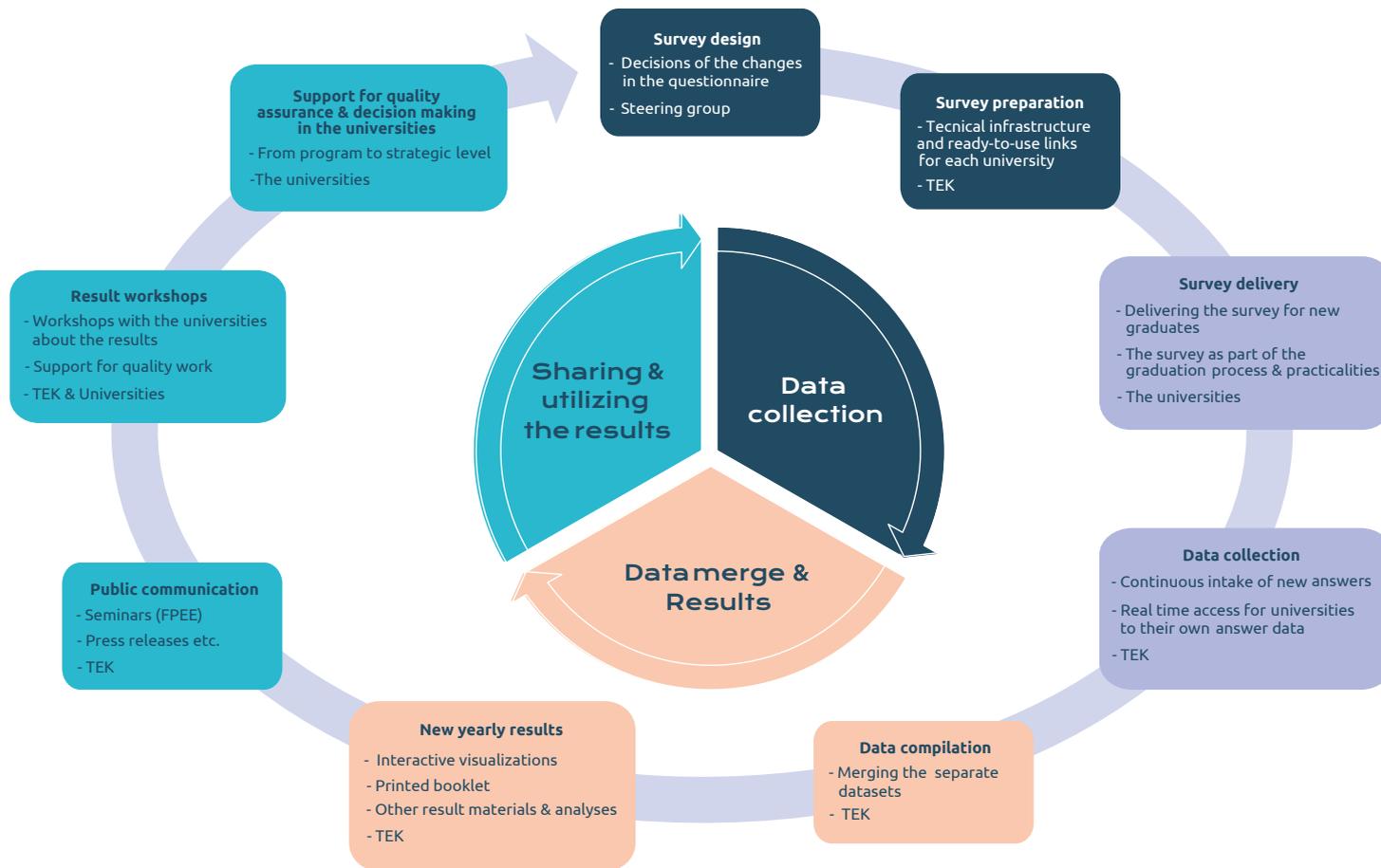
Kerstin Fagerström

Kati Kangasniemi

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# The yearly cycle of collaboration





# 1. Basics and Demograpichs

Number of graduates, responses and response rates 2021

Response rates 2012-2021

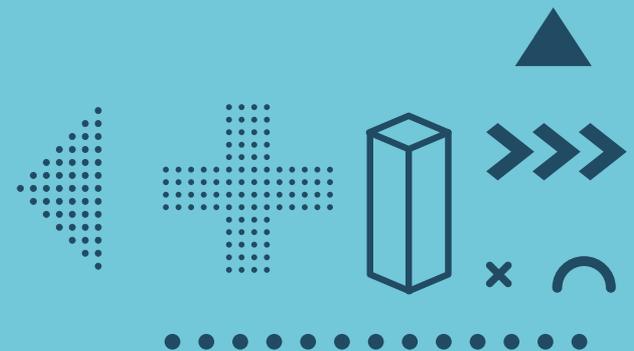
Number of answers 2012-2021

Educational areas within universities and schools

Gender

Nationality

Age at the time of graduation



# Number of graduates and responses 2021

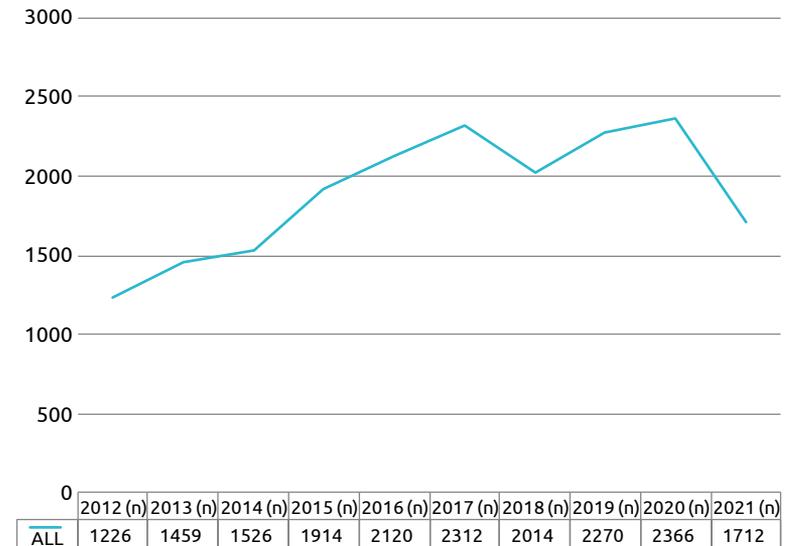
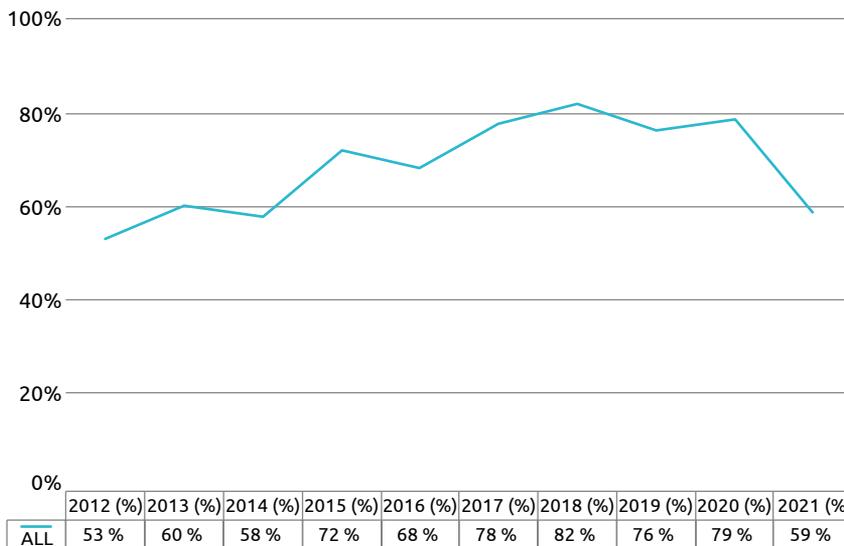
	ALL	Aalto ARTS*	Aalto CHEM	Aalto ELEC	Aalto ENG	Aalto SCI	Aalto ALL	TAU	LUT	UO	UTU**	ÅAU	UV
Graduates 2020 in the scope of the TEK Graduate Survey	2903	79	116	195	318	400	1108	752	534	328	59	78	44
Answers (n)	1712	34	49	130	203	188	604	452	453	62	49	66	26
Answer rate (%)	59 %	43 %	42 %	67 %	64 %	47 %	55 %	60 %	85 %	19 %	83 %	85 %	59 %

\* Not including the M.Sc (Arts) graduates from Aalto ARTS.

\*\* Not including the students from the commissioned degree programmes or the international double degree programmes.

## Answers and answer rates

©TEK Graduate Survey 2021



# Educational areas within the universities and schools

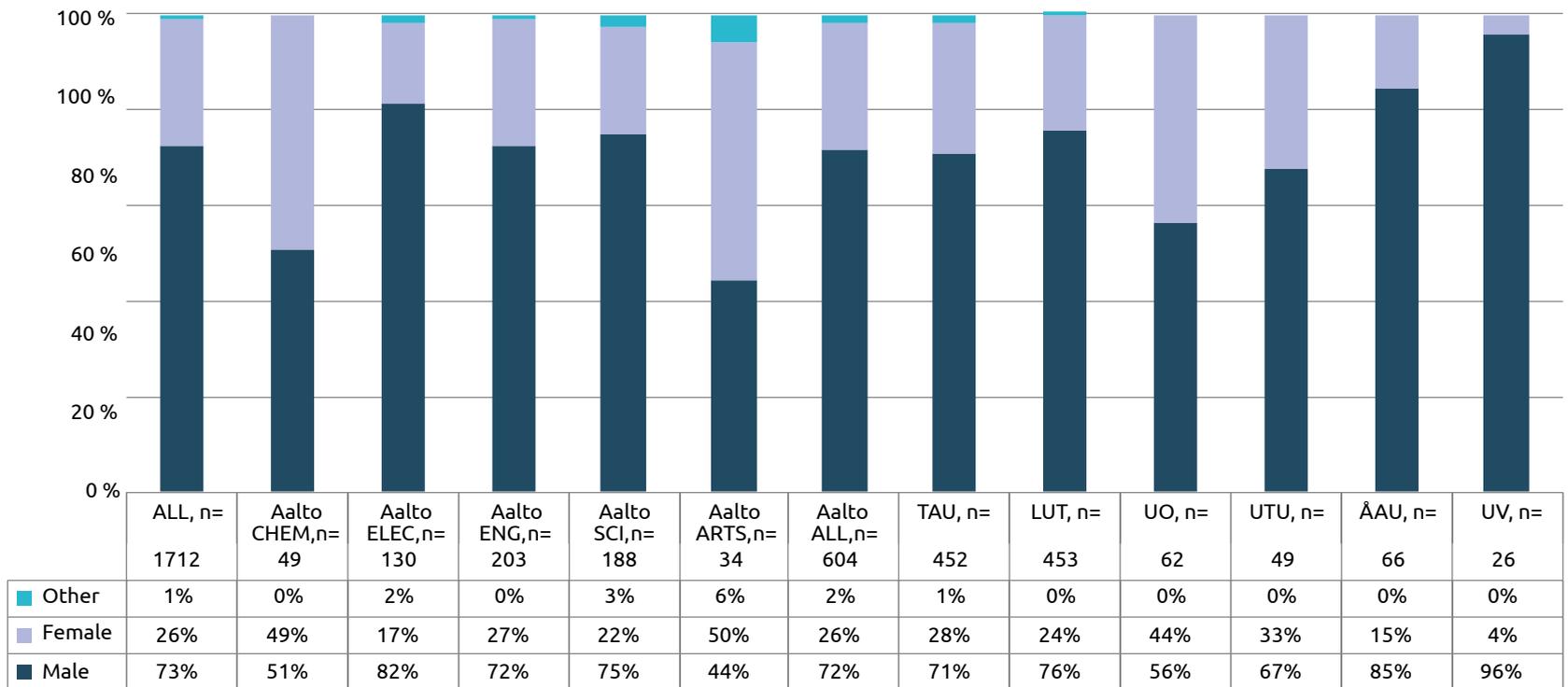
Educational area		ALL	Aalto CHEM	Aalto ELEC	Aalto ENG	Aalto SCI	Aalto ARTS	Aalto ALL	TAU	LUT	UO	UT	ÅAU	UV
Mechanical & Energy Engineering	Mechanical Engineering	11%			24%			8%	12%	17%	11%			
	Energy Engineering	9%	8%		24%			9%		17%				81%
Electrical & Automation Engineering	Electrical Engineering	11%		74%				16%	8%	13%	5%			4%
	Automation Engineering	4%		10%				2%	7%	6%				
	Engineering Physics	1%				6%		2%						
	Science and Engineering	3%		2%	2%	16%		6%	4%					
Information & Telecommunications Technology	Information Technology	15%		2%		61%		20%	14%	4%	6%	69%	27%	
	Telecommunications Technology	1%		12%				3%			2%			
Process & Materials Engineering	Chemical Engineering	5%	31%					2%		6%			73%	
	Process Engineering	1%									21%			
	Environmental Engineering	3%							5%	7%	8%			
	Wood Processing Technology	1%	20%					2%						
	Materials Technology, Rock Engineering	2%	22%		2%			2%	5%					
	Biotechnology	2%	18%					1%	3%			31%		
Building Construction & Surveying Technology	Building Construction, Community Development	7%			22%			7%	16%		11%			
	Surveying Technology	3%			26%			9%						
Industrial Management	Industrial management	15%				17%		5%	17%	30%	24%			15%
Architecture	Architecture	5%					91%	5%	9%		11%			
	Landscape Architecture	0%					9%							

100 % 100 % 100 % 100 % 100 % 100 % 100 % 100 % 100 % 100 % 100 % 100 % 100 % 100 % 100 %

Based on classification of the university specific degree and master's programs, which was done by the universities themselves.

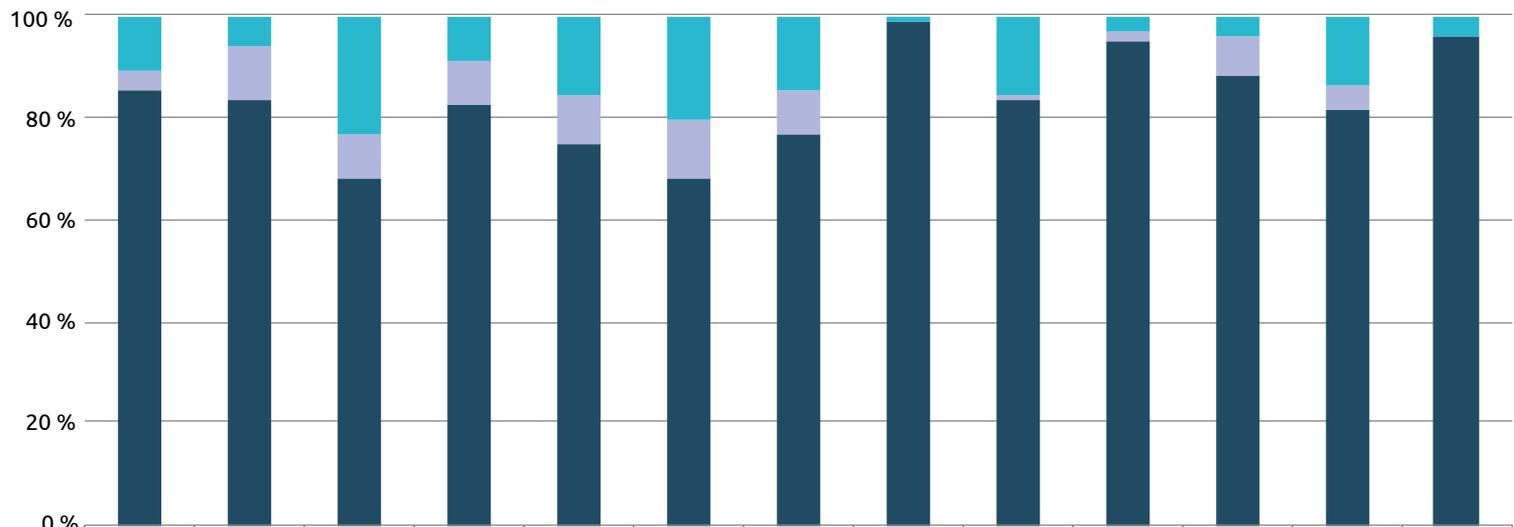
# Gender

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# Nationality

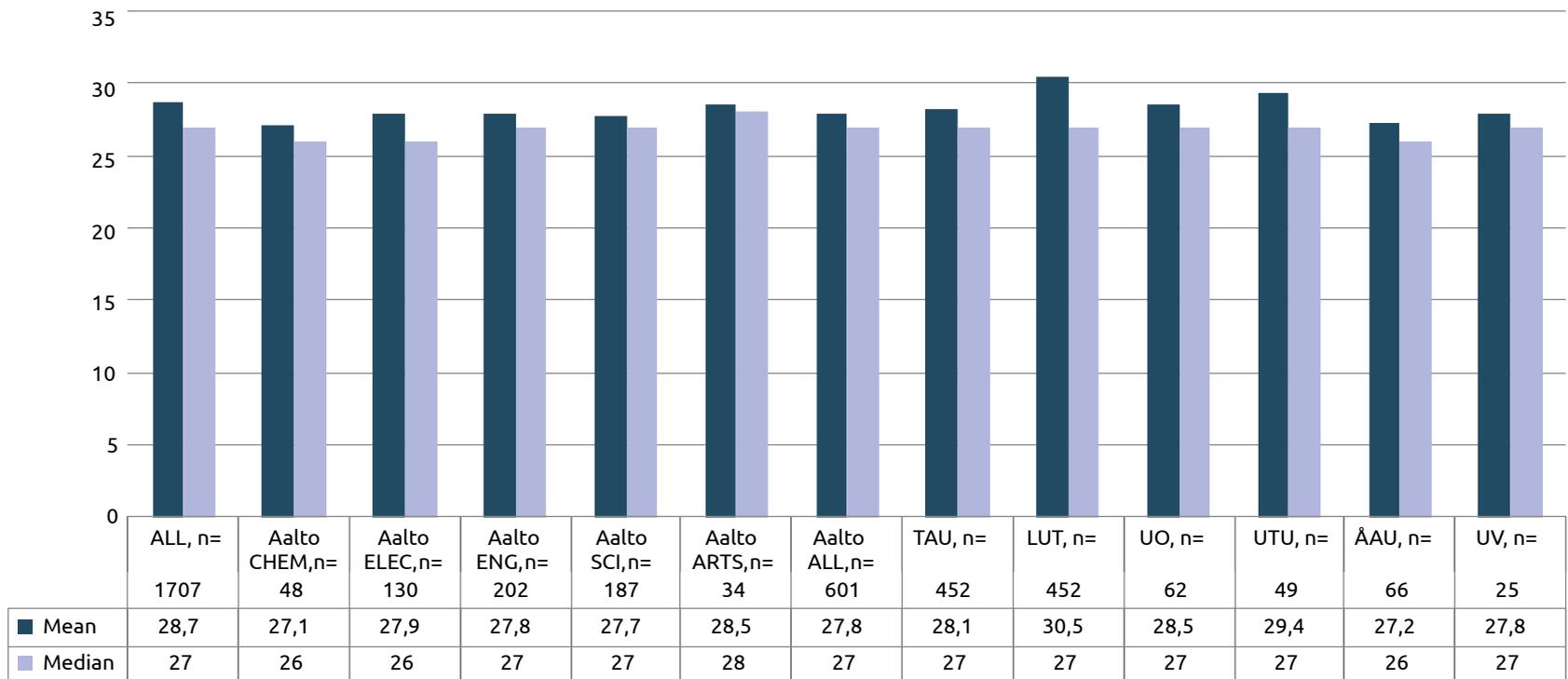
©TEK Graduate Survey 2021



	ALL, n= 1712	Aalto CHEM, n= 49	Aalto ELEC, n= 130	Aalto ENG, n= 203	Aalto SCI, n= 188	Aalto ARTS, n= 34	Aalto ALL, n= 604	TAU, n= 452	LUT, n= 453	UO, n= 62	UTU, n= 49	ÅAU, n= 66	UV, n= 26
Other outside EU	10%	6%	24%	9%	15%	21%	15%	1%	15%	3%	4%	14%	4%
Other within EU	4%	10%	8%	8%	10%	12%	9%	0%	1%	2%	8%	5%	0%
Finnish	86%	84%	68%	82%	75%	68%	76%	99%	83%	95%	88%	82%	96%

# Age at the time of graduation

©TEK Graduate Survey 2021







## 2. Studies

Degree and location of graduation before Master's studies

Exchange studies or working abroad

Absence from the studies during studies in Finland

Delays in studies or graduation

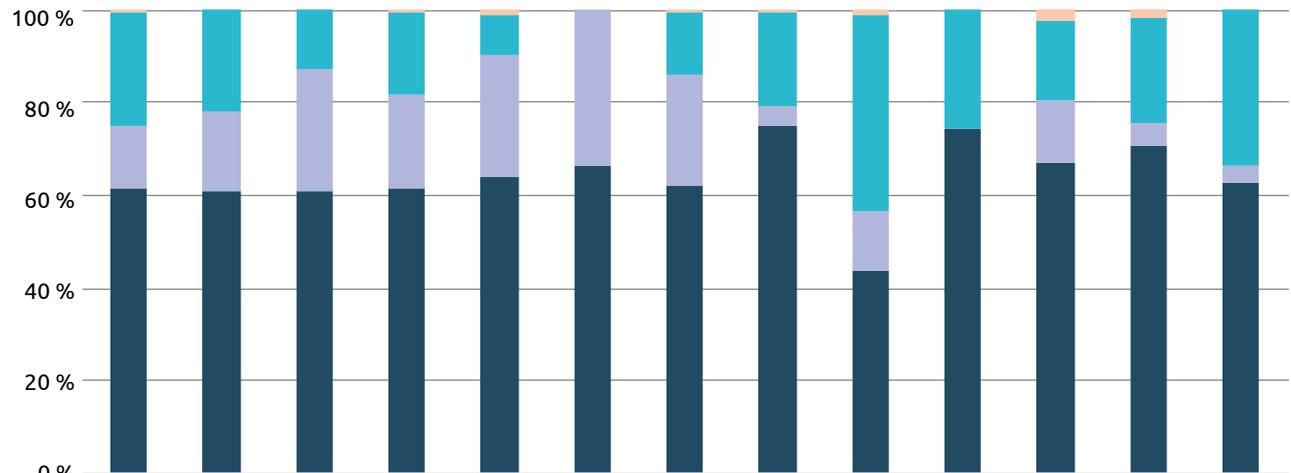
Reasons for the delays



# B.Sc. Studies

## Degree and location of studies before Master's studies

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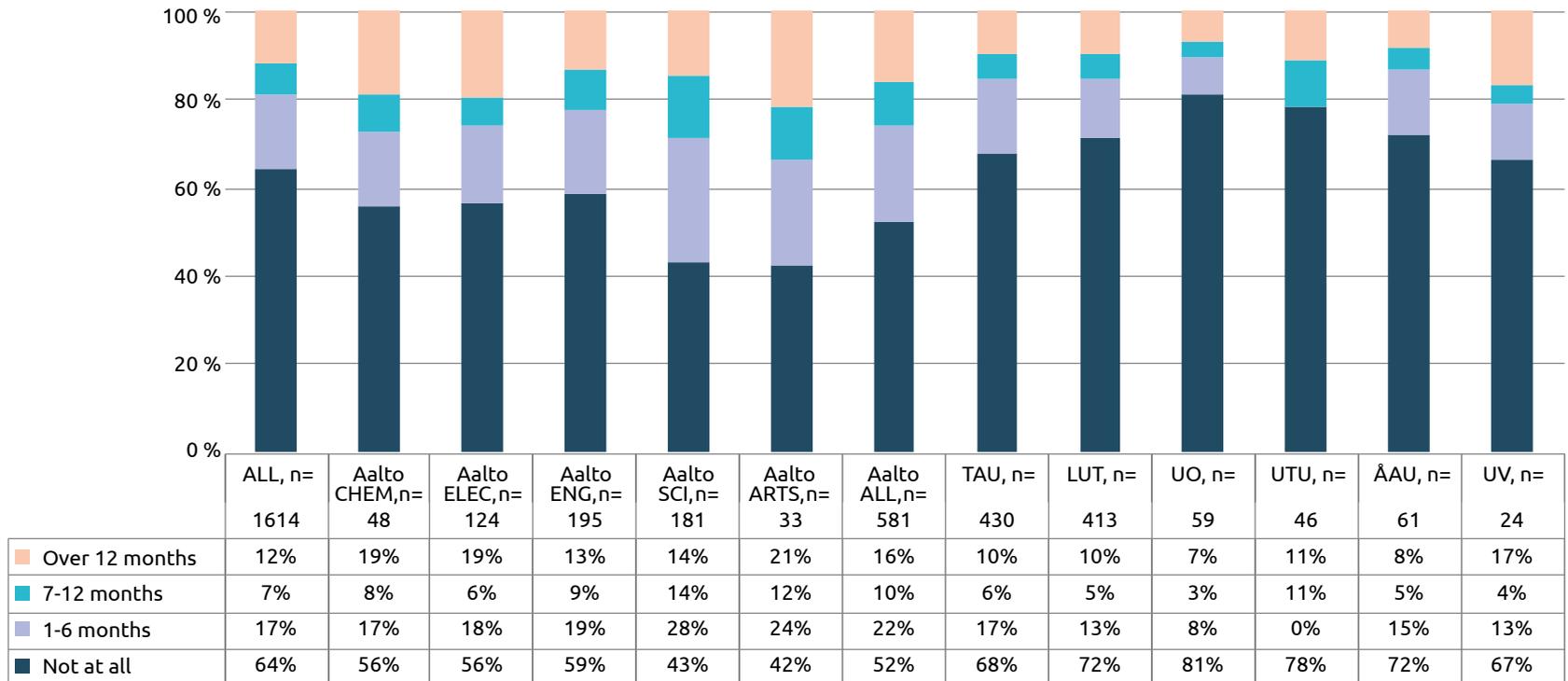


	ALL, n=	Aalto CHEM, n=	Aalto ELEC, n=	Aalto ENG, n=	Aalto SCI, n=	Aalto ARTS, n=	Aalto ALL, n=	TAU, n=	LUT, n=	UO, n=	UTU, n=	ÅAU, n=	UV, n=
	1612	46	120	199	173	30	568	426	427	59	46	62	24
Other	1%	0%	0%	1%	1%	0%	1%	0%	1%	0%	2%	2%	0%
B.Sc. from a university of applied sciences	24%	22%	13%	18%	9%	0%	13%	20%	43%	25%	17%	23%	33%
B.Sc. at another university	14%	17%	27%	21%	26%	33%	24%	4%	13%	0%	13%	5%	4%
B.Sc. at your current university	62%	61%	61%	61%	64%	67%	62%	75%	44%	75%	67%	71%	63%

# Exchange studies or working abroad

## Studies or working abroad

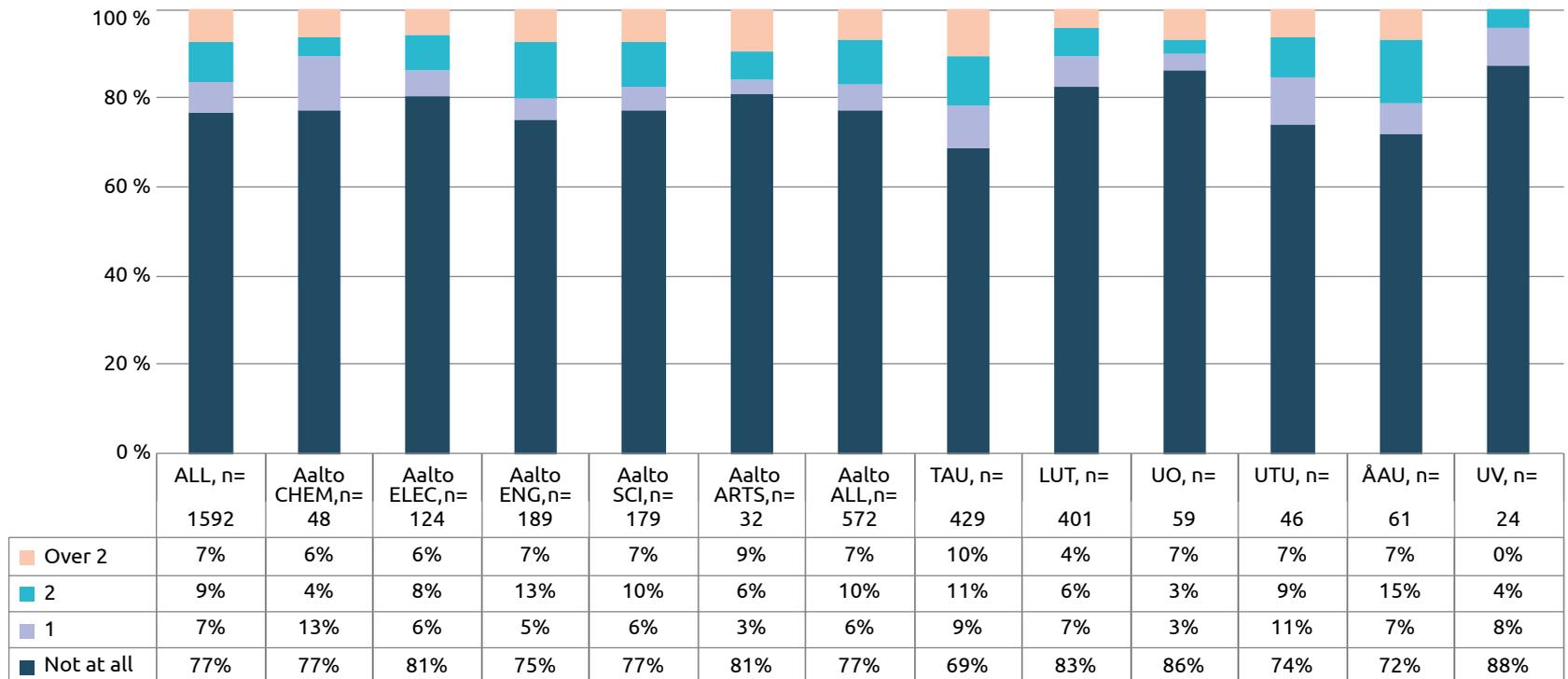
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# Absence

## Absence from the studies during studies in Finland, semesters

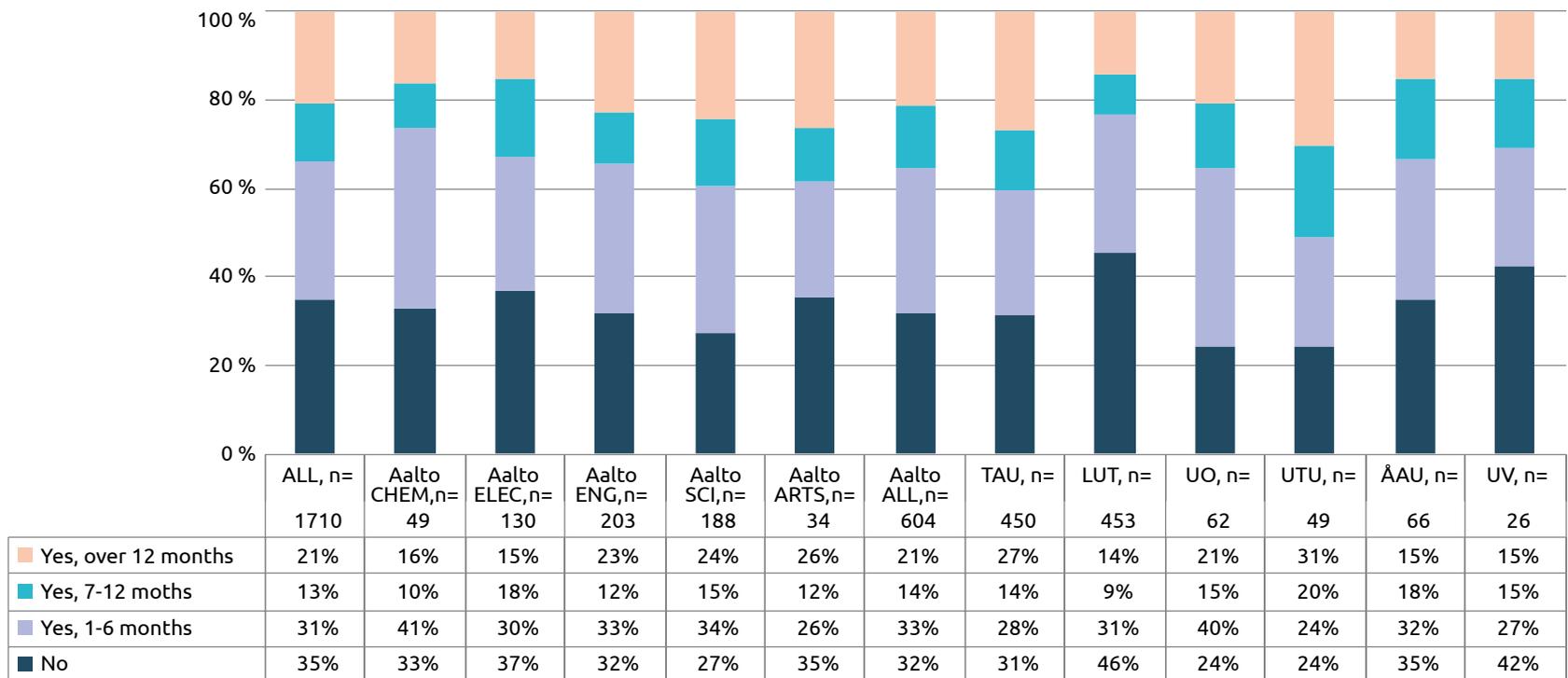
©TEK Graduate Survey 2021



# Delays in studies or graduation

## Delays in studies or graduation

©TEK Graduate Survey 2021



# Reasons for the delays

Reason for the delay, if delayed.	ALL, n=1109	Aalto CHEM, n=33	Aalto ELEC, n=82	Aalto ENG, n=138	Aalto SCI, n=137	Aalto ARTS, n=22	Aalto ALL, n=412	TAU, n=309	LUT, n=246	UO, n=47	UTU, n=37	ÅAU, n=43	UV, n=15
Working during the studies.	52 %	30 %	48 %	51 %	56 %	64 %	51 %	58 %	48 %	47 %	62 %	37 %	67 %
Delay in finding a place or subject for the thesis work.	25 %	24 %	23 %	24 %	19 %	23 %	22 %	29 %	25 %	23 %	22 %	35 %	33 %
Insufficient motivation for studies.	17 %	9 %	13 %	21 %	15 %	5 %	16 %	21 %	13 %	19 %	19 %	26 %	33 %
Other matters related to master's thesis or graduation.	16 %	33 %	17 %	15 %	17 %	5 %	17 %	16 %	12 %	15 %	11 %	26 %	13 %
Personal issues, eg. health problems.	13 %	15 %	13 %	15 %	11 %	14 %	13 %	12 %	12 %	15 %	8 %	12 %	7 %
COVID-19	12 %	24 %	16 %	10 %	9 %	0 %	11 %	12 %	12 %	4 %	14 %	23 %	20 %
Insufficient Master's thesis guidance.	11 %	15 %	11 %	17 %	7 %	18 %	13 %	13 %	9 %	4 %	16 %	9 %	0 %
Spending time as an exchange student.	9 %	9 %	10 %	9 %	12 %	14 %	10 %	9 %	7 %	2 %	8 %	9 %	20 %
Family issues.	9 %	9 %	5 %	5 %	5 %	0 %	5 %	9 %	15 %	9 %	8 %	5 %	0 %
Overlaps and incompatibilities in the course schedules.	8 %	12 %	12 %	7 %	10 %	9 %	9 %	8 %	6 %	6 %	8 %	0 %	27 %
Military or civil service.	7 %	12 %	5 %	6 %	9 %	9 %	7 %	6 %	7 %	4 %	14 %	5 %	0 %
Taking part in the student organization(s) activities.	5 %	12 %	11 %	5 %	14 %	9 %	10 %	3 %	2 %	6 %	3 %	2 %	0 %
Some other reason.	5 %	12 %	2 %	1 %	7 %	9 %	5 %	3 %	6 %	6 %	8 %	12 %	0 %
Insufficient study guidance.	4 %	3 %	4 %	7 %	2 %	27 %	6 %	4 %	4 %	2 %	0 %	5 %	7 %
Insufficient studying skills.	4 %	0 %	4 %	8 %	5 %	0 %	5 %	5 %	4 %	2 %	5 %	2 %	0 %
Studies as a whole (amount & quality)	2 %	3 %	0 %	3 %	3 %	0 %	2 %	2 %	3 %	0 %	0 %	2 %	0 %
Not having a job to take up after graduating.	2 %	6 %	1 %	1 %	1 %	0 %	1 %	2 %	2 %	2 %	3 %	0 %	7 %
Active free time (eg. Sports, travelling)	1 %	3 %	0 %	1 %	2 %	0 %	1 %	1 %	1 %	0 %	0 %	0 %	0 %





# 3. Expertise and skills: Importance and development

Items and Factors

Factor means

Importance

Development in studies

Development in work

Item means



# Items and factors

ITEMS IN FACTORS OF EXPERTISE					
Communication and Information processing	Social skills	Business and Management	Expertise and substance knowledge	Working Life Skills	Analytical skills
Written communication	Leadership	Sustainable development	Know-how of own field	Working independently	Self-knowledge
Oral communication	Team working	Basics of business operations	Knowledge of the research of own field	Problem solving	Self-confidence
Visual communication	Social skills	Entrepreneurial capacities	Knowledge of the history and development of own field	Information retrieval	Creativity
Digitalization and utilization of data			Mathematics and natural science	International work environment	Critical thinking skills
			Practical application of theories	Project management	Analytical thinking skills
				Time management and of prioritizing	Ethicality
				Developing own skills in working life	
				Career management capacities	
				Looking after of own well-being	

## METHOD:

With the following two questions, the respondents were asked to assess each of the 30 areas of expertise and skills from three different viewpoints:

1. "How important do you think the following areas of expertise are for your career?"
2. "Please compare how much the following areas of expertise developed in your studies and how much due to your work experience during your studies?"

A 7-point answer scale were used, where value (1) represented the option "Not at all" and (6) the option "Very much".

Respondents who chose "Unable to answer" (7) were excluded when calculating the means.

Based on factor analysis, the areas of expertise were classified in to 6 categories ("Factors").

# Factor means

Focus	Factor	ALL	Aalto CHEM	Aalto ELEC	Aalto ENG	Aalto SCI	Aalto ARTS	Aalto ALL	TAU	LUT	UO	UT	ÅAU	UV
Importance	Working Life Skills	5,4	5,5	5,4	5,4	5,5	5,4	5,4	5,4	5,4	5,4	5,5	5,3	5,3
	Social Skills	5,2	5,2	5,1	5,2	5,1	5,1	5,1	5,2	5,2	5,2	5,2	5,1	4,9
	Analytical Skills	5,2	5,1	5,3	5,1	5,2	5,5	5,2	5,1	5,2	5,1	5,2	5,2	4,9
	Communication and Information Processing	4,9	4,8	5	4,9	5	4,9	4,9	4,8	4,9	4,8	4,8	4,9	4,7
	Expertise and Substance Knowledge	4,8	5	5	4,8	4,7	4,9	4,8	4,7	4,8	4,7	4,8	4,7	4,7
	Business and Management	4,4	4,3	4,3	4,5	4,4	4,4	4,4	4,3	4,6	4,2	4,2	4,5	4,4
Development in studies	Working Life Skills	4,8	4,9	5	4,9	4,9	4,7	4,9	4,7	4,9	4,8	4,6	4,7	4,6
	Social Skills	4,5	4,6	4,6	4,5	4,4	4,3	4,5	4,4	4,6	4,5	4,5	4,4	3,9
	Analytical Skills	4,6	4,7	4,8	4,6	4,7	4,8	4,7	4,5	4,7	4,4	4,5	4,7	4,3
	Communication and Information Processing	4,5	4,6	4,7	4,5	4,7	4,6	4,6	4,3	4,5	4,5	4,6	4,5	4,3
	Expertise and Substance Knowledge	4,7	4,8	4,9	4,8	4,9	4,7	4,8	4,6	4,7	4,7	4,6	4,8	4,7
	Business and Management	3,9	3,9	3,8	4	3,6	3	3,8	3,8	4,2	3,7	3,7	4,1	4
Development in work	Working Life Skills	5	5	5,1	5	5,2	4,6	5,1	4,9	4,9	5	5,2	4,9	4,9
	Social Skills	4,6	4,5	4,6	4,6	4,8	4,1	4,6	4,5	4,6	4,4	4,8	4,6	4,4
	Analytical Skills	4,6	4,7	4,8	4,7	4,8	4	4,7	4,6	4,7	4,6	4,7	4,8	4,4
	Communication and Information Processing	4,3	4,2	4,5	4,3	4,7	3,6	4,4	4,2	4,3	4	4,2	4,2	4,1
	Expertise and Substance Knowledge	4,2	4,4	4,5	4,2	4,1	3,5	4,2	4,1	4,2	4,2	4,1	4,1	4,2
	Business and Management	3,7	3,5	3,8	3,8	3,8	3	3,7	3,6	3,8	3,6	3,6	4,1	3,8

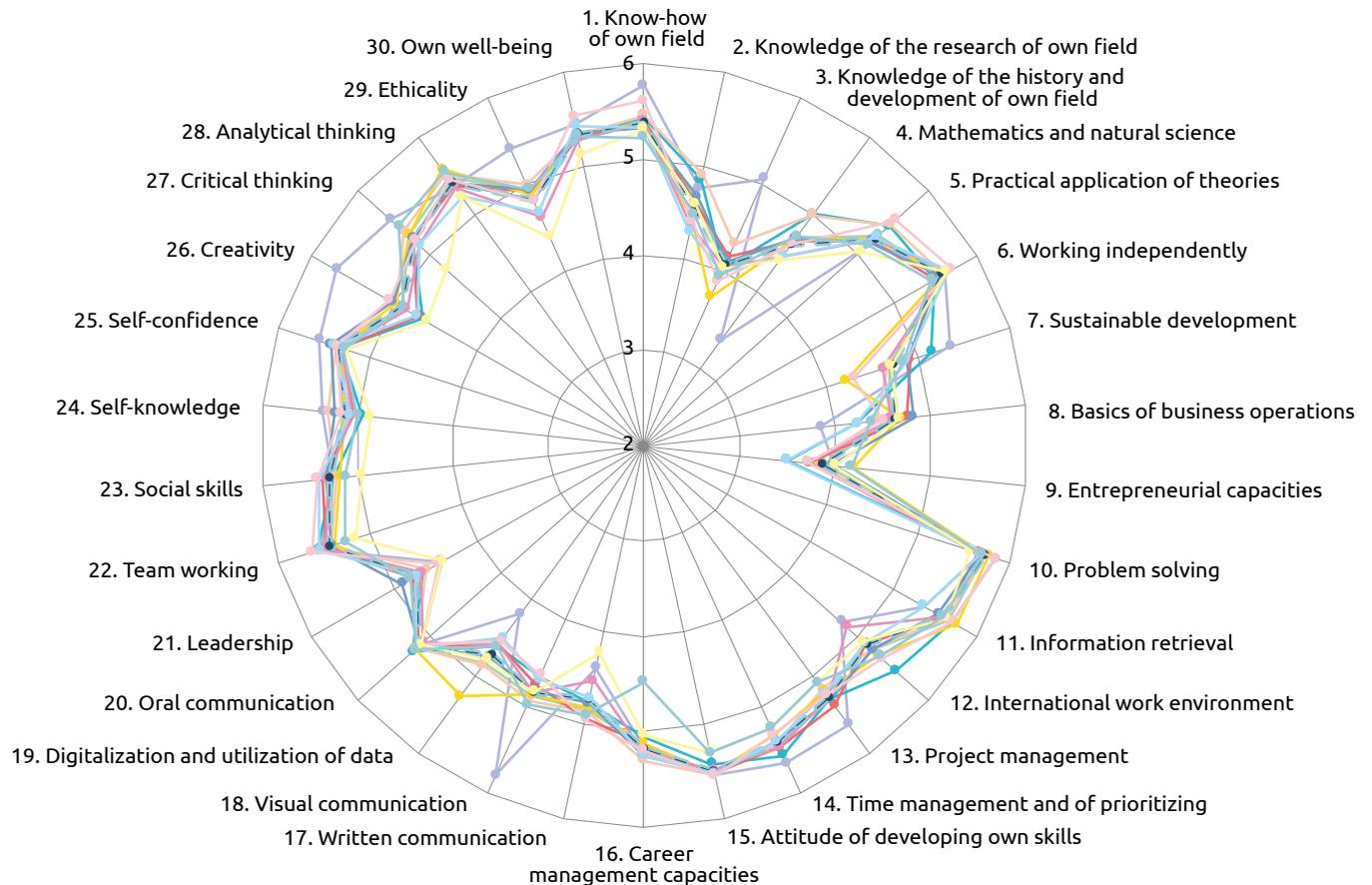
# Expertise and Skills: Importance

## Perceived importance for own career

©TEK Graduate Survey 2021

SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

- AALTO ALL, n= 572
- Aalto ARTS, n= 32
- Aalto CHEM, n= 48
- Aalto ELEC, n= 124
- Aalto ENG, n= 193
- Aalto SCI, n= 175
- LUT, n= 440
- TAU, n= 434
- ALL, n= 1644
- UO, n= 61
- UTU, n= 47
- UV, n= 25
- ÅAU, n= 65



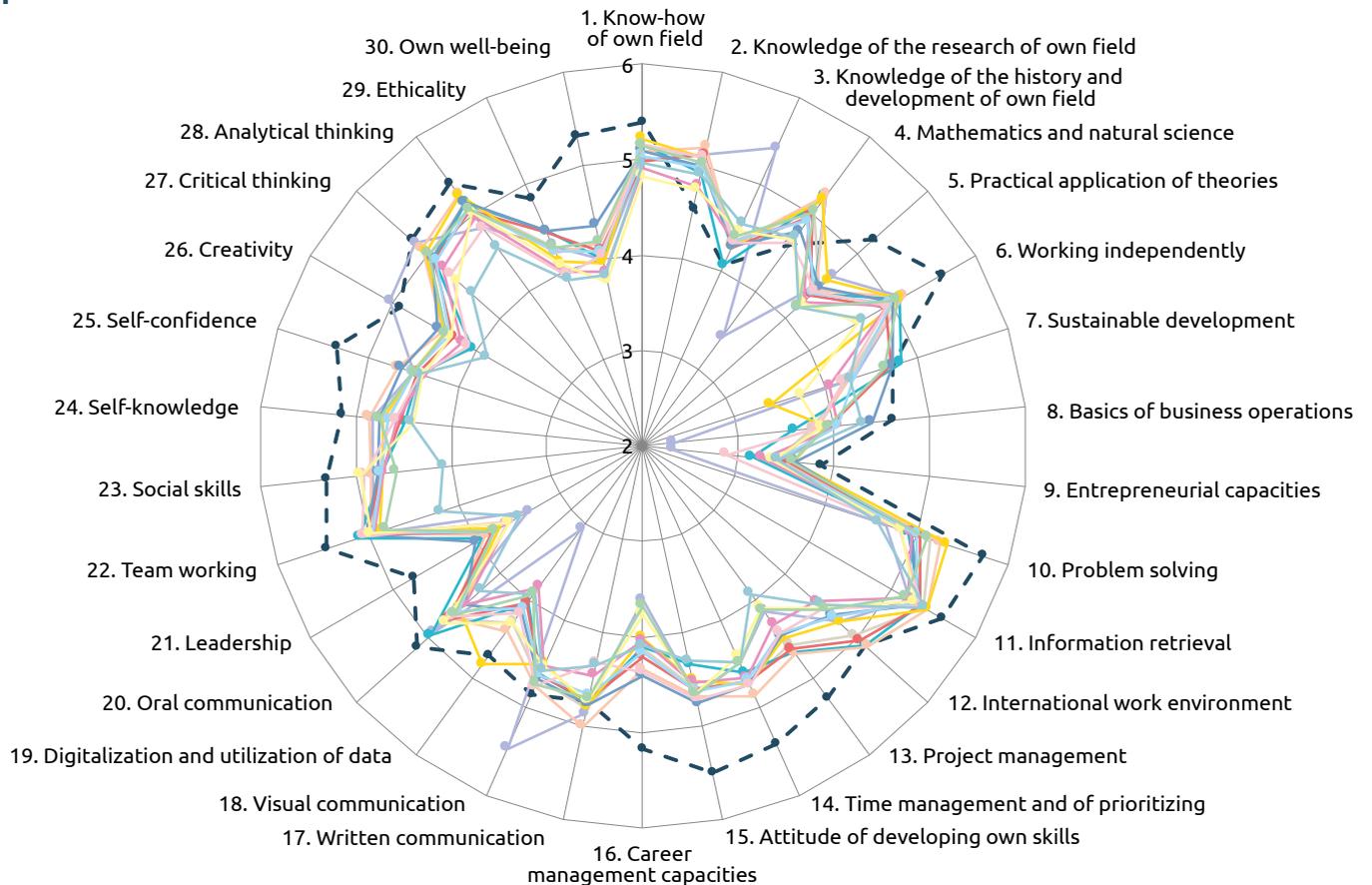
# Expertise and Skills: Development

## Percieved development in studies

©TEK Graduate Survey 2021

SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

●— IMPORTANCE, ALL  
 ●— AALTO ALL  
 ●— Aalto ARTS  
 ●— Aalto CHEM  
 ●— Aalto ELEC  
 ●— Aalto ENG  
 ●— Aalto SCI  
 ●— LUT  
 ●— TAU  
 ●— ALL  
 ●— UO  
 ●— UTU  
 ●— UV  
 ●— ÅAU



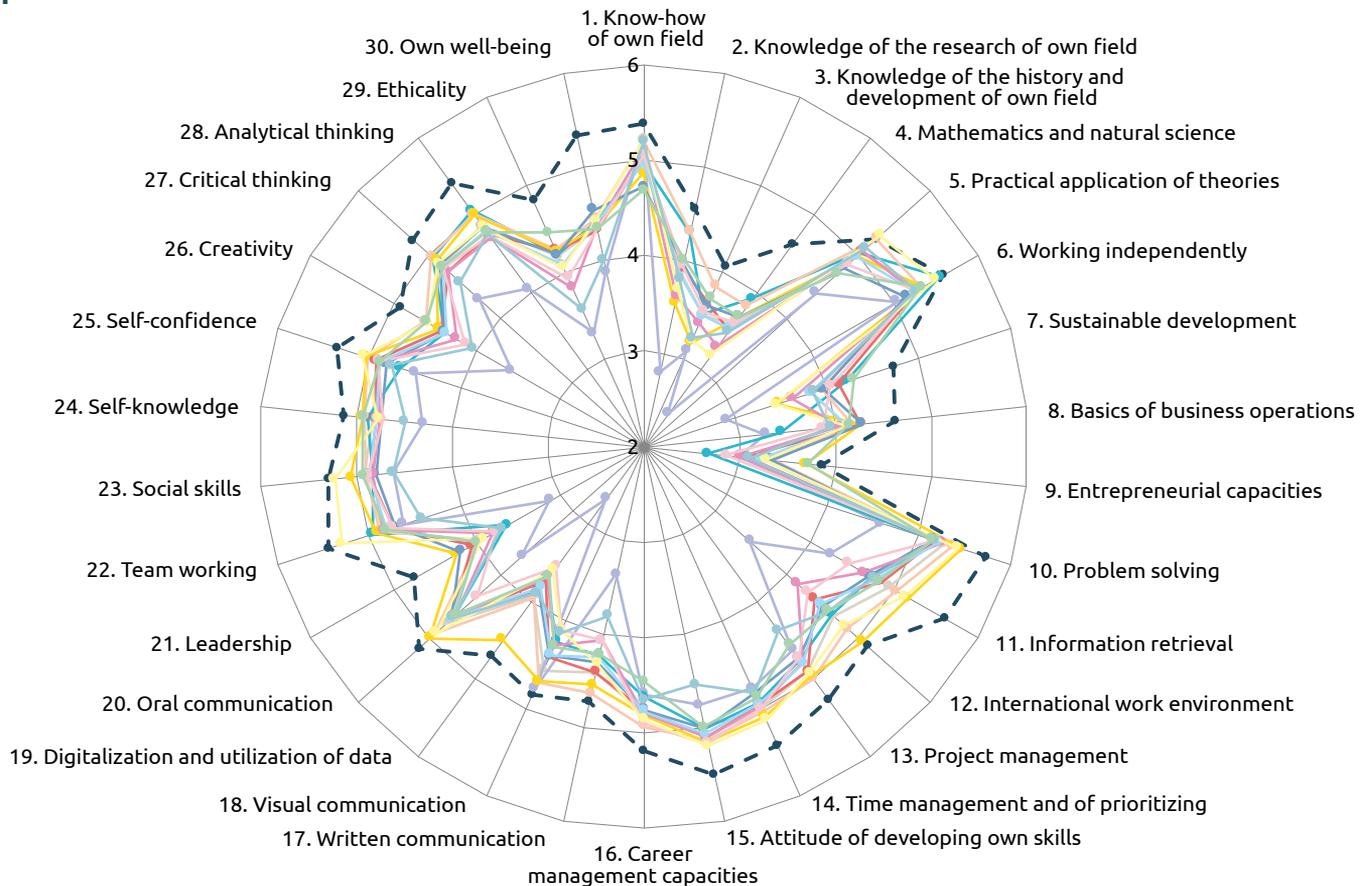
# Expertise and Skills: Development

## Perceived development in work

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SCALE  
 1 = Not at all (important)  
 2 = Very little  
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 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

- IMPORTANCE, ALL
- AALTO ALL
- Aalto ARTS
- Aalto CHEM
- Aalto ELEC
- Aalto ENG
- Aalto SCI
- LUT
- TAU
- ALL
- UO
- UTU
- UV
- ÅAU



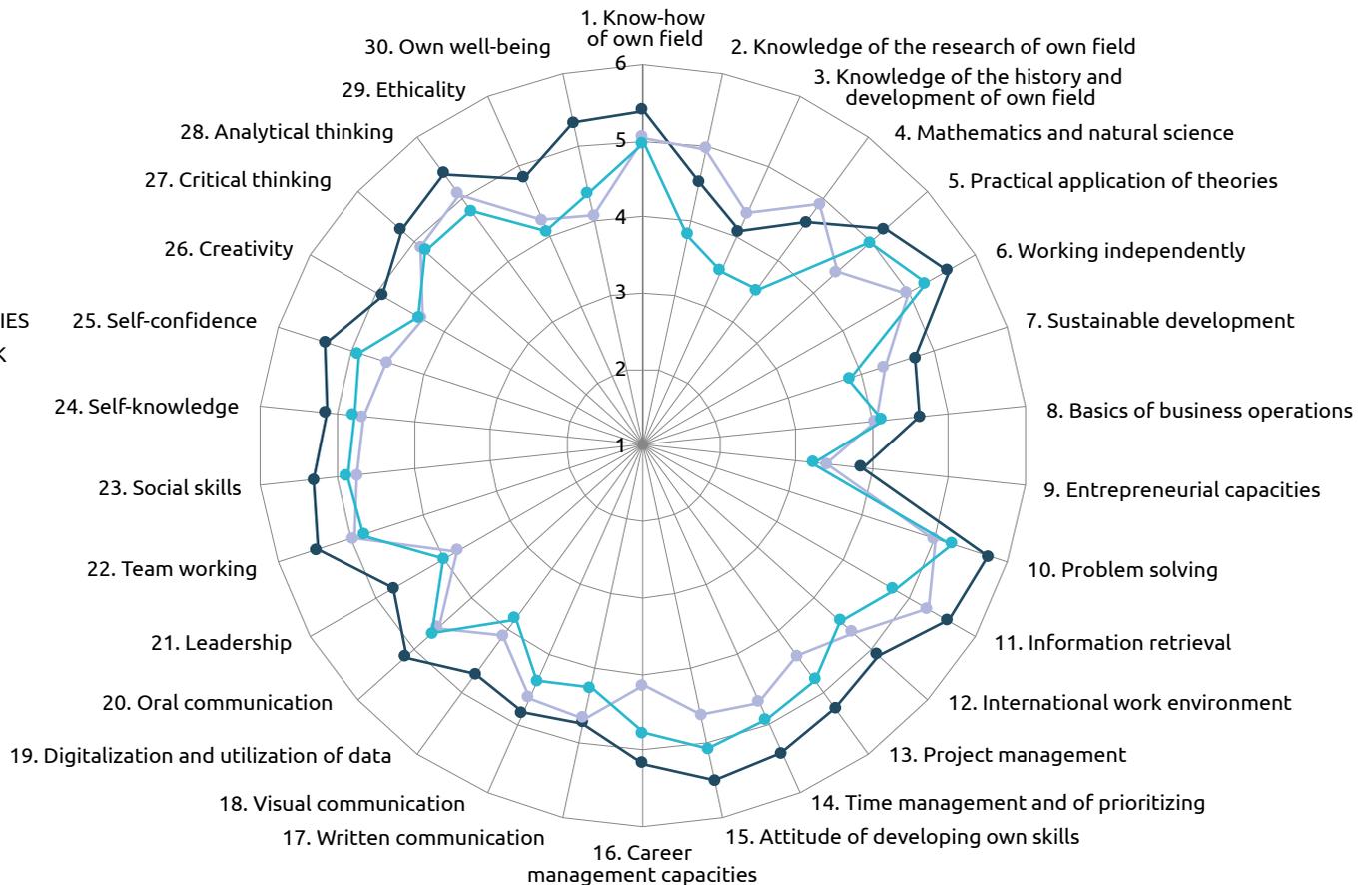
# Expertise and Skills

ALL, n= 1644

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SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

● IMPORTANCE  
 ● DEVELOPMENT IN STUDIES  
 ● DEVELOPMENT IN WORK



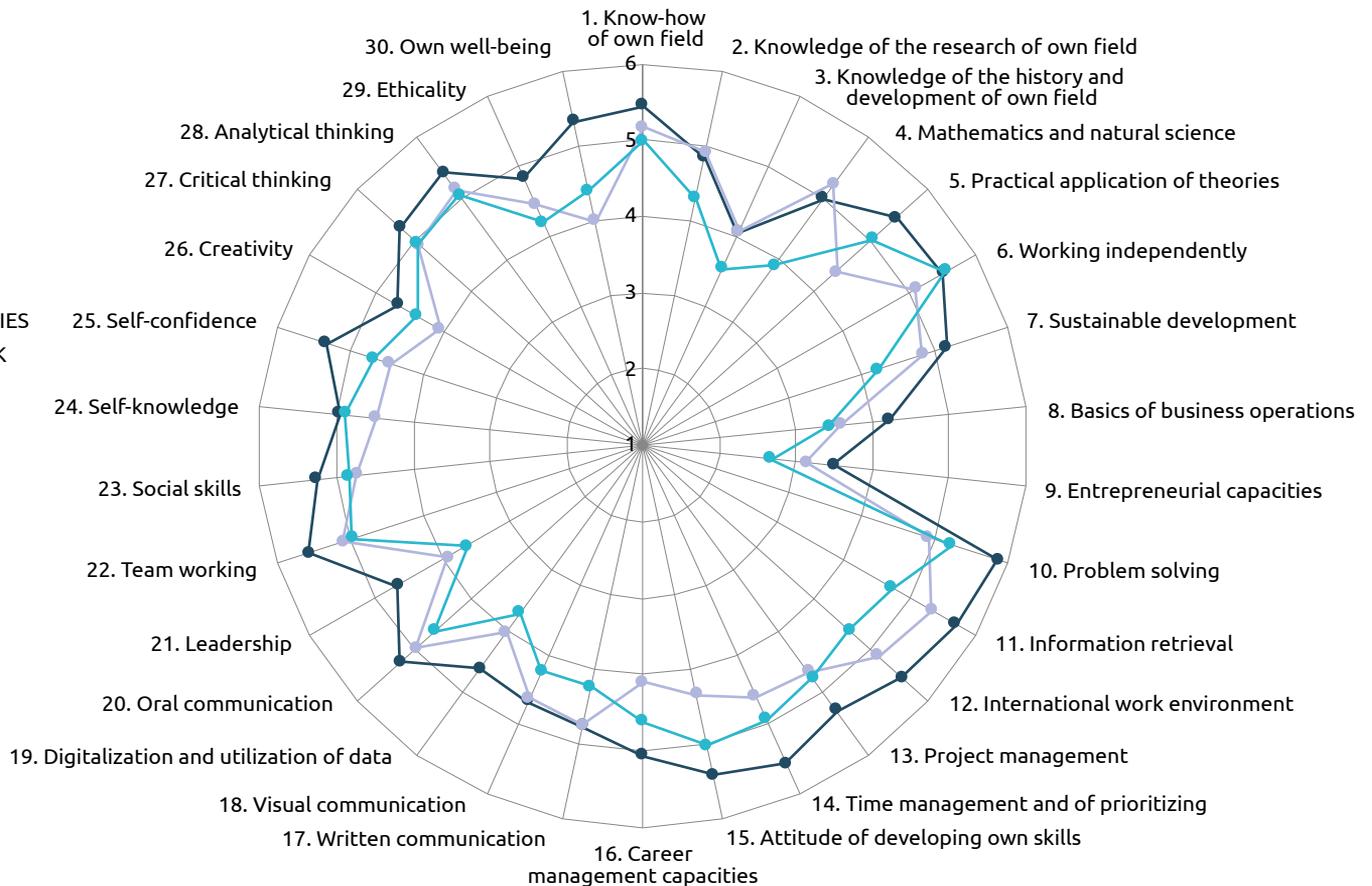
# Expertise and Skills

Aalto CHEM, n= 48

©TEK Graduate Survey 2021

SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

● IMPORTANCE  
 ● DEVELOPMENT IN STUDIES  
 ● DEVELOPMENT IN WORK



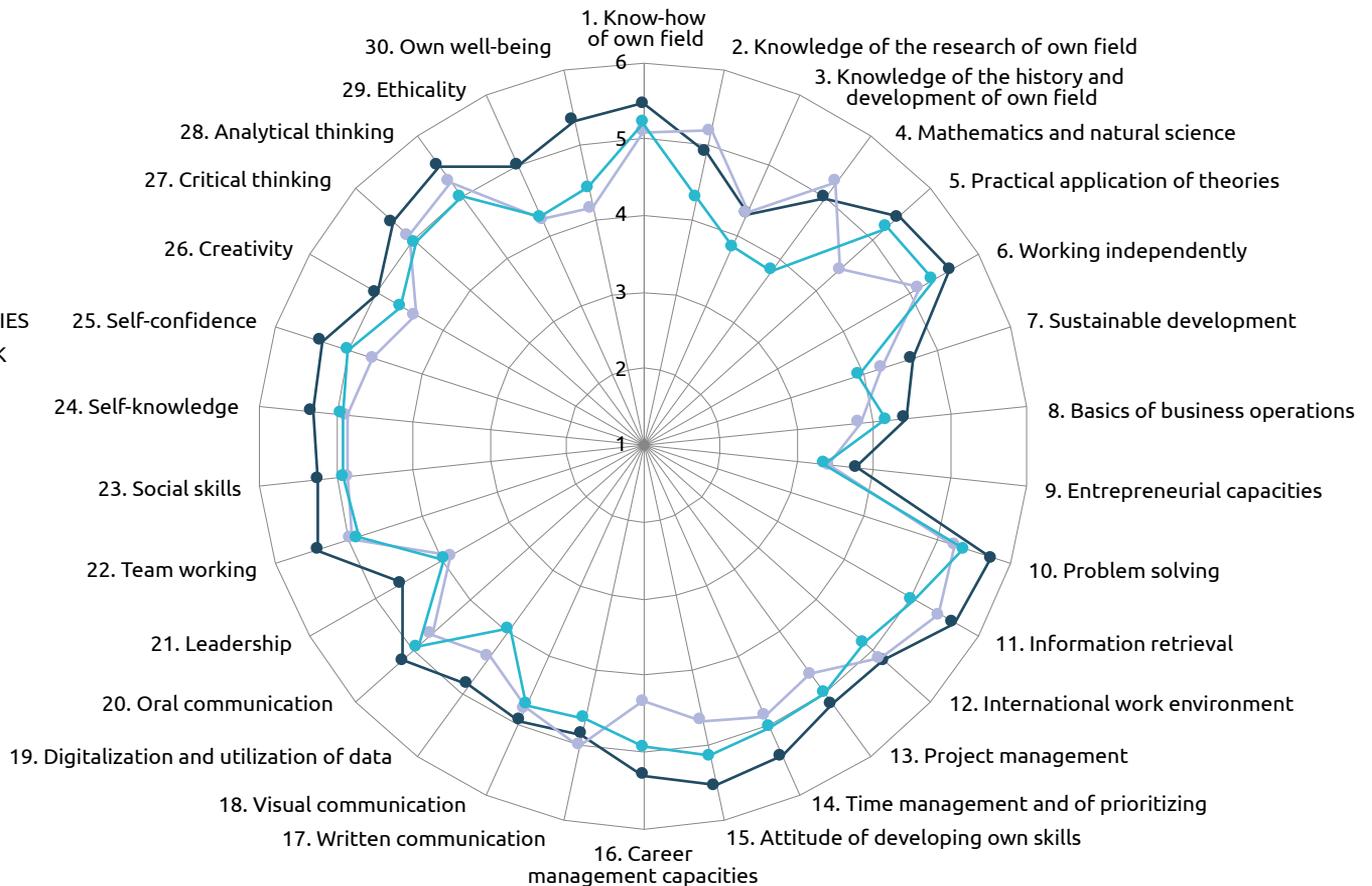
# Expertise and Skills

Aalto ELEC, n= 124

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SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

● IMPORTANCE  
 ● DEVELOPMENT IN STUDIES  
 ● DEVELOPMENT IN WORK



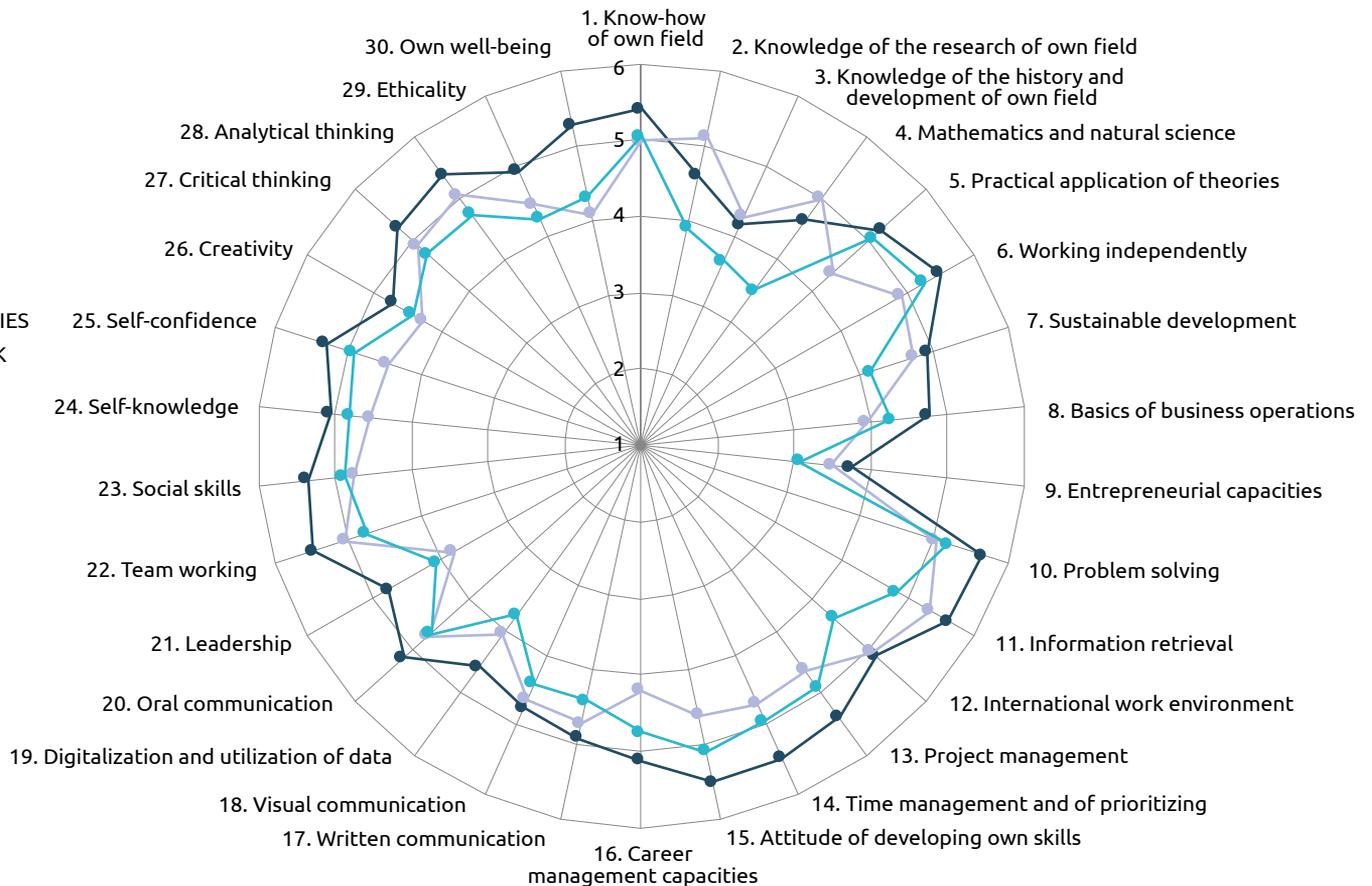
# Expertise and Skills

Aalto ENG, n= 193

©TEK Graduate Survey 2021

SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

● IMPORTANCE  
 ● DEVELOPMENT IN STUDIES  
 ● DEVELOPMENT IN WORK



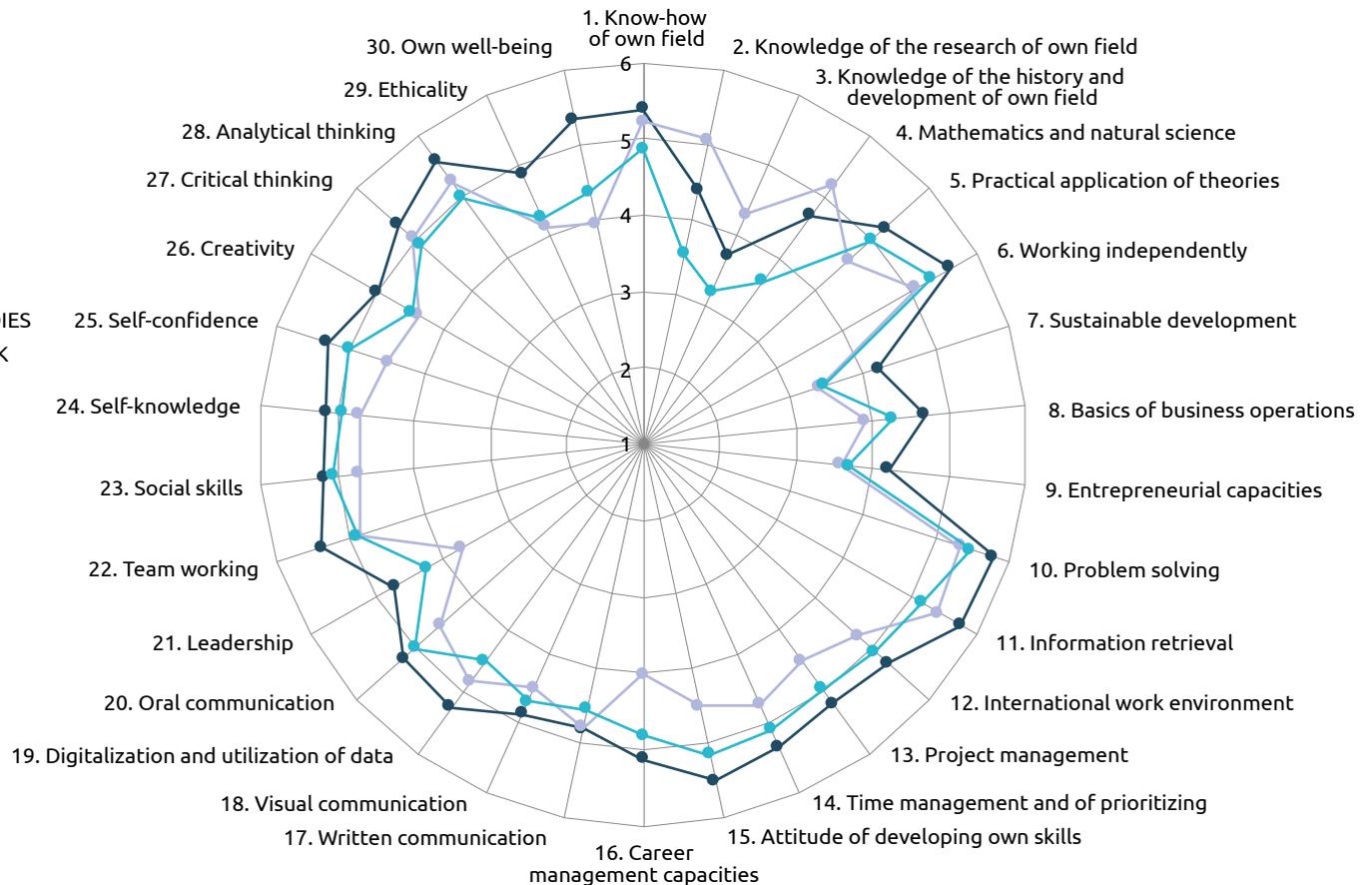
# Expertise and Skills

Aalto SCI, n= 175

©TEK Graduate Survey 2021

SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

● IMPORTANCE  
 ● DEVELOPMENT IN STUDIES  
 ● DEVELOPMENT IN WORK



# Expertise and Skills

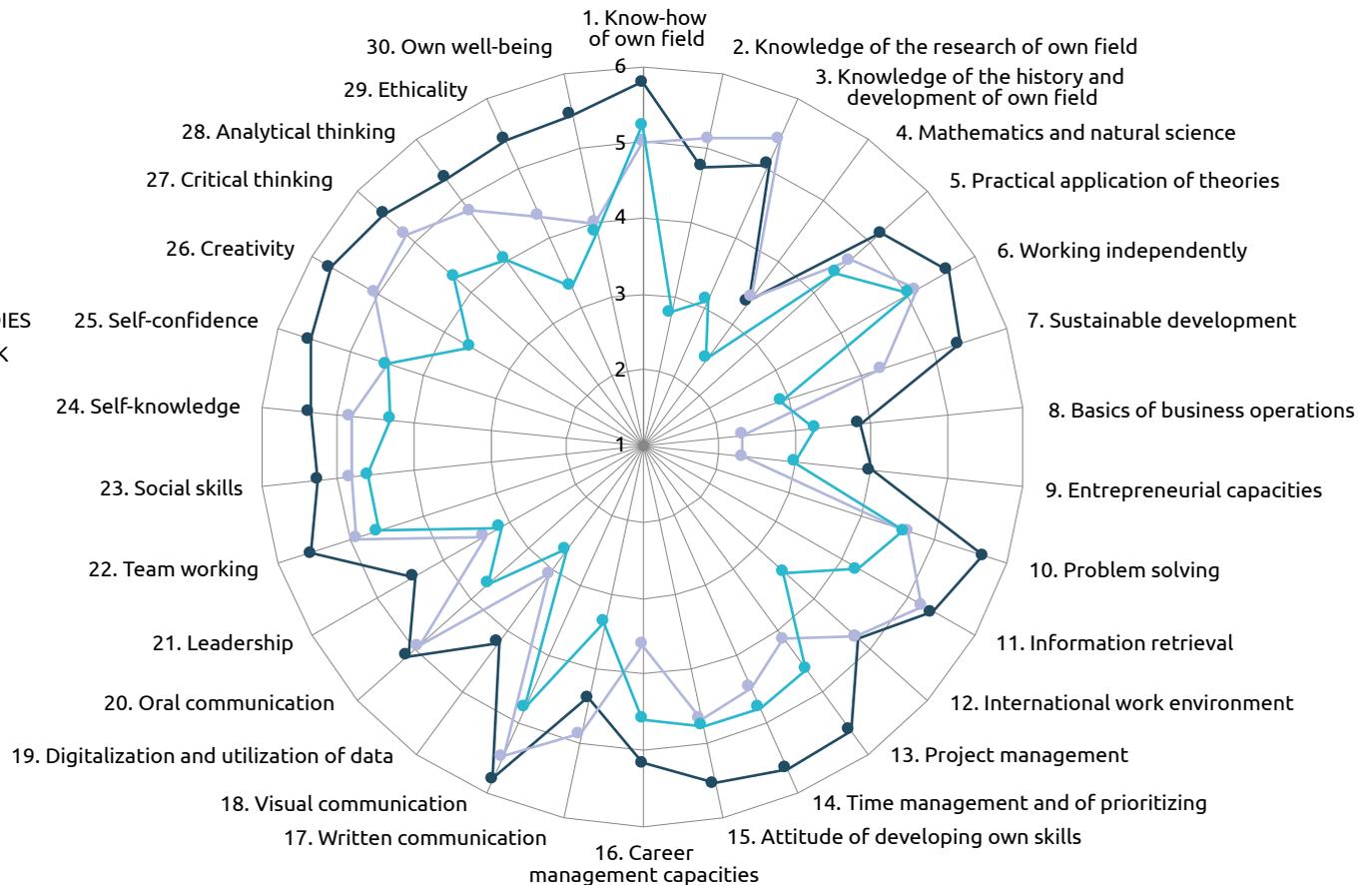
## Aalto ARTS, n= 32

©TEK Graduate Survey 2021

### SCALE

- 1 = Not at all (important)
- 2 = Very little
- 3 = Little
- 4 = Somewhat
- 5 = Much
- 6 = Very much
- (7 = Cannot answer)

- IMPORTANCE
- DEVELOPMENT IN STUDIES
- DEVELOPMENT IN WORK



# Expertise and Skills

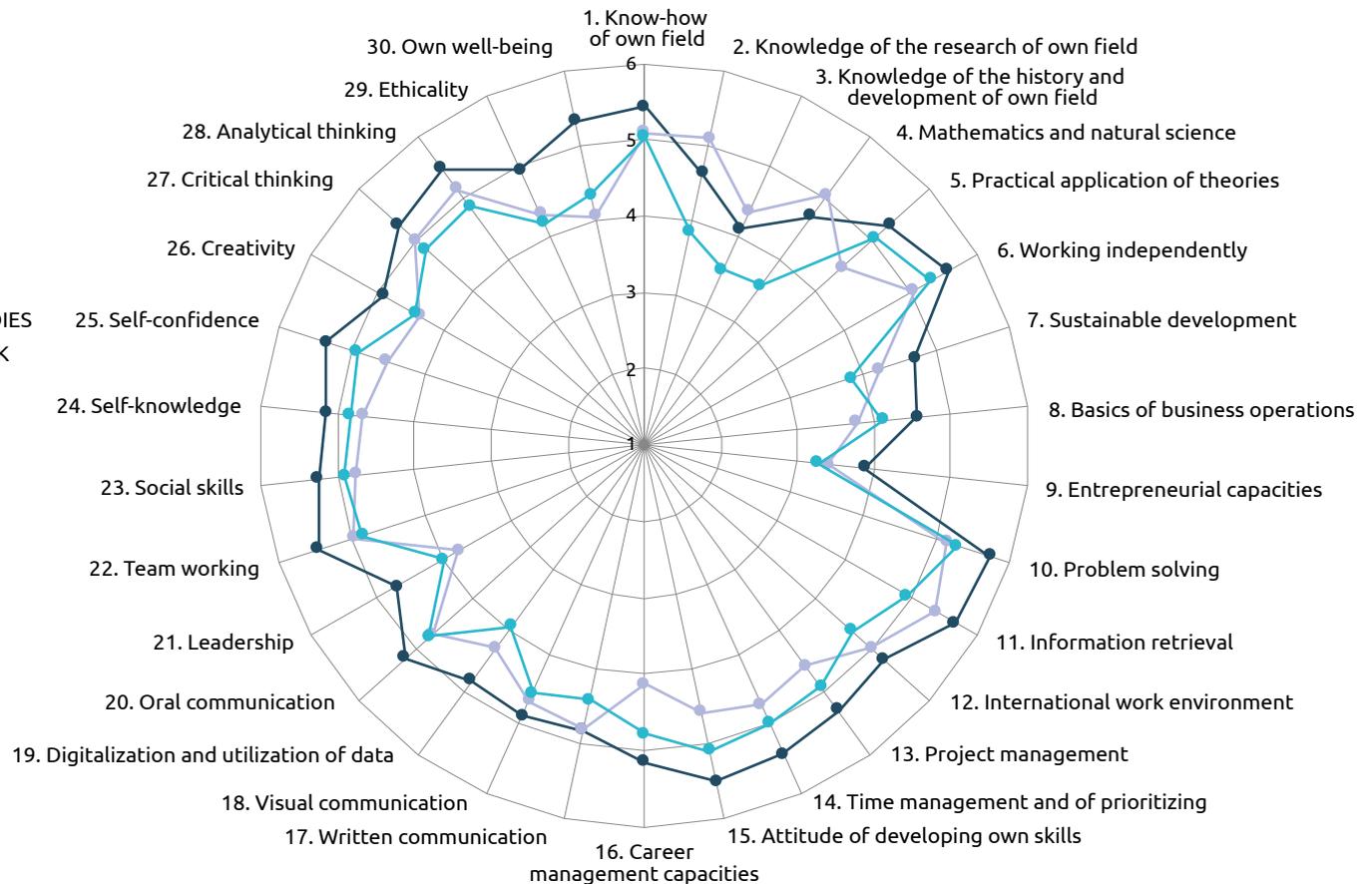
AALTO ALL, n= 572

©TEK Graduate Survey 2021

## SCALE

- 1 = Not at all (important)
- 2 = Very little
- 3 = Little
- 4 = Somewhat
- 5 = Much
- 6 = Very much
- (7 = Cannot answer)

- IMPORTANCE
- DEVELOPMENT IN STUDIES
- DEVELOPMENT IN WORK



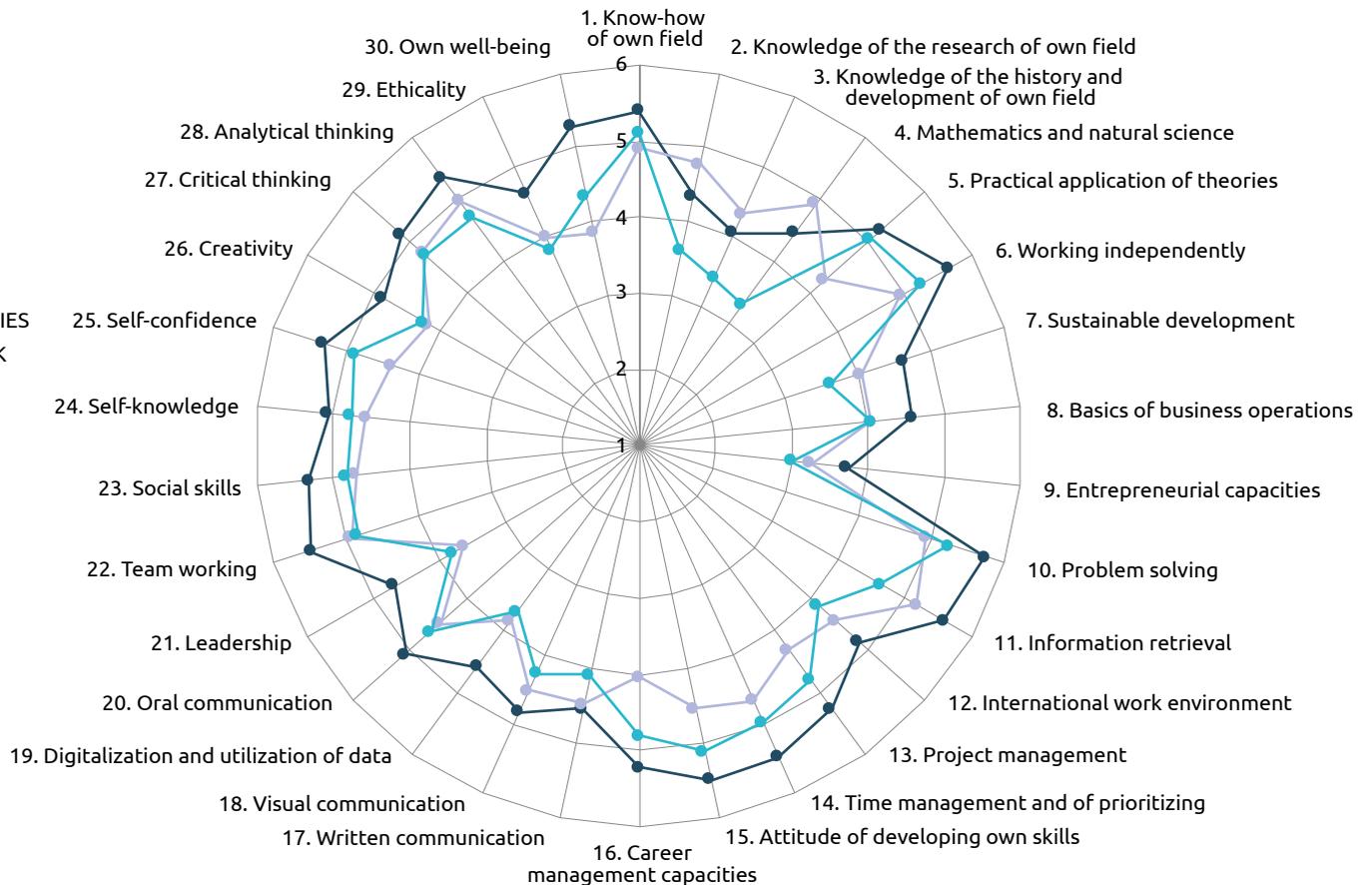
# Expertise and Skills

TAU, n= 434

©TEK Graduate Survey 2021

SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

● IMPORTANCE  
 ● DEVELOPMENT IN STUDIES  
 ● DEVELOPMENT IN WORK



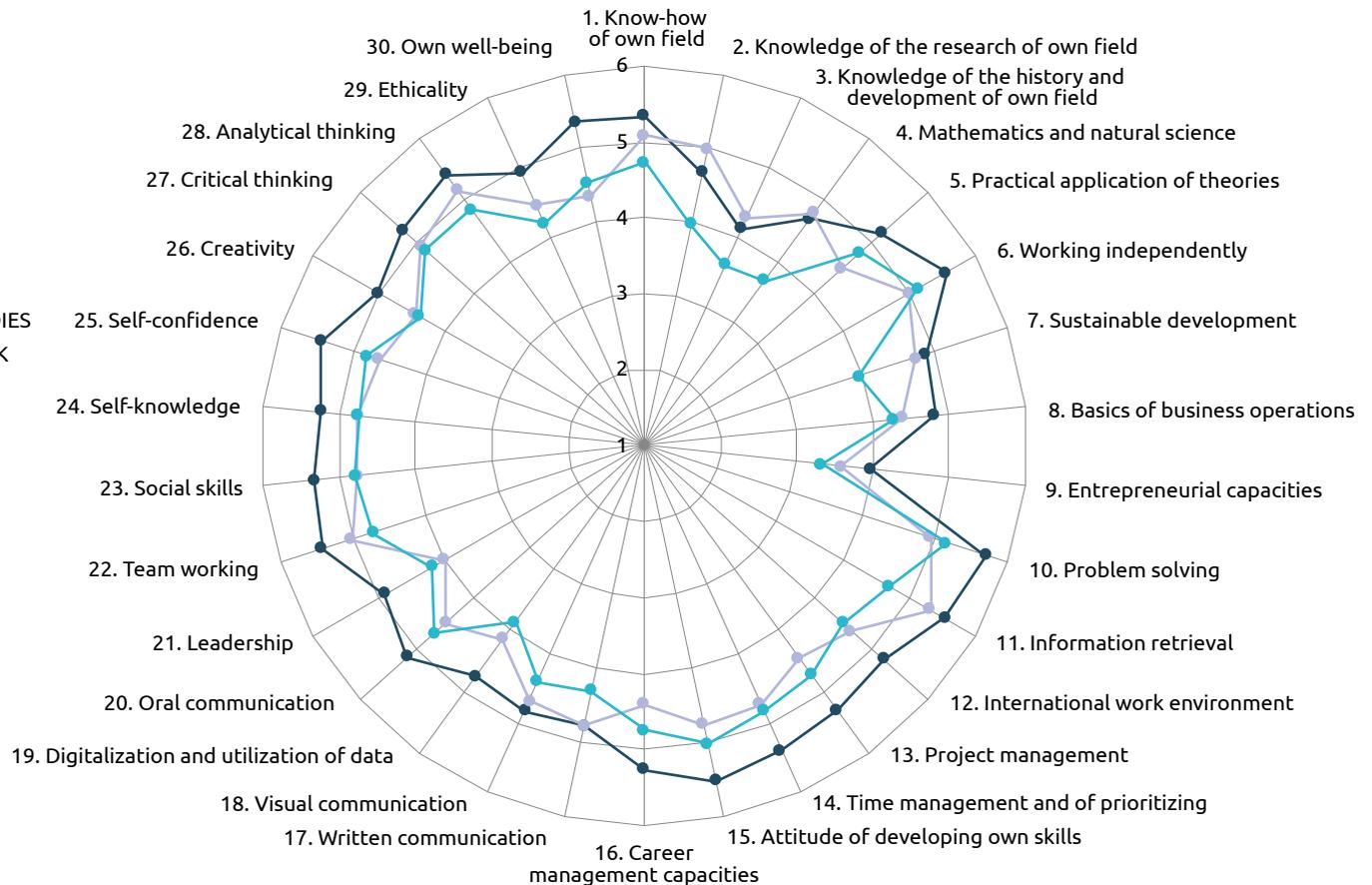
# Expertise and Skills

LUT, n= 440

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SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

● IMPORTANCE  
 ● DEVELOPMENT IN STUDIES  
 ● DEVELOPMENT IN WORK



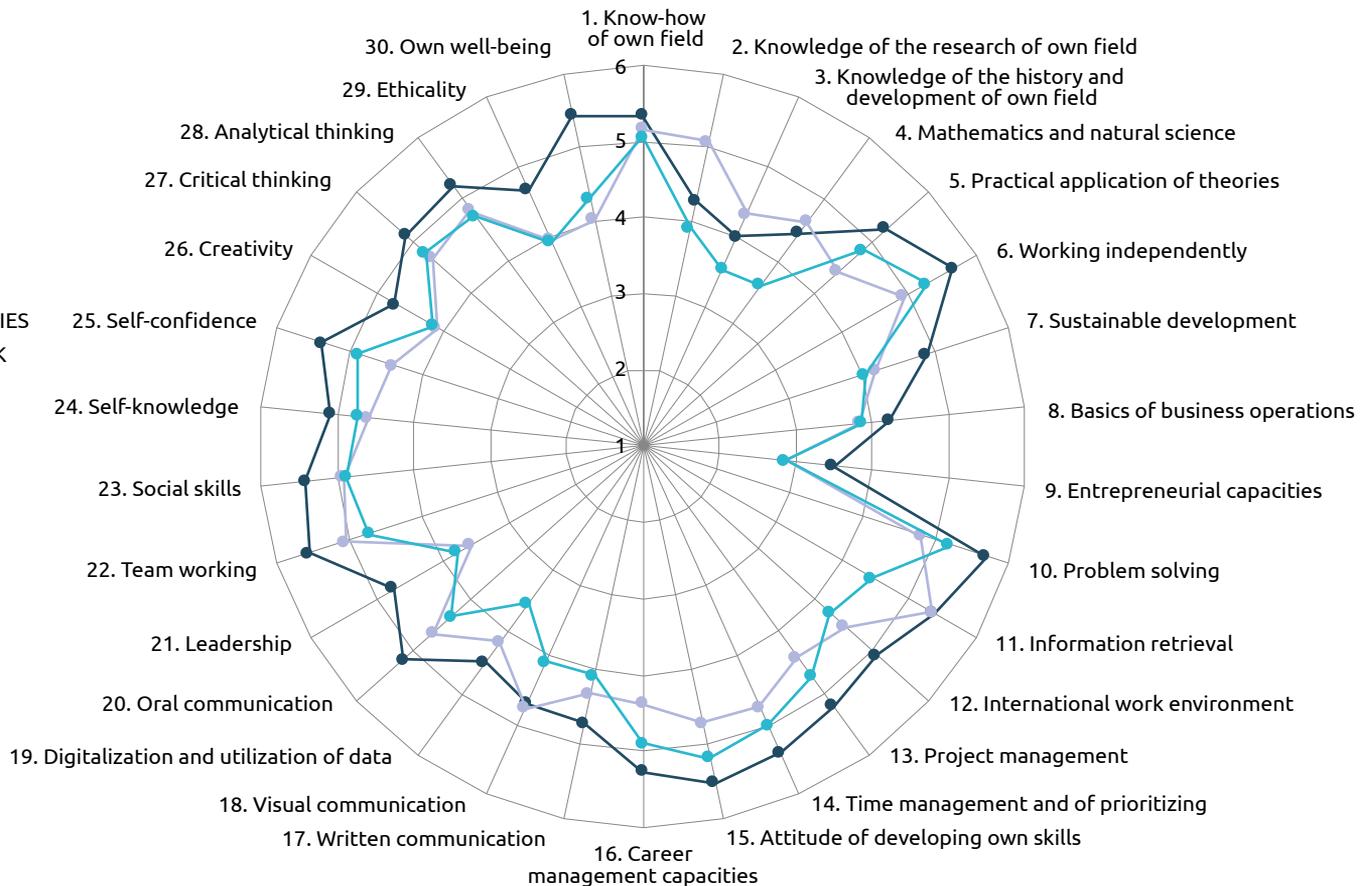
# Expertise and Skills

UO, n= 61

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SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

● IMPORTANCE  
 ● DEVELOPMENT IN STUDIES  
 ● DEVELOPMENT IN WORK



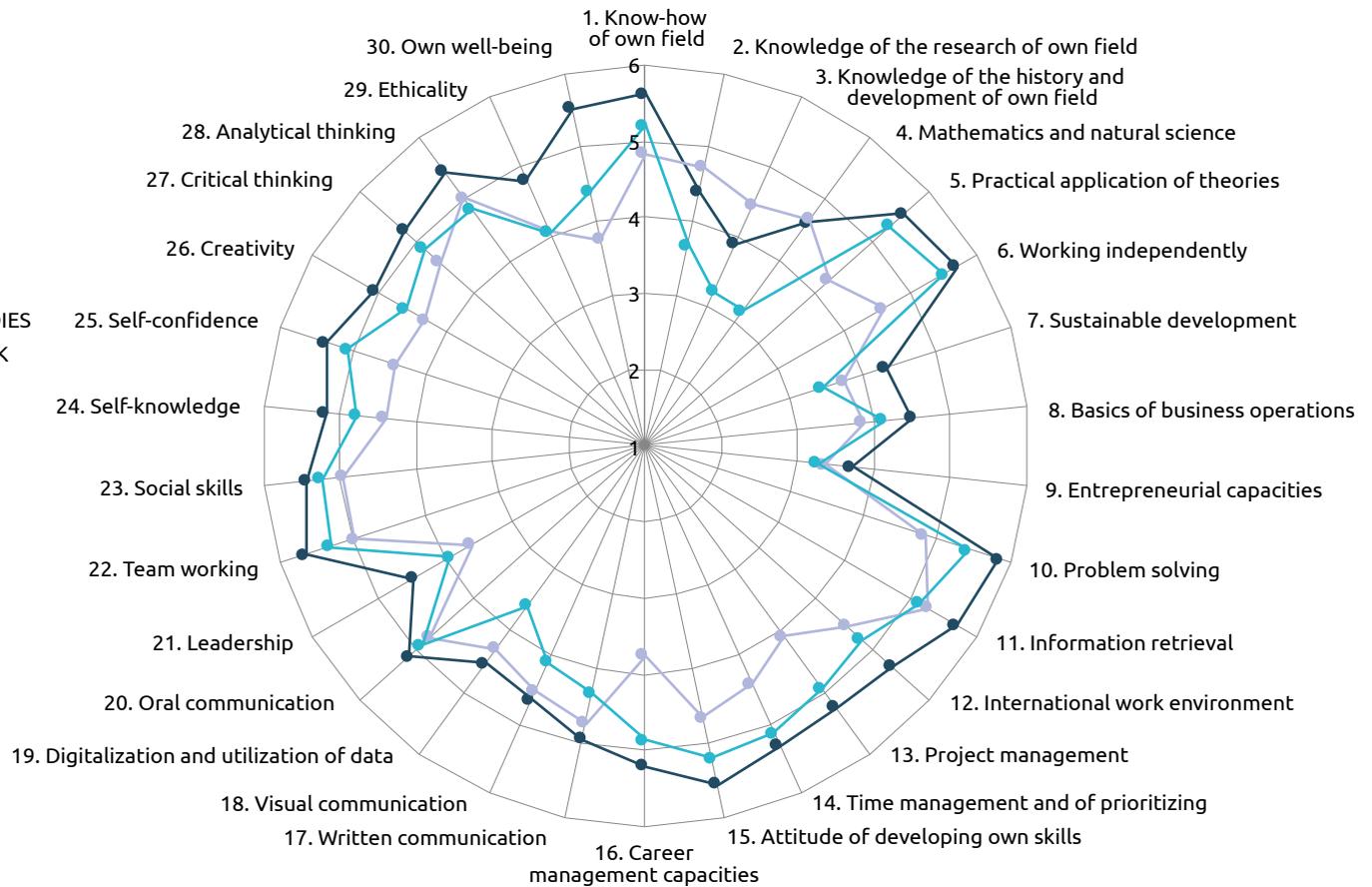
# Expertise and Skills

UTU, n= 47

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SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

● IMPORTANCE  
 ● DEVELOPMENT IN STUDIES  
 ● DEVELOPMENT IN WORK



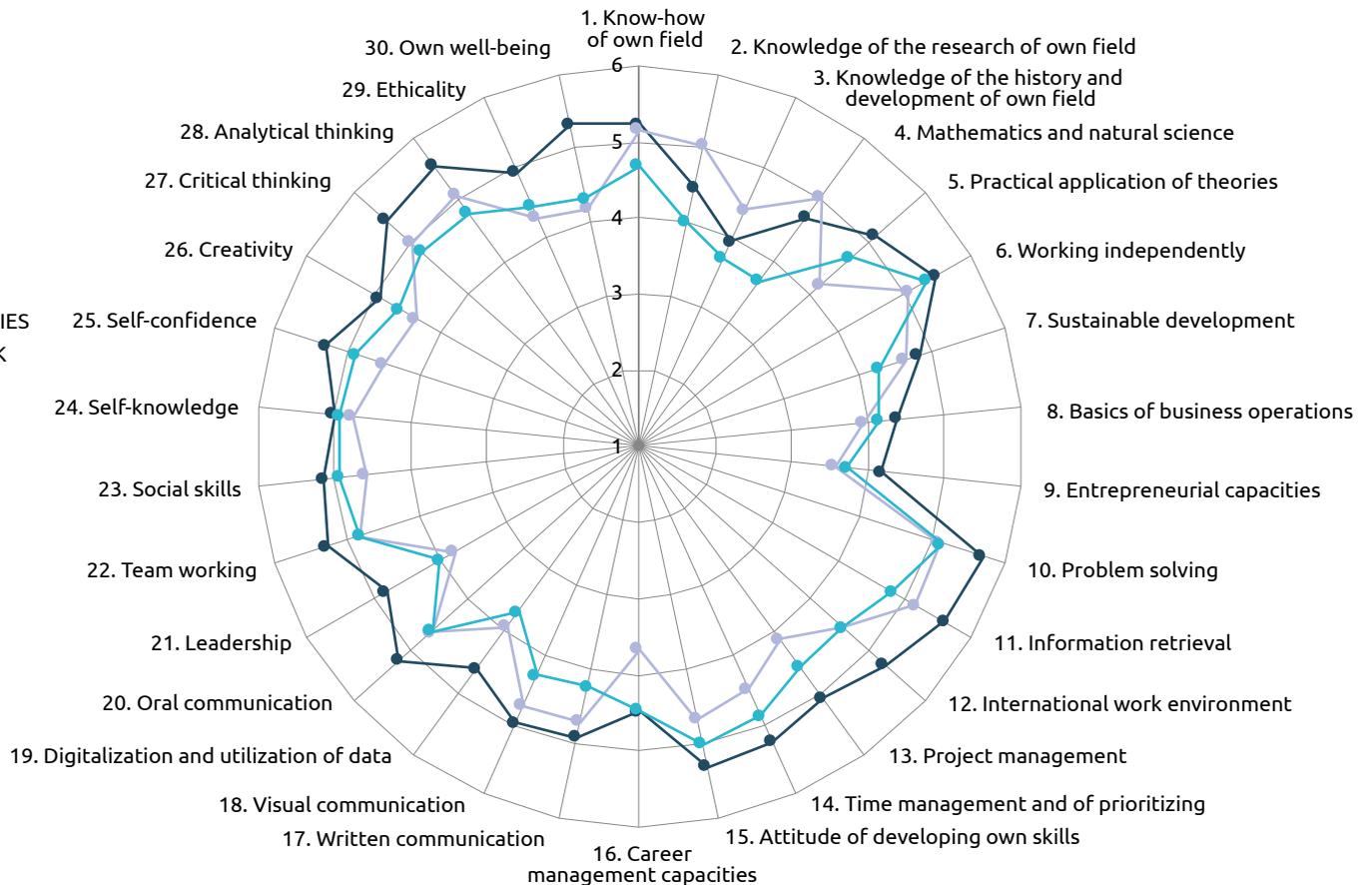
# Expertise and Skills

ÅAU, n= 65

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SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

● IMPORTANCE  
 ● DEVELOPMENT IN STUDIES  
 ● DEVELOPMENT IN WORK



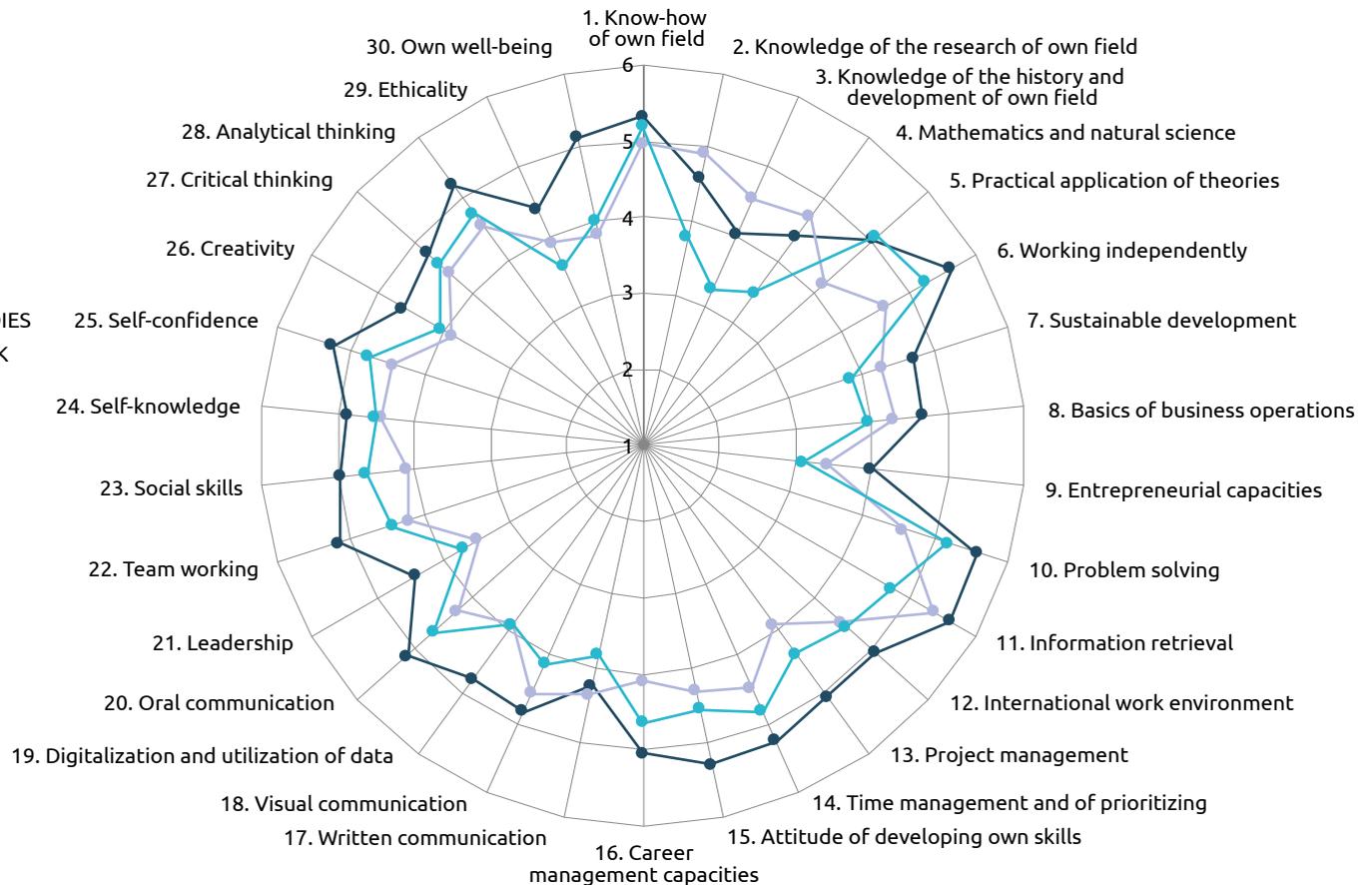
# Expertise and Skills

UV, n= 25

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SCALE  
 1 = Not at all (important)  
 2 = Very little  
 3 = Little  
 4 = Somewhat  
 5 = Much  
 6 = Very much  
 (7 = Cannot answer)

● IMPORTANCE  
 ● DEVELOPMENT IN STUDIES  
 ● DEVELOPMENT IN WORK





# 4. Support and counseling

Level of support and counseling

Finding information

Information on job market and career planning

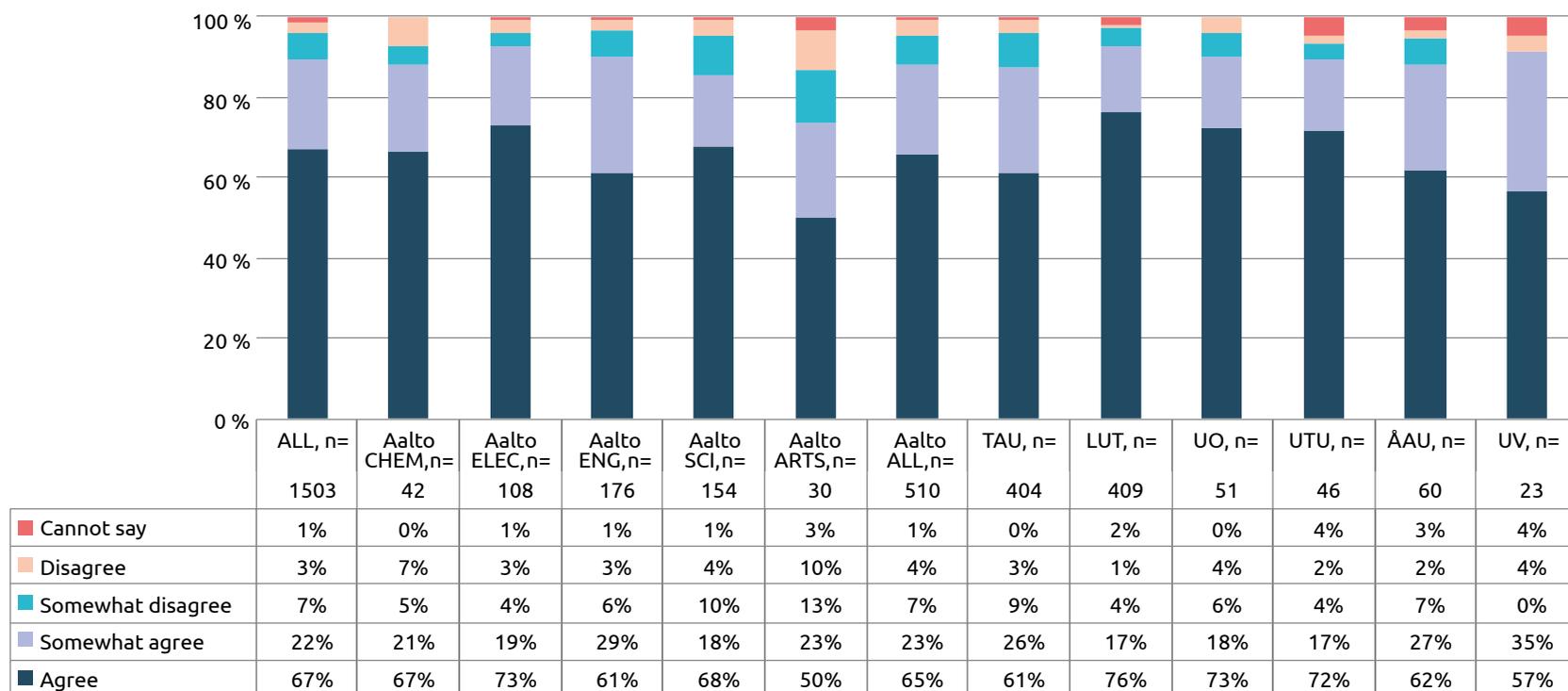
Learning environment



# Level of support and counseling

I have felt comfortable at my university.

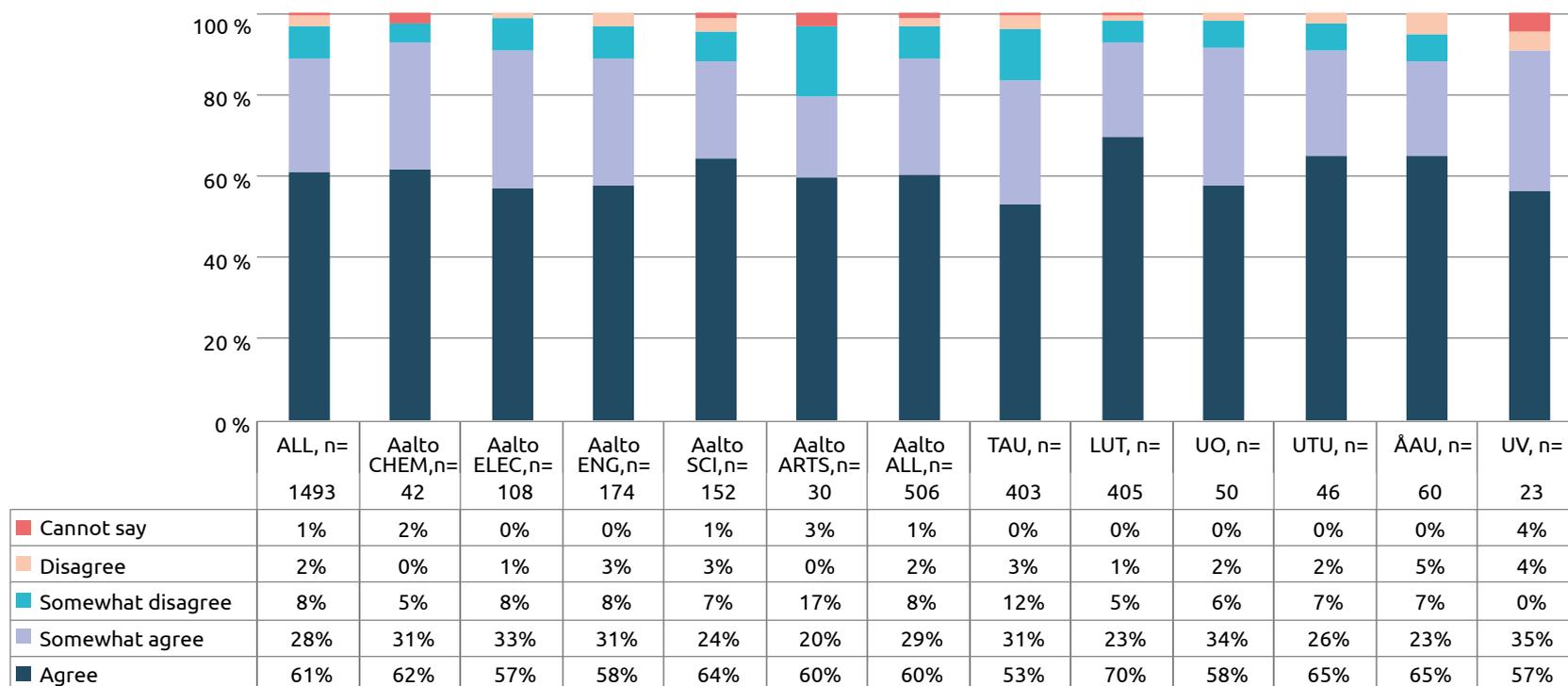
©TEK Graduate Survey 2021



# Level of support and counseling

I am satisfied with my studies.

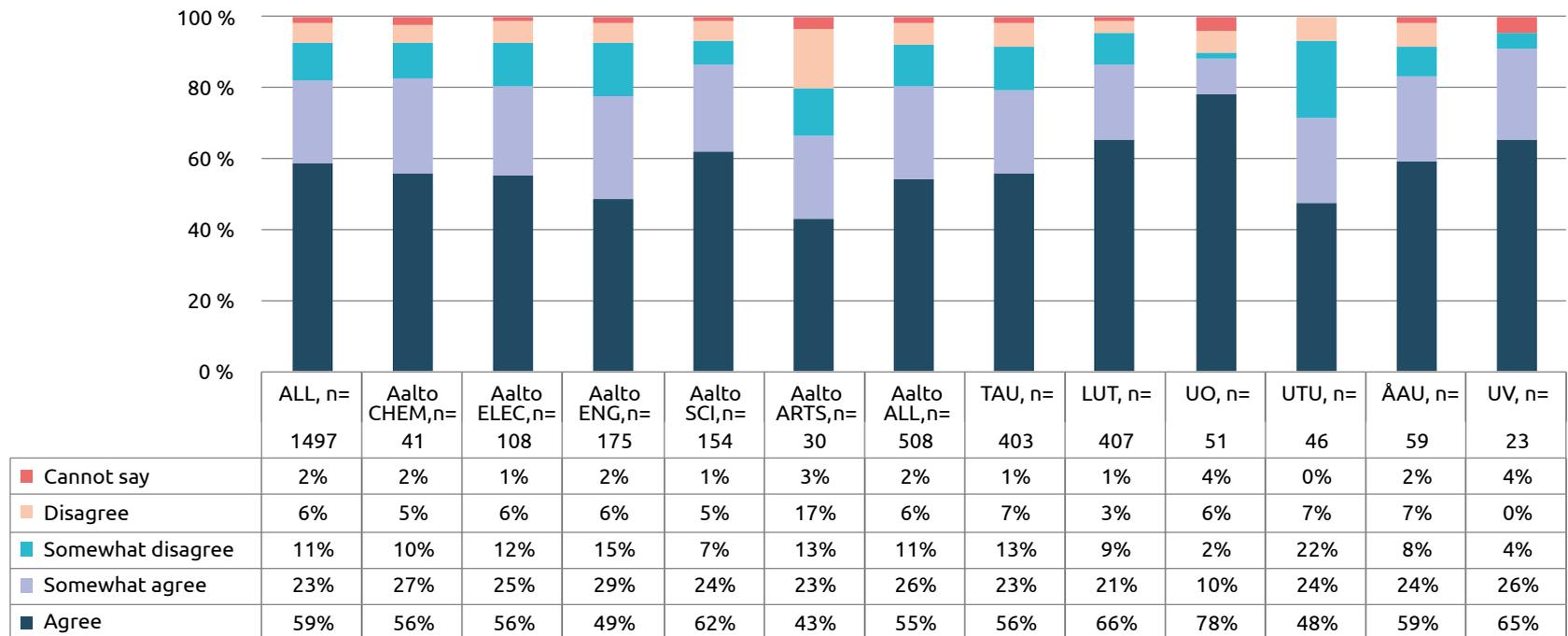
©TEK Graduate Survey 2021



# Level of support and counseling

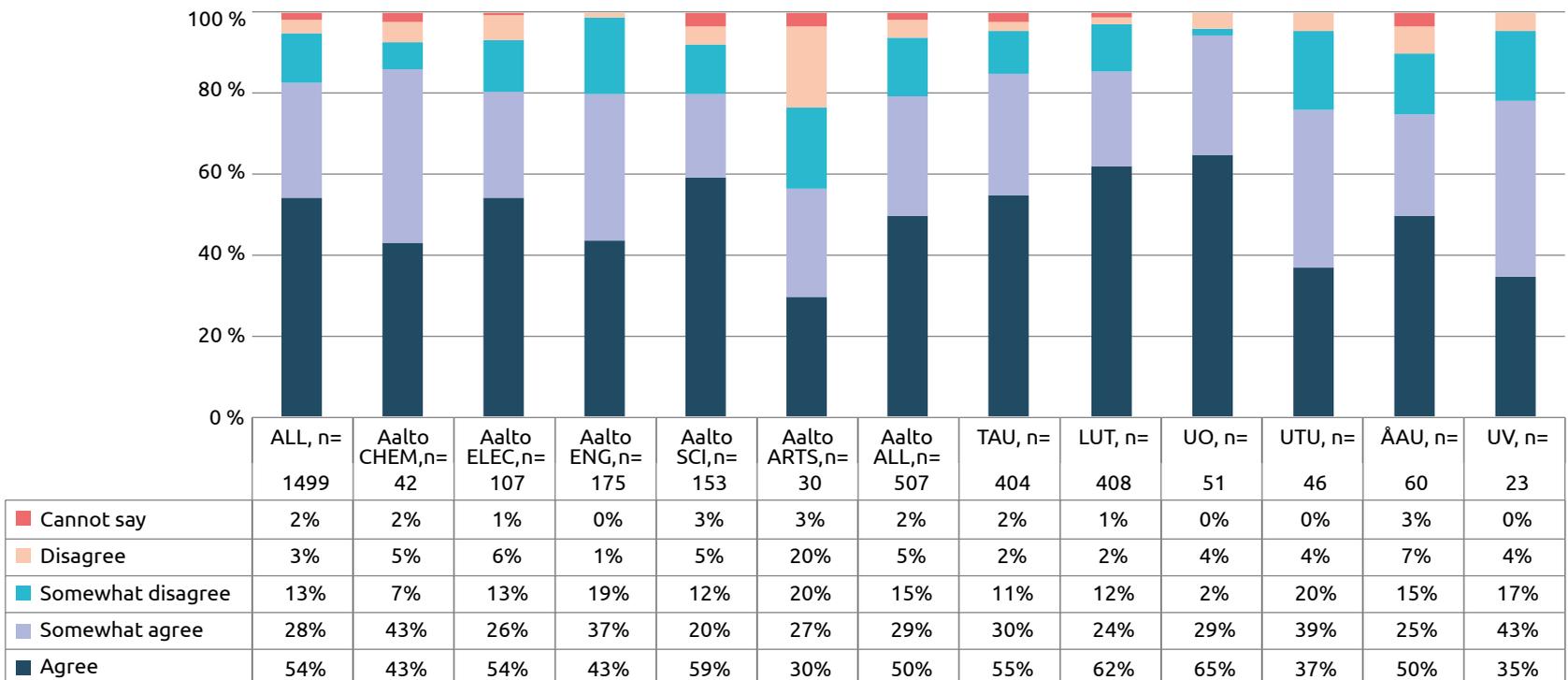
There has been sufficient guidance available for the preparation of my Master's thesis.

©TEK Graduate Survey 2021



# Level of support and counseling

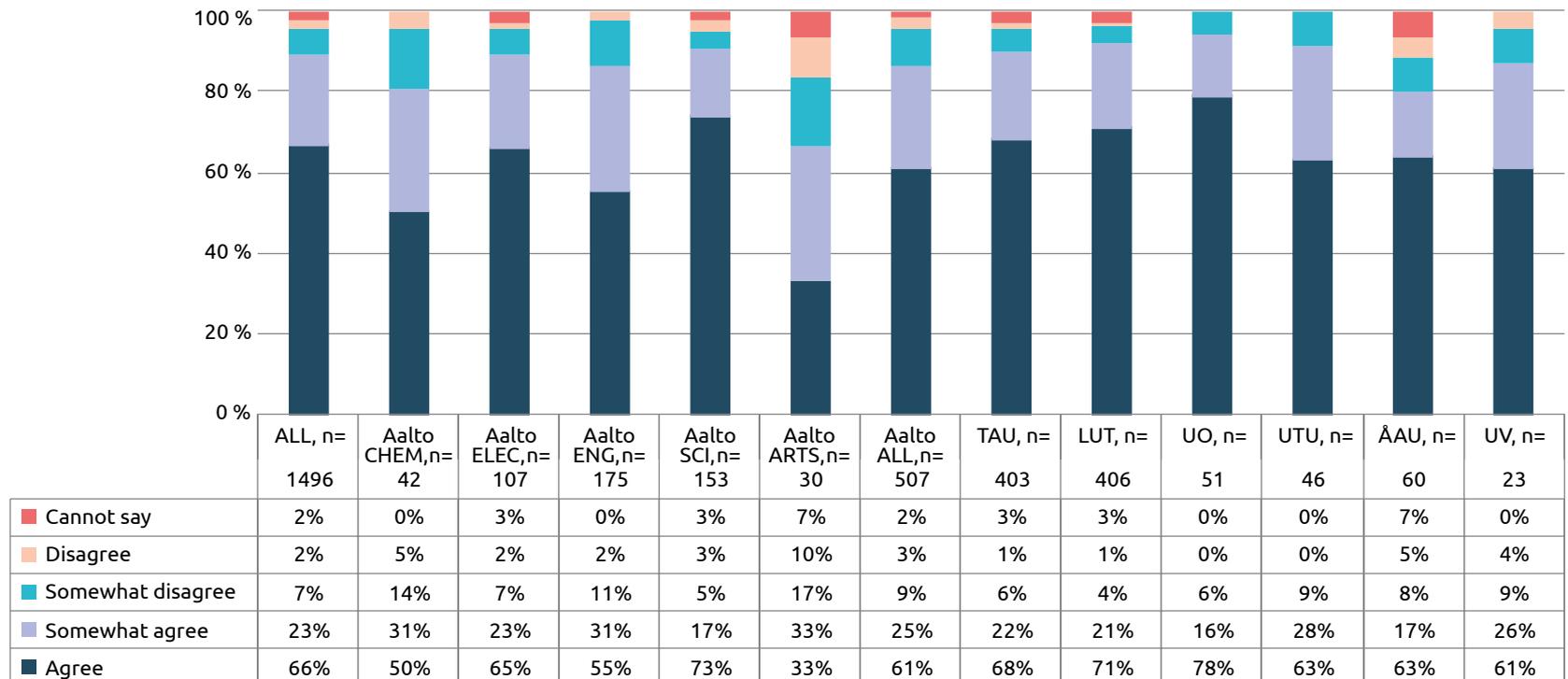
There has been sufficient guidance available for the organisation of my studies. ©TEK Graduate Survey 2021



# Level of support and counseling

When needed, I have found a person whom to ask for help.

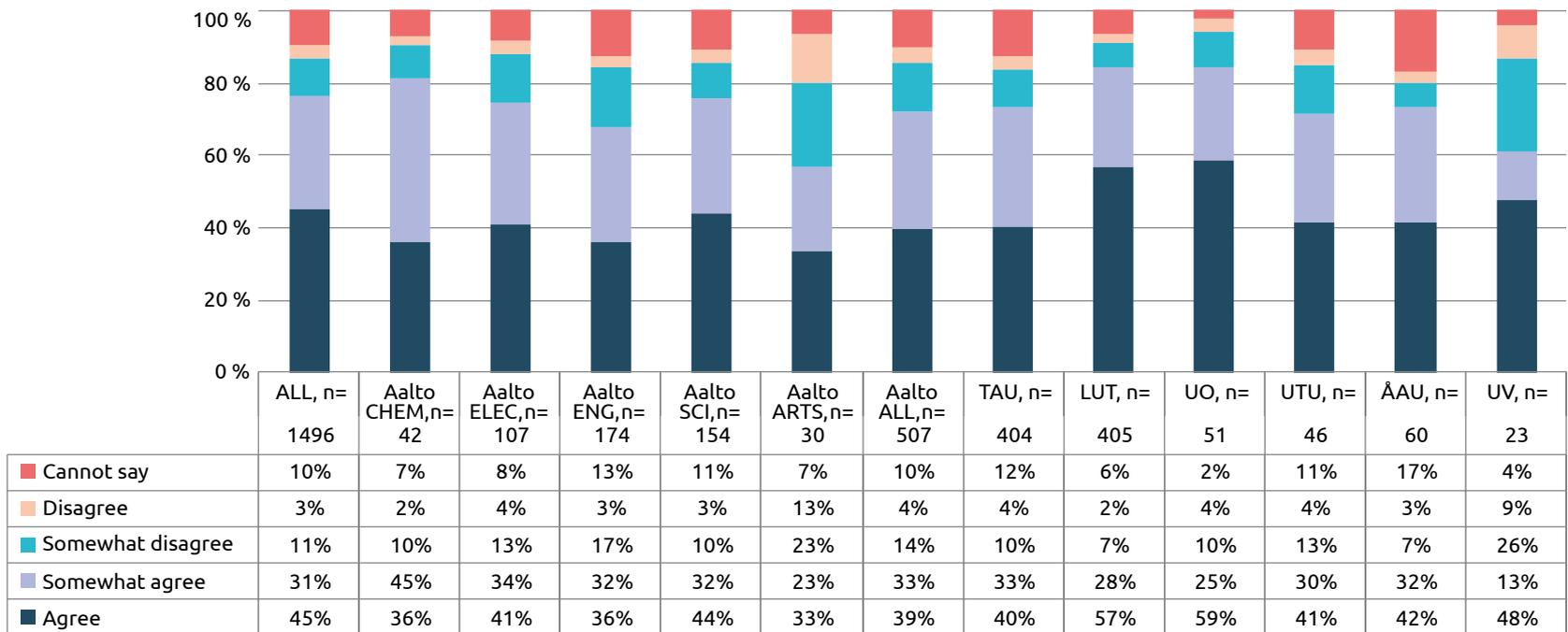
©TEK Graduate Survey 2021



# Level of support and counseling

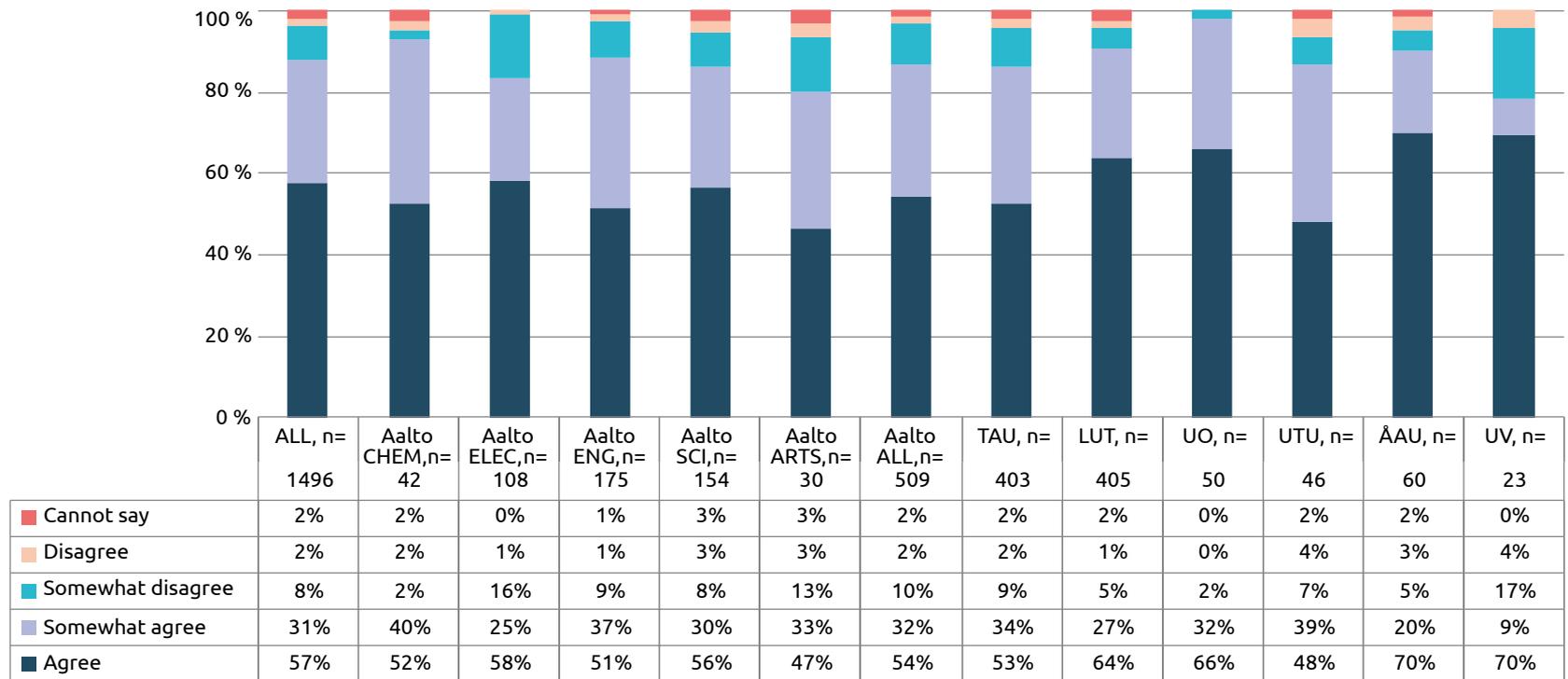
I have been satisfied with the opportunities I had to influence and participate in my study programme (e.g. planning, feedback).

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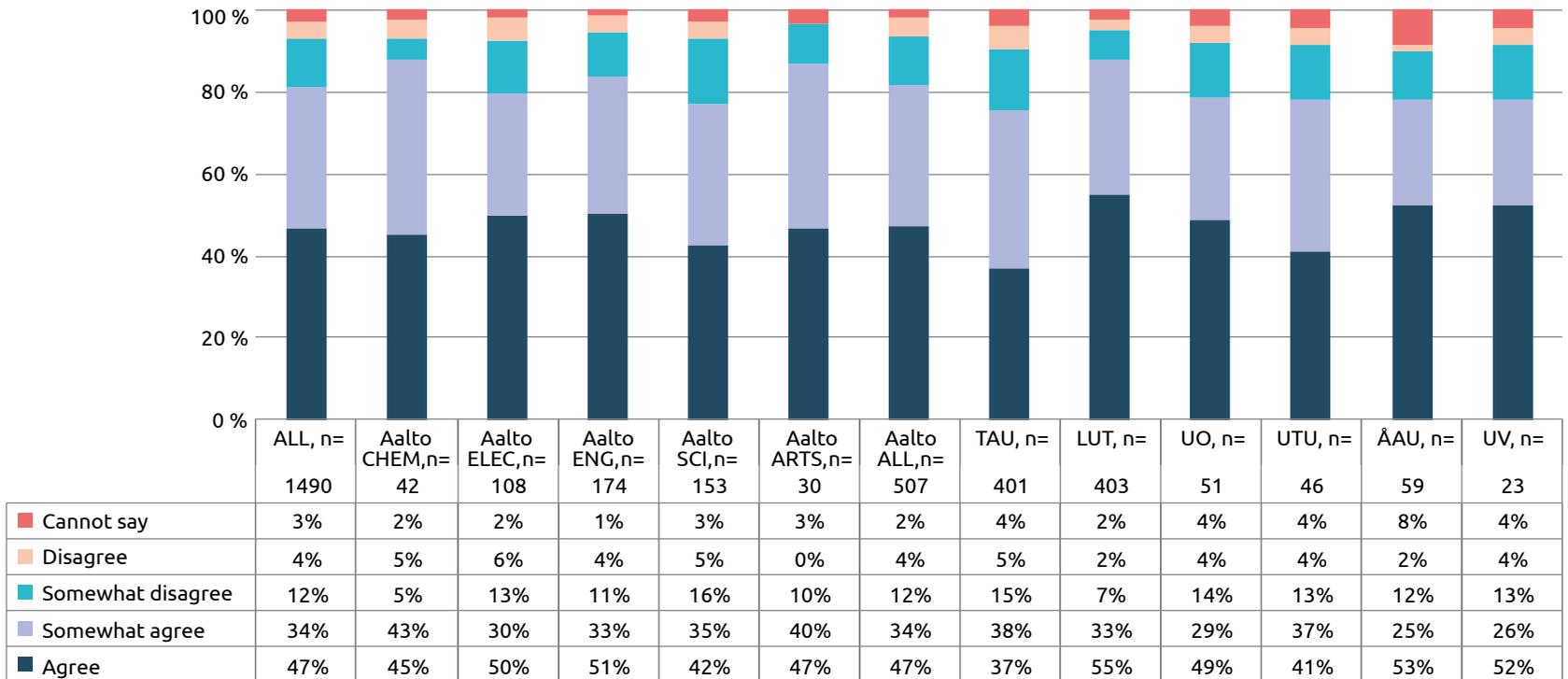
# Level of support and counseling

I have been satisfied with the communication I have had with the teaching staff. ©TEK Graduate Survey 2021



# Level of support and counseling

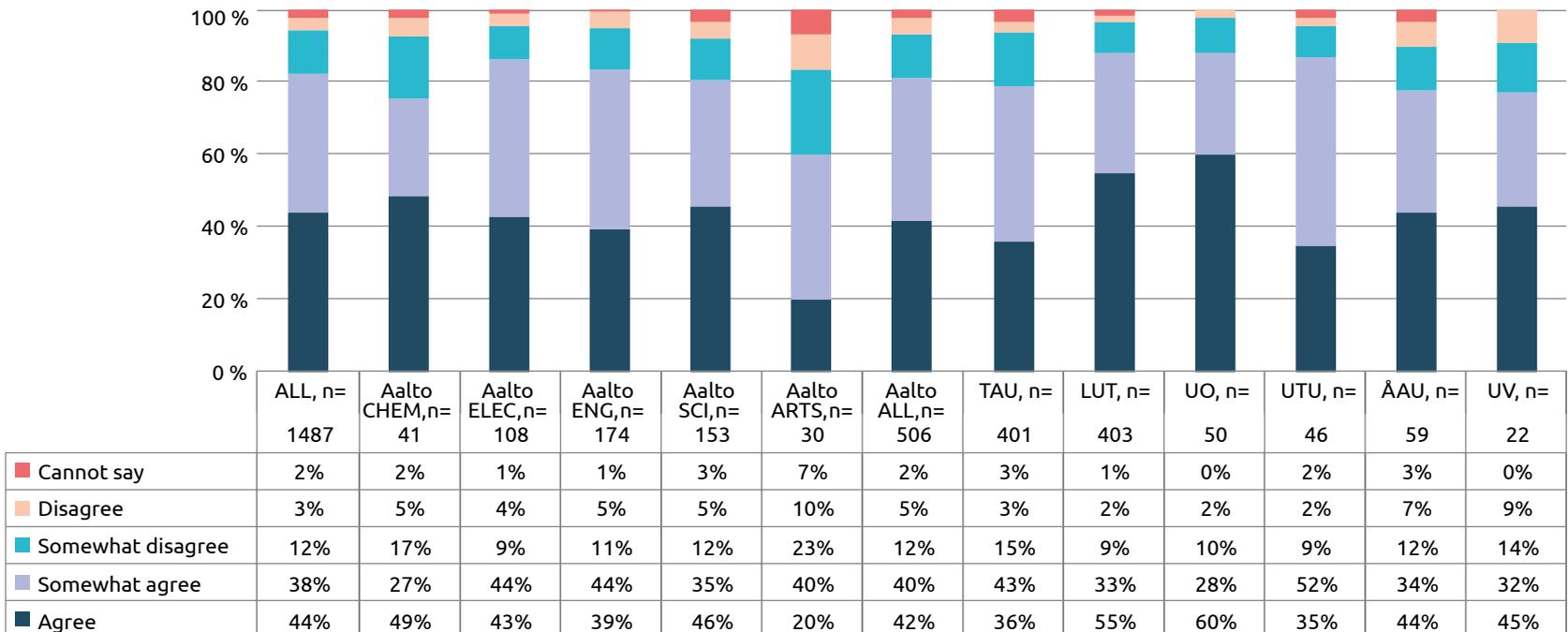
The feedback I received from the teaching staff has helped me with my studies. ©TEK Graduate Survey 2021



# Finding information and support

It has been easy for me to find information and support regarding different aspects of my studies.

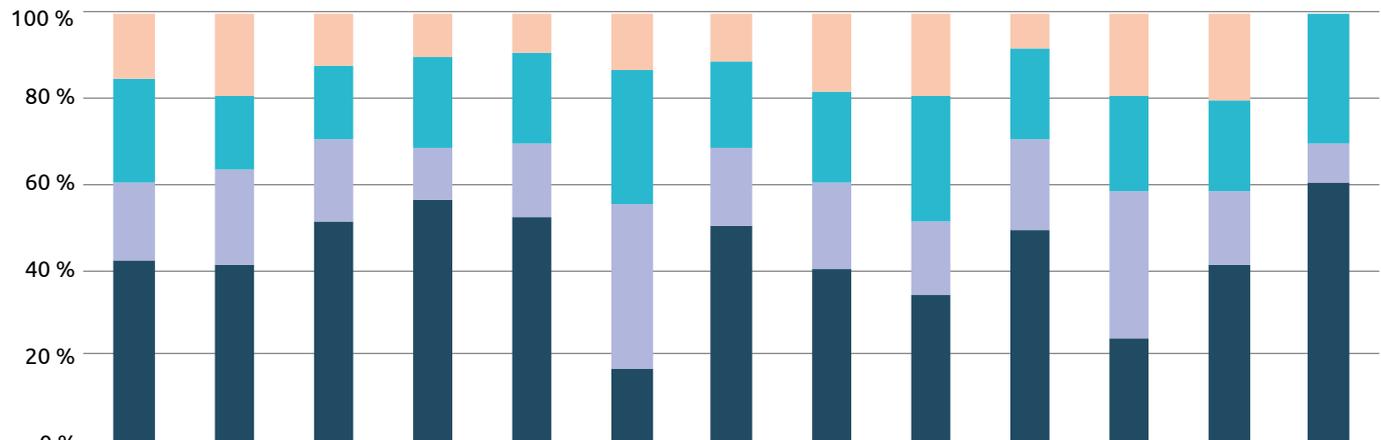
©TEK Graduate Survey 2021



# Information on job market and career planning

## Information on job market and career planning

©TEK Graduate Survey 2021

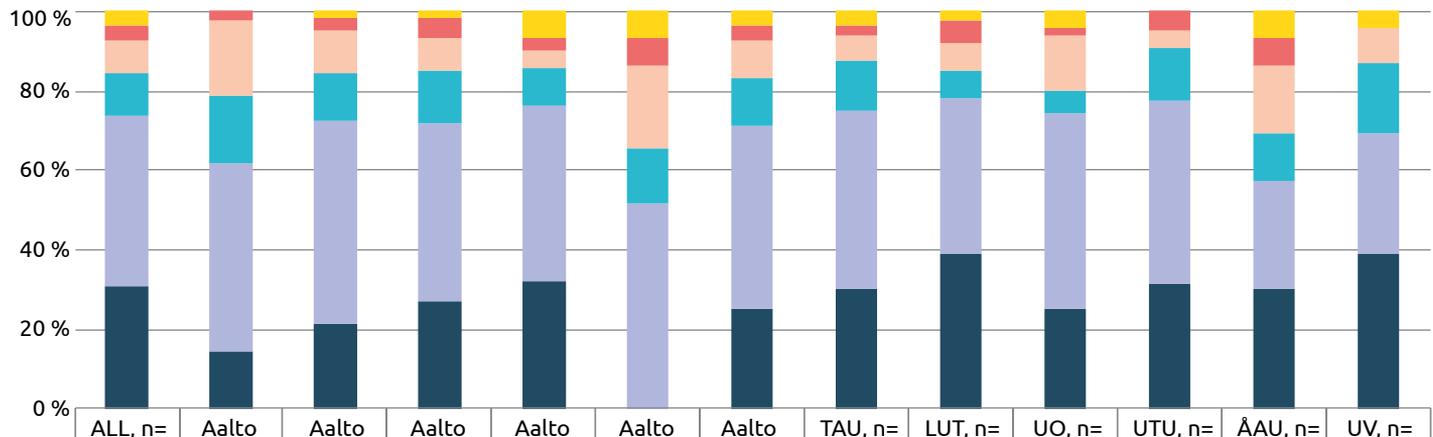


	ALL, n=1485	Aalto CHEM, n=41	Aalto ELEC, n=107	Aalto ENG, n=170	Aalto SCI, n=155	Aalto ARTS, n=29	Aalto ALL, n=502	TAU, n=403	LUT, n=407	UO, n=51	UTU, n=41	ÅAU, n=58	UV, n=23
Cannot say	15%	20%	12%	11%	9%	14%	11%	18%	19%	8%	20%	21%	0%
I did not need such information	24%	17%	18%	21%	21%	31%	21%	21%	30%	22%	22%	21%	30%
No, I didn't - What kind of information / support would you have needed the most?	19%	22%	19%	13%	17%	38%	18%	21%	17%	22%	34%	17%	9%
Yes, I did	42%	41%	51%	56%	52%	17%	50%	40%	34%	49%	24%	41%	61%

# Learning environment

Electronic learning environments have supported my learning well.

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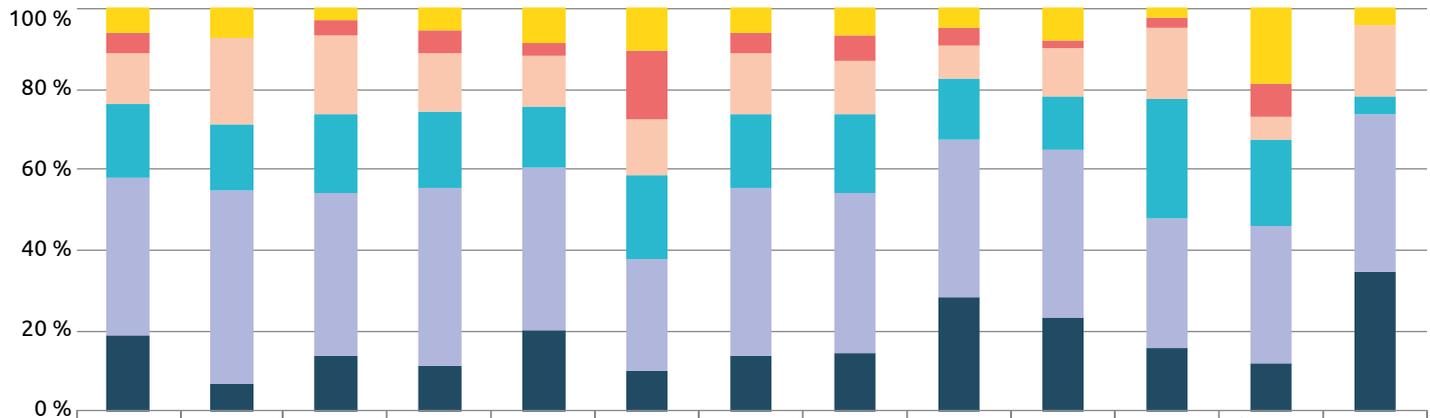


	ALL, n=1493	Aalto CHEM, n=42	Aalto ELEC, n=108	Aalto ENG, n=173	Aalto SCI, n=154	Aalto ARTS, n=29	Aalto ALL, n=506	TAU, n=406	LUT, n=404	UO, n=51	UTU, n=44	ÅAU, n=59	UV, n=23
Cannot say	3%	0%	2%	2%	6%	7%	3%	3%	2%	4%	0%	7%	4%
I fully disagree	4%	2%	3%	5%	3%	7%	4%	2%	5%	2%	5%	7%	0%
I somewhat disagree	8%	19%	11%	9%	5%	21%	9%	6%	7%	14%	5%	17%	9%
I do not agree or disagree	11%	17%	12%	13%	9%	14%	12%	13%	6%	6%	14%	12%	17%
I somewhat agree	43%	48%	51%	45%	44%	52%	46%	45%	39%	49%	45%	27%	30%
I completely agree	31%	14%	21%	27%	32%	0%	25%	30%	39%	25%	32%	31%	39%

# Learning environment

Student information systems have supported my learning well.

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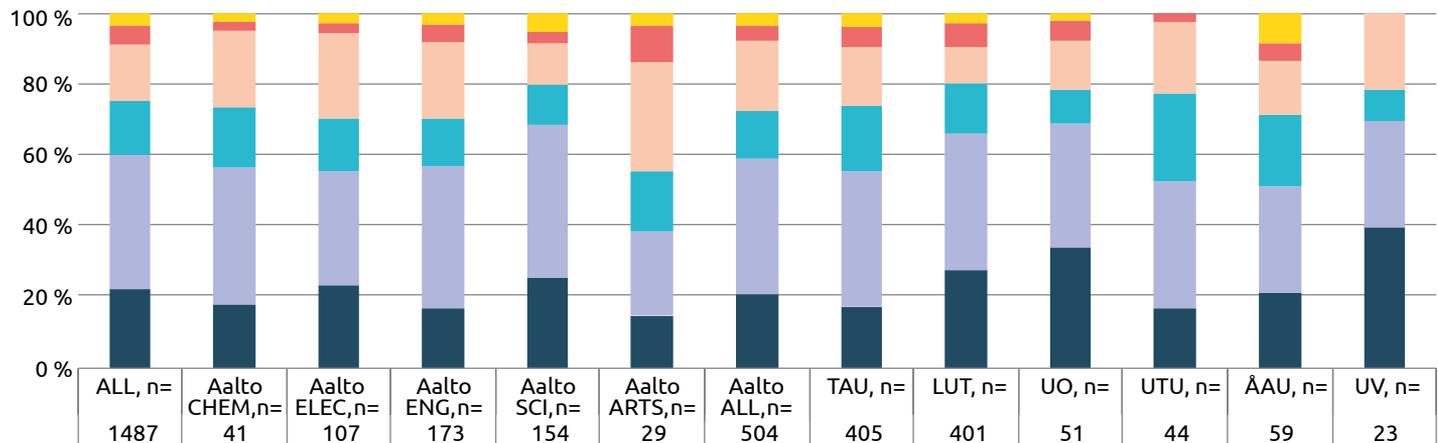


	ALL, n=1489	Aalto CHEM, n=42	Aalto ELEC, n=107	Aalto ENG, n=172	Aalto SCI, n=154	Aalto ARTS, n=29	Aalto ALL, n=504	TAU, n=406	LUT, n=402	UO, n=51	UTU, n=44	ÅAU, n=59	UV, n=23
Cannot say	6%	7%	3%	5%	8%	10%	6%	6%	4%	8%	2%	19%	4%
I fully disagree	5%	0%	4%	6%	3%	17%	5%	6%	4%	2%	2%	8%	0%
I somewhat disagree	13%	21%	20%	15%	12%	14%	15%	13%	9%	12%	18%	5%	17%
I do not agree or disagree	18%	17%	20%	19%	16%	21%	18%	20%	15%	14%	30%	22%	4%
I somewhat agree	40%	48%	40%	44%	40%	28%	41%	39%	39%	41%	32%	34%	39%
I completely agree	19%	7%	14%	11%	20%	10%	14%	15%	28%	24%	16%	12%	35%

# Learning environment

During my studies, I have received enough induction to the learning environments, systems and digital tools used in my university.

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	ALL, n=1487	Aalto CHEM, n=41	Aalto ELEC, n=107	Aalto ENG, n=173	Aalto SCI, n=154	Aalto ARTS, n=29	Aalto ALL, n=504	TAU, n=405	LUT, n=401	UO, n=51	UTU, n=44	ÅAU, n=59	UV, n=23
Cannot say	3%	2%	3%	3%	5%	3%	4%	4%	3%	2%	0%	8%	0%
I fully disagree	5%	2%	3%	5%	3%	10%	4%	6%	7%	6%	2%	5%	0%
I somewhat disagree	16%	22%	24%	22%	12%	31%	20%	17%	10%	14%	20%	15%	22%
I do not agree or disagree	16%	17%	15%	13%	12%	17%	14%	19%	14%	10%	25%	20%	9%
I somewhat agree	38%	39%	33%	40%	44%	24%	39%	39%	39%	35%	36%	31%	30%
I completely agree	22%	17%	22%	16%	25%	14%	20%	16%	27%	33%	16%	20%	39%





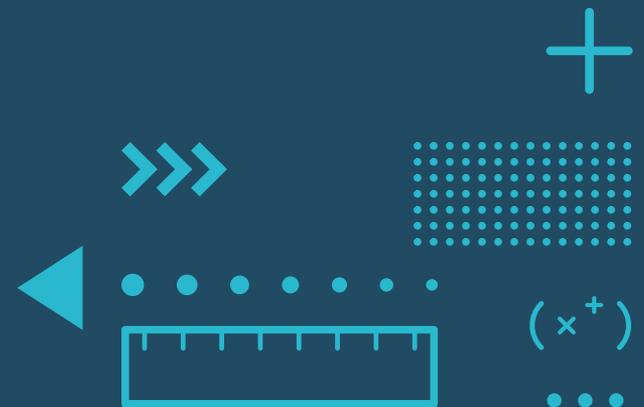
# 5. Well-being and coping

Load

Sleeping quality

Pressure from studies

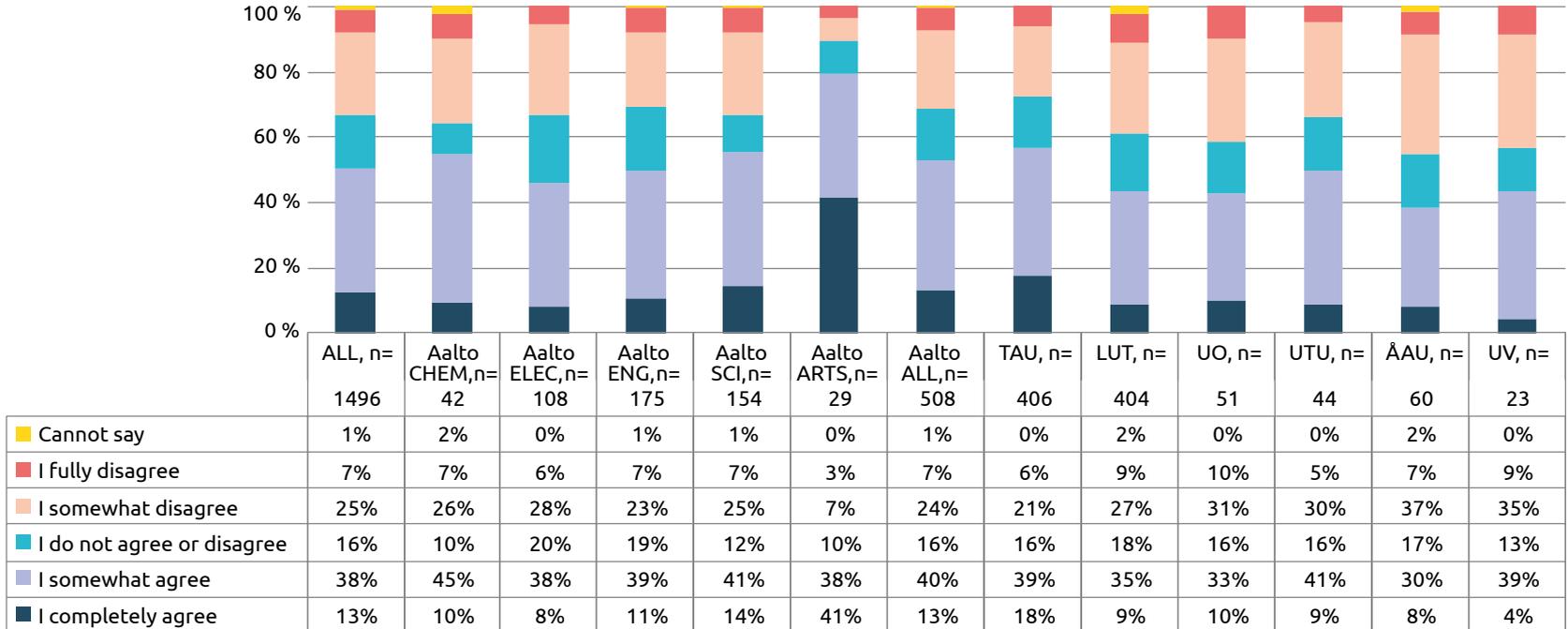
Coping



# Well-being and coping

I have often felt like I am all over my head with the amount of work related to my studies.

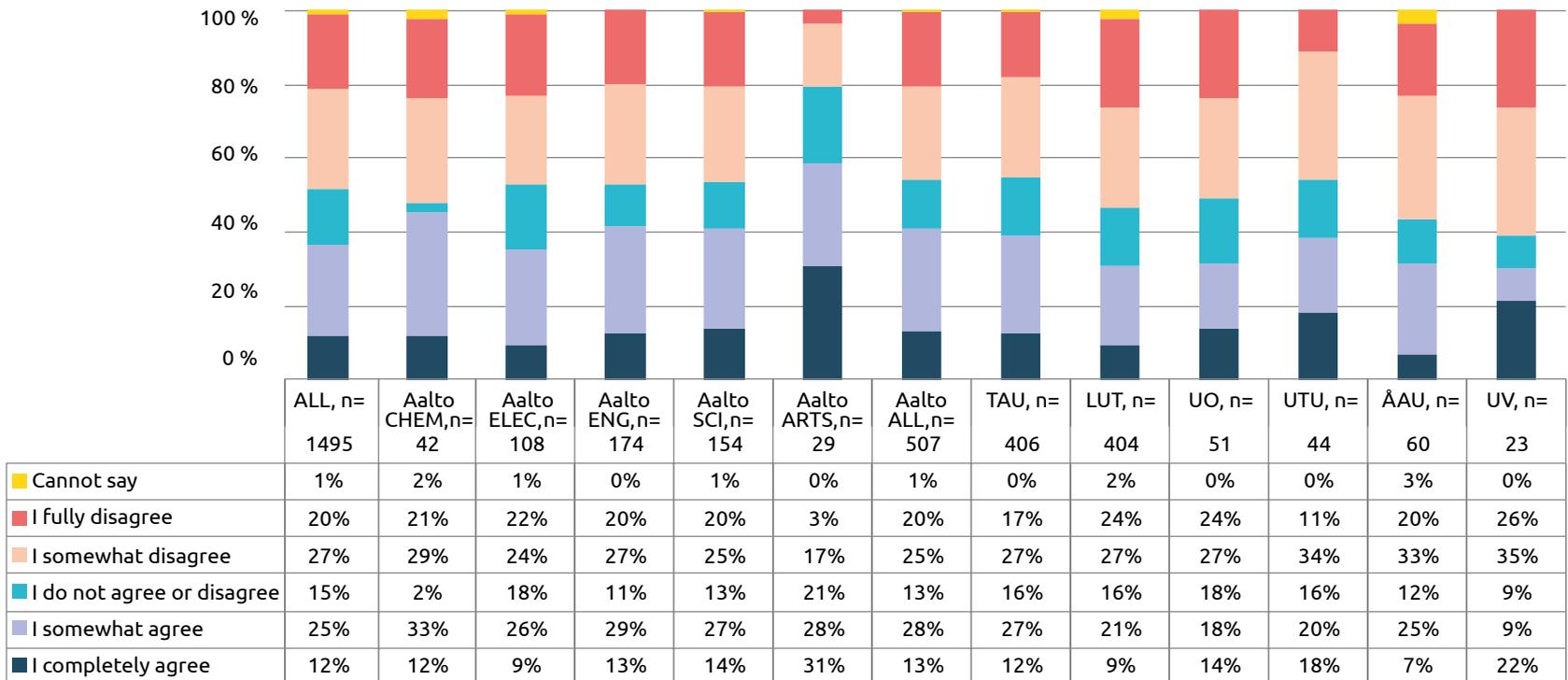
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# Well-being and coping

I have often slept poorly due to matters related to my studies.

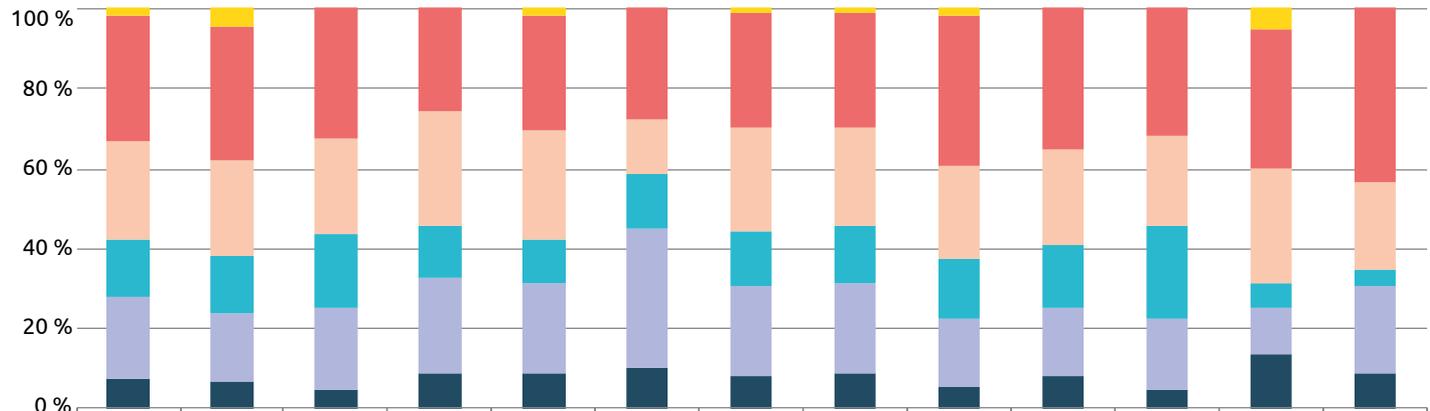
©TEK Graduate Survey 2021



# Well-being and coping

## Pressure from my studies has caused problems in my personal relationships.

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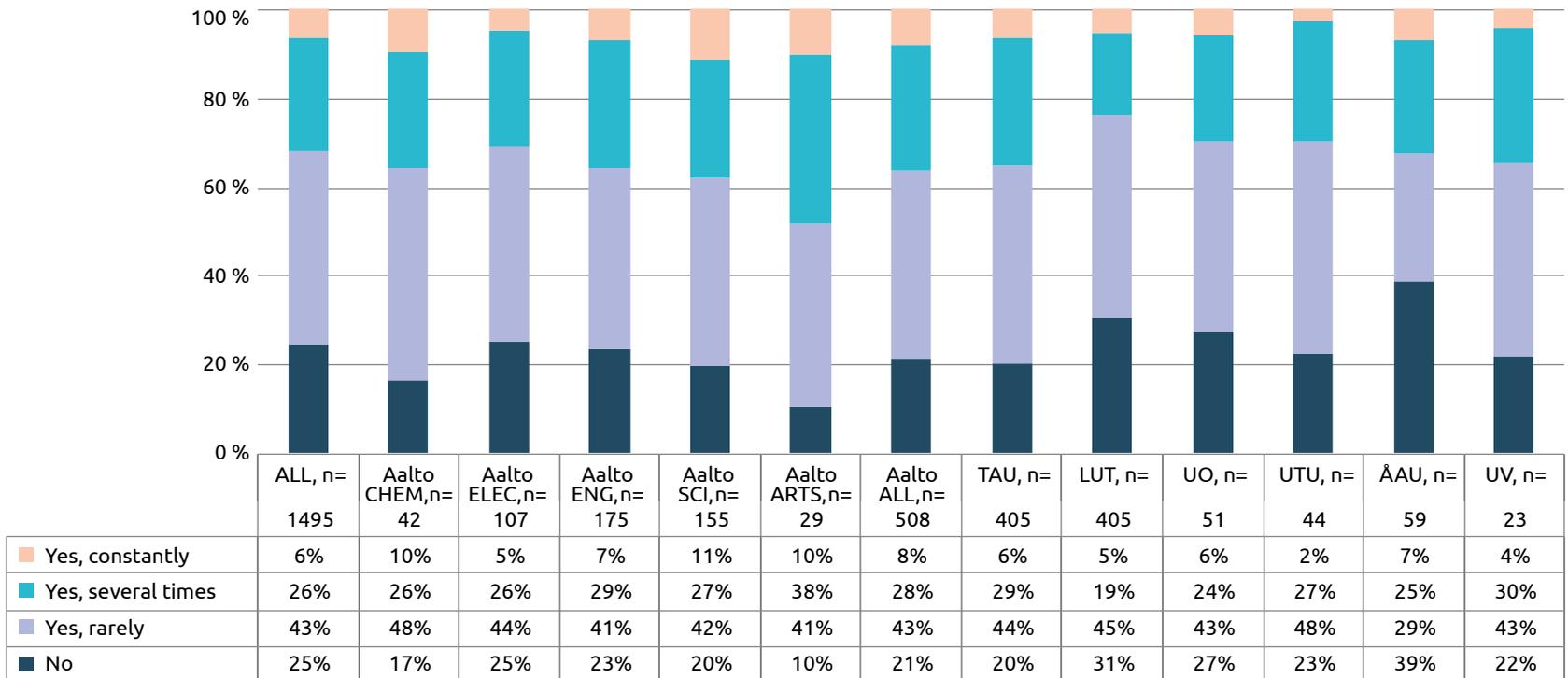


	ALL, n=1489	Aalto CHEM, n=42	Aalto ELEC, n=108	Aalto ENG, n=174	Aalto SCI, n=153	Aalto ARTS, n=29	Aalto ALL, n=506	TAU, n=405	LUT, n=400	UO, n=51	UTU, n=44	ÅAU, n=60	UV, n=23
Cannot say	1%	5%	0%	0%	2%	0%	1%	1%	2%	0%	0%	5%	0%
I fully disagree	32%	33%	32%	26%	28%	28%	29%	28%	37%	35%	32%	35%	43%
I somewhat disagree	25%	24%	24%	28%	27%	14%	26%	25%	23%	24%	23%	28%	22%
I do not agree or disagree	14%	14%	19%	13%	11%	14%	14%	14%	15%	16%	23%	7%	4%
I somewhat agree	20%	17%	20%	24%	22%	34%	23%	23%	17%	18%	18%	12%	22%
I completely agree	8%	7%	5%	9%	9%	10%	8%	9%	5%	8%	5%	13%	9%

# Well-being and coping

Have you been worried about coping during your studies?

©TEK Graduate Survey 2021





# 6. Master's thesis

Frame of collaboration

Duration

Financing

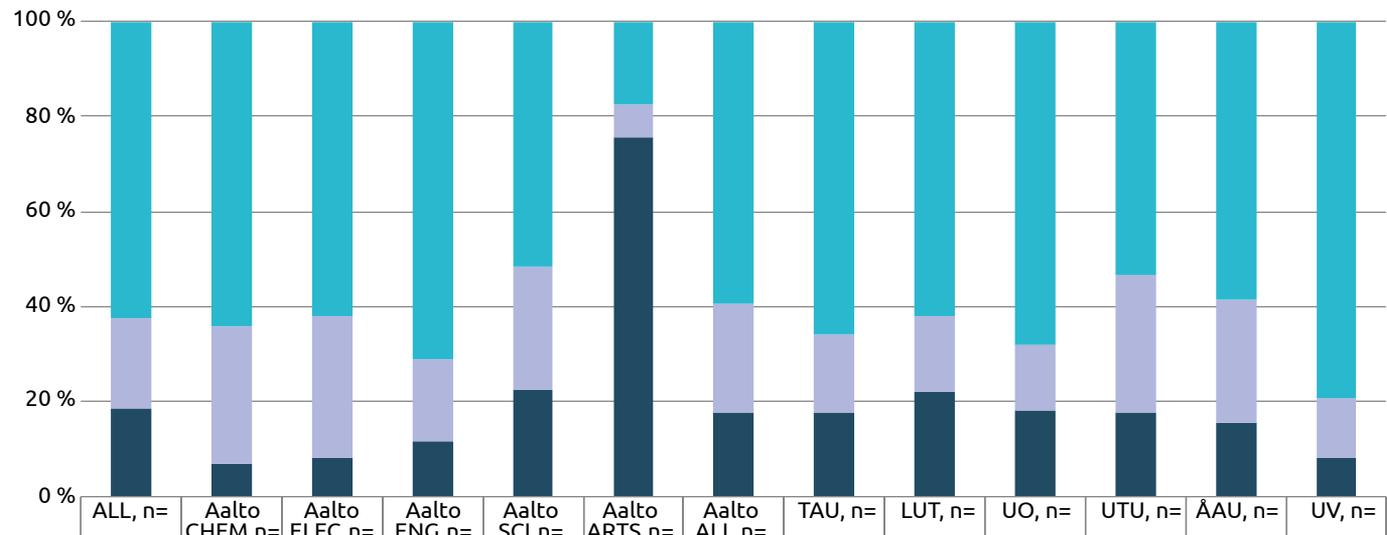
Support and supervision



# Frame of collaboration

Did your master's thesis involve collaboration within or outside of your university?

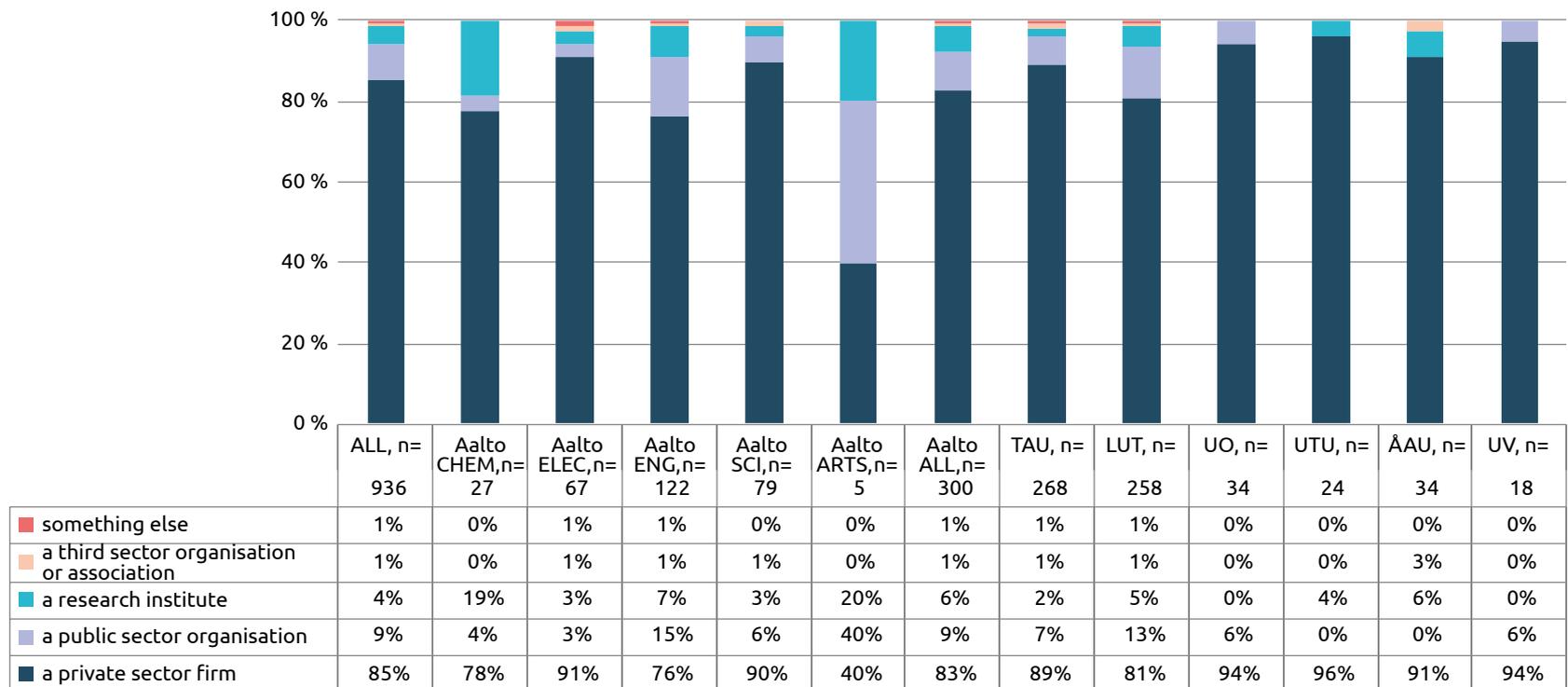
©TEK Graduate Survey 2021



# Frame of collaboration

## The non-university partner in my thesis was

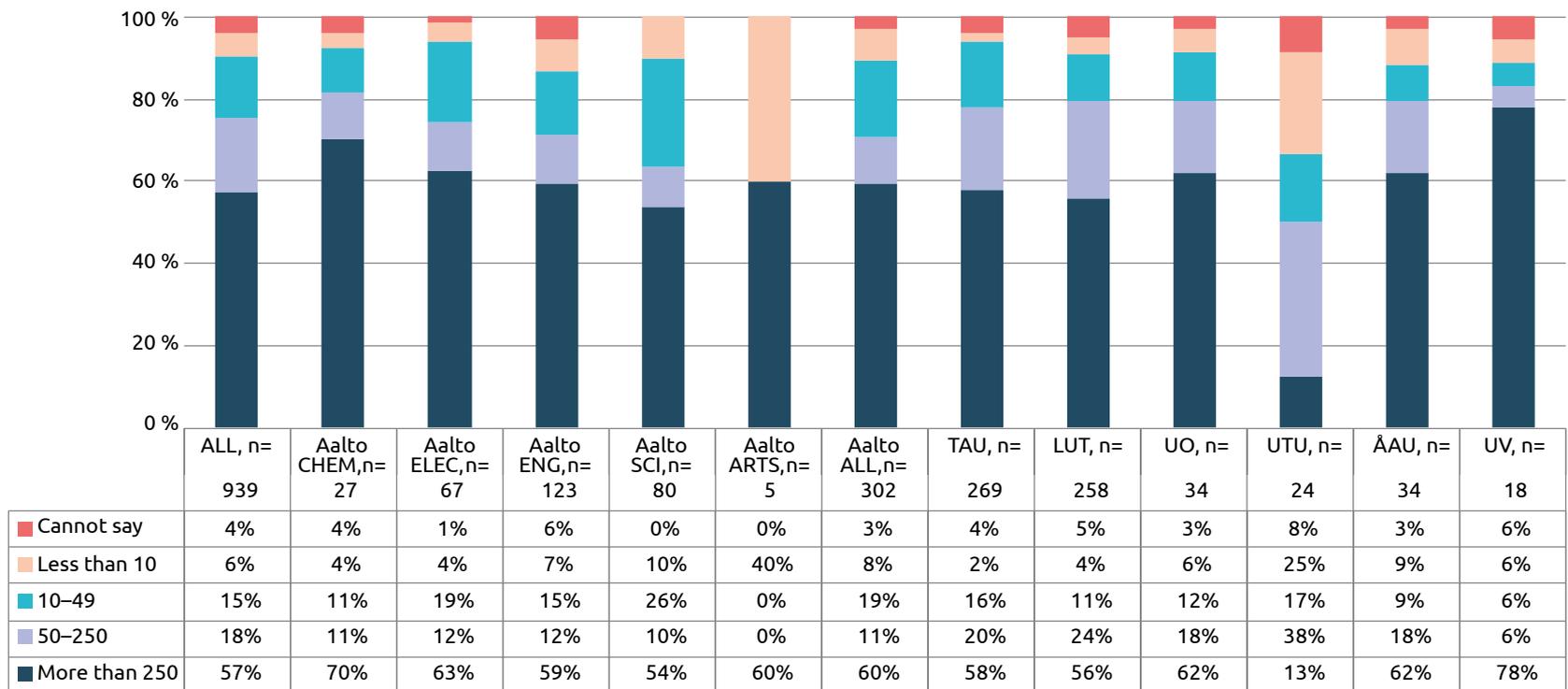
©TEK Graduate Survey 2021



# Frame of collaboration

## The size of the partnering organization (amount of personnel)

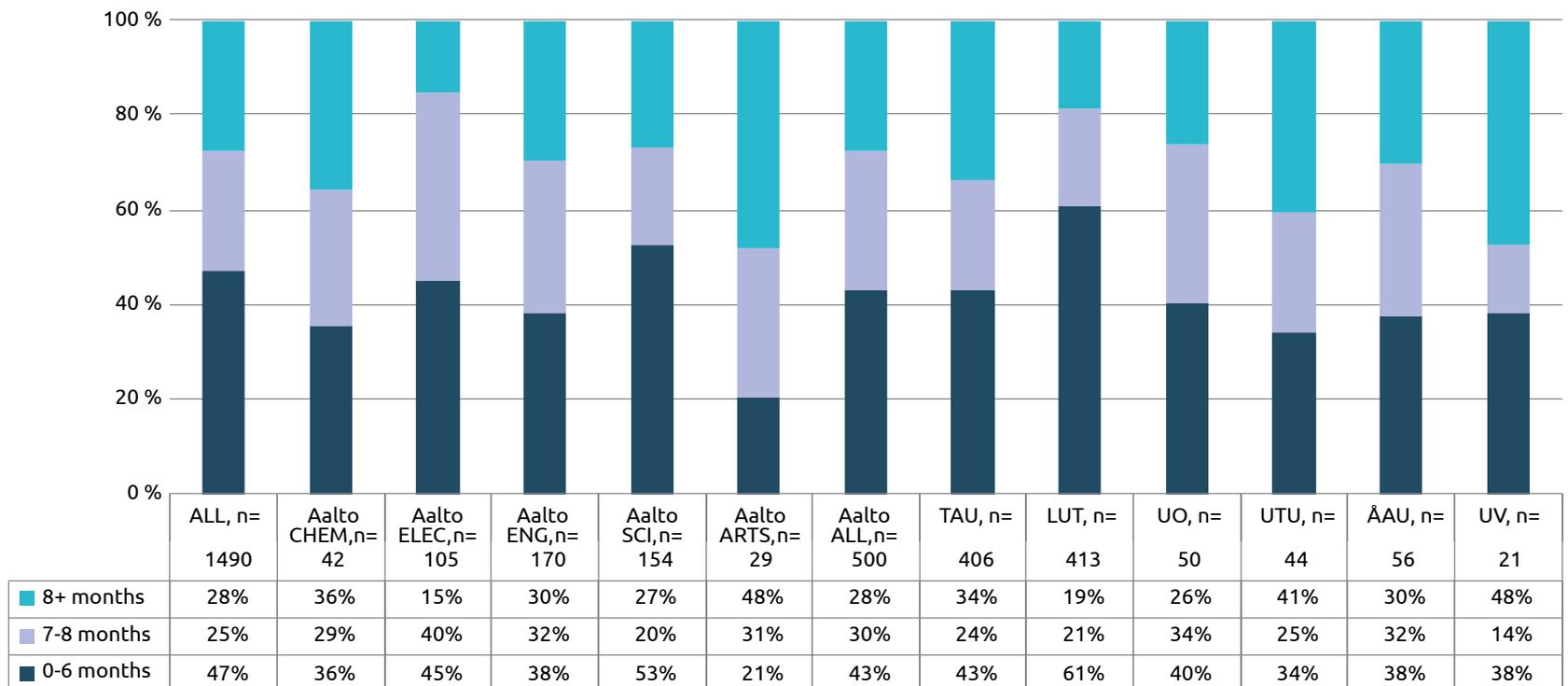
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# Duration

## How long did it take to complete your master's thesis?

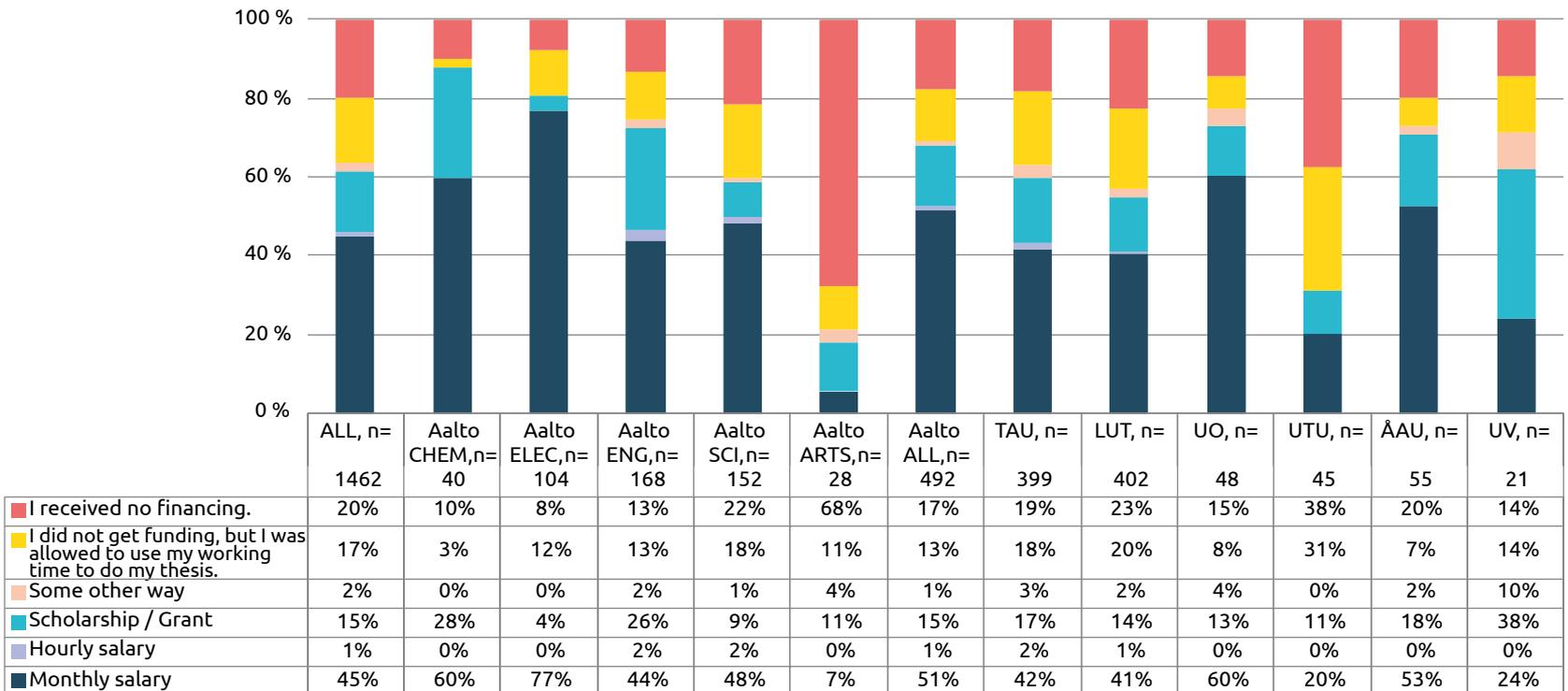
©TEK Graduate Survey 2021



# Financing

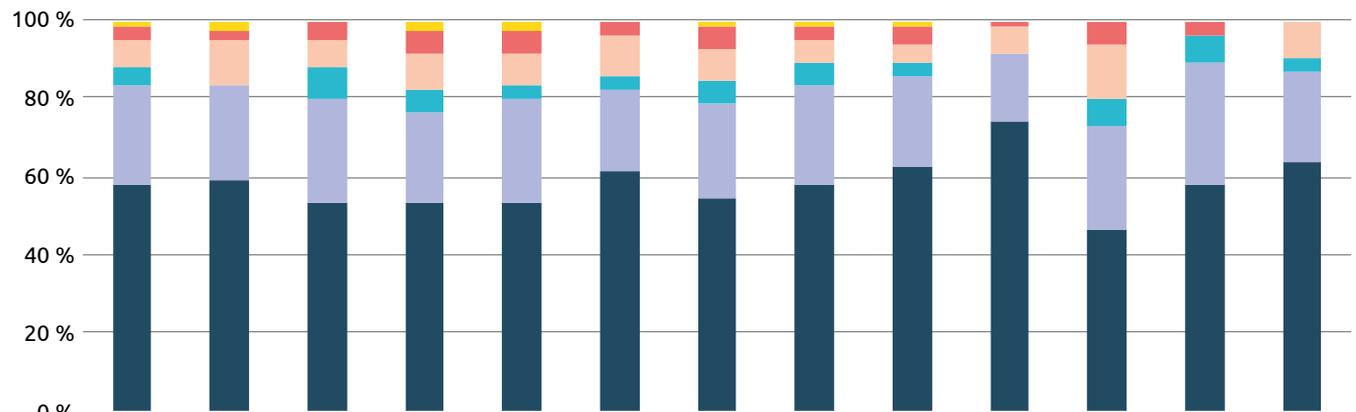
## Financing of your master's thesis

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# Support and supervision

The guidance I received from the university was well organised and informative. ©TEK Graduate Survey 2021

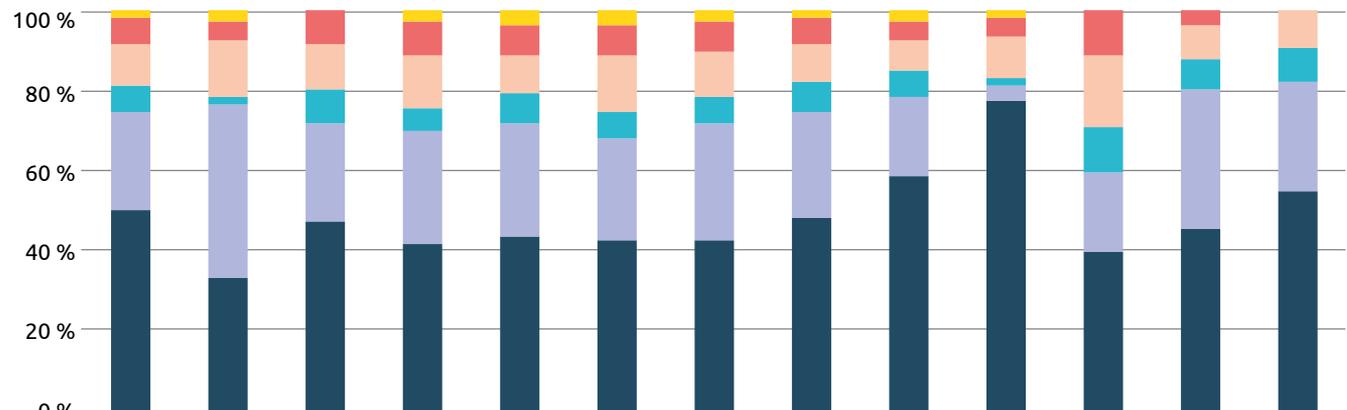


	ALL, n=1489	Aalto CHEM, n=42	Aalto ELEC, n=105	Aalto ENG, n=172	Aalto SCI, n=154	Aalto ARTS, n=29	Aalto ALL, n=502	TAU, n=407	LUT, n=406	UO, n=50	UTU, n=45	ÅAU, n=57	UV, n=22
Cannot say / Does not concern me	1%	2%	0%	2%	3%	0%	2%	1%	2%	0%	0%	0%	0%
I fully disagree	4%	2%	5%	6%	5%	3%	5%	3%	4%	2%	7%	4%	0%
I somewhat disagree	7%	12%	7%	9%	8%	10%	9%	6%	5%	6%	13%	0%	9%
I do not agree or disagree	5%	0%	9%	6%	3%	3%	5%	6%	4%	0%	7%	7%	5%
I somewhat agree	25%	24%	27%	23%	27%	21%	25%	27%	23%	18%	27%	32%	23%
I completely agree	58%	60%	53%	53%	54%	62%	54%	57%	62%	74%	47%	58%	64%

# Support and supervision

I received sufficiently guidance from the university.

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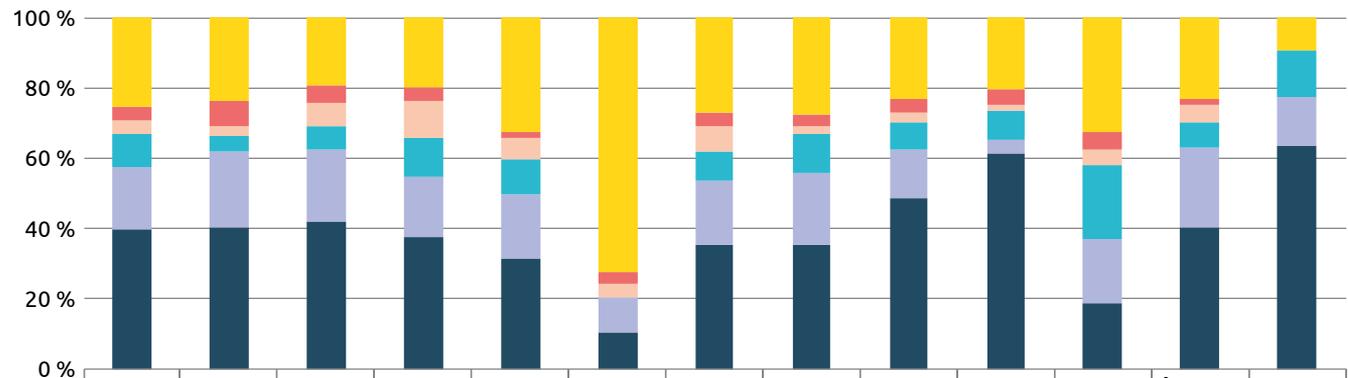


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Cannot say / Does not concern me	2%	2%	0%	3%	4%	4%	3%	1%	3%	2%	0%	0%	0%
I fully disagree	6%	5%	9%	8%	7%	7%	8%	7%	5%	4%	11%	4%	0%
I somewhat disagree	10%	14%	11%	13%	9%	14%	12%	10%	7%	10%	18%	9%	9%
I do not agree or disagree	7%	2%	9%	5%	8%	7%	7%	7%	7%	2%	11%	7%	9%
I somewhat agree	25%	43%	25%	29%	29%	25%	29%	27%	20%	4%	20%	35%	27%
I completely agree	50%	33%	47%	41%	44%	43%	43%	48%	58%	78%	40%	46%	55%

# Support and supervision

Cooperation between the university and my client carried out well in guiding the thesis work.

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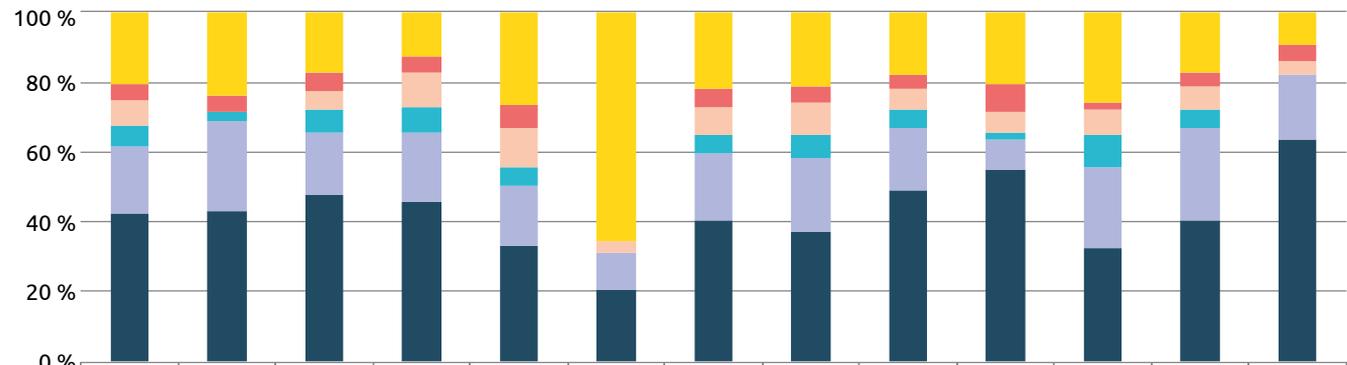


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Cannot say / Does not concern me	25%	24%	19%	20%	32%	72%	27%	27%	23%	20%	33%	23%	9%
I fully disagree	4%	7%	5%	4%	2%	3%	4%	3%	4%	4%	5%	2%	0%
I somewhat disagree	4%	2%	7%	11%	6%	3%	7%	2%	3%	2%	5%	5%	0%
I do not agree or disagree	9%	5%	7%	11%	10%	0%	9%	11%	7%	8%	21%	7%	14%
I somewhat agree	17%	21%	20%	18%	18%	10%	18%	20%	14%	4%	19%	23%	14%
I completely agree	40%	40%	42%	37%	32%	10%	35%	36%	49%	61%	19%	40%	64%

# Support and supervision

I received sufficiently guidance from the partnering organization for my thesis work.

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	ALL, n=1477	Aalto CHEM, n=42	Aalto ELEC, n=105	Aalto ENG, n=172	Aalto SCI, n=154	Aalto ARTS, n=29	Aalto ALL, n=502	TAU, n=405	LUT, n=399	UO, n=49	UTU, n=43	ÅAU, n=57	UV, n=22
Cannot say / Does not concern me	20%	24%	17%	13%	27%	66%	22%	21%	18%	20%	26%	18%	9%
I fully disagree	5%	5%	6%	5%	6%	0%	5%	5%	4%	8%	2%	4%	5%
I somewhat disagree	7%	0%	5%	10%	11%	3%	8%	9%	6%	6%	7%	7%	5%
I do not agree or disagree	6%	2%	7%	7%	5%	0%	6%	7%	6%	2%	9%	5%	0%
I somewhat agree	19%	26%	18%	20%	18%	10%	19%	21%	18%	8%	23%	26%	18%
I completely agree	43%	43%	48%	46%	33%	21%	41%	37%	49%	55%	33%	40%	64%





# 7. Working during the studies

Work experience gained during the studies

Working and progress of the studies

The importance of work experience

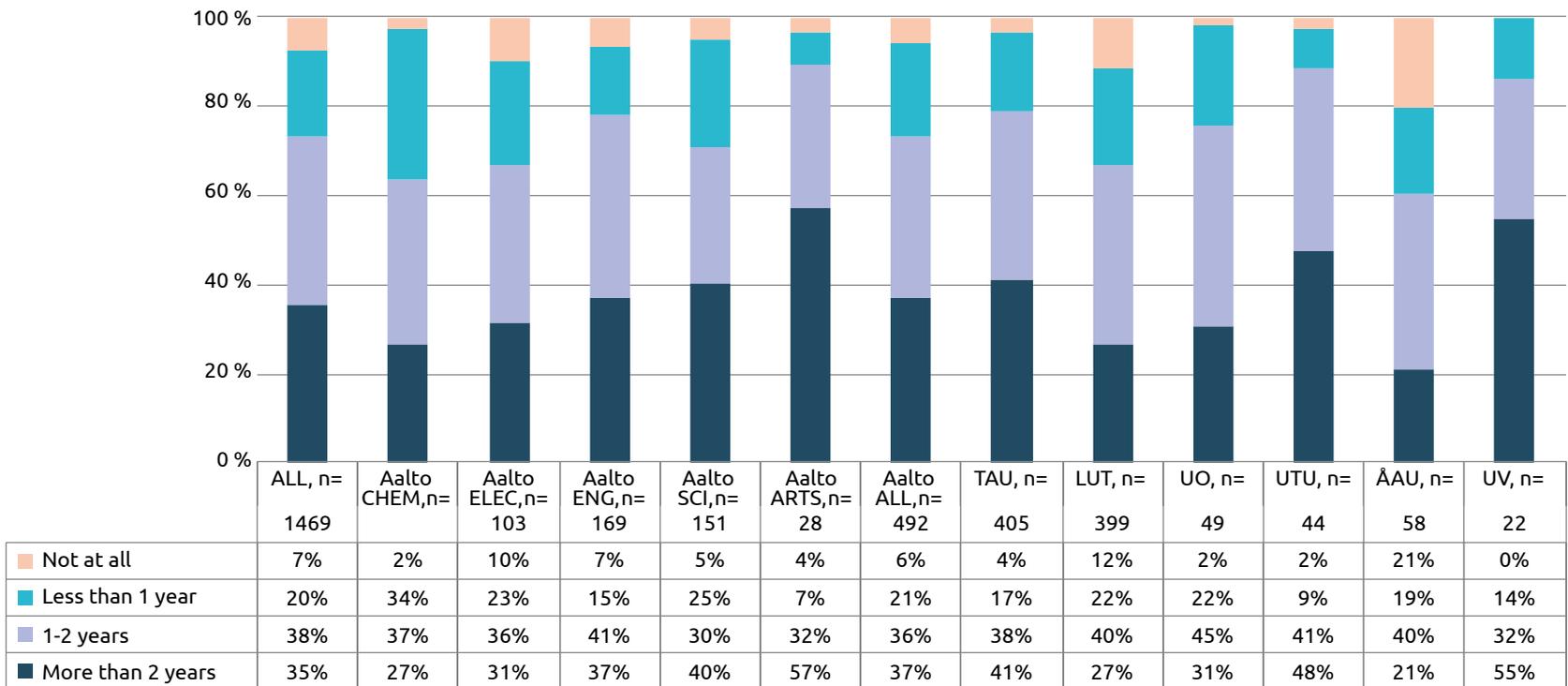
Voluntary engagement and activity



# Work experience gained during the studies

## All work experience

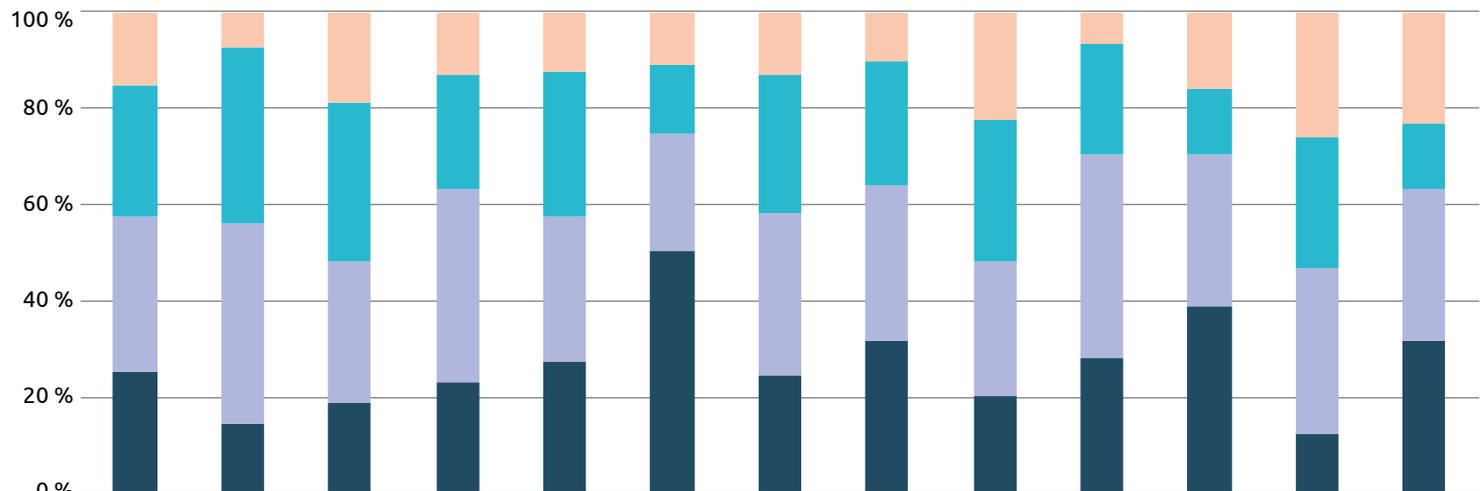
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# Work experience gained during the studies

## Work experience of own field (excl. M.Sc thesis)

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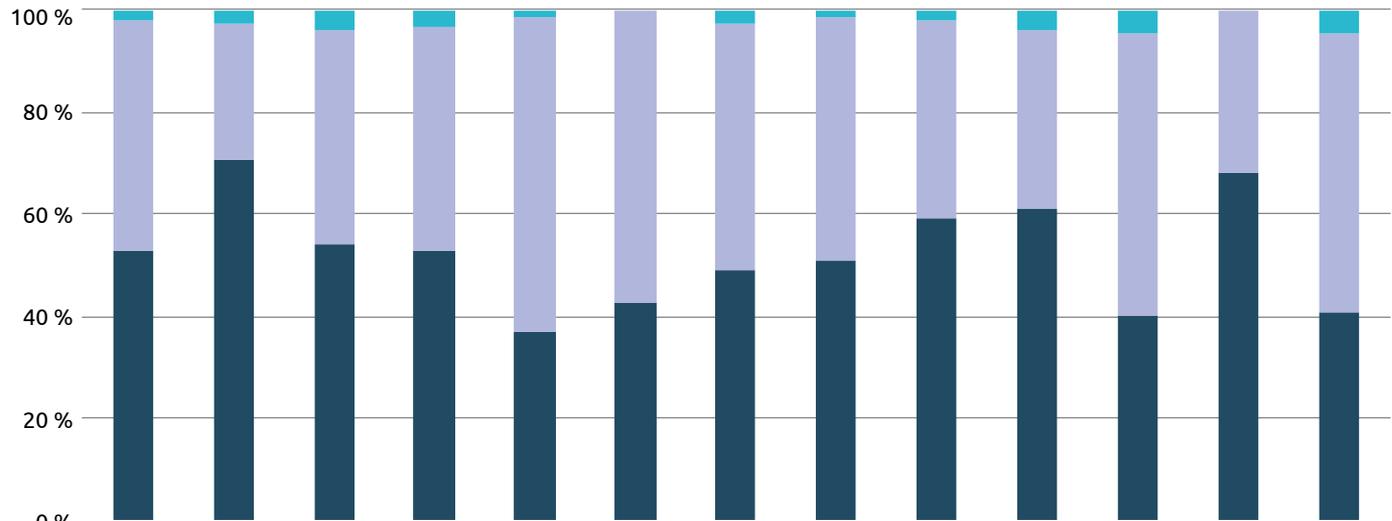


	ALL, n=1453	Aalto CHEM, n=41	Aalto ELEC, n=102	Aalto ENG, n=168	Aalto SCI, n=149	Aalto ARTS, n=28	Aalto ALL, n=488	TAU, n=403	LUT, n=391	UO, n=47	UTU, n=44	ÅAU, n=58	UV, n=22
Not at all	15%	7%	19%	13%	12%	11%	13%	10%	22%	6%	16%	26%	23%
Less than 1 year	27%	37%	33%	24%	30%	14%	28%	26%	30%	23%	14%	28%	14%
1-2 years	32%	41%	29%	40%	30%	25%	34%	33%	28%	43%	32%	34%	32%
More than 2 years	25%	15%	19%	23%	28%	50%	24%	32%	20%	28%	39%	12%	32%

# Working and progress of the studies

Did working during studies affect the progress of your studies?

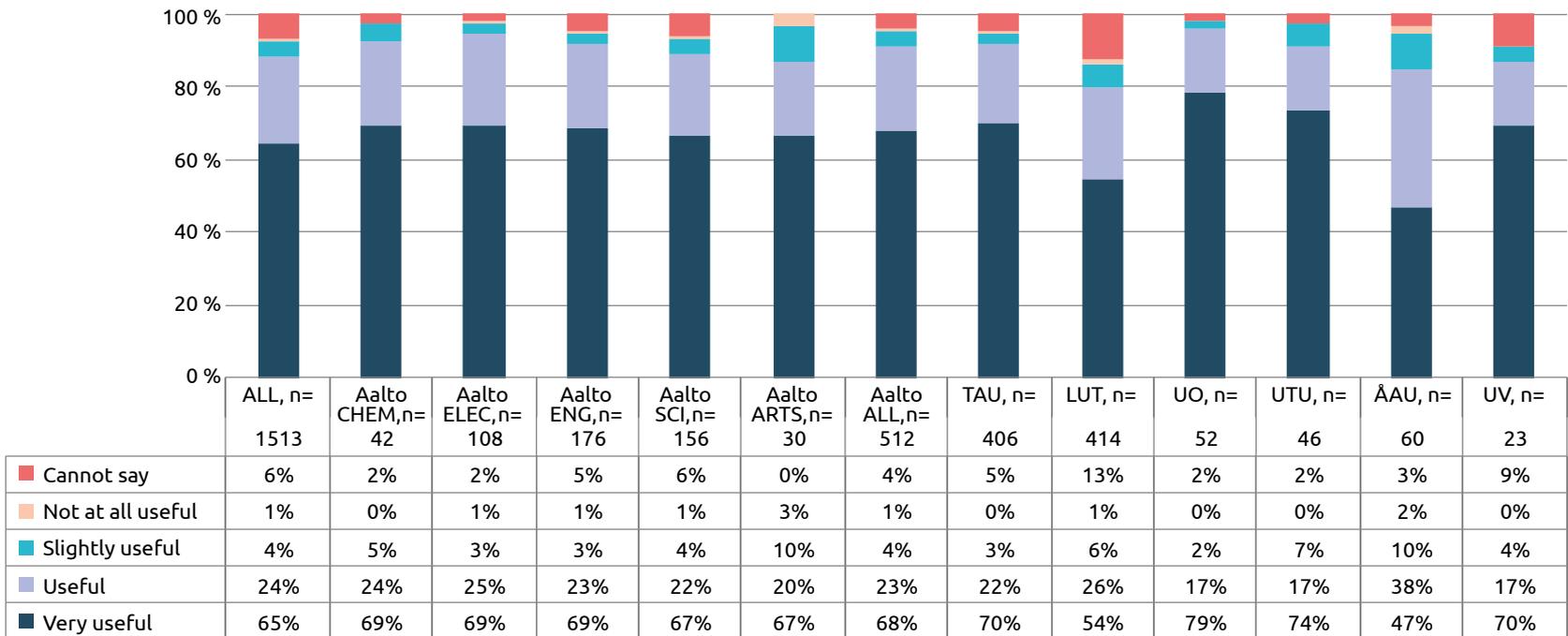
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# Importance of work experience

How useful do you consider the study related practice / work experience that gained during your studies?

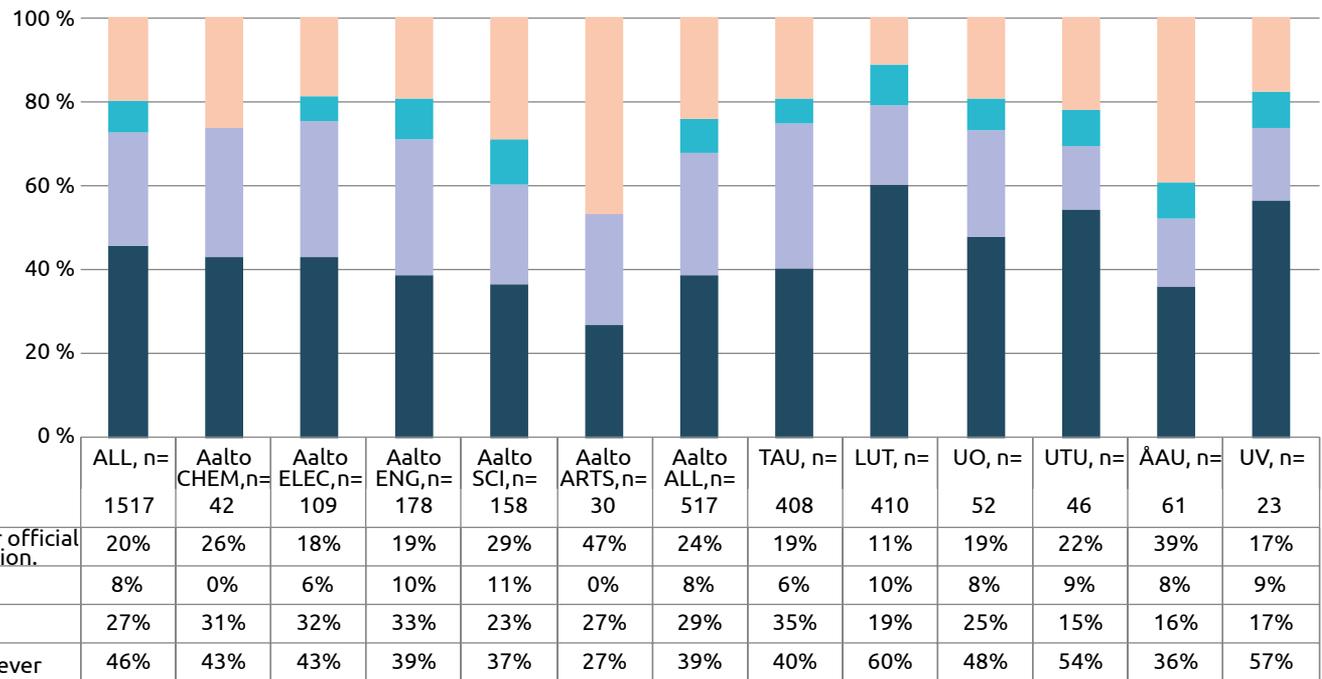
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# Voluntary engagement and activity

Which of the following best describes your participation in the activities of the guild or student association of your field?

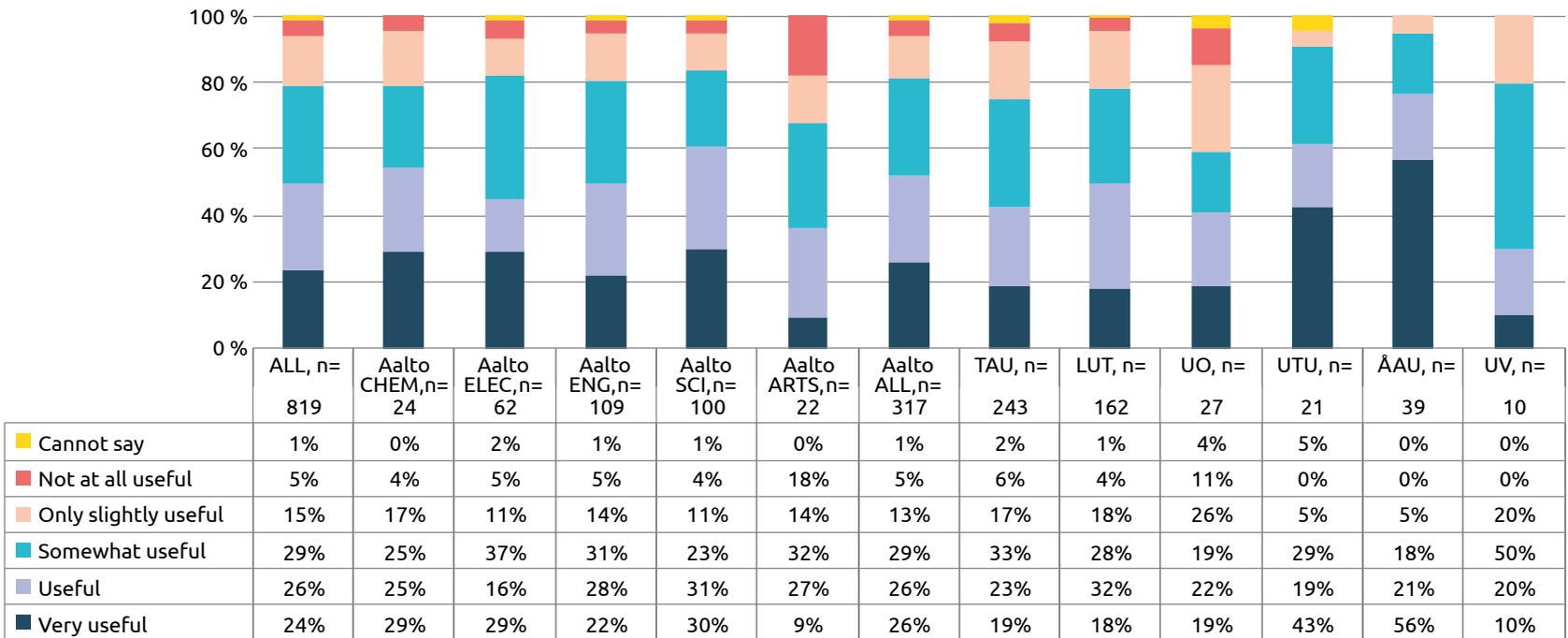
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# Voluntary engagement and activity

How useful participating in these activities have been for you concerning your studies and career management capacities?

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# 8. Employment

Situation at the time of graduation

Type of employment

Type of work

Operating sector

Size of the employer

Principal duties

Organizational position

Basic salary

Quality of the employment

Previous relation with the employer

Method of recruitment

Location of the job

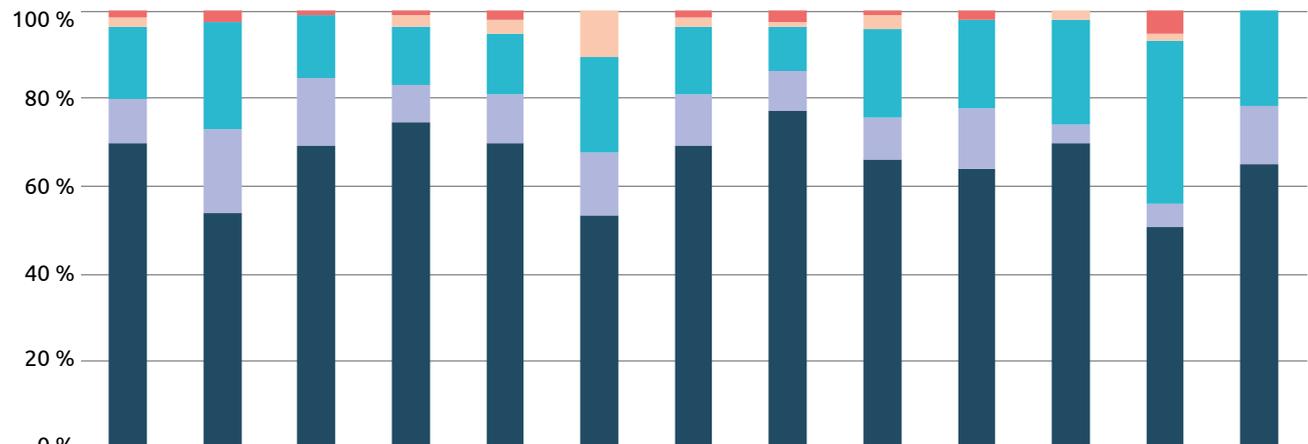
Working abroad



# Situation at the time of graduation

Describe your situation at the time of graduation.

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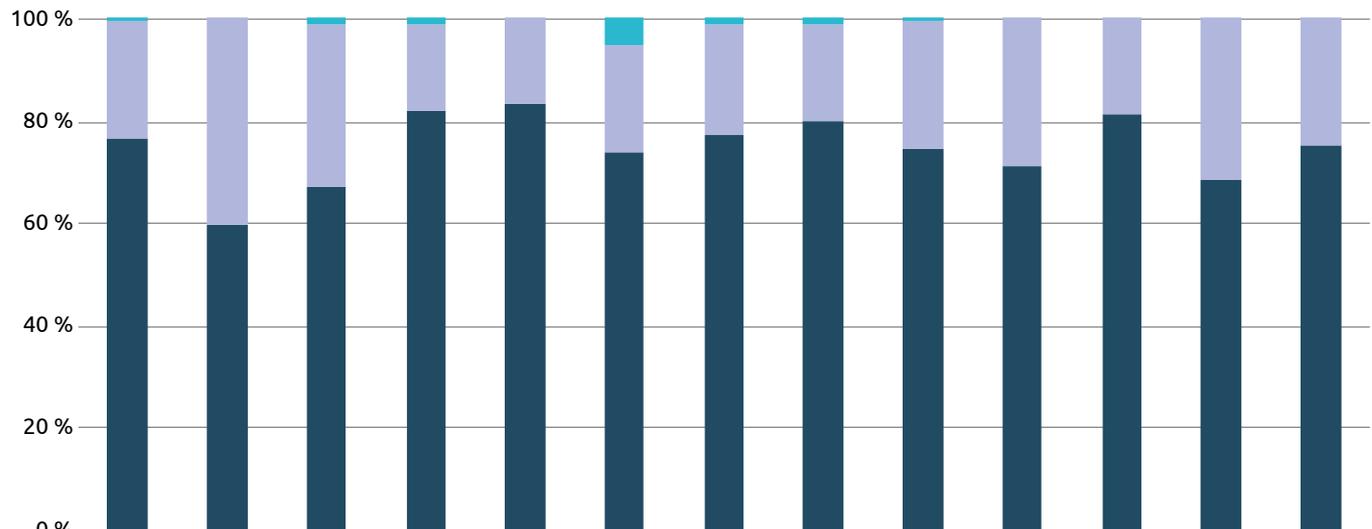


	ALL, n=	Aalto CHEM, n=	Aalto ELEC, n=	Aalto ENG, n=	Aalto SCI, n=	Aalto ARTS, n=	Aalto ALL, n=	TAU, n=	LUT, n=	UO, n=	UTU, n=	ÅAU, n=	UV, n=
ALL, n=	1519	41	105	174	158	28	506	413	422	50	46	59	23
Other	2%	2%	1%	1%	2%	0%	1%	3%	1%	2%	0%	5%	0%
I'm working as an entrepreneur or I'm otherwise self-employed.	2%	0%	0%	2%	3%	11%	2%	1%	3%	0%	2%	2%	0%
I am seeking for a job.	17%	24%	14%	13%	14%	21%	15%	10%	20%	20%	24%	37%	22%
I know where I'm going to be employed after my graduation (salaried work).	10%	20%	15%	9%	11%	14%	12%	9%	9%	14%	4%	5%	13%
I have a work contract.	70%	54%	70%	75%	70%	54%	69%	77%	66%	64%	70%	51%	65%

# Type of contract If employed

## Type of your current employment

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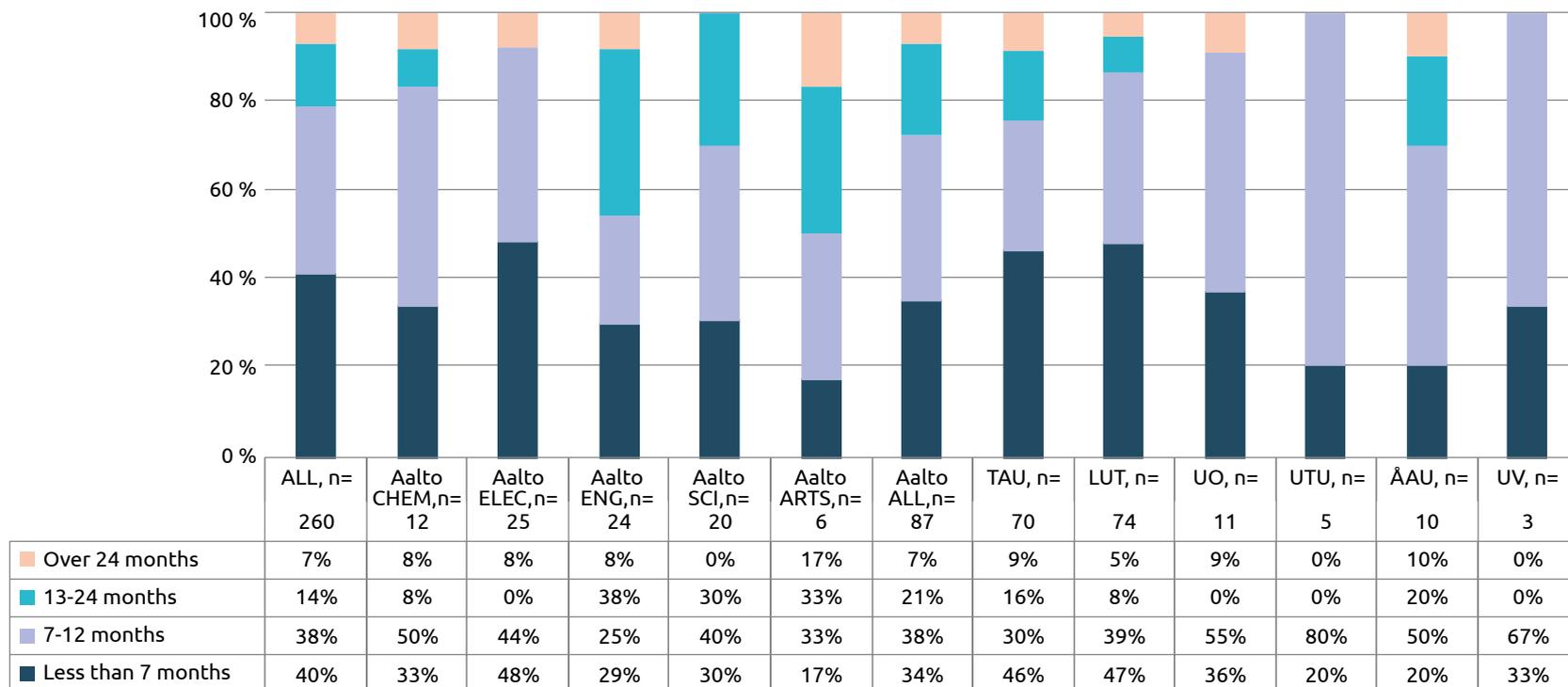


	ALL, n= 1162	Aalto CHEM, n= 30	Aalto ELEC, n= 83	Aalto ENG, n= 142	Aalto SCI, n= 120	Aalto ARTS, n= 19	Aalto ALL, n= 394	TAU, n= 345	LUT, n= 305	UO, n= 38	UTU, n= 32	ÅAU, n= 32	UV, n= 16
Other	1%	0%	1%	1%	0%	5%	1%	1%	0%	0%	0%	0%	0%
Fixed-term / temporary contract	22%	40%	31%	17%	17%	21%	22%	19%	25%	29%	19%	31%	25%
Permanent work contract	77%	60%	67%	82%	83%	74%	77%	80%	74%	71%	81%	69%	75%

# Fixed term contract If employed

## Fixed term / temporary contract, duration

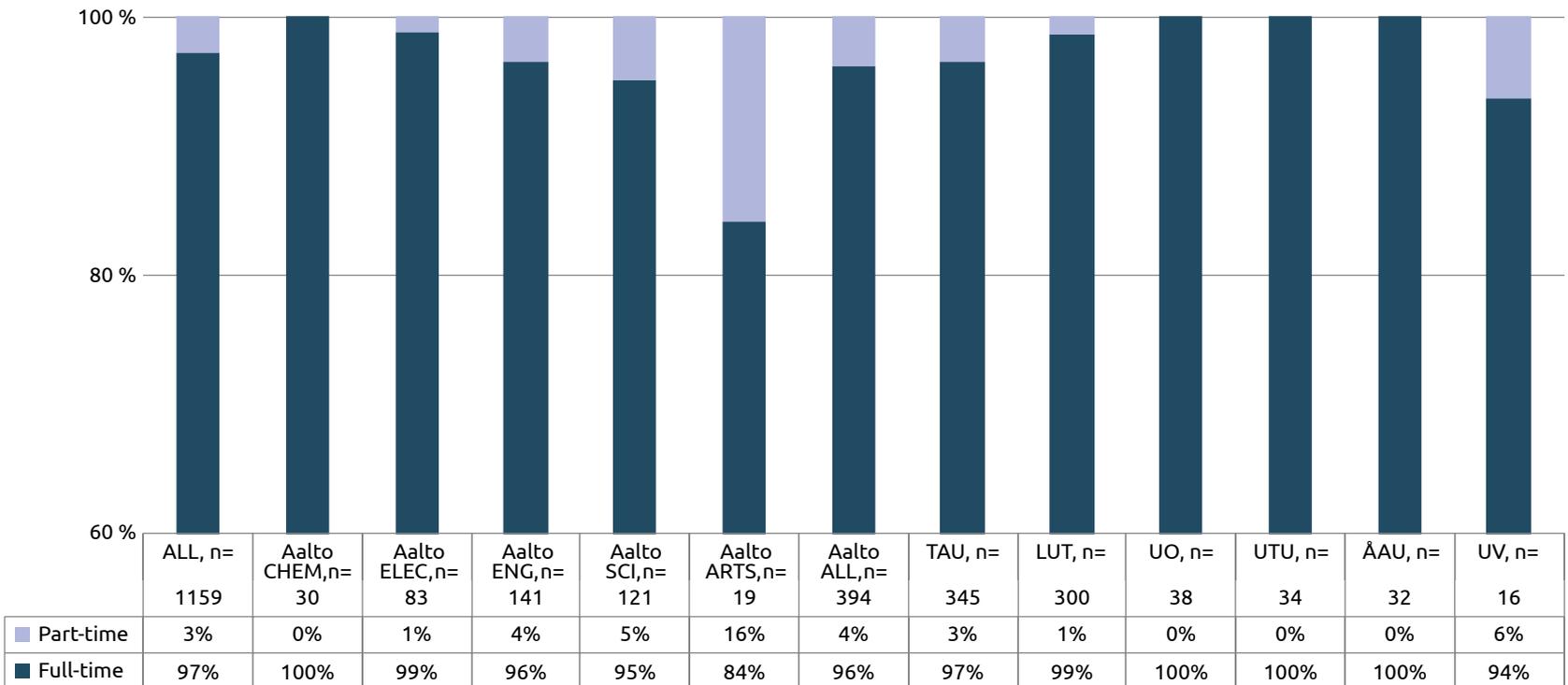
©TEK Graduate Survey 2021



# Type of work If employed

## Your work is

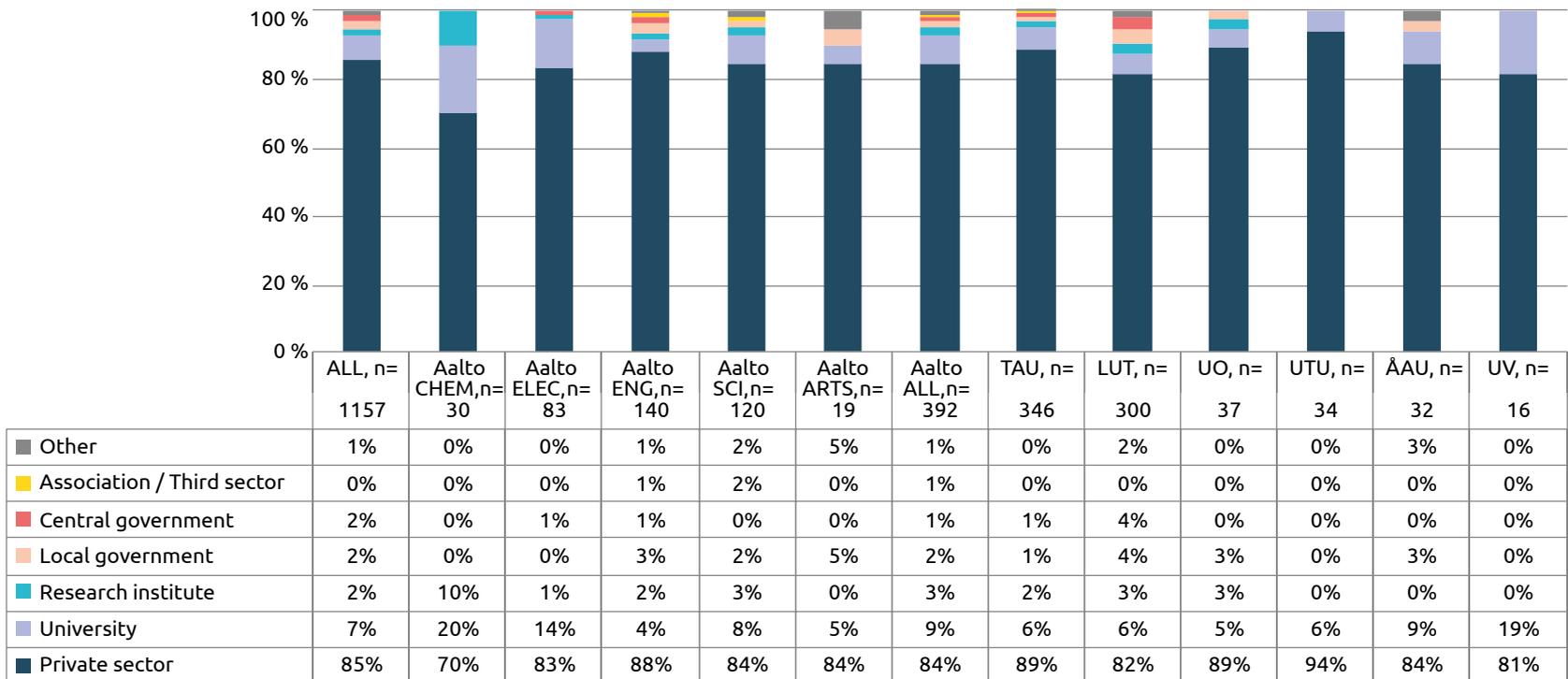
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# Operating sector If employed

## Operating sector of your employer

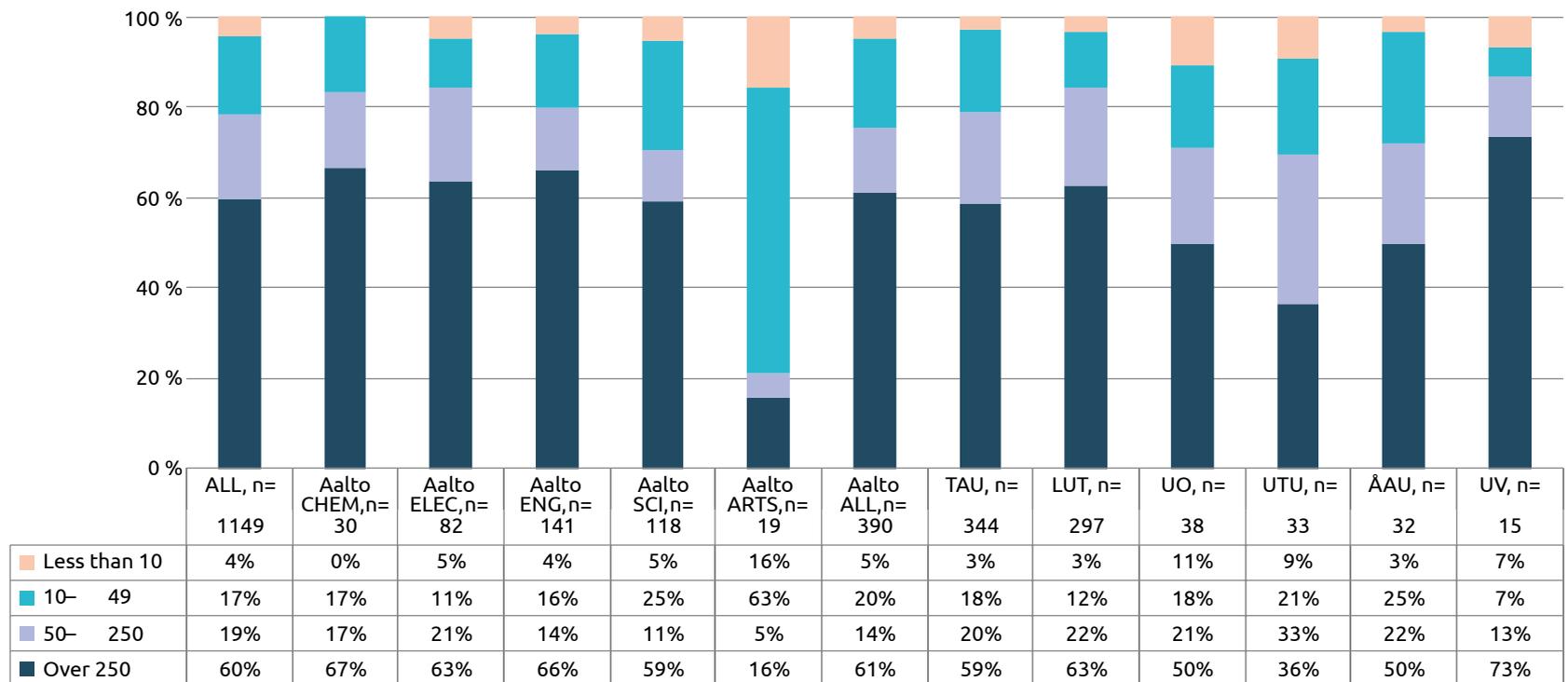
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# Size of the employer If employed

## Size of your employer based on the amount of personnel?

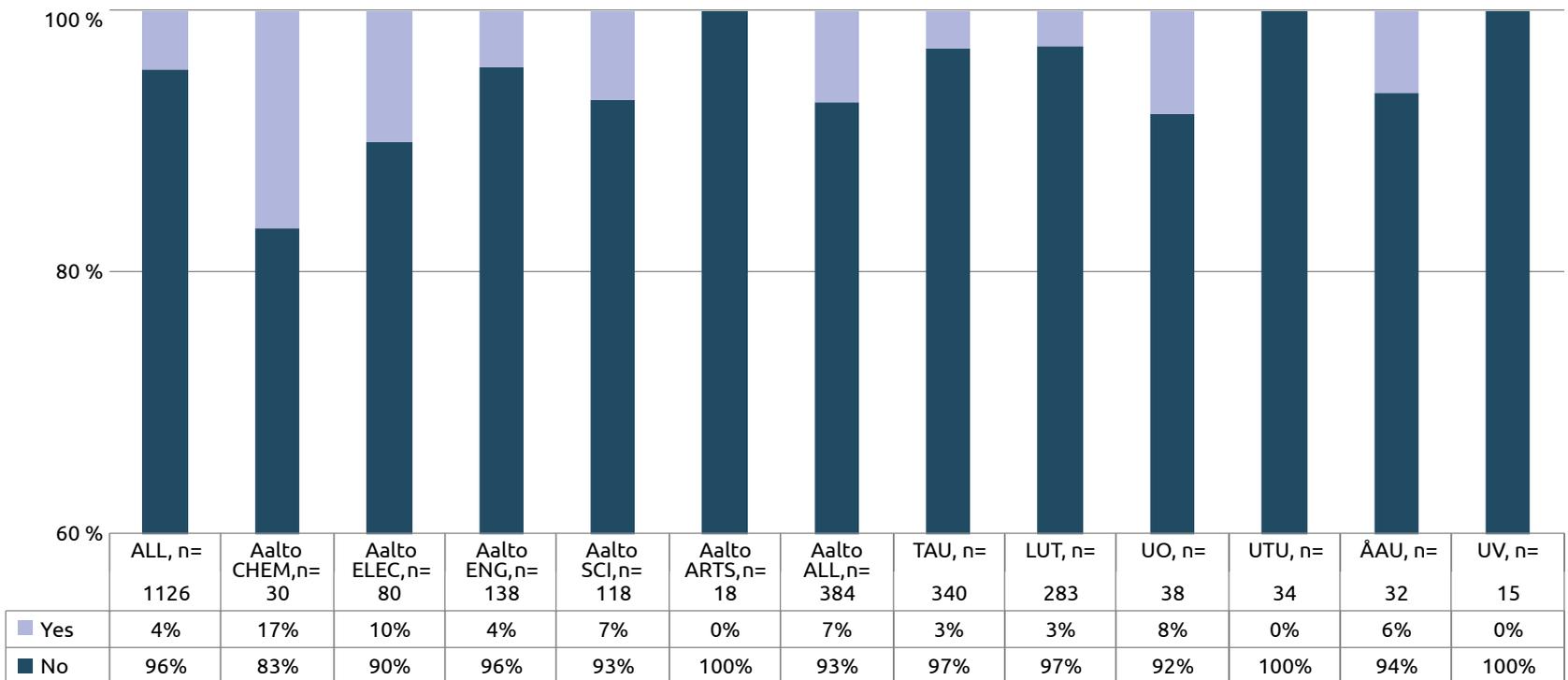
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# Doctoral studies If employed

## I work as a full-time doctoral candidate

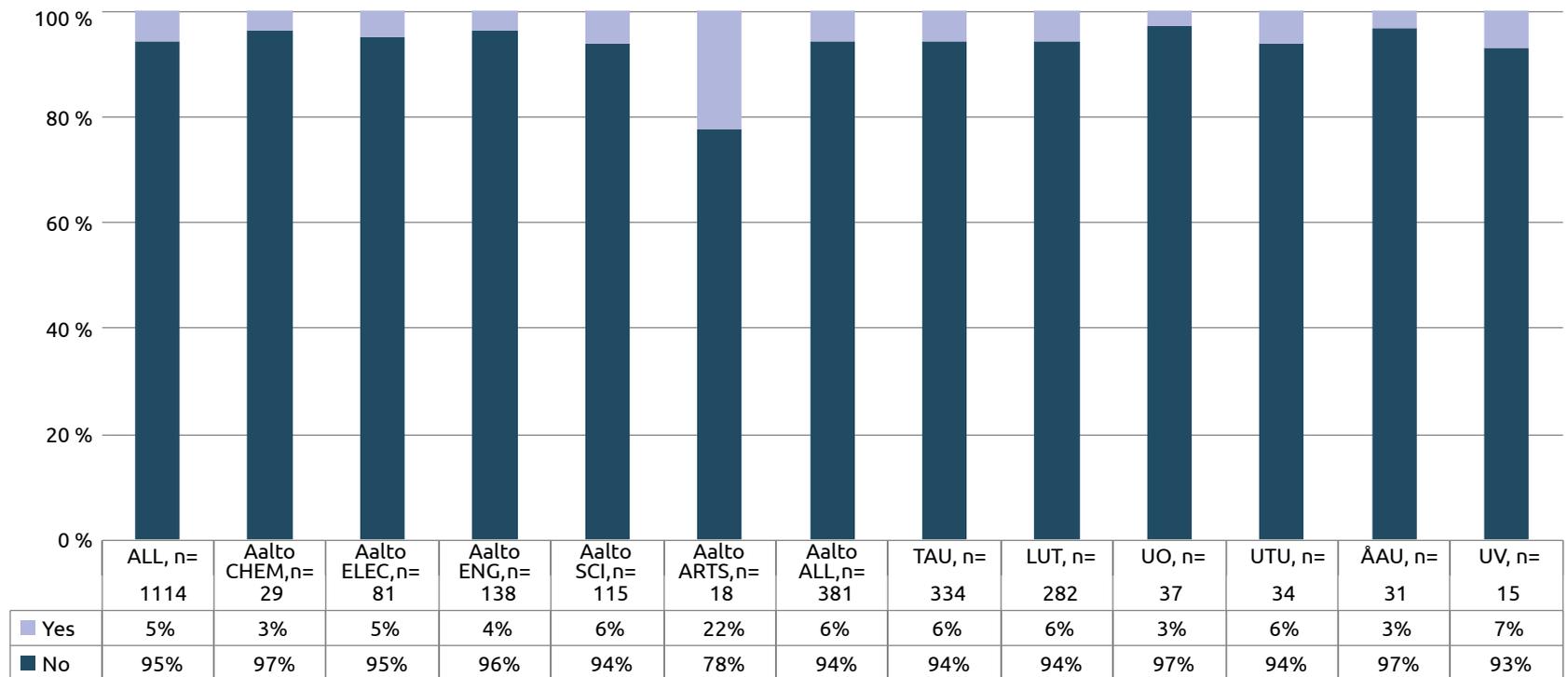
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# Part-time entrepreneurship If employed

I also work as a part-time entrepreneur.

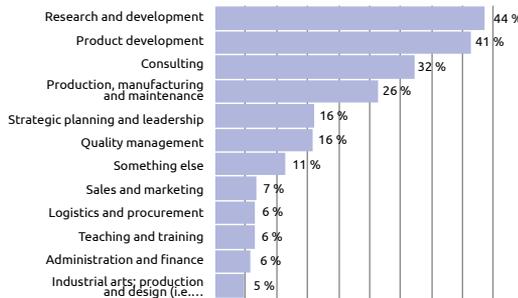
©TEK Graduate Survey 2021



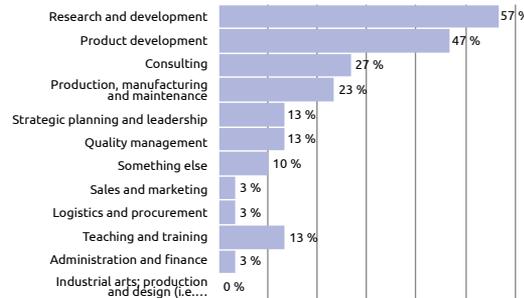
# Principal duties If employed

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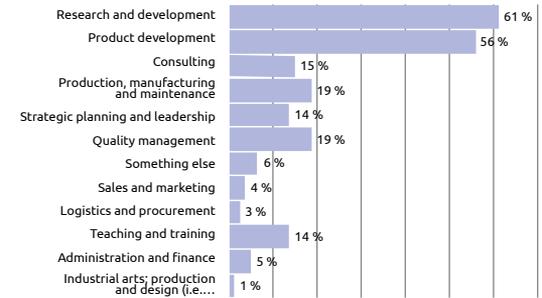
ALL, n=1127



Aalto CHEM, n=30



Aalto ELEC, n=80



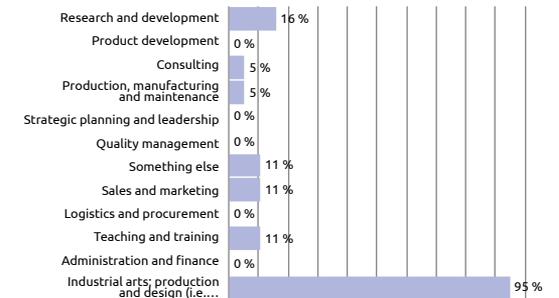
Aalto ENG, n=138



Aalto SCI, n=116



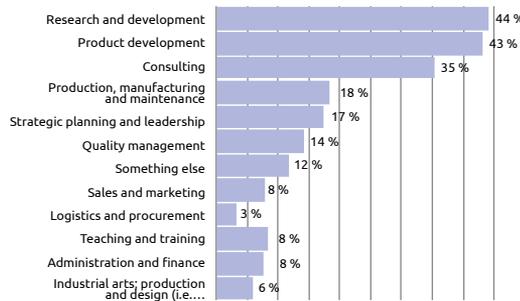
Aalto ARTS, n=19



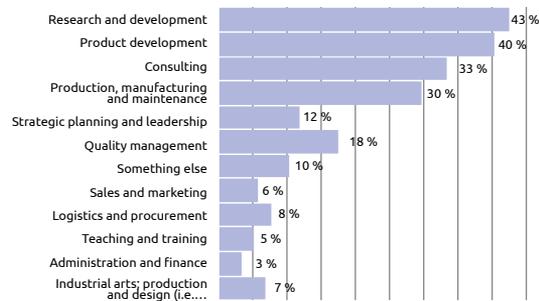
# Principal duties If employed

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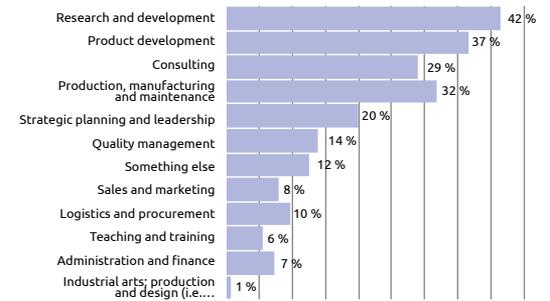
Aalto ALL, n=383



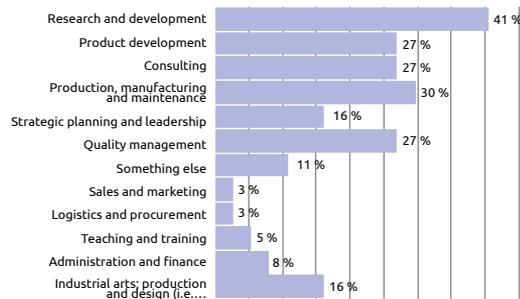
TAU, n=336



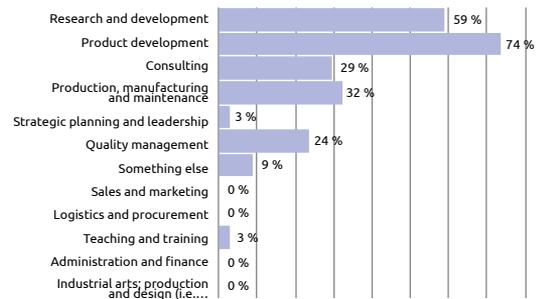
LUT, n=289



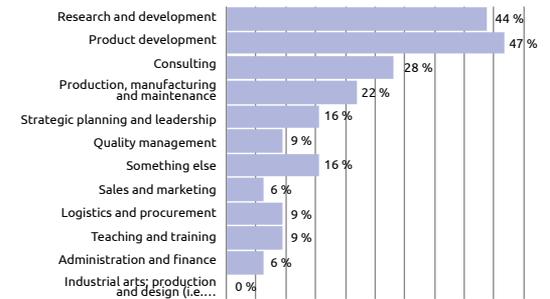
UO, n=37



UTU, n=34



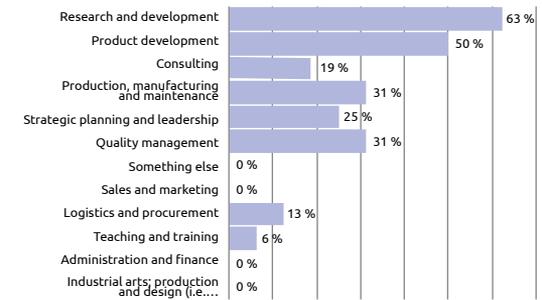
ÅAU, n=32



# Principal duties If employed

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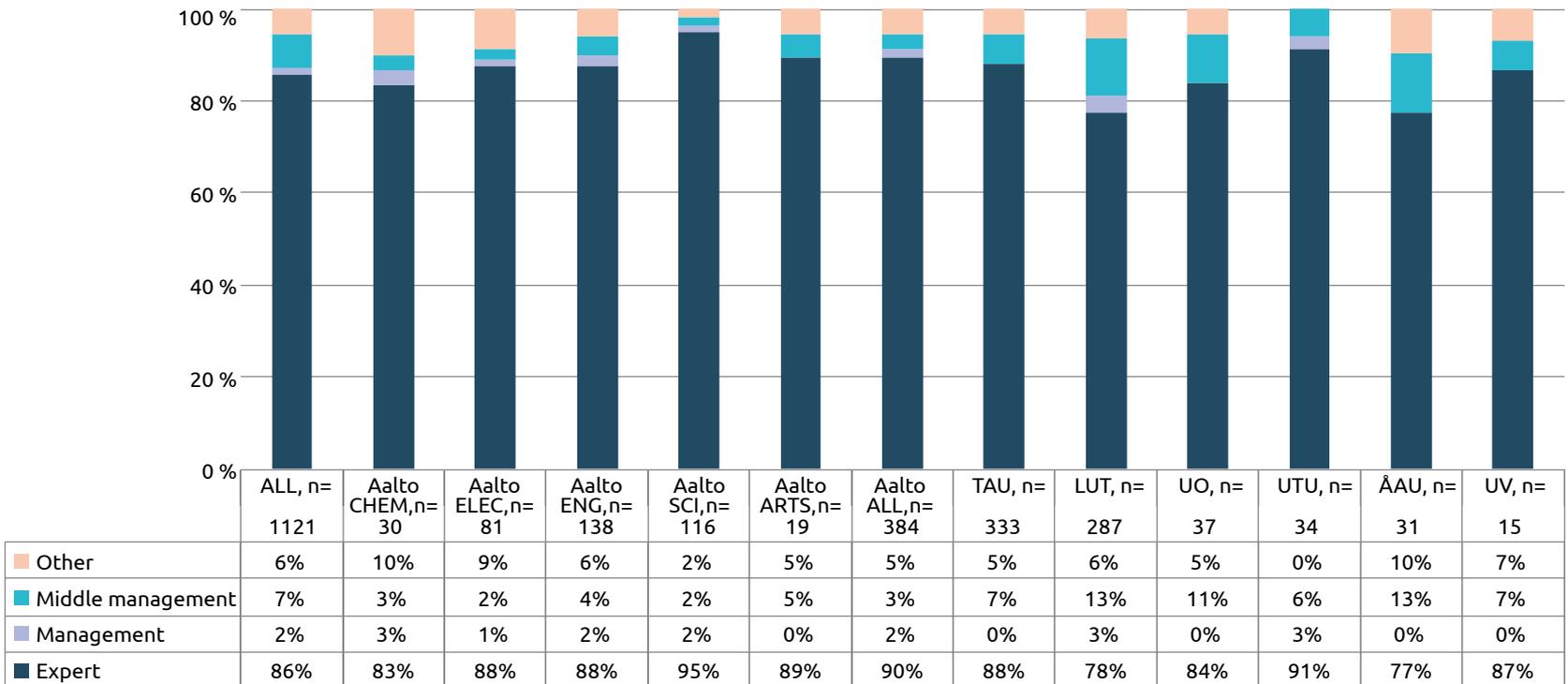
UV, n=16



# Organizational position If employed

## Your organizational position

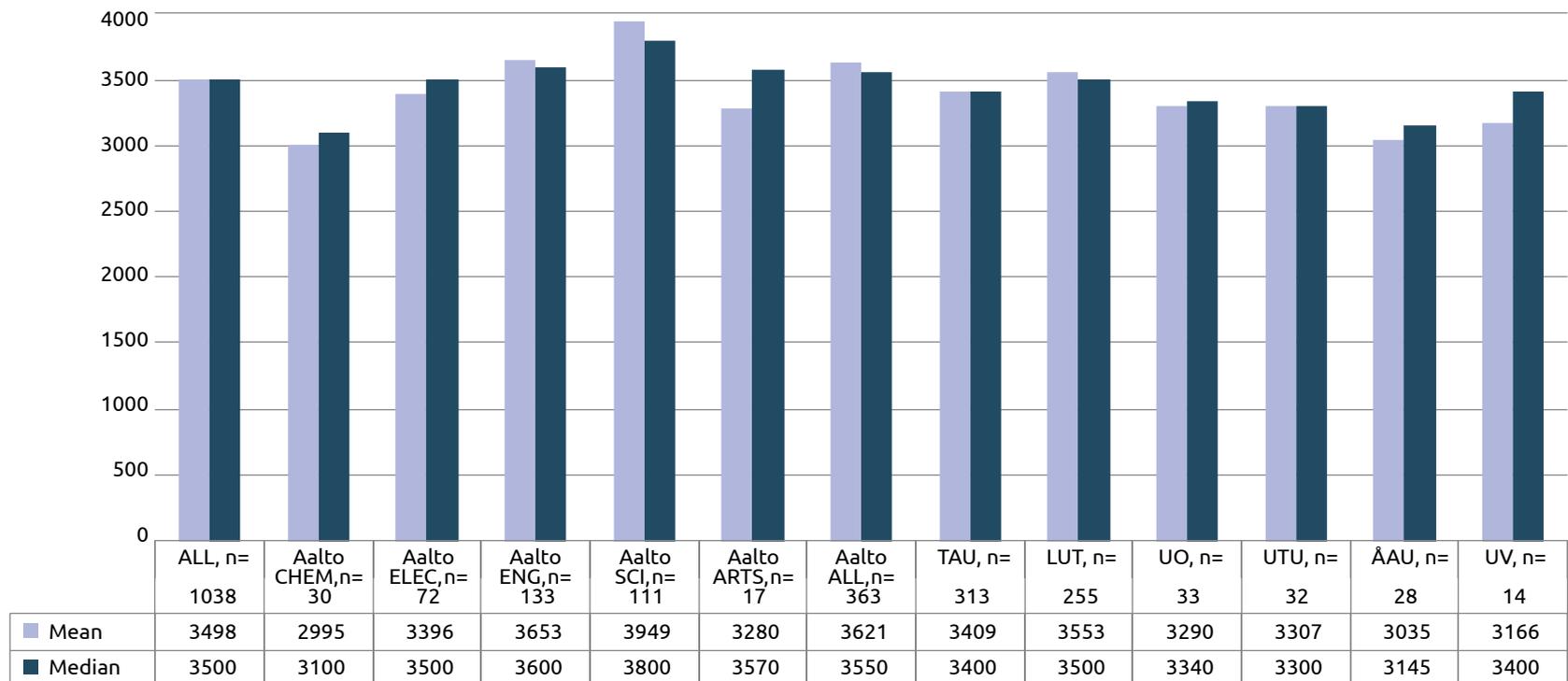
©TEK Graduate Survey 2021



# Basic salary If employed

## Basic wage or salary, EUR/month

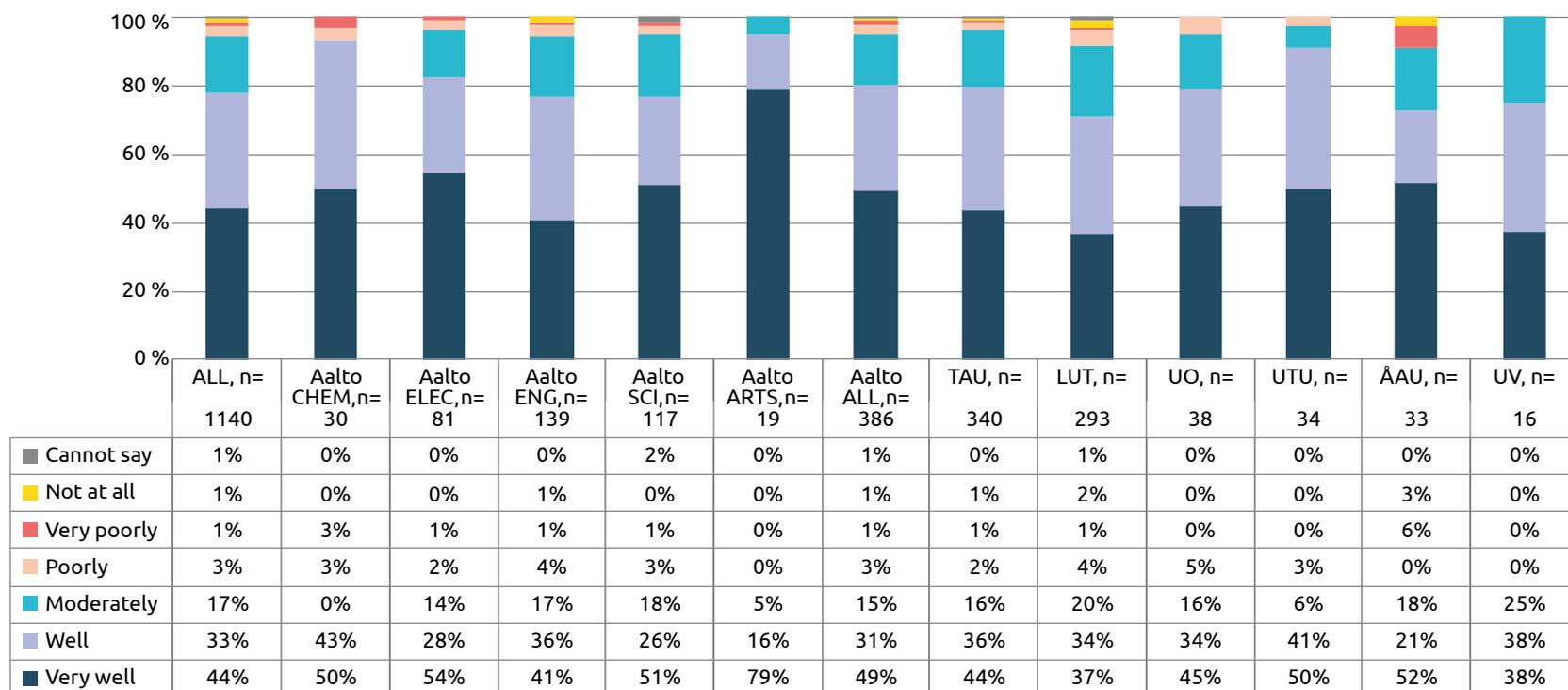
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# Quality of the employment If employed

How well does the content of your job correspond with your field of studies?

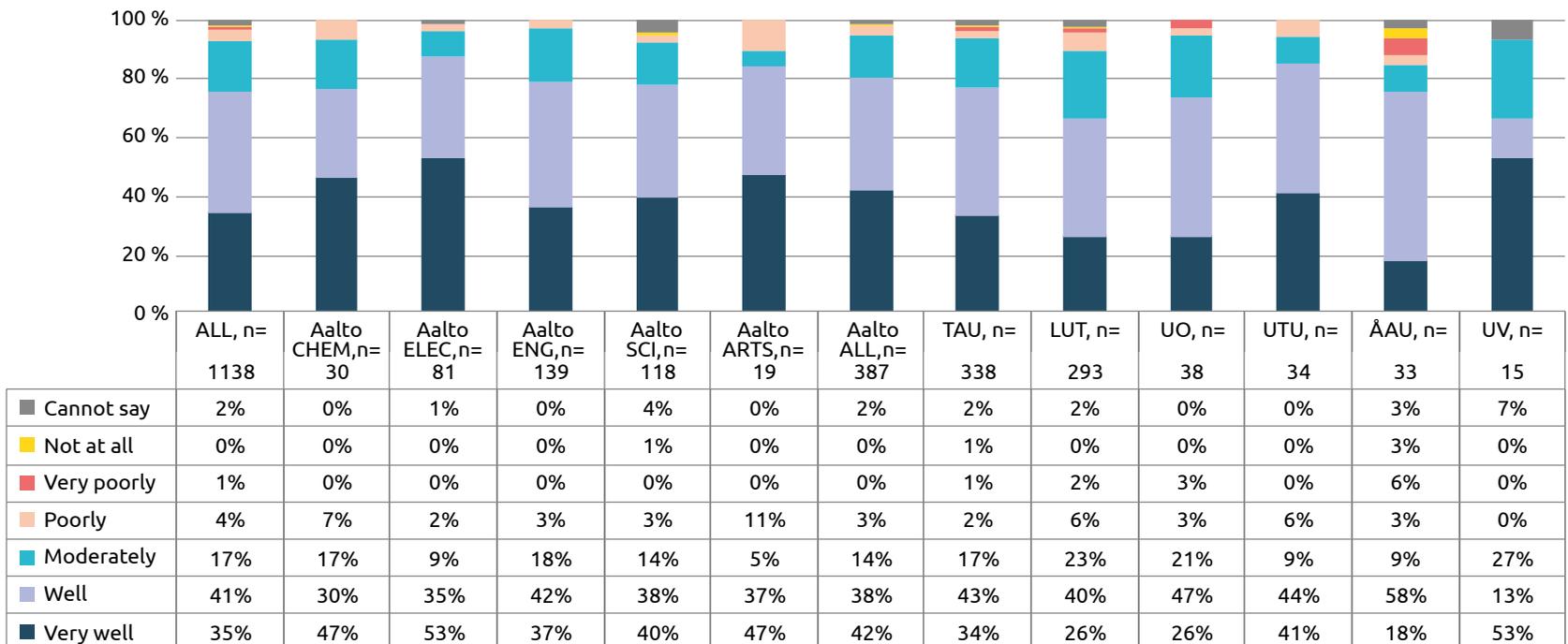
©TEK Graduate Survey 2021



# Quality of the employment If employed

How well does the level of demand in your job correspond with your educational level?

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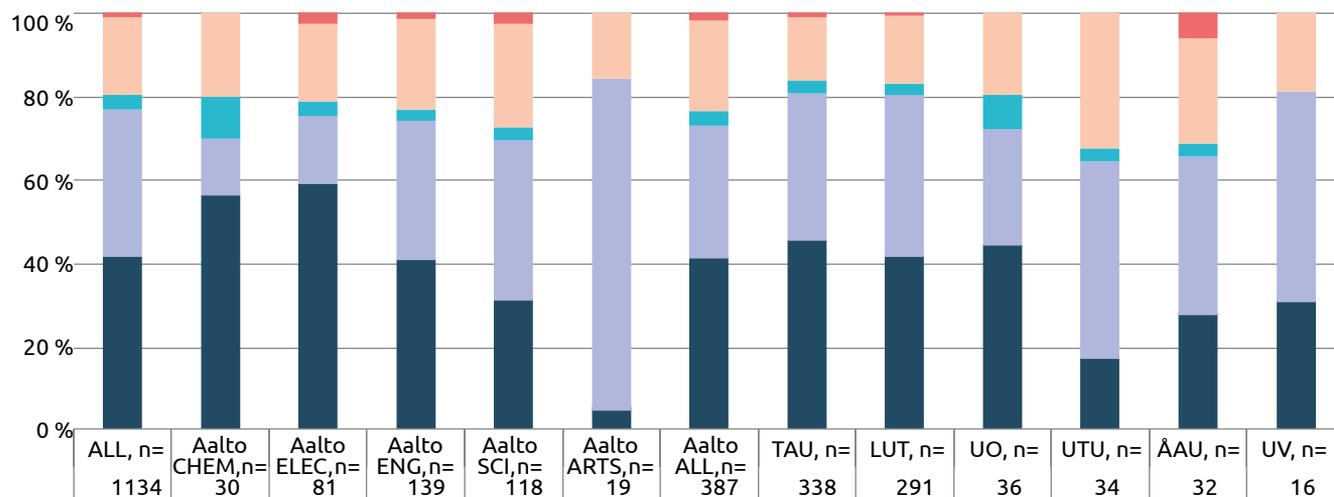


# Previous relation with the employer

## If employed

Do you have a previous relation with your employer?

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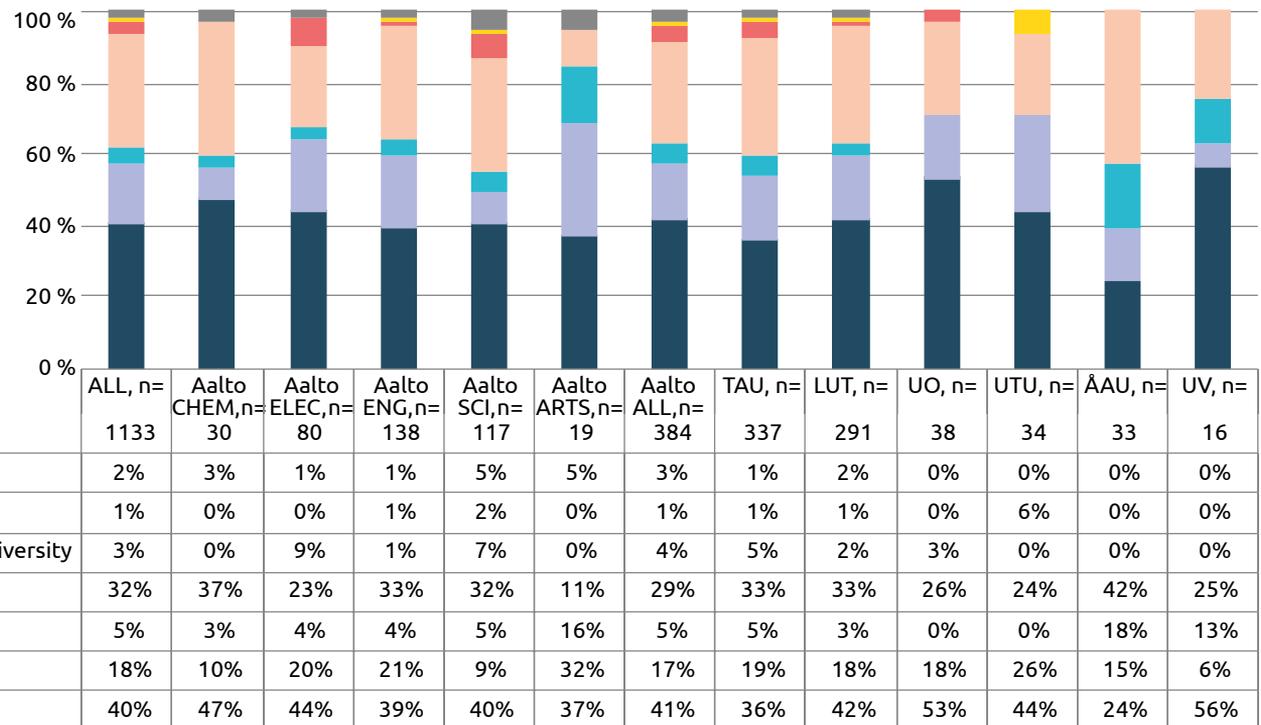


■ Something else	1%	0%	2%	1%	3%	0%	2%	1%	1%	0%	0%	6%	0%
■ No previous relation	19%	20%	19%	22%	25%	16%	21%	15%	16%	19%	32%	25%	19%
■ Master's thesis and previous collaboration	3%	10%	4%	3%	3%	0%	4%	3%	3%	8%	3%	3%	0%
■ Yes, I have previously worked in the organisation (excluding the work related to my master's thesis).	35%	13%	16%	33%	38%	79%	32%	35%	38%	28%	47%	38%	50%
■ Yes, I did my master's thesis for the organisation.	42%	57%	59%	41%	31%	5%	41%	46%	42%	44%	18%	28%	31%

# Method of recruitment If employed

## How did you get your current job?

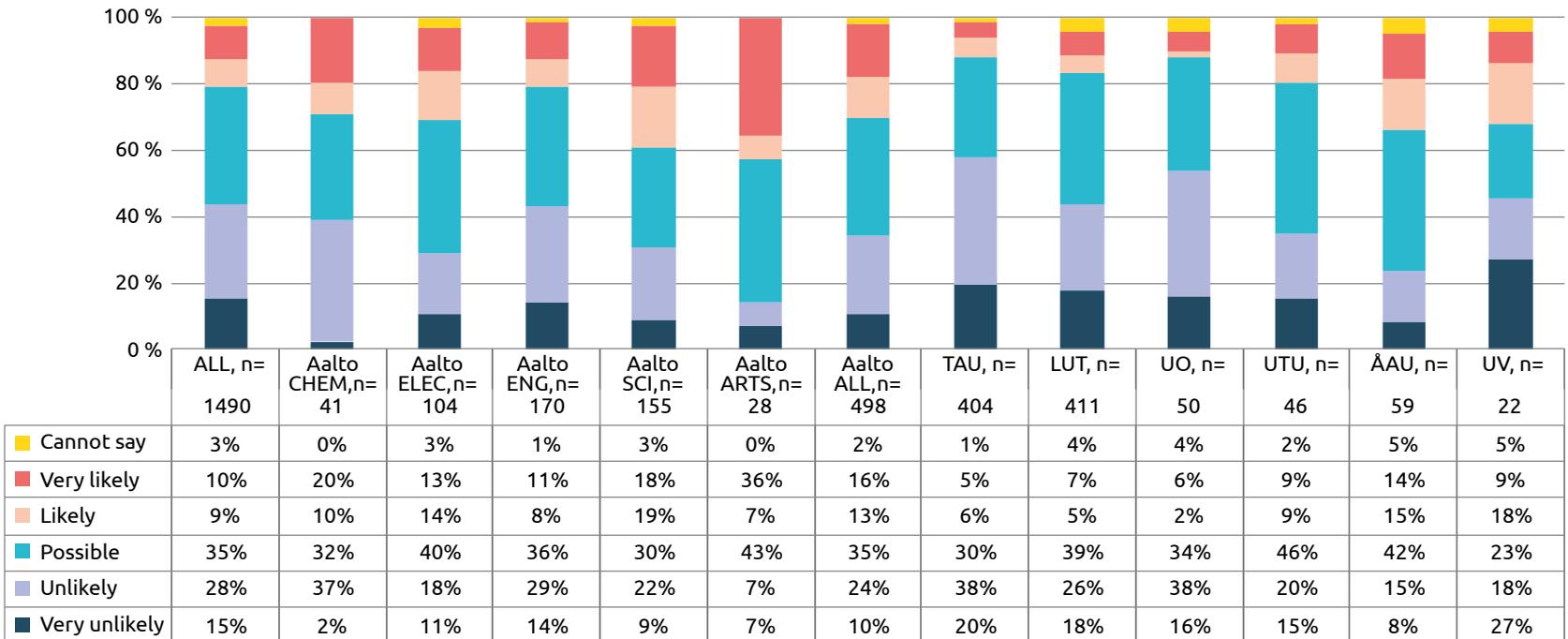
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# Working abroad

According to your own view, how likely it is that you will work elsewhere than in Finland within 5 years of your graduation?

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# Location of the job If employed

ALL, n= 1142



Aalto ALL, n= 389



TAU, n= 337



LUT, n= 295



UO, n= 38



UT, n= 34



ÅAU, n= 33



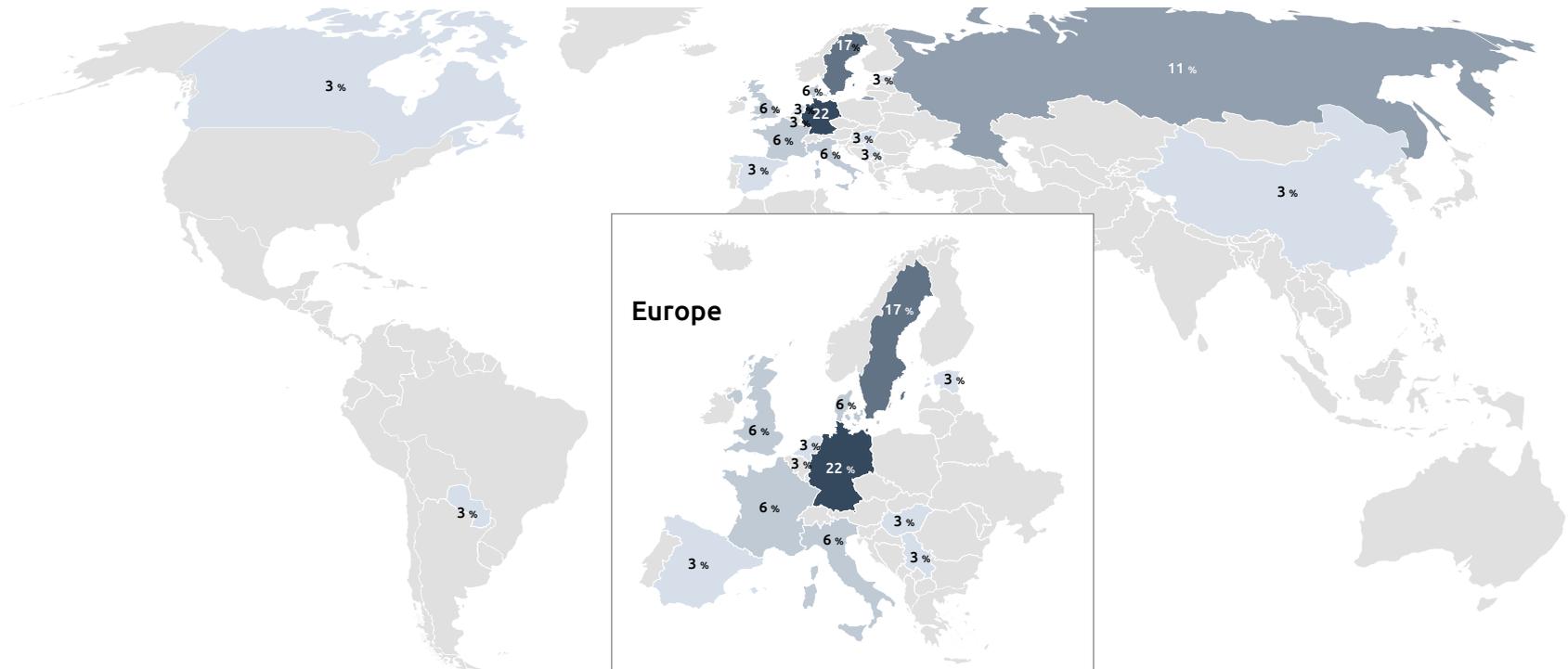
UV, n= 16



# Location of the job If abroad

The country where your job is located (outside Finland), n=36?

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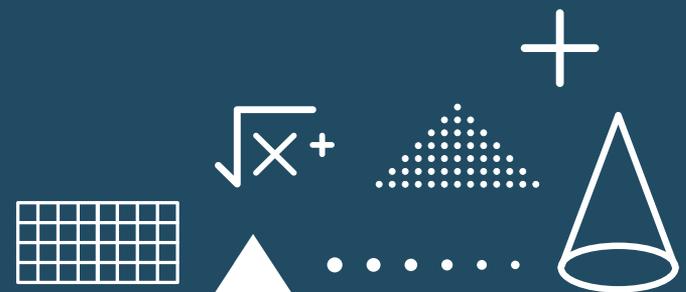
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© DSAT for MSFT, GeoNames, Microsoft, Navteq



# 9. Satisfaction with the studies

Reselection of the education

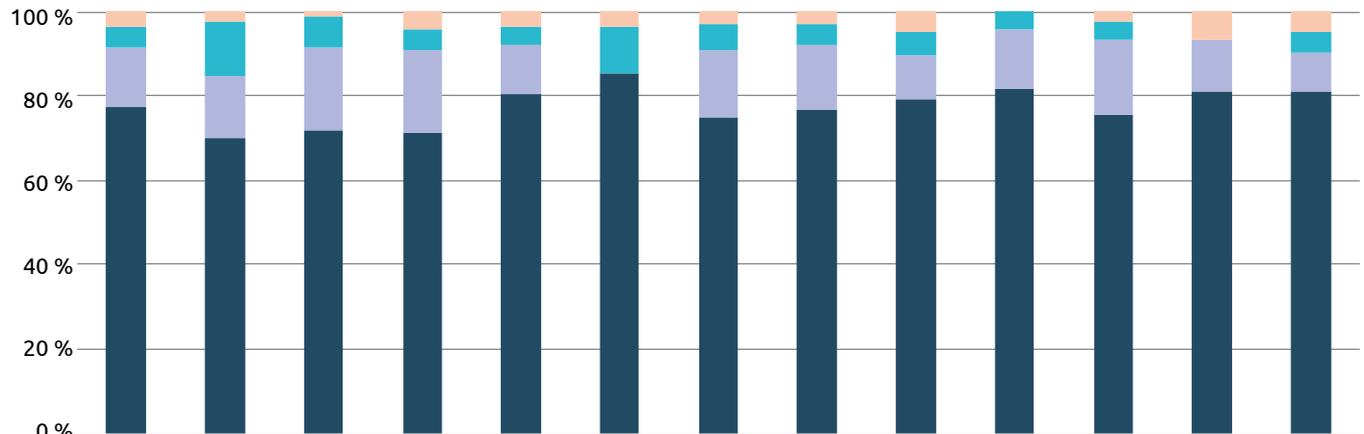
Satisfaction with the studies



# Reselection of education

If you could choose again, would now you choose the same basic degree and degree programme / major subject?

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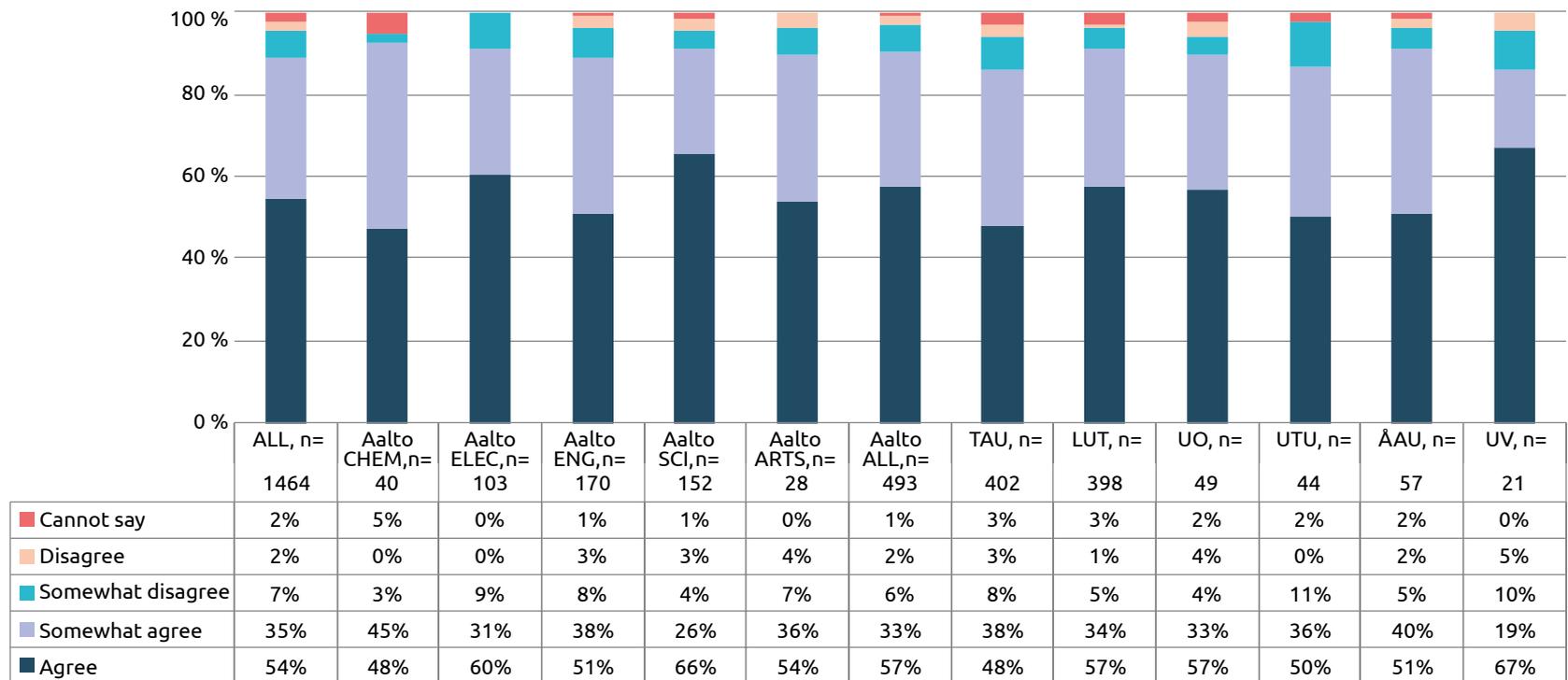


	ALL, n=1459	Aalto CHEM, n=40	Aalto ELEC, n=104	Aalto ENG, n=169	Aalto SCI, n=155	Aalto ARTS, n=27	Aalto ALL, n=495	TAU, n=392	LUT, n=398	UO, n=49	UTU, n=45	ÅAU, n=59	UV, n=21
Something else	4%	3%	1%	4%	4%	4%	3%	3%	5%	0%	2%	7%	5%
University education, but other than technology	5%	13%	8%	5%	4%	11%	6%	5%	5%	4%	4%	0%	5%
The same degree, but some other degree programme / major	14%	15%	19%	20%	12%	0%	16%	16%	10%	14%	18%	12%	10%
Yes, the same degree and degree programme / major	77%	70%	72%	71%	81%	85%	75%	77%	79%	82%	76%	81%	81%

# Satisfaction with the studies

The competences I have developed in my education meet my expectations.

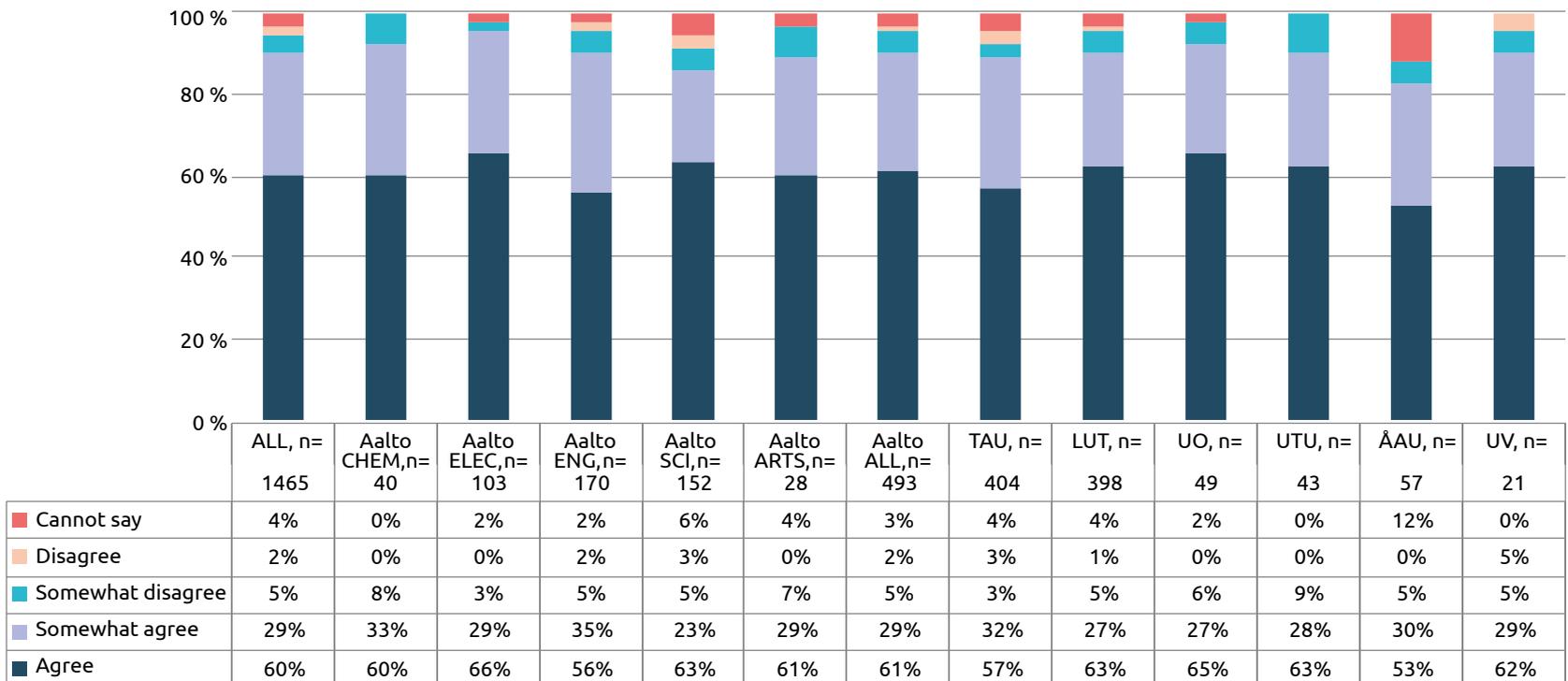
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# Satisfaction with the studies

## My education meets the set goals.

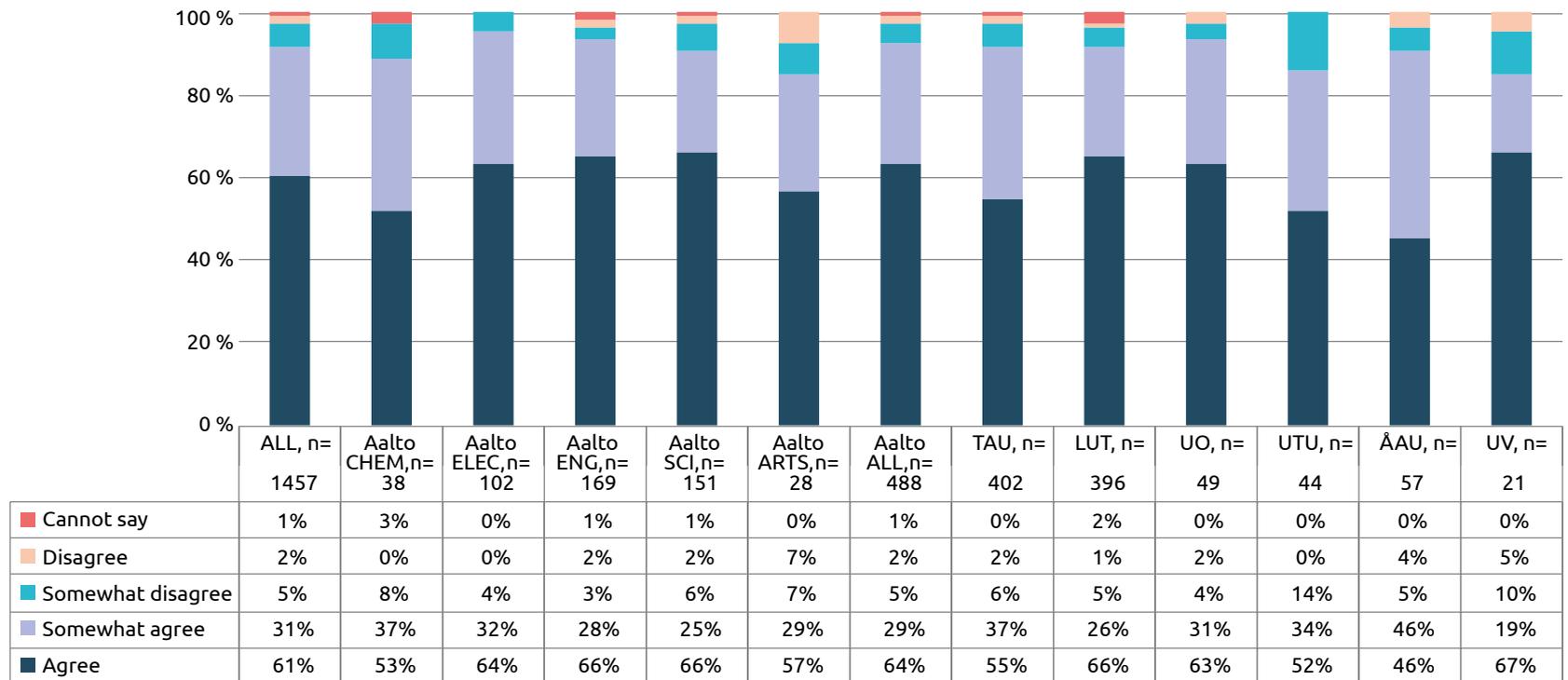
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# Satisfaction with the studies

The teaching has been, to a large extent, of good quality.

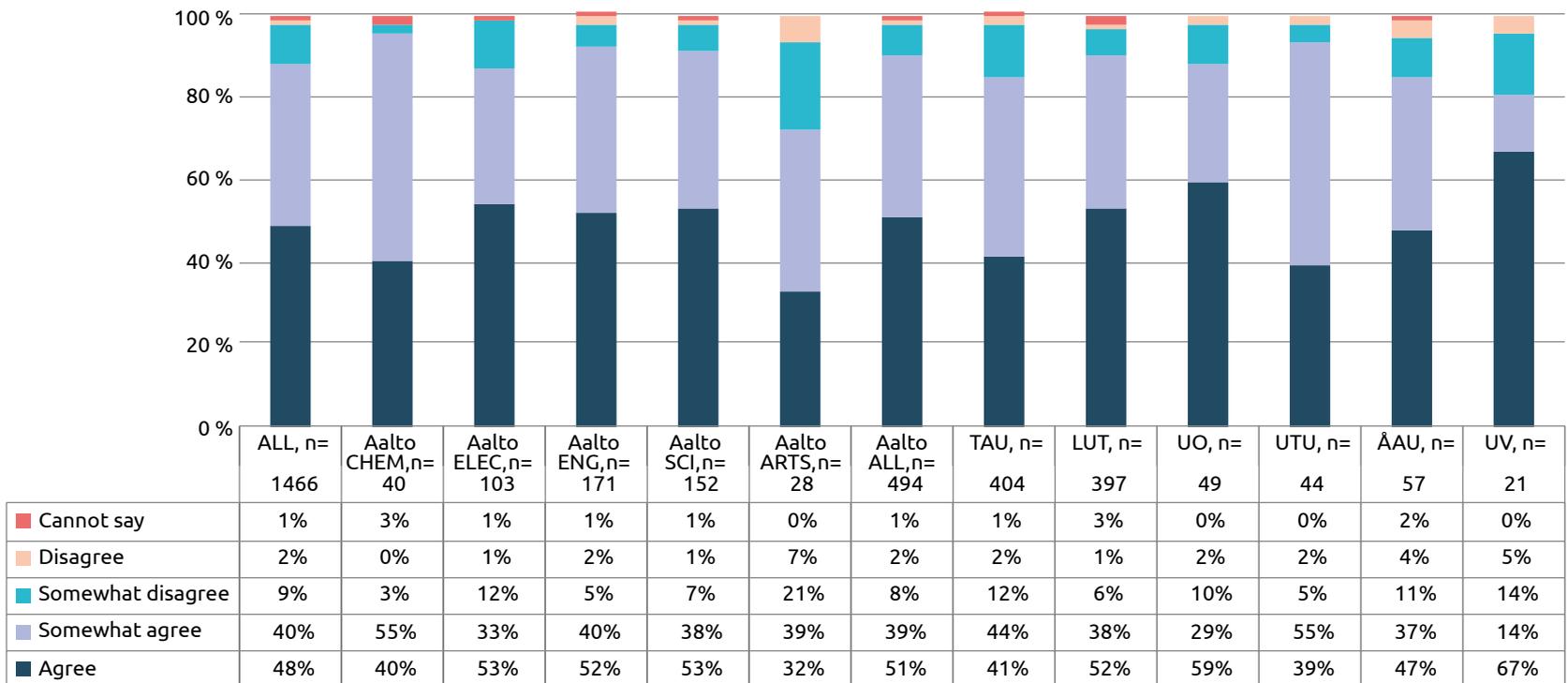
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# Satisfaction with the studies

I have been satisfied with the teaching methods used.

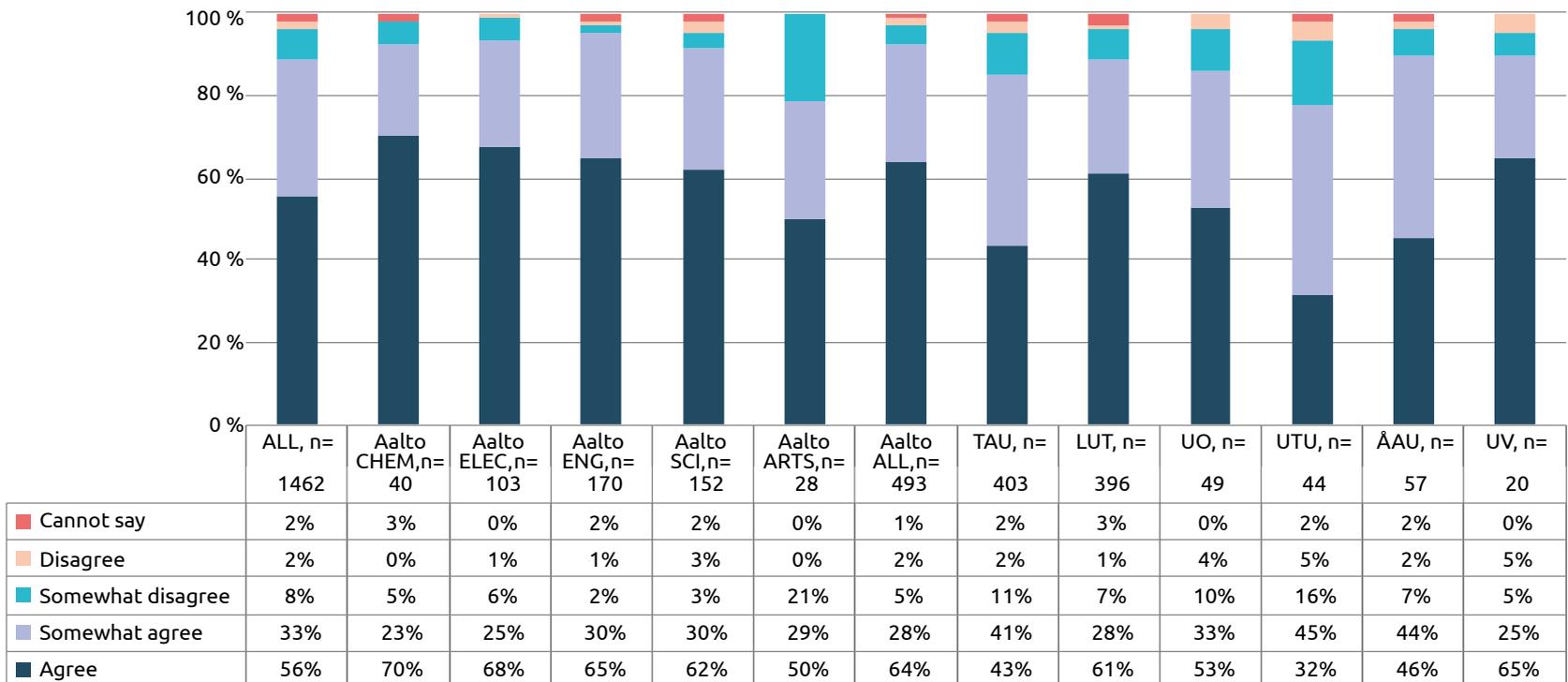
©TEK Graduate Survey 2021



# Satisfaction with the studies

Contents of the studies were up-to-date.

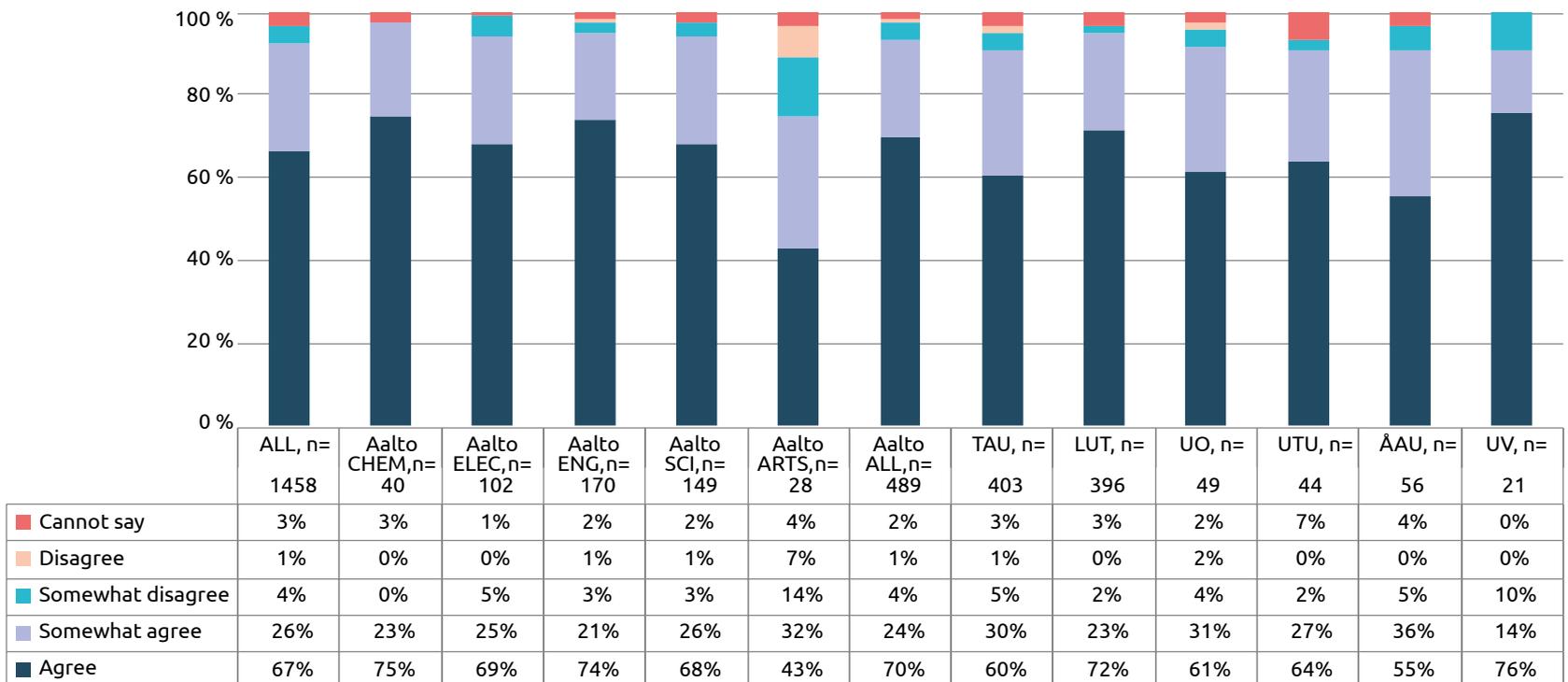
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# Satisfaction with the studies

Research results from the field were applied to teaching.

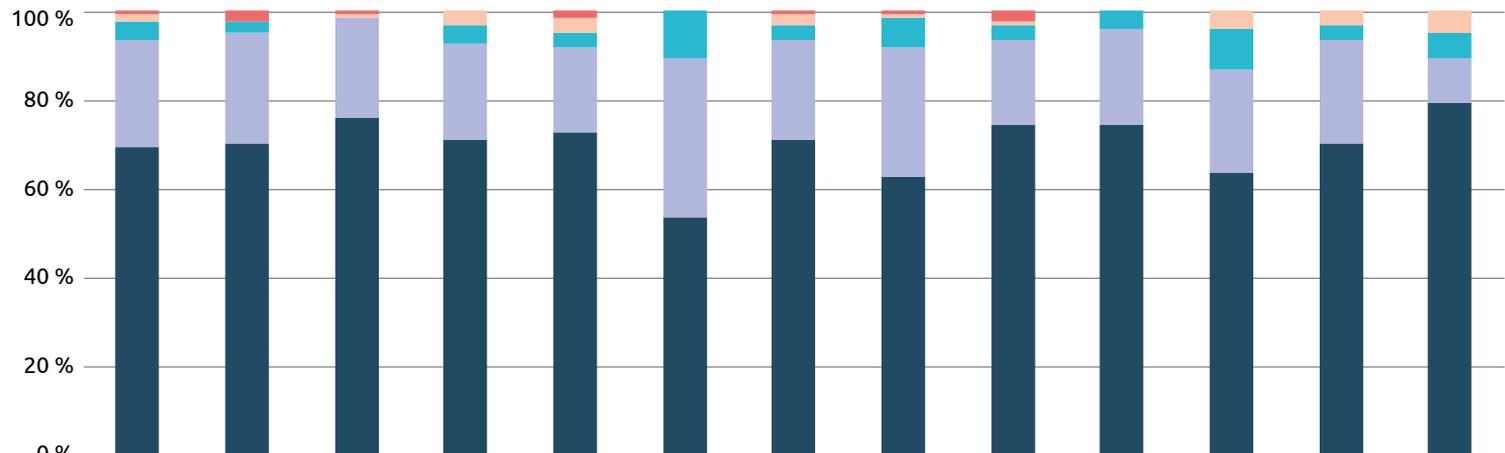
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# Satisfaction with the studies

I am satisfied with the education that I have received.

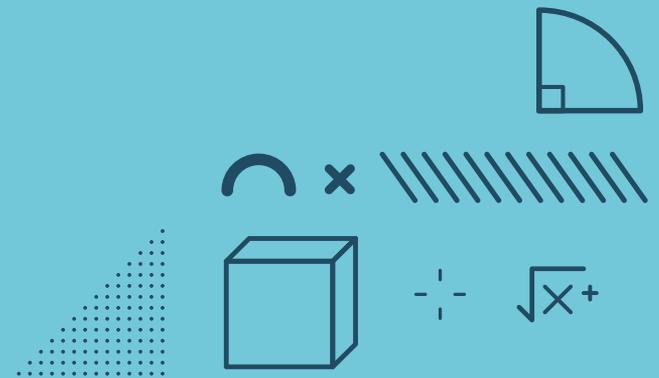
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	ALL, n= 1444	Aalto CHEM, n= 40	Aalto ELEC, n= 103	Aalto ENG, n= 168	Aalto SCI, n= 151	Aalto ARTS, n= 28	Aalto ALL, n= 490	TAU, n= 398	LUT, n= 389	UO, n= 47	UTU, n= 44	ÅAU, n= 57	UV, n= 19
Cannot say	1%	3%	1%	0%	1%	0%	1%	1%	2%	0%	0%	0%	0%
Disagree	2%	0%	1%	4%	4%	0%	3%	1%	1%	0%	5%	4%	5%
Somewhat disagree	4%	3%	0%	4%	3%	11%	3%	6%	3%	4%	9%	4%	5%
Somewhat agree	24%	25%	22%	22%	20%	36%	22%	30%	20%	21%	23%	23%	11%
Agree	69%	70%	76%	71%	72%	54%	71%	62%	74%	74%	64%	70%	79%



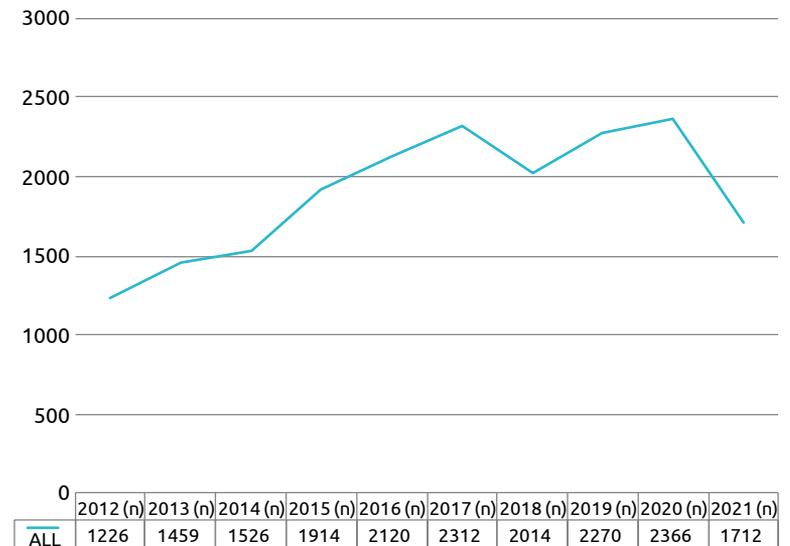
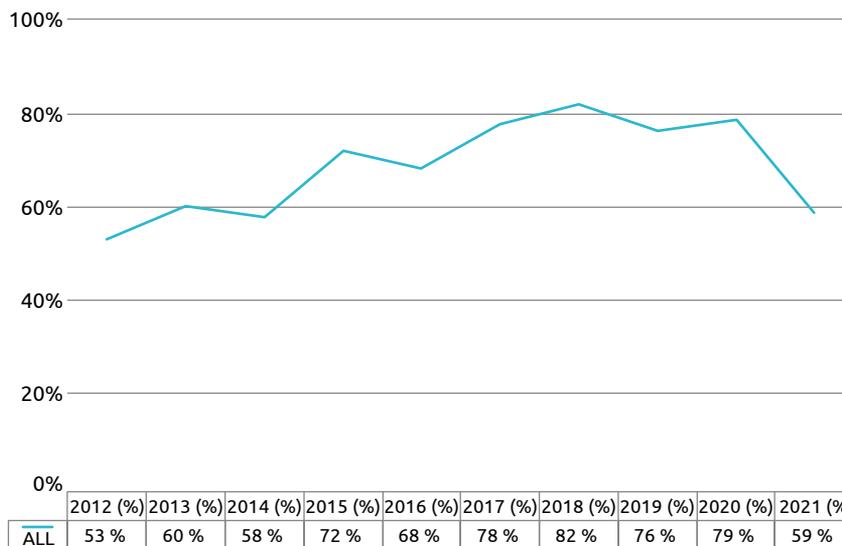
# Trends and time series



# Answers and answer rates

## Answers and answer rates

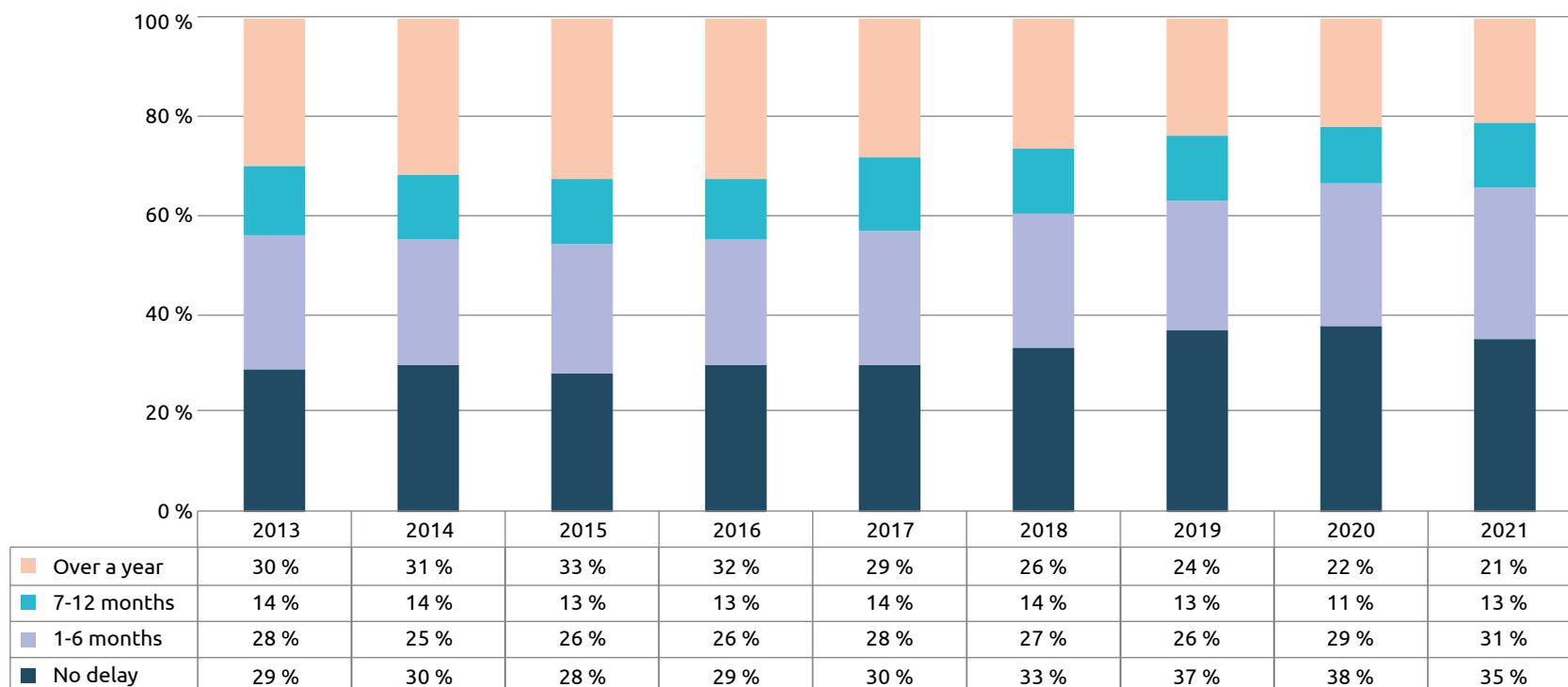
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# Delays

## 1. Delays in studies or graduation, amount

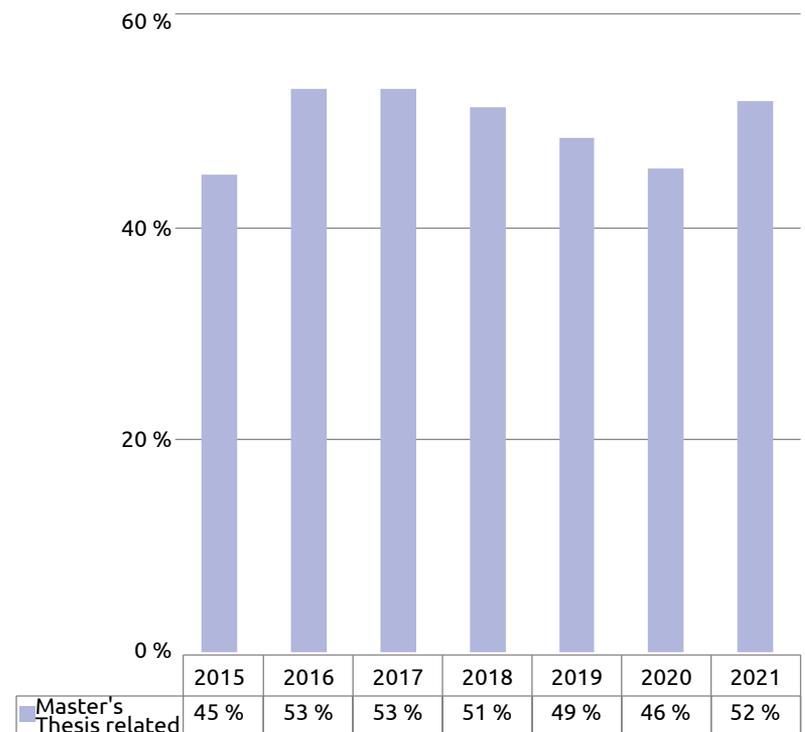
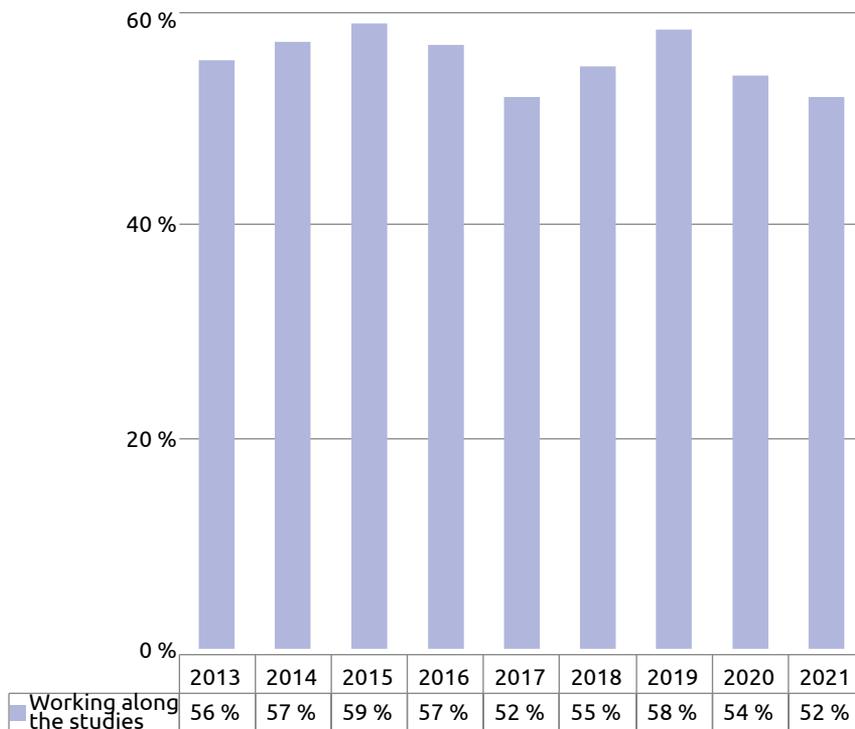
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# Reasons for the delays

## 2. Reasons for the delays among those whose studies were delayed

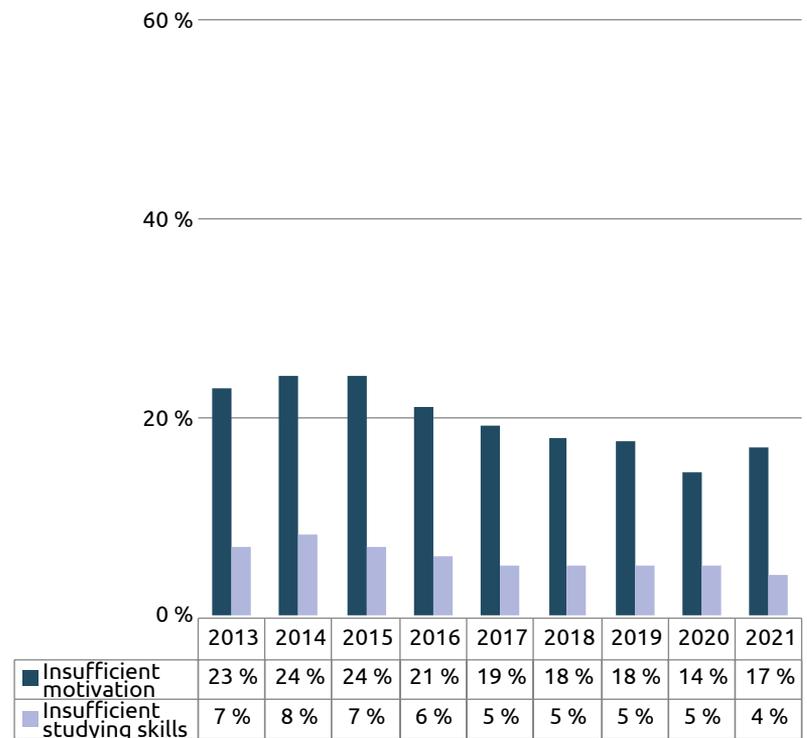
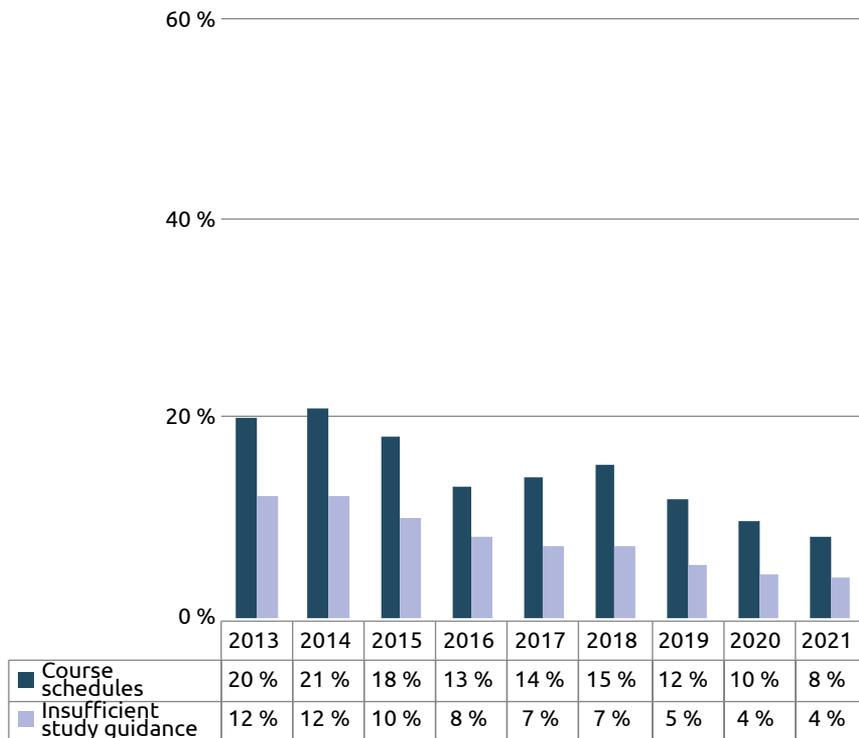
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# Reasons for the delays

## 2. Reasons for the delays among those whose studies were delayed

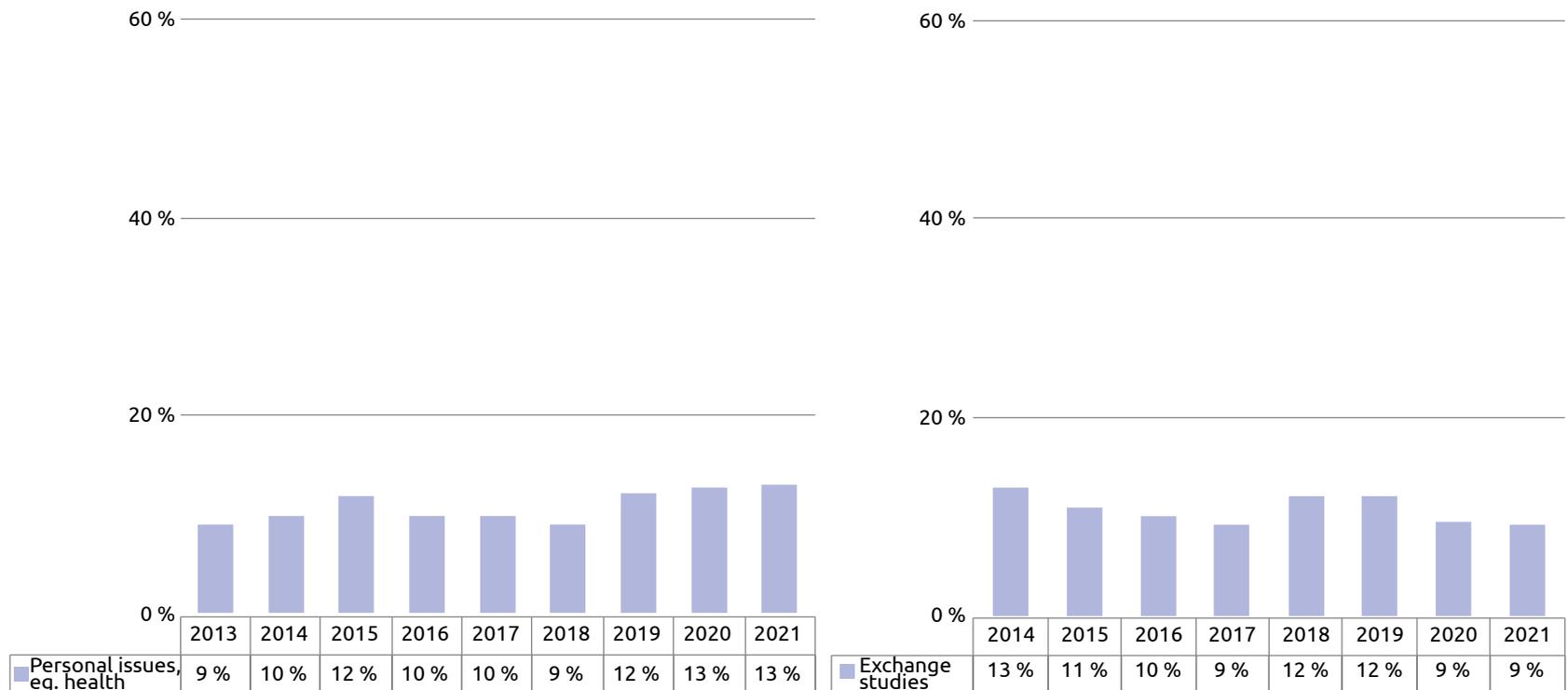
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# Reasons for the delays

## 2. Reasons for the delays among those whose studies were delayed

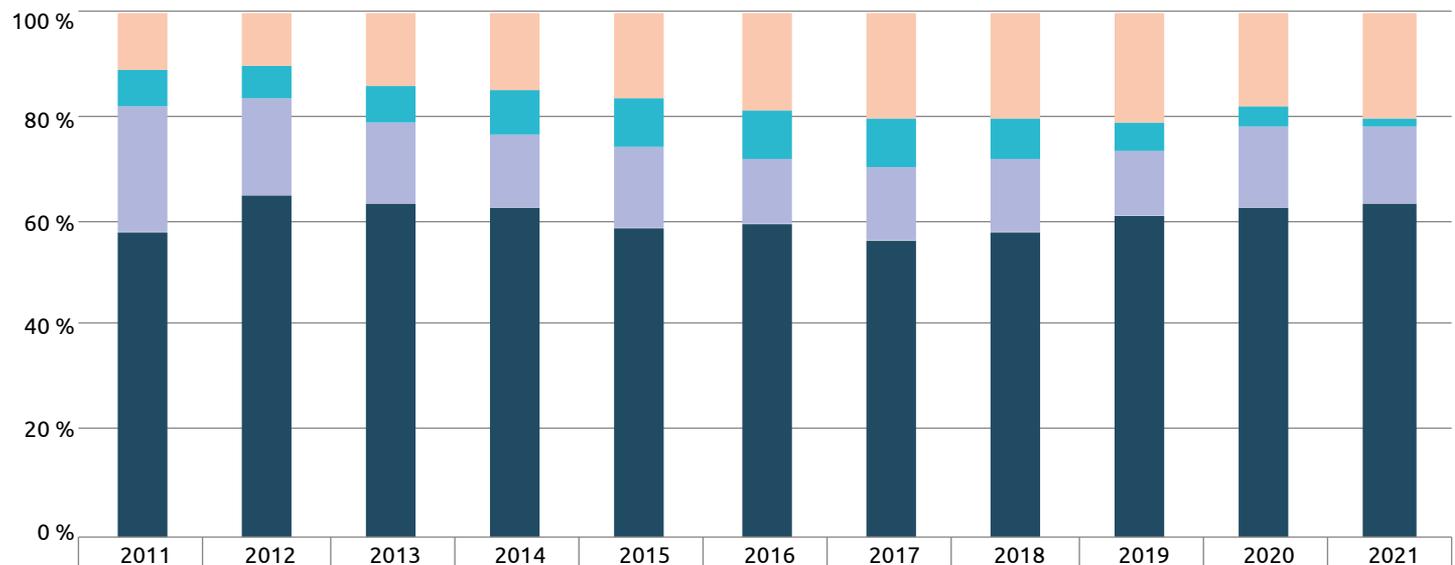
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# Master's thesis

## Financing of the Master's Thesis

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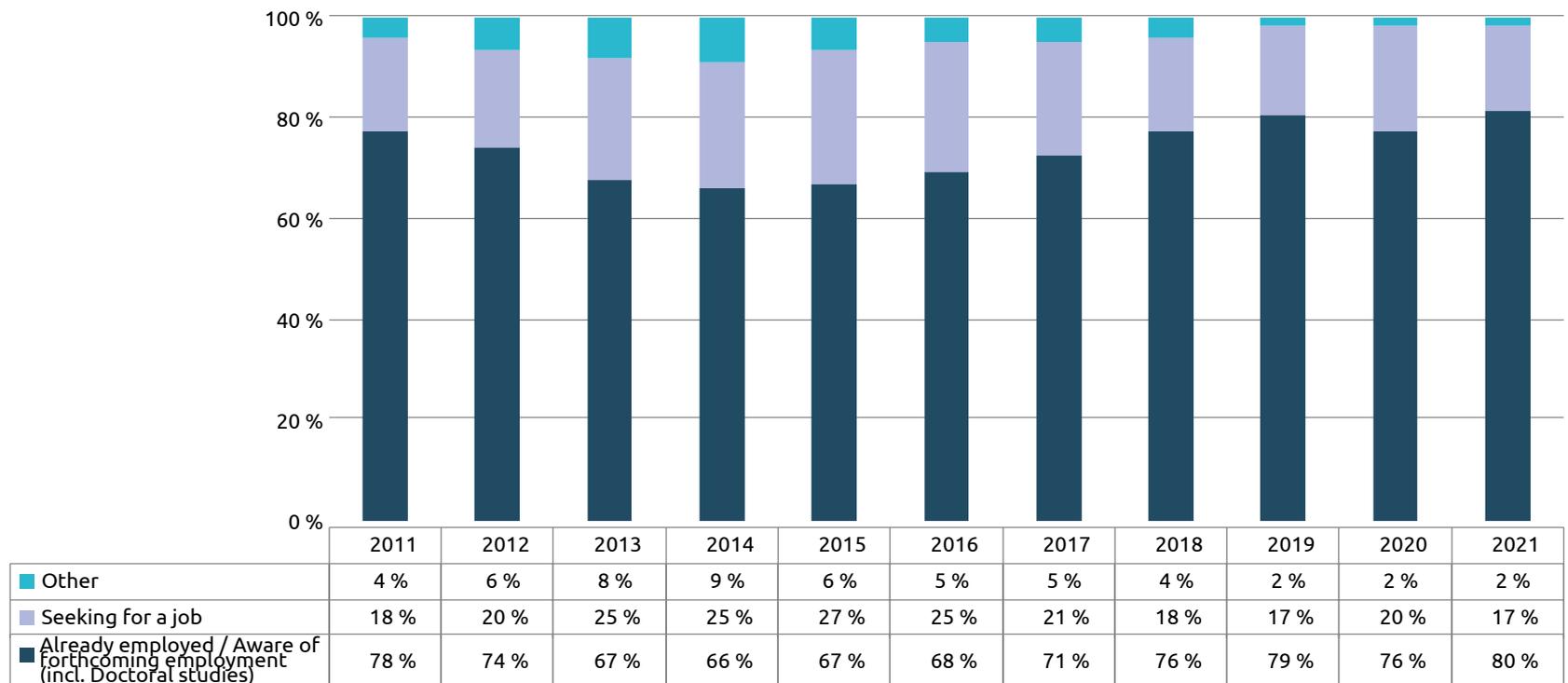


\* Including monthly or hourly salary, or permission to use working time for thesis.

# Employment

## Employment at the time of graduation

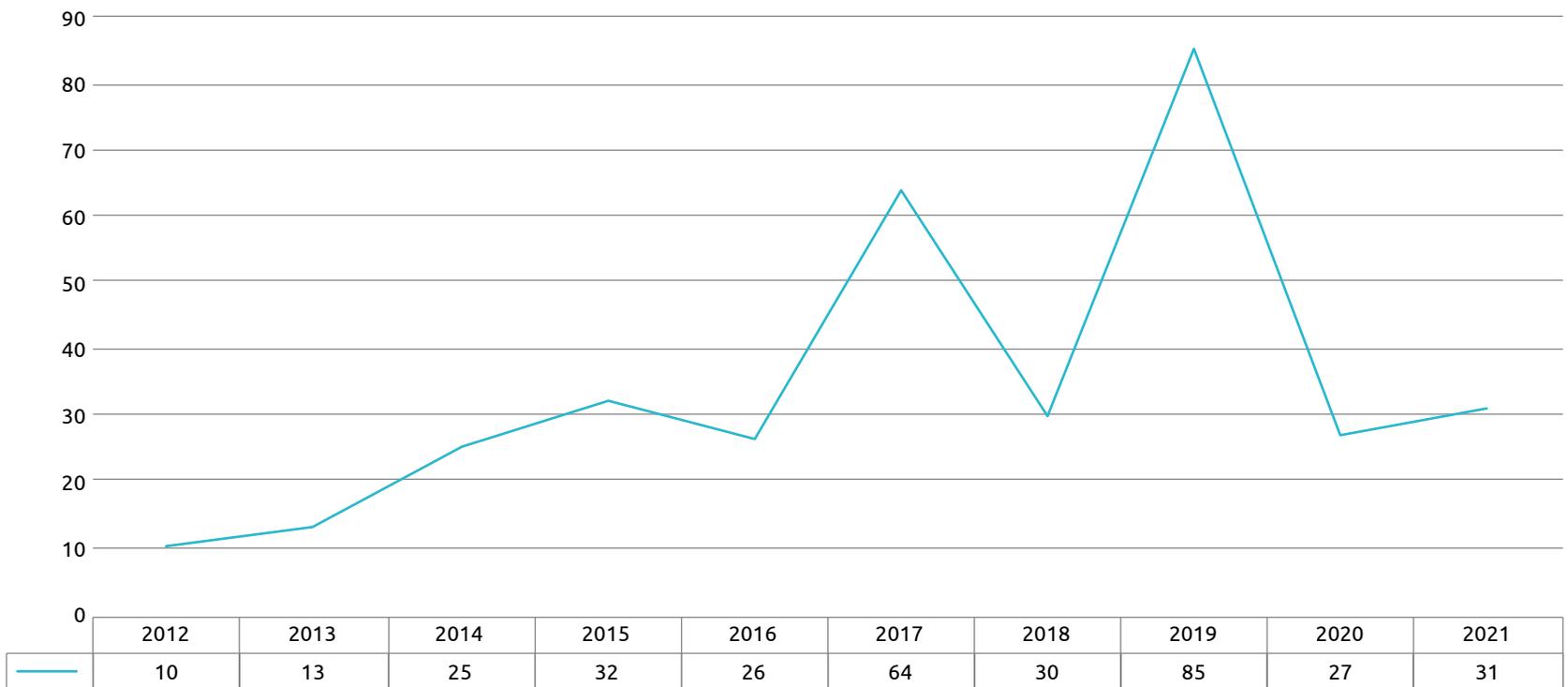
©TEK Graduate Survey 2021



# Employment

I'm working as an entrepreneur.

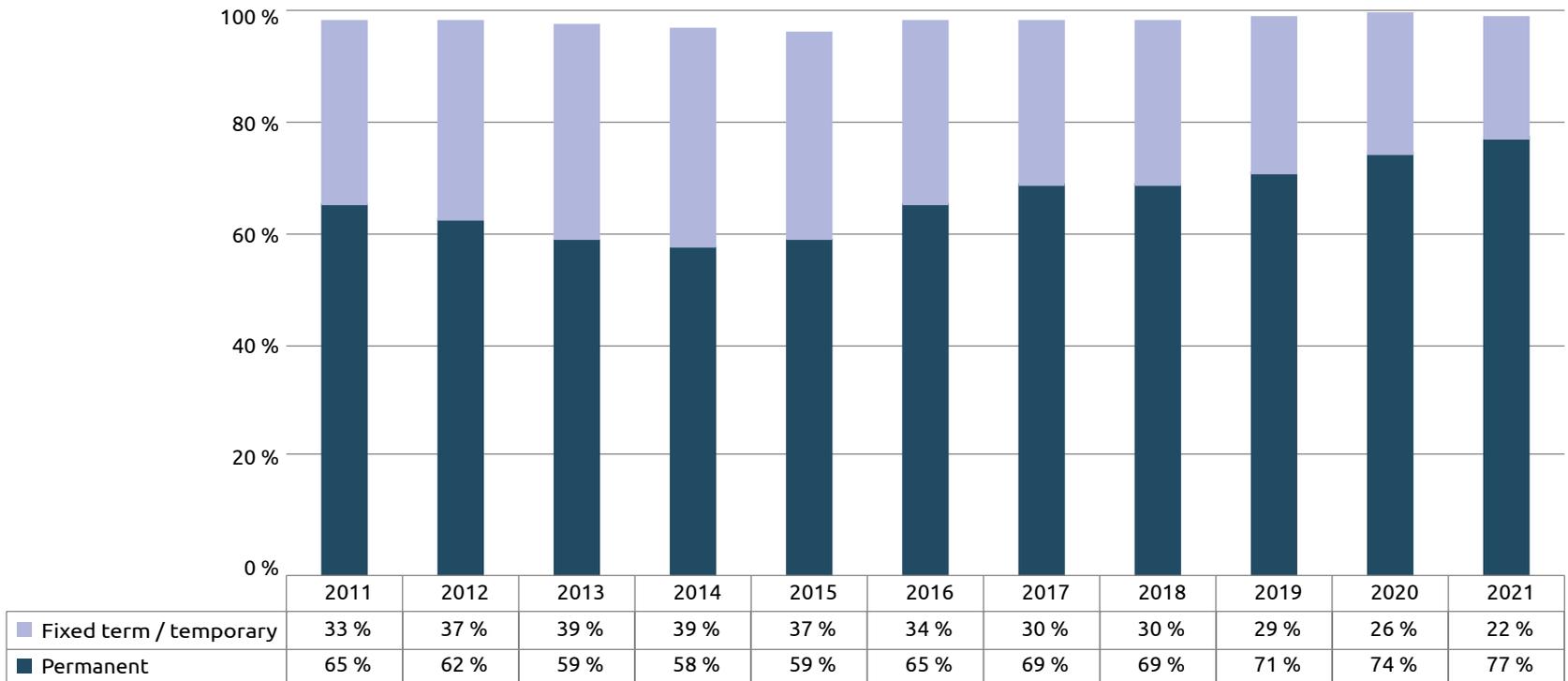
©TEK Graduate Survey 2021



# Type of contract

## Type of contract, if employed

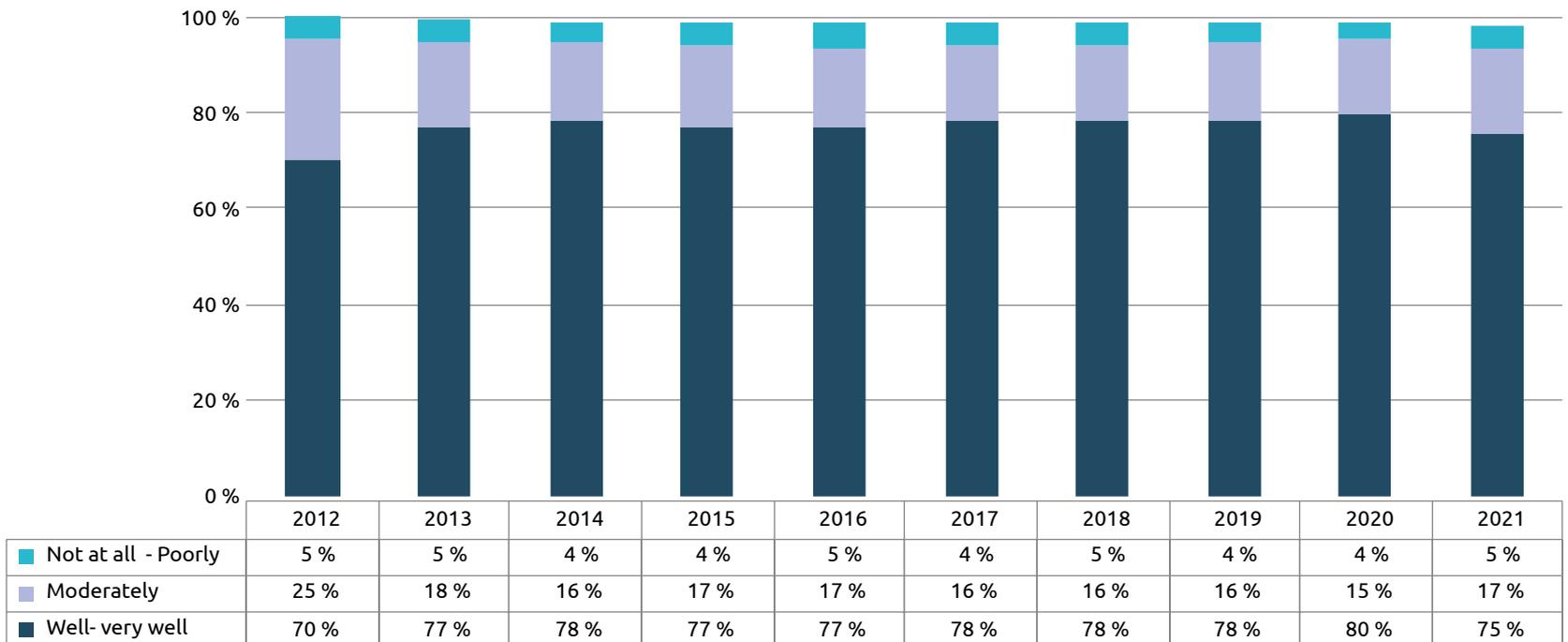
©TEK Graduate Survey 2021



# Quality of the employment

How well does the level of demand in your job correspond with your educational level?

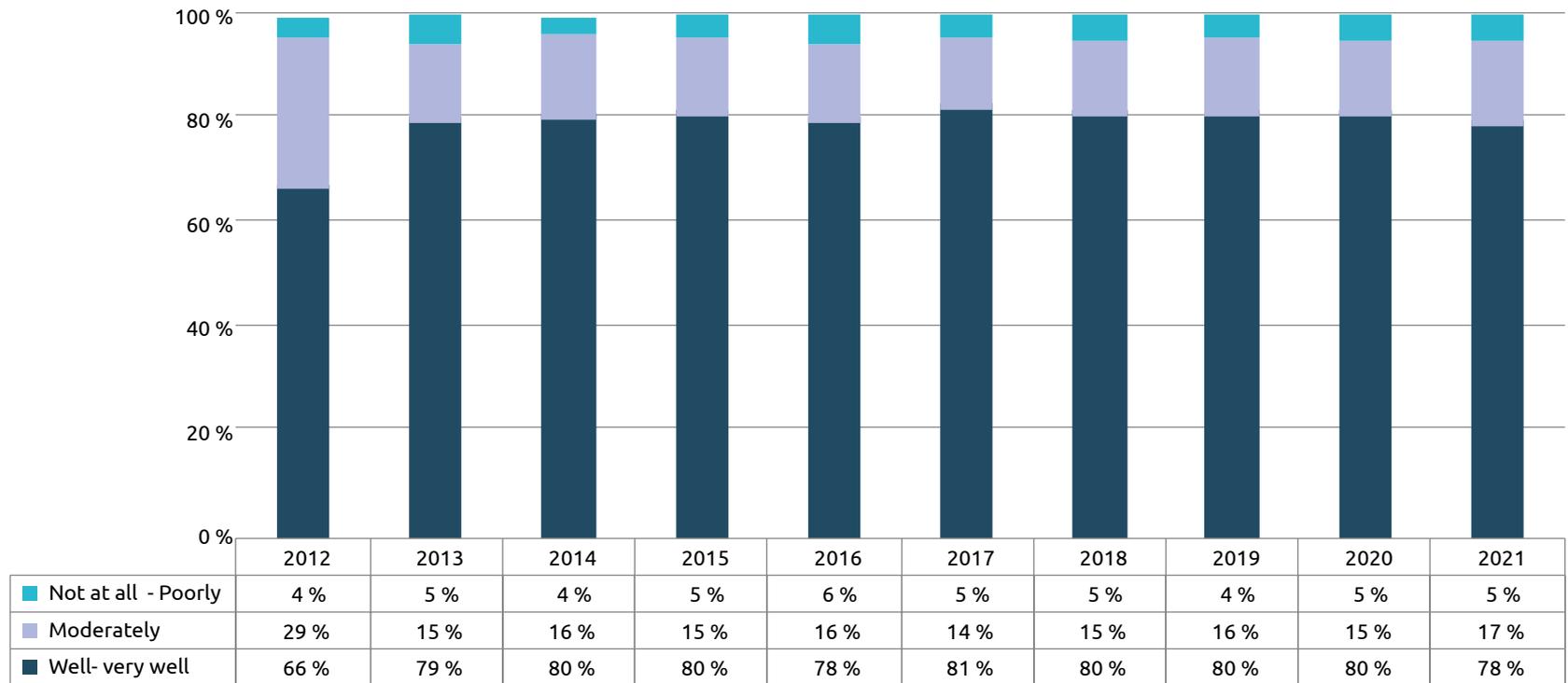
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# Quality of the employment

How well does the content of your job correspond with your field of studies?

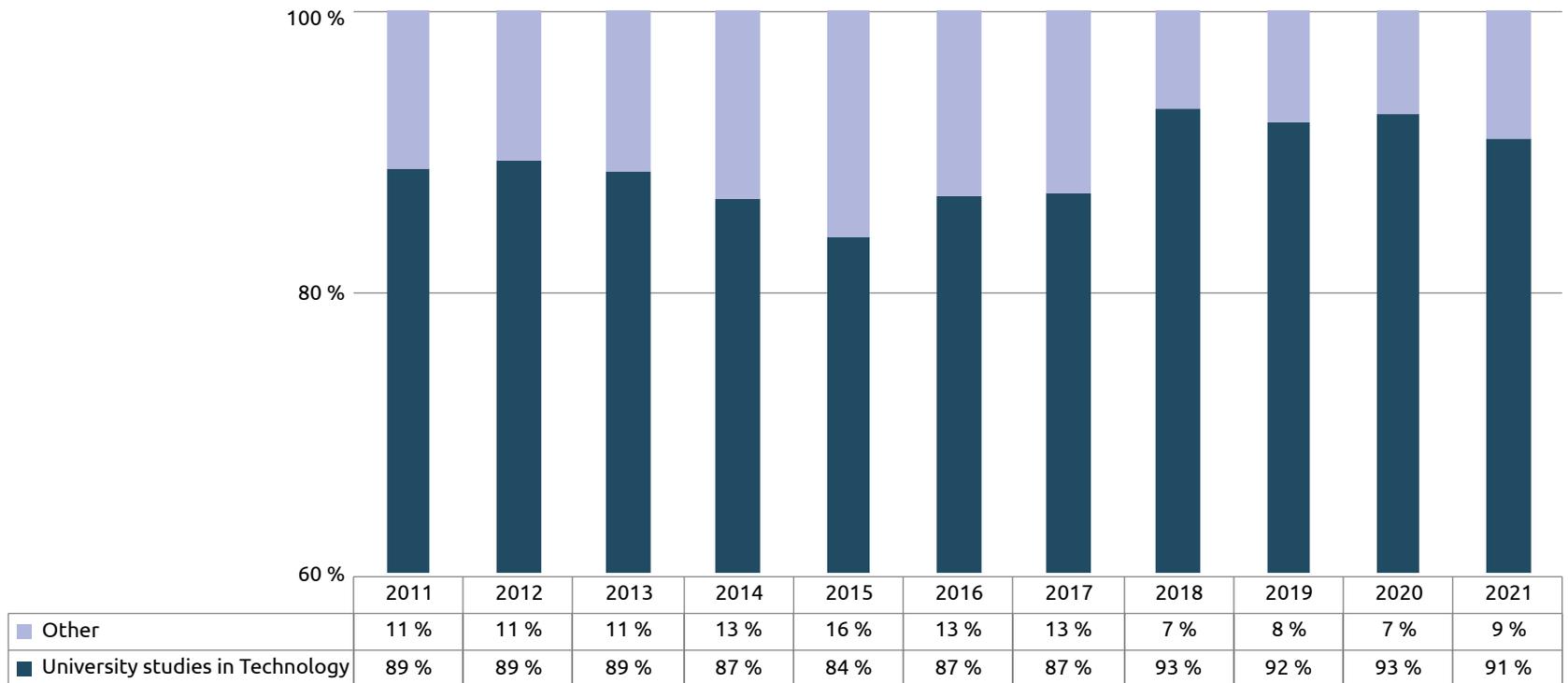
©TEK Graduate Survey 2021



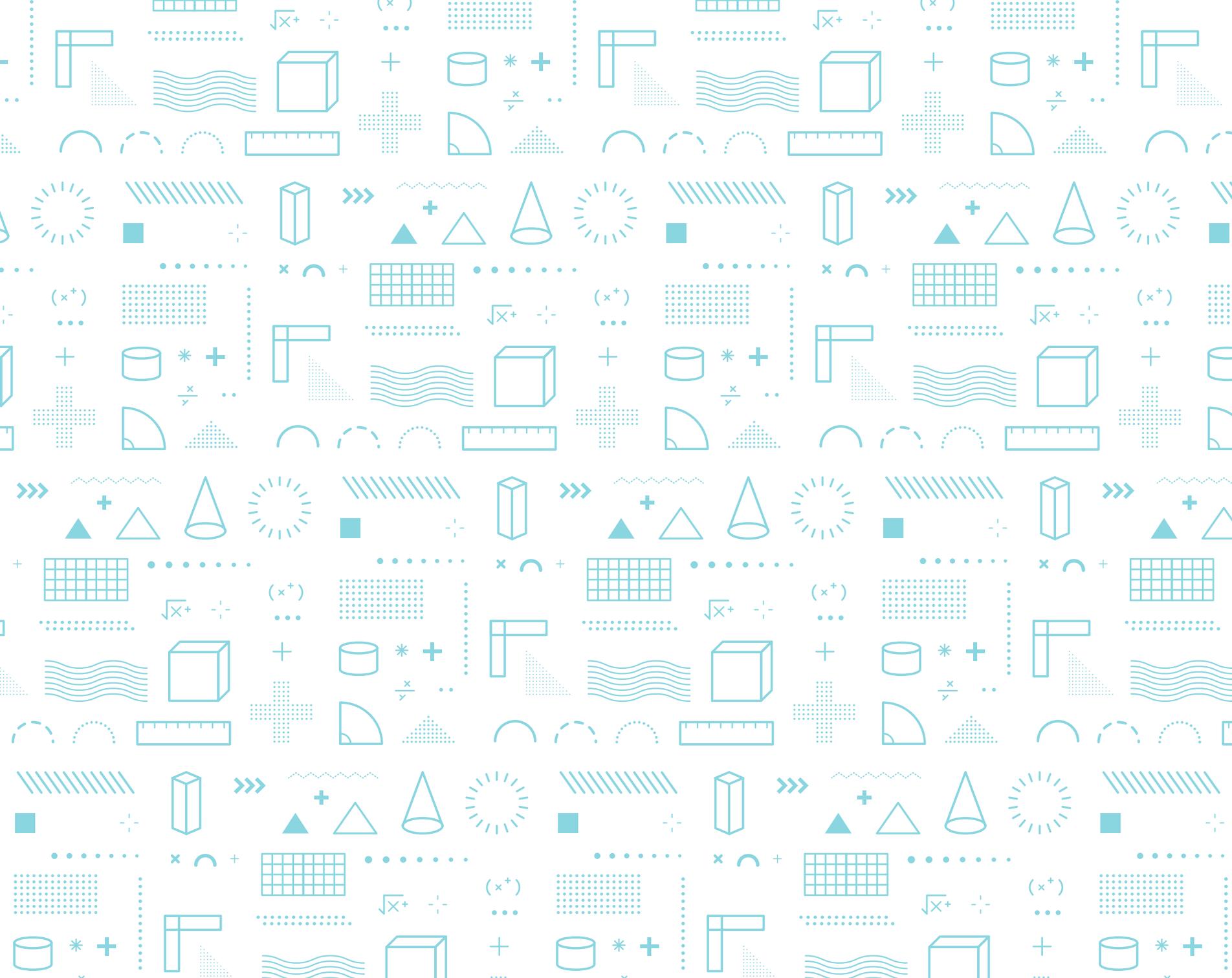
# Reselection

If you could choose again, which line of education would you choose now?

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# TEK Graduate Survey 2021

Academic Engineers and Architects in Finland TEK and Finnish universities in technology together carry out a yearly feedback survey for graduated academic engineers and architects.

The feedback and results are utilized in developing university education and influencing the educational policy making.

More information:

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arttu.piri@tek.fi

[www.tek.fi/graduate-survey](http://www.tek.fi/graduate-survey)

