

Faculty of Psychology and Educational Sciences, Faculty of Engineering and Architecture

Master of Science in Teaching in Science and Technology (abridged programme) -- Engineering and Technology

Language of instruction: Dutch

Programme version 7

1 Teaching Component 60 credits

1.1 Programme Pathway Theoretical Education 18 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	H002476 Powerful Learning Environments <i>Bram De Wever -- Department of Educational Studies</i>	6		1	A:1, B:1, K:1	180
2	H002478 The Student: Development and Motivation <i>Wim Beyers -- Department of Developmental, Personality and Social Psychology</i>	6		1	A:1, K:1, B:1	180
3	H002477 The Teacher within Class, School and Society <i>Melissa Tuytens -- Department of Educational Studies</i>	6		1	K:2, A:2, B:2	180

1.2 Programme Pathway Teaching Methodology 18 credits

Subscribe to 9 credit units from each teaching methodology module from the following list.

Your prior education determines to what Teaching Methodology or "STEM focus" courses you will be admitted. Teaching Methodology 2 covers another discipline than Teaching Methodology 1.

- BaSc ingenieurswet.: Teaching Methodology engineering and technology, Teaching Methodology or "STEM focus" corresponding to Physics, Computer Sciences and Mathematics
- BaSc ingenieurswet. - architectuur: Teaching Methodology engineering and technology, Teaching Methodology or "STEM focus" corresponding to Architecture, Physics, Computer Science and Mathematics
- BaSc ingenieurswet. - chemische technologie en materiaalkunde: Teaching Methodology engineering and technology, Teaching Methodology or "STEM focus" corresponding to Chemistry, Physics, Computer Science and Mathematics
- BaSc industriële wet.: Teaching Methodology engineering and technology, Teaching Methodology or "STEM focus" corresponding to Physics and Computer Science
- BaSc industriële wet. - industrieel ontwerpen: Teaching Methodology engineering and technology, Teaching Methodology or "STEM focus" corresponding to Architecture, Physics and Computer Science
- BaSc industriële wet. - chemie, MaSc industriële wet. - biochemie of milieukunde en MaSc industriële wet. - chemie met keuzevakken biochemie of milieukunde: Teaching Methodology engineering and technology, Teaching Methodology or "STEM focus" corresponding to Chemistry, Physics, and Computer Science

1.2.1 Module Teaching Methodology 1 9 credits

Subscribe to 9 credit units from the following list.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	H002583 Teaching Methodology: Engineering and Technology <i>Francis wyffels -- Department of Electronics and Information Systems</i>	9		1	J:J	270
2	H002606 Teaching Methodology: STEM Focus Architecture <i>Maarten Van Den Driessche -- Department of Architecture and Urban Planning</i>	9		1	J:J	270
3	H002599 Teaching Methodology: STEM Focus Chemistry <i>Katrien Strubbe -- Department of Chemistry</i>	9		1	J:J	270
4	H002603 Teaching Methodology: STEM Focus Physics <i>Stefaan Cottenier -- Department of Electromechanical, Systems and Metal Engineering</i>	9		1	J:J	270
5	H002604 Teaching Methodology: STEM Focus Computer Science <i>Kris Coolsaet -- Department of Applied Mathematics and Computer Science</i>	9		1	J:J	270
6	H002605 Teaching Methodology: STEM Focus Mathematics <i>Hendrik Van Maldeghem -- Department of Applied Mathematics and Computer Science</i>	9		1	J:J	270

1.2.2 Module Teaching Methodology 2 9 credits

Subscribe to 9 credit units from the following list in another discipline than the one chosen in the module "Teaching Methodology 1".

If you are able to demonstrate that you have acquired at least 30 academic credits in another specific domain (60 credits if it concerns a language), you can submit a request to educatievemaester@ugent.be to take the corresponding teaching methodology course. When you are allowed to do so, then you must take the corresponding internship in the Programme Pathway Internship.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	H002565 Teaching Methodology: Architecture <i>Maarten Van Den Driessche -- Department of Architecture and Urban Planning</i>	9		1	J:J	270
2	H002573 Teaching Methodology: Chemistry <i>Katrien Strubbe -- Department of Chemistry</i>	9		1	J:J	270
3	H002580 Teaching Methodology: Physics <i>Stefaan Cottenier -- Department of Electromechanical, Systems and Metal Engineering</i>	9		1	J:J	270
4	H002585 Teaching Methodology: Computer Science <i>Kris Coolsaet -- Department of Applied Mathematics and Computer Science</i>	9		1	J:J	270
5	H002493 Teaching Methodology: Mathematics <i>Hendrik Van Maldeghem -- Department of Applied Mathematics and Computer Science</i>	9		1	J:J	270

1.3 Programme Pathway Internship

18 credits

You must take 2 Internship courses each one corresponding with one of the Teaching Methodology Courses chosen in the Programme Pathway Teaching Methodology.

Have you received permission to take a different teaching methodology course in the Programme Pathway Teaching Methodology, please contact educatievemaester@ugent.be to have the corresponding internship added to your curriculum

Nr	Course	CRDT	Ref	MT1	Session	Study
1	H002584 Internship Engineering and Technology <i>Francis wyffels -- Department of Electronics and Information Systems</i>	9		1	J:J	270
2	H002610 Internship STEM Focus Architecture <i>Maarten Van Den Driessche -- Department of Architecture and Urban Planning</i>	9		1	J:J	270
3	H002612 Internship STEM Focus Chemistry <i>Katrien Strubbe -- Department of Chemistry</i>	9		1	J:J	270
4	H002611 Internship STEM Focus Physics <i>Philippe Smet -- Department of Solid State Sciences</i>	9		1	J:J	270
5	H002614 Internship STEM Focus Computer Science <i>Kris Coolsaet -- Department of Applied Mathematics and Computer Science</i>	9		1	J:J	270
6	H002600 Internship STEM Focus Mathematics <i>Hendrik Van Maldeghem -- Department of Applied Mathematics and Computer Science</i>	9		1	J:J	270
7	H002566 Internship Architecture <i>Maarten Van Den Driessche -- Department of Architecture and Urban Planning</i>	9		1	J:J	270
8	H002576 Internship Chemistry <i>Katrien Strubbe -- Department of Chemistry</i>	9		1	J:J	270
9	H002581 Internship Physics <i>Philippe Smet -- Department of Solid State Sciences</i>	9		1	J:J	270
10	H002586 Internship Computer Science <i>Kris Coolsaet -- Department of Applied Mathematics and Computer Science</i>	9		1	J:J	270
11	H002494 Internship Mathematics <i>Hendrik Van Maldeghem -- Department of Applied Mathematics and Computer Science</i>	9		1	J:J	270

1.4 Programme Pathway Practice Oriented Educational Research Project

6 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	H002582 Practice Oriented Educational Research Project in Sciences en Technology <i>Katrien Strubbe -- Department of Chemistry</i>	6		1	J:J	180

Teaching

When a course is not taught (solely) in the programme's language of instruction, the effectively used languages are indicated in square brackets following the course name, using the following ISO codes:

bg: Bulgarian	de: German	es: Spanish	ja: Japanese	pl: Polish	sh: Croatian/Serbian	zh: Chinese
cs: Czech	el: Greek	fr: French	nl: Dutch	pt: Portuguese	sl: Slovene	
da: Danish	en: English	it: Italian	no: Norwegian	ru: Russian	sv: Swedish	

Semester

Semesters are indicated by their number (1 or 2); semester 3 represents the summer period and J indicates a course spanning semesters 1 and 2. When a capital letter precedes a semester number, the course has multiple offerings. The letter indicates the offering concerned.

When a semester is shown in brackets, the course is not offered this year in the specific offering.

The offering frequency and first year of offering are indicated by the following codes:

a: bi-annually	c: annually, from 2026-2027	f: annually, from 2027-2028	i: annually, from 2028-2029
b: tri-annually	d: bi-annually, from 2026-2027	g: bi-annually, from 2027-2028	j: bi-annually, from 2028-2029
	e: tri-annually, from 2026-2027	h: tri-annually, from 2027-2028	k: tri-annually, from 2028-2029