Student	Jingjing Yang	01.08.2021–31.07.2025	
Date of birth	03.08.1991	Studies continue	
Student number	2104210	Credits	**240 cr**
Programme	Bachelor's Degree Programme in Software Engineering	Completed	**242 cr**

Studies	**Credits**	**Assessment**		**Date**
Engineering Mathematics and Science	**25 cr**			
Mechanics and Thermophysics	5 cr		5	17.12.2021
Electromagnetism, Waves and Atomic Physics	5 cr		5	18.12.2021
Physics Laboratory Works	3 cr		5	09.05.2022
Basics of Measuring and Reporting in ICT Engineering	2 cr		5	18.02.2022
Mathematics 1	5 cr		5	09.01.2022
Mathematics 2	5 cr		5	02.05.2022
ICT Engineering	**35 cr**			
Embedded Systems	10 cr		4	10.05.2022
Embedded Projects 1	5 cr		5	13.01.2023
Embedded Projects 2	5 cr		5	10.05.2023
Network Technologies	5 cr		5	02.01.2023
Server Technologies	10 cr		5	31.05.2023
Communication and Language Studies	**12 cr**			
Orientation to ICT Engineering Studies	3 cr		5	14.10.2021
English for ICT Engineering Students	3 cr		5	12.01.2022
Language Studies	**6 cr**			
Finnish I / Swedish I	3 cr	*s1*	4	20.09.2021
Finnish II / Swedish II	3 cr	*s2*	4	20.09.2021
Software Engineering	**110 cr**			
Programming Languages	**15 cr**			
Programming Languages 1	5 cr		5	07.01.2022
Programming Languages 2	5 cr		5	16.05.2022
Programming Languages 3	5 cr		5	14.12.2022
Device Oriented Programming	**15 cr**			
Mobile App Development 1	5 cr		5	29.05.2023
Mobile App Development 2	5 cr		5	09.01.2024
Operating System Concepts and Linux System Programming	5 cr		5	26.04.2024
Software Architectures and Engineering	**10 cr**			
Software Architectures and Design	5 cr		5	21.12.2023
Software Implementation and Testing	5 cr		5	08.04.2024
Data Analytics and Machine Learning	**20 cr**			
Data Systems and Analysis	5 cr		5	12.12.2022
Data Analysis and Visualization	7 cr		5	28.04.2023
AI and Machine Learning	8 cr		4	17.12.2023
Web Development	**25 cr**			
Basics of Web Development	5 cr		5	26.05.2022
Web Software Production	5 cr		5	13.01.2023
Full Stack Web Development	10 cr		5	19.01.2024

Student Jingjing Yang
Student number 2104210

API Service Development	5 cr		5	22.11.2024
Graphical User Interfaces and Usability	**10 cr**			
Software Requirements and Application Prototyping	5 cr		5	18.12.2023
Graphical User Interfaces	5 cr		5	16.05.2024
Software Projects	**15 cr**			
Software Project	5 cr		5	11.12.2024
Professional Software Development	10 cr		5	21.05.2024
Practical Training	**30 cr**			
Practical Training 1	6 cr	*k1*	S	20.09.2021
Practical Training 2	12 cr		S	15.10.2024
Practical Training 3	12 cr		S	15.10.2024
Free-Choice Studies (MAX 15 ECTS)	**15 cr**			
English in Global Context	3 cr	*s3*	5	20.09.2021
Organizational Communication	4 cr	*s4*	5	20.09.2021
Negotiations	2 cr	*s5*	4	20.09.2021
Research Writing Skills	3 cr	*s6*	5	20.09.2021
Business Mathematics	3 cr	*s7*	5	20.09.2021
External studies (not placed)	**15 cr**			
Thesis Plan	5 cr		5	07.04.2025
Implementing Thesis	5 cr		5	07.04.2025
Reporting Thesis	5 cr		5	15.05.2025

Bachelor's Thesis Title: Development of Non-Invasive Glucose Monitoring System Integration of Spectroscopy, IoT, and Machine Learning for Real-Time Heath Insight

Assessment: 5
Assessment date: 14.5.2025

Compensated studies

k1 = Previous Higher Education Studies, 26.10.2020, HAMK University of Applied Sciences

Inclusions

s1 = 3.12.2017, HAMK University of Applied Sciences
s2 = 6.4.2018, HAMK University of Applied Sciences
s3 = 30.12.2017, HAMK University of Applied Sciences
s4 = 19.4.2018, HAMK University of Applied Sciences
s5 = 22.5.2018, HAMK University of Applied Sciences
s6 = 20.12.2019, HAMK University of Applied Sciences
s7 = 7.11.2017, HAMK University of Applied Sciences

Student	Jingjing Yang
Student number	2104210

Electronic signature

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Student information

First names	Jingjing
Last name	Yang
Student number	154016843
Date of birth	3 Aug 1991

Study rights leading to a degree

MASTER'S DEGREE EDUCATION IN COMPUTING SCIENCES AND ELECTRICAL ENGINEERING

Education type	Master's Degree
Valid	1 Aug 2025-31 Jul 2029
Start date	1 Aug 2025
Study right status	Active
Academic year registrations	Autumn Semester 2025, attending Spring Semester 2026, attending
Degree title	Master of Science (Technology)
Degree programme	Master's Programme in Computing Sciences and Electrical Engineering (120 cr)
Specialisation	Embedded Systems

Degrees

Course name and code	Scope	Lang	Grade	Date
No completed credits				

Study modules

Course name and code	Scope	Lang	Grade	Date
No completed credits				

Courses

Course name and code	Scope	Lang	Grade	Date
Microcontrollers (EE.ELE.250)	5 cr	en	5	21 Dec 2025
Introduction to Embedded Systems (COMP.CE.100)	5 cr	en	4	18 Dec 2025
Embedded Linux Drivers (COMP.CE.460)	5 cr	en	4	9 Dec 2025
Finnish 4 (LANG.SUV.004)	2 cr	fi	Pass	28 Nov 2025
Vectors and Matrices (MATH.MA.140)	5 cr	en	5	16 Nov 2025
Finnish 3 (LANG.SUV.003)	3 cr	fi	Pass	13 Oct 2025

Partially completed courses

Course name and code	Scope	Lang	Grade	Date
Software Testing, Participation in teaching (COMP.SE.200)	0 cr	en	Pass	10 Dec 2025
Orientation to Master's Studies and Professional Life, Information searching skills (ITC.CEE.100)	0 cr	en	Pass	7 Dec 2025

Grade average 4,5

Total course credits 25 cr

The degree includes studies completed elsewhere with a total of 0 cr

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GRADING SCALES AND DESCRIPTIONS FOR COMPLETED STUDIES

The scope of studies is measured in ECTS credits (cr). The average workload of 1 600 hours needed to complete one academic year of studies corresponds to 60 credits.

The average grade of study attainments is calculated from courses which have been graded on a scale from 0 to 5 (fail–excellent) and which the student has passed. The average grade is weighted according to the courses' scopes in credits.

Language of study

Finnish	5 cr
Swedish	0 cr
English	20 cr
Other	0 cr

Language of study: fi (Finnish), sv (Swedish), en (English).
The language of study is not defined for all completed studies.

Grading scale for completed studies

5 (excellent), 4 (very good), 3 (good), 2 (satisfactory), 1 (passable), 0 (fail)

Pass (Pass), Fail (Fail)

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