

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	

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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	<i>k1</i>	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	<i>s3</i>	5 20.09.2021
Organizational Communication	4 cr	<i>s4</i>	5 20.09.2021
Negotiations	2 cr	<i>s5</i>	4 20.09.2021
Research Writing Skills	3 cr	<i>s6</i>	5 20.09.2021
Business Mathematics	3 cr	<i>s7</i>	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 Health 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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Opiskelija	Jingjing Yang	01.08.2021–31.07.2025		
Syntymäaika	03.08.1991	Opinnot jatkuvat		
Opiskelijanumero	2104210	Laajuus	240 op	
Ohjelma	Bachelor's Degree Programme in Software Engineering	Suoritettu	242 op	

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

5 = kiitettävä, 4 = erittäin hyvä, 3 = hyvä, 2 = tyydyttävä, 1 = välttävä, 0 = hylätty, S = suoritus hyväksytty

Opiskelija	Jingjing Yang			
Opiskelijanumero	2104210			
API Service Development	5 op	5	22.11.2024	
Graphical User Interfaces and Usability	10 op			
Software Requirements and Application Prototyping	5 op	5	18.12.2023	
Graphical User Interfaces	5 op	5	16.05.2024	
Software Projects	15 op			
Software Project	5 op	5	11.12.2024	
Professional Software Development	10 op	5	21.05.2024	
Practical Training	30 op			
Practical Training 1	6 op	<i>k1</i>	S	20.09.2021
Practical Training 2	12 op		S	15.10.2024
Practical Training 3	12 op		S	15.10.2024
Free-Choice Studies (MAX 15 ECTS)	15 op			
English in Global Context	3 op	<i>s3</i>	5	20.09.2021
Organizational Communication	4 op	<i>s4</i>	5	20.09.2021
Negotiations	2 op	<i>s5</i>	4	20.09.2021
Research Writing Skills	3 op	<i>s6</i>	5	20.09.2021
Business Mathematics	3 op	<i>s7</i>	5	20.09.2021
Hopsin ulkopuoliset opinnot (sijoittamattomat)	15 op			
Opinnäytetyön suunnittelu	5 op	5	07.04.2025	
Opinnäytetyön toteutus	5 op	5	07.04.2025	
Opinnäytetyön raportointi	5 op	5	15.05.2025	

Opinnäytetyö: Ei-invasiivinen glukoosimittari

Arviointi: 5

Arviointipäivämäärä: 14.5.2025

Korvaavat suoritukset

k1 = Aiemmat korkeakouluopinnot, 26.10.2020, Hämeen ammattikorkeakoulu

Sisältyvyydet

s1 = 3.12.2017, Hämeen ammattikorkeakoulu

s2 = 6.4.2018, Hämeen ammattikorkeakoulu

s3 = 30.12.2017, Hämeen ammattikorkeakoulu

s4 = 19.4.2018, Hämeen ammattikorkeakoulu

s5 = 22.5.2018, Hämeen ammattikorkeakoulu

s6 = 20.12.2019, Hämeen ammattikorkeakoulu

s7 = 7.11.2017, Hämeen ammattikorkeakoulu

Opiskelija	Jingjing Yang
Opiskelijanumero	2104210

Sähköinen allekirjoitus

Tämä dokumentti on sähköisesti allekirjoitettu 15.5.2025 kello 10.59 käyttäen Digi- ja väestötietoviraston varmennetta. Lisätietoja dokumentin aitouden varmistamisesta on Tampereen ammattikorkeakoulun internetsivuilla www.tuni.fi/esignature

Student	Jingjing Yang	28.08.2017—18.12.2020
Personal identity code	030891-280W	Graduated
Student number	1702523	Credits 210 cr
Programme	Degree Programme in International Business	Completed 210 cr

Studies	Credits	Assessment	Date
Core Competence	150 cr		
Business Essentials	15 cr	5	03.11.2017
<i>Study and Working Life</i>	3 cr	HYV	31.12.2017
<i>IT Skills</i>	3 cr	4	22.11.2017
<i>Business Mathematics</i>	3 cr	5	07.11.2017
<i>Business and Legal</i>	3 cr	5	29.11.2017
<i>Environmental</i>			
<i>Finnish I / Swedish I</i>	3 cr	4	03.12.2017
Global Markets	15 cr	5	30.12.2017
<i>Principles of Economics</i>	3 cr	3	30.12.2017
<i>Globalization and International Trade</i>	3 cr	5	26.12.2017
<i>Principles of Marketing</i>	3 cr	5	30.12.2017
<i>English in Global Context</i>	3 cr	5	30.12.2017
<i>Digital Co-Operation</i>	3 cr	HYV	21.12.2017
Operational Environment	15 cr	4	18.05.2018
<i>Finnish II / Swedish II</i>	3 cr	4	06.04.2018
<i>Argumentation</i>	4 cr	3	15.03.2018
<i>Organizational Communication</i>	4 cr	5	19.04.2018
<i>Principles of Accounting</i>	4 cr	4	06.04.2018
Innovation and Entrepreneurship	15 cr	4	07.06.2018
<i>Innovation and Business Opportunities</i>	5 cr	4	21.05.2018
<i>Business Planning Process</i>	5 cr	4	23.05.2018
<i>Legal Environment of an Entrepreneur</i>	3 cr	5	07.06.2018
<i>Negotiations</i>	2 cr	4	22.05.2018
Project SISU	30 cr	4	15.04.2019
<i>Operations Project</i>	9 cr	4	21.12.2018
<i>Project Management</i>	3 cr	4	21.12.2018
<i>Digital Project Management</i>	3 cr	HYV	21.12.2018
<i>Communication in Project SISU</i>	3 cr	4	21.12.2018
<i>Cross Cultural Communication</i>	3 cr	4	09.01.2019
<i>Organizational Behavior</i>	3 cr	4	04.02.2019
<i>Management Accounting</i>	3 cr	5	08.01.2019
<i>Professional Skills</i>	3 cr	5	21.12.2018
Research and Development	12 cr	5	16.02.2020
<i>Introduction to Research and Development</i>	3 cr	HYV	28.09.2019
<i>Research Writing Skills</i>	3 cr	5	20.12.2019
<i>Research Project</i>	6 cr	5	16.02.2020
Statistical Software in Business	2 cr	HYV	28.03.2019
Innovative Service Management	6 cr	5	16.02.2020
<i>Circular Economy</i>	3 cr	5	31.12.2019

5 = Excellent, 4 = Good, 3 = Good, 2 = Satisfactory, 1 = Satisfactory, HYL = Fail, HYV = Approved, V = exempt

Student Jingjing Yang
Student number 1702523

<i>Circular Supply Chain</i>	3 cr	5	31.12.2019
International Sales Management	5 cr s2	HYV	10.05.2019
Internet Business Models	5 cr s3	1	26.08.2019
Work Placement 1	15 cr	HYV	31.07.2019
Work Placement 2	13,5 cr	HYV	31.07.2020
Work Placement	1,5 cr	HYV	26.10.2020
Profiling competence	45 cr		
Corporate Social Responsibility (Beyond)	10 cr	3	31.12.2019
<i>Strategic Corporate Social Responsibility</i>	4 cr	3	31.12.2019
<i>Corporate Social Responsibility Management</i>	3 cr	3	31.12.2019
<i>Sustainable Consumption</i>	3 cr	3	31.12.2019
Strategic Corporate Social Responsibility	4 cr	4	29.03.2019
Sustainable Leadership	3 cr	4	04.06.2018
Strategic Management (Beyond)	15 cr	4	26.05.2020
<i>Concepts and Models of Strategic Thinking</i>	10 cr	4	23.04.2020
<i>Project Work</i>	5 cr	4	26.05.2020
Professional Skills	13 cr		
Purchasing	5 cr s4	5	21.08.2020
Advanced Finance	5 cr s5	HYV	16.05.2019
Academic Writing	3 cr s6	HYV	14.05.2019
Final Thesis	15 cr		
Final Thesis	15 cr	4	19.11.2020

Bachelor's Thesis Strengthening the Competitiveness for Education Export Company-based on competitor analysis, Case: Nedu Group Oy
Title:
Assessment: 4
Assessment date: 19.11.2020

Inclusions

- s1 = Statistical Software in Business, 28.3.2019, Kajaani University of Applied Sciences
- s2 = International Sales Management, 10.5.2019, Savonia University of Applied Sciences
- s3 = Internet Business Models, 26.8.2019, Laurea University of Applied Sciences
- s4 = Purchasing, 21.8.2020, JAMK University of Applied Sciences
- s5 = Advanced Finance, 16.5.2019, Savonia University of Applied Sciences
- s6 = Academic Writing, 14.5.2019, Saimaa University of Applied Sciences

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Student Jingjing Yang
Student number 1702523

The degree was completed in English.

The graduate submitted the proof of maturity included in the Bachelor's thesis in English.

The graduate has gained such oral and written skills in the obligatory English language required by the degree programme that are necessary for practising the profession and for further professional development (Decree 1129/2014, Section 7).

Hämeenlinna 18.12.2020

 **HAMK**
HÄMEEN AMMATTIKORKEAKOULU
HÄME UNIVERSITY OF APPLIED SCIENCES
Leena Luoma
Head of Student Service