



ASIIN Seal & Euro-Inf[®]: Label

Accreditation Report

Bachelor's Degree Programme

Data Science

Information Technology

Software Engineering

Computer Engineering

Master's Degree Programme

Information Technology

Provided by

**Ho Chi Minh City – University of Information Technol-
ogy**

Version: 22 April 2026

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A About the Accreditation Process

Name of the degree programme (in original language)	(Official) English translation of the name	Labels applied for ¹	Previous accreditation (issuing agency, validity)	Involved Technical Committees (TC) ²
Cử nhân Khoa học dữ liệu	Bachelor of Science in Data Science	ASIIN, Euro-Inf® Label	-	04
Cử nhân Công nghệ Thông tin	Bachelor of Science in Information Technology	ASIIN, Euro-Inf® Label	AUN-QA 2022	04
Cử nhân Kỹ thuật phần mềm	Bachelor of Science in Software Engineering	ASIIN, Euro-Inf® Label	AUN-QA 2021	04
Cử nhân Kỹ thuật máy tính	Bachelor of Science in Computer Engineering	ASIIN, Euro-Inf® Label	AUN-QA 2021	04
Thạc sĩ Công nghệ thông tin	Master of Science in Information Technology	ASIIN, Euro-Inf® Label	-	04
Date of the contract: 19.02.2025 Submission of the final version of the self-assessment report: 24.08.2025 Date of the onsite visit: 12.-13.11.2025 at: HCMUIT Campus, Ho Chi Minh City, Vietnam				
Expert panel:				

¹ ASIIN Seal for degree programmes; Euro-Inf®: Label European Label for Informatics;

² TC: Technical Committee for the following subject areas: TC 04 - Informatics/Computer Science;

Prof. Dr. Stefan Fischer, University of Lübeck Prof. Dr. Bruno Studer, University of Applied Sciences of the Grisons Prof. Dr. Christina Class, Ernst-Abbe-Hochschule Jena University of Applied Sciences Dang Ngoc Hai, Branch Director at Axon Active, Da Nang Branch & Vice Chairman at Da Nang Software Association Nguyen Hoang Anh Tu, Student at International University - Vietnam National University HCMC	
Representative of the ASIIN headquarter: David Witt	
Responsible decision-making committee: Accreditation Commission for Degree Programmes	
Criteria used: European Standards and Guidelines as of May 15, 2015 ASIIN General Criteria, as of March 28, 2023 Subject-Specific Criteria of Technical Committee 04 – Informatics/Computer Science as of March 29, 2018	

B Characteristics of the Degree Programmes

a) Name	Final degree (original/English translation)	b) Areas of Specialization	c) Corresponding level of the EQF ³	d) Mode of Study	e) Double/Joint Degree	f) Duration	g) Credit points/unit	h) First time of offer
Data Science	Cử nhân / Bachelor of Science		6	Full time	-/-	8 Semesters	193-208 ECTS/ 123 VN credits	2018
Information Technology	Cử nhân / Bachelor of Science		6	Full time	-/-	8 Semesters	196,5 – 211,5 ECTS/ 126 VN credits	2012
Software Engineering	Cử nhân / Bachelor of Science		6	Full time	-/-	8 Semesters	206-224 ECTS/ 130 VN credits	2006
Computer Engineering	Cử nhân / Bachelor of Science		6	Full time	-/-	8 Semesters	202,5 ECTS/ 126 VN credits	2006
Information Technology	Thạc sĩ/Master of Science		7	Full time	-/-	5 semesters	102 ECTS/ 60 VN credits	2013

In its Self-Assessment Report, the university provides the following background information regarding the university and the faculty in charge of the five degree programmes under review:

“The public university, VNUHCM—University of Information Technology (UIT), was established in 2006. It provides esteemed programmes in Information and Communication Technology (ICT). As a member of the Vietnam National University Ho Chi Minh City (VNUHCM), UIT is responsible for the training of a highly qualified labor force in information technology (IT) who are going to contribute to the growth of the national and regional IT industry. In

³ EQF = The European Qualifications Framework for lifelong learning

the interim, it engages in scientific research and advances the transfer of advanced IT technology with the objective of fostering the country's industrialization and modernization.

Vision

- UIT becomes a prestigious university in Information and Communications Technology (ICT) and other related fields in the Asia region.

Missions

- UIT is a graduate and undergraduate institution providing high-quality human resources to meet the demands of the labor market and to serve the community.
- UIT is a leading center in scientific research and technology transfer in Information and Communications Technology (ICT) and other related fields.

[...] UIT offers 11 undergraduate programmes, including Information Technology, Information Systems, Computer Science, Computer Engineering, Software Engineering, Computer Networks and Communications, Information Security, E-Commerce, Data Science, Artificial Intelligence, and Circuit Design. It also offers honors programmes in Computer Science and Information Security. At the graduate level, UIT offers five master's programmes and two doctor's programmes. Scientific research is prioritized, with a focus on information security, artificial intelligence, data science, and circuit design. Academic management of undergraduate and graduate programmes is the responsibility of six faculties. Considering that UIT's core value towards 'Exquisite—Innovation—Enthusiasm' influences its operations and development. The motto also serves to establish UIT as the leading university in Vietnam for the IT sector and to ensure that its students are properly catered for in all facets of their lives, including their professional skills, knowledge, and attitude toward life and working.

Faculty of Software Engineering (FSE) and the Faculty of Computer Engineering (FCE) were established in 2006 at the time of the founding of UIT. To better meet market demand, the Faculty of Information Science and Engineering (FISE) was established in 2018 with the responsibility of training in IT and Data Science. The faculties are devoted to providing a skilled and qualified workforce in the area of Information and Communication Technology, dedicated to scientific research and advanced IT technology transfer, aligned with the university vision and missions.

- FISE comprises 21 lecturers, 07 Ph.Ds, 11 Masters, 03 B.Sc.s, and 2 support staff, and visiting lecturers from various faculties, universities, and international institutions, is dedicated to high-quality research in Data Science and Information Technology, with two departments: Data Science; and Mobile Devices and Web Technology.

- FSE, consists of 30 lecturers, 10 Ph.Ds, 18 M.ScS, 2 B.ScS and 2 support staff, and focuses on high-quality education in Software Engineering. It has two departments: Software Development and Multimedia Communication and Game Development. FSE provides students with a strong foundation across all stages of the software development lifecycle, while placing a strong emphasis on practical, up-to-date knowledge and technologies to prepare graduates for real-world industry demands.
- FCE, consisting of 25 lecturers, 11 Ph.Ds., 11 Masters, 03 Engineers, and visiting lecturers from various faculties, universities, and international institutions, is dedicated to high-quality research in Computer Engineering, with two departments: Embedded System and Robots and Circuit and Hardware Design.”

C Expert Report for the ASIIN Seal⁴

1. The Degree Programme: Concept, Content & Implementation

Criterion 1.1 Objectives and Learning Outcomes of a Degree Programme (Intended Qualifications Profile)

Evidence:

- Self-Assessment Report
- Programme Specification of each degree programme
- Module handbook of each degree programme
- Objective-module-matrix for each degree programme
- Diploma Supplement for each degree programme
- Faculty websites
- Discussions during the audit

Preliminary assessment and analysis of the experts:

The experts base their assessment of the learning outcomes on the information provided in the module descriptions and in the Self-Assessment Report of the five degree programmes under review. For each degree programme, UIT has described Programme Objectives (PO), Programme Learning Outcomes (PLO), and Qualification Profiles. The PO and PLO are published on the faculties' websites and easily accessible for students as well as other stakeholders. Furthermore, there are regular revision processes in place that take into account feedback by external and internal stakeholders.

The experts refer to the Subject-Specific Criteria (SSC) of the Technical Committee Informatics/Computer Science and use the objective-module-matrices and module descriptions for each programme as a basis for judging whether the intended learning outcomes correspond with the competences as outlined by the SSC.

⁴ This part of the report applies also for the assessment for the European subject-specific labels. After the conclusion of the procedure, the stated requirements and/or recommendations and the deadlines are equally valid for the ASIIN seal as well as for the sought subject-specific label.

The experts note that the relationship between POs and PLOs has been established in a comprehensible and logical manner. The development of POs of each study programme under review involves both internal and external stakeholders so that the curricula can be adapted and modified according to the needs of the industry and the graduates on a regular basis. For example, UIT regularly conducts surveys, through which the different stakeholders get the chance to assess the programmes and their main objectives and adapt them if necessary. Internal stakeholders include all of UIT members (students, teaching staff, and non-academic employees), while the external stakeholders include the industry, alumni, the government, and society. A major revision including consultations of stakeholders takes place every two years.

For the Bachelor's degree programme in Data Science, UIT defines the following Programme Objectives (PO) and Programme Learning Outcomes (PLO) (see more details in Appendix):

Programme Objectives:

- “PO1: Graduates have good political qualities, ethics, attitude and health, and professional responsibility.
- PO2: Graduates master basic and advanced knowledge of data science and information technology, and have the ability to organize and develop data science applications in supporting management and decision making in economic and social organizations.
- PO3: Graduates have the ability to self-study, possess analytical and synthesis skills, scientific research skills, professional skills, time and resource management skills, and develop systematic thinking, critical thinking, and entrepreneurship.
- PO4: Graduates have the ability to communicate socially, work cooperatively, work in a team, and work within an organization.
- PO5: Graduates have the ability to apply knowledge, skills and experience to solve different professional situations.
- PO6: Graduates have good English proficiency and are able to communicate and work with foreign experts and colleagues.”

Programme Learning Outcomes:

- PLO 1: Apply foundational knowledge of natural and social sciences to understand and solve problems in Data Science and its practical contexts
- PLO 2: Demonstrate mastery of foundational and in-depth knowledge in Data Science

- PLO 3: Survey documents, formulate arguments, analyze, and proposed solutions for Data Science problems; recognize the necessity and possess the capability for lifelong learning
- PLO 4: Design, implement, and evaluate models/systems and solutions in Data Science
- PLO 5: Communicate, collaborate, and connect effectively with individuals and teams in specific professional contexts
- PLO 6: Communicate in the workplace, comprehend professional documents, and presenting specialized solutions in a foreign language
- PLO 7: Understand leadership and management
- PLO 8: Understand professional responsibility, respect the law, and uphold ethical values

For the Bachelor's degree programme in Information Technology, UIT defines the following Programme Objectives (PO) and Programme Learning Outcomes (PLO) (see more details in Appendix):

Programme Objectives:

- “PO1: Graduates possess good political qualities, strong professional ethics, a sense of organizational responsibility, and good health.
- PO2: Graduates have a solid foundation in basic knowledge and advanced expertise in information technology (IT).
- PO3: Graduates meet the requirements for research, development, and application of information technology in society.
- PO4: Graduates have the competence to advise, consult, and manage the implementation of tasks as specialists in the IT field.
- PO5: Graduates have the capacity to gradually improve their ability to conduct independent research, self-improvement, and continue to study at higher levels.”

Programme Learning Outcomes:

- PLO 1: Mastering foundational knowledge of natural and social sciences and understanding the application of these principles in Information Technology and practical contexts
- PLO 2: Mastering foundational and in-depth knowledge of Information Technology to apply in practice

- PLO 3: Surveying documents, formulating arguments, analyzing, and proposing solutions for Information Technology-related issues; recognizing the necessity and possessing the capability for lifelong learning
- PLO 4: Designing, implementing, and evaluating systems and solutions in Information Technology
- PLO 5: Communicating, collaborating, and connecting effectively with individuals and groups in specific professional contexts
- PLO 6: Communicating in the workplace, comprehending professional documents, and presenting specialized solutions in a foreign language
- PLO 7: Understanding leadership and management
- PLO 8: Understanding professional responsibility, respecting the law, and uphold ethical values

For the Bachelor's degree programme in Software Engineering, UIT defines the following Programme Objectives (PO) and Programme Learning Outcomes (PLO) (see more details in Appendix):

Programme Objectives:

- “PO1: Graduates possess a solid foundation in software engineering and computing, with strong professional competence, development skills, research abilities, and creative thinking.
- PO2: Graduates are capable of managing the entire software development lifecycle and delivering effective, practical, and innovative IT solutions, while adhering to ethical standards and legal regulations.
- PO3: Graduates demonstrate strong English proficiency and communication skills for collaboration in international and interdisciplinary environments.
- PO4: Graduates are capable of conducting independent research, synthesizing knowledge, and developing graduation theses that contribute to technological innovation and the advancement of their professional field.
- PO5: Graduates act responsibly, comply with legal and ethical standards in software development, and are aware of their role in serving the community and society.”

Programme Learning Outcomes:

- PLO 1: Demonstrate a solid understanding of fundamental knowledge in natural sciences and social sciences, and explain how such knowledge can be applied in Software Engineering and real-world contexts.

- PLO 2: Demonstrate a solid understanding of fundamental and selected advanced knowledge in Software Engineering, and apply that knowledge in practical contexts.
- PLO 3: Investigate relevant literature, construct arguments, analyze problems, and propose solutions in Software Engineering; demonstrate an awareness of the necessity for lifelong learning.
- PLO 4: Design, implement, and evaluate systems and solutions in the field of Software Engineering.
- PLO 5: Communicate and collaborate effectively with individuals and teams in specific professional contexts.
- PLO 6: Communicate effectively in professional settings, comprehend technical documents, and present domain-specific solutions in a foreign language.
- PLO 7: Demonstrate an understanding of leadership and management concepts.
- PLO 8: Demonstrate an understanding of professional responsibility, respect for the law, and ethical values.

For the Bachelor's degree programme in Computer Engineering, UIT defines the following Programme Objectives (PO) and Programme Learning Outcomes (PLO) (see more details in Appendix):

Programme Objectives:

- “PO1: Graduates have foundational knowledge in natural and social sciences and the ability to apply it to practical contexts.
- PO2: Graduates have foundational and specialized knowledge in Computer Engineering and the ability to apply them to practical contexts.
- PO3: Graduates have the ability to study, research, work individually and teamly, and adapt to the change in the Computer Engineering industry.
- PO4: Graduates adhere to professional development standards, respect the law, and uphold ethical values.”

Programme Learning Outcomes:

- PLO 1: Mastering foundational knowledge in natural sciences and social sciences and understanding how to apply this knowledge to Computer Engineering industry and practical contexts.
- PLO 2: Mastering foundational knowledge and some specialized knowledge in Computer Engineering to solve practical problems effectively.

- PLO 3: Surveying documents, reasoning, analyzing and proposing creative solutions to practical problems in Computer Engineering industry; Understanding the lifelong learning
- PLO 4: Designing, implementing, and evaluating systems and solutions in Computer Engineering industry
- PLO 5: Communicating, collaborating, and connecting effectively with individuals and groups in specific professional contexts
- PLO 6: Communicating effectively at work, comprehending technical documents, and presenting specialized solutions in a foreign language
- PLO 7: Understanding of leadership and management
- PLO 8: Understanding professional responsibilities, compliance to the law and ethical values.

For the Master's degree programme in Information Technology, UIT defines the following Programme Objectives (PO) and Programme Learning Outcomes (PLO) (see more details in Appendix):

Programme Objectives:

- "PO1: Graduated master's students with good political qualities and ethics.
- PO2: Graduated master's students have general knowledge and research methods in IT.
- PO3: Graduated master's students have the ability to work independently and creatively.
- PO4: Graduated master's students have the ability to discover and research to solve common or specialized practical problems in IT.
- PO5: Graduated master's students have the ability to impart IT knowledge."

Programme Learning Outcomes:

- PLO1: Master foundational and in-depth knowledge of the Information Technology field and other fields.
- PLO2: Develop and manage real-world and research projects in the Information Technology field.
- PLO3: Conduct scientific research effectively.
- PLO4: Understand professional responsibility, respect the law, and uphold ethical values.
- PLO5: Apply language proficiency in academic and professional contexts.

- PLO6: Understand social context and technology trends and have skills in developing ideas, designing, building and implementing information technology applications/research/systems.

In the experts' opinion, the intended qualification profiles of all five programmes under review are generally clear, plausible and allow students to take up an occupation, which corresponds to their qualification. They learn that the graduates of UIT are much sought after in the labor market. The representatives of industry emphasize the high quality of the graduates of the programmes under review. In addition, the industry states that they are very satisfied with the scope of the collaboration with the university. Furthermore, students as well as graduates also state that they are satisfied with and well aware of their good job perspectives.

However, UIT offers three different pathways for the Master's degree programme: "application oriented", "research type 1", and "research type 2." (see also criterion 1.3), which have different emphases. According to the experts, this leads to (slightly) different learning outcomes, which should also be reflected in the respective Diploma Supplements, on the relevant webpages, in the POs and PLOs etc. Currently, however, no differentiation is made in the Diploma Supplements or any other official document or webpage provided by the university, which is why the experts argue that the listed learning outcomes should be adapted to the corresponding pathways and contents.

Regarding the Bachelor's degree programme Data Science, the experts discuss the formulation of the PO 6: "Graduates have good English proficiency and are able to communicate and work with foreign experts and colleagues." The experts welcome the fact that language skills are included in the programme objectives and suggest that this could also be done in other bachelor's degree programmes. However, they note that the term 'English proficiency' is not entirely appropriate, as graduates are expected to achieve level B1 by the end of the programme. In the experts' view, this does not constitute a 'proficiency' level. The experts therefore believe that the university would be better off using wording such as 'basic professional competence'. The experts therefore recommend to reformulate PLO 6 regarding the English proficiency.

The discussion with industry representatives also reveals that students' soft skills could be further developed. In principle, the industry is satisfied with the graduates and, above all, with their professional and technical knowledge. However, soft skills – particularly in the areas of communication and presentation – could be further developed, as the industry regards these as essential for the students' future careers. The experts understand this and therefore recommend to further strengthen the students' soft skills.

In summary, the experts confirm that all five degree programmes under review adequately reflect EQF 6 level (Bachelor's programmes) and EQF 7 level (Master's programme) respectively. This can also be confirmed based on the module descriptions and discussions. The learning outcomes are consistent with the ASIIN Subject-Specific Criteria of the Technical Committees 04. They aim at the acquisition of specific competences and are well-anchored and binding. However, the experts argue that UIT the learning outcomes between the application oriented, research type 1 and research type 2 Master's degree programme need to be differentiated. Furthermore, they recommend to reformulate PLO 6 of the Bachelor's degree programme Data Science regarding the English proficiency.

Criterion 1.2 Name of the Degree Programme

Evidence:

- Self-Assessment Report
- Programme Specification of each degree programme
- Diploma Supplement for each degree programme

Preliminary assessment and analysis of the experts:

In its Self-Assessment report, UIT provides the following table on the names and codes of the different programmes under review:

Vietnamese Name	English Name	Programme code	Level
Khoa học dữ liệu	Data Science	7460108	Bachelor
Công nghệ Thông tin	Information Technology	7480201	Bachelor
Kỹ thuật phần mềm	Software Engineering	7480103	Bachelor
Kỹ thuật máy tính	Computer Engineering	7480106	Bachelor
Công nghệ thông tin	Information Technology	8480201	Master

The experts confirm that the English translation and the original Vietnamese names of the five degree programmes under review correspond with the intended aims and learning outcomes.

Criterion 1.3 Curriculum

Evidence:

- Self-Assessment Report
- Programme Specification of each degree programme
- Module handbook of each degree programme
- Objective-module-matrix for each degree programme
- Diploma Supplement for each degree programme
- Student handbooks
- Faculty websites
- Discussions during the audit

Preliminary assessment and analysis of the experts:

Structure and Content of the programmes

The curricula of all five study programme under consideration are reviewed by the experts in order to identify whether the described POs and PLOs (see chapter 1.1) can be achieved by the available modules. Course descriptions as well as overviews and the objective-module-matrices matching the different PLOs and the various module contents were provided for a thorough analysis.

The curricula of all four Bachelor's degree programmes are each designed for 8 semesters and offered as full-time study programmes. To complete the Bachelor's degree programme Data Science, students must complete at least 123 Vietnamese credits (equivalent to 193-208 ECTS credits), to complete the Bachelor's degree programme Information Technology, students must complete at least 126 Vietnamese credits (equivalent to 196,5-211,5 ECTS credits), to complete the Bachelor's degree programme Software Engineering, students must complete at least 130 Vietnamese credits (equivalent to 206-224 ECTS credits), and to complete the Bachelor's degree programme Computer Engineering, students must complete at least 126 Vietnamese credits (equivalent to 202,5 ECTS credits, see chapter 1.5 for more details about the conversion from Vietnamese credit points to ECTS credits). The students can extend their study time if needed.

For the four Bachelor's degree programmes under review, UIT defines the following broad curriculum structure (for detailed course overviews of all programmes, see Appendix):

Blocks of knowledge		BDS	BIT	BSE	BCE
General Knowledge	Political courses	13	13	12	13
	Mathematics, Informatics, Natural Sciences	18	18	18	22
	Foreign Language	12	12	12	12
	Professional Skills	02	02	02	02
	Physical education – National Defense education	Certificate			
Professional knowledge	Foundation courses	42	44	49	49
	Specialized courses	16	16	14	12
	Elective courses	10	10	6	6
Graduation knowledge	Internship, projects			6	2
	Thesis or Capstone project and Graduation courses	10	10	10	10
Total of accumulated credits		123	125	130	128

In its Self-Assessment report, UIT describes the structure of the curricula as follows: “General knowledge provides students with a background in mathematics, programming, and other natural science backgrounds that are essential for the programme. General knowledge also provides students with social and political knowledge that is essential for comprehending the impact of their work and study in a broader context. Professional knowledge encompasses a comprehensive blend of core professional courses, fundamental and specialized courses, as well as elective offerings. These courses are meticulously designed to equip students with both theoretical expertise and practical skills that are directly aligned with the current demands of the industry and the evolving job market. To further enhance their versatility and competitiveness, students are encouraged to select elective credits from other related programmes. This interdisciplinary approach not only broadens their skill set but also deepens their understanding of diverse aspects of their field, fostering a well-rounded and adaptable professional profile. By integrating knowledge from multiple disciplines, students are better positioned to excel in dynamic and complex work environments. Graduation modules provides students with the opportunity to apply their accumulated knowledge and skills through either a comprehensive thesis or a capstone project, demonstrating their professional competence and readiness for industry challenges. Students may choose between conducting a 10-credit thesis or completing a 6-credit individual capstone project in conjunction with a 4-credit capstone

course. These options ensure that students can tailor their experience to their professional goals while bridging academic theory with practical, real-world application..” In the Bachelor’s degree programmes Software Engineering and Computer Engineering, an internship is a compulsory part of the curriculum, whereas in the Bachelor’s degree programmes Data Science and Information Technology it is only an option as part of the electives.

Overall, the experts are satisfied with the curricula of both Bachelor’s degree programmes under review. They see that the programmes are well structured and that the modules build on each other in a reasonable way, enabling the students to effectively reach the learning outcomes as laid down for each programme as a whole.

However, during the on-site discussion, the experts discuss with the programme coordinators whether students are required to write a final thesis. The documentation still states that students have the choice between a final thesis or three elective modules. The programme coordinators explain that this is an outdated regulation which has already been amended as part of a previous ASIIN accreditation. Since 2024, every student has been required to write a final thesis. The university presents the new regulation after the on-site visit so that there is no need for a requirement.

The experts also discuss the extent to which topics relating to ethics and social responsibility in the context of computer science are covered as compulsory elements in the curricula. In this regard, programme coordinators state that the Bachelor’s programme in Data Science, for example, explicitly includes the course ‘Ethics in Artificial Intelligence and Data Science’. Furthermore, these topics are primarily covered in the ‘Professional Skills’ module, which features in all Bachelor’s programmes. The topic is also included in the learning objectives. The experts acknowledge that the topic is already addressed in parts of the curricula and is also reflected in the learning objectives. However, they note that the ‘Professional Skills’ course already covers a wide range of topics and that, in the medium term, consideration should be given to include a (further) dedicated compulsory module on ethics and social responsibility in the Bachelor’s curricula. Therefore, the experts recommend to include topics on ethics and social responsibility (regarding Computer Science/AI) in the mandatory curricula.

Regarding the Bachelor’s degree programmes in Software Engineering and Information Technology, the experts note that the “Software Testing” module is currently only an optional subject in both programmes. However, the experts believe that the topics of software testing and requirements engineering should be given greater emphasis within the compulsory curriculum in both programmes. They therefore recommend to include software testing and requirements engineering in the mandatory part of each of the two curricula.

The experts have also noted that, in the Bachelor's degree programmes Data Science, Software Engineering & Information Technology, the courses "Discrete Structures" and "Data Structures and Algorithms" are taught in the same semester. However, the experts believe that "Discrete Structures" should be taught first. During on-site discussions, they also note that there is coordination between the respective lecturers and that the students do not perceive any issues with the current sequence. Nevertheless, the lecturers are open to the experts' suggestion and understand that a corresponding change might still be sensible. The experts therefore recommend to teach Discrete structures before Data Structures and Algorithms.

The curriculum of the Master's degree programme Information Technology is designed for 5 semesters and offered as full-time study programme. To complete the programme, students must achieve at least 60 Vietnamese credits (equivalent to 102 ECTS credits, see chapter 1.5 for more details about the conversion from Vietnamese credit points to ECTS credits). As described in the Self-Assessment report, the Master's degree programme Information Technology "offers students three distinct pathways: Research-Oriented Type 1, Research-Oriented Type 2, and Application-Oriented, enabling them to pursue either a research-intensive or application-focused trajectory that best aligns with their career goals. While both Research-Oriented pathways emphasize scientific inquiry, they differ in the balance of coursework, thesis requirements, and publication expectations. In contrast, the Application-Oriented pathway prioritizes practical skills and implementation. Across all three options, the programme is structured into three main knowledge blocks, General Knowledge, Professional Knowledge, and Graduation Knowledge, requiring a total of 60 credits (equivalent to 102.5 ECTS) for completion."

For the Master's degree programme under review, the study plan is structured as follows (for detailed course overview, see Appendix):

Semester	Research-oriented Programme		Application-oriented Programme
	Type 1	Type 2	
Semester 1	- General Knowledge (3-7 credits) - Scientific Research Methodology (2 credits) ECTS = 7.5	- General Knowledge (3-7 credits) - Scientific Research Methodology (2 credits) ECTS = 7.5	- General Knowledge (3-7 credits) - Scientific Research Methodology (2 credits) ECTS = 7.5
Semester 2	- Advanced Scientific Research Methodology (2 credits)	- Specialized Courses (14 credits) ECTS = 23.5	- Specialized Courses (15 credits) ECTS = 24
Semester 3	- Master's Thesis (53 credits) ECTS = 109	- Specialized Courses (14 credits) ECTS = 22	- Specialized Courses (14 credits) ECTS = 24
Semester 4		- Scientific Research (12 credits) ECTS = 19.5	- Specialized Courses (14 credits) ECTS = 23
Semester 5		- Master's Thesis (15 credits) ECTS = 30	- Master's Thesis (12 credits) ECTS = 24

In its Self-Assessment report, UIT describes the structure of the curricula as follows: “General Knowledge: All students, regardless of their chosen orientation, begin with a foundational course in Philosophy (3 credits). This inclusion highlights the program's emphasis on fostering critical thinking and ethical considerations in both research and application. Professional Knowledge: The Professional Knowledge block is tailored to the specific orientation of the student. It encompasses Foundation Knowledge and Specialized Knowledge. Foundation Knowledge: Courses such as Scientific Research Methodology (2 credits) are mandatory across all pathways, with Advanced Scientific Research Methodology (2 credits) required for Type 1 in the Research-Oriented Program. This ensures that all students, regardless of focus, acquire essential research competencies. Specialized Knowledge: The credit requirements for specialized knowledge vary based on the chosen orientation. Students fulfill these credits by completing courses aligned with their focus area. Those in the Research-Oriented Program Type 2 tracks must complete a minimum of 28 credits, while students in the Application-Oriented Program track are required to earn at least 43 credits. This differentiation ensures that research-oriented students devote more time to

developing advanced research methodologies, while application-oriented students concentrate on building practical, real-world skills. Additionally, students are given the flexibility to earn up to 12 credits by enrolling in courses from other master's programmes. This flexibility not only enriches the learning experience but also enhances the student's ability to adapt to various industry demands or research challenges. By allowing students to take courses from other programmes, the curriculum fosters cross-disciplinary competence. This aligns with the program's objective of producing versatile professionals capable of navigating complex technological and theoretical landscapes while excelling in both specialized and interdisciplinary environments. Graduation Knowledge: The most significant divergence between the two orientations lies in the Master's Thesis. Research-Oriented Program Type 1 requires students to complete a rigorous 53-credit thesis, emphasizing original research contributions to the field. With Research-Oriented Program Type 2, students undertake a 15-credit thesis coupled with 12 credits of additional scientific research, offering a balance between research and coursework. If choosing an Application-Oriented Program, students, in contrast, engage in a 12-credit thesis alongside at least 12 credits dedicated to practical application and scientific research, ensuring that their work is grounded in real-world implementation"

In principle, the expert group is very convinced of the structuring of the submitted curriculum of the Master's degree programme under review and the corresponding content level. This is also confirmed by the satisfaction of the various stakeholders, which is evident in the different discussion rounds with students, alumni, industry representatives and teachers.

Furthermore, the experts also generally support the approach of the different study programme pathways, research-oriented and application-oriented, even if they are of the opinion that the university should define different learning outcomes in each case, as the content and skills to be taught are certainly different. This applies in particular to the 'research-oriented-type 1' pathway. Here, the experts see hardly any content overlaps with the other two pathways, as the main focus is explicitly placed on research and the graduation thesis. There should be a clear differentiation of the competences taught in each case (see also criterion 1.1). In the experts' opinion, the separation and definition of separate programmes could be a perspective as well.

During the audit discussions, the students stated that, overall, they are very satisfied with the curricula offered across all degree programmes. However, they would like to be able to choose even more courses from other subject areas within the elective section. For example, they mention that the nearby neighbouring university offers social sciences programmes and that they would find it exciting to be able to attend individual courses there as well. Recognition is possible in principle, the students report, citing experiences where,

for instance, courses attended at the University of Architecture were recognised. Furthermore, the students would like to see the range of foreign languages in which courses can be taken expanded. At present, there are mainly courses in English and Japanese. The students appreciate the current offering but would also like to see courses in, for example, French or German. The experts recognise that students, on the one hand, would like to have a wider choice of foreign languages and, on the other hand, also wish to attend more courses in other subject areas at other universities. Sufficient recognition arrangements are already in place for the latter, so the experts believe this could be implemented relatively easily. They therefore recommend increasing the variety of courses from other subjects/fields. The experts also understand that the range of foreign languages on offer always depends on available resources and that, at present, the languages most relevant to graduates – namely English and Japanese – are being offered. However, in order to address the students' comments, they recommend expanding the range of courses on offer in this area as well.

In summary, the experts state that all programmes under review are well-established and appropriately structured programmes that ultimately achieve the planned objectives very well. This is further confirmed by the high level of satisfaction among students, alumni and industry representatives.

Internship

As already described, in the Bachelor's degree programmes Software Engineering and Computer Engineering, an internship is a compulsory part of the curriculum, whereas in the Bachelor's degree programmes Data Science and Information Technology it is only an option as part of the electives.

The internship is stated to have a total workload of 90 hours and a duration of 10 weeks. Firstly, the experts note that 4 ECTS credits are allocated to the internship, which does not quite correspond to the stated workload. UIT defines that one ECTS credit corresponds to 27.5 hours (see criterion 1.5). Consequently, a 90-hour workload would equate to approximately 3.2, or rounded down to 3 ECTS credits, rather than 4. This must be adjusted accordingly. Furthermore, the experts are discussing the overall length of the internship, as they believe that 10 weeks is relatively short. This is also confirmed in discussions with students and industry representatives, as both sides would like to see the duration extended. A longer period in the company would allow students to work on a larger project and thus gain even more 'real-life experience' in the workplace. The students, too, would prefer to spend more time in the company for the same reason. This is supported by the experts, who also advocate making internships compulsory in all Bachelor's programmes.

The experiences are generally positive, and students view them as a rewarding experience; this would further strengthen the already good relationship between UIT and industry. The experts take the same view regarding the ‘international internship’. This lasts for four days, which, in the experts’ opinion, is also too short for students to benefit sufficiently from the experience of an international internship and seems more like an excursion than an internship. The experts therefore advocate extending the duration and, accordingly, increasing the number of credits awarded.

Therefore, the experts recommend to increase the duration of the internship and to make it mandatory in all four Bachelor’s degree programmes. In addition, they recommend increasing the scope of the international internship.

Mobility

HCMUIT offers a variety of mobility opportunities for students, including semesters abroad, short-term programmes, internships, and participation in international conferences. In this regard, in its Self-Assessment report, UIT describes, that it “offers students valuable opportunities to gain international experience, expand their cultural horizons, and improve their global employability. Students can participate in mobility programs typically after completing their first semester of study, subject to meeting academic and eligibility requirements set by UIT and partner institutions. As part of Vietnam National University—Ho Chi Minh City (VNU-HCM), UIT has established exchange agreements with both VNU-HCM member institutions and international partner universities [...]. For instance, students benefit from the ASEAN Credit Transfer System, which facilitates student and academic mobility across the region [ACTS - ASEAN Credit Transfer System (ui.ac.id)]. This system allows students to take courses at partner universities and transfer the credits back to their home institution, enhancing their academic flexibility while broadening their global perspective.”

During the on-site discussion, the students state that they themselves or other students who have been abroad have generally only had good experiences with the university's support. They are also of the opinion that good opportunities are offered.

However, in the students’ view, the range of opportunities could be expanded, particularly outside the ASEAN region. Overall, the experts recognise that there is still scope to increase mobility figures. However, they also understand that exchange programmes, particularly those outside the ASEAN region, are always associated with relatively high costs. They therefore view it as particularly positive that promoting the internationalisation of the entire university is already part of UIT’s strategic plan, and that there are also growing efforts on the part of the government to increase the internationalisation of universities and

provide the necessary resources. The experts acknowledge that UIT is continuing along this path of development and want to support this by recommending increasing international mobility opportunities.

In summary, the students state to be satisfied with the existing opportunities for international academic mobility. Even though the corresponding mobility statistics are not that high, the expert group recognizes that the university has focused on expanding its network of partner institutions to further encourage student participation in exchange programmes and already offers a variety of opportunities for going abroad to their students as well as their teaching staff.

Periodic Review of the curriculum

The programmes and their respective learning outcomes are reviewed every two years for major updates to ensure that they are in accordance with the requirements of the stakeholders and the development of the field. In its Self-Assessment report, UIT states additionally, that “Programme specifications are updated periodically according to the regulation on the programme, including changes in the content, structure, LOs, and course lists. [...] UIT follows a clear process for the development, updating, appraisal, and approval of undergraduate and graduate programmes [...]. This process ensures that curricula are regularly reviewed and revised, especially based on feedback from internal and external stakeholders. Internal stakeholders include faculty, staff, and student representatives, while external stakeholders encompass alumni, employers, industry professionals, and relevant corporations. Major curriculum reviews occur every two years to align with stakeholder requirements and advancements in the field. This systematic approach ensures the programmes remain relevant, up-to-date, and responsive to both academic and industry needs.”

The experts confirm that the curricula of all five degree programmes under review are designed to comply with the POs and PLOs and they are, according to UIT regulations, subject to constant revision processes. As such, the curricula will be reviewed regularly and commented on by students and teachers as well as by external stakeholders such as alumni or industry partners. The faculty keeps in touch with former students through the faculty alumni network. Market needs are assessed through regular surveys, as well as through contacts with employers achieved through events such as the job fair.

Criterion 1.4 Admission Requirements

Evidence:

- Self-Assessment Report
- Regulations on admission to Undergraduate degrees
- Regulations on admission to Master's and doctoral degrees
- Webpage UIT
- Discussions during the audit

Preliminary assessment and analysis of the experts:

Regarding Bachelor's degree programmes, UIT has issued the Regulations on admission to Undergraduate degrees. Furthermore, information on the admission regulations are provided on UIT's website. As described in the Self-Assessment report, "[the] University Admission Committee is responsible for proposing admission schemes, quotas, and selection criteria. These proposals are reviewed and approved by the Council of Science and Academy, the University Council, and VNU-HCM, following the Ministry of Education and Training's regulations and guidelines. UIT employs various admission schemes, including:

- Admission based on National High School Graduation Examination results.
- Direct admission for talented students as per Ministry of Education and Training regulations.
- Priority admission for top students from selected high schools and other criteria set by UIT, VNU-HCM.
- Admission based on Competency Assessment Examination results from VNU-HN or VNUHCM.
- Admission for graduates from international high schools or with international certificates.

Candidates are selected in each scheme based on ranking until quotas are filled, with quotas varying annually according to selection criteria. UIT supports prospective students through multiple online platforms, including a website, hotline, social media, and chat systems. These channels provide easy access to programme information, admission benchmarks, enrolment quotas, tuition details, scholarship policies, and more. UIT also offers scholarships for outstanding admitted students across various schemes."

UIT provides the following table regarding student intake and types of student admission from 2019-2024:

No.	Type of Student Admission	Admission Quota					
		2019	2020	2021	2022	2023	2024
1	Priority admission according to MOET and VNUHCM Regulations	Maximum of 5%	Maximum of 1%	Maximum of 5%	25%	25%	25%
2	Priority admission according to VNUHCM Regulation	Maximum of 15%	Maximum of 10%	Maximum of 15%			
3	National high school examination	Minimum of 50%	Minimum of 65%	Minimum of 25%	60%	60%	60%
4	VNUHCM Competency Assessment Examination	Maximum of 30%	Maximum of 23%	Maximum of 50%			
5	Renowned international qualifications		Maximum of 1%	Maximum of 2%	15%	15%	15%
6	Admission according to UIT regulation	-	-	Maximum of 2%	-	-	-

Regarding Master's degree programme, UIT has issued the Regulations on admission to Master's and doctoral degrees. Furthermore, information on the admission regulations is provided on UIT's website. In its Self-Assessment report, UIT describes the admission procedure as follows: "The Office of Graduate Studies, Science, and Technology oversees the planning and organization of graduate admissions in accordance with training and admission regulations. The two primary admission schemes are priority admission and the entrance examination. [...] For priority admission, exceptional candidates who have graduated from specialized programmes, such as high-quality programmes or internationally accredited programmes within VNUHCM, are given an advantage. This scheme recognizes the rigorous training these students have already undergone, ensuring that only the highest caliber of candidates—those with a minimum GPA of 7.0—are admitted without taking an entrance exam. Candidates who meet these criteria must also pass an interview conducted by a Council of 5-7 members. The Council's recommendation to the Rector for final approval ensures thorough vetting and fairness in the selection process. For candidates who do not meet the priority admission criteria, the entrance examination provides a clear and

structured pathway to admission. The examination, covering mathematics, informatics, and a foreign language (with options in English, French, Russian, German, Chinese, or Japanese), ensures that all candidates possess the necessary foundational skills for the programme. The UIT admissions committee then determines the eligibility cutoff scores based on results and programme quotas, ensuring that admitted students meet the program's high standards. This two-tiered admission system offers flexibility while maintaining academic rigor, ensuring that graduate students are selected through a fair, comprehensive process that aligns with programme objectives. Whether admitted through priority pathways or entrance exams, successful candidates demonstrate both the technical competence and intellectual readiness required to thrive in graduate programmes. UIT also awards outstanding admitted students for both admission schemes of all programmes."

Students during the on-site discussions testify that they are informed in detail about the requirements and the necessary steps to apply for admission into the degree programmes under review.

The experts see evidence that UIT keeps track of its students' progress and achievements. In this way, an instrument is in place to monitor the performance records of students with various enrolment backgrounds. In their assessment, the experts find the admission rules to be binding, transparent, and based on UIT's written regulations. They confirm that the admission requirements support the students in achieving the intended learning outcomes. Regarding the credit transfer for students, adequate policies are in place.

Criterion 1.5 Workload and Credits

Evidence:

- Self-Assessment Report
- Study plans of each degree programme
- Module descriptions
- Guidelines for Transferring the UIT Credit System to the European Credit Transfer and Accumulation System (ECTS)
- Discussions during the audit

Preliminary assessment and analysis of the experts:

According to the legal requirements, a Bachelor's degree programme in Vietnam requires at least 120 Vietnamese credits and a Master's degree programme 60 Vietnamese credits, where 1 Vietnamese credit equals about 50 hours of workload. To complete the Bachelor's degree programme Data Science, students must complete at least 123 Vietnamese credits

(equivalent to 193-208 ECTS credits), to complete the Bachelor's degree programme Information Technology, students must complete at least 126 Vietnamese credits (equivalent to 196,5-211,5 ECTS credits), to complete the Bachelor's degree programme Software Engineering, students must complete at least 130 Vietnamese credits (equivalent to 206-224 ECTS credits), and to complete the Bachelor's degree programme Computer Engineering, students must complete at least 126 Vietnamese credits (equivalent to 202,5 ECTS credits). To complete the Master's degree programme Information Technology, students must achieve at least 60 Vietnamese credits (equivalent to 102 ECTS credits).

UIT has issued a regulation on the conversion from Vietnamese Credits to ECTS credits, called "Guidelines for Transferring the UIT Credit System to the European Credit Transfer and Accumulation System (ECTS)" where it defines that one ECTS-point equals 27,5 hours of work. Furthermore, the regulation defines that "[a] contact hour is a measurement quantity of a student's study hours. A standard contact hour lasts for 50 minutes. [...] One academic credit equates to 15 theoretical hours, 30 hours of discussion, experimentation, and practice in the laboratory using offline or online learning methods, or 45 - 60 hours of practice and thesis preparation. For theoretical, practical, and experimental modules: to receive one credit, students must spend at least 30 hours of personal preparation (self-study).

The workload of students at UIT is as follows:

- One theoretical credit, students need to spend 15 contact hours x 50 minutes + 30 hours of self-study = 42.5 hours
- One credit for practice/ internship/ project/ graduation thesis, students need to spend 30 contact hours x 50 minutes + 30 hours of self-study = 55 hours

Since each ECTS credit equates to 25–30 contact hours, hours on guided work, and hours in the lab (including hours on self-study) depending on different nations in Europe and the regulations of the University, UIT unanimously decides to use an average of 27.5 hours per ECTS credit as the basis for an equivalent transfer at the UIT.

- One theoretical credit equates $42,5/27,5 = 1.5$ ECTS (rounded)
- One credit for practice/ internship/ project/ graduation thesis equates to $55/27,5 = 2$ ECTS."

This type of conversion also explains why, for example, the Bachelor's programmes have different number of ECTS credits depending on the respective study pathway, while the amount of Vietnamese credits that must be achieved is fixed for each case. This can be explained by the different proportions of theoretical and practical courses.

The UIT stipulates in its regulations that part of each course evaluation is also the enquiry of the workload that the students have to spend on the course. During the on-site discussions, students confirm that they are asked about their workload. In addition, they report experiences of the credit scope of courses being adjusted after the students had given corresponding feedback.

In summary, the experts can recognise from the workload information in the module descriptions that the overall workload is appropriate and corresponds to the Vietnamese credits. This is also confirmed in the surveys conducted by UIT each semester asking the students to evaluate the amount of time they spend outside the classroom for preparing the classes and studying for the exams. During the audit, the students emphasise that they consider the workload high but manageable and that it is possible to finish the degree programmes within the expected periods. Furthermore, a consistent and appropriate conversion from Vietnamese credits to ECTS is in place. However, UIT must ensure that the ECTS-points assigned to the internship in the Bachelor's degree programmes match the actual workload (see criterion 1.3).

Criterion 1.6 Didactic and Teaching Methodology
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Evidence:

- Self-Assessment Report
- Study plans of each degree programme
- Module descriptions
- Discussions during the audit

Preliminary assessment and analysis of the experts:

Various teaching and learning methods (including lectures, computer training and class-room and lab exercises, individual and group assignments, seminars and projects, etc.) have been implemented. Structured activities include tutorials, homework, assignments (reading or problem exercises) and practical activities. Group project assignments are given in some courses to develop students' skills in teamwork, communication, and leadership. The assignments and exercises should help students to develop their abilities with respect to critical thinking, written/oral communication, data acquisition, problem solving, and presentations.

The most common method of learning is class session. Lecturers generally prepare presentations to aid the teaching process. With individual or group assignments, such as discussions, presentations, or written tasks, students are expected to improve their academic as

well as their soft skills. In addition, practical activities should enable students to be acquainted with practical activities for research.

During the on-site visit, however, the experts noted that, due to student numbers and limited resources, laboratory classes can sometimes involve relatively large group sizes. Since, however, laboratory settings require closer supervision than, for example, lectures in order to provide students with adequate support, the experts would recommend that laboratory classes be organised in smaller groups. Of course, the experts recognise that this is only possible with the appropriate resources. Nevertheless, they issue a corresponding recommendation.

Furthermore, UIT supports students in conducting independent scientific work. In its SAR, UIT describes that “students are provided with resources and opportunities for independent learning, including access to research facilities, academic advising, and mentorship. UIT provides free computational platforms for lecturers and students with UIT-Cloud and GPU server systems. In addition, students can apply for research funds for their individual research projects. The student research funds are called twice per year, with no limitation on the number of applications per student.”

In summary, the expert group considers the teaching methods and instruments to be suitable to support the students in achieving the intended learning outcomes. In addition, they confirm that the study concept of all five degree programmes under review comprises a variety of teaching and learning forms as well as practical parts that are adapted to the respective subject culture and study format. It actively involves students in the design of teaching and learning processes. Moreover, they consider the support given to students to carry out independent research to be extraordinarily positive.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 1:

Criterion 1.1:

Regarding the different Pos and PLOs for the different pathways of the Master’s programme, UIT explains in its statement the following: “We would like to clarify that the differences among the three Master’s pathways (application-oriented, research type 1, and research type 2) are already explicitly described in our programme documentation [Programme Description, page 13] and in the Student Handbook [Student Handbook (pages 03)], where the objectives, focus, and expected outputs of each pathway are clearly distinguished. In addition, the course learning outcomes (CLOs) in the relevant syllabi differ across these pathways, reflecting the pathway-specific orientation and requirements. We would like to clarify that the issue identified in Section 2.4 of the English version is due to a

translation inconsistency.” UIT also provides a revised version of the English Diploma Supplement which was adapted accordingly.

The experts would like to express their gratitude for this clarification and for pointing out the existing distinctions as well as potential inconsistencies in translation. They can therefore confirm that the different pathways are adequately distinguished and that this is also reflected accordingly in the Diploma Supplement. Consequently, the initially planned requirement can be waived.

With regard to the Data Science bachelor’s program, the experts had questioned the phrasing “English proficiency” in PLO 6. In response, UIT explained that this was also a case of a translation inaccuracy. The wording has been revised as UIT explains in its statement: “The original statement: *‘Graduates have good English proficiency and are able to communicate and work with foreign experts and colleagues.’* will be updated to *‘Graduates are able to communicate and work with foreign experts and colleagues in English.’*” The experts support this adjustment.

Criterion 1.3 & 1.5:

UIT updated its Guidelines regarding the Credit Transfer to ECTS system. This regulation now states, that “[for] one internship credit, learners need to spend (8 weeks x 5 days/week x 4 hours/day)/2 = 80 hours. [...] One internship credit is equivalent to $80/27,5 = 3$ ECTS (rounded).” Therefore, the experts confirm that the assigned credits now match the actual workload and that there is no need for the initial requirement.

Criterion 1.3:

In its statement, UIT also addresses the curriculum recommendations made by the experts regarding the coverage of topics in the areas of ethics and social responsibility, software testing, discrete structures, and data structures and algorithms, as well as internships:

- With regard to the treatment of ethical issues, UIT explains that “1–2 dedicated chapters on ethics and social responsibility in computing and AI will be added to the ‘DS005 - Introduction to Data Science’, ‘IE005 - Introduction to Information Technology’, ‘SE005 - Introduction to Software Engineering Discipline’, and ‘CE005 - Introduction to Computer Engineering’ courses for each programme. These chapters will cover key topics such as professional ethics, responsible use of AI, data privacy, and societal impacts of technology. This approach ensures that all students are exposed to these important concepts at an early stage of their studies. We will also consider further integration of ethical considerations into advanced and specialized courses in future curriculum revisions.”

- The topic of software testing is to be covered more extensively in the future and has now been integrated as a separate thematic block: “Software Testing content has been integrated into the compulsory course ‘IE108 - Software Analysis and Design’ in the Information Technology programme and into the compulsory course ‘SE104 - Introduction to Software Engineering’ in the Software Engineering programme.”
- UIT has also made a change regarding the sequence of courses “Discrete Structures” and “Data Structures and Algorithms”: “We will revise the teaching plan so that ‘Discrete Structures’ is scheduled before ‘Data Structures and Algorithms’. Starting from the 2026 curriculum, in the IT, Data Science, Computer Engineering, and Software Engineering programs, ‘Discrete Structures’ will be moved to Semester 1 instead of ‘Linear Algebra’, and ‘Linear Algebra’ will be moved to Semester 2.”
- After the experts recommended that the internship be made mandatory in all programs (previously it was only mandatory in BCE and BSE), UIT has responded accordingly. UIT explains in its statement that “[in] the BIT (Information Technology) and BDS (Data Science) programmes, the internship was previously offered as an elective component. Following the experts’ recommendation, the curricula of the BIT and BDS programmes have been formally updated to make the internship a mandatory requirement. This change has been officially approved and documented. As a result, the internship is now a compulsory component across all four Bachelor’s programmes.”

The experts thank UIT for the detailed statement and greatly appreciate that UIT responded so quickly and specifically to the individual suggestions and recommendations. This reaffirms to the experts UIT’s commitment to continuously developing the programmes and also using the accreditation process to further advance the individual programmes. All of the curricular changes described that UIT has already implemented or intends to implement in the near future are viewed positively and supported by the experts. For this reason, the experts are also refraining from making the associated recommendations that were initially envisaged. However, even though the internship is now mandatory for all programmes, the experts still recommend extending its duration.

The experts consider criterion 1 to be fulfilled.

2. Exams: System, Concept and Organisation

Criterion 2 Exams: System, Concept and Organisation
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Evidence:

- Self-Assessment Report
- Module handbook for each degree programme
- Exam regulations
- Thesis guidelines
- Sample of exams and theses
- Discussions during the audit

Preliminary assessment and analysis of the experts:

UIT presents the general rules for the examination and assessment systems applicable to the study programmes under review. Exams for all five degree programmes follow detailed policies by the University. At UIT, assessment is conducted according to the regulations on training at the university level issued by the Ministry of Education and Training (MOET) and the teaching regulations of UIT. According to these regulations, each course has to determine learning outcomes, which support the achievement of the objectives of the respective programme. Accordingly, each course must assess whether all defined learning outcomes stated in the module descriptions have been achieved.

The student assessment process at UIT encompasses various components. Learning outcomes are evaluated through formative and summative assessments. Formative assessments gauge student progress during the semester using methods such as written and oral examinations, quizzes, reports, essays, and presentations. These assessments aim to identify learning gaps and enhance skills in teamwork, analysis, modeling, and system design. In addition to formative assessments, practice sessions help lecturers evaluate practical skills, and midterm and final exams cover diverse question types, including essays, multiple-choice questions, oral sessions, or final projects. The assessment methods are clearly outlined in the syllabus, providing transparency regarding the relationship between module learning outcomes, program learning outcomes, module content, lesson plans, assessment components, and methods.

The final grade of each module is calculated based on the score of these individual kinds of assessment. At the first meeting of a course, the students are informed about what exactly is required to pass the module and about how the final grade is determined through the teaching and learning plan. UIT uses a grading system with a 10-point scale, where you

need at least 5 points to pass a module. UIT provides the following table regarding the grading system:

10-point scale	100-point scale	4-point scale	Grade	Classification	Study result
9.0 to 10	90 to 100	4.0	A+	Excellent	Pass
8.0 – below 9.0	80 – below 90	3.5	A	Very good	Pass
7.0 – below 8.0	70 – below 80	3.0	B+	Good	Pass
6.0 – below 7.0	60 – below 70	2.5	B	Fairly good	Pass
5.0 – below 6.0	50 – below 60	2.0	C	Average	Pass
4.0 – below 5.0	40 – below 50	1.5	D+	Weak	Fail
3.0 – below 4.0	30 – below 40	1.0	D	Poor	Fail
Less than 3.0	Less than 30	0.0	F	Poor	Fail

Based on the university regulation, the students must retake the whole course if they fail, whereas the number of repetitions is unlimited. However, students can request to postpone the final exam due to important reasons (such as accidents, health problems, etc.). In these cases, students will take the final exam in the next semester without repeating the whole course. The reason, why there are no re-sits of the final exam is that the final grade depends on the assessment of the learning activities that will be carried out continuously through the semester and not only on the final exam. Students who have passed a course and want to improve the score, may also take the course again.

The students confirm that these regulations are effective and properly managed, and experts agree that provisions for disability accommodations, illness, and other exceptional circumstances are clearly established.

During the on-site visit, the experts had access to a selection of exams and final projects. They confirm that these represent an adequate level of knowledge as required by EQF-Level 6 and EQF-Level 7 respectively. The forms of exams are oriented in-line with the envisaged learning outcomes of the respective courses, and the workload is allocated in an acceptable way.

With regard to final theses and projects, the experts want to know whether these are also written in collaboration with industry and, if so, what the experiences have been. They

learn that this does indeed happen in some cases and that appropriate regulations are in place to govern the necessary supervision. Companies can approach the university with topics and describe what output is to be achieved within six months. Interested students can then apply for these projects. However, the industry representatives report that they would like to see a more systematic approach to cooperation on final-year projects. In their view, the faculty is not particularly proactive in recruiting students for final-year projects in industry. The industry would therefore like the university to identify, where appropriate, students in advance who might be of interest for industrial projects and then explicitly put them in touch with the relevant company (provided the students are interested). In the industry's view, this would allow the matching and selection process to be standardised to some extent and thus potentially increase the number of theses written in collaboration with industry in the medium term. Therefore, the experts recommend to systemize cooperation with industry regarding conducting final projects/theses with companies.

The experts conclude that the criteria regarding the examinations system, concept, and organization are fulfilled and that the examinations are suitable to verify whether the intended learning outcomes are achieved or not.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 2:

The experts consider criterion 2 to be fulfilled.

3. Resources

Criterion 3.1 Staff and Development
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Evidence:

- Self-Assessment Report
- Staff handbook
- Regulations on Staff Recruitment, Staff Evaluation, and Staff Development
- UIT Strategic Plan
- Discussions during the audit

Preliminary assessment and analysis of the experts:

HR Resources

UIT's teaching staff are categorised as professors, associate professors, and lecturers. The academic position of each staff member is based on research activities, publications,

academic education, supervision of students, and other supporting activities. All full-time teaching staff members are expected to be involved in teaching/advising, research, and administrative services. However, the workload can be distributed differently between the three areas from teacher to teacher, depending on the academic position. For example, full professors spend more time on research activities and less on teaching than associate professors or lecturers.

Yearly, the Dean of the respective Faculty devises a recruitment plan. This plan is shaped by UIT departments, considering factors like workload, the academic staff-to-student ratio, and retirements. Once approved by the Rector, the plan is passed to the Department of Personnel & Administration for candidate selection programs. Teaching staff qualifications are rigorously assessed by a committee based on the criteria relating to their achievement in the field of their subject. Criteria include subject-specific achievements, a pedagogical standards certificate, and proficiency in English, as specified in UIT recruitment notices. Focused on securing adept lecturers, the recruitment policy is widely publicized through mass media. This approach ensures broad visibility and attracts candidates aligned with UIT's academic standards.

UIT provides the following information on the quantity and qualifications of teaching staff

Faculty	#PhDs	#MSc	#BSc	#BE	Total
FISE	7	11	3	0	21
FSE	11	19	2	0	32
FCE	11	11	0	3	25

The Vietnamese government has set specific staff-student ratios for universities, with a recommended ratio of 1:20 for optimal engagement which is ensured in all five programmes under review. The experts meet with students to assess their perceptions of the support provided and the appropriateness of class sizes for effective learning. Students express satisfaction with the accessibility of lecturers, both inside and outside the classroom, and do not perceive any problems with current class sizes.

On frequent occasions, UIT invites guest lecturers from other members of VNU-HCM and international universities and institutes as well as from industry to teach parts of various core and major courses, as well as to supervise students for their internships, research projects, and theses. UIT provides the following information on the quantity and qualifications of visiting lecturers:

Faculty	#PhDs	#MSc	Total
FISE	6	8	14
FSE	0	2	2
FCE	3	0	3

During the various discussion sessions, the experts want to know how many external lecturers from industry are involved in the programmes under review and how well the collaboration is working overall. It emerges that, whilst such lecturers are used in individual cases, industry in particular would like to see even closer collaboration in this regard. The industry representatives on site report that they could envisage being integrated into teaching in a more structured manner, so as to incorporate the latest industry knowledge into the curricula. The experts welcome this proactive attitude on the part of industry and therefore recommend to more include external teachers and guest lecturers from industry in the programmes.

In summary, the experts emphasise the highly committed and motivated staff and the satisfaction of the students. They conclude that UIT has defined adequate measures for staff selection and that all programmes under review can be carried out effectively with the existing staff.

HR Development

UIT encourages the training of its academic staff to improve their didactic abilities and teaching methods. As stated in the Self-Assessment Report, academic staff frequently undergo training in pedagogy, research, management, leadership, and quality assurance. Academic staff at UIT undergo continuous development through various degree and non-degree training programmes at UIT or other institutions of Vietnam National University Ho Chi Minh City. Faculty can choose doctoral programmes according to their research interests, and the English Centre at UIT provides language support. Participation in national and international forums is encouraged, and UIT is committed to supporting national and international training for teaching staff that meets university standards. Senior lecturers are required to mentor and train newly recruited staff in teaching, research and community service, while junior staff gain experience by assisting as sit-in lecturers for at least one semester.

In its Self-Assessment report, UIT additionally describes that “[s]trong emphasis is placed on continuous academic and professional development, offering a wide range of

opportunities, including workshops, seminars, and conferences focused on both subject-specific knowledge and pedagogical skills. Regular peer reviews and performance evaluations are conducted to assess ongoing effectiveness, with student feedback playing a crucial role in identifying areas for improvement. This systematic approach ensures that faculty members are well-equipped to deliver high-quality education that meets rigorous institutional standards [...]. The evaluation system is tailored to specific job positions, assessing faculty on professional competence, teaching capacity, and research achievements, ensuring that faculty development aligns with institutional goals and industry needs.”

The experts discuss the various opportunities available for personal skill development with the teaching staff members. The teachers express their satisfaction with the internal qualification programme and willingness to improve their didactic skills.

However, during the audit interviews, teaching staff indicate that they would like to see (even) more professional development opportunities relating to modern didactics. In particular, they are interested in courses on AI-supported learning. The experts endorse this and recommend to offer the teaching staff further training regarding modern didactics. Furthermore, during the audit interviews, the experts gain the impression that the English proficiency of the teaching staff could be improved even further, which is why they recommend to further strengthen the English proficiency of the teaching staff.

In Summary, all interviewed staff demonstrate high motivation and attachment to the institution. In the opinion of the experts, UIT offers in principle sufficient support mechanisms and opportunities for teaching staff members who wish to strengthen their professional and teaching skills. However they recommend to offer further training regarding modern didactics and to further strengthen the teaching staff’s English proficiency.

Criterion 3.2 Student Support and Student Services

Evidence:

- Self-Assessment Report
- Evaluation/survey results
- Discussions during the audit

Preliminary assessment and analysis of the experts:

During the on-site discussions with programme coordinators, lecturers, and particularly the students, the experts gain a thorough understanding of the available support services for students. UIT provides both subject-specific academic counselling and general non-academic guidance.

At the start of the first semester, every student is assigned an academic advisor. These advisors are members of the academic staff and are responsible for approximately 10 to 15 students from their classes. Their academic advisor is the first port of call if a student needs advice or support on academic or personal issues. They also offer suggestions regarding relevant careers and skills development and help if there are problems with other teachers. Before the start of the semester, the advisors help students plan for their next courses. Students register for courses through an online platform that allows advisors to look through all registered courses and make adjustments in alignment with the student's progress and abilities. The platform is also used by advisors to monitor the academic performance of their students. They arrange at least two meetings per semester to discuss issues affecting the student's academic achievement. During the discussion with the experts, the students confirm that they all have an academic advisor. In general, during their interaction with the experts, students highlight the approachability of teachers, which contributes to building a fruitful interaction. The discussion leads the experts to the impression that students are well taken care of.

Students who prepare their thesis have one or more supervisors selected based on the topic of the final project. Each lecturer supervises up to five students and organises weekly meetings with them. The role of the thesis supervisor is to guide students in completing their final project, which includes finishing their research and the final project report.

During the campus tour, the experts observed a range of student services offered at UIT, including counselling provided by psychologists, medical doctors, lawyers, and educators, accessible through online, face-to-face sessions, and seminars.

Finally, there are several student organisations at UIT; these include student-led clubs, which are divided into arts, sports, religious and other non-curricular activities.

In its SAR, UIT provides the following summary on the student support activities carried out by UIT and the faculties involved:

Activity Type	UIT	FISE	FSE	FCE
Co-curricular activities	- Scholarship opportunities from enterprises and organizations. - Research and seminars. - Job Fairs (e.g., UIT Career Day). - Company visits offering practical exposure. - Open English Club (OEC) for language development.	- FISE Alumni Day with knowledge sharing from alumni. - Seminars by industry experts. - Company field trips. - Seminar on the benefits of research and integrating research into capstone projects and theses	- FSE Career Talk series: networking events with alumni and software companies - Seminars on software trends (e.g., Agile, DevOps, Cloud, AI) - Seminar on CV writing, interview skills, and career development guidance - Training programs co-organized with companies (e.g., React.js, Node.js), concluding with a certification exam - Company visits for hands-on exposure (e.g., FPT, KMS, VNG, Game-loft, Athena) - Game Club: knowledge-sharing and mentorship for aspiring game developers, featuring	- CEDAY - Seminars by industry experts - Company field trips

			industry and alumni guest talks - Seminar on the benefits of re- search and inte- grating research into capstone projects and theses	
Student com- petitions	- UIT Hackathon. - Network Chal- lenge. - Netsec TOEIC English competi- tion.	- Data Sci- ence Chal- lenge - Mock Interview - Real Success	- Hacka- thon com- petition - SEApp competition – where students deve- lop	- UIT Car Racing - AMO - IC Design
	- UIT Collegiate Programming Contest (UCPC). - UIT Artificial Intelligence Challenge (UIT AIC).	- ISE Spark of Ideas	applications or games and present their projects - IT Arena competi- tion	
Support ac- tivities	- Annual sup- port activities by the Office of Student Affairs (OSA).	- Annual sup- port activities by FISE Youth Union.	- Annual sup- port activities by FSE Student Union	- Annual sup- port activities by FCE Youth Union.

In summary, the experts positively note the good and trustful relationship between the students and the teaching staff. Enough resources are available to provide individual assistance, advice and support for all students. The support system helps the students achieve the intended learning outcomes and complete their studies successfully. The students, in general, have access to sufficient information about the programmes and are well-informed about the services available. The comprehensive support and advisory system is one of the strengths of UIT.

Criterion 3.3 Funds and equipment
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Evidence:

- Self-Assessment Report
- List of Equipment
- Strategic Plan
- On-site visit of participating institutes and laboratories
- Discussions during the audit

Preliminary assessment and analysis of the experts:

UIT provides basic funding and facilities for the five programmes under review. UIT or the Vietnamese government can provide additional funds for research activities, but the teachers have to apply for them. In addition, there are several cooperation agreements with industry partners. The main sources of income are the students' tuition fees and the funds provided by the Vietnamese government (mostly for salaries). In its Self-Assessment report, UIT states that "[to] strategically support its mission, UIT has established several dedicated funds as outlined in its internal spending regulation [...]. These include the Student Support Fund, which allocates a minimum of 8% of tuition fees from full-time undergraduate programmes (alongside external contributions) to scholarships, fee waivers, and other student services; the Research Support Fund, which draws from at least 3% of tuition fees and 5% of non-state revenue to finance research projects, equipment, and academic events; and the Development Fund, which reserves a minimum of 25% of annual surplus for infrastructure investment, academic development, and social responsibility initiatives. Additionally, the Income Supplement Fund enhances staff remuneration to attract and retain qualified personnel, while the Reward and Welfare Funds, capped at three months of salary expenses, support staff recognition and welfare activities."

All facilities and equipment are regularly validated and calibrated. Planning and maintaining the university's facilities. This includes evaluating, maintaining and improving the physical facilities and infrastructure of the university, such as teaching and learning facilities, laboratories, equipment, and tools, to meet the needs of education, research, and service.

The experts had a close look at the equipment used for practical training in the laboratories. The experts value the students' presentation of their practical work in the laboratories. They judge the facilities, including teaching labs, as adequate for teaching and confirm that they are well-equipped and contain everything necessary for the programmes' objectives. If students require additional resources to conduct their research, the programmes offer various partnerships with national and international institutes. Furthermore, the experts highlight the (partly) extracurricular opportunities provided for the students, e.g. the AI

Club and the opportunity to carry out internships in the offices on campus funded by various, partly international cooperation partners.

The experts find no severe bottlenecks due to missing equipment or infrastructure. The basic technical equipment for teaching students is available in sufficient numbers. In the discussion with the expert group, the students confirm that they are generally satisfied with the available equipment. Moreover, the teaching staff emphasise that from their point of view, the degree programmes receive sufficient funding for all teaching and learning activities. Of course, there is limited funding to modernise or add laboratory equipment, but there are sufficient resources for adequately teaching the classes. However, lecturers also note that the facilities require further investment to support advanced research. Whilst the facilities are clearly adequate for teaching and, to some extent, for research, lecturers still see a need for expansion, particularly with regard to high-performance computers, which is also recognised by the experts. The experts therefore recommend to improve the research facilities.

Students are satisfied with the library and the literature, most of which is available digitally. They can access international literature, scientific journals, and publications online through different host services. Students have sufficient access to current international literature and databases, and they can access them remotely. Additionally, students can access all the resources of all member universities of the Vietnam National University Ho Chi Minh City. This means that if UIT does not have the required books, they can be obtained from other universities.

During the audit, however, the students criticised the fact that the library closes as early as 4.30 pm. In their view, this is too early, as many of them explicitly use it as a study space. They would therefore like to see longer opening hours, extending into the evening. The experts can understand the students' objection and also recognise during the on-site visit that the library is used intensively by students for working and studying. They therefore want to take up the students' comments and recommend extending the opening hours of the library.

In summary, the expert group assesses that the available funds, the technical equipment, and the infrastructure (laboratories, library, seminar rooms, etc.) are well suited to the requirements for providing the four study programmes under review

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 3:

Criterion 3.3:

Regarding the opening hours of the library, UIT gives the following statement: “Since June 2, 2025, the University of Information Technology (UIT) has adjusted the operating hours of its Library. Specifically, the Library is open from 7:30 a.m. to 6:00 p.m. on weekdays (Monday to Friday), and from 8:00 a.m. to 4:00 p.m. on Saturdays. This adjustment was made based on a survey of students’ needs. The results indicated that the demand for late-hour library use is relatively low, partly due to the university’s location being relatively distant from the city center, which limits students’ mobility during evening hours. Therefore, UIT has extended the Library’s operating hours until 6:00 p.m. on weekdays and maintained Saturday service hours to better align with actual student needs while ensuring operational efficiency.”

The experts acknowledge that UIT has already addressed this issue and conducted a survey on the matter. They consider the presentation provided to be reasonable and view the new opening hours as a good compromise that takes students’ wishes into account while ensuring operational feasibility. For this reason, they are refraining from making the recommendation that was initially proposed.

The experts consider criterion 3 to be fulfilled.

4. Transparency and Documentation

Criterion 4.1 Module Descriptions

Evidence:

- Modul Handbooks for each degree programme under review

Preliminary assessment and analysis of the experts:

The experts observe that the module descriptions of all five degree programmes under review mostly contain the necessary information about the persons responsible for each module, the teaching language, the teaching methods, the workload, the credit points, the module objectives and intended learning outcomes, the content, the admission and examinations requirements and regulations, and the literature. However, the experts have identified some minor inaccuracies and inconsistencies. Firstly, they believe that the module descriptions should better indicate where ‘project-based learning’ is used. This is because, according to the on-site discussions, this approach is used significantly more often than is indicated in the module descriptions. Furthermore, the information regarding prerequisite

and recommended courses should be revised. In some cases, the information is incomplete and refers to incorrect module codes in parts; this needs to be rectified. The description of the Master's thesis in the application-oriented pathway also appears to be incorrect, as it states that the entire thesis is to be completed in three weeks.

Summing up, the experts are of the opinion that the university has generally provided good and mostly complete module descriptions overall. However, the module descriptions need to be reviewed, especially regarding information on the teaching methods, the consistent use of course codes and the description of the Master Thesis.

Criterion 4.2 Diploma and Diploma Supplement

Evidence:

- Exemplary Diploma Supplements
- Exemplary Transcripts of Records

Preliminary assessment and analysis of the experts:

The experts confirm that the students of the five programmes under review are awarded a Diploma and a Diploma Supplement upon graduation. The Diploma consists of a Diploma Certificate and a Transcript of Records. The Transcript of Records lists all the courses that the graduate has completed, the achieved credits, grades, and cumulative GPA. The Diploma Supplement contains all required information about the degree programmes including information on the programmes' objectives and intended learning outcomes.

Criterion 4.3 Relevant Rules

Evidence:

- Self-Assessment Report
- All relevant regulations as published on the university's website

Preliminary assessment and analysis of the experts:

The experts confirm that the rights and duties of both UIT and the students are clearly defined and binding. All rules and regulations are published on the university's website and hence available to all stakeholders. In addition, the students receive all relevant course material at the beginning of each semester.

The experts appreciate that the websites of the programmes include sufficient information about the intended learning outcomes, study plans, module descriptions and academic guidelines of each degree programme and are made available to all relevant stakeholders.

During the audit discussions, the experts also discuss with the various stakeholders the developments and impact of AI, and how the university is addressing this. The university is examining the issue and is willing to adapt its teaching accordingly, as well as to reconsider previously chosen examination formats, in order to keep pace with new developments. However, the experts note that there are currently no fixed university-wide regulations in place, which is why they recommend to implement university-wide/Institution-wide regulations and guidelines on the appropriate use of (gen) AI.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 4:

Criterion 4.1:

UIT provides updated module descriptions addressing all mentioned (minor) inaccuracies and inconsistencies. Therefore, the experts consider them now to be complete and fully accurate.

Criterion 4.3:

UIT explains in its statement that they have “issued comprehensive guidelines on the ethical use of Generative AI. This initiative is a collaborative effort between the Academic Affairs Office and Faculties to ensure academic integrity while embracing technological innovation.” UIT provides these university wide regulations attached to its statement.

The experts acknowledge that UIT has introduced a guideline on the use of AI in teaching and academic studies and are therefore withdrawing their original recommendation.

The experts consider criterion 4 to be fulfilled.

5. Quality management: quality assessment and development

Criterion 5 Quality management: quality assessment and development

Evidence:

- Self-Assessment report
- Student handbooks
- Quality Assurance Guidelines
- Surveys' reports
- Discussions during the audit

Preliminary assessment and analysis of the experts:

UIT's quality management revolves around its Internal Quality Assurance System, which is in line with MOET regulations. The QA system, managed by the Office of Inspection, Legal Affairs, and Quality Assurance (OILAQA), operates at both institutional and faculty levels to uphold and improve academic quality. UIT aims to continuously assess, evaluate, control, maintain and improve key activities in accordance with the University's mission, vision and strategic goals.

UIT uses various monitoring and assessment tools within its QA framework. Student progress is closely monitored using tools such as UIT's Moodle system, academic information portals and online surveys. Dropout and completion rates are regularly tracked, with interventions such as academic alerts and specific processes to address dropout concerns.

Assessment tools include bi-annual student surveys to evaluate teaching activities. These surveys cover module organisation, teaching activities and assessment methods. The results are analysed by OILAQA and reports are sent to UIT management and departments. Students also provide feedback on the quality of teaching through mandatory end-of-semester surveys.

The University conducts surveys to gather feedback from graduates, alumni and employers. Graduating students evaluate modules and training programmes, while alumni and employers evaluate the quality of the education and graduates' readiness for the work-place. The results of these surveys are used to improve programme effectiveness and align the curriculum with labour market needs.

UIT's commitment to continuous improvement is evident in its biennial surveys, which gather feedback from teaching and support staff. These surveys assess job satisfaction, including factors such as policies, training opportunities, support activities and evaluation by

managers and colleagues. Feedback from students, alumni and industry representatives is used to update the curriculum.

During the audit, the experts asked about student and industry satisfaction with their involvement in decision-making. Students expressed satisfaction, noting that their feedback was genuinely taken into account and had an impact on programme improvements. Furthermore, they confirm that they are informed about the evaluation results. Industry partners echoed the students' positive sentiment, acknowledging UIT's commitment to incorporating their insights and observing tangible changes. Overall, both groups confirmed their satisfaction, highlighting UIT's inclusive and responsive approach to stakeholder feedback.

In summary, the experts are of the opinion that UIT's quality management system, guided by internal and external feedback loops, involves students, alumni and industry stakeholders and ensures a comprehensive and continuous approach to programme improvement.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 5:

The experts consider criterion 5 to be fulfilled.

D Additional Documents

No documents needed.

E Comment of the Higher Education Institution

After the on-site audit, UIT provides the regulation stating that students have to carry out a final project or thesis and don't have the option to replace it with three elective courses.

In addition, UIT submits a statement regarding the initial requirements and recommendations. This includes revised versions of the module handbooks, student handbooks, and individual program specifications. UIT also submits the guidelines for credit conversion (UIT Credit System to ECTS), a decision regarding the adaptation of the Diploma Supplement, "Notice on converting elective credits to mandatory credits for the Internship course", "Proposal on adjustment of library service hours", and "Guidelines on the ethical use of Generative AI". The implications of the additional documents and the statement on the experts' assessment can be traced in the grey boxes under the respective criteria.

F Summary: Expert recommendations

Taking into account the additional information given by UIT the experts summarize their analysis and **final assessment** for the award of the seals as follows:

Degree Programme	ASIIN Seal	Subject-specific label	Maximum duration of accreditation
Ba Data Science	Without requirements.	Euro-Inf	30.09.2031
Ba Information Technology	Without requirements.	Euro-Inf	30.09.2031
Ba Software Engineering	Without requirements.	Euro-Inf	30.09.2031
Ba Computer Engineering	Without requirements.	Euro-Inf	30.09.2031
Ma Information Technology	Without requirements.	Euro-Inf	30.09.2031

Recommendations

For all programmes

- E 1. (ASIIN 1.3) It is recommended to increase variety of courses from other study fields as electives.
- E 2. (ASIIN 1.3) It is recommended to increase the range of available language courses to more languages than English and Japanese.
- E 3. (ASIIN 1.3) It is recommended to increase international mobility opportunities.
- E 4. (ASIIN 3) It is recommended to improve the research facilities.
- E 5. (ASIIN 3) It is recommended to more include external teachers and guest lecturers from industry in the programmes.

For all Bachelor's programmes

E 6. (ASIIN 1.3) It is recommended to increase the duration of the internship.

G Comment of the Technical Committee 04- Informatics/Computer Science

Assessment and analysis for the award of the ASIIN seal:

The Technical Committee discusses the procedure and follows the experts' assessment without any further changes.

Assessment and analysis for the award of the Euro-Inf® Label:

The Technical Committee deems that the intended learning outcomes of the degree programmes do comply with the Subject-Specific Criteria of the Technical Committee 04 – Informatics/Computer Science.

The Technical Committee 04 – Informatics/Computer Science recommends the award of the seals as follows:

Degree Programme	ASIIN Seal	Maximum duration of accreditation	Subject-specific label	Maximum duration of accreditation
Ba Data Science	Without requirements.	30.09.2031	Euro-Inf	30.09.2031
Ba Information Technology	Without requirements.	30.09.2031	Euro-Inf	30.09.2031
Ba Software Engineering	Without requirements.	30.09.2031	Euro-Inf	30.09.2031
Ba Computer Engineering	Without requirements.	30.09.2031	Euro-Inf	30.09.2031
Ma Information Technology	Without requirements.	30.09.2031	Euro-Inf	30.09.2031

H Decision of the Accreditation Commission

Assessment and analysis for the award of the subject-specific ASIIN seal:

The Accreditation Commission discusses the procedure and follows the assessment of the experts and the technical committee without any changes.

Assessment and analysis for the award of the Euro-Inf® Label:

The Accreditation Commission deems that the intended learning outcomes of the degree programmes do comply with the Subject-Specific Criteria of the Technical Committee 04 – Informatics/Computer Science.

The Accreditation Commission decides to award the following seals:

Degree Programme	ASIIN Seal	Maximum duration of accreditation	Subject-specific label	Maximum duration of accreditation
Ba Data Science	Without requirements.	30.09.2031	Euro-Inf	30.09.2031
Ba Information Technology	Without requirements.	30.09.2031	Euro-Inf	30.09.2031
Ba Software Engineering	Without requirements.	30.09.2031	Euro-Inf	30.09.2031
Ba Computer Engineering	Without requirements.	30.09.2031	Euro-Inf	30.09.2031
Ma Information Technology	Without requirements.	30.09.2031	Euro-Inf	30.09.2031

Recommendations

For all programmes

- E 1. (ASIIN 1.3) It is recommended to increase variety of courses from other study fields as electives.
- E 2. (ASIIN 1.3) It is recommended to increase the range of available language courses to more languages than English and Japanese.
- E 3. (ASIIN 1.3) It is recommended to increase international mobility opportunities.
- E 4. (ASIIN 3) It is recommended to improve the research facilities.

- E 5. (ASIIN 3) It is recommended to more include external teachers and guest lecturers from industry in the programmes.

For all Bachelor's programmes

- E 6. (ASIIN 1.3) It is recommended to increase the duration of the internship.

Appendix: Programme Learning Outcomes and Curricula

According to the Programme Specification the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor's degree programme Data Science:

Level	Programme Learning Outcomes (PLOs)
PLO1	Apply foundational knowledge of natural and social sciences to understand and solve problems in Data Science and its practical contexts
1.1	Apply fundamental knowledge in natural sciences
1.2	Apply fundamental knowledge in social sciences
PLO2	Demonstrate mastery of foundational and in-depth knowledge in Data Science
2.1	Understand and apply fundamental knowledge of operating systems
2.2	Understand and apply fundamental knowledge of programming
2.3	Understand and apply fundamental knowledge of algorithms
2.4	Understand and apply fundamental knowledge of information management
2.5	Understand and apply fundamental knowledge computer networks and communications
2.6	Understand and apply fundamental knowledge of computer architecture
2.7	Understand, apply and analyze fundamental and specialized knowledge of data science
PLO3	Survey documents, formulate arguments, analyze, and proposed solutions for Data Science problems; recognize the necessity and possess the capability for lifelong learning
3.1	Survey documents for Data Science problems
3.2	Reason and analyze issues and solutions
3.3	Develop ideas and proposing solutions
3.4	Understand and apply lifelong learning and self-development
PLO4	Design, implement, and evaluate models/systems and solutions in Data Science
4.1	Design Data Science models/systems
4.2	Evaluate models/system and can suggest solutions for improvement
PLO5	Communicate, collaborate, and connect effectively with individuals and teams in specific professional contexts
PLO6	Communicate in the workplace, comprehend professional documents, and presenting specialized solutions in a foreign language
6.1	Communicate and interpret documents in foreign languages
6.2	Comprehend specialized documents and present solutions in a foreign language
PLO7	Understand leadership and management
PLO8	Understand professional responsibility, respect the law, and uphold ethical values

The following **curriculum** is presented:

Semester	Code ID	Courses name	Credits	Theory	Practice	ECTS
Semester 1	IT001	Introduction to Programming	4	3	1	6.5
	MA006	Calculus	4	4	0	6.0
	MA003	Linear Algebra	3	3	0	4.5
	SS006	Introduction To Law	2	2	0	3.0
	DS005	Introduction to Data Science	1	1	0	1.5
	ENG01	English 1	4	4	0	6.0
	ME001	Military Education	Separately			
	Total credits for Semester 1		18	17	1	27.5
Semester 2	IT010	Computer Organization and Architecture	2	2	0	3.0
	SS004	Professional Skills	2	2	0	3.0
	IT003	Data Structures And Algorithms	4	3	1	6.5
	MA004	Discrete structures	4	4	0	6.0
	MA005	Probability and statistics	3	3	0	4.5
	ENG02	English 2	4	4	0	6.0
	Total credits for Semester 2		19	18	1	29.0
Semester 3	IT004	Databases	4	3	1	6.5
	IT005	Introduction To Computer Networks	4	3	1	6.5
	IT002	Object-Oriented Programming	4	3	1	6.5
	DS101	Advanced Statistic and Probabilistics	3	2	1	5.0
	ENG03	English 3	4	4	0	6.0
	Total credits for Semester 3		19	16	4	30.5
Semester 4	SS007	Philosophy Marx - Lenin	3	3	0	4.5
	IT007	Operating systems	4	3	1	6.5
	DS108	Pre-processing and Constructing Dataset	4	3	1	6.5
	DS107	Computational Thinking For Data Science	4	3	1	6.5
	Total credits for Semester 4		16	12	3	24.0
Semester 5	SS008	Political economics of Marxism and Leninism	2	2	0	3.0
	DS111	Data Analysis	4	3	1	6.5
	DS102	Statistical Machine Learning	4	3	1	6.5
	PE231	Physical Education 1	Separately			
	Specialized courses 1		≥4			6.0 - 8.0
	Total credits for Semester 5		≥14			22.0 - 24.0
Semester 6	SS009	Scientific Socialism	2	2	0	3.0
	PE232	Physical Education 2	Separately			

0 Appendix: Programme Learning Outcomes and Curricula

	Specialized courses 2		≥12			18.0 - 24.0
	Total credits		≥14			21.0 - 27.0
Semester 7	SS010	History of Vietnamese communist party	2	2	0	3.0
	SS003	Ho Chi Minh's Thoughts	2	2	0	3.0
	DS400	Data Science Graduation seminars (***) (required if choosing form 2 in the graduation knowledge block)	4	4	0	6.0
	Specialized courses 3 (**)		≥10			15.0 - 20.0
	Total credits for Semester 7 <i>Excluding Data Science Graduation Seminar: 14 credits</i> <i>If counting Data Science Graduation Seminar: 18 credits</i>		14 – 18			21.0- 26.0
Semester 8	Students choose one of the following three options: (****)					
	<i>Options 1: Graduation thesis (10 credits)</i>					
	DS505	Thesis	10	0	10	
	<i>Options 2: Data Science Graduation seminars (4 credits) and Capstone Project (6 credits) (the Data Science Graduation seminars (4 credits) was completed in semester 7)</i>					
	DS501	Capstone Project	6	0	6	
	<i>Options 3: Graduation project at the enterprise (10 credits)</i>					
	DS502	Industry Capstone Project	10	0	10	
Total credits for Semester 8 <i>If you choose form 1 or 3 : 10 credits</i> <i>If you choose form 2: 6 credits</i>			6 – 10			18.0- 20.0
Minimum total credits for the entire course			123			193.0- 208.0

According to the Programme Specification the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor's degree programme Information Technology:

Level	DESCRIPTION
1	(PLO1) Mastering foundational knowledge of natural and social sciences and understanding the application of these principles in Information Technology and practical contexts
1.1	Fundamental Knowledge in Natural Sciences
1.2	Fundamental Knowledge in Social Sciences
2	(PLO2) Mastering foundational and in-depth knowledge of Information Technology to apply in practice
2.1	Fundamental and specialized knowledge of operating systems
2.2	Fundamental and specialized knowledge of programming
2.3	Fundamental and specialized knowledge of algorithms
2.4	Fundamental and specialized knowledge of information management
2.5	Fundamental and specialized knowledge of Information Technology and apply it in practice
3	(PLO3) Surveying documents, formulating arguments, analyzing, and proposing solutions for Information Technology-related issues; recognizing the necessity and possessing the capability for lifelong learning
3.1	Collect, survey and synthesize issues related to the Information Technology industry

3.2	Reasoning and analytical skills
3.3	Developing ideas and proposing solutions skills
3.4	Understand the role of setting goals and planning for learning with the spirit of continuous learning and self-development
4	(PLO4) Designing, implementing, and evaluating systems and solutions in Information Technology
4.1	Design systems that meet the requirements and build systems based on existing designs
4.2	Evaluate the effectiveness of the system and can suggest directions for improvement
5	(PLO5) Communicating, collaborating, and connecting effectively with individuals and groups in specific professional contexts
6	(PLO6) Communicating in the workplace, comprehending professional documents, and presenting specialized solutions in a foreign language
6.1	General communication and writing skills
6.2	Reading and understanding specialized documents in a foreign language
7	(PLO7) Understanding leadership and management
8	(PLO8) Understanding professional responsibility, respecting the law, and uphold ethical values

The following **curriculum** is presented:

0 Appendix: Programme Learning Outcomes and Curricula

Semester	Course ID	Courses name	Credits	Theory	Practice	ECTS
Semester 1	IT001	Introduction to Programming	4	3	1	6.5
	MA006	Calculus	4	4	0	6.0
	MA003	Linear Algebra	3	3	0	4.5
	IE005	Introduction to Information Technology	1	1	0	1.5
	ENG01	English 1	4	4	0	6.0
	SS006	Introduction to Law	2	2	0	3.0
	ME001	National Defense Education	Separately			
	Total credits for Semester 1		18	17	1	27.5
Semester 2	IT002	Object-Oriented Programming	4	3	1	6.5
	IT003	Data Structures and Algorithms	4	3	1	6.5
	MA004	Discrete Structures	4	4	0	6.0

0 Appendix: Programme Learning Outcomes and Curricula

Semester	Course ID	Courses name	Credits	Theory	Practice	ECTS
	ENG02	English 2	4	4	0	6.0
	SS004	Professional Skills	2	2	0	3.0
		Total credits for Semester 2	18	16	2	28.0
Semester 3	IT004	Databases	4	3	1	6.5
	IT005	Introduction to Computer Network	4	3	1	6.5
	IT012	Computer Structure and Organization II	4	3	1	6.5
	ENG03	English 3	4	4	0	6.0
	MA005	Probability and Statistics	3	3	0	4.5
		Total credits for Semester 3	19	16	3	30.0
Semester 4	IE101	Information Technology Infrastructure	3	2	1	5.0
	IE103	Information Management	4	3	1	6.5
	IT007	Operating Systems	4	3	1	6.5
	SS003	Ho Chi Minh's Thoughts	2	2	0	3.0
	SS007	Philosophy Marxist-Lenin	3	3	0	4.5
		Total credits for Semester 4	16	13	3	25.5
Semester 5	IE104	Internet and Web Technology	4	3	1	6.5
	IE106	User Interface Design	4	3	1	6.5
	PE231	Physical Education 1	Separately			
	SS008	Political Economics of Marxism and Leninism	2	2	0	3.0
	SS009	Scientific Socialism	2	2	0	3.0
		Specialized Course	4	0 - 4	0 - 4	6.0 - 8.0
		Total credits for Semester 5	16	10 - 14	2 - 6	25 - 27
Semester 6	IE105	Introduction to Information assurance and security	4	3	1	6.5
	IE108	Software Analysis and Design	4	3	1	6.5
	PE232	Physical education 2	Separately			
	SS010	History of Vietnamese communist party	2	2	0	3.0
		Specialized Course 2	10	0 - 10	0 - 10	15.0 - 20.0
		Total credits for Semester 6	16	5 - 15	1 - 11	24.5 - 29.5
Semester 7	IE400	Graduate Seminars (Required if choosing Graduate Seminars + Capstone Project in the graduation knowledge)	4	0	4	8.0

Semester	Course ID	Courses name	Credits	Theory	Practice	ECTS
		Specialized Course 3	12	0 - 12	0 - 12	18.0 - 24.0
	Total credits for Semester 7 <i>If not counting Graduate Seminars: ≥ 12</i> <i>If counting Graduate Seminars: ≥ 16</i>		12 - 16	0 - 12	4 - 16	26.0 - 32.0
Semester 8	Students choose one of the following three options:					
	Option 1: Graduation Thesis					
	IE505	Thesis	10	0	10	20.0
	Option 2: Graduate Seminars and Capstone Project (The Graduate Seminars (4 credits) was completed in Semester 7)					
	IE501	Capstone Project	6	0	6	12.0
	Option 3: Industry Capstone Project					
	IE502	Industry Capstone Project	10	0	10	20.0
	Total credits for Semester 8 <i>If you choose option 1 or 3 : 10 credits</i> <i>If you choose option 2: 6 credits</i>		6 - 10	0	6 - 10	12.0 - 20.0
Total (including 12 credits of English)		125			198.5 - 219.5	

According to the Programme Specification the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor's degree programme Software Engineering:

Level	Programme Learning Outcomes (PLOs)
PLO1	Demonstrate a solid understanding of fundamental knowledge in natural sciences and social sciences, and explain how such knowledge can be applied in Software Engineering and real-world contexts.
1.1	Demonstrate a solid understanding of fundamental knowledge in natural sciences.
1.2	Demonstrate a solid understanding of fundamental knowledge in social sciences.
PLO2	Demonstrate a solid understanding of fundamental and selected advanced knowledge in Software Engineering, and apply that knowledge in practical contexts.
2.1	Demonstrate a solid understanding of fundamental knowledge in Information Technology and apply it in real-world situations.
2.2	Demonstrate a solid understanding of both fundamental and advanced knowledge in Software Engineering and apply it in practical contexts.
PLO3	Investigate relevant literature, construct arguments, analyze problems, and propose solutions in Software Engineering; demonstrate an awareness of the necessity for lifelong learning.
3.1	Collect, synthesize, and analyze issues related to the field of Software Engineering.
3.2	Search for and comprehend relevant documents, and apply them to develop solutions that meet given requirements.
3.3	Demonstrate an understanding of setting personal learning goals and planning for continuous learning and self-development.
PLO4	Design, implement, and evaluate systems and solutions in the field of Software Engineering.
4.1	Design systems that effectively meet specified requirements.

4.2	Implement systems based on existing designs.
4.3	Evaluate system performance and propose possible improvements.
PLO5	Communicate and collaborate effectively with individuals and teams in specific professional contexts.
5.1	Communicate and interact effectively with stakeholders throughout the system development process.
5.2	Build, maintain, and develop professional relationships relevant to Software Engineering and the broader IT domain.
PLO6	Communicate effectively in professional settings, comprehend technical documents, and present domain-specific solutions in a foreign language.
6.1	Communicate and comprehend technical materials in a foreign language.
6.2	Exchange information, engage in discussions, and present Software Engineering solutions in a foreign language.
PLO7	Demonstrate an understanding of leadership and management concepts.
7.1	Understand and apply fundamental knowledge of leadership and management skills.
7.2	Demonstrate self-awareness, confidence in professional environments, readiness to face challenges, and adaptability to new contexts.
PLO8	Demonstrate an understanding of professional responsibility, respect for the law, and ethical values.
8.1	Understand the fundamental legal regulations and ethical values in the context of Vietnamese society.
8.2	Respect and adhere to ethical principles and professional responsibilities, and comply with organizational rules and regulations.

The following **curriculum** is presented:

0 Appendix: Programme Learning Outcomes and Curricula

Semester	Course ID	Course name	Credits	Theory	Practice	ECTS
Semester 1	MA006	Calculus	4	4	0	6
	MA003	Linear algebra	3	3	0	4.5
	ENG01	English 1	4	4	0	6
	SE005	Introduction to Software Engineering	1	1	0	1.5
	IT001	Introduction to programming	4	3	1	6.5
	IT012	Computer Structure and Organization II	4	3	1	6.5
	ME001	National Defense Education	Separately			
	Total Credits for Semester 1		16	15	1	27.5
Semester 2	IT002	Object-Oriented Programming	4	3	1	6.5
	IT003	Data Structures and Algorithms	4	3	1	6.5
	MA004	Discrete Structures	4	4	0	6
	MA005	Probability and Statistics	3	3	0	4.5
	ENG02	English 2	4	4	0	6
	Total Credits for Semester 2		19			29.5
Semester 3	IT004	Databases	4	3	1	6.5
	IT005	Introduction to Computer Networks	4	3	1	6.5
	IT007	Operating Systems	4	3	1	6.5

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Semester	Course ID	Course name	Credits	Theory	Practice	ECTS
	IT008	Visual Programming	4	3	1	6.5
	ENG03	English 3	4	4	0	6
	Total credits for semester 3		20			32
Semester 4	SE104	Software engineering	4	3	1	6.5
	SS007	Marxist-Leninist philosophy	3	3	0	4.5
	SS008	Marxist Leninist political economy	2	2	0	3
	SS004	Professional skills	2	2	0	3
		Foundational core electives	4			6-8
	Total credits for semester 4		15			23-25
Semester 5	SS009	Scientific socialism	2	2	0	3
	SS010	History of Vietnamese communist party	2	2	0	3
	SE100	Object-oriented software development methodology	4	3	1	6.5
		Foundational core electives	8			12-16
	PE231	Physical education 1				
	Total Credits for Semester 5		16			24.5-28.5
Semester 6	SS006	Introduction to law	2	2	0	3
	SS003	Ho Chi Minh thought	2	2	0	3
	SE121	Major Project 1	2			4
		Specialized courses	8			12-16
	PE232	Physical education 2				
	Total Credits for Semester 6		14			22-26
Semester 7	SE501	Internship	2			4
	SE122	Major Project 2	2			4
		Specialized courses	6			9 - 12
		Elective courses	6			9 - 12
	Total credits for semester 7		16			26-32
Semester 8	Students choose one of the three options					
	CS505	Graduation Thesis	10			20
	CS554	Industry Capstone Project	10			20
		Capstone Projects (CS553) + Graduation courses	10			20
	Total credits of semester 8		10			18-20
Total			130			206-224

According to the Programme Specification the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor's degree programme Computer Engineering:

Level	Programme Learning Outcomes (PLOs)
PLO1	Mastering foundational knowledge in natural sciences and social sciences and understanding how to apply this knowledge to Computer Engineering industry and practical contexts.
1.1	Mastering foundational knowledge in natural sciences and social sciences
1.2	Understanding how to apply foundational knowledge in natural sciences and social sciences to Computer Engineering industry and practical problems
PLO2	Mastering foundational knowledge and some specialized knowledge in Computer Engineering to solve practical problems effectively.
2.1	Mastering foundational knowledge in the field of Information Technology
2.2	Mastering foundational and some specialized knowledge in Computer Engineering to solve practical problems.
PLO3	Surveying documents, reasoning, analyzing and proposing creative solutions to practical problems in Computer Engineering industry; Understanding the lifelong learning
3.1	Interpreting, reasoning, and analyzing practical problems in Computer Engineering industry.
3.2	Proposing creative solutions to practical problems in Computer Engineering industry.
3.3	Understanding the lifelong learning
PLO4	Designing, implementing, and evaluating systems and solutions in Computer Engineering industry

4.1	Designing basic systems for practical problems in Computer Engineering industry
4.2	Evaluating and enhancing solutions for practical problems in Computer Engineering industry
PLO5	Communicating, collaborating, and connecting effectively with individuals and groups in specific professional contexts
5.1	Communicating and cooperating effectively with individuals and groups
5.2	Applying skills of communication, discussion and connection effectively with individuals and groups in Computer Engineering industry
PLO6	Communicating effectively at work, comprehending technical documents, and presenting specialized solutions in a foreign language
6.1	Communicating at work and comprehending technical documents in a foreign language
6.2	Presenting and discussing specialized solutions in Computer Engineering in a foreign language.
PLO7	Understanding of leadership and management
7.1	Understanding basic knowledge of leadership and management skills
7.2	Applying basic knowledge of leadership and management skills into practical work
PLO8	Understanding professional responsibilities, compliance to the law and ethical values.
8.1	Understanding fundamental legal regulations and ethical values of Vietnam.
8.2	Respecting and complying to ethical values and professional responsibilities.

The following **curriculum** is presented:

Semester	Course ID	Course name	Credits	Theory	Practice	ECTS
Semester 1	CE005	Introduction Computer Engineering	1	1	0	1.5
	IT001	Introduction to Programming	4	3	1	6.5
	MA006	Mathematical Analysis	4	4	0	6.0
	MA003	Linear Algebra	3	3	0	4.5
	SS007	Marxist-Leninist philosophy	3	3	0	4.5
	ENG01	English 1	4	4	0	6.0
	ME001	National Defense Education	Separately			
	Total Credits for Semester 1		19	18	1	29
Semester 2	IT002	Object-Oriented Programming	4	3	1	6.5
	PH002	Introduction to digital circuit	4	3	1	6.5
	MA004	Discrete Structures	4	4	0	6.0
	MA005	Probability and Statistics	3	3	0	4.5
	ENG02	English 2	4	4	0	6.0
	Total Credits for Semester 2		19	17	2	29.5
Semester 3	IT003	Data structures and algorithms	4	3	1	6.5
	IT005	Introduction to Computer Network	4	3	1	6.5
	IT006	Computer Architecture	3	3	0	4.5
	ENG03	English 3	4	4	0	6.0
	CE119	Computer Architecture Laboratory	1	0	1	2.0
	SS003	Ho Chi Minh's Ideology	2	2	0	3.0
	Total Credits for Semester 3		18	15	3	28.5
Semester 4	CE103	Microprocessors and Microcontrollers	4	3	1	6.5
	IT007	Operating Systems	4	3	1	6.5
	CE121	Engineering Circuit Analysis	4	3	1	6.5
	SS009	Scientific socialism	2	2	0	3.0
	SS010	History of Vietnamese communist party	2	2	0	3.0
	Total Credits for Semester 4		16	13	3	25.5
Semester 5	IT004	Introduction to Database	4	3	1	6.5
	CE124	Electronic Devices and Circuits	4	3	1	6.5
	CE224	Embedded System Design	4	3	1	6.5
	CE118	Digital Logic Design	4	3	1	6.5
	Total Credits for Semester 5		16	12	4	26
Semester 6	CE213	Digital System Design with HDL	4	3	1	6.5
	SS004	Professional skills	2	2	0	3
	CE***	Major Elective Course 1	4	3	1	6.5
	XX***	Free Elective Course 1	3	3	0	4.5
	CE201	Project 1	2	0	2	4
	Total Credits for Semester 6		15	11	4	24.5

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Semester	Course ID	Course name	Credits	Theory	Practice	ECTS
Semester 7	CE502	Internship	2		2	4
	CE***	Major Elective Course 2	4	3	1	6.5
	XX***	Free Elective Course 2	3	3	0	4.5
	CE201	Project 2	2	0	2	4
	SS008	Marxist Leninist Political Economy	2	2	0	3
	SS006	Introduction to Vietnamese Law	2	2	0	3
	Total credits of semester 7		15	10	5	25
Semester 8	Choice 1					
	CE505	Capstone Project	10	0	10	20
	Choice 2					
		Graduation course 1	4	3	1	6.5
		Graduation course 2	4	3	1	6.5
		Graduation course 3	2	0	2	4
	Total Credits for Semester 8		10			
Total			128			208

According to the Programme Specification the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Master's degree programme Information Technology:

LEVEL		Program Learning Outcomes (PLOs)
PLO1: Master foundational and in-depth knowledge of the Information Technology field and other fields		
1	1.1	Understand foundational scientific knowledge and apply this foundational scientific knowledge to the field of Information Technology.
	1.2	Understand in-depth knowledge of the foundational technologies of the Information Technology field. Design and build solutions to problems related to Information Technology or trends in the Information Technology field.
	1.3	Understand specialized knowledge in depth. Design, build and operate specialized Information Technology systems.
PLO2: Develop and manage real-world and research projects in the Information Technology field		
2	2.1	Survey, synthesize, analyze, evaluate and recommend solutions to solve an Information Technology problem.
	2.2	Plan, organize, conduct and manage real-world/research projects.
PLO3: Conduct scientific research effectively		
3	3.1	Survey documents, analyze, evaluate and apply scientific works relative to Information Technology.
	3.2	Propose, design and conduct scientific research.

	3.3	Write a scientific work.
PLO4: Understand professional responsibility, respect the law, and uphold ethical values		
PLO5: Apply language proficiency in academic and professional contexts		
5	5.1	Read, understand, and synthesize professional documents in English.
	5.2	Design and write a scientific report/work in English.
	5.3	Develop a professional presentation and demonstrate the ability to deliver it effectively in English to a public audience.
PLO6: Understand social context and technology trends and have skills in developing ideas, designing, building and implementing information technology applications/research/systems		
6	6.1	Understand social context and technology trends.
	6.2	Develop ideas, design, build and implement information technology applications/research/systems appropriate to the social and technological context.

The following **curriculum** is presented:

No.	Course	Course Name	Number of credits			Semester	ECTS
	ID		Credit	Theory	Practice		
I. General knowledge			7				
Compulsory courses							
1.	PH2001	Philosophy	3	3	0	I	4.5
Elective courses							
2.	MA2001	Mathematics	4	4	0	I	6.0

II. Foundation knowledge							
3.	CS2205	Scientific Research Methodology	2	2	0	I	3.0
4.	CS3205	Advanced Scientific Research Methodology	2	2	0	I	3.0
III. Specialized knowledge			(See section 8.2)				
5.		Elective course 1				II	
6.		Elective course 2				II	
No.	Course ID	Course Name	Number of credits			Semester	ECTS
			Credit	Theory	Practice		
7.		Elective course 3				III	
8.		Elective course 4				III	
9.		Elective course 5				III	
10.		Elective course 6				III	
11.		Elective course 7				IV	
12.		Elective course 8				IV	
13.		Elective course 9				IV	
14.		Elective course 10				IV	
15.		Elective course 11				V	
16.		Elective course 12				V	
IV. Graduation							
17.	IT4001	Master's Thesis – Research-Oriented Program - Type 1	53	0	53	V	106

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18.	IT4002	Master's Thesis – Research-Oriented Program - Type 2	15	0	15		30
19.	IT4003	Master's Thesis - Application-Oriented Program	12	0	12		24
Total number of accumulated credits for the entire program			≥ 60				≥ 102.5 – ≥ 116.5