European Approach

Accreditation Report

Master's Degree Programme
Advanced Digital Technologies for Business
(formerly: Advanced Digital Skills)

Provided by
Universidade Nova de Lisboa (UNL)
Università di Bologna (UNIBO)
Linkopings Unisersitet (LIU)

Version: 25.03.2025

Table of Content

About the Accreditation Process

Name of the degree programme (in original language)	(Official) English translation of the name	Labels applied for	Involved Technical Committees (TC)[1]
Professional Master's in Advanced Digital Technologies for Business (formerly: Advanced Digital Skills)	/	European Approach	07

Date of the contract: 13.11.2023

Submission of the final version of the self-assessment report: 30.04.2024

Date of the onsite visit: 04.-05.06.2024

at: German University of Digital Science (Potsdam) and National College of Ireland (Dublin)

Expert panel:

Prof. Dr. Susanne Robra-Bissantz, Technical University of Braunschweig

Prof. Dr. Ralf Kramer, Stuttgart University of Applied Sciences (HFT Stuttgart)

Dr. Jan Christian Dammann, Senior Software Architect, Iteratec GmbH

Alexandre Al Ajroudi, Student at Institut National des Sciences Appliquées de Toulouse

Representatives of the ASIIN headquarter: Dr. Siegfried Hermes, Christin Habermann

Responsible decision-making committee: Accreditation Commission for Degree Programmes

Criteria used:

Standards for Quality Assurance of Joint Programmes in the European Higher Education Area

[1] TC: Technical Committee for the following subject areas: TC 07 - Business Informatics/Information Systems

Characteristics of the Degree Programme

a) Name	Final degree (original/English translation)	b) Areas of Specialization	c) Corresponding level of the EQF[2]	d) Mode of Study	e) Double/Joint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Advanced Digital Skills	Master of Advanced Digital Skills	/	7	Full time Part time Part time (accelerate)	Joint Degree	2 Semester (full time); 4 Semester (part time); 3 Semester (part time accelerated)	60 ECTS	Twice per year; September 2024

For the Master's degree programme the institutions have presented the following profile in their self-assessment report:

"The Joint Master's in Advanced Digital Skills programme has been developed in accordance with a multi-beneficiary grant agreement with the European Health and Digital Executive Agency (HADEA) within the framework of the Digital Europe Programme, Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240, with respect to provision of funding for Project 101084013 - DIGITAL4Business.

The DIGITAL4Business consortium is a partnership of 17 stakeholders led by National College of Ireland, bringing together key industry, technology, and education stakeholders in Europe.

Its composition is presented in the following table:

Partners	Acronmy
National College of Ireland	NCI
Alma Mater Studiorum – Università di Bologna	UNIBO
German University of Digital Science GGmbH	German UDS
Consorzio Interuniversitario Nazionale per l'Informatica	CINI
AKKA Italia (former Modis Consulting SRL)	Akkodis
Adecco Formazione SRL	ADECCO
Lee Hecht Harrison Deutschland GmbH	LHH

[2] EQF = The European Qualifications Framework for lifelong learning

Skillnet Ireland Company Limited by Guarantee	Sillnet Irl
Université Paris 8 Vincennes-Saint-Dennis	UP8
Linköpings Universitet	LIU
Terawe Technologies Limited	Terawe
Matrix Internet Applications Limited	Matrix
Digital Technology Skills Limited	DTSL
Universidade Nova Lisboa	UNL
Schuman Associates SCRL	Schuman
Associated Partners	Acronym
Certiport, A business of NCS Pearson Inc	Certiport
DIGITALEUROPE AISBL*	DIGITALEUROPA

The DIGITAL4Business European Joint Master's Degree in Advanced Digital Skills programme aims to design and implement a highly innovative, effective, and sustainable European EQF Level 7 programme in Advanced Digital Skills. This contributes to the overall objectives of the DIGITAL Europe Programme by fast-tracking a high number of graduates through a dynamic pan-European stakeholder ecosystem. In the latter, HEIs, Research Centres, Employment Services, and Industry work together to design, promote, deliver and improve an innovative Master's programme. It will focus on the practical application of Advanced Digital Skills within European Business, an entirely market-led academic programme driven and designed to meet the current and future (up)-skill needs of SMEs and Companies. […]

Graduates from the programme will help organisations digitally transform and scale into the future. The programme has been designed with industry standards and needs in mind, to fill the gap between higher education and the job market. The Digital4Business consortium's partners 15 partners from 7 EU countries have a unique unified vision of a centralised hub of advanced digital skills learning, that continuously evolves along with the technological and business needs of industries all over Europe. In addition, an industry advisory board from across Europe has been formed to participate in the design phase to ensure the programme is tailored to the needs of the market.

The Joint Master's Degree in Advanced Digital Skills is designed to cater to diverse learners, including business leaders, industry professionals without technical backgrounds, and recent graduates in business disciplines. By imparting advanced digital knowledge and fostering a forward-thinking approach, the program aims to enable individuals and organisations to thrive in the digital era. This program will empower participants to understand, leverage, and navigate the digital landscape effectively, thereby fostering innovation, competitiveness, and sustainable growth in their organisations.

The following partner Higher Education Institutions (HEIs) will be actively participating in the delivery of the programme:

- National College of Ireland (NCI)
- Alma Mater Studiorum – Università di Bologna (UNIBO)
- German University of Digital Science GGmbH (German UDS)
- Linköpings Universitet (LIU)
- Universidade Nova de Lisboa (UNL)
- Université Paris 8 Vincennes-Saint-Denis (UP8)

These HEIs, in conjunction with the Digital4Business consortium's industry partners, have collaborated and cooperated to jointly develop and design the proposed programme and its curriculum.

The Joint Master's Degree in Advanced Digital Skills will be delivered fully online using a combination of synchronous and asynchronous delivery techniques. Each of the partner institutions has taken on the role of module owner for a subset of the programme's constituent modules. The assignment of module ownership to a particular partner has been based on the identification of key areas of subject matter expertise amongst the group of partners.

As delivery of the programme is fully online, there will be no requirement for learners to physically attend classes at any partner institution's geographical location. Learner mobility will predominantly be virtual – with learners enrolling on modules that will be delivered by faculty from the different institutional partners. In addition to this, learners will also have opportunities to attend various networking events, hackathons, etc. that are associated with the Master's programme. For such events, learners will have an option of either attending physically or online. The programme team believe that this will facilitate some aspect of physical mobility for learners within the programme. These events will be hosted by partner institutions in different countries as part of the programme's schedule."

Changes in the course of the statement of the universities:

Following the audit, it was decided that the German Digital University of Science would no longer be a partner in the consortium offering the degree programme. The programme is now formally developed and offered by five nationally recognised education institutions, namely the National College of Ireland (NCI),Universidade Nova de Lisboa (UNL), Université Paris 8 Vincennes-Saint-Denis (UP8), Università di Bologna (UNIBO), and Linköping University (LIU) with the first four expected to participate in the awarding of the degree.

The report was written before the departure of UDS; mentions of UDS in the report can be ignored.

In addition, the title of the study programme has also been changed after this report has been written. While the current title is “Professional Master’s in Advanced Digital Technologies for Business” the former title “Advanced Digital Skills” may still be found throughout this report.

Changes in the course of the fulfilment of requirements:

During the course of the fulfilment of requirements (in September of 2024), the Universite Paris 8 Vincennes-Saint-Denis (UP8) withdrew from the Digital4Business Consortium as an academic partner. The programme is thus formally offered by the four nationally recognised higher education institutions, namely the 1) National College of Ireland (NCI), 2) Universidade Nova de Lisboa (UNL), 3) Università di Bologna (UNIBO), and 4) Linköpings Universitet (LIU) with the last three to participate in the awarding of the degree. The two modules previously provided by UP8 were distributed among the other academic partners: “Cybersecurity for Business” is now provided by LIU and “Data Governance and Ethics” is provided by NCI. All documents were revised, so that UP8 no longer appears as a participating academic partner.

The report was written before the departure of UP8; mentions of UDS in the report can be ignored. The same goes for the original name of the degree programme.

Expert Report about Standards for Quality Assurance of Joint Programmes in the EHEA

1. Eligibility

Criterion 1.1 Status

The institutions that offer a joint programme should be recognised as higher education institutions by the relevant authorities of their countries. Their respective national legal frameworks should enable them to participate in the joint programme and, if applicable, to award a joint degree. The institutions awarding the degree(s) should ensure that the degree(s) belong to the higher education degree systems of the countries in which they are based

EVIDENCE

There are six universities (referred to as "parties") involved in the Master's degree programme: National College of Ireland (NCI), Alma Mater Studiorum - Università di Bologna (UNIBO), German University of Digital Science GGmbH (German UDS), Linköpings Universitet (LIU), Universidad Nova de Lisboa (UNL) and Université Paris 8 Vincennes-Saint-Denis (UP8). According to the cooperation agreement, these parties can fulfil one of two cooperative participation roles, depending on whether or not a) the party is recorded on the certificate as a degree-awarding institution or b) the party is not recorded on the certificate as an institution but is listed in the Diploma Supplement as a contributing partner institution. The degree-awarding institutions are NCI, German UDS, UNL and UP8.

The Master's programme aims to start in the academic course 2024-2025 and does not have any students enrolled yet. All institutions, with the exception of the German UDS, are legally recognised as higher education institutions by the responsible governmental institution of their home countries. Legal documents provided by the German UDS indicate that the university is currently in the process of being founded, i.e. has already submitted an application for authorisation to the competent national authority. According to the Ministry of Science, Research and Culture of the State of Brandenburg (MWFK), the German UDS can start the process of programme accreditation before state recognition as a higher education institution. This does not prejudge the decision on state recognition, which will have to be granted before the programme can be offered for the first time.

ASSESSMENT

The expert panel considers that the institutions that will offer the joint programme are recognised as higher education institutions by the relevant authorities of their countries

with the exception of the German UDS, which is still in the process of being legally recognised as a higher education institution. Thus, German UDS must prove that it has received national authorisation as soon as the status has been granted. The institutions respective national legal frameworks enable them to participate in the joint programme.

The experts further confirm that each student who successfully completes the degree programme will receive a joint Master's degree by NCI, German UDS, UNL and UP8. In addition, the diploma supplement that is also awarded to all graduates, also lists Alma Mater Studiorum - Università di Bologna (UNIBO) and Linköpings Universitet (LIU). Both universities are also recognised as higher education institutions by the respective relevant national authorities.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 1.1

Given that the German University of Digital Science is not yet officially recognised as a higher education institution by the respective German ministry, the other consortium partners have decided that the German USD will be unable to formally participate in the module development and delivery of the study programme and will thus no longer offer the programme. As the programme is now only offered by universities that are state-recognised following the withdrawal of German UDS, the criterion is therefore fulfilled.

The experts conclude that this standard is fulfilled.

Criterion 1.2 Joint design and delivery

The joint programme should be offered jointly, involving all cooperating institutions in the design and delivery of the programme.

EVIDENCE

According to the information given in the self-assessment report, the Joint Master's in Advanced Digital Skills programme has been developed in accordance with a multi-beneficiary grant agreement with the European Health and Digital Executive Agency (HADEA) within the framework of the Digital Europe Programme, Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240, with respect to provision of funding for Project 101084013 - DIGITAL4Business.

The DIGITAL4Business consortium is a partnership of 17 stakeholders led by National College of Ireland, bringing together key industry, technology, and education stakeholders in

Europe. The following partner Higher Education Institutions (HEIs) will be actively participating in the delivery of the programme:

- National College of Ireland (NCI)
- Alma Mater Studiorum – Università di Bologna (UNIBO)
- German University of Digital Science GGmbH (German UDS)
- Linköpings Universitet (LIU)
- Universidade Nova de Lisboa (UNL)
- Université Paris 8 Vincennes-Saint-Denis (UP8)

These HEIs, in conjunction with the Digital4Business consortium's industry partners, have collaborated and cooperated to jointly develop and design the proposed programme and its curriculum.

In a cooperation agreement (cf. criterion 1.3), all parties - the degree-awarding as well as the non-degree awarding institutions - have made a binding commitment that all activities relating to the degree programme, particularly with regard to its design and delivery, will be carried out jointly. For this means, joint governing bodies such as the Joint Programme Committee, the Programme Board of Directors, the Joint Admission Board and the Quality Enhancement and Curriculum Development Committee have been established.

ASSESSMENT

The panel confirm that the programme is offered jointly, involving all cooperating institutions in its design and delivery. The experts consider the fact that the degree programme emerged from a joint project and is therefore the result of many years of successful cooperation between various universities and industrial partners to be a strength. Even though the NCI serves as the project head, the experts can see for themselves that all institutions, especially the award-giving ones, are equally involved in the development of the degree programme. In the experts' view, the responsibilities of all parties involved, which are anchored in the cooperation agreement, and in particular the establishment of various committees, ensure that the cooperation will continue to exist during the implementation of the degree programme. During the discussions with the project leads of the various universities, the experts were able to convince themselves that the universities cooperate closely with each other and are committed to the establishment and implementation of the programme.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 1.2

The universities announced in their statement to the accreditation report, that the German University of Digital Science is no longer one of the universities awarding the degree and thus will be unable to formally participate in the module development and delivery of the study programme. While the D4B consortium is actively seeking a new partner from Germany to assume the responsibilities of the German UDS, the coordinator, NCI, will assume responsibility for the German UDS modules on an interim basis.

The experts conclude that this standard is fulfilled.

Criterion 1.3 Cooperation Agreement

The terms and conditions of the joint programme should be laid down in a cooperation agreement. The agreement should in particular cover the following issues:

- Denomination of the degree(s) awarded in the programme
- Coordination and responsibilities of the partners involved regarding management and financial organisation (including funding, sharing of costs and income etc.)
- Admission and selection procedures for students
- Mobility of students and teachers
- Examination regulations, student assessment methods, recognition of credits and degree awarding procedures in the consortium

EVIDENCE

The Cooperation Agreement, as part of the documentation of the programme, includes information on

- the purpose of the agreement
- the legal framework
- the denomination of the degree awarded in the programme
- the rights, duties and responsibilities of the involved partners, including management and financial organisation such as funding, sharing of costs and income
- the programme governance and coordination mechanism, including the different joint boards and committees
- the admission and selection procedures for students
- the examination regulations, student assessment methods, recognition of credits and degree awarding procedures in the consortium (with reference to the Study and Examination Regulations)
- the mobility of students and staff

- quality assurance (with reference to the Internal Quality Handbook)
- intellectual property rights/results as well as confidentiality and non-disclosure of information

ASSESSMENT
The experts confirm that the provided cooperation agreement provided to them addresses the required points in a comprehensive way.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 1.3

The universities did not comment on this criterion.

The experts conclude that this standard is fulfilled.

2. Learning Outcomes

Criterion 2.1 Level (ESG 1.2)

The intended learning outcomes should align with the corresponding level in the Framework for Qualifications in the European Higher Education Area (FQ-EHEA), as well as the applicable national qualifications framework(s).

EVIDENCE
The Self-Assessment Report, the Study and Examination Regulation, the Student Handbook 2024, the Module Descriptions, the Objective-Module-Matrix and the Diploma Supplement provide evidence that the learning outcomes of the Joint Master's degree in Advanced Digital Skills meets the requirements of the EHEA (European Higher Education Area) framework for second cycle study programmes (EQF 7). These requirements include, among others, having advanced knowledge and understanding beyond the first cycle (EQF 6), applying knowledge and problem-solving skills in new or multidisciplinary environments, integrating knowledge to handle complexity and making judgements with limited information while considering social and ethical responsibilities.

The intended learning outcomes of the study programme align with level 7 in the EQF as well as with the applicable national frameworks of Germany, Ireland, Portugal, France, Italy and Sweden.

1. **German Qualification Framework (DQR):** The Advanced Digital Skills programme aligns with the German Qualification Framework, particularly at the master's level,

which is level 7 in DQR. This level includes competences for dealing with new complex tasks and problems and for independently managing processes in a scientific subject or in a strategy-oriented professional field of activity. The demand level is characterised by frequent and unpredictable changes.

2. **Irish Qualification Framework (NFQ):** The Advanced Digital Skills programme is categorised under level 9 in the National Qualification Framework of Ireland. The necessary learning outcomes in NFQ include, among others, a systematic understanding of knowledge, a critical awareness of current problems and/or new insights, a demonstration of a range of standard and specialised research or equivalent tools and techniques of enquiry as well as the development of new skills to a high level, including novel and emerging techniques.

3. **Portuguese Qualification Framework (NQF):** The Portuguese National Qualification Framework is aligned with the EQF; the Advanced Digital Skills programme is categorised under level 7. The necessary learning outcomes include highly specialised knowledge as the basis for original thinking and/or research, specialised problem-solving skills required in research and/or innovation and the ability to manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches.

4. **French Qualification Framework (RNCP):** The French National Framework for Professional Qualifications (RNCP) is aligned with the EQF, meaning that the Advanced Digital Skills programme adheres to level 7. It certifies the ability to develop and implement alternative strategies for the development of professional activity in complex professional contexts, as well as to evaluate the risks and consequences of one's activity.

5. **Italian Qualification Framework (QTI):** The Italian Qualifications Framework (QTI) is organised along the lines of the EQF. As such, the Advanced Digital Skills programme adheres to level 7. Both, the levels and the learning outcomes are the same in the QTI and the EQF.

6. **Swedish Qualification Framework (SeQF):** Sweden has introduced a national qualification framework in accordance with the EQF. The Swedish Qualification Framework has eight qualification levels; the Advanced Digital Skills programme is at level 7 (master's level). It certifies the ability to demonstrate very advanced knowledge of a field of work or study, to participate in research and developmental work as

well as to assess a field of work or study's information, facts and methods with regard to relevant aspects and opportunities.

ASSESSMENT

After carefully reviewing the self-assessment report and the additional documentation, the experts conclude that the learning objectives of the Master's degree Advanced Digital Skills correspond with the learning objectives for a Master's degree programme (EQF 7) as defined in the EQF and all relevant national qualification frameworks.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 2.1

The universities did not comment on this criterion.

The experts conclude that this standard is fulfilled.

Criterion 2.2 Disciplinary field

The intended learning outcomes should comprise knowledge, skills, and competencies in the respective disciplinary field(s).

EVIDENCE

For the Master's degree Advanced Digital Skills, the following Minimum Intended Programme Learning Outcomes (MIPLOs) have been established:

- MIPLO1: Critically appraise, select, and employ existing and emerging technologies to address complex business problems and support innovation and digital transformation in business
- MIPLO2: Critically assess and evaluate sustainability, governance and ethical risks and impacts associated with digital transformation
- MIPLO3: Synthesise and communicate the opportunities, risks and critical challenges of digital transformation practices to underpin strategic decisions to key stakeholders
- MIPLO4: Demonstrate an in-depth understanding of the fundamental concepts and techniques of advanced digital skills from a business perspective
- MIPLO5: Cultivate, select, and employ transversal advanced digital skills and practices, evaluating their application in various contexts
- MIPLO6: Explore, strategically leverage, and implement advanced digital skills and practices to foster creativity at an individual, team, and organization level.

ASSESSMENT

After reviewing the learning outcomes, the experts conclude that the degree programme is intended to provide people, who already possess professional experience and/or knowledge in companies with an understanding of the various digital tools and skills they need for the development of their personal career and their company.

The experts understand that graduates of the joint Master's degree are not expected to be able to utilize the digital skills they have learnt about and have familiarised themselves with. Instead, graduates should be able to apply the knowledge about the skills – e.g. Data Science and Cloud Computing – to solve problems in their company. As such, students of the Master's programme are not trained to become fully-fledged computer scientists or business informatics specialists; instead, the graduates have gained in-depth knowledge of advanced digital skills, which helps them, for example in their position as a manager of a company or department, to tackle problems and developments in their company in a targeted and future-oriented manner with the appropriate digital tools.

The degree programme thus aims to pick up people with fairly heterogeneous professional and/or academic background and provide them with the knowledge they need for their professional development or career aspirations about the multitude of digital skills that will help them solve problems in their (future) company. Even though the degree programme is open to Bachelor graduates with no previous professional experience, it is primarily aimed at people who are actively working or already have previous professional experience. In the view of the experts, this target group should be made even clearer in order to avoid misunderstandings regarding the objectives and to clarify why the qualification objectives are not so much aimed at practical learning but at an in-depth understanding of the fundamental concepts and techniques of advanced digital skills from a business perspective. In this regard, however, the auditors recommend to make the profession-oriented purpose of the programme more transparent.

In addition, the experts also recommend that the learning objectives of the degree programme should focus more on teaching core transferable skills, such as problem-solving skills, communication, collaboration, team competences and service orientation, skills that currently are not too prominent in the curriculum of the programme (cf. criterion 3.1 for more details).

In summary, the experts confirm that the objectives and learning outcomes of the degree programme as a whole are described briefly and consistently, yet they are not published yet and thus not available for students, lecturers and interested third parties (cf. criterion 8). The learning objectives reflect the target academic qualification and a professional activity corresponding to level 7 of the European Qualification Framework can be taken up.

The relevance of the objectives and learning outcomes for both the labour market and society are planned to be regularly reviewed in a process that involves the relevant stakeholders (in particular from higher education and professional practice) and, if necessary, the objectives are revised accordingly.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 2.2

In their statement, the universities welcome the recommendation to integrate more transferable skills into both the content/curriculum of the programme and its overall learning objectives. They mention that the programme already incorporates such skills in the following additional and thus voluntary (not-for-credit) programme components:

1. **Communication Strategy for your Job Search:** This activity includes CV, Elevator Pitch and Digital Reputation; Unlock your career potential with our comprehensive workshop on Job Search Communication. Learn to craft a standout CV and motivation letter tailored to your future career goals. Create a convincing Elevator Pitch summarizing your skills, accomplishments and professional objectives. Discover the hidden opportunities in networking through LinkedIn and master its functionalities to connect with high-potential contacts. Understand the critical role of digital reputation in today's job market and how to manage your online presence for professional success.

2. Networking and Interviewing Success: It allows participants to discover essential networking strategies to expand your professional connections including how to position yourself, extend your influence and create a targeted marketing plan for growth. Learn effective assessment techniques to enhance your confidence and performance and get practical coaching to excel at job interviews mastering difficult questions and convincing with well-prepared market and industry insights.

3. Navigate and Lead through Digital Change: Instructs learners to equip themselves with the skills to lead and communicate in times of digital transformation and organizational change. Learn to effectively manage change at both personal and team levels, internalise the role of manager and expert alike and develop strategies to build resilience. Gain insights into the drivers of the digital environment, and explore the mindset and behaviours needed to build practical skills for creating focus, empathy, and positive momentum during continuous change.

As per the recommendation, the universities will endeavour to further highlight such matters in the learning objectives and contents and update the relevant official documents accordingly.

The experts conclude that this standard is fulfilled.

Criterion 2.3 Achievement (ESG 1.2)

The programme should be able to demonstrate that the intended learning outcomes are achieved.

EVIDENCE

The Advanced Digital Skills Master's programme, including its learning outcomes, has been developed in a project funded by the European Union by a consortium of European universities and companies. It is primarily based on a needs analysis carried out in the companies. The results of this needs analysis were published in a scientific paper titled "Systematic Needs Analysis of Advanced Digital Skills for Postgraduate Computing Education: The DIGITAL4Business Case". The strong role of industry in the development of the learning objectives should, from the universities' point of view, ensure that graduates receive exactly those skills that are currently needed in industry.

As part of the programme development process, several intended competence profiles for students were considered as being representative of general business roles that will need to develop advanced digital skills in the very next future as digital transformation continues to evolve. For example, the universities and their business partners found that procurement managers would need to embrace digital tools for efficient vendor management and cost optimization, small business owners must adapt to digital marketing, e-commerce and financial technologies to remain competitive, while HR professionals in companies of any size are tasked with managing digital talent acquisition and employee engagement tools. The idea behind this is that once students complete the mandatory "Digital Transformation" module, they can select from a suite of elective modules that align with their interests and their career goal. The mapping of modules to a set of sample roles serves as a guide for learners as they progress through their programme of study (cf. criterion 1.3 of this report). A full list of the professions and professional roles that were assessed can be found in Annex 2 of this report.

ASSESSMENT

The auditors regard the strong industry perspective, both during the development of the degree programme and during its implementation (cf. criterion 1.3), as one of the strengths of the degree programme. Further, the companies continue to be involved as associate partners even after the programme has been established and were also interviewed during the audit. It was reported that, for example, guest lectures are held by industry partners or voluntary guided tours are organised by companies. It is also possible to complete practical

parts of the degree programme, such as the research project in the final semester, at one of the industry partners. Furthermore, timetables for the coming semesters show the extent to which the company partners hold regular meetings with the universities to ensure that the content of the modules is always up to date.

The study programme has not yet started and therefore does not yet have any graduates. However, the experts assume that graduates of the programme will be able to continue their education in their intended field by completing the Master Advanced Digital Skills and enter a profession that corresponds to their qualifications or take on further tasks in their current company. The list of professions and professional roles in particular shows that the degree programme has been designed to build on the competencies and skills to be achieved.

The experts are of the opinion, however, that the programme title “Advanced Digital Skills” does not match these learning objectives as the title promises that students will learn “advanced” digital skills at the level of a Master's degree programme. The universities argue that every young person already has digital skills, for example, using computers or smartphones, and that any form of further training in this area is automatically “advanced”. Although the experts can understand this argument, they consider it to be misleading. In their view, the title of the degree programme should make clear that it is not about general advanced digital skills, such as those learned in a classic computer science or business informatics programmes, but that students learn advanced *knowledge* about digital skills for an entrepreneurial field.

The auditors thus ask the universities to adapt the name of the programme to better align with its learning outcomes and curriculum and suggest titles such as “Advanced Digital Skills for Business.”

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 2.3

The D4B Consortium welcomes the remarks of the ASIIN Team regarding the name of the degree programme (“Advanced Digital Skills”), which, at the time of the on-site visit, appeared to be rather unspecific and not fully aligned with the learning objectives and content of the programme. Consequently, the D4B Consortium has decided to change the name of the main programme to "Professional Master’s in Advanced Digital Technologies for Business" to better reflect the spirit of the degree while maintaining the available content.

The auditors believe this to be a more fitting title that highlights the programmes strengths. The consortium now has the task of changing the title in all official documents (cf. criterion 8).

The experts conclude that this standard is fulfilled

Criterion 2.4 Regulated Profession

If relevant for the specific joint programme, the minimum agreed training conditions specified in the European Union Directive 2005/36/EC, or relevant common trainings frameworks established under the Directive, should be taken into account.

Not relevant.

3. Study Programme (ESG 1.2)

Criterion 3.1 Curriculum

The structure and content of the curriculum should be fit to enable the students to achieve the intended learning outcomes.

EVIDENCE

There are six universities (referred to as "parties") involved in the Master's degree programme: National College of Ireland (NCI), Alma Mater Studiorum - Università di Bologna (UNIBO), German University of Digital Science GGmbH (German UDS), Linköpings Universitet (LIU), Universidad Nova de Lisboa (UNL) and Université Paris 8 Vincennes-Saint-Denis (UP8). These parties can fulfil one of two cooperative participation roles, depending on whether or not a) the party is recorded on the certificate as a degree-awarding institution or b) the party is not recorded on the certificate as an institution but is listed in the Diploma Supplement as a contributing partner institution. The degree-awarding institutions currently are NCI, German UDS, UNIBO and UP8. The cooperation agreement between the parties state their individual responsibilities and roles.

The curriculum of the degree programme comprises a total of 60 ECTS credits. Each module has a scope of 5 or 10 ECTS credits. There are two mandatory modules with 10 credits each, "Digital Transformation", which must take place in the first semester, and "Digital Transformation Project / Practicum", which must take place in the last semester. For the remaining modules students can choose from a total of 12 modules.

The degree programme consists of two compulsory modules, each worth 10 ECTS credits, and 12 compulsory modules worth 5 or 10 ECTS credits, from which students are free to choose. The elective modules are offered every semester. The modules will be delivered by faculties from different institutional partners.

Module Name	ECTS	Mandatory / Elective
Digital Transformation	10	Mandatory
AI for Business	10	Elective
Data Science for Business	10	Elective
Cybersecurity for Business	10	Elective
Cloud Computing for Business	10	Elective
Business Programming	5	Elective
Internet of Things	5	Elective
Blockchain Technologies	5	Elective
Quantum Computing	5	Elective
Data Governance and Ethics	5	Elective
Innovation	5	Elective
Generative AI	5	Elective
Risk and Change Management in Digital Business Environments	5	Elective
Digital Transformation Project / Practicum	10	Mandatory

Table 4. Module ECTS and Mandatory/Elective Status

In order to support students in selecting the modules relevant to them, the universities have developed so-called role profiles, as already mentioned under criterion 2.3, which assign compulsory elective modules to certain professions or professional orientations (see Appendix 2).

ASSESSMENT

After reviewing the exemplary curricula, the module descriptions, the role profiles for selecting the individual elective modules and the matrix of module objectives, the reviewers concluded that the curriculum is well suited to realising the intended learning objectives. However, they consider it useful if students also acquire core transferable skills such as problem-solving, communication, collaboration, service orientation and team competence. The auditors are aware that skills such as communication, collaboration and teamwork are more difficult to implement in a purely virtual degree programme than in a face-to-face degree programme, where students learn and work together face-to-face. Nevertheless, these skills should also be taught in a virtual environment, as they are key competences in a company.

According to the self-assessment report, the compulsory module “Digital Transformation” serves as the cornerstone of the Master’s programme, establishing essential knowledge and skills that underpin various specialized fields. The module is designed to ensure that students develop a comprehensive understanding of the rapidly evolving digital landscape.

Its learning outcomes are intended to directly link with other modules across the curriculum, creating a holistic learning experience. The other compulsory module "Digital Transformation Project / Practicum", in which students will learn how to develop a proposal for digital transformation, comprises an in-depth literature review and project plan as well as a report.

According to the Internal Quality Handbook, the Master's Board of Directors, comprised of the Programme Directors that have been selected by each of the partner institutions, are responsible for all matters concerning the degree programme, including its curriculum. The Master's Board meets twice a year and discusses or decides upon changes to the curriculum. In addition, the Quality Enhancement and Curriculum Development (QECD) Committee, composed of at least one academic faculty member from each partner institution, prepares and implements on behalf of the Master's Board of Directors quality enhancement and curriculum development. The QECD Committee meets whenever called upon or whenever the annual internal quality procedures requires it (cf. criterion 5). The QECD Committee assists in evaluating the degree of achievement of learning objectives and the coherence of the programme and ensures that there are effective procedures for data collection, information analysis and proposals and the channelling of suggestions for improvement of the degree programme.

To collect feedback from all relevant stakeholders, especially the students, the universities set up procedures for academic performance analysis, for suggestions and complaints, for the quality enhancement planning as well as student module level satisfaction surveys. The results of all these procedures and surveys will be incorporated into the further development of the curriculum.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 3.1

As the German UDS is no longer a partner in the Consortium, the modules that were supposed to be offered by German UDS will be offered by NCI on an interims basis until another partner from Germany has been found. The programme will now be offered by National College of Ireland (NCI), Universidade Nova de Lisboa (UNL), Université Paris 8 Vincennes-Saint-Denis (UP8), and Università di Bologna (UNIBO). This must be updated in all official documents, especially the module descriptions (cf. criterion 8).

The experts conclude that this standard is fulfilled.

Criterion 3.2 Credits

The European Credit Transfer System (ECTS) should be applied properly and the distribution of credits should be clear.

EVIDENCE

The Advanced Digital Skills Master's programme is structured to align with the European Credit Transfer and Accumulation System (ECTS). The programme comprises a total of 60 ECTS credits. Each module has a scope of 5 or 10 ECTS credits. There are two mandatory modules with 10 credits each, "Digital Transformation", which must take place in the first semester, and "Digital Transformation Project / Practicum", which must take place in the last semester. For the remaining modules students can choose from a total of 12 modules.

ASSESSMENT

The Advanced Digital Skills program's application of the ECTS is proper, with a clear distribution of credits that align with the standard requirements for a European master's program. The structure of the curriculum, with defined credit allocations for each module, supports a coherent educational progression aimed at achieving the intended learning outcomes. The detailed documentation provided in the program's annexes further affirms the program's commitment to transparency and adherence to ECTS standards.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 3.2

The universities did not comment on this criterion.

The experts conclude that this standard is fulfilled.

Criterion 3.3 Workload

A joint bachelor programme will typically amount to a total student workload of 180-240 ECTS-credits; a joint master programme will typically amount to 90-120 ECTS-credits and should not be less than 60 ECTS-credits at second cycle level (credit ranges according to the FQ-EHEA); for joint doctorates there is no credit range specified. The workload and the average time to complete the programme should be monitored.

EVIDENCE

The duration of the degree programme is one year (60 ECTS credits). According to the European Credit Transfer and Accumulation System (ECTS), the workload of one ECTS credit

corresponds to 25 to 30 hours of work. For this study programme, one ECTS credits corresponds to 30 hours of work.

The programme is offered in three different modes of study: full-time (2 semesters, 30 credits each), part-time (4 semesters, 15 credits each) and part-time accelerated (3 semesters, 20 credits each). In either mode, the 2 mandatory modules are placed in the first and last semester, the remaining open credits in each semester must be taken in the form of elective modules. These models are designed to accommodate the individual situations of students who are already working or have families, for example. The plan to offer the degree programme in these different variants is a clear added value for students in the view of the experts. As the modules, with the exception of the Module "Digital Transformation Project / Practicum" do not build on each other, the programme can be completed smoothly in all three variants. Exemplary study plans for all three modes of study can be found in Appendix 3 of this report.

ASSESSMENT

The experts consider that the workload is evenly distributed on the 60 ECTS of the Master's programme as per semester, 30 ECTS are allocated. The Internal Quality Handbook contains surveys of students on various topics relating to their studies. In the future, a student workload survey will also be conducted in this context to monitor whether the credits awarded for each module correspond to the actual student workload and whether the distribution of the workload across all semesters enables graduation within the standard period of study (cf. criterion 9). However, this QA instrument has not been further elaborated in the handbook. For instance, it is not detailed how often such surveys shall be conducted or whether student workload shall be evaluated on programme or module or even unit level or whether a combination of all shall be established. The review team therefore concludes that the HEIs should detail and ensure a systematic and regular monitoring of the credit point allocation in order to identify and, if necessary, adapt the credit point allocation or the contents of the modules.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 3.3

The universities state that the student workload survey will be revised to include a dedicated question on the workload. In addition, the QM manual will also be revised to clearly mention and describe the allocation of credit points and the monitoring of student workload. It will also be clearly stated that the workload monitoring takes places at both the module and programme levels.

The experts consider the measures planned by the universities to be sensible. However, a corresponding requirement remains in place until these are implemented.

The experts conclude that this standard is not fulfilled.

4. Admission and Recognition (ESG 1.4)

Criterion 4.1 Admission

The admission requirements and selection procedures should be appropriate in light of the programme's level and discipline.

EVIDENCE

Under the supervision of the Master's Board, the Joint Admissions Board is responsible for the selection and admission of all students to the degree programme. The Joint Admission Board consists of one representative from each partner institution; it meets at least once after each application deadline.

The Study and Examination Regulations detail the application, selection and admission procedure, including the eligibility and selection criteria, language qualification requirement, the joint application and the admission procedure.

Admission may be granted to applicants who hold a minimum of an EQF Level 6 qualification and hold English proficiency of the level B2. In addition, "applicants who have graduated from programmes lacking embedded technical problem-solving skills must show additional technical proficiency and problem-solving abilities beyond their EQF Level 6 qualification. This can be demonstrated through industry certifications, further qualifications, or certified professional experience. Those who do not meet these criteria will be subject to an interview and further assessment to determine their suitability for the programme."

Recognition or prior learning (RPL) as compensation for missing prior knowledge is established, according to the Study and Examination Regulations and should provide for the consideration of applicants with lower, or no formal qualification, currently working in a relevant field, for admission onto the programme. The process includes evaluating the skills, knowledge, and experience through reviews of work portfolios, interviews, and practical assessments. Applicants submit portfolios detailing their relevant experiences, professional training, and certifications. RPL assessors then match these against course requirements. If equivalent, this prior learning can replace formal qualifications for admission. Should there be any gaps, the institution may recommend bridging courses to prepare the student for full admission.

Applicants who do not have the minimum academic qualifications will be assessed for entry based on prior learning and work experience, combined with a demonstrated commitment

towards meeting the academic requirements of the programme. Entry will be assessed using a written application from the candidate and by interview. Recognition of Prior Learning will be assessed in accordance with this policy, this may require a portfolio of evidence (this may include but is not limited to submission of an essay, references, examination results, and module/micro-credential/programme/training syllabi completed by the applicant) and interview, or other assessment as determined by the Joint Admissions Board.

The Joint Admissions Board's determination that an applicant has the necessary numeracy skills will be based on the evidence provided. Typically, the determination of a sufficient numeracy skill level will be based on prior completion of modules/micro-credentials/programmes/training with a high degree of numerical/mathematical subject content (e.g., Statistics, Probability, Calculus, Operations Research, Quantitative Techniques, Econometrics, Optimisation, Discrete Mathematics, Accountancy, Financial Analysis etc.).

ASSESSMENT

The experts recognize that the universities want to admit a heterogeneous student body for the joint degree. In principle, it is to be welcomed that not only students who have already completed a Bachelor's degree can apply, but that the programme also admits students without a previous university degree but with many years of professional expertise. However, the admission requirements are very vague and do not make clear which previous academic and/or professional knowledge is required in which area(s). First and foremost, the evaluators are of the opinion that there must be specific technical and scientific prerequisites for admission to the programme in general and the individual modules to ensure that only those applicants who can successfully complete the programme are accepted. During the audit, the programme managers mentioned that the technical knowledge was specified after the submission of the self-evaluation report, which the reviewers generally welcome. However, they ask that this be published in the official regulations and that the requirements for the modules be made clearer so that applicants know whether the course is suitable for them and that successful completion of the course is possible for all admitted applicants.

From the experts' point of view, one option would be to restrict access to the entire programme and only open it up to people who have a technical background and now want to build on this to establish their digital skills. The same would also be possible for people from a management or business background.

Another alternative, of course, would be to establish prerequisites for individual modules or module groups - for example along the lines of the already established role profiles. For example, a separate study path could be designed for each applicant from the pool of elective modules, ensuring that the applicant only takes modules that will advance their career

and for which they have the necessary prior knowledge. The university states that for individual modules, for example “Programming for Business”, these subject-specific requirements have already been defined, but have not yet been included in the module descriptions and are not binding. The universities are also already working on an AI solution for recommending individual study paths.

In the discussions with the four degree-awarding universities, the experts learned that the National College of Ireland already has many years of experience with testing sufficient prior technical and IT knowledge for admission to a degree course. The experts therefore believe that the preliminary examinations of prior knowledge will be carried out adequately and that the exact requirements and the exact procedure only need to be set out in a binding manner so that prospective students can refer to them.

In summary, the experts state that there is a central admission procedure in which the responsible persons from all partner universities are involved and that the admission procedure is binding. They see the lack of subject-specific admission criteria (both academic and non-academic) as a weak point of the degree programme concept. The universities must specify the technical and scientific prerequisites of the programme and the individual modules in order to contribute to the enrolment of suitable applicants to the programme. Particularly with regard to applicants without previous academic qualifications, it must be ensured that they receive appropriate advice, for example in the selection of suitable elective modules.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 4.1

In their statement, the universities remark that the stated requirements for admission are designed to be inclusive yet rigorous, thus welcoming applicants with diverse educational and professional backgrounds. The programme accepts candidates with a minimum EQF Level 6 qualification, while also allowing those without traditional academic credentials to demonstrate their technical proficiency through industry certification, further qualifications, or relevant professional experience. This flexible approach ensures that the programme remains accessible to a broad range of individuals while maintaining high standards to ensure the success of the students. Such a requirement should also enable the programme to contribute to addressing the urgent and evolving needs of the European workforce in the context of EU 2030 social and digital targets.

The universities explain that the decision to maintain a flexible and inclusive admission policy is both a strategic and necessary response to the digital transformation imperative facing Europe today, i.e. the EU 2030 social targets underscore the importance of continuous

learning and upskilling, aiming for at least 60% of adults to participate in training annually and for 78% of the population to be in employment. Currently, the European labour market faces significant challenges, with over three-quarters of companies reporting difficulties in finding workers with the necessary skills, and only 37% of adults engaging in regular training. Furthermore, the Digital Economy and Society Index reveals that 4 out of 10 adults, as well as every third working individual in Europe, lack basic digital skills. The situation is exacerbated by the underrepresentation of women in tech-related professions, with only 1 in 5 ICT specialists and 1 in 3 STEM graduates being women.

Considering these challenges, the programme's inclusive approach to admission is not merely a reflection of a desire to a diverse cohort; it is a deliberate access to broaden access to digital education and skills development, thereby contributing to the achievement of these critical EU targets.

The experts note that the universities have dealt intensively with the labour market and the current challenges in the area of digital skills and further developments and have developed a degree programme to counteract this gap. The reviewers see the fact that not only traditional Bachelor's graduates are addressed, but also people without previous academic qualifications in particular, as a strength of the programme that should definitely be maintained.

Nonetheless, in addition to a level of EQF 6, the knowledge or skills that applicants must have for the programme as a whole or for individual modules must be specified. Otherwise, someone who has no prior knowledge in the required area could be accepted onto the programme. The extent to which the universities define the prior knowledge is up to them.

However, it must be clear to prospective students whether they are suitable for the programme. For example, the university could publish a list of Bachelor's degree programmes or professional positions that qualify for the course. A list of necessary prior knowledge could also be published. In all respects, however, subject-specific requirements must be established to ensure that only those students who have the necessary prior knowledge to successfully complete the degree programme actually begin it.

The experts conclude that this standard is not fulfilled.

Criterion 4.2 Recognition

Recognition of qualifications and of periods of studies (including recognition of prior learning) should be applied in line with the Lisbon Recognition Convention and subsidiary documents.

EVIDENCE

The Cooperation Agreement, the Exam and Study Regulation 2024 as well as the Student Handbook establish the conditions for credit recognition of the Master's as well as periods of study (including the recognition of prior learning).

ASSESSMENT

The experts consider that the Consortium applies fair recognition procedures to facilitate recognition of the modules and credits awarded in the partner or other external institutions and to facilitate access to the programme. The recognition of qualification and periods of studies, including recognition of prior learning, are applied in line with the Lisbon Convention.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 4.2

The universities did not comment on this criterion.

The experts conclude that this standard is fulfilled.

5. Learning, Teaching and Assessment (ESG 1.3)

Criterion 5.1 Learning and Teaching

The programme should be designed to correspond with the intended learning outcomes, and the learning and teaching approaches applied should be adequate to achieve those. The diversity of students and their needs should be respected and attended to, especially in view of potential different cultural backgrounds of the students.

EVIDENCE

According to the self-assessment report, the Teaching, Learning and Assessment (TLA) strategy for the programme should provide students with an innovative mix of approaches to engage with the content of their modules and to demonstrate their learning. The TLA strategy seeks to combine lectures, tutorials, problem-based learning, enquiry-based learning, practical work, flipped classroom, seminars, case-based learning, project-based work as well as group work.

The programme is delivered entirely online through Direct E-Learning (DEL), which combines on-demand activities and live online classes using virtual classroom technology. Students must complete specific tasks independently at scheduled times on the programmes Learning Management System (LMS). This approach is chosen to help avoid overcrowded

schedules, especially for students with limited time, and allows the programme team to keep track of student progress and engagement in the online courses.

Asynchronous activities may consist of reading or audio/video-based content, as well as practical lab exercises which must be uploaded to the LMS on a weekly basis. The synchronous class contact elements build upon and supplement the asynchronous and self-paced learning materials and activities on Moodle to create an environment whereby learners engage practically with materials outside of class time, leaving time for practical facilitation based directly on those materials in class-contact time.

ASSESSMENT

The experts state that, in their view, the various forms of teaching and learning are suitable for achieving the intended learning objectives. However, the evaluators recognize that the didactic methods in the module descriptions must be much more specific, especially with regard to the aspect of a constructive alignment (cf. criterion 8).

Although teaching is held virtually throughout, the involved universities recognise the importance of providing opportunities for enrolled students to also avail of physical mobility opportunities. Thus, each partnering HEI agrees to host at least one student mobility event during the academic session, which students can attend online as well as on-site.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 5.1

The universities did not comment on this criterion.

The experts conclude that this standard is fulfilled.

Criterion 5.2 Assessment of Students

The examination regulations and the assessment of the achieved learning outcomes should correspond with the intended learning outcomes. They should be applied consistently among partner institutions.

EVIDENCE

According to the self-assessment report, all exams are designed to assess the extent to which the defined learning objectives have been achieved.

Regarding the assessment methods, the Study and Examination Regulations states that each module will employ a variety of assessment methods to evaluate different competencies, including automated quizzes for immediate feedback, peer-assessed assignments to

foster collaborative learning, and project-based assessment that simulate real-world challenges. The module descriptions lists the following assessment methods: continuous assessment, proctored written test, project, proposal, artefact and report.

The Digital Transformation Project / Practicum module stands as a capstone module for the programme. This final project is designed to demonstrate students' comprehensive understanding and competence in digital transformation within a practical, real-world context and demonstrates that students are able to work independently on a task at the intended level of the programme. Students are encouraged to undertake this module in cooperation with the industry; in this case, the universities assume responsibility for their content and for suitable conditions in the respective company or organisation.

Examinations are marked according to transparent criteria; grading rubrics for assignments are provided to students and lecturers will provide general assessment feedback regarding assignments in a timely manner (typically within two weeks of the submission date).

The Study and Exam Regulations define that if the overall module assessment or examination results in an insufficient grade or the student does not show up on a fixed date or withdraws, the assessment or examination must be repeated in a repeat assessment or resit. Students can apply for a module repeat assessment in the case of initially failing a module. In such cases, the repeat assessment covers all learning outcomes associated with the failed module. In principle, re-sits and reassessments of insufficient grades can occur only once during one academic year. If a student subsequently fails a module after attempting a repeat assessment, it is then necessary for the student to re-enrol for repeat attendance on the module.

ASSESSMENT

The experts considers the examination regulations and the assessment of the achievement of the learning outcomes correspond with the intended learning outcomes and there are rules to be applied consistently among partner institutions.

While the Study and Examination Regulations states that each module will employ a variety of assessment methods to evaluate different competencies, including automated quizzes for immediate feedback, peer-assessed assignments to foster collaborative learning, and project-based assessment that simulate real-world challenges, it remains vague overall what the content and the scope of these examinations are. According to the experts, the exam forms and grading schemes must be specified in the Study and Examination Regulation, so that students know, what will be expected of them.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 5.2

The universities state that the forms of examination used in the programme will be clearly defined in the examination regulations. In addition, each module coordinator has been asked to review the assessment method in their respective module and adapt it where necessary. The module descriptions will be updated accordingly.

The experts consider the measures planned by the universities to be appropriate. However, a corresponding requirement remains in place until these are implemented.

The experts conclude that this standard is not fulfilled.

6. Student Support (ESG 1.6)

The student support services should contribute to the achievement of the intended learning outcomes. They should take into account specific challenges of mobile students

EVIDENCE

The Master's programme under consideration addresses a wide range of students and study conditions and, consequently, needs to accommodate learners with heterogeneous educational as well as disciplinary backgrounds. Different study modes including full-time and different part-time types of delivery as well as the almost entirely online type of teaching and learning are obviously responding to this initial position. On the other hand, the range of flexible learning paths based on personal/qualification profiles opened up through these learning conditions comes with new challenges not only with regard to the didactical approach discussed earlier in this report, but also concerning the support structure provided by the partner universities. The review team acknowledges that the partnering institutions carefully considered this issue in their plan to establish a number of different student services including, for instance, a "Learning and Disability Support Service", an "Assistive Technology Support Service", a "Student Councelling & Wellness Service", and a "Careers and Opportunities Support Service". In the eyes of the experts, especially the "Careers and Opportunities Support Service" is extremely important, as the programme is explicitly designed for re- and upskilling a workforce with a broader qualification background and professional experiences. Hence, it makes good sense to implement a job perspectives and career opportunities service in the support framework of this Master's programme.

ASSESSMENT

Along with the overall portfolio of services scheduled to be provided to the students, the review team is convinced that the learners' needs for advice and support will be served adequately in the programme. In order to foster this proactive and supporting learning environment, the experts suggest additional efforts to incentivise and continually strengthen bonding activities of both learners and lecturers in the programme.

Otherwise, the experts observe that information about the different supporting services – similar to all student related information on the programme – is not yet available (or at least easily accessible) on the programme's website – as indicated in the self-assessment report. This needs to be changed in the course of the accreditation procedure. For the purpose of transparent information on the programme, all study-related information (curriculum and intended learning outcomes, admission requirements, study and examination rules, etc.) must be published and easily accessible for relevant stakeholders, such as students and teaching staff.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 6

The universities did not comment on this criterion.

The experts conclude that this standard is not fulfilled.

7. Resources (ESG 1.5 & 1.6)

Criterion 7.1 Staff

The staff should be sufficient and adequate (qualifications, professional and international experience) to implement the study programme.

EVIDENCE

The review team takes note that the joint Master's programme has been developed in accordance with a multi-beneficiary grant agreement with the European Health and Digital Executive Agency (HADEA) within the framework of the Digital Europe Programme. From a consortium of altogether 17 stakeholders bringing together industry, technology, and education stakeholders, there were six universities from across Europe, who are actively participating in the programme. The combined expertise of these universities in the digital field and related (business) informatics areas is considered a promising basis for the implementation and delivery of the Master's programme. It is notable in this respect that the

partner HEIs have concluded a "Cooperation Agreement" on the joint provision of the Master's programme, which also includes their mutual commitment to appoint "sufficient and appropriately qualified staff to deliver the various elements of the degree programme."

ASSESSMENT

The experts do not doubt the appropriate qualification of most of the teaching staff of the HEIs for the module/s delivered by each of them. Moreover, they experience highly motived young staff members from different partner HEIs during the on-site visit, who at the same time have indicated their deep involvement in field-related research work. Although the Master's programme has not started yet, students from affiliated degree programmes at NCI claim interest in the programme, not least due to their general contentment with the didactical and pedagogical competences of the involved teaching staff.

In that regard, the expert team especially acknowledges how the partner HEIs have taken care of the issue of further developing the related professional competences of the teaching staff. As the programme is delivered almost entirely in a digital mode through Direct E-Learning (DEL), it is obvious that the success of the teaching/learning process very much depends on related pedagogical versatility of the responsible lecturers. Hence, a reliable implementation of support and on-going professional development to staff members in the design, production and use of new technologies in teaching and learning – as promised by the partner HEIs – is of crucial importance. Hence, the experts welcome the establishment of a "Train the Trainer" programme supposed to provide training on the practical use of online tools, the Learning Management System (LMS), and pedagogical strategies for online delivery. As to that, it is considered a favourable condition for the partners that they can rely on the specific pedagogical expertise of the University of Bologna.

It is also positively noted that the partner HEIs are willing to monitor the suitability and readiness of the lecturers' professional and didactical qualifications on a regular basis as part of the internal quality assurance of the Master's programme. Complementary to this, the partners have stipulated that lecturers need to have adequate language skills and subject-specific expertise in order to qualify for the programme.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 7.1

The universities did not comment on this criterion.

The experts conclude that this standard is fulfilled.

Criterion 7.2 Facilities

The facilities provided should be sufficient and adequate in view of the intended learning outcomes.

EVIDENCE

The Consortium developed a sustainability strategy for the Master's programme. On a first glance, burden sharing in the course of delivering the programme might facilitate its delivery. On the other hand, the engagement of a number of European universities, with different educational strategies, divergent scientific eco-systems, and heterogeneous cultural environments adds significant challenges to the joint operation of the programme. In this respect, it is well noted that major arrangements concerning the sharing of responsibilities, establishment of joint committees and their respective tasks and competences, Quality Assurance and its instruments as well as core programme-related issues have been bindingly settled in the Cooperation Agreement between the collaborating universities.

As the degree programme is offered purely digitally, there were no facilities in the traditional sense (e.g. lecture rooms or laboratories) that had to be inspected. Nevertheless, visits to the German UDS and the NCI took place, during which the assessors were able to gain an impression of these two university locations. In addition, the digital platform was explained to them at both locations and they were shown the various digital tools that will be used to organise teaching on the degree programme.

ASSESSMENT

The experts notice that the Cooperation Agreement also entails cornerstones of a sustainable financial strategy to guarantee the viability of the programme even beyond the initial phase of its European backed funding until 2026. They see the need to further detail this strategy and take note that an operationalization of the concept is scheduled in the project framework. The concretized financial sustainability concept must be conveyed to the experts for the assessment in the course of the accreditation procedure. In this respect, however, it is welcomed that with the National College of Ireland (NCI), the higher education institution responsible for financial management is explicitly identified in the Cooperation Agreement.

Additionally, with its extensive experience in higher education, NCI appears to be an excellent choice for the coordinating role within the HEI consortium. This choice would likely ensure more reliable resourcing for the programme. Both centralized platforms implemented by the cooperating HEIs—the 'Customer Relationship Management (CRM) system' and the 'Learning Management System (LMS)'—promise to contribute to achieving the programme's learning objectives, as does the integrated Lab services solution. The experts, who considered the platform services during the onsite visit, view them as an adequate solution to foster the achievement of the intended programme learning outcomes.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 7.2

The universities present the revenue side of a financial sustainability concept. The auditors notice, however, that the expense and cost side of the balance sheet are missing. Thus, the (more or less fixed) costs and expenses of the infrastructure and its continuous maintenance as well as the costs and expenses of teaching (depending on the number of students and adequate group sizes per course) must be taken into consideration, both overall and per university partner. The experts are not satisfied with the presented sustainability concept and ask the universities to present a concept that takes into account the effort (e.g. teaching by professors from participating universities) as well as the costs side (e.g. teaching assistants, professors during lecture-free periods). At the very least, the universities must showcase how external lecturers who are to cover a significant part of the curriculum, as stated during the audit, are to be financed sustainably.

The experts conclude that this standard is partially fulfilled.

8. Transparency and documentation (ESG 1.8)

Relevant information about the programme like admission requirements and procedures, course catalogue, examination and assessment procedures etc. should be well documented and published by taking into account specific needs of mobile students.

EVIDENCE

Together with the self-assessment report, the Consortium hands in the following documents, which give an overview of the structure of the study programme and contain all rules and regulations

- Cooperation Agreement
- Study and Examination Regulation
- Internal Quality Handbook
- Module Handbook
- Student Handbook
- Diploma Supplement

In future, all of these documents will also be available on the programmes website.

ASSESSMENT

The experts confirm that the rights and duties of the involved partner HEIs and the students as well as the rules concerning the admission, commencement, progression and completion of the Master's degree programme are clearly defined and binding in the relevant regulations. The HEIs claim that students receive all relevant course materials in the language of instruction (English) at the end of each semester. In addition, the partners have created a "D4B Student Handbook" containing core study-related information and thus providing a meaningful information source for students.

At the time of the audit, however, none of the relevant regulations, information sources nor even the highly important Cooperation Agreement between the partnering HEIs provided was published on the D4B or the Master's degree website. This remains to be done and subsequently evidenced in the course of the accreditation procedure.

The experts further observe that the module descriptions contain the necessary information about the module title, the teaching method(s) albeit being fairly generic in many cases, the credits and workload, the intended learning outcomes, the module content, admission and examination requirements, form(s) of assessment, details of how the module mark is calculated, and recommended literature.

As each of the partnering HEIs contribute to the Advanced Digital Skills Master programme with a number of (elective) modules, the reviewers appreciate that the module descriptions do also specify the names of those responsible for the modules. This is all the more important in case of a joint programme, where separate universities run the programme cross-nationally. With respect to the intrinsically supplementary character of the study programme, the element of complementing the learners' digital competence profile with reference to solving business problems, is largely missing out in the description of the intended learning outcomes as well as the module contents. The experts are of the opinion that this issue needs to be addressed in the curriculum design and/or, correspondingly, a revision of the module descriptions. If these business-related enhanced problem-solving competencies are not included in the curriculum, they must either be integrated into the existing modules or introduced as a specific module designed to meet this demand.

Apart from this, the experts caution that module descriptions must be revised according to the indications given in the different sections of this report.

The experts further confirm that the students of the degree programmes under review are awarded a Diploma (Certificate) and a Diploma Supplement after graduation. The Diploma Supplement provides information on the student's qualification profile and individual performance as well as the classification of the degree programme.

The marks of individual modules are presented and the way in which the final mark is calculated is explained. In addition to the final mark, statistical data is included as set forth in the ECTS User's Guide to allow stakeholders to assess the individual mark.

However, as mentioned earlier in the section on programme learning outcomes (see above, sec. 1.1), experts believe that the qualification profile reflected in the Diploma Supplement must indicate more clearly how the programme enhances or broadens the digital skills of learners who are primarily advancing in their professional careers.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 8

The universities declare that all official programme-related documents will be published on the D4B website (www.digital4business.eu) as soon as possible, to ensure that they are easily accessible to all stakeholders. In additions, the module descriptions will be revised according to the notes in this report and the qualification profile of the diploma supplement will be revised so that it indicates how the programme enhances and broadens the digital skills of the learners.

The experts consider the measures planned by the universities to be appropriate. However, a corresponding requirement remains in place until these are implemented. Since the German UDS is no longer a project-partner and NCI will take over their modules on an interim basis, the experts also remark that all documents must be revised accordingly.

The experts conclude that this standard is not fulfilled.

9. Quality Assurance (ESG 1.1 & part 1)

The cooperating institutions should apply joint internal quality assurance processes in accordance with part one of the ESG.

EVIDENCE

The roles of various HEIs involved in the project and their responsibilities are set out in a binding cooperation agreement.

According to this, each partner institution appoints at least one academic *Programme Director*. The Programme Director shall liaise with his or her counterparts in the other partner institutions on all matters concerning the degree programme and shall ensure that the degree programme at his or her partner institutions is consistent with the joint agreements

concerning the degree programme. Together, these Programme Directors build the *Programme Board of Directors* (*Master's Board*), which is responsible for the general management, academic supervision, quality assurance, degree awarding and recognition issues, agreement changes, dispute resolution and student complaints. Additionally, the Master's Board is considered responsible for the system review, advice on policy developments for the joint degree programme, and to ensure the coherence and consistency of the concept of the programme. The Master's Board shall meet at least twice a year.

The Cooperation Agreement further specifies that one *Programme Coordinator* of each partner HEI will assist the Programme Director and carry out day-to-day administrative and technical tasks concerning the students, quality assurance, mobility in the degree programme and general matters related to programme delivery at the partner institution. He or she shall liaise with the other Partner HEIs' Programme Coordinators and Programme Directors, students in the degree programme, and with external partners.

In addition, there are also other joint governing bodies such as the Joint Admission Board, the Examination Board, the Joint Programme Committee, and – with regard to Quality Assurance – especially the Quality Enhancement and Curriculum Development Committee.

A Quality Handbook details the above mentioned boards and institutions and entails quality assurance processes concerning academic performance analysis, student module level satisfaction surveys, class representative meetings, suggestions and complaints as well as quality enhancement planning.

Accordingly, for each programme instance, midway through each academic semester, the D4B Master Secretariat shall distribute Online Student Survey Questionnaires to student cohorts to receive feedback for each of their enrolled modules. Students will have one week to complete the questionnaires. Over the course of the next two weeks, the Master Secretariat is expected to process the surveys, and individual lecturers shall then receive module level feedback following the collection of results of the surveys. The Master Secretariat is also required to compile all results, to determine average satisfaction rates, and to provide a summary report to the Project Coordinator, the QECD Committee, and the Joint Programme Committee. Following this, the Joint Programme Committee and the Project Coordinator are supposed to analyse the summary results, identify possible problems, and send a report for improvement proposals to the Master's Board of Directors within two weeks of receiving the initial summary data. Lecturers should consider the feedback received for the modules that they teach, and identify potential areas where modifications may be required to enhance delivery.

In addition to this combination of institutional and procedural elements and instruments of internal QA of the considered Master's programme, it becomes obvious from the Cooperation Agreement and the statements of the HEIs during the onsite discussions that the issue of QA of the programme is given high priority. The challenge of establishing QA processes and instruments specifically tailored towards the needs of cross-national degree programmes is, in the eyes of the reviewers, clearly seen, and – at least on a conceptual level – properly addressed. The interconnection between internal and external QA is also reflected and made use of in the ordinary quality enhancement processes of the Master's programme.

ASSESSMENT

The experts appreciate that QA is not only given consideration in the Cooperation Agreement between the partner HEIs but also in the Quality Assurance Handbook that has been produced already. The QA manual attests to the important role the partner HEIs ascribe to appropriate QA processes and instruments for the success and further development of the Master's programme. What is missing out from the description of the planned QA processes in the QA Handbook, however, is a consistent closing of feedback loops by communicating follow up measures to the learners. The issue might be inherently implemented, although it is not formulated explicitly. The reviewers nevertheless consider this a decisive element for the prospect of a QA system that, in turn, might be negatively affected by deficient feedback mechanisms. With respect to their generally favourable assessment of the presented QA scheme for the joint Master's programme, the experts are giving the HEIs the benefit of the doubt regarding the aforementioned feedback issue. They nevertheless highly recommend to making the feature of communicating back to the students more prominent in the QA framework and related formulations (specifically, in but not limited to the QA manual).

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 9

The universities plan to revise the QM-manual to clearly mention and describe the allocation of credit points and the monitoring of student workload. It will also be clearly stated that the workload monitoring takes places at both the module and programme levels.

The experts consider the measures planned by the universities to be appropriate.

The experts conclude that this standard is fulfilled.

Additional Documents

No additional documents needed.

Comment of the Higher Education Institution (18.08.2024)

The institution provided a detailed statement as well as the following additional documents:

- Sustainability Strategy

Summary: Expert recommendations (28.08.2024)

Taking into account the additional information and the comments given by D4B, the experts summarize their analysis and **final assessment** as follows:

Requirements

A 1. (EA 3.3) Detail and ensure a systematic and regular monitoring of the credit point allocation in order to identify and, if necessary, adapt the credit point allocation or the contents of the modules.

A 2. (EA 4.1) Specify the technical and scientific prerequisites of the programme and the individual modules in order to contribute to and to facilitate the enrolment of suitable applicants to the programme.

A 3. (EA 5.2) Specify the exam forms and grading scheme in the study and exam regulation.

A 4. (EA 7.2) Provide the concretized financial sustainability concept and the means for its implementation.

A 5. (EA 8) Clearly indicate the reference to solving business problems, including relevant methodologies, in the description of learning outcomes and contents of the modules (either as dedicated module or in the subject-specific modules).

A 6. (EA 8) Revise and, if necessary, adapt the module descriptions according to the annotations in the report (e.g. learning outcomes, teaching/learning formats, and examination forms).

A 7. (EA 8) The Diploma Supplement needs to be more specific in describing the individual qualification profile of the graduate.

A 8. (EA 8) Revise all relevant documents (study plans, module descriptions, cooperation agreement, diploma, diploma supplement, etc.) so that only the active project partners and module owners are named.

A 9. (EA 6, 8) Make all study-related information material and regulations available for the relevant stakeholders.

Recommendations

E 1. (EA 2.2) It is recommended to make the profession-oriented purpose of the programme more transparent.

E 2. (EA 6) It is recommended to incentivise and continually strengthen bonding activities of both students and lecturers.

E 3. (EA 2.2,) It is recommended to enlarge core transferal skills within the programme, such as problem-solving skills, communication, collaboration, and team competences, service orientation.

E 4. (EA 9) It is recommended that the closing of the feedback loop be increasingly taken into account in the QA framework and the corresponding documents (e.g. QM manual).

Comment of the Technical Committee 07 – Business Informatics / Information Systems (13.09.2024)

Assessment and analysis

The Technical Committee discusses the procedure and agrees with the assessment of the auditors.

The Technical Committee recommends an accreditation for one year under 9 requirements and 4 recommendations.

Decision of the Accreditation Commission (24.09.2024)

Assessment and analysis:

The Accreditation Commission discusses the procedure and agrees with the assessment of the auditors and the Technical Committee.

The Accreditation Commission recommends an accreditation for one year under 9 requirements and 4 recommendations.

Degree Programme	ASIIN Seal	Maximum duration of ac creditation
Professional Master's in Advanced Digital Technologies for Business	With requirements for one year	30.09.2031

Requirements

A 1. (EA 3.3) Detail and ensure a systematic and regular monitoring of the credit point allocation in order to identify and, if necessary, adapt the credit point allocation or the contents of the modules.

A 2. (EA 4.1) Specify the technical and scientific prerequisites of the programme and the individual modules in order to contribute to and to facilitate the enrolment of suitable applicants to the programme.

A 3. (EA 5.2) Specify the exam forms and grading scheme in the study and exam regulation.

A 4. (EA 7.2) Provide the concretized financial sustainability concept and the means for its implementation.

A 5. (EA 8) Clearly indicate the reference to solving business problems, including relevant methodologies, in the description of learning outcomes and contents of the modules (either as dedicated module or in the subject-specific modules).

A 6. (EA 8) Revise and, if necessary, adapt the module descriptions according to the annotations in the report (e.g. learning outcomes, teaching/learning formats, and examination forms).

A 7. (EA 8) The Diploma Supplement needs to be more specific in describing the individual qualification profile of the graduate.

A 8. (EA 8) Revise all relevant documents (study plans, module descriptions, cooperation agreement, diploma, diploma supplement, etc.) so that only the active project partners and module owners are named.

A 9. (EA 6, 8) Make all study-related information material and regulations available for the relevant stakeholders.

Recommendations

E 1. (EA 2.2) It is recommended to make the profession-oriented purpose of the programme more transparent.

E 2. (EA 6) It is recommended to incentivise and continually strengthen bonding activities of both students and lecturers.

E 3. (EA 2.2,) It is recommended to enlarge core transferal skills within the programme, such as problem-solving skills, communication, collaboration, and team competences, service orientation.

E 4. (EA 9) It is recommended that the closing of the feedback loop be increasingly taken into account in the QA framework and the corresponding documents (e.g. QM manual).

Fulfilment of Requirements (25.03.2025)

Analysis of the experts and the Technical Committees (10.03.2025)

A 1. (ASIIN 1.4) Specify the technical and scientific prerequisites of the programme and the individual modules in order to contribute to and to facilitate the enrolment of suitable applicants to the programme.

Initial Treatment	
Experts	fulfilled Justification: The prerequisites are well detailed and the problem of heterogeneous or lacking technical skills of applicants has been solved sufficiently.
TC 07	Fulfilled. Justification: The TC follows the assessment of the experts without any changes.

A 2. (ASIIN 1.5) Detail and ensure a systematic and regular monitoring of the credit point allocation in order to identify and, if necessary, adapt the credit point allocation or the contents of the modules.

Initial Treatment	
Experts	Fulfilled Justification: The issue is well addressed as surveys now ask for whether the credits match the workload. However, concerns were raised about how discrepancies in credit allocation are evaluated—students only assess compliance, without indicating whether deviations are upward or downward. A more quantitative approach would provide clearer insights in the future.
TC 07	Fulfilled. Justification: The TC follows the assessment of the experts without any changes.

A 3. (ASIIN 2) Specify the exam forms and grading scheme in the study and exam regulation.

Initial Treatment	
Experts	fulfilled

	Justification: Examination forms and grading schemes have been specified in the study and exam regulation as well as the module descriptions.
TC 07	Fulfilled. Justification: The TC follows the assessment of the experts without any changes.

A 4. (ASIIN 3.3) Provide the concretized financial sustainability concept and the means for its implementation.

Initial Treatment	
Experts	Fulfilled Justification: There remains uncertainty about the financial sustainability of the study programme; the experts question the student numbers (e.g. 317 seems too high) and financial figures (9 million vs. 8 million in revenues). Yet, the experts believe that the current financial plan, which prove that the compendium receives 50% of the costs, is enough to carry the first cohort of students.
TC 07	Fulfilled. Justification: The TC follows the assessment of the experts without any changes.

A 5. (ASIIN 4.1) Clearly indicate the reference to solving business problems, including relevant methodologies, in the description of learning outcomes and contents of the modules (either as dedicated module or in the subject-specific modules).

Initial Treatment	
Experts	fulfilled Justification: The integration of business problem-solving methodologies into learning outcomes and module content is now considered satisfactory. The programme's technological foundation is deemed appropriate for addressing these concerns.
TC 07	Fulfilled. Justification: The TC follows the assessment of the experts without any changes.

A 6. (ASIIN 4.1) Revise and, if necessary, adapt the module descriptions according to the annotations in the report (e.g. learning outcomes, teaching/learning formats, and examination forms).

Initial Treatment	
Experts	Fulfilled Justification: The module descriptions now entail all the missing information and are very detailed.
TC 07	Fulfilled. Justification: The TC follows the assessment of the experts without any changes.

A 7. (ASIIN 4.2) The Diploma Supplement needs to be more specific in describing the individual qualification profile of the graduate.

Initial Treatment	
Experts	fulfilled Justification: The Diploma Supplements now contains the individual specifications (professional role profiles) for clarification of the individual qualification goals of the graduates.
TC 07	Fulfilled. Justification: The TC follows the assessment of the experts without any changes.

A 8. (ASIIN 4.3) Revise all relevant documents (study plans, module descriptions, cooperation agreement, diploma, diploma supplement, etc.) so that only the active project partners and module owners are named.

Initial Treatment	
Experts	fulfilled Justification: All relevant documents (study plans, module descriptions, cooperation agreements, diploma supplements) now correctly list only active project partners and module owners.
TC 07	Fulfilled. Justification: The TC follows the assessment of the experts without any changes.

A 9. (ASIIN 4.3) Make all study-related information material and regulations available for the relevant stakeholders.

Initial Treatment	
Experts	Not completely fulfilled Justification: The individual specifications (professional role profiles) that have been added to the Diploma Supplement are not published anywhere else.
TC 07	Fulfilled.

	Justification: The TC recognises that the university has already adapted the required information in the Diploma Supplement and will publish it as soon as it is clear whether the relevant requirement (A7) is considered fulfilled. The TC therefore considers the requirement to be fulfilled and is in favour of issuing a hint that the information must be published as soon as possible after receipt of the corresponding accreditation decision.

Decision of the Accreditation Commission (25.03.2025)

The Accreditation Commission regards all requirements as fulfilled.

Appendix 1: Objective-Module Matrix

	Critically appraise, select, and employ existing and emerging technologies to address complex business problems and support innovation & digital transformation in business	*Critically assess and evaluate sustainability, governance and ethical risks and impacts associated with digital transformation.*	*Synthesise and communicate the opportunities, risks and critical challenges of digital transformation practices to underpin strategic decisions to key stakeholders.*	*Demonstrate an in depth understanding of the fundamental concepts and techniques of advanced digital skills from a business perspective.*	*Cultivate, select, and employ transversal advanced digital skills and practices, evaluating their application in various contexts.*	*Explore, strategically leverage, and implement advanced digital skills and practices to foster creativity at an individual, team, and organizational levels.*
Digital Transformation	x	x	x		x	
AI for Business	x	x	x			x
Data Science for Business	x			x	x	x
Cybersecurity for Business		x	x	x	x	
Cloud Computing for Business	x	x	x		x	
Business Programming	x			x		x
IoT	x	x		x		x
Blockchain Technologies	x	x	x		x	
Quantum Computing	x		x		x	
Governance & Ethics		x	x		x	x
Innovation	x			x	x	x
Generative AI	x	x	x		x	x
Risk & Change Management		x	x	x	x	x
Capstone Project	x	x	x	x	x	x

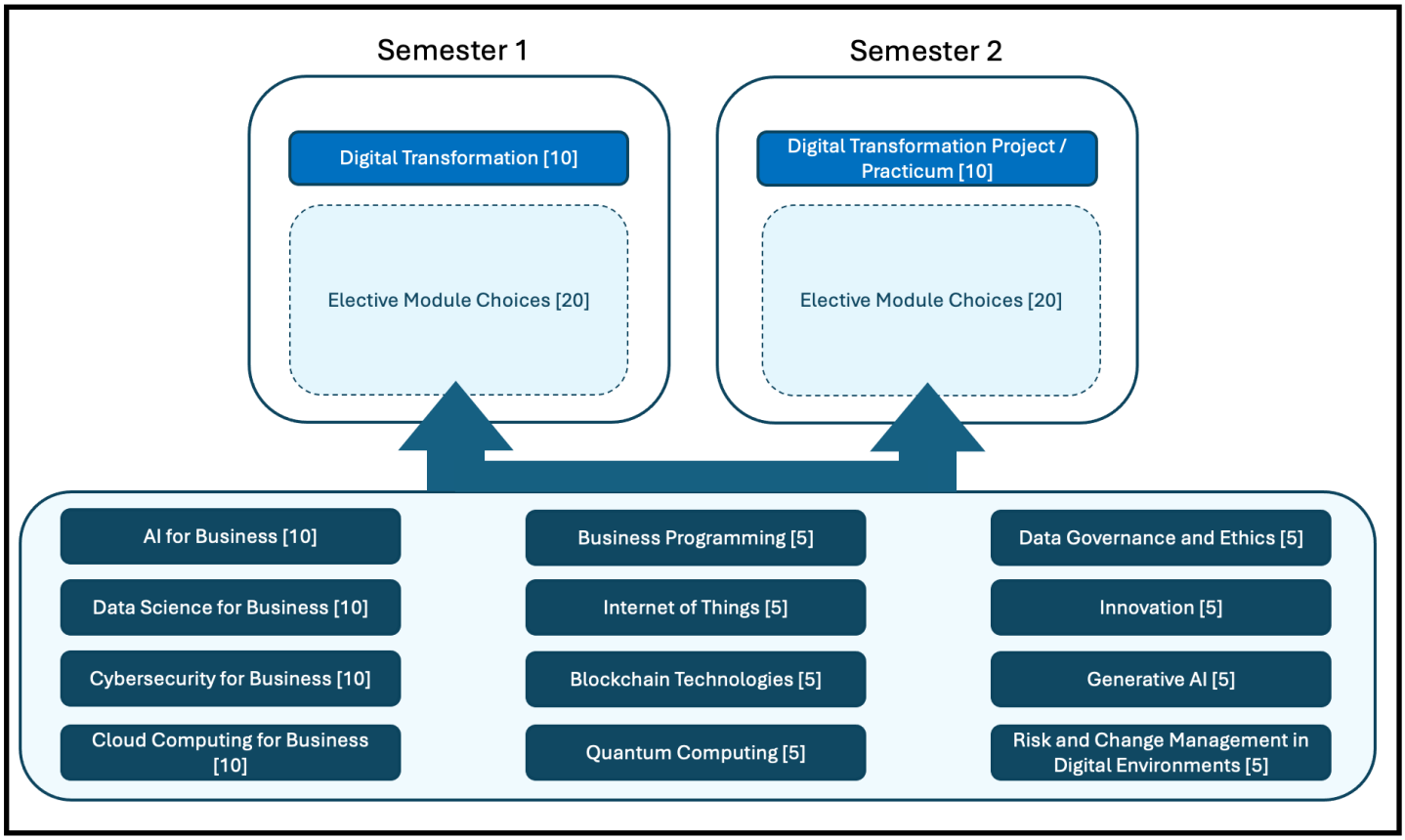
Appendix 2: Role Profile of Potential Students

			Modules												
			Digital Transformation [10]	AI for Business [10]	Data Science for Business [10]	Cybersecurity for Business [10]	Cloud Computing for Business [10]	Programming for Productivity [5]	Internet of Things [5]	Blockchain Technologies [5]	Quantum Computing [5]	Data Governance and Ethics [5]	Innovation [5]	Generative AI [5]	Risk and Change Management in Digital Environments [5]	Digital Transformation Practicum [10]
Role Profiles	1	Procurement Manager	M	E	E	E	E					E			E	M
	2	Small Business Owner	M	E	E	E	E					E			E	M
	3	HR Professional	M	E	E	E	E					E	E	E		M
	4	Business Operations Manager	M	E	E	E	E					E	E			M
	5	Sales Person	M	E	E		E	E				E	E		E	M
	6	Junior Software Engineer	M	E	E	E	E	E			E		E	E		M
	7	Legal Professional	M	E	E	E	E			E		E		E		M
	8	Facilities Management Professional	M	E	E	E	E		E				E			M
	9	Supply Chain Management Professional	M	E	E	E	E			E		E			E	M
	10	Engineering Professional in SME	M	E	E	E	E	E	E		E			E		M
	11	Office Administrator in SME	M	E	E	E	E	E							E	M
	12	Finance Professional	M	E	E	E	E			E		E			E	M
	13	Product Manager	M	E	E	E	E					E	E			M
	14	Marketing Professional	M	E	E	E	E					E	E	E		M
	15	Project Manager	M	E	E	E	E					E			E	M
	16	Customer Services Professional	M	E	E	E	E					E		E	E	M

M - Mandatory Module
E - Elective Module

Appendix 3: Curricula / Exemplary Study Plans

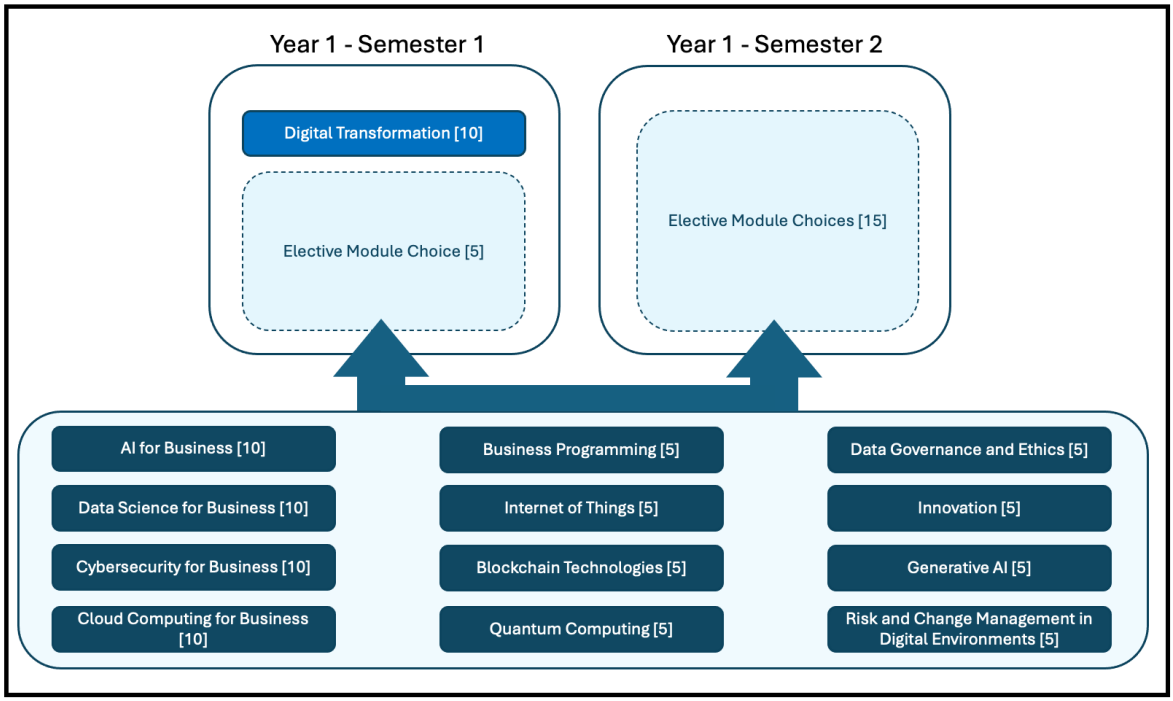
Exemplary Study Plan: Full-time



Note: In each semester, a learner chooses elective modules for 20 ECTS.

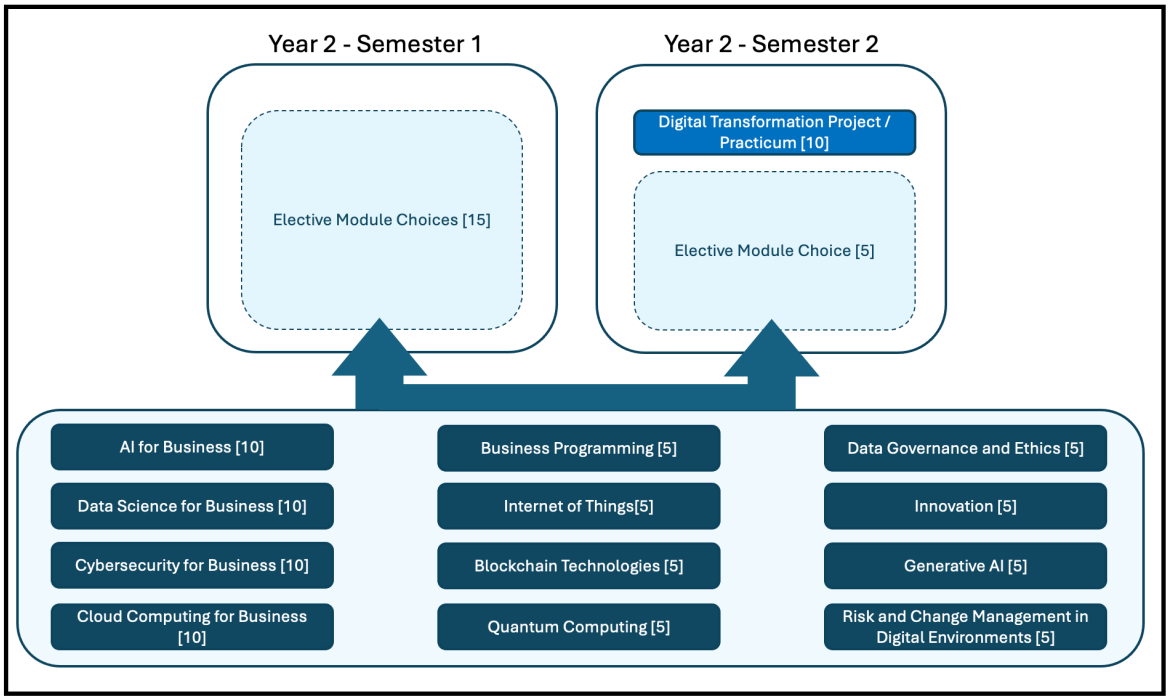
Legend Mandatory Module [ECTS Credits] Elective Module [ECTS Credits]

Exemplary Study Plan: Part-time



Note: In the first semester, a learner chooses an elective module for 5 ECTS. In the second semester, a learner chooses elective modules for 15 ECTS.

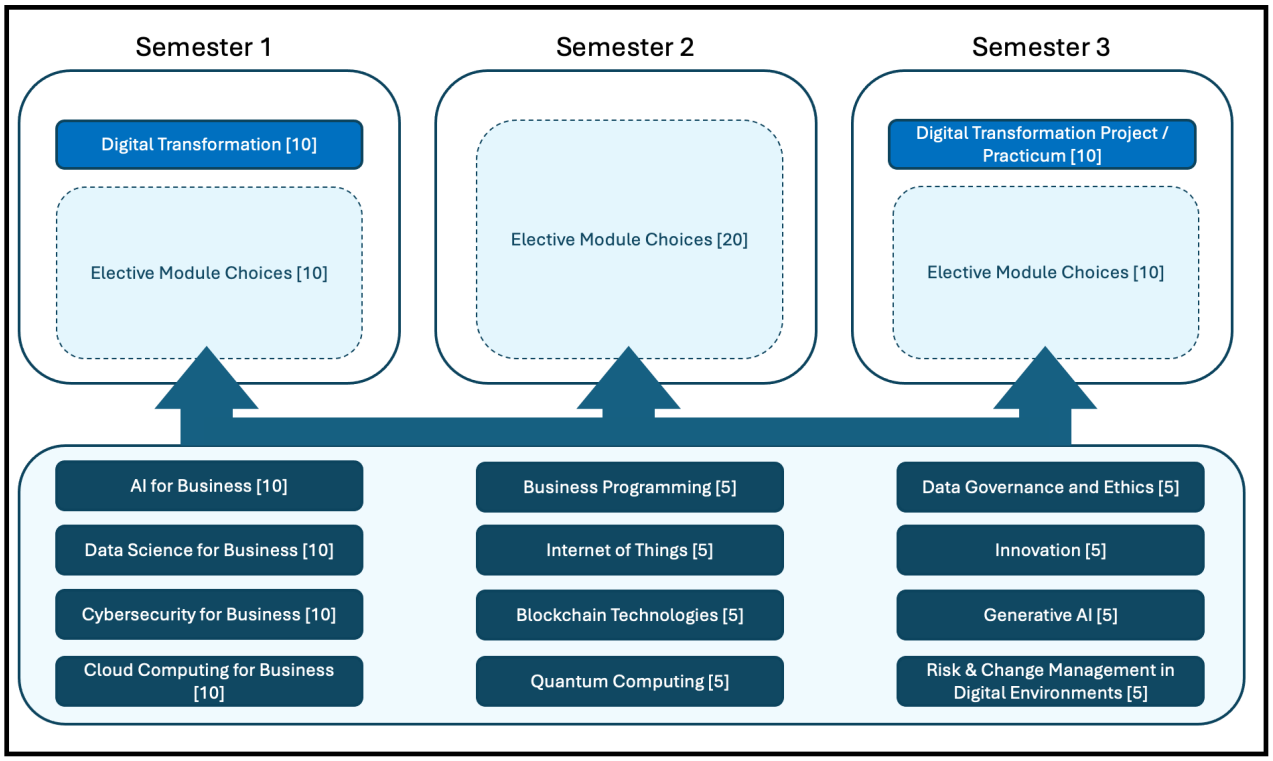
Legend Mandatory Module [ECTS Credits] | Elective Module [ECTS Credits]



Note: In the first semester, a learner chooses elective modules for 15 ECTS. In the second semester, a learner chooses an elective module for 5 ECTS.

Legend Mandatory Module [ECTS Credits] | Elective Module [ECTS Credits]

Exemplary Study Plan: Part-time accelerated



Note: In the first and third semester, a learner chooses elective modules for 10 ECTS. In the second semester, a learner chooses elective modules for 20 ECTS.

Legend Mandatory Module [ECTS Credits] Elective Module [ECTS Credits]