

# Digital **4** Business

Evolving your digital future

# Full Time/Part Time Programme

Deliverable D4.1/D4.2

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# Work Package 4

## Full Time/Part Time Programme

### Overview and Initial Commitments

The development of a comprehensive suite of the Full Time Programme (Output D4B1: Full Time Programme for 150 students starting) for the online master's program has been partially completed.



## Objectives of the Digital4Business Joint Master's Degree

The programme aims to provide learners with essential knowledge, skills, and competence to understand the impacts of digital transformation, advanced digital skills, and emerging technologies for business and enterprise.

The programme is offered in three modes of study:

- I. Full Time,
- II. Part Time Accelerated, and
- III. Part Time.

For all study modes, learners must obtain 60 ECTS to be awarded the Joint Master's Degree in Advanced Digital Skills. For each of the study modes, Full Time, Part Time Accelerated, and Part Time, the duration of the programme is either 2 semesters, 3 semesters, or 4 semesters in duration (see Table 1).

Mode of Study	Duration (semesters)	Average time required to complete studies (years)	Credit point/unit (ECTS)
<b>Full time</b>	2	1	60
<b>Part time (Accelerated)</b>	3	1	60
<b>Part time</b>	4	2	60

Table 1. Duration of Programme for each Mode of Study.

Note: A semester is an academic session that typically encompasses 12 weeks of teaching and a further period of time to allow for module terminal examinations after the 12<sup>th</sup> week of teaching.

The curriculum focuses on the associated core subject matter areas at both a theoretical and practical level. A mandatory module on Digital Transformation serves as the cornerstone of the Master's Programme, establishing essential knowledge and skills that underpin various specialized fields. The other modules in the programme are offered as a suite of elective modules. This gives

learners a high degree of flexibility to choose areas of focus within the Advanced Digital Skills landscape that are particularly interesting (see Table 2).

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

Table 2. Modules, corresponding ECTS and Mandatory/Elective status.

The linkages between these modules provide students with a well-rounded education that equips them with multidisciplinary skills and insights. This prepares them for the dynamic digital landscape, where these areas often intersect, complement, and influence each other, fostering well-rounded, versatile professionals ready to adapt to the evolving needs of the digital economy.

The Minimum Intended Programme Learning outcomes (MIPOs) in terms of knowledge, skill, and competence for the programme are presented in Table 3.

Name	Description
<b>MIPO1</b>	Critically appraise, select, and employ existing and emerging technologies to address complex business problems and support innovation and digital transformation in business.
<b>MIPO2</b>	Critically assess and evaluate sustainability, governance and ethical risks and impacts associated with digital transformation.
<b>MIPO3</b>	Synthesise and communicate the opportunities, risks and critical challenges of digital transformation practices to underpin strategic decisions to key stakeholders.
<b>MIPO4</b>	Demonstrate an in depth understanding of the fundamental concepts and techniques of advanced digital skills from a business perspective.
<b>MIPO5</b>	Cultivate, select, and employ transversal advanced digital skills and practices, evaluating their application in various contexts.
<b>MIPO6</b>	Explore, strategically leverage, and implement advanced digital skills and practices to foster creativity at an individual, team, and organizational levels.

Table 3. Minimum Intended Programme Learning Outcomes (MIPOs).



## Study modes

The programme is offered in three modes of study, namely Full Time, Part Time Accelerated, and Part Time. For a learner registered on the Full-Time programme, the standard period of study is one year. The programme schedule and the curriculum are designed in a way that allows students to earn 30 ECTS per semester over two semesters. The workload per semester consists of an average 750 hours.

For a learner registered on the Part Time Accelerated programme, the standard period of study is also one year. However, in this case, the programme schedule and the curriculum are designed in a way that allows students to earn 20 ECTS per semester over three semesters. The workload per semester consists of an average 500 hours.

Finally, for a learner registered on the Part Time programme, the standard period of study is two years. For such learners, the programme schedule and the curriculum are designed in a way that allows students to earn 15 ECTS per semester over four semesters. The workload per semester consists of an average 375 hours.

To the greatest extent possible, the programme schedule is designed to distribute the workload evenly across the semester by offering a variety of teaching and assessment formats.

The curriculum and programme structure for the Joint Master's Degree in Advanced Digital Skills (Full Time) is shown in Figure 1.

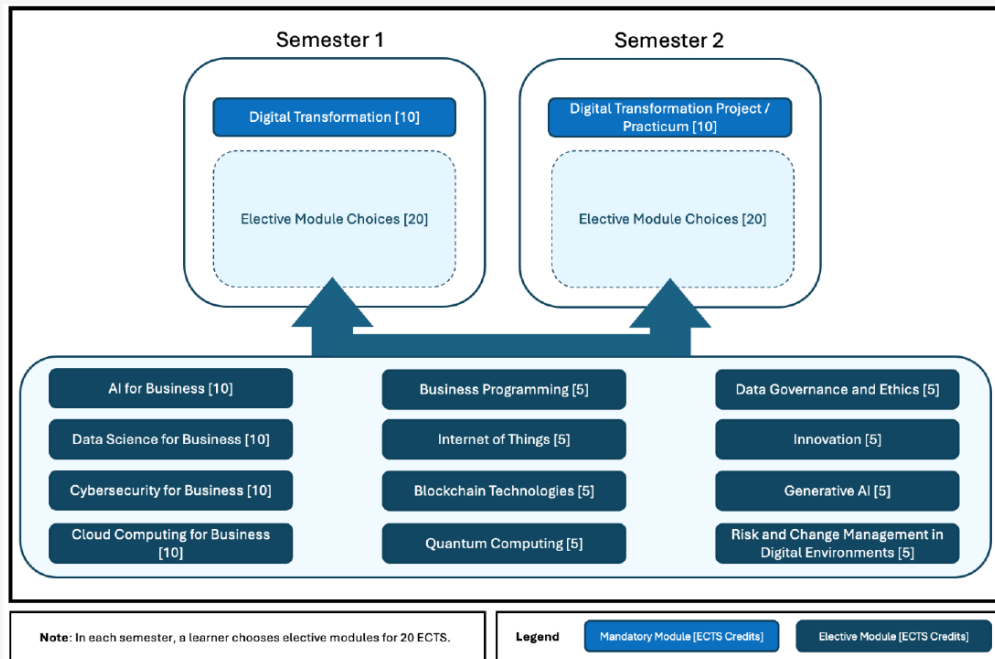


Figure 1. Joint Master's Degree in Advanced Digital Skills (Full Time).

The curriculum and structure for the Joint Master's Degree in Advanced Digital Skills (Part time Accelerated) is shown in Figure 2.

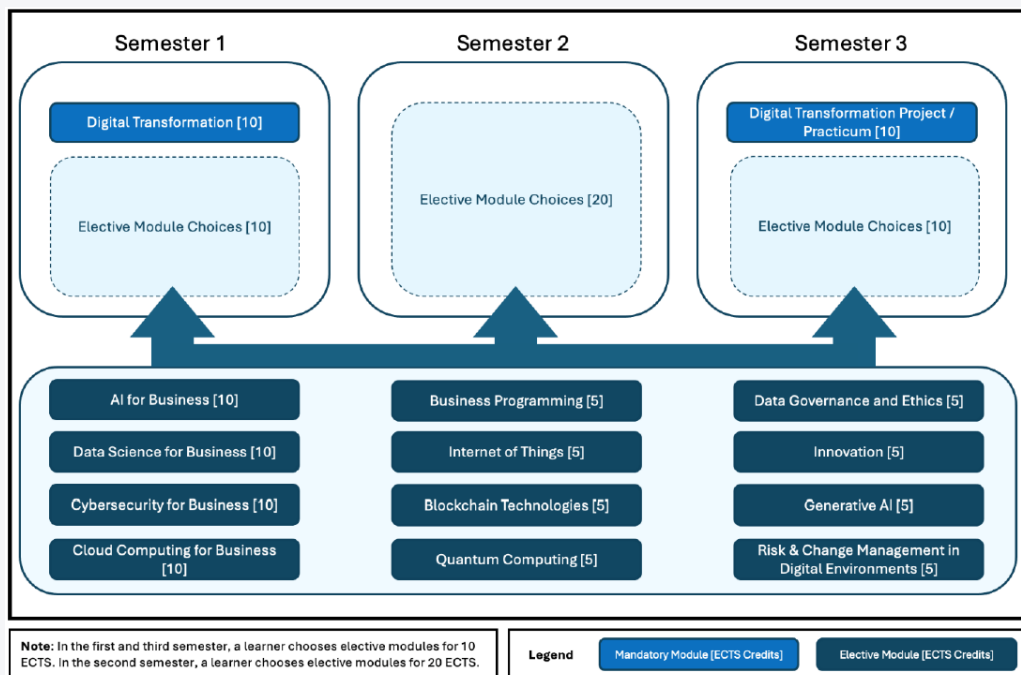


Figure 2. Joint Master's Degree in Advanced Digital Skills (Part Time Accelerated).

The curriculum and structure for the Joint Master’s Degree in Advanced Digital Skills (Part time) year 1 and year 2 are shown in Figure 3a. and Figure 3b., respectively.

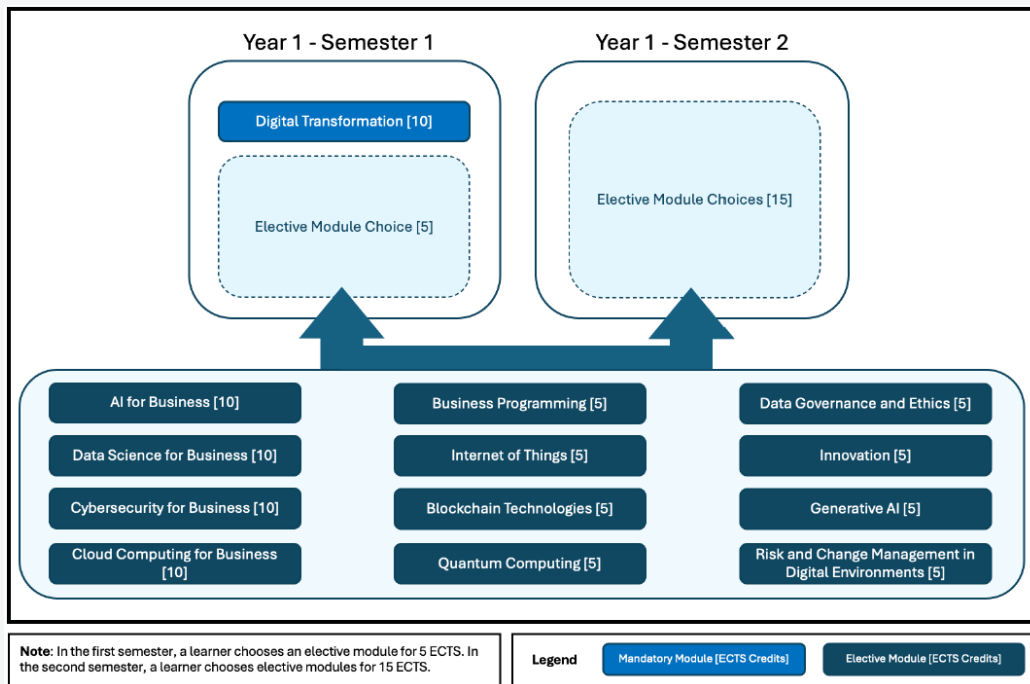


Figure 3a. Joint Master’s Degree in Advanced Digital Skills (Part Time) Year 1.

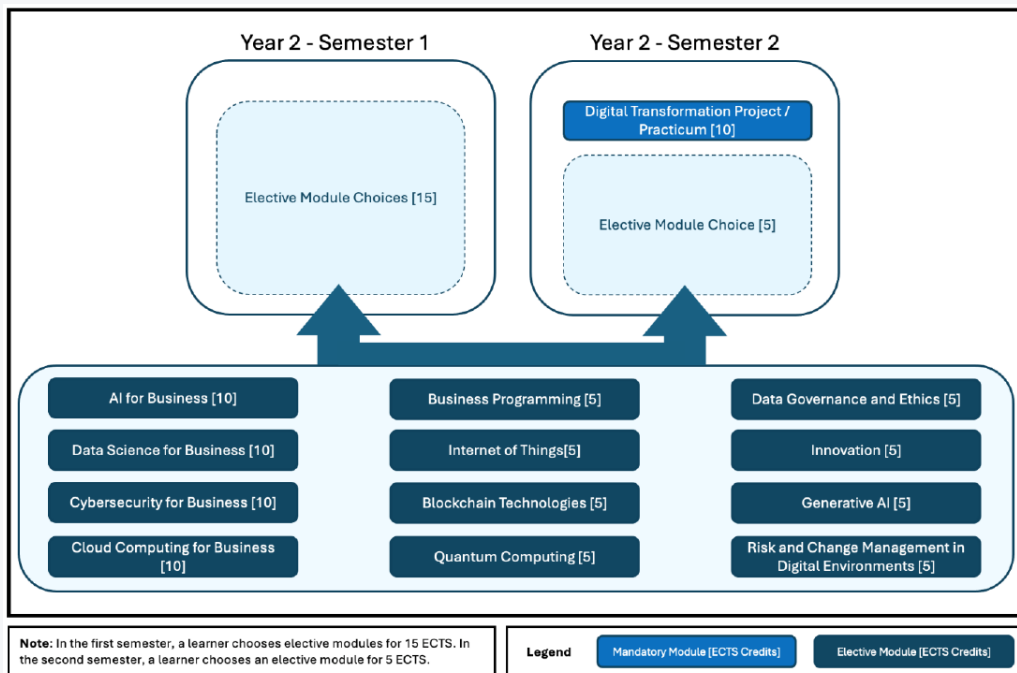


Figure 3b. Joint Master’s Degree in Advanced Digital Skills (Part Time) Year 2.



There is a high degree of flexibility for learners when choosing elective modules. The programme team's analysis of role profiles offer guidance to learners with regards to which elective modules are a more suitable choice to make when pursuing such roles.



## Description of Programme Modules

The curriculum focuses on the associated core subject matter areas at both a theoretical and practical level including:

- Digital Transformation
- Innovation
- Data Governance & Ethics
- Artificial Intelligence
- Data Science
- IoT (Internet of Things)
- Blockchain Technologies
- Cloud Computing
- Cybersecurity
- Risk & Change Management
- Business Programming
- Quantum Computing

Modules on AI and Data Science benefit from their linkage with Digital Transformation, providing real-world context for the applications in organizations. Likewise, Cloud Computing gains significance as learners consider the effective implementation of cloud solutions within the context of digital transformation.

Cybersecurity knowledge becomes more practical and strategic when seen through the lens of Digital Transformation, as it helps learners navigate the complex digital security landscape. Blockchain's importance in reshaping digital infrastructures is highlighted when studied in the context of Digital Transformation.

IoT's close connection with Digital Transformation is emphasized, helping learners harness the full potential of IoT technologies. Digital Transformation also provides students with insights into the potential impact of Quantum Computing on digital ecosystems.

Data Governance & Ethics module benefits from a strong foundation in Digital Transformation, aligning data policies and ethical guidelines with technological advancements. Understanding Digital Transformation is vital for using generative AI applications strategically and responsibly. Innovation, a critical focus of the programme, thrives in the environment created by successful Digital Transformation. Understanding the intricacies of digital transformation is instrumental in managing risks and changes associated with digital disruptions and opportunities.



## Programme schedule

The class schedule for Fall 2024/Winter 2025 is as follows: AI at Linköping University, Data Science at NOVA IMS, Cloud at the National College of Ireland, Cybersecurity at UDS, Digital Transformation at the University of Bologna, Blockchain at the National College of Ireland, IoT at UDS, Programming at UDS, Quantum at the National College of Ireland, Governance & Ethics at UP8, Innovation at the University of Bologna, Risk & Change Management at UDS, and Generative AI at NOVA IMS.

Applications for all courses open on July 1, 2024, and close on September 15, 2024. Classes commence on September 24, 2024, and conclude on December 20, 2024. The target number of students for each class is 20, with a maximum capacity of 50 and a minimum requirement of 10 students.

Our target number of students for each class is 20, with a maximum capacity of 50 and a minimum requirement of 10 students to run the course. Please find the details in Table 4.

Module Name	Semester	Applications		Class		Module owner	Campuses	Capacity		
		Open on date	Close on date (deadline)	Start date	End date			Min	Max	Target
<b>AI for Business</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	Linkoping university	D4B Online Platform	10	50	20
<b>Data Science for Business</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	NOVA IMS	D4B Online Platform	10	50	20
<b>Cloud Computing for Business</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	National College of Ireland	D4B Online Platform	10	50	20
<b>Cybersecurity for Business</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	UDS	D4B Online Platform	10	50	20
<b>Digital Transformation</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	University Of Bologna	D4B Online Platform	10	50	20
<b>Blockchain Technologies</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	National College of Ireland	D4B Online Platform	10	50	20
<b>Internet of Things</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	UDS	D4B Online Platform	10	50	20
<b>Business Programming</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	UDS	D4B Online Platform	10	50	20
<b>Quantum Computing</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	National College of Ireland	D4B Online Platform	10	50	20
<b>Data Governance and Ethics</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	UP8	D4B Online Platform	10	50	20
<b>Innovation</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	University Of Bologna	D4B Online Platform	10	50	20
<b>Risk &amp; Change Management in Digital Business Environments</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	UDS	D4B Online Platform	10	50	20
<b>Generative AI</b>	Fall 2024	01/07/2024	15/09/2024	23/09/2024	20/12/2024	NOVA IMS	D4B Online Platform	10	50	20

Table 4. The schedule for our upcoming classes for Fall 2024/Winter 2025.

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