

MSc Data Science in Business and Entrepreneurship (DSBE)

Information document regarding:

- 1. February intake**
- 2. Homologation Program (September)**
- 3. Homologation Program (February)**

Academic year 2022-2023

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February intake

Although not ideal, a student can start the master's program DSBE as of February. It is not ideal, since the students follow the curriculum in a different order compared to the program starting in September and cannot follow some of the elective courses in the student's second semester because of entry requirements.

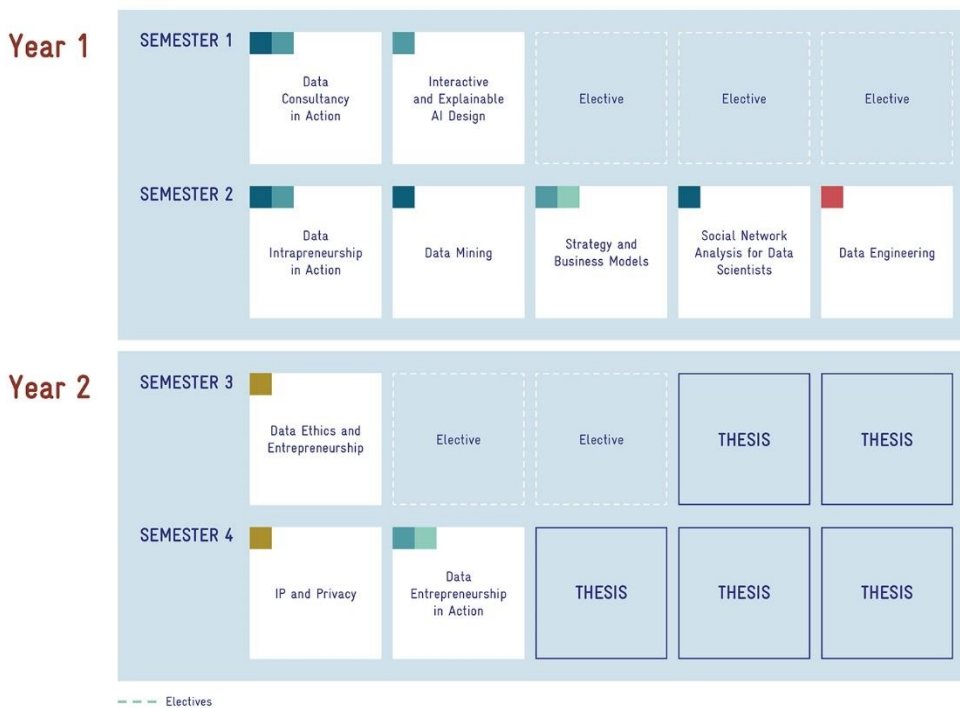
The program is divided in four semesters:

- Semester 1 (year 1, fall semester: August - January)
- Semester 2 (year 1, spring semester: February – July)
- Semester 3 (year 2, fall semester: August - January)
- Semester 4 (year 2, spring semester: February – July)

Because the student starts in February, the following order is relevant:

- Semester 2
- Semester 1
- Semester 4
- Semester 3

PROGRAM FEBRUARY



Each slot (square) represents a course with a study load of 6 EC. The master's thesis is visualized being 5 separate slots, however, of course it is one part of the examination program. Please note that the allocation of the study load of the master's thesis is flexible: a student can choose how the study load of the master's thesis is allocation. E.g. a student can also choose to focus more on the thesis in the third semester (i.e. 18 EC) and less in the fourth semester (i.e. 12 EC) which makes room for an elective in semester 4.

Your first semester - semester 2

In **semester 2**, the curriculum looks as follows:

- Data Consultancy in Action
- Interactive and Explainable AI Design
- Elective course spring
- Elective course spring
- Elective course spring

The following courses are offered as an elective course in the spring semester:

- Advanced Data Architectures (entry requirement: Data Engineering)
- Causal Inference for Business Development
- Data-Driven Service Innovation
- Data Forensics (entry requirement: Social Network Analysis for Data Scientists)
- Data Visualization
- Decision Support Systems
- Deep Learning (entry requirement: Data Mining)
- Entrepreneurial Finance
- Prescriptive Algorithms
- Research in Action

Please be noted that for some of the courses there is an entry requirement (i.e. a course from semester 1) which means a student is not able to follow these courses in semester 2.

Your second semester - semester 1

In **semester 1** the student follows all mandatory courses. The curriculum of semester 1 then looks as follows:

- Data Intrapreneurship in Action
- Data Mining
- Social Network Analysis for Data Scientists
- Strategy and Business Models
- Data Engineering

Your third semester - semester 4

In **semester 4**, the student follows one mandatory course, two elective courses and starts with the thesis. The curriculum of semester 4 then looks as follows:

- Data Ethics and Entrepreneurship
- Elective course spring
- Elective course spring
- Thesis (12/30 EC)

Your fourth semester - semester 3

In **semester 3**, the student follows two mandatory courses and continues with the thesis. The curriculum of semester 3 then looks as follows:

- Data Entrepreneurship in Action
- Intellectual Property and Privacy
- Thesis (18/30 EC)

(In case the student allocates the study load differently than what is presented in the infographic)

The following courses are offered as an elective course in the fall semester:

- Data-Driven Food Value Chain
- Cybersecurity (entry requirement: Data Engineering)
- Natural Language Processing
- Real-Time Process Mining
- Research in Action

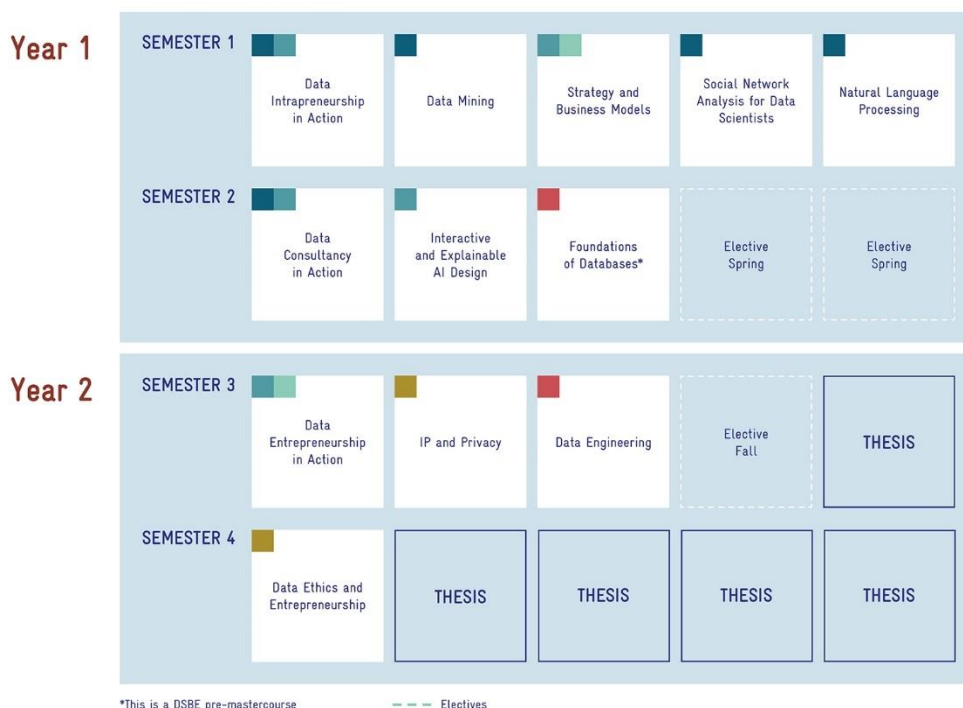
Homologation program (September intake)

Although not ideal, a student with a deficiency on databases can start the master's program DSBE as an Homologation Program student (HP student) as of September. It is not ideal because, as a consequence of the deficiency, a student cannot follow a mandatory course in the first year (Data Engineering) as it requires entry knowledge. Furthermore, the student cannot follow some of the elective courses in the student's second semester because of entry requirements.

The program is divided in four semesters:

- Semester 1 (year 1, fall semester: August - January)
- Semester 2 (year 1, spring semester: February – July)
- Semester 3 (year 2, fall semester: August - January)
- Semester 4 (year 2, spring semester: February – July)

PROGRAM SEPTEMBER (HOMOLOGATION)



Each slot (square) represents a course with a study load of 6 EC. The master's thesis is visualized being 5 separate slots, however, of course it is one part of the examination program. Please note that the allocation of the study load of the master's thesis is flexible: a student can choose how the study load of the master's thesis is allocation. E.g. a student can also choose to focus more on the thesis in the third semester (i.e. 12 EC) and less in the fourth semester (i.e. 18 EC) which makes room for an elective in semester 4.

Your first semester - semester 1

In **semester 1** the HP student follows all mandatory courses, except Data Engineering. Instead, the student follows the course Natural Language Processing (as a course in the elective space). The curriculum of semester 1 then looks as follows:

- Data Intrapreneurship in Action
- Data Mining
- Social Network Analysis for Data Scientists
- Strategy and Business Models
- Natural Language Processing (as an elective course fall)

Your first semester - semester 2

In **semester 2**, the HP student needs to clear the deficiency by following the course Foundations of Databases (part of the pre-master's program). This course will be part of the examination program of the students (i.e. the obtained 6 EC count for the 120 EC a student needs to obtain). The curriculum of semester 1 then looks as follows:

- Data Consultancy in Action
- Interactive and Explainable AI Design
- Foundations of Databases
- Elective course spring
- Elective course spring

The follow courses are offered as an elective course in the spring semester:

- Advanced Data Architectures (entry requirement: Data Engineering)
- Causal Inference for Business Development
- Data-Driven Service Innovation
- Data Forensics (entry requirement: Social Network Analysis for Data Scientists)
- Data Visualization
- Decision Support Systems
- Deep Learning (entry requirement: Data Mining)
- Entrepreneurial Finance
- Prescriptive Algorithms
- Research in Action

Please be noted that for some of the courses there is an entry requirement (i.e. a course from semester 1) which means a HP student is not able to follow these courses in semester 2.

Your third semester - semester 3

In **semester 3**, next to the two mandatory courses, the thesis and one elective courses, the HP student needs to follow Data Engineering as this course was moved to year 2. The curriculum of semester 3 then looks as follows:

- Data Entrepreneurship in Action
- Data Engineering
- Intellectual Property and Privacy
- Elective course fall¹
- Thesis (6/30 EC)

The follow courses are offered as an elective course in the fall semester:

- Data-Driven Food Value Chain
- Cybersecurity (entry requirement: Data Engineering)
- ~~○ Natural Language Processing²~~
- Real-Time Process Mining
- Research in Action

Your fourth semester - semester 4

In **semester 4**, the HP student follows one mandatory course and continues with the thesis. The curriculum of semester 4 then looks as follows:

- Data Ethics and Entrepreneurship
- Thesis (24/30 EC)

¹ Alternatively, a student can choose to put more focus on the thesis in semester 3 (resulting in 12/30 EC study load for the thesis) and move the elective course to semester 4

² Because this course is part of the curriculum in semester 1 for HP students, the course is struck through

Homologation program (February intake)

Although not ideal, a student with a deficiency on databases can start the master's program DSBE as a Homologation Program student (HP student) as of September. It is not ideal because, as a consequence of the deficiency, a student cannot follow a mandatory course in the first year (Data Engineering) as it requires knowledge. Furthermore, the HP student cannot follow some of the elective courses in the student's second semester because of entry requirements.

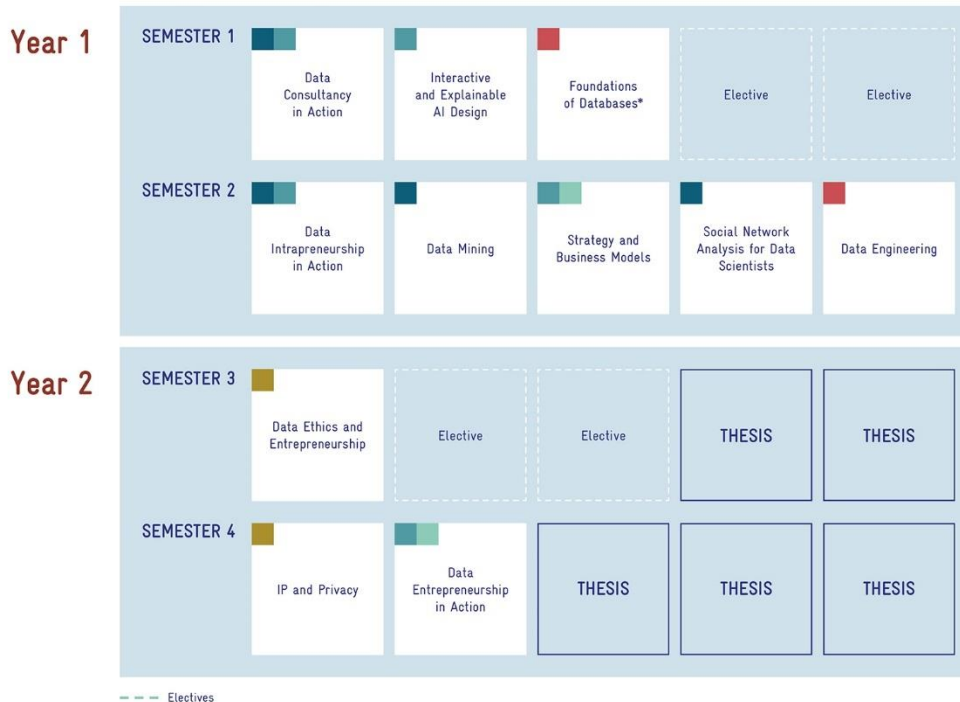
The program is divided in four semesters:

- Semester 1 (year 1, fall semester: August - January)
- Semester 2 (year 1, spring semester: February – July)
- Semester 3 (year 2, fall semester: August - January)
- Semester 4 (year 2, spring semester: February – July)

If the student starts in February, the following order is relevant:

- Semester 2
- Semester 1
- Semester 4
- Semester 3

PROGRAM FEBRUARY (HOMOLOGATION)



Each slot (square) represents a course with a study load of 6 EC. The master's thesis is visualized being 5 separate slots, however, of course it is one part of the examination program. Please note that the allocation of the study load of the master's thesis is flexible: a student can choose how the study load of the master's thesis is allocation. E.g. a student can also choose to focus more on the thesis in the third semester (i.e. 12 EC) and less in the fourth semester (i.e. 18 EC) which makes room for an elective in semester 4.

Your first semester - semester 2

In **semester 2**, the HP student needs to clear the deficiency by following the course Foundations of Databases (part of the pre-master's program). This course will be part of the examination program of the students (i.e. the obtained 6 EC count for the 120 EC a student needs to obtain). The curriculum of semester 1 then looks as follows:

- Data Consultancy in Action
- Interactive and Explainable AI Design
- Foundations of Databases
- Elective course spring
- Elective course spring

The follow courses are offered as an elective course in the spring semester:

- Advanced Data Architectures (entry requirement: Data Engineering)
- Causal Inference for Business Development
- Data-Driven Service Innovation
- Data Forensics (entry requirement: Social Network Analysis for Data Scientists)
- Data Visualization
- Decision Support Systems
- Deep Learning (entry requirement: Data Mining)
- Entrepreneurial Finance
- Prescriptive Algorithms
- Research in Action

Please be noted that for some of the courses there is an entry requirement (i.e. a course from semester 1) which means a HP student is not able to follow these courses in semester 2.

Your second semester - semester 1

In **semester 1**, the HP student follows all mandatory courses. The curriculum of semester 1 then looks as follows:

- Data Intrapreneurship in Action
- Data Mining
- Social Network Analysis for Data Scientists
- Strategy and Business Models
- Data Engineering (entry requirement: Foundations of Databases)

Your third semester - semester 4

In **semester 4**, the HP student follows one mandatory course, two elective courses and starts with the thesis. The curriculum of semester 4 then looks as follows:

- Data Ethics and Entrepreneurship
- Elective course spring³
- Elective course spring³
- Thesis (12/30 EC)

Your fourth semester - semester 3

In **semester 3**, the HP student follows two mandatory courses and continues (and finishes) the thesis. The curriculum of semester 3 then looks as follows:

- Data Entrepreneurship in Action
- Intellectual Property and Privacy
- Thesis (18/30 EC)

(In case the students allocated the study load differently)

The following courses are offered as an elective course in the fall semester:

- Data-Driven Food Value Chain
- Cybersecurity (entry requirement: Data Engineering)
- Natural Language Processing
- Real-Time Process Mining
- Research in Action

³ Alternatively, a student can choose to put more focus on the thesis in semester 4 (resulting in 18/30 EC study load for the thesis) and move the elective course to semester 3