

23 March 2026

# INFORMATION EVENT ABOUT THE BACHELOR THESIS IN **COMPUTER SCIENCE** AND IN **BUSINESS INFORMATICS**

## General Instructions

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## The bachelor thesis

- is a teaching unit worth 15 ECTS credits (equivalent to between 375 and 450 hours of study) and is completed within 3 months (corresponding to 12 weeks) **in case of full-time studies**
- is accomplished during the 5<sup>th</sup> and/or 6<sup>th</sup> semester
- is a personal work of a student who must solve a specific problem and put the knowledge he/she has acquired during the studies into practice
- is under the responsibility of a professor and can be accompanied by an assistant
- see also the study plan [1], or the study plan and the regulations [2][4]

## Necessary fundamentals

- before starting the bachelor thesis, the student should in principle have achieved all necessary courses to be able to treat the topic of his/her bachelor thesis

# STARTING THE BACHELOR THESIS

**The student is responsible for finding the topic of the bachelor thesis**

## **Steps to complete**

- select a research group at the DIUF that works in an area you are interested in (bachelor theses in Computer Science & Business Informatics can be written in all research groups at the DIUF)
- consult the group's website to see if there are available projects for a bachelor thesis
- contact the responsible person (professor) and agree with your supervisor about the thesis topic

## **Own ideas**

- students can propose their own ideas (with a company) and suggest a thesis topic
- topics proposed by any person other than a professor must be validated by a professor

## **Registration**

- the registration for the bachelor thesis should be done on MyUnifr during the next possible course registration period (there is no registration for the evaluation of the bachelor thesis)

# RESEARCH GROUPS AT THE DIUF



## AI for the Benefit of Human Experts (AIBEX)

- Deep Learning, Large Vision Models, Large Language Models
- Graph-Based Pattern Recognition
- Document Analysis, Handwriting Analysis
- Digital Humanities
- Digital Pathology
- AI-Oriented Software Engineering

[More info →](#)



## AIDOS Lab

- Computational Topology
- Foundations of Machine Learning
- Geometrical & Topological Deep Learning
- Topological Data Analysis

[More info →](#)



## Applied Statistics and Modelling

- Fuzzy statistics
- Data mining and econometrics methods
- Survey statistics
- Treatment effect evaluation

[More info →](#)



## Decision Support & Operations Research

- Modeling language development for mathematical optimization problems
- Combinatorial optimization and graph theory
- Heuristic and meta-heuristic methods
- Decision support: models, methods and applications

[More info →](#)



## Digitalization and Information Systems Group

- Design, Implementation and Analysis of Enterprise Information Systems
- Enterprise Modeling and Metamodeling
- Blockchains
- Visualization and Device-less Interaction

[More Info →](#)



## eXascale Infolab

- Big Data
- Social Data
- Data Science Infrastructures
- Crowdsourcing

[More Info →](#)



## Foundations of Dependable Systems

- complementation of Büchi automata
- omega-automata with blind counters
- security in electronic voting
- algorithms for ecological graphs
- intrusion detection in smart grids

[More info →](#)



## Human-Computer Interaction

- Multimodal Human Machine Interaction
- Data Visualization
- Interactive AI
- Human-Building Interaction

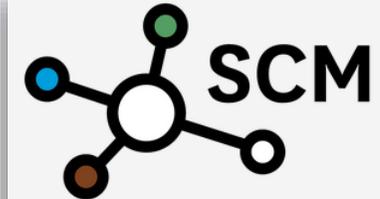
[More Info](#)



## Resilient Systems Design

- Fuzzy Sets and Systems
- Computational Intelligence
- Soft, Perceptual and Granular Computing

[More Info →](#)



## Supply Chain Management

- Humanitarian supply chain management
- Sustainability in global supply chains
- Modern slavery in agrifood supply chains
- Circular supply chains

# OTHER RESEARCH GROUPS AND COMPANIES

**There is the possibility to perform a bachelor thesis in collaboration with an external research group or with a company in relation to Computer Science or Business Informatics**

## **Collaboration with an external research group**

- an external research group can be from the Faculty of Science and Medicine or the Faculty of Management, Economics and Social Sciences, resp., or even from an other faculty or university
- there is a co-supervision of a person from the external research group and a professor from the DIUF who is formally responsible for the bachelor thesis

## **Collaboration with a company**

- the proposed topic by the company must be validated by a professor from the DIUF
- there is a co-supervision of a person from the company and a professor from the DIUF who guarantees the academic standard and who is formally responsible for the bachelor thesis

# FINISHING THE BACHELOR THESIS

## Report, defense and submission

- the report should be written with LaTeX or using Overleaf, resp. (see also [FSES&M guidelines](#))
- once you complete your thesis, submit the report to your supervisor (PDF or print version)
- if the report has been accepted, the defense can take place, and the submission can be made
  - **students in Computer Science: report to the secretariat (hot clue or spiral binding print version)**
  - **students in Business Informatics: delivery to the dean's office according to the [instructions](#)**

## Evaluation

- the work process, the report and the presentation are fed into the evaluation
- the bachelor thesis is evaluated with a grade

## Deadline to finish within the current semester

- if you would like to finish your bachelor thesis within the current semester, then you must submit the report until the last Friday before the start of the next course period
- afterwards, you can finish your bachelor studies by completing all administrative steps ([link](#))([link](#))

## Plagiarism

- plagiarism is the uncredited use of the ideas, representations or words of somebody else
- in the bachelor studies, plagiarism is considered as an act of fraud, and according to the regulations [3] or [5], such an act can be sanctioned (see also the university's rules [6])
- to avoid plagiarism, every external source of information must be adequately and correctly cited

## Legal basis

- [1] “Plan d’études pour l’obtention du Bachelor of Science en informatique / Studienplan für den Erwerb des Bachelor of Science in Informatik” of May 30<sup>th</sup>, 2022 ([link](#))
- [2] “Brochure et plan d’étude du Bachelor of Science en Informatique de gestion / Broschüre und Studienplan des Bachelor of Science in Wirtschaftsinformatik” of November 2025 ([link](#))
- [3] “Règlement pour l’obtention des Bachelor of Science et des Master of Science / Reglement für die Erlangung der Bachelor of Science und der Master of Science” of May 30<sup>th</sup>, 2022 ([link](#))
- [4] “Règlement sur l’octroi des Bachelor à la Faculté des sciences économiques et sociales et du management de l’Université de Fribourg / Reglement für den Erwerb der Bachelor an der Wirtschafts- und Sozialwissenschaftlichen Fakultät der Universität Freiburg” of May 28<sup>th</sup>, 2018 ([link](#))
- [5] “Règlement sur l’organisation des études et des examens à la Faculté des sciences économiques et sociales et du management de l’Université de Fribourg / Reglement über die Organisation des Studiums und der Examina an der Wirtschafts- und Sozialwissenschaftlichen Fakultät der Universität Freiburg” of September 27<sup>th</sup>, 2021 ([link](#))
- [6] “Directives concernant la procédure en cas de soupçon de comportement scientifique incorrect / Richtlinien über das Verfahren im Falle des Verdachts auf das Vorliegen wissenschaftlichen Fehlverhaltens” of May 13<sup>th</sup>, 2008 ([link](#))

# THAT'S ALL

**We hope your bachelor thesis will be interesting and successful, and we wish you all the best for your further studies**

**Do you have questions?**

