



Bachelor in Digital technologies for information and communication

This 180-credit Bachelor's degree provides a broad-based education in computing and digital technologies, information and communication sciences and a consolidated general knowledge of the place of digital technology in our society, so that we can understand it and take action.

The 2024-2025 programme is subject to change. It is provided for information purposes only.

Programme mnemonic

BA-TECN

Studies level

Bachelor

Learning language

french

Schedule

office hours

Studies categories / subcategories

Sciences and technics / Sciences and technics, Human and social sciences / Engineering sciences, / Information and communication and / other

Campus

Charleroi Ville Haute

Foreign exchange

yes

- › Mobilise and articulate knowledge from different disciplines to understand the issues associated with the digital transformations of society.
- › Use the most appropriate methods and tools for accessing and processing data and information to help make decisions and construct messages.
- › Adopt a critical and informed stance towards the collection, processing and use of data. (big data, algorithms, automation and artificial intelligence, visualisation, quantification, predictions, etc.).
- › Identify, master and use technological intelligence methods and tools in a variety of contexts, both professional and personal.
- › Design and formulate recommendations and solutions for those involved in the development, dissemination and use of digital technologies in various fields.
- › Shape the digital transformations of tomorrow by becoming a mediator between stakeholders in the digitisation process.

Developing cross-disciplinary skills

Mastering written and oral communication

- › Fluency in written and spoken French, including in the specific context of digital communication professions and applications.
- › Proficiency in English at C1 level, including English specific to the digital communication professions and applications.

Training in the scientific approach

- › Practise the scientific approach, including problematisation, formulation and verification of hypotheses, and the use of research methods adapted to the objectives.
- › Search for relevant information.
- › Analysing information, checking it, cross-checking it and processing it critically.

Acting in collaboration and as part of a community

- › Learn about project management methods, including team collaboration.

Programme objectives

The Bachelor's degree in Digital Technologies for Information and Communication provides high-level access to a variety of disciplines in the information and communication sciences, as well as computer sciences and the humanities and social sciences. The Bachelor's degree aims to develop the following skills:

Develop specific knowledge of digital technologies used for information and communication purposes

- › Identify and analyse how digital technologies can influence people's vision and experience of the world and their participation in it.

- › Use digital technologies with the emancipatory aim of strengthening the processes of transmission, exchange, sharing and critical construction of knowledge within society.

Programme's added value

This 180-credit Bachelor's degree offers a multi-skills training in computer science and digital technologies, as well as a consolidated general knowledge of the place of digital technology in our society. The diversity of disciplines covered is useful not only for understanding and analyzing the digital society, but also for acting in it and transforming it. Emphasis is placed on

- › written and oral expression in French and English in the humanities and social sciences (psychology of communication, source criticism, philosophy of the digital age, etc.), enabling students to take a step back from the digital world in order to understand our society
- › IT and technical disciplines (data processing, programming languages, web development, etc.) to enable students to take action.
- › a wide range of practical communication concepts (strategic intelligence, visual communication, design, graphic processing of information, etc.).

At the crossroads of disciplines, the Bachelor's degree will train students with a capacity for analysis and action in various fields of digital communication.

The Faculty of Letters, Translation and Communication (LTC) has developed a policy of helping students to succeed in their bachelor's program.

A tutoring course also enables B3 students to support and mentor B1 students who feel the need to do so.

Each year, students are asked to carry out a project designed to combine theory and practice within a concrete case. This project is carried out individually in B1, in a group in B2 and in a professional environment in B3.

Succeed in your studies

Choose

The information and guidance counsellors at the InfOR-études [<https://www.ulb.be/en/studies-info-desk-1>] service will help you choose your studies throughout the year.

Succeed

Take part in preparatory courses [<https://www.ulb.be/en/studies-info-desk-1>] or get help to succeed [<https://www.ulb.be/en/studies-info-desk-1>], before or during your studies.

Get help

Apply for financial aid, look for accommodation or a student job, get support [<https://www.ulb.be/fr/aides-services-et-accompagnement/aid-services-and-support-1>] for your specific needs.

International/Openness

The internship planned as part of the "Projet 3 : Projet personnel en contexte professionnel" course may take place abroad (optional).

Partnership

Organized by ULB in co-diplomation with UMONS, UCLouvain, IHECS and HEPH Condorcet

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Bloc 1 | BA-TECN























Cours obligatoires

- COMM-B1010 **Cultures numériques**
 5 credits [lecture: 24h] 📅 first term 🗨️ French
- COMM-B1020 **Veille stratégique**
 4 credits [lecture: 20h] 📅 second term 🗨️ French
- COMM-Y1100 **Psychologie de la communication**
 5 credits [lecture: 24h] 📅 first term 🗨️ French
- COMM-Y1110 **Communication visuelle et graphique**
 4 credits [lecture: 30h] 📅 second term 🗨️ French
- COMM-Y1200 **Atelier d'expression en langue française 1**
 5 credits [practical work: 48h] 📅 first term 🗨️ French
- COMM-Y1210 **Projet 1 : Portfolio individuel**
 5 credits [project: 15h] 📅 first and second terms 🗨️ French
- COMM-Y1220 **Anglais**
 5 credits [lecture: 48h] 📅 second term 🗨️ French
- COMM-Y1300 **Initiation aux algorithmes**
 4 credits [lecture: 20h, tutorial classes: 20h] 📅 first term 🗨️ French
- COMM-Y1310 **Introduction au traitement de données**
 4 credits [lecture: 20h, tutorial classes: 20h] 📅 second term 🗨️ French
- COMM-Y1400 **Initiation aux langage de programmation**
 5 credits [lecture: 30h, tutorial classes: 30h] 📅 first term 🗨️ French
- COMM-Y1410 **Fondement du droit**
 4 credits [lecture: 22h] 📅 first term 🗨️ French
- COMM-Y3705 **Théories de la communication et de l'information** | Valeria Ligurgo (Coordinator)
 5 credits [lecture: 24h] 📅 second term 🗨️ French
- HIST-D2700 **Critique historique** | Francine Bolle (Coordinator)
 5 credits [lecture: 24h] 📅 second term 🗨️ French

Bachelor in Digital technologies for information and communication

Bloc 2 | BA-TECN

Cours obligatoires

- COMM-B2010 **Atelier de veille stratégique**
 3 credits [lecture: 15h]  first term  French
- COMM-B2020 **Sociétés numériques**
 8 credits [lecture: 38h]  first and second terms  French
- COMM-Y2100 **Design et création sonore et vidéo**
 8 credits [lecture: 38h]  first and second terms  French
- COMM-Y2110 **Projet 2 : réalisation e groupe**
 10 credits [lecture: 24h]  first and second terms  French
- COMM-Y2200 **Atelier d'expression en langue française 2**
 5 credits [lecture: 24h]  first term  French
- COMM-Y2210 **Project Management (EN)**
 5 credits [lecture: 24h]  second term  French
- COMM-Y2300 **Traitement avancé de données**
 5 credits [lecture: 24h, tutorial classes: 24h]  first term  French
- COMM-Y2310 **Macro économie (économie du numérique)**
 3 credits [lecture: 15h]  second term  French
- COMM-Y2320 **Intelligences artificielles I**
 2 credits [lecture: 10h, tutorial classes: 10h]  second term  French
- COMM-Y2400 **Droit du numérique**
 5 credits [lecture: 24h]  first term  French
- COMM-Y2410 **Traitement des textes et des images**
 6 credits [lecture: 30h]  second term  French

Bachelor in Digital technologies for information and communication

Bloc 3 | BA-TECN

Cours obligatoires

- COMM-B3000 **Tutorat : Accompagnement de l'étudiant.e de début de cycle**
🕒 1 credit [lecture: 6h] 📅 first and second terms 🗨️ French
- COMM-B3010 **Recherche scientifique**
🕒 5 credits [lecture: 24h] 📅 second term 🗨️ French
- COMM-B3020 **Projet 3 : Projet personnel en contexte professionnel (possibilité mobilité)**
🕒 20 credits [lecture: 24h] 📅 second term 🗨️ French
- COMM-Y3100 **Philosophie et numérique**
🕒 5 credits [lecture: 24h] 📅 first term 🗨️ French
- COMM-Y3200 **Digital Marketing Management (EN)**
🕒 5 credits [lecture: 24h] 📅 second term 🗨️ French
- COMM-Y3300 **Intelligence artificielle II**
🕒 3 credits [lecture: 15h] 📅 first term 🗨️ French
- COMM-Y3310 **Séminaire en entrepreneuriat numérique**
🕒 3 credits [lecture: 15h] 📅 first term 🗨️ French
- COMM-Y3320 **Développement web, cloud et mobile**
🕒 8 credits [lecture: 48h] 📅 first and second terms 🗨️ French
- COMM-Y3400 **Traitement graphique de l'information (sémiotique du web)**
🕒 5 credits [lecture: 24h] 📅 first term 🗨️ French
- COMM-Y3410 **UX /UI Design**
🕒 5 credits [lecture: 24h] 📅 first term 🗨️ French