RÉPUBLIQUE FRANÇAISE

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UNIVERSITÉ DE TECHNOLOGIE DE BELFORT-MONTBÉLIARD

UTBM ENGLISH COURSES

Academic Year 2026-2027*

**Courses listed are given for information only and can be subject to modifications.*

www.utbm.fr

Teaching approach at UTBM is focused **on practical application.** The theoretical knowledge acquired is used to carry out projects in the same way as in a business environment.

We advise you to choose between 4 to 6 UE (30 ECTS). **Students must choose their subjects in one campus only.** Enrolment in a course is subject to validation of UTBM pedagogical team and available places*

Courses can either be entirely taught in English ("**ENG - full**") or taught in French with materials, support and exams available in English ("**ENG - support**").

4 professional majors are fully available in English (20-25 ECTS) and appear as red in the document.

Our programmes

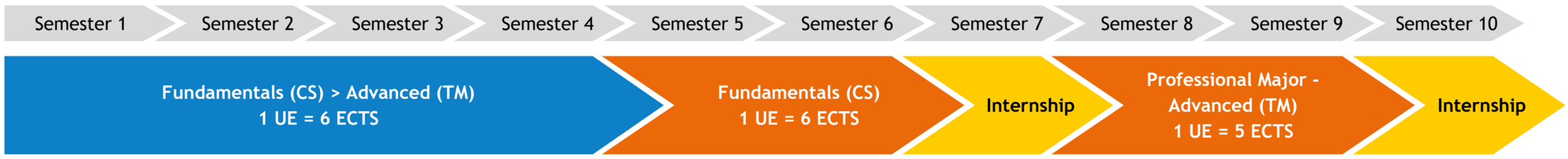
Sevenans	Belfort	Montbéliard
Undergraduate - 2nd year	Energy Engineering	Mechanical Engineering and Ergonomics - **1 major**
Industrial Systems - **1 major**	Computer Science **- 2 majors**	
Mechanical Engineering		

+ Projects + Languages + Technology, Science and Society

UTBM curriculum

Undergraduate
Interdisciplinary ground knowledge.

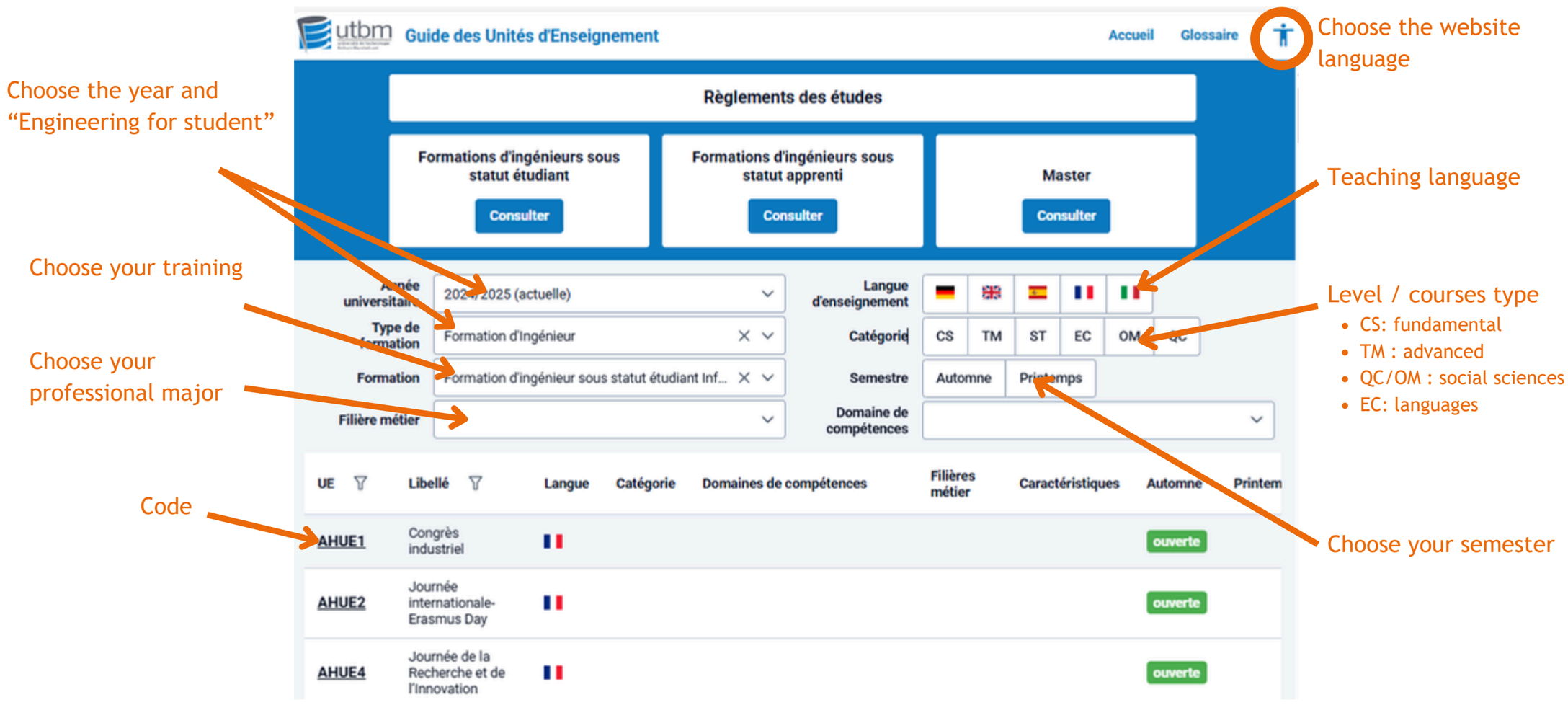
Engineering cycle
Specialization in an engineering discipline.



UE = subject

Guide des UE

To discover the syllabi, go on *le guide des UE*.



* Students choosing subjects in either only **undergraduate, engineering cycle-CS, or engineering cycle-one full professional major** will be pre-enrolled. Enrolment in other subjects will be made during the *Welcome Week* after publication of the timetable. See UE guide for more details.

Sevenans Campus

Undergraduate *Tronc Commun*

AUTUMN SEMESTER

UE code	Name	ECTS credits	Level	ENG
MT3E	Second year algebra and analys	6	TM	Full
IF3E/ IF3B	Introducting to databases / Practical Computer Science	6	TM	Sup-port

SPRING SEMESTER

UE code	Name	ECTS credits	Level	ENG
PS28	Thermodynamics	6	CS	Full
EL22	Initiation to Automatic Control	6	TM	Sup-port
LP2A/LP2B	Introduction to object conception and programming / Multimedia: digital representation	6	TM	Full

Sevenans Campus

Industrial systems
Génie industriel

AUTUMN SEMESTER

UE code	Name	ECTS credits	Level	Prof. major	ENG
GP40	Operations management	6	CS		Support

SPRING SEMESTER

UE code	Name	ECTS credits	Level	Prof. major	ENG
Digital Industry (20 ECTS)					
UN57	Industrial Robotics and Automation	5	TM	IN	Full
UN58	Industry 4.0	5	TM	IN	Full
UN59	Digital twin	5	TM	IN	Support
PIN5	Project in Digital Industry *(to be chosen in a list of subjects)*	5	TM	IN	Full

Sevenans Campus

Mechanical Engineering

AUTUMN SEMESTER

UE code	Name	ECTS credits	Level	Prof. major	ENG
CP58	Lean Product Development	5	TM	PDP	Full
MN56	Advanced modelling and smiluation in mechanical engineering	5	TM	SOSM	Full
PSOSM, PPDP	Project in Mechanical Engineering *(to be chosen in a list of subjects)*	5	TM	PDP, SOSM	Full

SPRING SEMESTER

UE code	Name	ECTS credits	Level	Prof. major	Prof. major
CP41	Design methods in mechanical engineering	6	CS		Full
MN44	Introduction to mobile-physics simulation	6	CS		Full
CP51	PLM and Design for X	5	TM	IPD	Full
CP55	Design and modelling for additive manufacturing	5	TM	IPD	Full
PIPD	Project in Mechanical Engineering *(to be chosen in a list of subjects)*	5	TM	IPD	Full

Belfort Campus

Energy Engineering
Énergie et génie électrique

AUTUMN SEMESTER

UE code	Name	ECTS credits	Level	Prof. Major	ENG
EL48	Electrical machines	6	CS		Sup-port
RE51	Power system analysis and control	5	TM	RE	Sup-port
RE52	Renewable energy: design and control	5	TM	RE	Full
BR54	Hydrogen stationnary for buildings	5	TM	BR	Full
ESP3	Project in Energy Engineering *(to be determined with a teacher)*	6	TM	All	Full

SPRING SEMESTER

UE code	Name	ECTS credits	Level	Prof. Major	ENG
OI43	Introduction to Matlab - Simulik	6	CS		Full
SE52	Advanced power electronics	5	TM	SE	Full
SE53	Embedded systems	5	TM	SE	Full
PE52	Renewable energy: principle and technology	5	TM	PE	Full
PB54	Energy Storage	5	TM	PE	Full
ESP3	Project in Energy Engineering *(to be determined with a teacher)*	6	TM	All	Full

Belfort Campus

Science *Informatique* **Computer**

AUTUMN SEMESTER

UE code	Name	ECTS credits	Level	Prof. Major	ENG
PC40	Parallel Computing and Multicolore Architec	6	CS		Full
RE4E/F	Introduction to networks - Routing and switching essentials	6	CS		Sup-port
SY48	Compiler and language theory	6	CS		Full

Artificial Intelligence (25 ECTS)

AI50	Development project - AI *(to be chosen in a list of subjects)*	5	TM	AI	Full
AI51	Multi-Agent systems and simulation	5	TM	AI	Full
AI52	Advances optimization technics	5	TM	AI	Full
AI53	Machine learning by practice	5	TM	AI	Full
AI54	Generative AI	5	TM	AI	Full
VA56	Introduction to mobile robotics	5	TM	VA	Full
RC53	Cloud infrastructure and vistualization	5	TM	RC	Full
AS21	Project in Computer Science *(to be determined with a teacher)*	5	TM	All	Full

Belfort Campus

Science Informatique Computer

SPRING SEMESTER

UE code	Name	ECTS credits	Level	Prof. Major	ENG
IT41	Classical and Quantum Algorithms	6	CS		Full
SY43	Android development	6	CS		Sup-port

Data Science (25 ECTS)

DS50	Development project - Data Science *(to be chosen in a list of subjects)*	5	TM	DS	Full
DS51	Smart analytics and data management	5	TM	DS	Full
DS52	Data science fundamentals	5	TM	DS	Full
DS53	Business intelligence big data	5	TM	DS	Full
DS55	Blockchain and distributed systems	5	TM	DS	Full

DE50	Development project - Development *(to be chosen in a list of subjects)*	5	TM	DE	Full
DE52	Software engineering	5	TM	DE	Sup-port
DE53	Associate Cloud Engineer	5	TM	DE	Full
AS52	Project in Computer Science *(to be determined with a teacher)*	5	TM	All	Full

Montbéliard Campus

Mechanical Engineering and Ergonomics
Mécanique et Ergonomie

AUTUMN SEMESTER

UE code	Name	ECTS credits	Level	Prof. Major	ENG
User-Centered Mobility and Sustainability (25 ECTS)					
MS51	Specific aspects of vehicule engineering: automobile, railway, aircraft.	5	TM	MS	Sup-port
MS52	Engineering for sustainable targets	5	TM	MS	Sup-port
MS53	Simulation in vehicule engineering	5	TM	MS	Sup-port
CM54	Digital technology in 5.0 engineering	5	TM	MS	Sup-port
MS50	Project in Mobility and Sustainability *(to be chosen in a list of subjects)*	5	TM	MS	Sup-port

Free electives

Projects

AUTUMN & SPRING SEMESTERS

Subjects are to be determined with a teacher. Please send us beforehand a list of desired subjects of study approved by your home university.

UE code	Name	ECTS credits
ESP3	Tutored project - bachelor level	6
ESP4	Tutored project - master's level	12
ESP5	Tutored project - PhD level	18

Humanities and Social Sciences and Society, Technology, Sustainability

UE code	Name *(availability to be confirmed)*	Semester	ECTS credits
EC1E	Fundamental of economics for the engineer		5
EC07	Nudges		5
CC03	American studies		5
CC04	British studies		5
CC05	Intercultural awareness: how to become a global citizen ?		5
EI02	The rest of the English speaking world		5
EI03	International security and global challenges		5
EV02	Energy and environment		5
MG06	Patents as tools for engineers		5
MR5X	Project in social sciences *(to be determined with a teacher)*		5

Free electives

Languages

Level 1-3 and post : your language level will be tested upon your arrival.

AUTUMN & SPRING SEMESTERS			
UE code	**Name** *(availability to be confirmed)*	**ECTS credits**	**Prerequisites**
LE01	English level 1	4	French level
LE02	English level 2	4	English level
LE03	English level 3 - International exam	6	English level
LE05	English post level 3 - Business issue	4	English level
LE07	English post level 3 - Technology and industry	4	English level
LE08	English post level 3 - Written communication	4	English level
LE09	English post level 3 - Oral communication	4	English level
LF70	French for begineers	4	
LF71	French level 1	4	French level
LF72	French level 2	4	French level
LF73	French level 3	4	French level
LF74	French level 4 - International exam	6	French level
LC00	Chinese for beginners	4	French level
LC01	Chinese level 1	4	Chinese level
LC02	Chinese level 2	4	Chinese level
LC08	Chinese - preparation to HSK exam	4	Chinese level

Free electives

Languages

Level 1-3 and post : your language level will be tested upon your arrival.

AUTUMN & SPRING SEMESTERS

UE code	Name *(opening depends on the number of students)*	ECTS credits	Prerequisites
LG00	German for beginners	4	French level
LG01	German level 1	4	German level
LG02	German level 2	4	German level
LG03	German level 3 - International exam	6	German level
LG05	German post-level 3 - Business	4	German level
LI00	Italian for beginners	4	French level
LI01	Italian level 1	4	Italian level
LR00	Russian for beginners	4	French level
LS00	Spanish fo beginners	4	French level
LS01	Spanish level 1	4	Spanish level
LS02	Spanish level 2	4	Spanish level
LS03	Spanish level 3 - International exam	6	Spanish level

RÉPUBLIQUE FRANÇAISE

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DISCOVER OUR FRENCH LESSONS



5 different levels

From real beginner to taking an international exam (A1-B2)

Small classes

15 students maximum for a personnalised teaching





Discovery of French culture

For a total immersion

Classes certified “Label Qualité FLE”

A guarantee of quality

[flə]
QUALITÉ
FRANÇAIS LANGUE ÉTRANGÈRE
Label officiel délivré par l'État
RÉPUBLIQUE FRANÇAISE

★ ★ ★ formations
★ ★ ★ enseignants
★ ★ ★ accueil
★ ★ ★ locaux
★ ★ ★ gestion

29 mars 2024 - 28 mars 2028