



**UNIVERSITÉ DE TECHNOLOGIE** DE BELFORT-MONTBÉLIARD

# Study engineering in a French University of Technology

Study programs in English for International Students

[www.utbm.fr](http://www.utbm.fr)

# STUDY ENGINEERING IN A FRENCH UNIVERSITY OF TECHNOLOGY

## → **An exchange semester**

Programs available in Computer Sciences, Mechanical, Industrial and Energy engineering.

## → **The possibility to continue with the complete engineering diploma in french**

## → **A summer school with courses in english**



# INDUSTRIAL SYSTEMS ENGINEERING AND MANAGEMENT

## PROGRAM IN ENGLISH

### FALL SEMESTER → September to February

n°	UV	Name	ECTS credits
<b>Bachelor level</b>			
1	CP47	Basic CAD: introduction to 3D modeling in CATIA	3
2	TW43	CAD project	3
3	GP40	Operations management	6
4	TX53	Laboratory project	6
or (4)	TO53	Operational project	6
or (4)	TW53	Application project	6
<b>Master level</b>			
1	QP54	Continuous improvement : Lean Engineering Management (Subject to availability)	6
<b>Additional courses for Bachelor or Master level</b>			
/	-	French or other Foreign language course (see courses catalogue on <a href="http://guideuv.utbm.fr">http://guideuv.utbm.fr</a> )	4
/	EI00	French Insight: discover France through the major issues facing society today (plus other humanities see list page 7)	5

### SPRING SEMESTER → February to July

n°	UV	Name	ECTS credits
<b>Bachelor level</b>			
1	OI43	Introduction to Matlab/Simulink	6
5	CP47	Basic CAD: introduction to 3D modeling in CATIA	3
3	TW43	CAD project	3
4	OI43	Introduction to MathSimulink	6
<b>Master level</b>			
1	SY55	Automated systems architecture and network for industry 4.0	6
2	TW53	Automated systems project	6
3	UN55	Model-based engineering systems: software architecture	6
<b>Additional courses for Bachelor or Master level</b>			
/	-	French or other Foreign language course (see courses catalogue on <a href="http://guideuv.utbm.fr">http://guideuv.utbm.fr</a> )	4
/	EI00	French Insight: discover France through the major issues facing society today (plus other humanities see list page 7)	5

# MECHANICAL ENGINEERING AND DESIGN PROGRAM IN ENGLISH

## FALL SEMESTER → September to February

n°	UV	Name	ECTS credits
Last year of Bachelor level / First year of Master level			
1	MN56	Advanced modeling and simulation in mechanical engineering	6
2	CP58	Lean Product Development	6
3	MA51	Additive Manufacturing	6
4	MQ52	Non-linear mechanics	
5	TX51	Laboratory project	6
or (5)	TO51	Operational project	6
or (5)	TW51	Application project	6
Additional courses			
6	-	French or other Foreign language course (see courses catalogue on <a href="http://guideuv.utbm.fr">http://guideuv.utbm.fr</a> )	4
7	EI00	French Insight: discover France through the major issues facing society today ( <i>plus other humanities see list page 7</i> )	5

## SPRING SEMESTER → February to July

n°	UV	Name	ECTS credits
Bachelor level			
1	CP41	Design methods in mechanical engineering	6
3	MN44	Introduction to multi-physics simulation	6
Master level			
1	MA53	Material forming and product assembly	6
2	MA54	Engineering of innovative materials for design	6
3	TX51	Laboratory project	6
or (3)	TO51	Operational project	6
or (3)	TW51	Application project	6
4		PLM and design for X: Collaborative design, product-process data management, PLM	6
Additional courses for Bachelor or Master level			
/	-	French or other Foreign language course (see courses catalogue on <a href="http://guideuv.utbm.fr">http://guideuv.utbm.fr</a> )	4
/	EI00	French Insight: discover France through the major issues facing society today ( <i>plus other humanities see list page 7</i> )	5

# COMPUTER SCIENCES PROGRAM IN ENGLISH

## FALL SEMESTER → September to February

n°	UV	Name	ECTS credits
Last year of Bachelor level / First year of Master level			
1	REA1	Introduction to networks	3
2	REA2	Routing and switching essentials	3
3	LO47	Multi-core and parallel computing	6
4	AG44	Graph Theory and Applications	6
5	BD51	Business Intelligence and Data Warehouse	6
Additional courses			
6	-	French or other Foreign language course (see courses catalogue on <a href="http://guideuv.utbm.fr">http://guideuv.utbm.fr</a> )	4
7	EI00	French Insight: discover France through the major issues facing society today (plus other humanities see list page 7)	5

## SPRING SEMESTER → February to July

n°	UV	Name	ECTS credits
Master level			
1	IA51	Artificial intelligence for serious games	6
or (1)	LO53	Positioning systems techniques and applications	6
2	TX52	Laboratory project	6
or (2)	TO52	Operational project	6
or (2)	TW52	Application project	6
or (2)		Introduction to Matlab/Simulink	6
Additional courses			
3	-	French or other Foreign language course (see courses catalogue on <a href="http://guideuv.utbm.fr">http://guideuv.utbm.fr</a> )	4
4	EI00	French Insight: discover France through the major issues facing society today (plus other humanities see list page 7)	5

# ENERGY PROGRAM IN ENGLISH

## FALL SEMESTER → September to February

n°	UV	Name	ECTS credits
Last year of Bachelor level / First year of Master level			
1		Energy economics	6
2		Renewable energy design and control	6
3		Laboratory project	6
4		Power systems analysis and control (Subject to availability)	6
Additional courses			
5	-	French or other Foreign language course (see courses catalogue on <a href="http://guideuv.utbm.fr">http://guideuv.utbm.fr</a> )	4
6	EI00	French Insight: discover France through the major issues facing society today (plus other humanities see list page 7)	5

## SPRING SEMESTER → February to July

n°	UV	Name	ECTS credits
Master level			
1	ER54	Renewable energy principles and technology	6
Bachelor level			
1	OI43	Introduction to Matlab/Simulink	6
2	TX54	Laboratory project	6
or (2)	TO54	Operational project	6
or (2)	TW54	Application project	6
Additional courses for Bachelor or Master level			
/	EV02	Energy, environment and sustainable development (Subject to availability)	5
/	-	French or other Foreign language course (see courses catalogue on <a href="http://guideuv.utbm.fr">http://guideuv.utbm.fr</a> )	4
/	EI00	French Insight: discover France through the major issues facing society today (plus other humanities see list page 7)	5

# HUMANITIES

## ADDITIONAL COURSES

### FALL & SPRING SEMESTERS

n°	UV	Name	ECTS credits
Bachelor & Master levels			
1	EI03	International security and global challenges	5
2	EI04	Industrial buying, selling and negotiation	5
3	EV02	Energy, environment and sustainable development	5
4	PA02	Cross-cultural studies	2

## SUMMER SCHOOL

### COURSES IN ENGLISH

4 to 6 weeks in May, June and July

- Energy (option 3-day FC lab summer school € 250)
- Mechanical Engineering
- Computer Sciences
- Social sciences
- Industrial systems

#### Content

- Research project or Operational project or Application project (6 ECTS credits)
- Innovation challenge: technical project in partnership with industry (1 week in May)
- French Insight: discover France through major issues facing society (5 ECTS credits)
- International Street Music Festival in early June
- Eurokéennes: major 3-day rock festival in early July (approx € 45 per day)

## CONTACTS

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