



MODEL WEEKLY TIME-TABLES

2024-2025

Teaching units in pink are taught at ECAM Lyon.

Semester 1	h/week	Semester 2	h/week
MATHS FOR ENG. (1)	3	MATHS FOR ENG. (2)	3
ELECTRICAL ENG.	3	THERMODYNAMICS	3
MATERIALS (1)	3	MATERIALS (2)	3
MECHANICS (1)	3	MECHANICS (2)	3
MECHANICAL DESIGN (1)	2	MECHANICAL DESIGN (2)	2
HUMANITIES (1)	6	HUMANITIES (2)	6
	20		20



Semester 3	h/week
MATHS FOR ENG. (3)	5.5
FLUID MECHANICS (1)	3
STRENGTH OF MATER.	3
KINEMATICS of mechanical systems	3
MANUFACTURING	3
HUMANITIES (3)	6
	23,5

Semester 4

SEMESTER AT STRATHCLYDE OR TWENTE UNIVERSITY

Aerospace / Aerodynamics electives

Semester 5	h/week
CONTROL ENGINEERING	3
THERMODYNAMICS AND PROPULSION	3
HEAT TRANSFER	3
MACHINE ELEMENTS	8
TRANSDUCERS & MEASUREMENTS	3
HUMANITIES (4) PRE-PROFESS	6
	26

Semester 6	Total hours
COMPOSITE MATERIALS	30
MUTLI-PHYSICS/ MECHATRONICS	30
FLIGHT MECHANICS	20
HUMANITIES (5) PRE-PROFESS	20
INTERNSHIP IN INDUSTRY 4 MONTHS	April - July

Final projects from October to March

Teaching units and credits

Students validate 30 ECTS credits per semester leading to a total of 180 ECTS credits on completion of their degree.

Semester 1

UE-IBENG-1 Mechanical and Materials Engineering-S1	ECTS Credits 13	UE-IBENG-1 General Engineering-S1	ECTS Credits 11	UE-IBENG-1 Personal development -1-S1 (*)	ECTS Credits 6
EC1: MECHANICS (1)	5	EC1: MATHS FOR ENGINEERING (1)	5	EC1: FRENCH AS A FOREIGN LANGUAGE	6
EC2: MECHANICAL DESIGN (1)	3	EC2: ELECTRICAL ENGINEERING	4	EC2: LANGUAGE EC3: SPORT	
EC3: MATERIALS (1)	5	EC3: ENGINEERING COM- MUNICATION	2	EC4: NON SCIENTIFIC OPTIONS <i>(*) choice based on French level</i>	

Semester 2

UE-IBENG-1 Mechanical and Materials Engineering-S2	ECTS Credits 12	UE-IBENG-1 General Engineering -S2	ECTS Credits 12	UE-IBENG-1 Personal development -1-S2 (*)	ECTS Credits 6
EC1: MECHANICS (2)	6	EC1: MATHS FOR ENGINEERING (2)	5	EC1: FRENCH AS A FOREIGN LANGUAGE	6
EC2: MECHANICAL DESIGN (2)	2	EC2: PROJECTS	2	EC2: LANGUAGE EC3: SPORT	
EC3: MATERIALS (2)	4	EC3: THERMODYNAMICS	4	EC4: NON SCIENTIFIC OPTIONS <i>(*) choice based on French level</i>	
		EC4: SCIENTIFIC PROGRAMMING	1		

Semester 3

UE-IBENG-2 Mechanical and Materials Engineering-S3	ECTS Credits 12	UE-IBENG-2 General Engineering -S3	ECTS Credits 12	UE-IBENG-2 Personal development -S3 (*)	ECTS Credits 6
EC1: STRENGTH OF MATERIALS	4	EC1: MATHS FOR ENGINEERING (3)	6	EC1: FRENCH AS A FOREIGN LANGUAGE	6
EC2: KINEMATICS OF MECHA- NICAL SYSTEMS	4	EC2: INTERNSHIP (end of year 1)	2	EC2: LANGUAGE EC3: SPORT	
EC3: MANUFACTURING	4	EC3: FLUID MECHANICS	4	EC4: NON SCIENTIFIC OPTIONS <i>(*) choice based on French level</i>	

Semester 4

At the University of Strathclyde (Glasgow-UK)

IBENG-2 General Engineering-S4	ECTS Credits 10	IBENG-2 Mechanical and Aerospace Engineering-S4	ECTS Credits 15	IBENG-2 Personal Development-S4	ECTS Credits 5
EC1: ENGINEERING ETHICS	3	EC1: FLIGHT AND SPACEFLIGHT	5	EC1: ELECTIVE OR FRENCH AS A FOREIGN LANGUAGES	5
EC2: EXPERIMENTAL AND LABORATORY SKILLS	3	EC2: AERODESIGN	5		
EC3: AUTOMOTIVE SYSTEMS	4	EC3: ENGINEERING ANALYSIS (FE)	5		

At the University of Twente (Enschede - The Netherlands)

IBENG-2 Fluid and Heat-S4	ECTS Credits 15	IBENG-2 Mechatronics-S4	ECTS Credits 15
EC1: FLUID MECHANICS-2	4	EC1: SYSTEM AND CONTROL ENGINEERING	4
EC2: PROJECT IN FLUID DYNAMICS AND AERODYNAMICS-2	7	EC2: MECHATRONICS PROJECT	7
EC3: HEAT TRANSFER	4	EC3: DYNAMICS	4

Semester 5

IBENG-3 General Engineering-S5	ECTS Credits 12	IBENG-3 Mechanical and Aerospace Engineering-S5	ECTS Credits 12	IBENG-3 Personal and Professional development-S5	ECTS Credits 6
EC1: HEAT TRANSFER	4	EC1: MACHINE ELEMENTS	5	EC1: ELECTIVE *	4
EC2: CONTROL ENGINEERING	4	EC2: THERMODYNAMICS AND PROPULSION	4	EC2: INTERNATIONAL ENGINEERING PRACTICE (1)	2
EC3: TRANSDUCERS AND MEASUREMENTS	4	EC3: FINAL PROJECT (1)	3	<i>(*depending on French level)</i>	

Semester 6

IBENG-3 Industrial Engineering-S6	ECTS Credits 18	IBENG-3 Aerospace Engineering-S6	ECTS Credits 7	IBENG-3 Personal and Professional Development-S6	ECTS Credits 5
EC1: FINAL PROJECT (2)	6	EC1: COMPOSITE MATERIALS	2	EC1: ELECTIVE *	1
EC2: INTERNSHIP IN INDUSTRY (2)	12	EC2: MULTI-PHYSICS/ MECHATRONICS	3	EC2: ENGINEERING PRACTICE (2)	3
		EC3: FLIGHT MECHANICS	2	EC3: INTERNATIONAL CULTURE	1

*(*depending on French level)*