

## Cycle view of the study programme

B1 Or Th Pr Au Cr

Depending on your educational background or depending on the focus, it is possible that the prerequisites / corequisites for the 1st year of the programme are presented in the block 2. You are therefore invited to read through the list of courses in block 2 even if you are registering for the first time in this master.

### Core curriculum compulsory courses (B1 : 60Cr, B2 : 30Cr)

ARCH2007-2	<i>Environmental design of buildings in the context of sustainable development</i> - AnneFrançoise MARIQUE, Sigrid REITER - [2d FW, 40h Proj.]	B1	Q1	15	30	[+]	5
	<b>Corequisite :</b> ARCH0115-1 - Ateliers d'architecture IV						
ARCH0115-1	<i>Architectural studio IV, integrated conception</i> - Catherine ELSEN - [1d FW, 88h Proj.]	B1	Q1	20	130	[+]	10
	<b>Corequisite :</b> ARCH2007-2 - Conception architecturale et urbaine durable ARCH0075-3 - S3C : Studio de Conception Computationnelle Collaborative						
GCIV0201-2	<i>Concretes and new Materials Technologies</i> - Luc COURARD - [0,5d FW, 6h Labo., 8h Proj.]	B1	Q1	32	20	[+]	5
ARCH3333-1	<i>Existing constructions - Intervention principles</i> - Maurizio COHEN, Claudine HOUBART	B1	Q2	40	-	-	3
ARCH3271-1	<i>Introduction to scientific research</i> - Mario COOLS - [30h Proj.]	B1	Q2	10	10	[+]	2
PHIL0076-1	<i>Aesthetics and contemporary art</i> - Maud HAGELSTEIN	B1	Q2	30	-	-	3
ARCH3283-1	<i>Acoustics and lighting of buildings</i> - <i>Introduction</i> - Arnaud THIENPONT - <i>Methods and applications</i> - Arnaud THIENPONT - [16h Proj.]	B1	Q1	15	14	-	5
				15	10	[+]	
ARCH2011-1	<i>Sustainable building construction techniques IV : Building renovation</i> - Guirec RUELLAN - [2d FW]	B1	Q2	15	15	[+]	3
GCIV2063-1	<i>Planning buildings, coordination and safety on building sites</i> (english language) - Fabian BOUCHER - [1d FW]	B1	Q1	15	15	[+]	2
ARCH2003-1	<i>Urbanisation dynamics</i> - Jacques TELLER - [65h Proj.]	B1	Q2	26	26	[+]	5
ARCH0075-3	<i>S3C: Collaborative Computational Design Studio</i> - Aurélie DE BOISSIEU - [1d FW, 78h Proj.]	B1	Q2	15	45	[+]	7
	<b>Corequisite :</b> ARCH0115-1 - Ateliers d'architecture IV						
ASTG9002-1	<i>Professional internship</i> - Shady ATTIA - [20d FW, 20h Proj.]	B1	TA	-	-	[+]	3
ARCH3336-1	<i>Setting up real-estate operations</i> - Mathurin SMOOS	B1	Q2	32	-	-	3
MECA0512-1	<i>Thermodynamics, machines and thermal systems: applications in the building sector</i> - Vincent LEMORT - [1d FW]	B1	Q2	26	26	[+]	4
ARCH0116-3	<i>Architectural studio V: integrated project</i> - Jacques TELLER - [1d FW, 150h Proj.]	B2	Q2	-	100	[+]	10
	<b>Corequisite :</b> ARCH0115-1 - Ateliers d'architecture IV						
ATFE0009-1	<i>Master thesis / project</i> - COLLÉGIALITÉ, Mario COOLS - [600h Proj.]	B2	TA	-	-	[+]	20

Cycle of conferences on the professional competences of the engineer/architect (code of ethics, organising real estate operations, public procurement, etc.): compulsory attendance.

Study trip: guided tours on architectural and urbanistic achievements (optional)

A visit to a business (optional).

Final year trip: at the beginning of the academic year, prior to the organisation of the courses, guided tours to companies, geological sites (optional).

*Notice* : with the agreement of the President of the jury, students can also choose a course from catalogue

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**Additional courses for Erasmus students (B2 : 14Cr)**

LANG0840-1	<i>French, S1 - 1er quadrimestre</i> - ISLV, Marielle MARÉCHAL	B2	Q1	-	-	-	<b>5</b>
LANG0840-2	<i>French, S2 - 2e quadrimestre</i> - ISLV, Marielle MARÉCHAL	B2	Q2	-	-	-	<b>5</b>
GCIV0008-2	<i>Energy and transport (english language)</i> - Mario COOLS - [25h Proj.]	B2	Q1	30	15	[+]	<b>4</b>

**Focus courses (B2 : 30Cr)**

UEEN0007-1	<i>District Energy Systems (english language)</i> - Pierre DEWALLEF - [8h Proj., 1d FW]	B2	Q1	16	8	[+]	<b>3</b>
UEEN0008-1	<i>Urban water systems (english language)</i> - Benjamin DEWALS - [12h Proj.]	B2	Q1	18	18	[+]	<b>3</b>
UEEN0002-1	<i>Land rehabilitation in urban environments (english language)</i> - Serge BROUYÈRE, Frédéric COLLIN - [10h Labo., 20h Proj., 2d FW]	B2	Q1	20	10	[+]	<b>5</b>
UEEN0003-1	<i>Urban resilience (english language)</i> - [60h Proj., 1d FW]	B2	Q1	36	16	[+]	<b>5</b>
UEEN0004-1	<i>Urban planning and transportation (english language)</i> - Mario COOLS, Jacques TELLER - [1d FW]	B2	Q1	26	26	[+]	<b>5</b>
UEEN0005-1	<i>Participatory Design at an Urban Scale (english language)</i> - Catherine ELSÉN - [20h Proj., 1d FW]	B2	Q1	20	10	[+]	<b>3</b>
UEEN0006-1	<i>UEE Integrated Project (english language)</i> - Luc COURARD - [100h Proj., 1d FW]	B2	Q1	-	90	[+]	<b>6</b>

**Bridging courses Master of science in architecture and engineering (aimed at bachelors in architecture)**

**Compulsory courses (B0 : 60Cr)**

*Notice* : aux conditions qu'il apprécie, le jury peut admettre les porteurs du diplôme de bachelier en architecture avec un complément de programme pouvant comporter jusqu'à 60 crédits additionnels (voir liste ci-dessous). La liste des unités d'enseignement composant cet aménagement sera ajusté en fonction des acquis particuliers des candidates et candidats.

MATH0002-5	<i>Analyse mathématique 1</i> - <i>Théorie et applications</i> - Eric DELHEZ - <i>Bases mathématiques et répétitions</i> - Patricia TOSSINGS	B0	Q1	22	22	-	<b>8</b>
MATH0066-1	<i>Complement of mathematics 2</i> - Patricia TOSSINGS	B0	Q2	26	26	-	<b>4</b>
ARCH0006-2	<i>Methodology of Architectural Projects II : bioclimatic composition</i> - Pierre LECLERCQ - [1d FW, 85h Proj.]	B0	TA	40	50	[+]	<b>8</b>
MECA0001-2	<i>Mechanics of materials</i> - JeanFrançois DEMONCEAU, Laurent DUCHENE - [2h Labo., 12h Proj.]	B0	Q1	27	25	[+]	<b>5</b>
MECA0012-6	<i>Solid mechanics</i> - Laurent DUCHENE - [15h Proj.]	B0	Q2	26	26	[+]	<b>5</b>
GCIV0184-5	<i>Building Materials</i> - Luc COURARD, Anne HABRAKEN - [0,5d FW, 12h Labo., 12h Proj.]	B0	Q2	36	16	[+]	<b>5</b>
GCIV2172-1	<i>Metallic Elements Calculation</i> - JeanFrançois DEMONCEAU - [1d FW, 10h Proj.]	B0	Q2	26	26	[+]	<b>5</b>
GCIV2173-1	<i>Reinforced concrete (english language)</i> - Boyan MIHAYLOV - [1d FW, 10h Proj.]	B0	Q2	26	26	[+]	<b>5</b>
ARCH0009-3	<i>Sustainable building construction techniques III: networks</i> - Shady ATTIA - [1d FW, 45h Proj.]	B0	Q1	17	35	[+]	<b>5</b>

GCIV0608-1	<i>Introduction to Structures engineering</i> - JeanFrançois DEMONCEAU, Margaux GEUZAINÉ - [4d FW, 40h Proj.]	B0	Q2	12	12	[+]	5
GCIV2030-2	<i>Structural Design of Buildings</i> - JeanFrançois DEMONCEAU - [40h Proj.]	B0	Q1	15	30	[+]	5

**Bridging courses (aimed at bachelors or students with a degree in engineering - this includes students from Institut Mines Telecom d'Alès, from 'Ecole d'Ingénieurs de La Rochelle, from Polytech Lille, from 'Institut de Technologie du Cambodge et and from EPF Troyes, Sceaux, Montpellier)**

**Compulsory courses (B0 : 60Cr)**

*Notice* : this programme is likely to be adjusted according to skills previously acquired by the student.

ARCH0002-1	<i>Methodology of Architectural Projects I : functional and ergonomical composition</i> - Pierre LECLERCQ - [1d FW, 100h Proj.]	B0	TA	30	60	[+]	8
ARCH3270-1	<i>Architectural studio IA: Graphic composition</i> - Catherine ELSEN - [1d FW, 35h Proj.]	B0	Q1	10	40	[+]	3
ARCH0066-2	<i>Architectural studio IB: architectural composition</i> - Catherine ELSEN - [1d FW, 25h Proj.]	B0	Q2	10	40	[+]	4
ARCH0006-2	<i>Methodology of Architectural Projects II : bioclimatic composition</i> - Pierre LECLERCQ - [1d FW, 85h Proj.]	B0	TA	40	50	[+]	8
ARCH0068-7	<i>Urban Analytics, Theory</i> - Jacques TELLER	B0	Q1	15	20	-	2
ARCH0017-4	<i>Digital architectural modeling</i> - Aurélie DE BOISSIEU - [98h Proj.]	B0	Q2	20	70	[+]	6
ARCH2224-1	<i>Architectural culture 2 - history of construction - Antiquity to the 19th century</i> - Philippe SOSNOWSKA	B0	Q2	40	-	-	4
ARCH3260-2	<i>Architectural studio II, Introduction</i> - Catherine ELSEN - [1d FW, 85h Proj.]	B0	TA	20	70	[+]	7
ARCH3262-1	<i>Architectural studio III A</i> - Shady ATTIA - [1d FW, 55h Proj.]	B0	Q1	10	35	[+]	5
ARCH3263-1	<i>Architectural studio III B</i> - Sigrid REITER - [1d FW, 55h Proj.]	B0	Q2	10	35	[+]	4
GCIV0646-1	<i>Buildings conception and execution</i> - <i>Basic concepts</i> - [1d FW] - <i>Advanced concepts + Project</i> - [40h Proj.]	B0	Q2	24	-	[+]	4
				16	-	[+]	
ARCH3281-1	<i>Summary of construction practices in the building industry</i> - Pierre LECLERCQ - [1d FW, 30h Proj.]	B0	Q1	7	45	[+]	5