

#### 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.

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

ARCH0065-2	<i>Design Process Analysis</i> - Samia BEN RAJEB, Pierre LECLERCQ - [18h Proj.]	B2	Q2	15	30	[+]	3
GCIV0165-1	<i>Timber constructions</i> (english language)	B2	Q1	15	15	-	3
ARCH3282-1	<i>Urban Transport &amp; Mobility</i> (english language) - Mario COOLS - [30h Proj., 2d FW]	B2	Q1	25	25	[+]	5
ARCH2019-1	<i>Engineering of urban environments</i> - Sigrid REITER - [60h Proj.] <b>Corequisite :</b> ARCH2007-2 - Conception architecturale et urbaine durable	B2	Q1	18	36	[+]	5
ARCH2018-1	<i>Urban and territorial governance</i> - Christophe BREUER, Jacques TELLER	B2	Q1	20	-	-	2
ARCH3337-1	<i>Computational design</i> - Aurélie DE BOISSIEU - [1d FW]	B2	Q2	15	42	[+]	2
SPOL2209-3	<i>Territorial development and the environment: Policies and legal aspects</i> - Sophie HANSON	B2	Q1	30	-	-	2
ARCH3272-1	<i>Building performance simulation and monitoring</i> (english language) - Part 1 - Shady ATTIA - Part 2 - Shady ATTIA - [70h Proj.] <b>Prerequisite :</b> ARCH0080-1 - Physique du bâtiment et climatisation	B2	Q1	15	15	-	5
GCIV0133-9	<i>Maintenance, repair and reinforcement of constructions</i> (english language) - Luc COURARD - [1d FW] <b>Prerequisite :</b> GCIV0201-2 - Technologie des bétons et matériaux nouveaux	B2	Q1	20	20	[+]	3

#### Cours obligatoires du tronc commun (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.] <b>Corequisite :</b> ARCH0115-1 - Ateliers d'architecture IV	B1	Q1	15	30	[+]	4
ARCH0115-1	<i>Architectural studio IV, integrated conception</i> - Catherine ELSEN - [1d FW, 88h Proj.] <b>Corequisite :</b> ARCH2007-2 - Conception architecturale et urbaine durable ARCH0075-3 - Studio Digital Collaboratif BIM	B1	Q1	20	130	[+]	10
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>	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> - Introduction - Arnaud THIENPONT - Methods and applications - Arnaud THIENPONT - [16h Proj.]	B1	Q1	15	14	-	5
ARCH0080-1	<i>Building physics and air conditioning</i> - Philippe ANDRE	B1	Q2	30	30	-	4
ARCH2011-1	<i>Sustainable building construction techniques IV : Building renovation</i> - [2d FW]	B1	Q2	15	15	[+]	4
GCIV2063-1	<i>Planning buildings, co-ordination and safety on building sites</i> -	B1	Q1	15	15	[+]	2

BOUCHER - [1d FW]

ARCH2003-1	<i>Urbanisation dynamics</i> - Jacques TELLER - [65h Proj.]	B1	Q2	26	26	[+]	5
ARCH0075-3	<i>Studio Digital Collaboratif BIM</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
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

*Notice* : Cycle de conférences sur les compétences professionnelles de l'ingénieur architecte (déontologie, montage d'opérations immobilières, marchés publics,...) : participation obligatoire

*Notice* : 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 UNIC.

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

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

**Additional credits, Master of Science (MSc) in Architectural Engineering (aimed at Bachelors and qualified engineers - in particular students from the "Institut Mines Telecom d'Alès", from the "Ecole d'Ingénieurs de La Rochelle, de Polytech Lille", from the "Institut de Technologie du Cambodge" and from the "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 ELSSEN - [1d FW, 35h Proj.]	B0	Q1	10	40	[+]	3
ARCH0066-2	<i>Architectural studio IB: architectural composition</i> - Catherine ELSSEN - [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

### Master MSc. in Architectural Engineering, professional focus in architectural and urban engineering

ARCH2224-1	<i>Architectural culture 2 - history of construction - Antiquity to the 19th century</i>	B0	Q2	40	-	-	<b>4</b>
ARCH3260-2	<i>Architectural studio II, Introduction</i> - Catherine ELSEN - [1d FW, 85h Proj.]	B0	TA	20	70	[+]	<b>7</b>
ARCH3262-1	<i>Architectural studio III A</i> - Shady ATTIA - [1d FW, 55h Proj.]	B0	Q1	10	35	[+]	<b>5</b>
ARCH3263-1	<i>Architectural studio III B</i> - Sigrid REITER - [1d FW, 55h Proj.]	B0	Q2	10	35	[+]	<b>4</b>
GCIV0646-1	<i>Buildings conception and execution</i> - <i>Basic concepts</i> - Boyan MIHAYLOV - [1d FW] - <i>Advanced concepts + Project</i> - [40h Proj.]	B0	Q2	40	-	[+]	<b>4</b>
ARCH3281-1	<i>Summary of construction practices in the building industry</i> - [1d FW, 30h Proj.]	B0	Q1	7	45	[+]	<b>5</b>

### Additional ECTS Master of science in architecture and engineering (aimed at bachelors in architecture)

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

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

MATH0002-5	<i>Mathematical analysis I</i> - <i>Part 1</i> - Eric DELHEZ - <i>Part 2</i> - Patricia TOSSINGS - [26h QA Sess.]	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> - 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> - [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>
ARCH3281-1	<i>Summary of construction practices in the building industry</i> - [1d FW, 30h Proj.]	B0	Q1	7	45	[+]	<b>5</b>
GCIV0608-1	<i>Introduction to Structures engineering</i> - Vincent DENOËL - [4d FW, 40h Proj.]	B0	Q1	12	12	[+]	<b>5</b>