

Two-Year Master Program (120 ECTS)

Access conditions to the Master (http://www.ulg.ac.be/cms/c_46354/master-en-ingenieur-civil-des-constructions)

First Year

Compulsory courses

GCIV0201-2	<i>Choice and maximisation of construction materials</i> - Luc COURARD - [1d FW]	30	30	[+]	5
GCIV2032-1	<i>Design and means of erection of structures and bridges</i> - Vincent DE VILLE DE GOYET, JeanMarc FRANSSSEN	30	30	-	5
GCIV2033-2	<i>Steel, concrete, timber and composite steel-concrete construction</i> - JeanFrançois DEMONCEAU, JeanMarc FRANSSSEN, JeanPierre JASPART, Boyan MIHAYLOV, N... - Suppl : François KAISER - [2d FW]	60	60	[+]	10
GEOL0001-1	<i>Geology and Geology for Engineers</i> - Alain DASSARGUES - [2d FW]	35	25	[+]	5
GCIV2034-1	<i>Free surface flow</i> - Michel PIROTON	30	30	-	5
GCIV2035-1	<i>Environmental hydrodynamics</i> - Benjamin DEWALS	30	30	-	5
GCIV2036-2	<i>Soil and rock mechanics</i> - Frédéric COLLIN - [1d FW]	25	25	[+]	4
GCIV2037-1	<i>Structural Mechanics II</i> - Hervé DEGÉE, Vincent DENOËL	35	35	-	6
GCIV0185-2	<i>Numerical methods in Civil and Geological Engineering</i> - <i>Linear methods</i> - Laurent DUCHENE, Michel PIROTON	30	30	-	10
GCIV0009-1	<i>Hydraulic constructions</i> - Sébastien ERPICUM, Philippe RIGO	30	30	-	5

Notice : Students who, in their Bachelor studies, have already taken the compulsory course GEOL0001-1 *Geology and Engineering Geology* from this Master's programme are forced to replace it by a course chosen from :

- * GEOL0023-4 *Engineering geology (integrated project)*- 10h+30h+2 j.T.t - 5 ECTS - NGUYEN F.
- * ARCH00003-4 *Method of construction of buildings I*- 30h+30h+ 2,5jT.t - 5 ECTS - N. Suppl. : Mauro BACCARINI

Second year

Compulsory courses

GCIV2065-1	<i>Hydraulic engineering II</i> - Benjamin DEWALS, Philippe RIGO - [3d FW]	30	30	[+]	5
GCIV2066-1	<i>Technical Economic Planning and Analysis</i> - Mario COOLS	15	15	-	3
GCIV2039-2	<i>Seminar</i> - COLLÉGIALITÉ - [2d FW]	20	-	[+]	2
ATFE0010-1	<i>Final Work (including an introduction to methodology and research)</i> - COLLÉGIALITÉ	-	-	-	20

Final year trip: visits to works of art (optional).

Choose one focus from the following :

Research Focus

Compulsory courses

PRCO0001-1	<i>Integrated civil engineering project</i> - Vincent DENOËL, Boyan MIHAYLOV	-	80	-	8
ASTG0016-1	<i>Placement</i> - COLLÉGIALITÉ	-	-	-	5

Optional courses

Choose one option from the following :

Civil Engineering Works

GCIV2048-1	<i>Waterways</i> - Philippe RIGO	20	20	-	4
GCIV0133-9	<i>Maintenance, restoration and protection of buildings</i> - Luc COURARD - [1d FW]	30	10	[+]	3

GCIV2049-1	<i>Geotechnical structures</i> - Frédéric COLLIN, JeanPol RADU - [1d FW]	30	30	[+]	6
GCIV2050-2	<i>Accidental and exceptional actions</i> - Hervé DEGÉE, JeanFrançois DEMONCEAU, Vincent DENOËL, JeanMarc FRANSSSEN, Michel PIROTON	30	20	-	4

Urban Project and Transport

A new programme is being prepared for 2013-2014. Note: Erasmus IN students are asked to consult the programme for the Masters in Civil Architecture, including the option "Urban and Transport Project".

Architecture and Building Engineering

ELEN0077-3	<i>Introduction to acoustics and lighting</i> - JeanJacques EMBRECHTS	30	15	-	3
ARCH2015-2	<i>Air conditioning</i> - Philippe ANDRE	30	15	-	3
GCIV2042-2	<i>Designing buildings in high-risk areas</i> - Hervé DEGÉE, JeanFrançois DEMONCEAU, Vincent DENOËL, JeanMarc FRANSSSEN	16	8	-	2
GCIV2063-1	<i>Planning buildings, co-ordination and safety on building sites</i> - S. KREUSCH, JeanMarie RIGO	15	15	-	2
ARCH0019-2	<i>Project management II</i> - N... - Suppl : Sylvain KUBICKI - [2d FW]	15	15	[+]	2
ELEC0434-1	<i>Residential electric installations</i> - JeanLouis LILIE	15	15	-	2
GCIV0133-9	<i>Maintenance, restoration and protection of buildings</i> - Luc COURARD - [1d FW]	30	10	[+]	3

Teaching and civil engineering

Notice : Notice : All the lectures are given in English

GCIV2056-1	<i>Sustainable materials and structures</i> (english language) - Luc COURARD, JeanPierre JASPART, Barbara ROSSI	30	30	-	5
GCIV2058-2	<i>Environmental geotechnics</i> (english language) - Frédéric COLLIN	30	30	-	5
GCIV0625-1	<i>Water purification</i> (english language) - Frank DELVIGNE	30	15	-	3
GCIV2060-1	<i>River basin management</i> (english language) - Benjamin DEWALS, Sébastien ERPICUM	20	20	-	4

Professional focus in management

Compulsory courses

GEST3001-1	<i>People management and organisation</i> - Jocelyne ROBERT	24	24	-	4
GEST3002-1	<i>Human Resources</i> - Jocelyne ROBERT	24	-	-	2
GEST3003-1	<i>Competitive strategy in the marketplace</i> (english language) - Michael GHILISSEN	16	16	-	3
GEST3004-1	<i>Marketing (operations and management)</i> (english language) - Michael GHILISSEN	16	16	-	3
GEST3005-2	<i>Accountancy and Finance</i> - Jacques BERWART	24	24	-	4
GEST3006-1	<i>Operations and supply chain management I</i> (english language) - Yasemin ARDA	16	16	-	3
GSTG3001-1	<i>Business plan</i> - COLLÉGIALITÉ	-	30	-	4
GSTG3002-1	<i>Functional analysis of a company</i> - COLLÉGIALITÉ - [30h Internship]	-	-	[+]	4

Optional courses

Choose one of the following courses :

GEST3010-1	<i>Operations and supply chain management II</i> - Sabine LIMBOURG	16	16	-	3
GEST3011-2	<i>ICT for Business</i> - Alain DUBOIS	16	16	-	3
GEST3012-1	<i>Financial and actuarial modelling</i> - Louis ESCH	16	16	-	3

Adjusted programme for student of the Bachelors in Civil Engineering who have not taken the "Structure" option

Students studying for the Bachelors in Civil Engineering who have not chosen the appropriate option :

- * must take all the so-called "prerequisite" courses hereafter, if they were not taken during the 1st cycle. These courses must be taken during the 1st year of the masters and some 1st-year compulsory courses must be rolled over to the 2nd year.
- * must subsequently reduce the number of courses they choose to take in the 2nd year of the masters. If all the "prerequisite" courses must be taken, it will be impossible for them to choose which courses they take.
- * cannot choose the professional "management" focus.

The program adapted by these students has to receive the preliminary agreement of the Jury.

Compulsory prerequisites

GCIV0097-1	<i>Steel and concrete constructions</i> - JeanPierre JASPART, Boyan MIHAYLOV - Suppl : François KAISER	35	35	-	6
GCIV0603-2	<i>Geotechnics and infrastructure</i> - Robert CHARLIER, JeanPol RADU - [1d FW]	30	30	[+]	5
GCIV0604-2	<i>Hydraulics</i> - Michel PIROTON	20	20	-	4
GCIV0184-5	<i>Building Materials</i> - Luc COURARD - [1d FW]	30	30	[+]	5
MECA0012-5	<i>Solid mechanics</i> - Laurent DUCHENE	30	30	-	5
GCIV0624-2	<i>Structural mechanics</i> - JeanMarc FRANSSSEN	30	30	-	5