

Advanced Master in the Water-Energy-Food Nexus

Cycle view o	of the study programme	B1	Or	Th	Pr	Au	Cr
Compulsory cou	rses (B1:45Cr)						
Module 1: Int	roduction and basic concepts						
Opening semin	ars of the water-energy-food Nexus ¿ Charles BIELDERS, Gilles COLINE	ET, B	ernard	I TYC	HON		
HULG0559-1	Challenges of sustainable development, transition and development of the EEA Nexus dimension - Challenges of sustainable development and transition - Philippe BARET, Nathalie DELZENNE, Valérie SWAEN - Development of the EEA Nexus dimension - Charles BIELDERS, Gilles COLINET, Bernard TYCHON	B1	Q1 22,5 6	- 3	-		4
Module 2: The	e 3 components of the NEXUS EEA						
Water security	y component						
ENVT3040-2	Integrated and participative management of water resources - Johan DEROUANE, Joost WELLENS	B1	Q1	32	16	-	4
Energy securit	ty component						
ENVT0892-1	Integrated energy management, particularly in the construction industry - Philippe ANDRE, Maxime HABRAN	B1	Q1	32	16	-	4
Food security	component						
ENVT0073-1	Agricultural production systems and food security - Antoine DENIS, Pierre OZER, Bernard TYCHON	B1	Q1	20	20	-	4
Module 3: Inte	erconnections of the 3 components of the EEA Nexus and case studies						
ENVT0074-1	Nexus Water-Energy-Food seminars: case studies of interconnections - Charles BIELDERS, Gilles COLINET, Antoine DENIS, Bernard TYCHON - [38h SEM, 10h Vis.]	B1	TA	-	-	[+]	4
HULG0560-1	Natural resources: appropriation and resistance - An ANSOMS	<b>B</b> 1	Q2	30	-	-	3
HULG0561-1	Water-Food Nexus: modelling and analysis tools - Mathieu JAVAUX, Marnik VANCLOOSTER	B1	Q2	22,5	22,5	-	4
Module 4: Tec	chnical tools						
ENVT2027-4	Application of teledetection and geographical information systems for environmental management - Antoine DENIS, Bernard TYCHON	B1	Q1	12	24	-	3
Module 5: Per	sonal work in the form of an internship						
STFE0035-1	<i>Personal work in the form of an internship</i> - COLLÉGIALITÉ - [1,5mois Internship]	B1	Q2	-	-	[+]	15
Optional courses	(B1:15Cr)						
Module 2: The	e 3 components of the NEXUS EEA						

In agreement with the Jury, choose courses for a total of 8 credits, including a maximum of 1 course among the 3 courses ENVT3035-2, ENVT0068-2, GEST3019-2 (Note: for an annual programme of more than 60 credits, contact the Beadle's office): (B1:8Cr)

### Water security component

HULG0562-1	Irrigation and drainage - Mathieu JAVAUX	B1	Q2	22,5	22,5	-	4
ENVT3035-2	Wastewater treatment, production of drinking water and recovery of wastewater for irrigation - Hugues JUPSIN - [6h FT]	B1	Q1	24	12	[+]	4
Energy security component							

#### Energy security component

ELEC0080-1	Energy networks	B1	Q1	4
------------	-----------------	----	----	---



## Study programmes 2023-2024

# Faculty of Sciences

## Advanced Master in the Water-Energy-Food Nexus

	- Part 1: Electrical energy systems - Damien ERNST - Part 2: Heat networks - Pierre DEWALLEF - [1d FW]		24 6	12 6	- [+]		
ENVT0068-2	<i>Exploitation of renewable energy</i> - Philippe ANDRE, Manfred GREGER, Vincent HANUS	B1	Q1	32	16	-	4
Food security	component						
HULG0487-1	Soil management and development in warm region - Charles BIELDERS, Bruno DELVAUX	B1	Q2	22	8	-	3
GEST3019-2	Food policies and strategies (english language) - Hossein AZADI - [3h FT]	B1	Q1	9	15	[+]	3

### Module 3: Interconnections of the 3 components of the EEA Nexus and case studies

In agreement with the Jury, choose courses for a total of 5 credits from: (Note: for an annual programme of more than 60 credits, contact the Beadle's office): (B1 : 5Cr)

GEOG0073-1	Town and country planning, food and energy security - Serge SCHMITZ	B1	Q2	24	-	-	3
HULG0490-1	Evaluation of the environmental impact: diagnosis and indicators - Charles BIELDERS, Pierre DEFOURNY	B1	Q2	22,5	-	-	3
ENVT0075-1	Waste: water, energy and food resources - Luc MINNE - [3h Vis.]	B1	Q2	21	-	[+]	3
ECON0945-1	<i>Economy, energy and environment</i> - Nadia DE ZOTTI, HenryJean GATHON, Axel GAUTIER	B1	Q1	24	5	-	2
Module 4: Technical tools							

With the agreement of the Jury, choose 1 course from: (B1: 2Cr)

HULG0563-1	Evaluation of the environmental impact: project and introduction to managing databases, part F: Managing databases - Guillaume LOBET	B1	Q2	12	12	-	2
ENVT0736-4	Development projects management and communication, Part 1: Development projects management - N, Bernard TYCHON	B1	Q1	12	12	-	2
GEST7085-1	Leadership best practices (english language) - Michael GHILISSEN	B1	Q2	-	16	-	2