

## EDUCATIONAL PLAN

### SEMESTER 1 -

YEAR I  
2018 / 2019

Nr Crt.	Name of the discipline	Cod	C	Applications			SI	TO	CR	Prerequisites	Form of examination
				S	L	Pr					
1	Numerical analysis and programming languages / software development environments	1.DF.DI.01	2	2	-	-	4	8	6		C
2	Techniques of acquiring and processing data	1.DD.DI.02	2	-	1	-	5	8	6		E
3	<b>Optional discipline A:</b> A.1. Advanced Engineering Thermodynamics. A.2. Modeling and simulating installations in unsteady states; A.3. Advanced Fluid Mechanics;	1.DD.DO.03	2	1	-	-	4	7	6		E
4	Dynamic behavior of thermal-hydraulic systems	1.DS.DI.04	2	-	-	-	3	5	4		E
5	Modeling and simulation of installation systems	1.DS.DI.05	1	3	-	-	8	12	8		E
<b>TOTAL</b>			<b>9</b>	<b>6</b>	<b>1</b>	<b>-</b>	<b>24</b>	<b>40</b>	<b>30</b>		<b>4E+1C</b>

### SEMESTER 2

Nr Crt.	Name of the discipline	Cod	C	Applications			SI	TO	CR	Prerequisites	Form of examination
				S	L	Pr					
1	Comfort and air quality in buildings with special purposes	2.DS.DI.01	1	1	-	-	3	5	4		E
2	The use of renewable energy resources in buildings (heat pumps, solar and geothermal energy)	2.DD.DI.02	1	-	1	-	6	8	5		E
3	Radiation Heating and Cooling	2.DS.DI.03	1	-	1	-	2	4	3		C

4	Systems/equipment for preventing and fighting fires	2.DS.DI.04	1	1	-	-	2	4	3		E
5	<b>Optional discipline B:</b> B.1. Ensuring the reliability and the maintenance of installation systems; B.2. Noise and vibration proofing of buildings and building services.	2.DS.DO.05	1	1	-	-	2	4	2		C
6	Air-conditioning of multi-zone buildings	2.DS.DI.06	1	1	-	-	2	4	4		C
7	Low power cogeneration	2.DS.DI.07	1	1	-	-	3	5	4		E
8	Air distribution in rooms and ventilation efficiency	2.DS.DI.08	1	1	-	-	2	4	4		C
	Academic integrity and ethics	2.DC.DI.09	1	-	-	-	1	2	1		C
	<b>TOTAL</b>		<b>9</b>	<b>6</b>	<b>2</b>	<b>-</b>	<b>23</b>	<b>40</b>	<b>30</b>		<b>4E+ 5C</b>

Crossing first year to second year Master studies required obtaining 30 credits.

**SEMESTER 3**  
**II 2019/2020**

**YEAR**

Nr Crt	Name of the discipline	Cod	C	Applications			SI	TO	CR	Prerequisites	Form of examination
				S	L	Pr					
1	Energy consumption in heating and domestic hot water systems	3.DS.DI.01	2	-	-	-	6	8	6		E
2	Energy consumption in ventilation, air conditioning and refrigeration systems	3.DS.DI.02	2	2	-	-	5	9	6		E
3	Expertise, energy audit and energy certification of buildings	3.DS.DI.03	2	2	1	-	7	12	8		E
4	Commissioning of heating and air conditioning systems	3.DD.DI.04	2	-	-	-	2	4	4		C
5	<b>Optional discipline C:</b> C.1. Passive house design C.2. Heat and moisture transfer through building insulation	3.DD.DO.05	1	-	-	-	2	3	2		C
6	Energy management of building services – BMS systems	3.DS.DI.06	1	1	-	-	2	4	4		E
	<b>TOTAL</b>		<b>10</b>	<b>5</b>	<b>1</b>	<b>-</b>	<b>24</b>	<b>40</b>	<b>30</b>		<b>4E+ 2C</b>

**SEMESTER 4**

Nr Crt	Name of the discipline	Cod	C	Applications			SI	TO	CR	Pre requisi tes	Form of examinati on
				S	L	Pr					
1	Research and design activities		-	-	-	7	13	20	15	-	C
2	Accomplishment and completion of the Master thesis		-	-	-	7	13	20	15	-	C
<b>TOTAL</b>			-	-	-	14	26	40	30		2C

Notes to the disciplines: "Research activities - design" and "Finalization and elaboration of the dissertation work" are received from the coordinating didactic framework of the dissertation work, during the summer session.

**The support of the Dissertation Work for the acquisition of the Master's Degree is subject to obtaining 120 credits.**

	Dissertation paper support								10	120 ECTS	E
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**TOTAL CREDITS FOR OBTAINING THE MASTER'S DEGREE: 130  
CREDITS**

**RECTOR**

**DEAN,**

**Prof. Univ. dr. ing. Radu Sorin VĂCĂREANU**

**Prof. Univ. dr. ing. Sorin BURCHIU**