#### TECHNICAL UNIVERSITY OF CLUJ-NAPOCA

### FACULTY OF BUILDING SERVICES ENGINEERING

### DEPARTMENT OF BUILDING SERVICES ENGINEERING

# THEMES FOR THE PROFESSIONAL ACTIVITY (2024 – 2025)

#### SECOND YEAR – PROFESSIONAL MASTER

#### PROGRAM NAME: BUILDING SERVICES FOR REGENERATIVE CITIES

No.	Theme	Coordinator	Student
1.	Impact of building's services on city assessments	Conf.dr.ing. Beu Dorin	Ursa P.Alexandru Petru
2.	Cost differences between green buildings and regular one	Conf.dr.ing. Beu Dorin	Anitei V. Elena Iuliana
3.	Role of standardization in twin transition	Conf.dr.ing. Beu Dorin	Contolencu R.Theodor
4.	Optimizing a HVAC system for a microchip production facility to increase energy efficiency during operation	Conf.dr.ing. Domnița Florin	Goga G. Mihnea Cristian
5.	Optimizing a HVAC system for a multi-purpose facility to increase energy efficiency during operation	Conf.dr.ing. Domnița Florin	
6.	Designing heating systems for a nZeB building using renewables	Conf.dr.ing. Abrudan Ancuța	Marton I. Roland
7.	Circular Economy and Life Cycle Assessment in the Steel Industry	Conf.dr.ing. Ilutiu-Varvara Dana Adriana	Sechei Bogdan
8.	Life cycle analysis for steelmaking industry	Conf.dr.ing. Ilutiu-Varvara Dana Adriana	Colceriu Paul Razvan
9.	Indoor environmental quality	S.l.dr.ing. Rus Tania	Les Tudor
10.	Circular economy in building services	S.l.dr.ing. Rus Tania	Sinescu F.Marius
11.	Positive energy district	S.l.dr.ing. Rus Tania	Boldizsar Levente
12.	Designing an energy efficient HVAC installation serving an office building	S.l.dr.ing. Pop Octavian	Bogya P.Akos
13.	Assessment of the possibilities of retrofitting DHW system that serve a swimming complex	S.l.dr.ing. Pop Octavian	
14.	Solutions for rainwater management	S.l.dr.ing. Mureșan Dan S.l.dr.ing. Deac Anagabriela	

Decan,

Conf.dr.ing. Florin DOMNIȚA

Director de departament, Conf.dr.ing. Ciprian BACOŢIU

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### PROGRAM NAME: BUILDING SERVICES FOR REGENERATIVE CITIES

No.	Theme	Coordinator	Student
1.	Designing heating systems for a nZeB building using renewables	Conf.dr.ing. Abrudan Ancuța	
2.	Comparison between floor and ceiling heating	Conf.dr.ing. Abrudan Ancuța	
3.	Vitrified clay pipes vs PVC pipes for urban sewers	Conf.dr.ing. Bacotiu Ciprian	
4.	Concrete pipes vs HDPE pipes for urban sewers	Conf.dr.ing. Bacotiu Ciprian	
5.	Impact of building's services on city assessments	Conf.dr.ing. Beu Dorin	Alin Rus
6.	Green Financing	Conf.dr.ing. Beu Dorin	My Linh
7.	Green mobility and impact on schools	Conf.dr.ing. Ciugudeanu Calin	
8.	PV systems for educational buildings	Conf.dr.ing. Ciugudeanu Calin	
9.	Optimizing a HVAC system for to increase energy efficiency during operation	Conf.dr.ing. Domnița Florin	
10.	Optimizing a HVAC system for to increase energy efficiency during operation	Conf.dr.ing. Domnița Florin	
11.	Life Cycle Assessment of Polyvinyl Chloride (PVC) Pipes	Conf.dr.ing. Ilutiu-Varvara Dana	
12.	Life Cycle Assessment of Steel Pipes	Conf.dr.ing. Ilutiu-Varvara Dana	
13.	Circular Economy in the Steel Industry	Conf.dr.ing. Ilutiu-Varvara Dana	
14.	Design solution of renewable energy sources for public buildings	S.l.dr.ing. Corsiuc Georgiana	
15.	Risk analysis of water distribution networks: a GIS based approach	S.l.dr.ing. Iacob Cristina	
16.	The management of water supply system using GIS applications	S.l.dr.ing. Iacob Cristina	
17.	Green sewage water treatment	S.l.dr.ing. Deac Anagabriela	
18.	Use of rainwater in schools	S.l.dr.ing. Deac Anagabriela	
19.	Solutions for rainwater management	S.l.dr.ing. Mureşan Dan	
20.	Water consumption in schools	S.l.dr.ing. Mureşan Dan	
21.	Designing an energy efficient HVAC installation serving an office building	S.l.dr.ing. Pop Octavian	
22.	Assessment of the possibilities of retrofitting DHW system that serve a swimming complex	S.l.dr.ing. Pop Octavian	

23.	Positive Energy District	S.l.dr.ing. Rus Tania	
24.	Indoor environmental quality analysis in educational buildings	S.l.dr.ing. Rus Tania	
25.	Optimizing Building Performance through Parametric Design and Fabrication	S.l.dr.ing. Rusu Daniel	

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