

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA

FACULTY OF BUILDING SERVICES ENGINEERING

DEPARTMENT OF BUILDING SERVICES ENGINEERING

THEMES FOR THE PROFESSIONAL ACTIVITY (2025 – 2026)

FIRST YEAR – PROFESSIONAL MASTER

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 HDPE pipes for urban sewers	Conf.dr.ing. Bacotiu Ciprian	
4.	Concrete pipes vs PVC pipes for urban sewers	Conf.dr.ing. Bacotiu Ciprian	
5.	Impact of building's services on city assessments	Conf.dr.ing. Beu Dorin	
6.	Green Financing	Conf.dr.ing. Beu Dorin	
7.	Green mobility and impact on schools	Conf.dr.ing. Ciugudeanu Calin	
8.	PV systems for educational buildings	Conf.dr.ing. Ciugudeanu Calin	
9.	Life Cycle Assessment of Polyvinyl Chloride (PVC) Pipes	Conf.dr.ing. Ilutiu-Varvara Dana	
10.	Circular Economy in the Steel Industry	Conf.dr.ing. Ilutiu-Varvara Dana	
11.	Design solution of renewable energy sources for public buildings	S.l.dr.ing. Corsiuc Georgiana	
12.	Risk analysis of water distribution networks: a GIS based approach	S.l.dr.ing. Iacob Cristina	
13.	The management of water supply system using GIS applications	S.l.dr.ing. Iacob Cristina	
14.	Green sewage water treatment	S.l.dr.ing. Deac Anagabriela	
15.	Use of rainwater in schools	S.l.dr.ing. Deac Anagabriela	
16.	Solutions for rainwater management	S.l.dr.ing. Mureșan Dan	
17.	Water consumption in schools	S.l.dr.ing. Mureșan Dan	
18.	Designing an energy efficient HVAC installation serving an office building	S.l.dr.ing. Pop Octavian	
20.	Assessment of the possibilities of retrofitting DHW system that serve a swimming complex	S.l.dr.ing. Pop Octavian	
21.	Positive Energy District	S.l.dr.ing. Rus Tania	
22.	Indoor environmental quality analysis in educational buildings	S.l.dr.ing. Rus Tania	
23.	Natural Insulation in Construction: Benefits an Impact	S.l.dr.ing. Rusu Daniel	
24.	Optimizing Building Performance through Parametric Design and Fabrication	S.l.dr.ing. Rusu Daniel	

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SECOND YEAR – PROFESSIONAL MASTER

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	
6.	Green Financing	Conf.dr.ing. Beu Dorin	
7.	Green mobility and impact on schools	Conf.dr.ing. Ciugudeanu Calin	
8.	PV systems for educational buildings	Conf.dr.ing. Ciugudeanu Calin	
9.	Life Cycle Assessment of Polyvinyl Chloride (PVC) Pipes	Conf.dr.ing. Ilutiu-Varvara Dana	
10.	Life Cycle Assessment of Steel Pipes	Conf.dr.ing. Ilutiu-Varvara Dana	
11.	Design solution of renewable energy sources for public buildings	S.l.dr.ing. Corsiuc Georgiana	
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15.	Green sewage water treatment	S.l.dr.ing. Deac Anagabriela	
16.	Use of rainwater in schools	S.l.dr.ing. Deac Anagabriela	
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18.	Water consumption in schools	S.l.dr.ing. Mureșan Dan	
20.	Designing an energy efficient HVAC installation serving an office building	S.l.dr.ing. Pop Octavian	
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22.	Positive Energy District	S.l.dr.ing. Rus Tania	
23.	Indoor environmental quality analysis in educational buildings	S.l.dr.ing. Rus Tania	
24.	Natural Insulation in Construction: Benefits an Impact	S.l.dr.ing. Rusu Daniel	

25.	Timber Frame Buildings	S.l.dr.ing. Rusu Daniel	
26.	Optimizing Building Performance through Parametric Design and Fabrication	S.l.dr.ing. Rusu Daniel	

Decan,
Conf.dr.ing. Florin DOMNIȚA

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