



National University of Engineering (UNI)

School of Civil Engineering
Syllabus 2026-II

1. COURSE

CE2C6. Territorial Planning I (Mandatory)

2. GENERAL INFORMATION

2.1 Course	: CE2C6. Territorial Planning I
2.2 Semester	: 7 th Semester.
2.3 Credits	: 3
2.4 Hours	: 2 HT; 2 HP;
2.5 Duration of the period	: 16 weeks
2.6 Type of course	: Mandatory
2.7 Learning modality	: Face to face
2.8 Prerequisites	: CE1G1. General Geology. (2 nd Sem)

3. PROFESSORS

Meetings after coordination with the professor

4. INTRODUCTION TO THE COURSE

Territorial Planning I introduces the historical process of human settlement and territorial planning, planning theories and methodologies, and the different types and modalities of urban and territorial planning through case studies.

5. GOALS

- Describe the historical process of human settlement and its relationship with territorial planning.
- Apply planning theories and methodologies to the analysis of a territory.
- Distinguish the types and modalities of urban and territorial planning based on case studies.

6. COMPETENCES

ABET-1) An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics. (Usage)

ABET-2) An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. (Usage)

7. TOPICS

Unit 1: Historical Urban Planning Theories (15 hours)	
Competences Expected: ABET-1	
Topics	Learning Outcomes
• Classic urban theories: Howard's Garden City, Le Corbusier's Radiant City (Towers in the Park), Wright's Broadacre City, and their influence on 20th-century planning and zoning • Post-WWII planning: the rise of the master plan, Team 10 critique of CIAM, Jane Jacobs' advocacy for mixed-use and short blocks,	• Describe the key historical urban planning theories and their influence on 20th-century city form, and explain the shift from master planning to strategic [Familiarity]
Readings : [HT14]	

Unit 2: Contemporary Planning Methods and Theory (29 hours)	
Competences Expected: ABET-1	
Topics	Learning Outcomes
- Planning methods: zoning (Euclidean, form-based, performance-based), master planning vs. strategic planning, public participation (charrettes, community workshops) - Smart growth and new urbanism: principles (transit-oriented development, walkability, mixed-income housing, urban growth boundaries), Andrés Duany's transect, - Contemporary urban theory: Lefebvre's production of space, Harvey's right to the city, Sennett's open city, and the role of informality, participation, - Integration of civil engineering technical constraints (structural, geotechnical, utility infrastructure, and transportation) into urban planning and architectural design frameworks; the collaborative role of civil engineers in multidisciplinary building and urban project teams	- Apply a planning method - such as form-based coding or scenario planning - to a specific urban site, producing land use or built form regulations that align with stated policy [Usage] - Evaluate a current urban plan or zoning code against contemporary planning principles (walkability, mixed-use, transit orientation, social equity), identifying strengths [Assessment]
Readings : [HT14]	

Unit 3: Urban Design at Multiple Scales (12 hours)	
Competences Expected: ABET-2	
Topics	Learning Outcomes
- Regional and city scale: transit corridors, green belts, growth boundaries, satellite towns, and the relationship between density - Neighborhood scale: walkability (5-10 minute walking radius), mixed-use zoning, social infrastructure (schools, clinics, community centers), and the 20-minute neighborhood concept - Block and street scale: block length for pedestrian permeability (80-120 m max), street section design (lane widths, sidewalks, bike lanes, street trees, furniture zone), - Public space design: squares, plazas, parks, pocket parks, and streets as public space; William Whyte's elements of successful public space (sittable space, sun, food - Urban design guidelines: building setbacks, height limits, architectural character, facade articulation, signage, lighting,	- Describe the key design considerations at each urban scale - regional, neighborhood, block, street, and public space - [Familiarity] - Develop a set of urban design guidelines for a specific neighborhood or street typology, integrating density, building height, block length, street section, [Usage] - Evaluate an urban design project for its multi-scale coherence, assessing how well it integrates regional transit, neighborhood walkability, block permeability, street safety, [Assessment]
Readings : [HT14]	

8. WORKPLAN

8.1 Methodology

Individual and team participation is encouraged to present their ideas, motivating them with additional points in the different stages of the course evaluation.

8.2 Theory Sessions

The theory sessions are held in master classes with activities including active learning and roleplay to allow students to internalize the concepts.

8.3 Practical Sessions

The practical sessions are held in class where a series of exercises and/or practical concepts are developed through problem solving, problem solving, specific exercises and/or in application contexts.

9. EVALUATION SYSTEM

***** EVALUATION MISSING *****

10. BASIC BIBLIOGRAPHY

[HT14] Peter Hall and Mark Tewdwr-Jones. *Urban and Regional Planning*. 6th. Routledge, 2014.