SUMMER SEMESTER 2026
DESIGN STUDIO 2

IOUD - Institute Of Urban Design
825126 PJ Design Studio 2

Instructors:
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Meetings: weekly meetings on Wednesday

PLANETARY CITIES

DESIGN BRIEF

The course introduces students to disciplinary approaches to urban design and aims to discover hidden potentials and reimagine a city fabric. Rather than treating the city as a fixed object, the course frames it as a composite structure formed by interacting layers. Through a combination of formal analysis, precedent studies using diagrams, and practical design exercises, students will develop hybrid structures embedded within the urban fabric of planetary cities by building a controllable urban synthesis engine. The outcome is a series of multilayered hybrid conditions that reimagine urban form as an evolving synthesis rather than a singular identity.

Students work in pairs and engage with curated city fragments representing three distinct urban morphologies associated with specific historical and ideological positions. The course unfolds in three phases:

PROCESS

PHASE 1: ANALYSIS

Students conduct a thorough formal analysis of selected city fragments. Each fragment represents one of three distinct urban paradigms. Through layered drawing, students examine main recurring urban elements. These elements exist in every urban context, but in each of the cities their formal and topological qualities are different.

The objective of this phase is to learn how to "read" the city — to identify underlying rules, spatial hierarchies, density patterns, and ideological implications embedded in urban form. Analytical drawings and diagrams serve as tools to reveal structural logic.

PHASE 2: INTRA-CITY HYBRIDISATION

Within a single city context, students hybridise the three analysed morphologies. Working layer by layer, they recombine road systems, block configurations, parcel structures, architectural elements and spatial hierarchies to generate new urban conditions that negotiate between ideological paradigms. This phase emphasises controlled transformation and the development of a multilayer synthesis method.

PHASE 3: INTER-CITY HYBRIDISATION

Students extend the synthesis across different cities, combining morphological systems between contexts. Layered recomposition becomes more complex: transformations in one layer (e.g., circulation) are tested against their consequences in others (e.g., parcelisation, built form, public space distribution). AI tools are used as speculative instruments to test and visualise alternative configurations while maintaining analytical rigor.

METHODOLOGY

The course combines formal analytical methods with digital modelling and AI-assisted generative exploration. Urban fragments are examined through systematic formal analysis, focusing on spatial structure and morphological logic. Analytical drawings and diagrams are produced to reveal the underlying organisation of each layer.

Rhinoceros 3D and Adobe Illustrator are used as the primary tools for geometric reconstruction and multilayer modelling.

AI-based generative tools are introduced as exploratory instruments within the design process. They are used to test hybridisations, visualise alternative configurations, and assist in translating drawings and renders into spatial objects. Students critically evaluate AI-generated results, maintaining conceptual and formal control throughout the process.

Physical representation through 3D printing complements the digital workflow, enabling students to materialise and assess their hybrid urban configurations spatially.