2024 MODULE HANDBOOK

Erasmus Mundus Joint Master

Redesigning the Post-Industrial City (RePIC)

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1. RePIC Mission, Values und Goals

Eight members of the European University Alliance UNIC – The European University of Cities in Post-Industrial Transition have collaborated to create the integrated transnational study programme **Redesigning the Post-Industrial City (RePIC)**, a two-year, English-taught joint master degree with 120 credit points ECTS. RePIC is funded as an Erasmus Mundus Joint Master (EMJM) with support from the European Union (2023-2029) and admits new students once a year in October. The Consortium Partners are:

- Ruhr University Bochum (RUB), Germany
- University College Cork (UCC), Ireland
- University of Deusto (UDeusto), Spain
- Erasmus University Rotterdam (EUR), Netherlands
- Koç University (KU), Turkey
- University of Liège (ULiège), Belgium
- University of Oulu, (UOulu), Finland
- University of Zagreb (UniZG), Croatia

Building on the complementary strengths of the vibrant UNIC Partnership and involving a broad range of associated partners from government, industry and the public, RePIC offers unique perspectives on the post-industrial city and a potentially life-changing physical and virtual student mobility experience. RePIC fosters multidisciplinary and cross-cultural thinking to critically respond to challenges of transformational change by placing mobility, superdiversity and inclusion at the very core of its inter-university campus – and thereby transcending cultural, national and disciplinary boundaries. RePIC students can meaningfully engage in shaping society by developing a profound understanding of the post-industrial city and its environment, mainly in European countries, and by creating research-based solutions to advance urban transformations. Based on a rigorous and forward-thinking curriculum, RePIC serves as a catalyst for innovative education putting a spotlight on engaged research and evidence-based practices such as City Labs and Design Studios. Our ambition is to build an open-minded knowledge and innovation community committed to the co-creation, co-design and co-production of transformative approaches to more sustainable and resilient urban futures – and our students are invited to contribute!

RePIC's mission is to develop a dynamic network of urban thinkers with the capacity to contribute to future-oriented, avantgarde thinking on the revitalisation of the post-industrial city. RePIC provides high quality academic education and professional skills for talented and committed students, who are eager to specialise in urban studies encompassing urban development, planning, policy and design perspectives, and who intend to build bridges into neighbouring disciplines, e.g., Architecture, Business and Law, Urban and Environmental Sociology, Urban and Regional Economics, (Spatial) Data Science or Psychology. Graduates will be awarded a joint master degree that will allow them to make a difference in this challenging world and transfer the community responsibility orientation of the course into society. In accordance with the 2016 UNESCO International Bureau of Education Curriculum Guidelines, RePIC supports students and offers guidance to develop:

1. The knowledge and understanding (theoretical and methodological approaches)

2. The intellectual, practical and transferable skills ("hard" research methods and techniques skills as well as "soft skills" such as intercultural and interdisciplinary communication)

3. The professional values (responsibility, research integrity and ethics) required for successful completion of the programme.

The RePIC curriculum stresses the importance of cross-cutting issues and themes, encouraged by cross-curricular projects and cross-boundary learning, following a spiral curriculum approach. A spiral curriculum is not simply the repetition of a topic taught but one in which there is an iterative revisiting and deepening of topics, subjects or themes throughout the programme. Sustainability is a key concept of interest, as **the UN 2030 Sustainable Development Agenda** identified cities as key players or drivers of sustainable development – and urban sustainability transformations are at the very core of our study programme.

RePIC strategically links transformation policies, transition pathways and sustainability goals with its curriculum. Each module explicitly addresses key **UN Sustainable Development Goals (SDGs)** in order to debate and showcase potential solutions for the post-industrial city. The 2021 Berlin Declaration on Education for Sustainable Development emphasised the need to implement Education for Sustainable Development with a focus on cognitive skills, social and emotional learning, collaboration skills, problem solving and strengthening resilience. For the design of the didactical concept, RePIC refers to the European University Association's Thematic Peer Group report on "Environmental Sustainability of Learning and Teaching" to embed an integrated approach to sustainability in education. When critically assessing urban development, planning, policy and design, RePIC addresses to the following SDGs in particular:

- SDG 4 Quality Education
- SDG 8 Decent work and economic growth
- SDG 9 Industry, innovation, and infrastructure
- SDG 11 Sustainable cities and communities
- SDG 12 Sustainable consumption and production
- SDG 13 Climate action

While the SDGs constitute a strong set of normative ethically justified guidelines, they do not substitute critical and reflective thinking in academic and professional contexts. We are very much aware of the fact that the definition and the objectives of sustainability and the solutions of complex sustainability problems are always valued and also controversial in multi-value contexts such as multi-cultural classrooms. Open ambiguity of sustainability allows the participation of different parties in discussions and in decision-making process, in which the significance of the concept is specified. This requires also new ways in which relationships between academia and society are conceptualised to better understand key interlinkages, dependencies, synergies and trade-offs embedded in the SDGs. RePIC will enable students to engage in co-creation, co-design and co-production processes for the sustainable transformation of the post-industrial city, advance methodological approaches to complex nexus challenges and contribute to more efficient academia-society

dialogues. The RePIC Urban Sustainability Transformations Research Forum, Research Methods, City Labs and Engaged Research Placement modules are specifically designed for this purpose.

Through engaged research practices, students and communities are engaged in discussions and in planning activities for the sustainable transformation of their own cities where it comes to the development and implementation of concrete actions. For RePIC, this mainly happens in the context of Global North, especially European cities in post-industrial transition. But to avoid ethnocentrism in our curriculum, we create a space for expression and reflection for all our students from all over the world to feel that they can be and express themselves without any restrictions. RePIC also encourages thinking beyond sustainability by introducing students to a multitude of concepts promoting resilient, smart, green, low carbon eco, knowledge or science cities. In practice, these concepts often appear to be used interchangeably by policymakers, planners, developers and designers. We will have to discuss in fundamental as well as in specialisation modules the question whether these categories each embody distinct conceptual perspectives, which would have implications for how they are understood theoretically and applied to foster transformative change in post-industrial cities. The Master Thesis module with its online colloquium will contribute to further deepen this discussion and pave the ground for theory-based, evidence-informed policymaking, planning and design.

RePIC Currriculum and Study Locations

	1st Semester Fundamentals	2nd Semester Specialisations	3rd Semester In-Depth Studies	4th Semester Master Thesis
Modules	**City Lab I** (Offered in Cork by UCC) *10 ECTS*	**Track 1** Urban Transformations and Resilience *Cork & Liège* *30 ECTS*	**City Lab II (Field Salon)** Organised by UCC and run jointly with RePIC Partners, at alternating locations in Europe *10 ECTS*	**Master Thesis** (incl. Research Lab Work and Online Colloquium) 3 Options: - Monography - Research Manuscript - Practical Project Joint Supervision of two RePIC Universities *30 ECTS*
	RePIC Core Theory The Post-Industrial City - Society, Space and Environment *10 ECTS*	**Track 2** Inequality, Diversity and Social Justice *Rotterdam & Koc* *30 ECTS*	**Either:** **Structured Learning (in Liège)** *15 ECTS*	
	RePIC Urban Sustainability Transformations Research Forum *5 ECTS*	**Track 3** Urban Analysis: Smart, Sustainable and Resilient Cities *Bochum & Oulu* *30 ECTS*	**Or:** **Structured Learning and Engaged Research Placement (in Cork)** *15 ECTS*	
	Research Methods I *5 ECTS*	**Track 4** Governance of Post-Industrial Cities *Zagreb & Deusto* *30 ECTS*	**Research Methods III** (Online) *5 ECTS*	
Study Location	Bochum	Cork, Istanbul, Bochum or Zagreb	Either Liège or Cork	All RePIC Universities

2. RePIC Learning Outcomes and Study Pathways

RePIC consists of compulsory modules, elective modules and the master thesis module. A module is a unit of teaching and learning that is self-contained in terms of content and time and successfully concluded by passing the corresponding module assessment. The "European Credit Transfer and Accumulation System" (ECTS) is applied to determine the number of credit points that can be obtained for the successful completion of a module. One credit point in RePIC corresponds to a study workload of approx. 27 hours. Each module contains competence-oriented assessment to reasonably test the module's specific learning outcomes. To successfully complete the study programme, students must complete all compulsory and elective modules and fulfil the mobility requirements (as outlined in Chapter 4).

Teaching comprises traditional methods such as lectures and seminars, readings, discussions, and high-impact innovative student-activating methods such as design-based learning, system thinking, peer learning, learning by doing, challenge-based learning, co-design methods, workshops, ateliers, City Labs and Design Studios with transdisciplinary collaboration, face-to-face and virtual team teaching of lecturers from different RePIC Partner Universities. Interaction between students from different countries in the international classroom, in outreach activities and during leisure time will add to the students' self-confidence and international mindset, and to an appreciation of diverse cultures. Intercultural awareness and cultural sensitivity are strongly enhanced, and important transferable skills such as teamwork and leadership, problem-solving and communication skills will be further developed.

RePIC's Key Learning Outcomes are summarised in the table and linked to the relevant modules. RePIC graduates will be able to …

I. Academic Research		Relevant Modules
Knowledge & Understanding	(a) Understand and reflect upon theories of urban development, planning, policy and design, analytical frameworks and methodological approaches. (b) Identify stakeholders, drivers and key dilemmas of transformative change in post-industrial cities, mainly in Europe and the Global North. (c) Understand and reflect the governance dynamics of transformative processes and interventions for the revitalisation of the post-industrial city.	M1-1, M1-3, M1-4, M2-1-1, M2-2-1, M2-2-2, M2-3-1, M2-4-1, M2-4-2, M3-1, M3-4
Skills	(a) Critically analyse, visualise and evaluate geospatial and other relevant data. (b) Develop a research topic independently and apply appropriate theoretical and methodological approaches. (c) Apply data analysis techniques to real-world post-industrial urban transformation challenges. (d) Critically reflect on research practices in different national contexts.	M1-2, M1-3, M1-4, M2-1-2, M2-1-3, M2-2-3, M2-2-5, M2-3-5, M2-4-3, M3-2, M4-1
Professional Values	(a) Determine the requirements to design and implement a multi-partner project in a given time.	M1-1, M1-2, M2-1-2,

	(b) Embrace professional ethical practices and responsible conduct in their own work.	M2-2-3, M2-2-5, M2-3-5, M3-2, M4-1
	(c) Encourage dialogue between approaches and perspectives.	
II. Context Analysis and Reflection		**Relevant Modules**
Knowledge & Understanding	(a) Understand major local, national and global historical developments influencing urban spaces.	M1-3, M2-1-1, M2-2-1, M2-2-2, M2-2-4, M2-3-2, M2-3-3, M2-3-4, M2-4-1, M3-1, M3-4
	(b) Contribute to broader debates on sustainability pathways, transformative governance and adaptation approaches.	
	(c) Put multidisciplinary views of the post-industrial city and the differentiated impact of post-industrialism on urban societies into context.	
Skills	(a) Conceptualise, interpret and critically analyse urban transformation challenges in different national contexts and in comparative research settings.	M1-1, M3-1, M3-2, M3-3, M3-4, M4-1
	(b) Develop new perspectives for the sustainable transformation of the post-industrial city adopting engaged research practices.	
	(c) Engage in dynamic team processes in international projects and intercultural encounters.	
Professional Values	(a) Position their own research findings in the broader context of post-industrial urban transformation research and practice.	M1-1, M1-3, M3-1, M3-3, M4-1
	(b) Demonstrate how the results generated in research inform professional activities in the post-industrial city.	
III. Leadership		**Relevant Modules**
Knowledge & Understanding	(a) Understand the importance of mind shift to enhance transformative change management processes.	M1-1, M1-4, M3-1, M3-3, M3-4
	(b) Exchange knowledge across the various sub-disciplines addressing post-industrial cities in transition.	
	(c) Explain the opportunities and challenges of current trends in urban development, planning, policy and design.	
Skills	(a) Create new knowledge, evidence and experimental approaches for the joint development and implementation of transition pathways towards sustainability.	M1-1, M3-1, M4-1
	(b) Communicate, translate and mediate between different professional orientations and social groups, to bring together different perspectives and to work in transnational teams.	
	(c) Meaningfully engage in shaping society by creating research-based solutions to advance urban transformations.	
Professional Values	(a) Engage critically, creatively and constructively with the city of tomorrow.	M1-1, M1-3, M3-1, M4-1
	(b) Serve as an urban curator engaged with the politics of urban sustainability transformations.	
	(c) Think beyond disciplinary boundaries and explore and generate new ideas that can be applied to current and emergent needs.	

RePIC Module Identifier	RePIC Module Title	CP	Responsible Partner
SEMESTER 1	**30 CP ECTS**		
1-1	City Lab I	10	UCC
1-2	Research Methods I	5	RUB
1-3	RePIC Core Theory: The Post-Industrial City – Society, Space and Environment	10	RUB
1-4	RePIC Urban Sustainability Transformations Research Forum	5	RUB
SEMESTER 2	**30 CP ECTS**		
Track 1	**Urban Transformations and Resilience**		
2-1-1	Conceptualising Society, Space and the City	10	UCC
2-1-2	Research Design Studio: Salvaging and Transformations of the Post-Industrial City	15	UCC
2-1-3	Research Methods II	5	UCC
Track 2	**Inequality, Diversity and Social Justice**		
2-2-1	The City in Visual Culture	6	KU/EUR
2-2-2	The Production of Social (In)Justice in the (Post-Industrial) City	6	KU/EUR
2-2-3	Social Design Studio: Justice and Diversity	6	KU/EUR
2-2-4	Design for Health and Wellbeing	6	KU/EUR
2-2-5	Research Methods II	6	KU/EUR
Track 3	**Urban Analysis: Smart, Sustainable and Resilient Cities**		
2-3-1	Integrative Urban Development	5	UOulu
2-3-2	Environmental Urban Planning	7	RUB
2-3-3	Urban Remote Sensing and Smart Data: Modelling the Post-Industrial City	7	RUB
2-3-4	Urban Climatology	6	RUB
2-3-5	Research Methods II	5	UOulu
Track 4	**Governance of Post-Industrial Cities**		
2-4-1	Sustainable Urban Development Governance	10	UniZG/UDeusto
2-4-2	Governance of Post-Industrial Cities	15	UniZG
2-4-3	Research Methods II	5	UDeusto
SEMESTER 3	**30 CP ECTS**		
3-1	City Lab II (Field Salon)	10	UCC
3-2	Research Methods III: Seminar in Advanced Research Methods	5	EUR
UCC Track			
3-3	Structured Learning and Engaged Research Placement	15	UCC
ULiège Track			
3-4	Structured Learning	15	ULiège
SEMESTER 4	**30 CP ECTS**		
4-1	Master Thesis	30	All
Extracurricular			
AE-1	Language Courses	--	All

3. RePIC Teaching Practice and Impact

The RePIC Curriculum is specifically tailored to the demands and needs of future employers around the fields of urban and regional studies, development, policy, planning and design. RePIC Graduates will be able to initiate and manage change, foster innovation, increase social cohesion and improve communication between all stakeholders. The following pedagogical features define the advanced nature of the modalities of learning:

- **Reflection of society's demands and needs-focused research** – RePIC stresses the relevance and the normative value of smart, sustainable, resilient, inclusive, just cities.

- **Combining theory and practice** in meaningful ways – Through the integration of City Labs into the curriculum, students come into direct experience with the challenges of the post-industrial city and understand from the very beginning how to engage with various stakeholders and co-produce knowledge with societal partners rather for them or on them.

- **Holistic understanding of driving factors and challenges** that affect the post-industrial city, including psychological, social, environmental and economic processes and mechanisms, to promote transdisciplinary approaches and thinking outside the box.

- **Structured placements** – RePIC brings students into experiential exchange with potential employers at a point in time when they have already gained sufficient knowledge and experience to become a valuable asset for the institutions providing placements.

- **State-of-the-art syllabi** – RePIC offers training in big data, modelling and simulation techniques, law, public health, migration studies, social work, and more, as a transdisciplinary approach is crucial to develop multi-faceted solutions for the transformation of the post-industrial city.

- **Innovative didactic methods and concepts** are used to design courses that give students a broad knowledge and skills set needed to act successfully in the field. Mobility is at the heart of the learning experience, and students are provided with intensive coaching by academic experts and professionals from the cities.

- **Lifelong learning** – RePIC Graduates will be empowered to continuously pursue professional knowledge and to deploy new concepts and theories in appropriate urban contexts. They will perform tasks with a high level of autonomy and significant judgement in planning and determining the selection of tools and approaches, applying diverse scientific, managerial, planning skills and implementing plans.

- **Skills shortage in change management** – RePIC supports young people to acquire the highly sought-after skills and competences for redesigning the post-industrial city and provide local governments and other stakeholders with adequately trained graduates able to drive change.

With these features in mind, we expect our graduates to be highly skilled and agile thinkers who will enjoy excellent job opportunities within public and private employers and across local and international settings.

4. RePIC Key Mobility Challenges and Timeline

RePIC offers its students the unique opportunity to choose their own fields of specialisation and mobility schemes tailored to their personal interests and individual career perspectives. As an Erasmus Mundus Joint Master, RePIC includes **compulsory physical mobility** for all enrolled students consisting of a minimum of two study periods in two countries, of which at least one must be an EU Member State or Third Country associated to the Programme. These two countries must be different from the country of residence of the student at enrollment stage. Each of the two mandatory study periods must correspond to a workload of at least one academic semester (30 credit point ECTS or equivalent). Compulsory mobility periods cannot be replaced by virtual mobility. In the curriculum, the modules are assigned to semesters according to a standard study plan. For legal reasons, additional registration procedures at your respective study location ("host university") must be followed. All relevant information is communicated in a timely manner via the RePIC Local Coordinators and the registrar's office in charge of the process.

In such a demanding context, acute and temporarily increased workloads may cause increased stress. Individual counselling and regular exchange with instructors and peers can provide support to explore and address acute issues and develop coping skills. In any case, it is useful to draw up an overview of all the tasks to be carried out in order to prioritise them and plan the mobilities ahead carefully. It is also advised to adapt breaks to the task in hand and always allow yourself adequate recovery time (reading, sports, etc.). When developing your individual work plan, please consider the following **distinctive programme features**:

- In **Semester 1**, the City Lab I (M1-1) takes place in Cork, Ireland, in early January 2025. All courses in Bochum (Oct-Dec 2024) will be finished before the Christmas Holiday break including assessments (Modules M1-2, M1-3, M1-4), while preparatory workshops and tasks for the City Lab I will have to be carried out in November 2024. City Lab I requires several continuous assessment components to be completed during and after the fieldwork (learning logs, presentation, portfolio within one week after the City Lab). Due to the different start dates in Semester 2, the overlapping of task assignments with the City Lab I portfolio submission is almost unavoidable. Furthermore, depending on your country of origin, potential visa requirements for travel to Cork, Istanbul or Zagreb must be addressed in a timely manner.

- During **Semester 2**, students will select one of the four specialisation tracks, with respective mobility to Cork, Istanbul or Zagreb. In each of the tracks, the teaching delivery will be by pairing universities to ensure excellence through co-delivery of courses. Semester start dates differ among the host universities (see **2024-2026 RePIC Student Journey**), so please make yourself familiar with the academic calendars as indicated and plan your mobility and tasks accordingly. In Track 1, students are advised to look for accommodation until 22 May 2025 when an exhibition of the Research Design Studio (M2-1-2) is planned. In Track 3, modules contributed online by UOulu (M2-3-1, M 2-3-5) are scheduled for January-March 2025, while the RUB modules will only begin in early April 2025. Please be aware that access to each of the four specialisation tracks is limited to ensure even distribution of students.

- Before **Semester 3** classes begin in either Liège or Cork, the City Lab II (Field Salon) (M3-1) will be the opportunity to fully benefit from collaboratively addressing challenges and the co-design

of integrated solutions in post-industrial cities in Europe. It will take place in early September 2025, and, as part of the continuous assessment, preparatory works will be required beforehand in August. All assignments (daily submission log on the week of the City Lab, poster and group presentation on the final day of the City Lab, portfolio within one week after the City Lab) will have to be completed before classes begin at ULiège and UCC in mid-September. As accommodation services offered by the universities are not a guarantee of accommodation, we advise you to start searching for accommodation independently as soon as you have received your offer to study at UCC or ULiège. Please keep in close contact with the local student support services. Research Methods III (M3-2) is an online course organised by EUR and takes place in the period from September 2025 to January 2026.

- The choice of your **Semester 4** host university is linked to your master thesis and supervision. The Master Thesis (M4-1) is to be assessed by a jury of a minimum of three examiners. One of the examiners should be responsible for setting the topic of the master thesis and the supervision. Please check our list of thesis ideas and contact RePIC Faculty you are interested in working with at the earliest possible stage. Your own ideas for potential topics are also welcome. Again, potential visa requirements must be addressed in a timely manner. The anticipated study period is January to September 2026, depending on your host university.

While RePIC Faculty and Staff are committed to make sure you are getting the most out of your studies and dedicated student support services are available at all RePIC Partner Universities, a high degree of individual initiative, good communication skills and reliability as well as the willingness to become involved in the RePIC journey are what we anticipate from our students.

2024-2026 RePIC Student Journey - From Entry to Graduation

Enter RePIC 10/01/2024

BOCHUM
Welcome Activities
09/30-10/06/2024
Classes
10/07-12/10/2024

CORK
City Lab I
01/06-01/10/2025

Second semester
Track: Urban Transformations and Resilience
University College Cork/Ireland
01/13-05/23/2025

Second semester
Track: Inequality, Diversity and Social Justice
Koç University/Turkey
01/27-05/30/2025

Second semester
Track: Urban Analysis:
Smart, Sustainable and Resilient Cities
Ruhr- Universität Bochum/Germany
01/27-07/18/2025

Second semester
Track: Governance of Post-Industrial Cities
University of Zagreb/Croatia
02/24-06/06/2025

Third semester
University College Cork/Ireland
or
University of Liège/Belgium

City Lab II (Organised by UCC)

CORK
Sept-Dec 2025
Liège
Sept 2025-Jan 2026

2024 City Lab II Daily Agenda

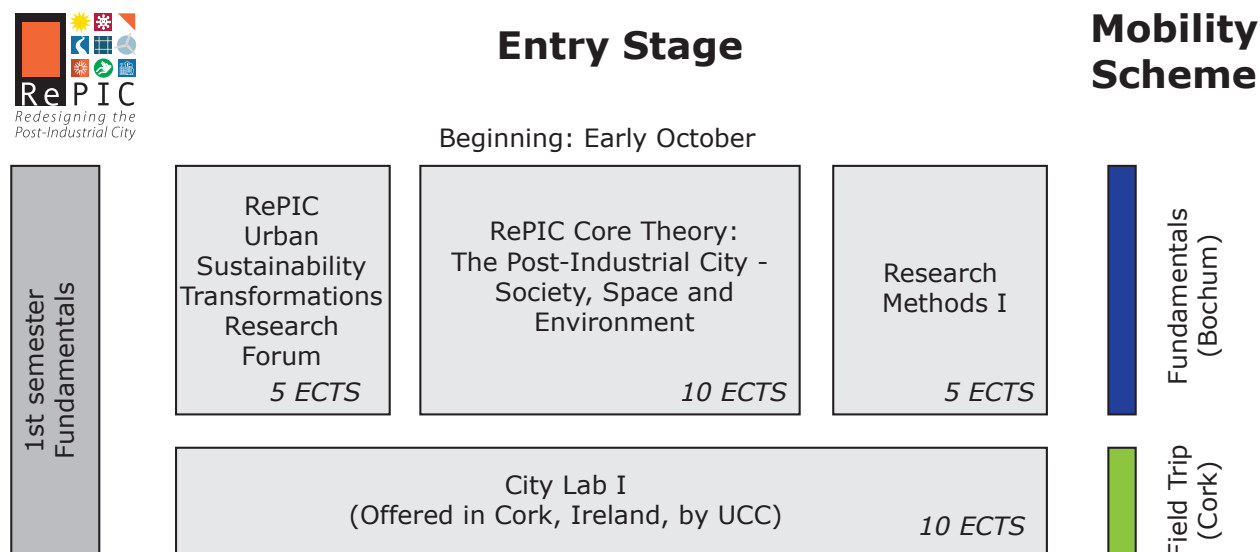**UNIC CITY**
City Lab II
Early Sept 2025

Fourth semester
Dissertation

Master Thesis
Depending on the Academic Calendar of the Host University

Complete RePIC 09/30/2026

5. RePIC Semester Structure Details

Semester 1

The RePIC programme starts at RUB in Bochum, Germany, with welcome activities in the first week of October. During the first semester, students complete a "Core Theory" and Research Methods curriculum to lay the foundations for studying RePIC. Students will be equipped with the skills and insights required to understand conceptual and methodological approaches to the study of the post-industrial city. Modules will provide a substantial knowledge base, i.e., facts and ideas as well as the theories that connect them, in the context of a conceptual framework of the post-industrial city and its changing governance configurations advancing urban sustainability transformations. Lectures start in early October and comprise the RePIC Core Theory, the RePIC Urban Sustainability Transformations Research Forum and the Research Methods I modules. While the RePIC Core Theory module is delivered in-situ only, the RePIC Urban Sustainability Transformations Research Forum is offered in a hybrid format with in-situ and online talks to allow for diverse input from acdemia, businesses and other interested parties across the RePIC Partnership. The Research Methods I module is delivered face-to-face and supplemented by an additional asynchronous online classroom to give students more flexibility in their individual learning progress.

The first semester concludes with a joint field trip to Cork, Ireland, where UCC conducts the **City Lab I** in early January. Participants will explore the potential for the post-industrial city to act as a milieu for continuous civic immersion asking how it can be cultivated to inform cultural and social dissonance. Underlining the wider ambitions of the course, the City Lab identifies and addresses societal challenges faced by the post-industrial city through co-design, co-production and co-creation, in diverse teams, envisions innovative solutions to real-life urban challenges and supports local implementation. The adopted mode of the inquiry encompasses experimental ethnographic and service-learning approaches, which involves a process of learning, action and reflection. It requires learners to activate ideas of public and civic engagement through intervening within society with societal partners to effect change. This will be achieved through collaboration:

All City Labs are developed in collaboration with one leading external civic/community organisation and include emphasis on specific issues ("Challenge Themes"), in a team-based approach. Underlying challenge-based and impact-by-design research methodologies ensure that social impact, learning and research will go hand in hand. This approach ensures the activities enhance the learning and interventionist action-oriented-research eco-system in RePIC. It provides a flexible and replicable model for mobilising and brokering relevant learning placements for each learner – creating the conditions for the co-learning experience to contribute meaningful value to the underlying context of the Challenge Themes. As an overall experience, the skills and competencies the learners develop in this City Lab experience will equip them with deep ontological and epistemological foundations. In these ways, it will embed critical thinking skills as cornerstones to their RePIC journey – while also acting as a preparatory learning experience for the in-depth community-based participatory research aspects they will undertake in Semester 3 City Lab II (Field Salon). This didactic concept also serves to form a joint cohort and to interconnect RePIC staff and students.

Fostering an appreciation on inter- and trans-disciplinarity, the City Lab Challenge Themes will be explored during the **City Lab Co-Creation Week** in such a way as to draw out distinct insights that will be recorded and evaluated by learners. In this way, the process will demonstrate the interconnectivity of the challenges of post-industrial transitions as defined through the lens of the Semester 2 RePIC Tracks. The Challenge Themes for the RePIC City Lab Semester I are selected in partnership with Cork City, in the context of broader themes identified as important to Cork City and its engagement with the other associated partner cities of RePIC. Organised by core RePIC academics and leaders of the City Lab in UCC's Community and Engagement Office, the week will be delivered in partnership with four anchor City Lab partners in Cork. These partners are established sectoral nodes and networks for each component of the quadruple helix, namely: Cork City Public Participation Network (PPN), a statutory network of community and CSO actors; Cork City Council as municipality; Cork City Local Enterprise Office and Plato Business Network as lead contact for the business/enterprise sector; the National Sculpture Factory who are experts in cross-cutting cultural research practices.

IMPORTANT

Up-to-date details on coursework and continuous assessment components including due dates are provided in the City Lab specific information pack prepared for students!

2024 City Lab I Immersive Action Learning + Online Seminars
Co-Creation and Engaged Research Skills

Semester 2

The second semester enables the students to choose one of the four specialisation tracks which build on the fundamentals and methods offered in Semester 1. The aim is to deepen theoretical knowledge, convey more specific methods and promote interdisciplinary learning and team building. The four tracks each have a host university (= physical location of the student in the semester). This host university is supported by at least one RePIC Partner University by means of teaching contributions. In addition, all four RePIC Tracks contain research methods training, either as specifically designated research methods courses or as integrated part of content modules:

- **Track 1 "Urban Transformations and Resilience"** (offered at UCC **in Cork** with ULiège) positions the socio-spatial tensions in post-industrial landscapes as representing a unique opportunity to test multiple latencies that these places hold and questions how they become subject to a process of transformation.

- **Track 2 "Inequality, Diversity and Social Justice"** (offered at KU **in Istanbul** with EUR) focuses on recognising, understanding and explaining inequalities and diversities, and on designing innovative approaches to improve social justice in the post-industrial city.

- **Track 3 "Urban Analysis: Smart, Sustainable and Resilient Cities"** (offered at RUB **in Bochum** with UOulu) focuses on a set of diverse and complementary methodological approaches to our understanding of the post-industrial city including Architecture, Geoinformatics, Remote Sensing, Urban Climatology and Environmental Planning.

- **Track 4 "Governance of Post-Industrial Cities"** (offered at UniZG **in Zagreb** with UDeusto) provides the theoretical and practical accommodation of sustainable governance in urban development processes through the disciplinary lenses of Law, Architecture and Urban Planning.

Second semester
Track: Urban Transformations and Resilience
University College Cork/Ireland

Second semester
Track: Urban Analysis:
Smart, Sustainable and Resilient Cities
Ruhr- Universität Bochum/Germany

Second semester
Track: Inequality, Diversity and Social Justice
Koç University/Turkey

Second semester
Track: Governance of Post-Industrial Cities
University of Zagreb/Croatia

Track 1: Urban Transformations and Resilience

University College Cork & University of Liège

| 2nd semester Specialisations | Conceptualising Society, Space and the City

10 ECTS | Research Design Studio: Salvaging and Transformations of the Post-Industrial City

15 ECTS | Research Methods II: Digital Storytelling and Immersive Fictions

5 ECTS | Lectures take place in Cork |

Classes@UCC: 01/13-05/23/2025

Adopting critical and experimental thinking practices and the theme of "salvage" (of space, form, material, landscape), this track will consider critical ideas that deal with issues and questions of contemporary relevance for the city. It will question the continuous challenges within the historical and post-industrial city (preservation, identity, access) and the aspirations of a contemporary urban conglomeration (infrastructure, climate, inclusion). It will position the socio-spatial tensions in post-industrial landscapes as representing a unique opportunity to test multiple latencies that these places hold – distinct temporal, social, technological and cultural fields – and questions how they become subject to a process of transformation or "renovation". The track will adopt new and innovative approaches towards engagement (co-design, participation-based, live projects) and use new representational modalities to explore the physical landscapes and built infrastructures within the post-industrial city.

Working with a community of local authors and actors, it will act to critically resituate and redefine the city in surprising and new ways. Including a Seminar Series, it draws upon a range of key thinkers on the city and demonstrates the significance of innovative and interpretive concepts as the basis to generate creative and critical insights into contemporary urban and cultural issues. Attention is given to the relationships between social theory and research design in contemporary urbanism, human geography and related areas. Through the Research Methods II module, students will look at interactions between real world spaces and digital mediations of these spaces – the aim of which is to assist the learner acquire a wide range of critical and creative skills. This will be facilitated by a variety of experts from various disciplines using digital filmic and other immersive research techniques.

Track 2: Inequality, Diversity and Social Justice

Koç University Istanbul & Erasmus University Rotterdam

2nd semester Specialisations	The City in Visual Culture	The Production of Social (In)Justice in the (Post-Industrial) City	Social Design Studio: Justice and Diversity	Design for Health and Wellbeing	Research Methods II	Lectures take place in Istanbul
	6 ECTS	6 ECTS	6 ECTS	6 ECTS	6 ECTS	

Classes@KU: 01/27-05/30/2025

Challenges and problems faced by post-industrial cities are often multidimensional societal problems revolving around a complex interplay between a variety of inequalities, diversities and historical path-dependencies that are resilient to (policy) change. Building on the general conceptual and methodological introductions from Semester 1, this track will focus on recognising, understanding and explaining inequalities and diversities and on designing innovative approaches to improving social justice in post-industrial cities. In a series of five modules, students will analyse a variety of inequalities and diversities in post-industrial cities, get acquainted with the main conceptual and theoretical tools for understanding these inequalities, develop methodological skills for the analysis and design of solutions to increase social justice and to actively engage with actors in urban environments to experiment with challenges and opportunities in real-world settings to better contextualise design for diversity.

Track 3: Urban Analysis:
Smart, Sustainable and Resilient Cities
Ruhr University Bochum & University of Oulu

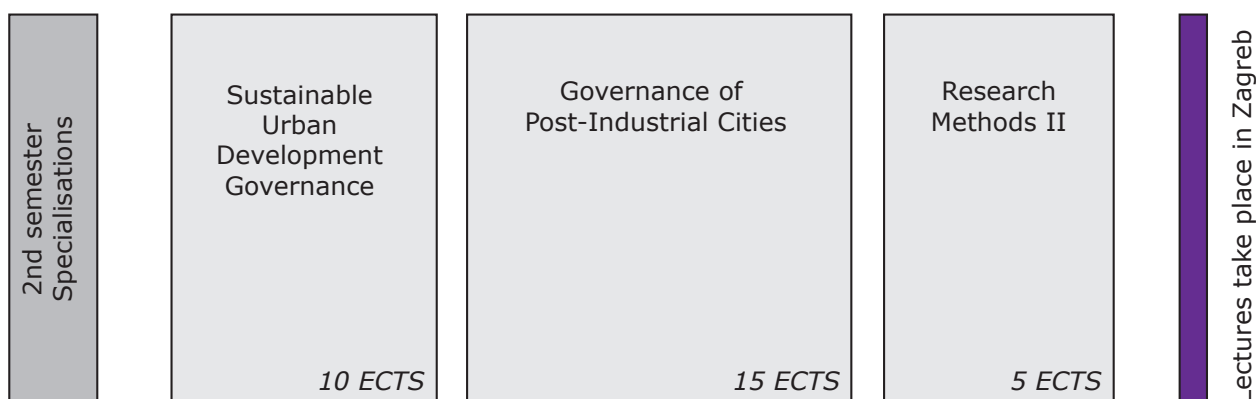| 2nd semester Specialisations	Integrative Urban Development	Environmental Urban Planning	Urban Remote Sensing and Smart Data: Modelling the Post-Industrial City	Urban Climatology	Research Methods II	Lectures take place in Bochum
	5 ECTS	7 ECTS	7 ECTS	6 ECTS	5 ECTS	

Classes@RUB: 01/27-07/18/2025

The post-industrial city, understood as a coupled human-environment system, is subject to both challenges and opportunities for attaining the UN Sustainable Development Goals. As the global mega-trend of urbanisation continues and the urban share of the world population is expected to increase from about 55 percent in 2018 to 68 percent by 2050, fundamental urban transformations are urgently required to attain these goals. Understanding the highly context-specific needs for transformative change of urban areas, accounting for simultaneous changes of ecological and human properties towards more sustainable pathways, is therefore of high societal relevance. Evidence-based sustainability transformation processes in the post-industrial city require appropriate expertise to analyse current and picture future developments of smart, green and resilient spatial patterns, gradients, connectivities and their dynamics. To move forward, it is important to incorporate different disciplines conceptually and analytically. Therefore, the track focuses on key methodological approaches as well as methods of acquiring and analysing (digital, geospatial) data, including Architecture, Geoinformatics, Remote Sensing, Urban Climatology and Environmental Planning. Multi-disciplinary approaches adopting multi-scalar, multi-actor perspectives on spatial phenomena help to identify relevant thematic crossovers and intersections, leading to new insights.

Track 4: Governance of Post-Industrial Cities

University of Zagreb and University of Deusto

2nd semester Specialisations	Sustainable Urban Development Governance	Governance of Post-Industrial Cities	Research Methods II	Lectures take place in Zagreb
	10 ECTS	*15 ECTS*	*5 ECTS*	

Classes@UniZG: 02/24-06/06/2025

This track provides the theoretical and practical accommodation of sustainability governance in urban development processes. It is divided into three modules carried out through interdisciplinary collaboration of faculties of law, architecture and urban planning. The first module aims to train students in the management and knowledge of the theoretical foundations, principles, criteria and strategies, new challenges and problems related to the different areas that make up the concept of sustainable urban development: environmental, economic, social and cultural development. Providing students with the foundations to critically assess the interrelationships between environmental, cultural, economic and social processes in the production and development of a resilient habitat, endowed with identity, quality of life and opportunities framed by a holistic, multidimensional, cross-sectoral and cross-cutting vision.

The second module aims to train students in the management and knowledge of the theoretical foundations, principles, criteria and strategies, new challenges and problems related to the different areas that make up the concept of urban governance, particularly with administrative and institutional aspects of local self-government in urban areas, implementation of EU Cohesion Policy in urban settings, local/urban public services (services of general interest) and management of urban migration. The third research module addresses the need to shape a governance model for the achievement of the proposed sustainable urban development. It aims to provide students a method of analysis, design and evaluation of a governance model for sustainable urban development, based on action research. The application of city governance from the reality of projects, in institutional, business and associative practice, will be worked on. Reviewing instrumental aspects, such as the use of specific tools linked to the management of city governance projects, citizen participation in these processes, the world of data and impact assessment.

Semester 3
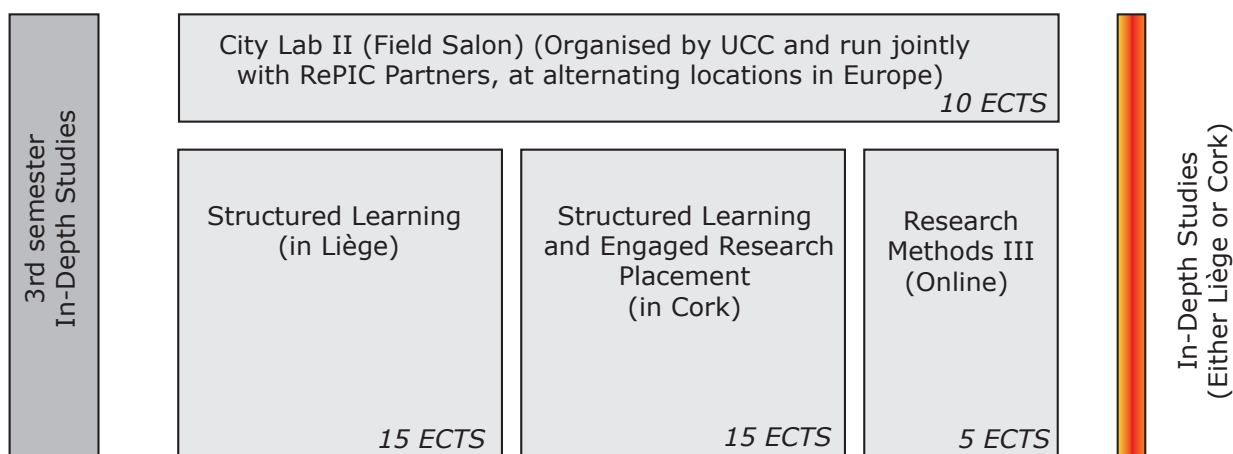
To further strengthen the diversity and vitality of learning modalities that is central to the RePIC programme, students will have two options for further specialisation in Semester 3. Half of the Semester 3 cohort students will be hosted by UCC, half of the cohort by ULiège. Whereas the focus at UCC is on Structured Learning and Engaged Research Placements, ULiège offers in-depth Structured Learning in major fields related to the transformation of the post-industrial city: Urban planning and transportation; Land rehabilitation in urban environments; Participatory design at urban scale; Land-property markets and planning. If too many students choose one option, the programme coordinators will decide on a selection taking mobility requirements, social and disadvantage-compensating regulations into account. To exchange knowledge across the various sub-disciplines addressing post-industrial cities in transition and provide students with opportunities for inclusive collaboration fostering a sense of belonging and engagement, Research Methods III and City Lab II (Field Salon) will be offered for all cohort students as a shared learning experience.

Research Methods III (M3-2) is designed as an International Seminar with invited speakers to further develops students' understanding of research methods, introducing more complex forms of quantitative, qualitative, geospatial, design and mixed methods approaches. It will equip students with a detailed understanding of advanced research designs to support their ability to evaluate the strenghts and weaknesses of different research designs and to support their own independent research projects. Moreover, the continuation of the research methods modules on an advanced level helps to further develop students' conceptual understanding, provide enhanced peer interaction and more accessibility to instructors and potential supervisors in preparation of the master thesis.

City Lab II (Field Salon) (M3-1), scheduled for early September, brings the entire cohort together in another joint learning activity to enable students to directly experience, observe, research, interpret and communicate the diverse expressions of the post-industrial condition as it is expressed in neighbourhoods, public institutions, organisations and firms. Again, the community aspect is central to collaboration and support, stimulating creative ways in which specific community needs and issues can be met, contributing to more prosperous and liveable places, and improving the social integration and sustainability of communities. The module will be co-organised and co-delivered by the City Lab Module organisers at UCC in collaboration with a local partnering university and municipality as the Research Performing Organisation (RPO).
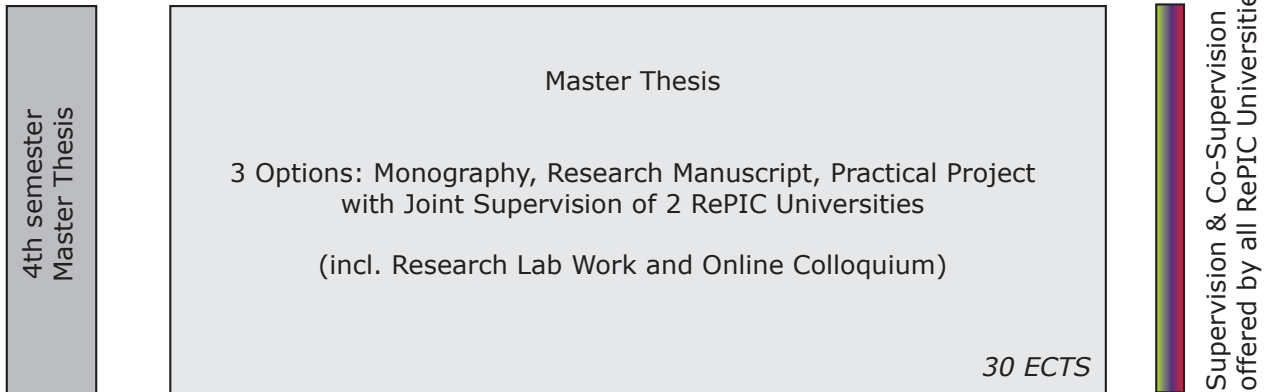
City Lab II (Field Salon) includes an intensive one-week immersive field experience comprising intensive training in community-based participatory research and other critical best practice engaged research methodologies. Working in partnership with a leading active engaged research project, the students will undertake independent investigations with key urban stakeholders (e.g., city managers, urban innovators, community activists) to identify personas, communities and environments and map such users (both human and non-human) through a series of gathering methods. Through this gathering, learnings can be identified from both a contemporary city perspective but also of future speculation. Drawing upon the research training modules in Year 1, students will collect data in urban field-sites using qualitative and quantitative research techniques, as well as critical interpretative methods and concepts. After a week of interactions with city stakeholders, learning of different methodologies and independent investigation, there will be a final day of preparing a poster and/or a clearly labelled taxonomy of field observations alongside a presentation as a group. There will be ad hoc tutorials on this day to help guide your own studies and preparatory group work. The one-week field-class is grounded in a series of seminars and workshops.

City Lab II (Field Salon) is a great opportunity for students to make use of their individual learnings from semesters 1 and 2 of the RePIC studies so far, practice novel gathering techniques and make intellectual connections across the key learning objectives of the RePIC programme. Students are strongly encouraged to employ participatory, engaged research and co-creation methods for their own master thesis – also building on their critical engagement with research practices in different national contexts presented in Research Methods III and the RePIC Urban Sustainability Transformations Research Forum.

Semester 4

Final Semester

4th semester Master Thesis

Master Thesis

3 Options: Monography, Research Manuscript, Practical Project
with Joint Supervision of 2 RePIC Universities

(incl. Research Lab Work and Online Colloquium)

30 ECTS

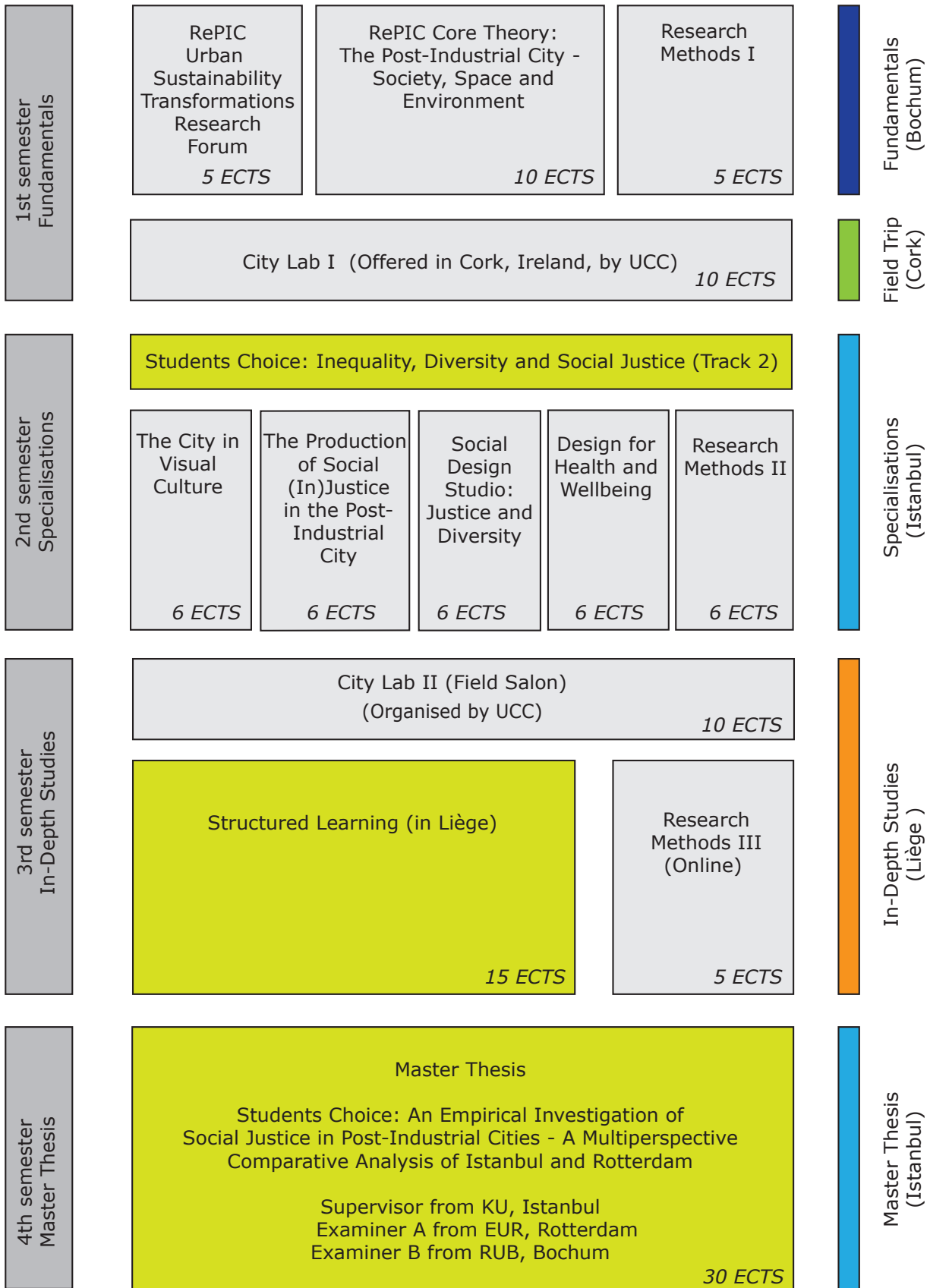Supervision & Co-Supervision offered by all RePIC Universities

The fourth semester is the final semester of the two-year-programme. The key element of this semester is the master thesis. Considering the multidisciplinary nature of the programme, the students can choose among three types of "master thesis": a traditional thesis, a research manuscript aiming at publication in an academic journal, a practical project accompanied by documentation and written analysis. The master thesis can be supervised in a research lab at any of the Partner Universities. RePIC expects all students to have at least one supervisor and one examiner from two different RePIC Universities, so that joint supervision is guaranteed, plus a third examiner. The master thesis is also coupled with a final presentation of the master thesis (max. 15 minutes, followed by Q&A max. 30 minutes). The thesis is presented in a cross-border online format inviting students and staff members from all contributing universities. Students are also encouraged to arrange a self-organised Graduate Exhibition of their thesis projects (e.g, on the occasion of the graduation ceremony). For orientation purposes and to ensure a balanced distribution of supervisions across the RePIC Partnership, a list of suggested master thesis topics will be made available by the Joint Admission and Examination Committee (AEC) at the beginning of Semester 3.

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In total, RePIC comprises a standard study period of 4 semesters (30 credit points ECTS each) and a total workload of 120 credit points ECTS. The next figure provides a visual impression of a sample study pathway, including the corresponding mobility scheme. It shows one of the many possible options. The student's individual choices are highlighted in yellow. The RePIC Co-Directors and Local Coordinators in close collaboration with the RePIC Faculty monitor each study track to ensure a smooth transition from one semester to the next and a timely completion of the study programme. Students are strongly encouraged to seek individual counselling as a personal opportunity to receive support during challenging times, especially when you organise your mobility!

Example of a RePIC Student Pathway

Mobility Scheme

1st semester Fundamentals

RePIC Urban Sustainability Transformations Research Forum
5 ECTS

RePIC Core Theory: The Post-Industrial City - Society, Space and Environment
10 ECTS

Research Methods I
5 ECTS

City Lab I (Offered in Cork, Ireland, by UCC)
10 ECTS

Fundamentals (Bochum)

Field Trip (Cork)

2nd semester Specialisations

Students Choice: Inequality, Diversity and Social Justice (Track 2)

The City in Visual Culture
6 ECTS

The Production of Social (In)Justice in the Post-Industrial City
6 ECTS

Social Design Studio: Justice and Diversity
6 ECTS

Design for Health and Wellbeing
6 ECTS

Research Methods II
6 ECTS

Specialisations (Istanbul)

3rd semester In-Depth Studies

City Lab II (Field Salon) (Organised by UCC)
10 ECTS

Structured Learning (in Liège)
15 ECTS

Research Methods III (Online)
5 ECTS

In-Depth Studies (Liège)

4th semester Master Thesis

Master Thesis

Students Choice: An Empirical Investigation of Social Justice in Post-Industrial Cities - A Multiperspective Comparative Analysis of Istanbul and Rotterdam

Supervisor from KU, Istanbul
Examiner A from EUR, Rotterdam
Examiner B from RUB, Bochum
30 ECTS

Master Thesis (Istanbul)

6. RePIC Options for Extracurricular Activities

In addition to the compulsory curriculum, students are invited to **research and practice-oriented events and activities** organised by the RePIC Partner Universities and the RePIC Associated Partners covering the eight municipalities of Bochum, Cork, Bilbao, Rotterdam, Istanbul, Liège, Oulu, and Zagreb as well as a wide circle of actors beyond government authorities. This establishes an early link with potential future employers or placement companies and organisations. Examples in Germany are lecture series offered by the University Alliance Ruhr in the field of Metropolitan Studies (https://metropolenforschung.uaruhr.de/en/) and GIS related lectures organised by the Interdisciplinary Centre of Geo-Information (IZG) at RUB, in cooperation with the German Cartographic Society (https://www.izg.rub.de/veranstaltungen.html).

With the American elite universities as a role model in mind, the RUB Writing Centre aims at offering students qualified **training in academic writing**. Because no one is born with this skill, you can and must learn how to do it. The services offered by the writing centre are available to all faculties. They address students who want to expand their writing competence and optimise their writing strategies; researchers who want to become more professional in terms of their writing strategies; and teachers who pursue continuing education in the guiding and supervision of essay-writing (https://zfw.rub.de/welcome/).

Language courses are offered by the Language Centres of the Partner Universities. In addition, UNIC Online Language Modules are available (https://unic.eu/en/online-language-modules). All language modules are digital self-study courses for beginners (AO-A1 level according to CEFR), except the English language modules. The English language module requires prior English knowledge at B1/B2-level. You can either complete the entire language module (average 15 to 30 h, depending on the language) or select from the content according to your interests. Each Partner University hosts its own language modules in the respective university's e-learning system.

7. RePIC Examination Regulations: Important Specifications

There are joint examination regulations for the degree programme, which are binding for all students in RePIC. These regulate the organisation of student mobility within the programme, examination performance, types of assessments, passing and retaking of modules and module examinations, compensation for disadvantages and statutory periods of protection, absence, withdrawal, deceit, infringement of regulations, scope of the master examination, admission to the master thesis, acceptance, assessment, and retaking of the master thesis and successful completion of the master programme.

Resit and Retake Guidance

- A module has been passed when the related module assessment has been passed. You will not be able to retake a module if you have already passed it.

- If you do not pass a module at the first sit, you will normally get a resit opportunity. You will need to resit any assessment tasks you have not passed. Resits are opportunities for students

who have failed the original assessment (minimum pass mark) or who were unavailable at the first sit, e.g. due to illness. Resits for a module take place in a designated period but within the framework of the subsequent semester at the latest.

- Before registering for the resit of an exam, the student should contact the local RePIC Coordinator. The local registration and participation regulations of the actual host university at which the student is present when taking an assessment apply and must be communicated to the students within the first two lectures/sessions of each module.

- A retake is necessary when you study a whole module for a second time because you have taken it previously but have not passed it. You will have to redo all assessments. As you will be retaking the module in a different academic year, the lecturer might be different.

Supplemental Examination and Assessment for City Lab Modules

- City Labs I and II are a combination of different teaching methods such as fieldwork, seminars, webinars and workshops, and students are expected to engage with all continuous assessment components of these modules.

- If a student misses a day, e.g., due to illness, the student will be able to pass the module through an accumulation of the continuous assessment completed and/or plus additional work provided by the lecturers to make up the grade. Marks in passed elements of continuous assessment are carried forward. Failed elements must be repeated as prescribed by the lecturers.

- If a student missed the entire City Lab that would be made up by an alternative set of assessment in the same academic year to be communicated by the lecturers.

Progression

- The regular duration of the master programme including the completion of the master thesis is four semesters. An extension of two semesters is possible without further petition. If a student needs another extension, a substantiated application to the RePIC Academic Study Board is required to assess the circumstances.

- RePIC students must demonstrate a minimum level of performance, which is monitored by the Joint Admission and Examination Committee. Students must have achieved 45 credit points ECTS after the second semester and 90 credit points ECTS after the fourth semester. A proof of completion such as the Transcript of Records is mandatory for registration with the respective host university.

Master Thesis Module

- According to the RePIC Examination Regulations, an oral examination accompanies the master thesis.

- The oral examination consists of a 30-45-minute defence in which the candidate is expected to answer questions on the master thesis. It will be organised as an online colloquium to include a presentation (max. 15 minutes), followed by Q&A (max. 30 minutes).

- The colloquium is not graded.

All students are expected to engage fully with all forms of assessment. Please ensure that you do not miss time- and/or location-specific assessments. Extensions will not be granted by lecturers once **deadlines** have passed without stating reasons. Furthermore, specific **attendance** and **late assignment submission provisions** may apply for individual modules. These provisions must be communicated to the students within the first two lectures/sessions of each module the latest.
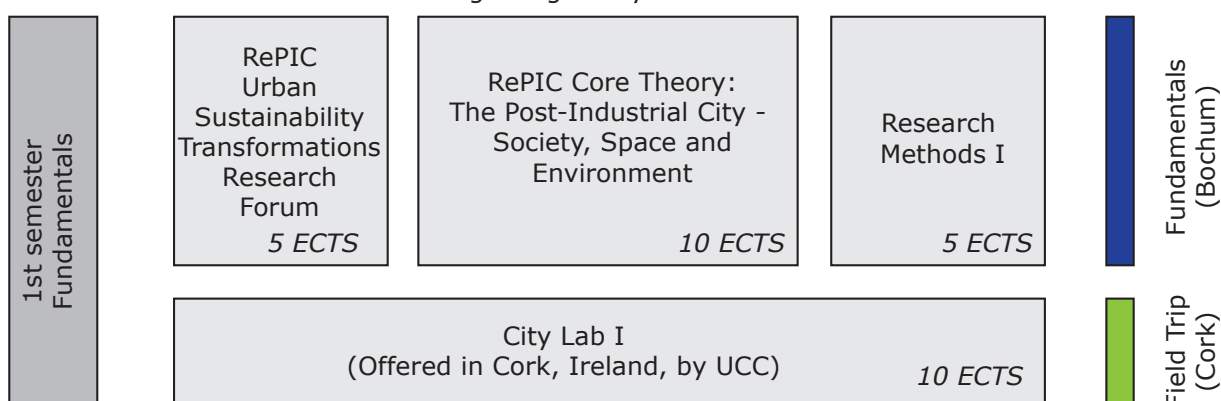
8. RePIC Module Descriptions

Semester 1

Entry Stage

Beginning: Early October

Mobility Scheme

1st semester Fundamentals

RePIC Urban Sustainability Transformations Research Forum — *5 ECTS*

RePIC Core Theory: The Post-Industrial City - Society, Space and Environment — *10 ECTS*

Research Methods I — *5 ECTS*

City Lab I (Offered in Cork, Ireland, by UCC) — *10 ECTS*

Fundamentals (Bochum)

Field Trip (Cork)

City Lab I					
Module	**Credits**	**Workload**	**Term**	**Frequency**	**Duration**
1-1	10 CP	270 h	1st Semester	Winter term	1 semester
Lectures			**Contact hours**	**Self-Study**	**Group size**
Seminars (30 h)			150 h	120 h	60 students
Workshop Tutorials (120 h)					

Prerequisites

All students participating in the module are enrolled as master students.

Learning outcomes

After successful completion of the module, students will be able to:

- Explain complex urban and civic conditions in the post-industrial city using trans-disciplinary approaches.
- Analyse and record distinct urban and civic fields, using digital techniques and hybrid media forms to visualise their findings.
- Synthesise key thematic and research ideas within a group.
- Co-create proposals that address a societal challenge together with city actors and stakeholders.
- Summarise and assess the potential of collaborative research methodologies.
- Deploy novel approaches to disseminate results to specialist and public audience groups.
- Create a reflective research statement, making connections across the academic and applied service-learning components of the module.

Content

Viewing the city as an experiential living laboratory – a diverse civic space of multiple ecologies, dwelling, culture, capital, discussion, and participation – this module will investigate how the post-Industrial city is

understood as a multiplicity that is entwined by physical, political, and historical limits and dynamic social, cultural, and ecological vectors. Using applied service-learning modalities in parallel with experimental and novel digital techniques, the aim of the module is to understand the tensions and intersections between the occupation of urban places and the flows that move around it. Addressing a key thematic issue in the UNIC City Lab challenge areas and aligning with the EU Urban Agenda, the problem-solving approach of this City Lab will comprise of three research phases: (1) Identifying challenge(s); (2) Co-creating solution(s); (3) Creating and implementing strategy(s).

During studio-based workshops and interacting with city stakeholders and public actors, we will consider the patterns of public space and the complex set of actions and transformations that define it – exploring and initiating examples of urban, social, environmental, economic, and community innovation as co-created responses to identified challenges and opportunities within the post-Industrial city. Attempting to determine and conceptualise the constitution of places, the research findings will disrupt normative urban design orthodoxies and through experimental participatory modalities will serve as a catalyst for learning and action.

Teaching methods/formats

Seminars, workshops, studio-based learning, project work, group work

Mode of assessment

Continuous Assessment:

[1] Visual Dossier of Research: 70 % of the grade

[2] Group Seminar Presentation: 20 % of the grade

[3] Reflective Journal: 10 % of the grade

Requirement for the award of credit points

The awarding of credit points requires the passing of all coursework submissions. In relation to the Seminar, it is understood to include the design of the Group Seminar Presentation, which includes critical discussion and feedback to be incorporated into the final submission of the Visual Dossier. A component of the final research will be published on the open-access UNIC European Open Case Repository.

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

10/120

Module coordinator and lecturer(s)

Dr. Jason O'Shaughnessy, Dr. Denis Linehan, Dr. Martin Galvin, Ciara O'Halloran

Further information

SDGs addressed in the module: SDG 10 Reduced Inequalities, SDG 11 Sustainable Cities and Communities, SDG 16 Peace, Justice and Strong Institutions, SDG 17 Partnership for the Goals. Research Themes: Societal challenges; integrated knowledge; civic engagement; service-learning modalities; design-thinking; new urban historiographies; urban improvisation strategies

Research Methods I: Quantitative, Qualitative and Geospatial Methods and Data Literacy					
Module	**Credits**	**Workload**	**Term**	**Frequency**	**Duration**
1-2	5 CP	135 h	1st Semester	Winter term	1 semester
Lectures			**Contact hours**	**Self-Study**	**Group size**
Seminars (30 h)			30 h	105 h	25 students

Prerequisites

All students participating in the module are enrolled as master students.

Learning outcomes

After successful completion of the module, students will be able to:

- Understand the principles and practices of different research methods relevant to the study of the post-industrial city.
- Read, process and apply geospatial data, including geospatial data analysis in open-source geographic information systems (GIS), the creation of digital 2d and 3d maps and interactive web-cartographic applications.
- Critically evaluate underpinning values in research methodologies and are aware of research ethics.
- Reflect on the developments of establishing an **In**frastructure for **Sp**atial **I**nformation in the Eu**r**opean

Community (INSPIRE).	

- Identify up-to-date geospatial data resources offering open data for answering modern research questions in post-industrial cities.
- Reflect and critically evaluate the properties and potentials of these geospatial data resources and infrastructures (Geospatial Data Literacy).

Content

This course provides a thorough introduction to the principles and practices of research relevant to the study of the post-industrial city, including quantitative, qualitative, geospatial data, design and mixed methods approaches. Students will explore the strengths and weaknesses of the different research methods approaches as well as their underlying knowledge claims; reflect upon research issues, particularly ethics, relevance, validity, and reliability; develop the skills required to disseminate their own research plans and findings. Students will also be introduced to current developments of digital data, with a specific focus on geospatial data, and their organisation in digital data infrastructures. These developments built on the INSPIRE (2007/2/EC) Directive adopted and published by the European Union in 2007 as an EU-wide contribution to (geospatial) data harmonisation and interoperability, guided by environmental data themes. In the sense of a sound Geospatial Data Literacy (GDL), students will get to know (open) data resources and to reflect critically on their characteristics and potentials for the analysis of the multidisciplinary challenges faced by the post-industrial city. This training of GDL is accompanied by practical exercises of geospatial data analysis and cartographic visualisations of results in 2D and 3D. Visualisation includes state-of-the-art concepts of user-oriented and cognition-oriented adaptation, with the aim of creating suitable media for different fields of engaged research practices, such as maps and 3D-animations used to support participatory planning and decision-making processes.

Teaching methods/formats

Weekly 2-hour seminar, additional digital self-guided learning material

Mode of assessment

Written online exam of 60 minutes: 100 % of the grade (in the last session in Dec.)

Requirement for the award of credit points

Passed exam

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

5/120

Module coordinator and lecturer(s)

PD Dr. Dennis Edler, Dr. Matthias Falke, Katrin Reichert

Further information

SDGs addressed in the module: SDG 4 Quality Education, SDG 9 Industry, Innovation and Infrastructure, SDG 11 Sustainable Cities and Communities

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RePIC Core Theory: The Post-Industrial City – Society, Space and Environment

Module	Credits	Workload	Term	Frequency	Duration
1-3	10 CP	270 h	1st Semester	Winter term	1 semester

Lectures			Contact hours	Self-Study	Group size
Lectures (30 h)			60 h	210 h	a) 60 students
Seminars (30 h)					b) 25 students

Prerequisites

All students participating in the module are enrolled as master students.

Learning outcomes

After successful completion of the module, students will be able to:

- Understand and reflect upon theories of urban development, planning, policy and design, analytical frameworks and methodological approaches.
- Identify stakeholders, drivers and key dilemmas of transformative change in post-industrial cities, mainly in Europe and the Global North.

- Understand and reflect the governance dynamics of transformative processes and interventions for the revitalisation of the post-industrial city.
- Understand the importance of mind shift to enhance transformative change management processes.
- Think beyond disciplinary boundaries and engage in intercultural encounters.
- Apply the critical understanding gained in this module by contributing to contemporary real-world debates over post-industrial urban transformations in the EU and elsewhere.

Content

1. *Core Theory Lecture*: The lecture will form an introduction to the study of the post-industrial city and provide students with a substantial foundation of content knowledge. It focuses on the built-up urban landscape, the socio-economic structures, socio-spatial dynamics, narratives, urban institutions, and power relations of the industrial past and whether and how these continue to inform transformations of society and space in the post-industrial present. The module will have no single geographical focus but will use examples from a range of different countries and time periods. Students need to understand these facts and ideas, and the theories that connect them, in the context of a conceptual framework of the post-industrial city. The main aim is to introduce students to a multiscalar view of the post-industrial city and the differentiated impact of post-industrialism on societies and cities, and perspectives for the transformation of post-industrial cities. Among others, the module will introduce concepts such as multi-level governance, historical institutionalist and comparative historical as well as public policy analysis and travelling concepts to study the post-industrial city as a contested space which is regulated by tensions in land, property and urban planning systems.

2. *Applied Analysis Seminar*: In the seminar, students will learn how to conduct an investigation in the social sciences using publicly available information from various sources, including peer-reviewed academic journals, government-provided websites, special interest groups and individual experts. You will consider and evaluate what constitutes a reliable and/or authoritative source of information, and how you can assess the validity of a source and undertake an independent piece of research. This requires advanced levels of self-motivation, presentation, time and resource management in addition to independence and creativity of thought, on an approved topic and will produce a presentation and a research paper. The written assignment will test many of the skills important to future employers.

Teaching methods/formats

Lecture, theory-based discussions, seminar-based teaching, project work, group work

Mode of assessment

[1] Lecture online open-book examination of 60 minutes: 50 % of the grade (in the last session in Dec.)
[2] Seminar presentation (max. 15 minutes followed by Q&A): 15 % of the grade
[3] Research paper of max. 3,500 words: 35 % of the grade (submission by the end of Dec.)

Requirement for the award of credit points

The seminar is designed to practice academic discourse and requires the regular attendance of the students. The awarding of credit points requires the passing of a one-hour written exam on the content of the lectures as well as the design of a seminar session with presentation and group work or discussion on the topic of the written assignment and the research paper.

Module applicability in other degree programmes

The module is applicable for incoming international master students at RUB.

Weight of the mark for the final score

10/120

Module coordinator and lecturer(s)

Prof. Dr. Thomas Feldhoff, Dr. Matthias Falke

Further information

SDGs addressed in the module: SDG 7 Affordable and Clean Energy, SDG 9 Industry, Innovation and Infrastructure, SDG 10 Reduced Inequalities, SDG 11 Sustainable Cities and Communities
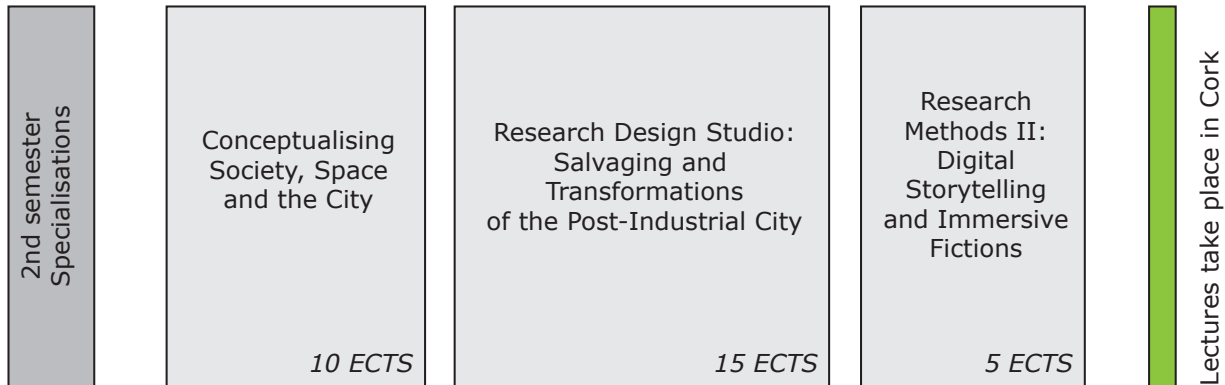
RePIC Urban Sustainability Transformations Research Forum					
Module 1-4	**Credits** 5 CP	**Workload** 135 h	**Term** 1st Semester	**Frequency** Winter term	**Duration** 1 semester
Lectures Seminars (30 h)			**Contact hours** 30 h	**Self-Study** 105 h	**Group size** 60 students

Prerequisites

All students participating in the module are enrolled as master students.

Learning outcomes

After successful completion of the module, students will be able to:

- Interpret, debate and communicate both verbally and in writing issues confronting post-industrial cities with specialists in a range of disciplines and with lay people.
- Effectively facilitate and participate in multi-stakeholder discussion groups developing integrated and participative approaches to urban policies.
- Critically evaluate underpinning values in research and reflect on research ethics and civic responsibility.
- Recognise that he or she can make a difference and have an impact on individuals and communities.

Content

The Research Forum addresses the new narrative of "smart, sustainable, resilient urban transformations" with a focus on the "Great Transformation Towards a Sustainable Society"; urban transformation governance that tries to coordinate and steer the driving forces and dynamics characterising transformations towards achieving sustainability; and transformative capacity as the abilities of actors to create innovations that contribute to sustainability. The module will be delivered in-class face-to-face with contributions from all RePIC Partner Universities either via video conferencing or flying faculty teaching. Each session will comprise weekly objectives, recommended reading and specific activities. Topics are derived from current research conducted by RePIC Faculty and may include but are not limited to the following: Historical aspects and development paths of post-industrial cities; Transformative governance and capacities; Architecture and design for urban resilience; Modern approaches to the visualisation of urban landscapes (e.g., virtual and augmented reality in participatory settings); Climatic design and stewardship; Participatory modes of urban egagement; Urban resilience; Urban food production; Migrancy; Post-colonialism; Circular economy; Inclusion, diversity and poverty; Race and gender equalities and justice; Urban health; Higher education, university-community engagement and responsibility.

Teaching methods/formats

Lectures, theory-based discussions, reading assignments

Mode of assessment

[1] Chairing and moderation of one session (group of 2-3 students): 20 % of the grade

[2] Written essay of max. 2,500 words: 80 % of the grade (submission by the end of the lecture period)

Requirement for the award of credit points

The seminar is designed to practice academic discourse and requires the regular attendance of the students. The awarding of credit points requires the preparation and chairing and moderation of one session and the passing of the written essay.

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

5/120

Module coordinator and lecturer(s)

Prof. Dr. Thomas Feldhoff, Dr. Matthias Falke

Further information

SDGs addressed in the module: SDG 11 Sustainable Cities and Communities, SDG 16 Peace, Justice and Strong Institutions, SDG 17 Partnership for the Goals

Semester 2

Track 1: Urban Transformations and Resilience

University College Cork & University of Liège

2nd semester Specialisations	Conceptualising Society, Space and the City *10 ECTS*	Research Design Studio: Salvaging and Transformations of the Post-Industrial City *15 ECTS*	Research Methods II: Digital Storytelling and Immersive Fictions *5 ECTS*	Lectures take place in Cork

Conceptualising Society, Space and the City					
Module 2-1-1	**Credits** 10 CP	**Workload** 270 h	**Term** 2nd Semester	**Frequency** Summer term	**Duration** 1 semester
Lectures Seminars/Webinars (12 x 4 h)			**Contact hours** 48 h	**Self-Study** 222 h	**Group size** 15 students

Prerequisites

All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes

After successful completion of the module, students will be able to:

- Identify and debate concepts in contemporary urban and social theory.
- Explain the theoretical foundation for urban research within the social sciences.
- Explore the use of social, cultural, political and economic theory in building research practices.
- Address meaningfully the interdisciplinary contexts of idea in contemporary urbanism.
- Develop strong and sustained critical ability to interpret, debate and communicate issues in core texts.

Content

This is a seminar-based module which explores episodes in contemporary urban thinking. Drawing upon range of key thinkers on the city, the module will demonstrate the significance of innovative and interpretive concepts as the basis to generate creative and critical insights into contemporary urban and cultural issues. Attention is given to the relationships between social theory and research design in contemporary urbanism, human geography and related areas.

Readings are available in advance and will form the basis of a reflective weekly discussion. Participants are requested to summarise papers and generate questions for each session. These discussions will contribute to the development of individual presentations that will be delivered during the module. The Group Project will involve a literature review and evaluation of key urban thinkers or theories with a focus on how these are currently applied in research contexts.

Topics to include: The City in Theory, Radical Urbanism, Planetary Urbanism, New Economic Geography, Topology and the City, Body and Difference, New Materialism and Nature, Non-Representational Theory, Theorizing Digital Urbanism, Decolonizing the City as catalyst for discussing the role of design across different disciplines and public domains.

Teaching methods/formats

Seminars

Mode of assessment

Continuous assessment: 3 Coursework submissions

[1] Seminar Paper (3,000 words): 50 % of the grade
[2] Individual Presentation (20 minutes): 15 % of the grade – Reflective Statement on Key Personal Learning Outcomes
[3] Group Project (Written report of 3,000 words): 35 % of the grade – Critical Biographies of Urban Thinkers

Requirement for the award of credit points
The awarding of credit points requires the passing of all three coursework submissions.

Module applicability in other degree programmes
N/A

Weight of the mark for the final score
10/120

Module coordinator and lecturer(s)
Dr. Denis Linehan

Further information
SDGs addressed in the module: SDG 8 Decent Work and Economic Growth, SDG 11 Sustainable Cities and Communities, SDG 16 Peace, Justice and Strong Institutions

Research Design Studio: Salvaging and Transformations of the Post-Industrial City					
Module 2-1-2	Credits 15 CP	Workload 405 h	Term 2nd Semester	Frequency Summer term	Duration 1 semester
Lectures Seminars (30 h) Design Studio Tutorials (120 h)			Contact hours 150 h	Self-Study 255 h	Group size 15 students

Prerequisites
All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes
After successful completion of the module, students will be able to:
- Create a design proposal that recognises the distinct cultural, social, and urban conditions found in the post-industrial city.
- Interpret complex design ideas with intellectual and methodological rigour.
- Communicate a rationale for specific design investigation based on understandings of contextualizing information.
- Use advanced digital visual communication methods and appropriate methods to analyse, test, and critically appraise a complex design proposal.
- Illustrate novel and innovative design solutions to specific urban research problems that are related to the post-industrial city.
- Interact and communicate with specialists across different professional and academic disciplines and with public audiences.

Content
Adopting critical and speculative thinking – and adopting the theme of 'salvage' (of space/ form/ material, landscape) – this studio-based module will consider critical ideas that deal with issues and questions of contemporary relevance for the city. It will consider the continuous challenges within the historical and post-industrial city (preservation, identity, access) and the aspirations of a contemporary urban conglomeration (infrastructure, climate, inclusion). It will position the continuous tensions in post-industrial landscapes as representing a unique opportunity to test multiple latencies that these places hold – distinct temporal, social, technological and cultural fields – and questions how they become subject to a process of transformation or 'renovation' in the sense of making new again.
The studio will adopt new and innovative approaches towards engagement (co-design, participation-based, live projects) and use new representational modalities to explore the physical landscapes and built infrastructures within the post-industrial city. Working with a community of local authors and actors, the design-based propositions will act as spatial provocations that critically resituate and define the city in surprising and new ways.
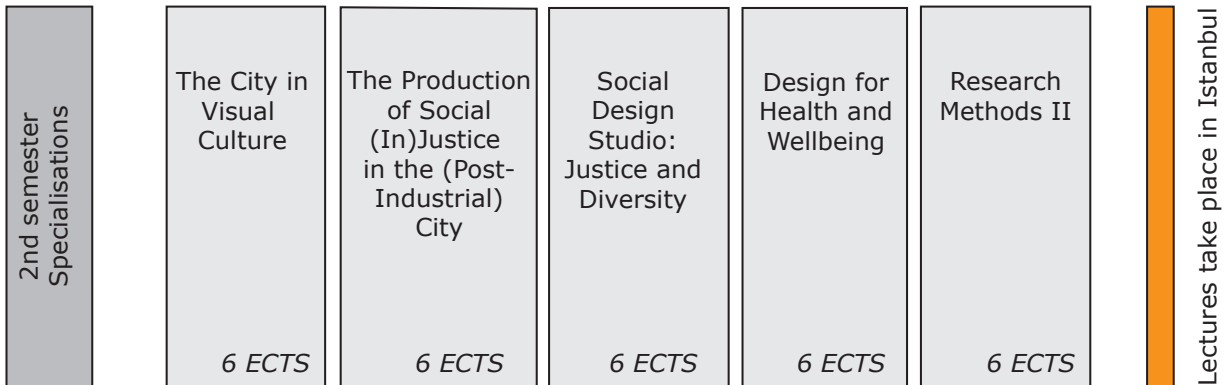
Themes to include as catalyst for discussing the role of design across different disciplines and public domains: Scarcity, Ecological Fusions, Urban Emptiness and Evolution, Future Mythologies, Renovation of the City-Body.

Teaching methods/formats

Seminars, studio-based learning, project group work

Mode of assessment

Continuous Assessment: 3 No. Coursework submissions: 100 % that include: Schematic representations through four stages of research and thematic ideas that define key contextual, cultural, architectural and environmental constraints. Coursework submissions to be organised in a digital portfolio.

[1] Stage 1 "Post Industrial Scapelands": 15 % of the grade

[2] Stage 2 "Strategic After / Further Image": 20 % of the grade

[3] Stage 3 "Radical [re]Vision" and Stage 4 "Reflections and Exhibition": 65 % of the grade

Requirement for the award of credit points

The awarding of credit points requires the passing of coursework submissions.

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

15/120

Module coordinator and lecturer(s)

Dr. Jason O'Shaughnessy, Cathal Mulry

Further information

SDGs addressed in the module: SDG 8 Decent Work and Economic Growth, SDG 11 Sustainable Cities and Communities, SDG 12 Responsible Consumption and Production, SDG 16 Peace, Justice and Strong Institutions

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Research Methods II: Digital Storytelling and Immersive Fictions					
Module 2-1-3	**Credits** 5 CP	**Workload** 135 h	**Term** 2nd Semester	**Frequency** Summer term	**Duration** 1 semester
Lectures Seminars (12 x 1 h) Laboratory Sessions (12 x 5 h)			**Contact hours** 72 h	**Self-Study** 63 h	**Group size** 15 students

Prerequisites

All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes

After successful completion of the module, students will be able to:

- Explain the benefits of digital storytelling to improve key skills and support and communicate research.
- Recognise the potential of the digital storytelling process to support a diverse range of urban stakeholders to critically reflect upon the city.
- Identify and describe digital media concepts and principles, both immersive and non-immersive, in the context of multimedia visualisations.
- Assess research work and make decisions by using digital, filmic and immersive research techniques and modalities
- Demonstrate applied research skills in the creation of digital media and immersive environments.
- Demonstrate theoretical understanding of, and practical competence in the use of advanced input and output devices in a virtual environment.

Content

This module will critically appraise recent and prospective issues, developments and opportunities in the digital media and new media. It will adopt experimental new modes of visualising and interacting with spatial environments and provide new ways of conjecturing on our digital futures and the possibilities inherent in applied research. With this, it will look at interactions between real world spaces and digital mediations of these spaces – facilitating the acquisition of a wide range of critical and creative skills and the possibility of (a) understanding and visualising current social, ecological, economic and technological dynamics in urban settings, (b) finding new ways to integrate research with digital exploration, (c) enabling

new forms of digital learning while maintaining empathy with real-world social and natural problems. This will be facilitated by a variety of experts from various disciplines using digital filmic and other immersive research techniques.

By re-appropriating multi-sensorial digital and immersive environments & computational design, the aim of this module is to empower learners to integrate research and design and deliver innovations. We will aim to navigate the virtuality continuum and facilitate agile learning approaches based around design-thinking and co-design processes. We will explore new ways of experiencing content and creating alternate learning objectives in building a skill set for content creation, and curation of stories and insights. We will create new digital-spatial expertise and through a curated learning pathway created by the learner – responding to digitalisation through innovative new systems of learning and inter-disciplinary thinking.

Teaching methods/formats

Self-guided learning, discussion forums and regular communication, multimedia and interactive activities

Mode of assessment

Continuous Assessment: 100 % of the grade. Coursework (digital or filmic work) to be designed and curated into a digital online portfolio evolved through following components.

[1] Identify and develop appropriate cinematographic and film production techniques: 15 %

[2] Detailed storyboard and/or script for a video production. Create a process log of digital activities: 20 %

[3] Triptych of still renders that demonstrate filmic assets. Produce a project model (digital or analog) that tests the premise of the urban design premise and strategy(s): 50 %

[4] Finished piece of digital or filmic work. Uploading and curating all the outputs in Stages 1-4 to an online digital repository, which acts as a living archival space for the Module: 15 % of the grade.

Requirement for the award of credit points

Passed exam

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

5/120

Module coordinator and lecturer(s)

Dr. Jason O'Shaughnessy (UCC), Viktor Gekker, Dave Concannon

Further information

SDGs addressed in the module: SDG 4 Quality Education

Track 2: Inequality, Diversity and Social Justice

Koç University Istanbul & Erasmus University Rotterdam

2nd semester Specialisations	The City in Visual Culture	The Production of Social (In)Justice in the (Post-Industrial) City	Social Design Studio: Justice and Diversity	Design for Health and Wellbeing	Research Methods II	Lectures take place in Istanbul
	6 ECTS	6 ECTS	6 ECTS	6 ECTS	6 ECTS	

The City in Visual Culture					
Module 2-2-1	**Credits** 6 ECTS	**Workload** 162 h	**Term** 2nd Semester	**Frequency** Summer term	**Duration** 1 semester
Lectures Seminars and Lectures (45 h)			**Contact hours** 45 h	**Self-Study** 117 h	**Group size** 15 students

Prerequisites

All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes

After successful completion of the module, students will be able to:

- Develop visual literacy by working on visual art and media.
- Explain how visual culture and cities evolved over time and in different contexts, including post-industrial cities.
- Discuss visual art and media with reference to diversity, inequality, and social justice in urban spaces.
- Demonstrate analytical skills both verbally and in writing.

Content

The module examines how artists, filmmakers and urban planners conceive and visualise the identity of cities and their cultural diversity. Current debates on migration, gentrification and resistance call for a more refined understanding of the processes in the transformation of modern cities as well as social inequalities generated in the urban space (questions of who has the right to the city and which communities are increasingly excluded from it). This course will explore historical and recent debates on the city, its diversity, its marketing/ branding, public space and inequalities in entering this space, post-industrial locations and spaces of inclusion and exclusion appear in visual culture. Readings and visual material ranging from photographs, films, graffiti art, installations, architecture, and design will be discussed. The focus will be on European cities such as Amsterdam, London, Berlin, Marseilles, Rome and Istanbul.

Teaching methods/formats

Seminar course

Mode of assessment

[1] Weekly response papers (1-2 page(s), taking a position in relation to the texts, synthesizing at least two reading assignments' central arguments, contributions, and posing questions): 30 % of the grade

[2] Weekly article/film presentations (5 in total): 20 % of the grade

[3] Conference presentation (15 minutes + ppt): 20 % of the grade

[4] Final research paper of 6,000-8000 words: 30 % of the grade

Requirement for the award of credit points

The course needs to be passed with a sufficient mark in order to receive credit points.

Module applicability in other degree programmes					
N/A					

Weight of the mark for the final score
6/120

Module coordinator and lecturer(s)
Assoc. Prof. Ipek Celik Rappas

Further information:
SDGs addressed in the module: SDG 11 Sustainable Cities and Communities, SDG 16 Peace, Justice and Strong Institutions

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The Production of Social (In)Justice in the (Post-Industrial) City

Module	Credits	Workload	Term	Frequency	Duration
2-2-2	6 ECTS	162 h	2nd Semester	Summer term	1 semester

Lectures	Contact hours	Self-Study	Group size
Seminars and Lectures (30 h) Tutorials (10 h)	40 h	122 h	15 students

Prerequisites
All students participating in the module are enrolled as master students, have completed Semester 1.

Learning objectives:
After successful completion of the module, the students will be able to:
- Delineate and discuss seminal theories of social justice through the lens of different disciplines (including history, political economy, public health and sociology).
- Compare and synthesise various perspectives on social justice and inequality in order to achieve a more complete understanding of how uneven urban processes and development produce inequal urban spatialities and alter urban politics.
- Understand societal mechanisms that produce inequality and apply critical tools (based on real-world examples) to address urban problems as well as suggest alternatives.
- Explain the different ways in which (in)justice and (in)equality play a role in shaping all aspects of urban life.
- Develop possible solutions to shape a more just and equal urban environment.
- Apply the theories discussed to European post-industrial cities to understand how inequality plays out in practice.
- Critically engage with scholarly texts and complex argument, as well as discuss and analyse them both verbally and in writing.

Content
Modern cities, since the Industrial Revolution, demonstrate the sharpest contradictions in human society. Cities today are global technological innovation hubs, economic growth engines and spearheads of creativity, while at the same time they produce extreme forms of poverty, social and political disarray and environmental hazards. While promising social diversity, cultural life and individual liberties, they simultaneously foster institutionalised modes of violence, control and discrimination. The aim of this course is to critically engage with the contradictions modern cities entail through a social justice perspective, and to examine closely how these topics took/take place in (post)industrial cities. The course will start with introducing different approaches to conceptualizing social justice (e.g., liberal, Marxist, feminist). After introducing these approaches, the course will embed these theories in the urban sphere. The course will demonstrate how urban forms of injustice are contingent while deeply rooted in the particularities and distinctiveness of specific urban realities. Subsequently, building on these theories, as well as conceptual foundations discussed in Module 2-2-1, the course will critically analyse how historical, political, and economic structures produced, and are still producing, inequalities in European post-industrial cities. Moreover, during the lectures and tutorials, the course will engage with pressing urban issues and real-world examples, such as housing and decision making, in order to deepen our understating of the ways social inequalities are being practiced, sustained and justified in post-industrial urban settings. Nevertheless, the course views cities not only as sites of social theory, but also as prominent sites of social change. Accordingly, the last part of the course will explore theoretical and practical examples of just, or more just, urban processes and developments, and will

draw comparisons and necessary conclusions to post-industrial European cities. The input of this course, together with the input of Module 2-2-1, will form the theoretical and conceptual basis for Module 2-2-3 "Social Design Studio: Justice and Diversity".

Teaching methods/formats

Lectures and group work in seminars

Mode of assessment

[1] Research paper – max. 2,500 words : 50 % of the grade

[2] Seminar presentation (max. 10 min. followed by 5 min. Q&A) : 15 % of the grade

[3] Group project output (presentation or up to 2,000 words written report): 35 % of the grade

Requirement for the award of credit points

The course needs to be completed with a sufficient mark.

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

6/120

Module coordinator and lecturer(s)

Dr. Merav Kaddar (IHS/EUR)

Further information

SDGs addressed in the module: SDG 8 Decent Work and Economic Growth, SDG 11 Sustainable Cities and Communities, SDG 16 Peace, Justice and Strong Institutions

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Social Design Studio: Justice and Diversity					
Module 2-2-3	**Credits** 6 ECTS	**Workload** 162 h	**Term** 2nd Semester	**Frequency** Summer term	**Duration** 1 semester
Lectures Seminars and Lectures (45 h)			**Contact hours** 45 h	**Self-Study** 117 h	**Group size** 15 students

Prerequisites

All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes

After successful completion of the module, the students will be able to:

- Navigate one complex social topic of design with "critical and responsible design" perspectives.
- Critically analyse existing theories around design, diversity and social justice.
- Explore and apply social design methods through ideating, collecting data, making analysis, communicating and sharing their insights.
- Explore the strengths and weaknesses of existing designs and tools to work and design with under-valued groups and transfer their insights into design implications and tangible outcomes or services as teams.

Content

"Social Design Studio: Justice and Diversity" offers a socially engaged design studio environment. Seminars and impulse lectures will be held on three contemporary topics throughout the semester. Students will deal with social issues with design tools in collaboration with NGOs and activists. Methods like workshops, hack sessions, laddering interviews and social juries will be used. The three topics of the studio will align classical domains such as are "Inclusion and Diversity", "Food Sustainability and Migration", "Activism, Design and Gender" to post-industrial cities.

Teaching methods/formats

Seminar, studio work, group work, an exhibition out of selected work.

- (Impulse lecture + workshop) Keynote and opening talks for three topics, followed by panels and in class exercises
- Project work (topic 1 and 2)
- Studio work as City Lab (topic 3)

Mode of assessment

[1] Q&A and moderation for keynote talks (5 points for each topic): 15 %

[2] Reading assessment: Posting reading questions and in-class discussion on readings: 15 %

[3] Design Process Assessment: Design Journals (divided into 3 projects 5/5/10): 20 %

[4] Tool development and trial iterations (topic 2 and 3, 5/10): 15 %
[5] Studio Assessment: Topic presentations (topic 1 and 2): 15 %
[6] Studio Assessment: Final project progress and final presentation: 20 % of the grade

| **Requirement for the award of credit points** |
| No more than 2 lecture absences; design journal with at least two projects with progress; collection of minimum 60 points |

| **Module applicability in other degree programmes** |
| N/A |

| **Weight of the mark for the final score** |
| 7/120 |

| **Module coordinator and lecturer(s)** |
| Dr. Özge Subaşı |

| **Further information** |
| SDGs addressed in the module: SDG 11 Sustainable Cities and Communities, SDG 12 Responsible Consumption and Production, SDG 16 Peace, Justice and Strong Institutions |

Design for Health and Wellbeing

Module	Credits	Workload	Term	Frequency	Duration
2-2-4	6 ECTS	162 h	2nd Semester	Summer term	1 semester

Lectures			Contact hours	Self-Study	Group size
Lectures (14 h)			46 h	116 h	15 students
Seminars (14 h)					
Work Group Meetings (14 h)					
Assignment Workshop (2 h)					
Assignment Presentations (2 h)					

| **Prerequisites** |
| All students participating in the module are enrolled as master students, have completed Semester 1. |

Learning outcomes

After successful completion of the module, students will be able to:

- Explain basic theories and models of public health and of transition processes of post-industrial cities.
- Identify major population health challenges in urbanisation.
- Apply design thinking to develop interventions strategies and policies aimed at individual behaviour and social and physical environments in which individuals live.

Content

While public health strategies have contributed tremendously to improvements in population health, major challenges remain, such as health inequalities, climate change, and obesogenic environment. Many of these problems are 'wicked problems' which are complex, dynamic, and context specific. Improving population health in urban areas in the next decade(s) requires a thorough analysis of current challenges, their causes, and solutions, and learning from problems and successes of the past. Unidirectional interventions will not suffice, and innovative strategies are required that understand how factors in the urban environment are likely to operate as a complex system and interact with each other and with individual city inhabitants in the specific urban context of rapidly developing post-industrial cities.

This course will demonstrate how public health theories have developed from deterministic downstream-upstream models via socio-ecological models towards system approach and life-course perspective. Methods to identify current population health challenges will be presented, and principles of developing prevention strategies will be applied to these challenges. The course will challenge participants to engage with public health problems and to integrate design thinking in tackling the complex problems in public health with effective solutions. Examples of (re)designing healthy neighbourhoods and healthy cities will inspire participants in the pursuit of sustainable solutions to improve the health of individuals and communities.

Teaching methods/formats

The course includes lectures, eLearning, group work, group assignments and site visits.

Mode of assessment

[1] Presentation of approx. 10 minutes (prerequisite for grading the assignment)
[2] Final report of group assignment (groups of 2-3 students): 100 % of the grade

[1] Presentation of approx. 10 minutes (prerequisite for grading the assignment)
[2] Final report of group assignment (groups of 2-3 students): 100 % of the grade
In line with the principles of public health as a collective science-based action, the task assigned to the groups is the analysis of a population health problem in a post-industrial city and the design of a solution for this population health problem. The report must show: the magnitude of the population health challenge (2nd learning outcome); scientific evidence how to tackle this challenge (1st learning outcome), and use of design thinking on potential solutions at individual behavioural level or at social and physical environmental level (3rd learning outcome).

Requirement for the award of credit points
The course needs to be passed with a sufficient mark. A written self-evaluation of the individual contribution to teamwork and collaboration must be submitted.

Module applicability in other degree programmes
N/A

Weight of the mark for the final score
6/120

Module coordinator and lecturer(s)
Dr. Joost Oude Groeniger, Dr. Mariëlle Beenackers

Further information
SDGs addressed in the module: SDG 2 Zero Hunger, SDG 3 Good Health and Wellbeing SDG 6 Clean Water and Sanitation, SDG 9 Industry, Innovation and Infrastructure

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Research Methods II: Conceptual and Methodological Tools for Researching Post-Industrial Cities

Module	Credits	Workload	Term	Frequency	Duration
2-2-5	6 ECTS	162 h	2nd Semester	Summer term	1 semester

Lectures		Contact hours	Self-Study	Group size
Lectures and Seminars (46 h)		46 h	116 h	15 students

Prerequisites
All students participating in the module are enrolled as master students, have completed Semester 1.

Learning objectives:
The aim of this course is to equip participants with a mixed methods toolkit for designing and executing urban research. After successful completion of the module, students will be able to:
- Understand the differences between quantitative, qualitative, design and mixed methods research.
- Use qualitative, quantitative, mixed and design research methods, including data collection, analysis and interpretation, to examine and understand issues of inequality issues of inequality and justice in cities.
- Identify the appropriate research methodology to answer their research question.
- Undertake research in post-industrial urban settings.
- Present their findings (through a written text, oral presentation and/or design outcome).

Content
Cities and urban areas around the world are becoming bigger and more complex to understand, plan and design. Post-industrial cities pose an even greater challenge as they encompass opposite, at time contradictory, processes occurring at the same time. Inequality and injustice may emerge from these processes. To face these challenges, the module demonstrates how to use, and combine, different tools for collecting, analysing and presenting data. This methodological module will teach participants how to engage with rigorous urban research through a mixed methods approach. Accordingly, the module will have the following main themes: quantitative research, qualitative research, mixed methods and design research methods.
The first part of the module will teach students how to use quantitative research methodologies. In this part, the students will learn descriptive statistics; data visualisation; probability and estimation; hypothesis testing; simple and multiple regression analysis. The students will also engage with Geographic Information Systems. Additionally, the students will learn to use software like R for statistical analysis.
In the second part of the module, the students will be concerned with qualitative research methodologies, covering both theoretical considerations for qualitative research and practical dimensions of data collection and analysis. During this part, the students will learn qualitative data collection tools such as interviews, fo-

cus groups, observations, online and offline qualitative data collection. Additionally, the students will practice how to analyse their data using software such as ATLAS.ti or MaxQDA (types, data preparation and coding, analysis, presentation of findings).

In the third part of the module, the students will learn theories and methodologies of design. This includes definitions of design and design activity; ways of doing and knowing, theory construction in design. Three types of design research will be addressed: research for, in and through design. Additionally, the students will be introduced to different methodological approaches in design, such as user centred design, research through design, participatory design, collaborative design and critical design.

The module uses a hands-on approach, where the students apply the methodologies learnt in practice throughout the module. In the beginning of the course, each student will choose a research topic relating to the track's theme and will explore it through the different methodological approaches taught. At the end of the course, the students will be asked to speculate about experiences in post-industrial cities of the future, in relation to the research topic they selected at the beginning of the module. For the module's concluding assignment, the students will utilise and integrate the different methodological approaches they have learnt, based on the data collected and analysed throughout the module.

Teaching methods/formats

Lectures, seminars, group-work, workshops, and case-based assignments

Mode of assessment

[1] Oral exam on the course material (15 min.): 50 %

[2] Annotations: (9 weeks x 5): 22.5 %

[3] Assignment: Critical analysis of design studies in the urban context: 15 %

[4] Participation in class discussions: 10 %

[5] Attendance: 2.5 % of the grade

Requirement for the award of credit points

The course needs to be completed with a sufficient mark.

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

5/120

Module coordinator and lecturer(s)

Assist. Prof. Dr. Aykut Coskun (KU), Dr. Sofia Pagliarin (EUR)

Further information

SDGs addressed in the module: SDG 4 Quality Education, SDG 9 Industry, Innovation and Infrastructure SDG 10 Reduced Inequalities, SDG 11 Sustainable Cities and Communities, SDG 12 Responsible Consumption and Production

Track 3: Urban Analysis:
Smart, Sustainable and Resilient Cities
Ruhr University Bochum & University of Oulu

2nd semester Specialisations	Integrative Urban Development	Environmental Urban Planning	Urban Remote Sensing and Smart Data: Modelling the Post-Industrial City	Urban Climatology	Research Methods II	Lectures take place in Bochum
	5 ECTS	7 ECTS	7 ECTS	6 ECTS	5 ECTS	

Integrative Urban Development					
Module 2-3-1	**Credits** 5 CP	**Workload** 135 h	**Term** 2nd Semester	**Frequency** Summer term	**Duration** January-March
Lectures Lectures (12 h, online) Seminars (15 h, online)			**Contact hours** 27 h	**Self-Study** 108 h	**Group size** 15 students
Prerequisites All students participating in the module are enrolled as master students, have completed Semester 1. Basic knowledge of urban design or planning is desirable.					
Learning outcomes After successful completion of the module, students will be able to: • State features of integrative urban development. • Describe the roles of urban design and planning in the interaction of the built environment, society, business and innovations, culture, technology, and nature, in the context of smart city. • Describe user and customer-oriented development principles. • Create a thematic review on an integrative urban development topic.					
Content The lectures of the study unit deal with the procedures of integrative urban development, in the context of the smart city. The thematic review focuses on an integrative urban development topic. The student presents the thematic review in interim and final seminars.					
Teaching methods/formats Online lectures and seminars, independent studying					
Mode of assessment [1] Presentation (5 min.) of the review report in the final seminar [2] Review report (5 pages + references): 100 % of the grade					
Requirement for the award of credit points Participation in lectures (80 % of the contact hours), presentation of the review report in the final seminar					
Module applicability in other degree programmes M. Sc. Architecture (Orientation Urban Design & Planning, UOulu)					
Weight of the mark for the final score 5/120					
Module coordinator and lecturer(s) Prof. Helka-Liisa Hentilä (Coordinator), Senior Research Fellow Sari Hirvonen-Kantola (Lecturer).					
Further information					

SDGs addressed in the module: SDG 7 Affordable and Clean Energy, SDG 9 Industry, Innovation and Infra-structure, SDG 11 Sustainable Cities and Communities, SDG 13 Climate Action, SDG 15 Life on Land, SDG 16 Peace, Justice and Strong Institutions, SDG 17 Partnerships for the Goals.

Environmental Urban Planning

Module	Credits	Workload	Term	Frequency	Duration
2-3-2	7 CP	189 h	2nd Semester	Summer term	1 semester

Lectures			Contact hours	Self-Study	Group Size
Seminars (30 h)			30 h	159 h	15 students

Prerequisites

All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes

After successful completion of the module, students will be able to:
- Understand the diverging meanings of core concepts of landscape and environment in various fields of politics in Europe and in Germany.
- Describe the tasks and structure of landscape planning in Germany.
- Identify and apply the most important instruments of landscape and environmental planning.

Content
- Landscape Definitions (e.g., European Landscape Convention, UNESCO World Heritage Convention)
- Federal Nature Conservation Act (German: BNatSchG u. LSchG NRW)
- Environmental Aspects (Concerns) in Binding Land use Plans and in Regional Planning
- Nature Conservation, Biotope (Value) Assessment and Compensation
- Environmental Impact Assessment (EIA – German: UVP, UVU, UVS)
- Environmental Indicators and Environmental Quality Goals and Standards
- Strategic Environmental Assessment
- Methods of Multi-dimensional Ecological Impact Analyses for Planning

Teaching methods / formats

Lectures, group discussions, short field trips and oral contributions

Mode of assessment

Oral exam of max. 30 minutes (15 minutes for the student's presentation on a chosen topic and 15 minutes for discussion): 100 % of the grade

Requirements for the award of credit points

Passed exam

Module applicability in other degree programmes

The module is applicable for incoming international master students at RUB.

Weight of the mark for the final score

7/120

Module coordinator and lecturer(s)

Prof. Dr. Thomas Feldhoff (Coordinator), Dr. Stephan Treuke (Lecturer)

Further information

SDGs addressed in the module: SDG 6 Clean Water and Sanitation, SDG 9 Industry, Innovation and Infra-structure, SDG 11 Sustainable Cities and Communities, SDG 15 Life on Land

Urban Remote Sensing and Smart Data: Modelling the Post-Industrial City

Module	Credits	Workload	Term	Frequency	Duration
2-3-3	7 CP	189 h	2nd Semester	Summer term	1 semester

Lectures			Contact hours	Self-Study	Group Size
Seminars and Tutorials (45 h)			45 h	144 h	15 students

Prerequisites

All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes

Having successfully passed the module, students will be able to:

- Apply principles of urban remote sensing.
- Extract thematic information of digital imagery.
- Extract thematic spatiotemporal information from the analysis of crowd sourced data.
- Explain the limitations of methodological approaches embedded in current software.

Content

- Introduction to concepts of urban remote sensing, land use and land cover modelling
- Overview of data sources and their specific characteristics
- Modern methods of accessing (open) geodata
- Land use and land cover modelling with integrated methods
- Result validation
- Creating visual results of spatial mass data
- Extracting thematic information from various (open) data sources
- Planning and creating an individual practical project

Teaching methods / formats

Theory-based discussions, (hands-on) tutorials, group work, final practical project

Mode of assessment

[1] Story map presentation (10 min.) in the last seminar session

[2] Practical project: Group work on land use and land cover modelling to develop a story map: 100 % of the grade

Requirements for the award of credit points

Passed practical project (expense, quality, creativity) and presentation

Module applicability in other degree programmes

The module is applicable for incoming international master students at RUB.

Weight of the mark for the final score

7/120

Module coordinator and lecturer(s)

Jun. Prof. Dr. Andreas Rienow (RUB), Prof. Dr. Jacques Teller (ULiège)

Further information

SDGs addressed in the module: SDG 4 Quality Education, SDG 9 Industry, Innovation and Infrastructure, SDG 11 Sustainable Cities and Communities

Urban Climatology					
Module 2-3-4	**Credits** 6 CP	**Workload** 162 h	**Term** 2nd Semester	**Frequency** Summer term	**Duration** 1 semester
Lectures Seminars (30 h)			**Contact hours** 30 h	**Self-Study** 132 h	**Group Size** 15 students

Prerequisites

All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes

After successful completion of the module, students will be able to:

- Explain theories of urban climatology and related methods (observations, remote sensing, modelling).
- Apply methods to derive climate relevant urban characteristics (e.g., local climate zone maps).
- Explain basic modelling concepts, including their strengths and shortcomings, and to run selected urban climate models.

Content

The course may include but is not limited to the following topics:

- Introduction to basic concepts of urban climatology
- The urban energy balance
- The urban heat island
- Concepts to describe the urban characteristics (urban structure, fabric, cover) at different scales (building, canyon, neighbourhood, city)
- Modelling approaches
- Observations of urban climates

•	Remote sensing of urban climates
•	Biometeorology
•	Air quality

Teaching methods / formats

Theory-based discussions, (hands-on) tutorials, group work, final practical project

Mode of assessment

Three equally weighted practical projects including presentations (Part I: Google Earth and LCZs; Part II: Controls on UHI Genesis; Part III: Sensor Network Design): 100 % of the grade

Requirements for the award of credit points

Passed practical projects

Module applicability in other degree programmes

The module is applicable for incoming international master students at RUB.

Weight of the mark for the final score

6/120

Module coordinator and lecturer(s)

Prof. Dr. Benjamin Bechtel, Dr. Iain Stewart

Further information

SDGs addressed in the module: SDG 3 Good Health and Wellbeing, SDG 11 Sustainable Cities and Communities, SDG 13 Climate Action

Research Methods II
Students select *one* of the following three elective options:

Research Methods II: Design Thinking in Urban Context					
Module	**Credits**	**Workload**	**Term**	**Frequency**	**Duration**
2-3-5	5 CP	135 h	2nd Semester	Summer term	5 weeks (May-June)
Lectures			**Contact hours**	**Self-Study**	**Group size**
Lectures, Seminars and Workshop (30 h)			30 h	105 h	15 students

Prerequisites

All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes

After successful completion of the module, students will be able to:
- Understand Design Thinking as a design approach.
- Apply the Design Thinking methods and process in the design and development of urban environments.
- Collect and utilise user-understanding in design work.
- Report design evidence.
- Formulate a design brief document.

Content
- Introduction to concepts of Design Thinking
- Overview of the methods, process, and philosophy of Design Thinking
- Collecting and documenting user-understanding
- Formulating a design brief document
- Recording and analysing the completed design process

Teaching methods/formats

This is an online course with seminar-based teaching, lectures, and project work in small groups. Active student participation and contact teaching are expected. Students complete a Design Thinking project from start to finish in small groups using a Design Canvas document. Teacher lectures and guidance support the completion of the group work.

Mode of assessment

Students turn in a filled Canvas document, which is used to record the design thinking process and give an oral presentation (20 min. long) of the completed Design Thinking project.
[1] Canvas document: 80 % of the grade
[2] Presentation: 20 % of the grade

Requirement for the award of credit points					
The course is built around intensive group work, during which students complete a Design Thinking process from start to finish and present their Design Canvas document and a design brief document in the final seminar. Participation in 80 % of contact teaching and the completion of course work are required.					

Module applicability in other degree programmes					
M. Sc. Architecture (UOulu)					

Weight of the mark for the final score					
5/120					

Module coordinator and lecturer(s)					
Prof. Helka-Liisa Hentilä (Coordinator), MSc Arch. Eevi Juuti (Lecturer)					

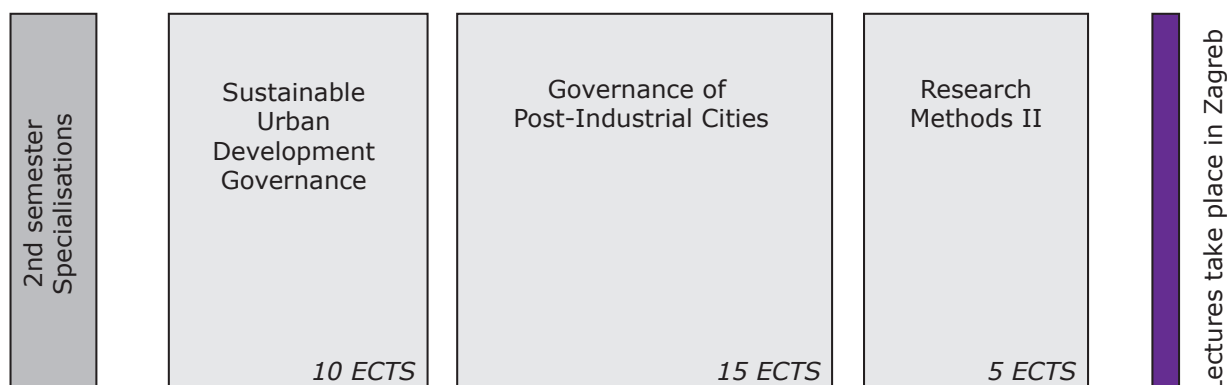| Further information					
SDGs addressed in the module: SDG 3 Good Health and Wellbeing, SDG 11 Sustainable Cities and Communities, SDG 9 Industry, Innovation and Infrastructure.					

Research Methods II: GIS Basics and Cartography					
Module 2-3-5	**Credits** 5 CP	**Workload** 135 h	**Term** 2nd Semester	**Frequency** Summer term	**Duration** 1 semester
Lectures Asynchronous Online Course			**Contact hours** None	**Self-Study** 135 h	**Group size** 15 students

Prerequisites					
All students participating in the module are enrolled as master students, have completed Semester 1.					

Learning outcomes					
After successful completion of the module, students will be able to: • Understand the key principles of Geographic Information Systems (GIS) and cartographic visualisation. • Understand the different types of geographic information and data models. • Use GIS software to produce thematic maps and perform basic data processing tasks.					

Content					
• Introduction to Geographic Information Systems (GIS) and cartography • Thematic mapping • Principles of cartographic visualization • Coordinate systems and projections • Georeferencing and digitizing • Basics of spatial interpolation					

Teaching methods/formats					
Self-paced learning with tutorial videos and instructions					

Mode of assessment					
[1] Eleven assignments and three quizzes. An assignment consists of a short-written report and/or a map made using either the ArcGIS Pro or QGIS software, as instructed in each exercise. The length of each report is a maximum of one page. [2] Online open-book exam: 100 % of the grade					

Requirement for the award of credit points					
Passed exam and successful completion of all assignments/quizzes.					

Module applicability in other degree programmes					
N/A					

Weight of the mark for the final score					
5/120					

Module coordinator and lecturer(s)					
Dr. Harri Antikainen, UOulu Faculty of Science (GEO)					

Further information					
SDGs addressed in the module: SDG 3 Good Health and Wellbeing, SDG 11 Sustainable Cities and Communities, SDG 15 Life on Land					

Research Methods II: Data and Decision Making					
Module 2-3-5	**Credits** 5 CP	**Workload** 135 h	**Term** 2nd Semester	**Frequency** Summer term	**Duration** 1 semester
Lectures Blended Learning (72 h)			**Contact hours** 72 h	**Self-Study** 63 h	**Group size** 15 students

Prerequisites

All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes

After successful completion of the module, students will be able to:

- Understand what the science of data-driven decision-making and analytics means in the urban context.
- Understand how data transforms into information and knowledge through interaction.
- Explain the design process of data-driven services both at systemic and citizen-centric points of view.
- Apply data-driven decision making in smart city context.

Content

The course gives an overview of data-driven decision making in an organizational and network-driven context, addressing key organizational functions, stakeholders, resources, and transactions. An overview of the key smart city processes and support systems is given, from the viewpoint of data-driven planning, execution and improvement for knowledge management and decision making. The needs of smart city stakeholders, including city organization, small and medium-size companies, public service organisations and community-based settings are also brought up.

Teaching methods/formats

Blended approach, including individual assignments and group work in an online learning platform, with visiting experts

Mode of assessment

[1] Weekly thematic written assignments, (approx. 300 words each) and/or oral presentation: 40 % of the grade

[2] Examination through research report based on course topics (length 10 pages, submission by the end of the course): 60 % of the grade

Requirement for the award of credit points

Completion of all assignments

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

5/120

Module coordinator and lecturer(s)

Dr. Marika Iivari, Oulu Business School

Further information

SDGs addressed in the module: SDG 8 Decent Work and Economic Growth, SDG 9 Industry, Innovation and Infrastructure, SDG 11 Sustainable Cities and Communities

Track 4: Governance of Post-Industrial Cities

University of Zagreb and University of Deusto

2nd semester Specialisations	Sustainable Urban Development Governance	Governance of Post-Industrial Cities	Research Methods II	Lectures take place in Zagreb
	10 ECTS	*15 ECTS*	*5 ECTS*	

Sustainable Urban Development Governance					
Module	**Credits**	**Workload**	**Term**	**Frequency**	**Duration**
2-4-1	10 CP	270 h	2nd Semester	Summer term	1 semester
Lectures			**Contact hours**	**Self-Study**	**Group size**
Lectures, Seminars and Workshops (100 h)			100 h	170 h	15 students

Prerequisites

All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes

After successful completion of the module, students will be able to:

- Understand the complexity and interrelationships of each and between the different fields of sustainable urban development (environmental, social, economic, and cultural).
- Apply their acquired knowledge and problem-solving skills in familiar or unfamiliar environments. within broader (or multidisciplinary) contexts related to their area of study.
- Measure/evaluate the level of environmental, economic, social and cultural development of a city project.
- Identify, understand, interpret, evaluate, and use data and indicators in relation to the different areas of sustainable urban development.
- Critically assess the interrelationships between environmental, cultural, economic, and social processes in the production and development of a resilient habitat, endowed with identity, quality of life and opportunities framed by a holistic, multidimensional, cross-sectoral and cross-cutting vision.
- Appropriately communicate the analysis and results of their urban assessments using digital tools.
- Interact and communicate with agents and experts of the different areas of sustainable urban development.
- Effectively determine the purpose, objectives, methodology, team, resources, time management, evaluation and impact indicators required in the implementation of an integrated sustainable urban development model.

Content

This module provides the theoretical and practical accommodation of sustainability in urban development processes. It aims to train students in the management and knowledge of the theoretical foundations, principles, criteria and strategies, new challenges and problems related to the different areas that make up the concept of sustainable urban development: environmental, economic, social, and cultural development. The module is divided into five different sections, which address the following topics:

1. *Foundations of SUD Governance (UNIZG-FL + UNIZG-AF):* Introduction to SUD; International organizations and documents governing sustainable post-industrial urban development, Tools for assessing sustainable development of post-industrial cities; global, national and local agendas for SUD: Agenda 2030, NUA, European Urban Agenda, etc.; Tools for assessing sustainable development of post-industrial cities
2. *Environmental SUD Governance – Planning Processes in Contemporary Urban Development (UNIZG-AF +*

UNIZG-FL): Planning and governance strategies in European cities; Smart city concepts; Traffic and sustainability; Governing and Planning Housing and Public Space by transforming brownfields; Touristification and sustainable city development; Gentrification of urban cores; Subsidised housing and urban transformation; The role of Green and Blue infrastructure in contemporary urban transformation (landscape urbanism, climate change, green networks ...)

3. *Economic SUD Governance (UD):* City competitiveness – city marketing; Financing SUD: public-private management; Urban economy and circular city; Mobility, transport and logistics; Post-disaster and transitional urban development: Structural vs. holistic urban reconstruction

4. *Social SUD Governance (UNIZG-AF + UNIZG-FL):* Urban sociology; Migrations; Age groups and social groups; Human rights and the Right to the City; Identity, diversity, multiculturalism

5. *Cultural SUD Governance (UD):* Heritage Urbanism; Assessing, preserving and redesigning post-industrial sites: Identity and spatial transformation

Teaching methods/formats

- Theoretical classes: lectures of the relevant elements, concepts and procedures of the area of knowledge, both by teachers and by students (flipped learning).
- Case studies: practical applications of the knowledge acquired, with guidance for reflection and personal learning.
- Seminars and workshops, testimonials and/or visits to actors involved in the promotion and implementation of governance for sustainable development in the city.
- Reading and synthesis of articles, books and other study materials, preparation of papers, planning and preparation of assignments, planning and project work, preparation of articles and preparation of articles and presentations, preparation and analysis of real or simulated cases.
- Tutoring and monitoring: individual and group consultations, design and development of work, development of reports, individual and group feedback, return of work and deliverables.

There will be a combination of face-to-face, blended and virtual classes.

Mode of assessment

Continuous assessment and final paper.

[1] Completion of exercises, both of a partial nature, carried out during the course period, as well as of a global nature, at the end of the semester: 15 %

[2] Individual oral presentation (max. 10 min.) given during the course period: 15 %

[3] Written paper (max. 3,000 words) that contains a personal reflection on the different trends in the understanding and interpretation of the city in its complexity, and a case study analysis: 45 %

[4] Record of attendance and active participation in follow-up tutorials: 25 % of the grade

Requirement for the award of credit points

The award of credit points will be subject to the passing of the paper and an overall minimum mark of 50 %.

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

10/120

Module coordinator and lecturer(s)

Ivan Koprić (UniZG-FL), Vedran Đulabić (UniZG-FL), Goranka Lalić Novak (UniZG-FL), Mihovil Škarica (UniZG-FL), Tijana Vukojičič Tomić (UniZG-FL), Sanja Gašparović (UniZG-AF), Lea Petrović Krajnik (UniZG-AF), Anka Mišetić (UniZG-AF)

Further information

SDGs addressed in the module: SDG 9 Industry, Innovation and Infrastructure, SDG 11 Sustainable Cities and Communities, SDG 17 Partnership for the Goals

Governance of Post-Industrial Cities					
Module	**Credits**	**Workload**	**Term**	**Frequency**	**Duration**
2-4-2	15 CP	405 h	2nd Semester	Summer term	1 semester
Lectures / Courses			**Contact hours**	**Self-Study**	**Group size**
1. Multi-level Governance, Cohesion Policy and Urban Development (40 h)			120 h	285 h	15 students

2. Institutional Analysis of Local and Urban Governance Models (40 h)			
3. Collaborative Trans-sectoral Governance (40 h)			

Prerequisites

All students participating in the module are enrolled as master students, have completed Semester 1.

Learning outcomes

After successful completion of the module students will be able to:

- Describe the role and the position of sub-national territorial units in the multi-level governance system.
- Recognise the relations between the state and lower territorial levels, especially towns and cities, theoretically and comparatively.
- Work in local administrative bodies at all professional positions and for work in other administrative or non-profit sector bodies related to local government and decentralisation.
- Transpose ideas of local autonomy, decentralization or legal basis of local self-government to the specific solutions that are applicable in policy processes related to local government.
- Compare individual aspects of local governance within different political systems (territorial structure, local scope, supervision and financing).
- Understand the functioning of the European structural and investment funds, as well as of the implications of the EU Cohesion Policy on the urban level of governance.
- Understand the main concepts connected with the term city and urban management.
- Recognise the relevant European environment: important societal and administrative processes, legal and administrative principles and standards regarding position and development of towns and cities.
- Implement measures and instruments for management and sustainable development in urban areas.
- Communicate problems, ideas and solutions to academic and professional bodies.
- Understand the role of cities in migration and diversity management.
- Recognise the concept, dimensions and approaches to the integration of migrants and refugees at local level.

Content

This module provides the theoretical and practical foundations of institutional and legal aspects of urban governance. It aims to train students in the management and knowledge of the theoretical foundations, principles, criteria and strategies, new challenges and problems related to the different areas that make up the concept of urban governance, particularly with administrative and institutional aspects of local self-government in urban areas, implementation of EU Cohesion Policy in urban setting, local/urban public services (services of general interest), and management of urban migrations. The module is divided into three different sections (courses), which address the following topics:

1. *Multi-level Governance, Cohesion Policy and Urban Development (UniZG-FL):* The aim of the course is to introduce the students to the concept of Multi-level Governance, as well as the organisation and functioning of the Cohesion Policy of the European Union with special emphasis on its urban dimension. The students are introduced to the basic concepts required for the understanding of multi-level and network governance as doctrinal and theoretical concepts important for understanding the governance of post-industrial cities (e.g., regional and cohesion policy, regional and urban development, EU structural and investment funds, absorption capacity, multi-level decision-making, network governance).

2. *Institutional Analysis of Local and Urban Governance Models (UniZG-FL):* This course will introduce students with institutional analysis of different local governance models with special emphasis on institutional models of governing urban areas of various sizes. Students are introduced to basic ideas and conceptual issues of local government. Students are introduced to the principles of territorial organization of local governments, the vertical delineation of public affairs, local government roles in the modern world, the scope of the territorial units of government, political processes at the local level, organisation and activities of local administrative structures and the basics of the decentralisation process.

3. *Collaborative Trans-sectoral Governance (UniZG-AF and UniZG-FL):* Government and governance of cities; relational and collaborative governance; communication between institutions and citizens in a context of collaborative governance; open government – transparency and accountability, OGP; city government and public opinion; cities and conflict management; citizen participation; digital administration and public governance; smart citizenship; and local public services.

Teaching methods/formats
• Theoretical classes: Lectures of the relevant elements, concepts, and procedures of the area of knowledge, both by teachers and by students (flipped learning) • Case studies: Practical applications of the knowledge acquired, with guidance for reflection and personal learning • Simulations and role-playing • Seminars and workshops, testimonials and/or visits to actors involved in the promotion and implementation of governance for sustainable development in the city • Reading and synthesis of articles, books and other study materials, preparation of papers, planning and preparation of assignments, planning and project work, preparation of articles and preparation of articles and presentations, preparation and analysis of real or simulated cases • Tutoring and monitoring: Individual and group consultations, design and development of work, development of reports, individual and group feedback, return of work and deliverables • Interdisciplinary design studios: Group work with consultations, design and presentation of original work, feedback with guests, exhibition There will be a combination of face-to-face, blended, and virtual classes.

Mode of assessment
Continuous assessment and final paper: [1] Completion of exercises, both of a partial nature, carried out during the course period, as well as of a global nature, at the end of the semester: 15 % [2] Individual oral presentations (max. 10 min.): 15 % [3] Written paper and group design (max. 3,000 words) that contains a personal reflection on the different trends in the understanding and interpretation of the city in its complexity, a case study analysis, and a planning design: 45 % [4] Record of attendance and active participation in follow-up tutorials: 25 % of the grade

Requirement for the award of credit points
The award of credit points will be subject to the passing of the Paper, positive evaluation of the group design and an overall minimum mark of 50 %.

Module applicability in other degree programmes
N/A

Weight of the mark for the final score
15/120

Module coordinator and lecturer(s)
Ivan Koprić (UniZG-PF), Vedran Đulabić (UniZG-PF), Goranka Lalić Novak (UniZG-PF), Mihovil Škarica (UniZG-PF), Teo Giljević (UniZG-PF), Tijana Vukojičić Tomić (UniZG-PF), Iva Lopižić (UniZG-PF), Kristina Careva (UniZG-AF), Rene Lisac (UniZG-AF)

Further information
SDGs addressed in the module: SDG 11 Sustainable Cities and Communities, SDG 17 Partnership for the Goals

Research Methods II: Methodological Approaches and Tools for Understanding the Governance of Post-Industrial Cities					
Module 2-4-3	**Credits** 5 CP	**Workload** 135 h	**Term** 2nd Semester	**Frequency** Summer term	**Duration** 1 semester
Lectures Blended Learning (Partially online with 1 week face to face, 35 h)			**Contact hours** 35 h	**Self-Study** 100 h	**Group size** 15 students

Prerequisites
All students participating in the module are enrolled as master students, have completed Semester 1.

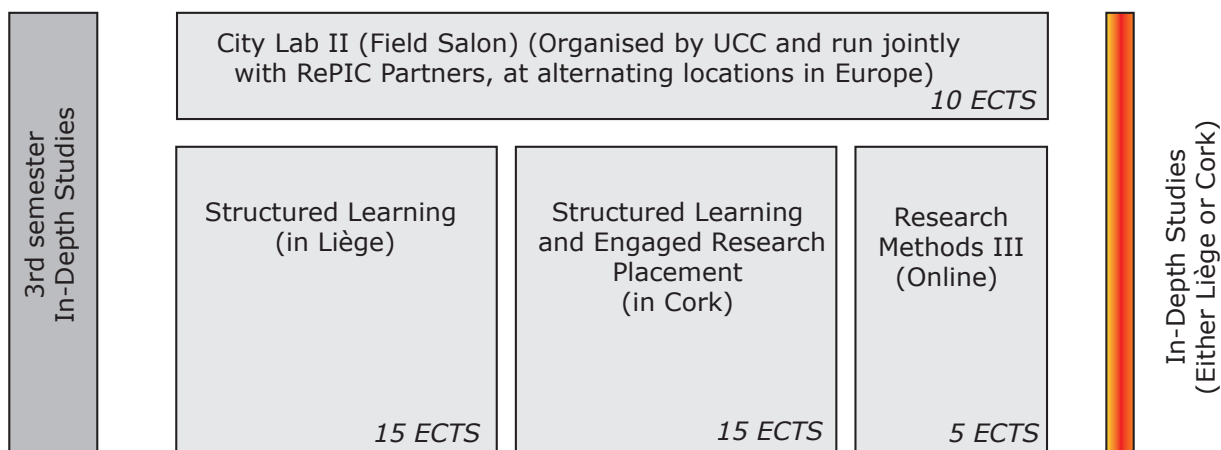| Learning outcomes |
|---|
| After successful completion of the module, students will be able to:
• Understand the research process and the differences between quantitative, qualitative and mixed research methods. |

- Review past literatures and select a theoretical framework related to their research proposal.
- Frame and define research problems.
- Choose and implement a methodology for their research proposal.
- Collect, analyse and report data related to their field of study.
- Apply research methodologies on an advanced level.

Content

This module introduces advanced scientific knowledge to conduct research at a Master's level with a focus on sustainability, urban development and governance of post-industrial cities. It allows students to determine methodologies that are appropriate for their areas of research interests related to the field. Furthermore, it familiarises students with research design and implementation, equipping them with methods to develop research proposals.

The module covers the whole research process. It establishes the fundamentals of research methods and ways to undertake a research project from beginning to end. Contents include: Defining the research problem statement, developing research questions, ethical considerations in research, literature review, highlighting the systematic and meta-analysis, and the presentation of the basic methods of quantitative and qualitative data collection and analysis.

The module emphasises participatory action research, grounded theory, and qualitative and quantitative content analysis.

Teaching methods/formats

Lectures, self-guided learning, discussion forums and regular communication, online interactive activities, weekly helpdesk. These will be blended or virtual classes.

Mode of assessment

Written examination of 60 minutes: 100 % of the grade

Requirement for the award of credit points

Passed exam

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

5/120

Module coordinator and lecturer(s)

Nerea Aranbarri Kortabarria (UDeusto)

Further information

SDGs addressed in the module: SDG 4 Quality Education

Semester 3

In-Depth Studies

Mobility Scheme

3rd semester In-Depth Studies

City Lab II (Field Salon) (Organised by UCC and run jointly with RePIC Partners, at alternating locations in Europe)
10 ECTS

Structured Learning (in Liège)
15 ECTS

Structured Learning and Engaged Research Placement (in Cork)
15 ECTS

Research Methods III (Online)
5 ECTS

In-Depth Studies (Either Liège or Cork)

City Lab II (Field Salon)					
Module	**Credits**	**Workload**	**Term**	**Frequency**	**Duration**
3-1	10 CP	270 h	3rd Semester	Winter term	1 semester
Lectures			**Contact hours**	**Self-Study**	**Group size**
Fieldwork (5 days, 8 hours per day) Seminars/Webinars (6 x 1 h) Workshops (3 x 1 h)			49 h	221 h	60 students

Prerequisites

All students participating in the module are enrolled as master students. Formal: 45 CP (minimum)

Learning outcomes

After successful completion of this module, students will be able to:

- Apply research skills to real-world scenarios in the post-industrial city.
- Assess the changing form and function of urban innovation and challenges in the post-industrial city.
- Engage and interact with specialists across different professional and academic disciplines and with public audiences.
- Critically assess complex urban conditions using trans-disciplinary and approaches.
- Observe, analyse and record distinct urban fields and communicate their findings.
- Synthesise key thematic and research ideas within a group.
- Demonstrate reflective practice, making intellectual connections across the learning objectives of the RePIC programme.

Content

Viewing the city as a living and learning laboratory – a space of dwelling, capital, production, innovation, and participation – this field-class will investigate how the post-industrial city is understood as a multiple that is entwined by physical, political and historical limits and dynamic social, cultural, and ecological vectors. The aim of the module is to enable students to directly experience, observe, research, interpret and communicate the diverse expressions of the post-industrial condition as it is expressed in neighbourhoods, public institutions, organisations and firms in the European City.

The field-class is for-grounded in a series of seminars and workshops in preparation for the one-week field-class visits in which methodological techniques, conceptual approaches will be formulated and deployed to address real-world problems at the field-class destination. To support these tasks, students will be tasked to

recruit and dialogue with key urban stakeholders (e.g., City Managers, Urban Innovators, Community Activists) in advance of field-visits. Once on site, the field-class pedagogy will require students to actively engage in a sequence of field-based investigations that enable them to concretely address urban challenges and best practices in the post-industrial European city. Drawing upon the research training modules in Year 1, students will collect data in urban field-sites using qualitative and quantitative research techniques, as well as critical interpretative methods and concepts.

Teaching methods/formats

Field Work, seminars, workshop, project work, group work and reflective practice

Mode of assessment

Continuous portfolio-based assessment:

[1] Urban Portfolio – Digital and/or Physical Artefact: 40 %

[2] Seminar – 20 min. group presentation: 40 %

[3] Learning Log(s) – Physical Reflective Journal: 20 % of the grade

Requirement for the award of credit points

The awarding of credit points requires the passing of each of the coursework submissions.

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

10/120

Module coordinator and lecturer(s)

Dr. Denis Linehan (Coordinator and Lecturer), Dr. Jason O'Shaughnessy, Ciara O'Halloran, affiliated RePIC programme staff

Further information

SDGs addressed in the module: SDG10 Reduced Inequalities; SDG11 Sustainable Cities and Communities; SDG16 Peace, Justice, and Strong Institutions; SDG17 Partnership for the Goals

Research Methods III: Seminar in Advanced Research Methods					
Module 3-2	**Credits** 5 CP	**Workload** 135 h	**Term** 3rd Semester	**Frequency** Winter term	**Duration** 1 semester
Lectures Seminars in hybrid/online format			**Contact hours** 30 h	**Self-Study** 105 h	**Group size** 60 students

Prerequisites

All students participating in the module are enrolled as master students and have successfully completed the modules Research Methods I and Research Methods II. Formal: 45 CP (minimum)

Learning outcomes

After successful completion of the module, students will be able to:

- Systematically identify, review and critically appraise relevant research papers.
- Evaluate and justify the utility of different research designs to address specific research questions.
- Apply knowledge of different research approaches on the design of research on post-industrial cities.
- Express their point of view through both written and oral mediums.
- Engage in independent learning to further their academic development and development as researchers.

Content

The International Seminar in Advanced Research Methods further develops students' understanding of research methods. The module will introduce advanced forms of quantitative, qualitative, geospatial, design and mixed methods approaches through presentations of research processes by researchers. This course will introduce advanced research designs to support the students' ability to evaluate the utility of different research designs and methods and to support their own independent research projects. It features presentations from UNIC researchers as well as invited external speakers (30 minutes presentation, 30 minutes discussion) and will take place in a hybrid/online format. Supporting course content addressing a new topic will be posted online in advance of the presentation. Each class will include a seminar-style discussion of the presentation, facilitated by teams of four to five students in the class who have prepared questions and recap the key discussion points. It is expected that all participants will contribute to the discussion by posing questions, raising issues and comments, listen closely to others and respectfully engage with their views.

Teaching methods/formats
Seminar in hybrid/online format with sessions taking place in person with hybrid delivery or fully online (depending on the presenter availability), self-guided online learning, discussion forums and regular communication, multimedia and interactive activities, weekly helpdesk

Mode of assessment
[1] Group work – Preparation and facilitation of a seminar (introducing the topic, preparing questions, moderating the discussion): 25 % of the grade
[2] Individual work – A 2,500-word essay critically evaluating research design. During the course, students will have the opportunity to engage in assignment preparation sessions and receive some formative feedback on their work before submission: 75 % of the grade

Requirement for the award of credit points
Passed exam

Module applicability in other degree programmes
N/A

Weight of the mark for the final score
5/120

Module coordinator and lecturer(s)
Dr. Merav Kaddar, RePIC Faculty and external invited speakers

Further information
SDGs addressed in the module: SDG 4 Quality Education

Structured Learning and Engaged Research Placement (at UCC Cork)					
Module 3-3	**Credits** 15 CP	**Workload** 405 h	**Term** 3rd Semester	**Frequency** Winter term	**Duration** 1 semester
Lectures Placement with host organisation			**Contact hours** 123 h	**Self-Study** 282 h	**Group size** 30 students

Prerequisites
All students participating in the module are enrolled as master students. Formal: 45 CP (minimum)

Learning outcomes
After successful completion of the module, students will be able to: • Define the goals of their placement project and manage it to success. • Understand their professional roles and relationships in their placement. • Demonstrate values, attitudes, skills, knowledge and critical understanding as outlined in the council of europe's reference framework of competencies for democratic culture. • Identify societal challenges in partnership with city and societal stakeholders and effect change through co-learning and / or engaged research. • Apply knowledge, skills and competencies acquired during the RePIC programme, particularly tracks 1, 2, 3 or 4, to the analysis and solution of societal challenges. • Recognise "research-mindedness" as a core professional competency. • Show initiative and leadership skills working independently and in teams. • Reflect on the learning experience resulting from the placement. • Identify personal and professional strengths and areas requiring improvement and development.

Content
RePIC's vision is to evolve a new network of urban thinkers with the capacity to impact and realise more sustainable urban futures through critically assessing complex urban and civic conditions and contributing to avant-garde thinking on the revitalisation of post-industrial cities. Its goal is to disrupt normative urban design orthodoxies through invoking experimental participatory modalities that serve as a catalyst for new learning and action practices in re-conceptualising the civic, cultural, and socio-urban fabric of the post-Industrial city and deduce new urban historiographies. Thus, the aim of the placement component of the programme is, immersive experiential-based learning, to investigate under-explored social, civic, cultural, ecological, and public domains and begin to conceptualise new inclusive epistemological responses, that are multi-scalar, trans-disciplinarily and co-designed with city stakeholders. Centring on *or across* UNIC City Lab Challenges, and aligned with the EU Urban Agenda, in the placement

students are charged with producing a body of collaborative, change-orientated learning or research that engages *with* stakeholders in addressing mutually identified needs. Students will work with host organisation partners to co-identify a challenge or problem, which is then addressed by the student in a co-created and participatory manner. The focus is on the idea that city partners and the student benefit equally from the experience through mutuality and reciprocity. The placement provides a link between learning, research and an activist interventionist stance that bridges disciplinary knowledge, with practical and experiential ways of knowing. Through reflective opportunities in small online groups of UNIC Placement peers across different urban contexts, and in one-on-one meetings with RePIC advisors, a focus is on regular and on-going reflective opportunities that help students develop reflexive and analytical abilities, and that guide a continuous synthesising of practical experience and discipline-based theories.

Students are expected to mobilise the skills and knowledge acquired in Year 1 of the RePIC programme, particularly Tracks 1-4, and apply these in a professional placement. Students are encouraged to see the Placement experience as providing the context for the exploration of 'research problems', in partnership with city and societal stakeholders. In line with the Placement Policy overseen by each respective RePIC Partner, each student will agree a learning contract outlining the tasks and objectives of the placement with the host organisation and devise a plan which will support the delivery of the learning outcomes. The Structured Learning and Engaged Research Placement will be jointly monitored by a RePIC staff member and an employee of the placement organisation.

Teaching methods/formats

Practical learning and/ or conducting an engaged research project, in consultation with a supervisor and host organisation linked to UNIC City Labs

Mode of assessment:

Continuous portfolio-based assessment, which is a systematic, cumulative and ongoing collection of materials that is produced by the student as evidence of his or her learning, progress, performance, efforts and proficiency. The materials are selected for inclusion following a set of guidelines, and the student will explain and reflect on the contents of the portfolio. A rubric will specify the assessment criteria for which the portfolio needs to provide evidence. It will specify the range of contexts from which the portfolio contents need to be derived:

- Open-ended diaries, reflective journals and structured autobiographical reflections or other methods which require the learner to record and reflect on their own behaviour, learning and personal development. These could for example also include nonverbal self-expressions, art works/installations, multimedia digital storytelling, photographs, film, VR, Vlogs, websites, audio or video recording and other forms that facilitate reflection and expression.
- Student written reflective memos from one-on-one meetings with RePIC supervisors, demonstrating growth in reflexive and analytical abilities, synthesising of practical experience and discipline-based theories.
- Observational and situational assessments a) of the student in a range of different placement experiences completed by the host organisation b) student self-assessments, and c) students' reflections on peer feedback from online small group peer reflective work.
- Learning report and/or engaged research report that demonstrates a significant collaborative, interventionist, or change-orientated activity, that engaged societal stakeholders in addressing an identified challenge or problem in a co-created and participatory manner.
- Other meaningful portfolio artefacts negotiated with the student, host organisation and supervisor.

Requirement for the award of credit points

The awarding of credit points requires the student to present a portfolio comprising personal reflections, reflective memos from consultations with supervisors, observational and situational assessments from the placement experience and a significant learning and/or research report.

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

10/120

Module coordinator and lecturer(s)

Placement component coordinated by UCC City Labs and UNIC Stakeholder Organisations, Dr. Denis

Linehan, Dr. Jason O'Shaughnessy, Dr. Martin Galvin. Dr. Therese Kenna, Ciara O'Halloran, affiliated RePIC programme staff

Further information

SDGs addressed in the module: SDG 4 Quality Education, SDG11 Sustainable Cities and Communities, SDG16 Peace, Justice and Strong Institutions, SDG17 Partnership for the Goals

Structured Learning (at ULiège)					
Module 3-4	**Credits** 15 credits	**Workload** 405 h	**Term** 3rd Semester	**Frequency** Winter term	**Duration** 1 semester
Lectures In-depth courses with Practicum, Seminars and Field Trips			**Contact hours** 175	**Self-Study** 230	**Group size** 30 students

Prerequisites

All students participating in the module are enrolled as master students. Formal: 45 CP (minimum)

Learning outcomes

After successful completion of the module students will be able to:

- Deal with in-depth study topics on an advanced level.
- Apply knowledge, skills and competencies acquired during their studies in the RePIC programme to the analysis and solution of placement problems or field-related ones.
- Show initiative and leadership skills working independently and in teams through the practical projects
- Deal with issues and topics with an open-minded and multidisciplinary point of view.
- Reflect on the learning experience resulting from the practicum.
- Identify personal and professional strengths and areas requiring improvement and development.
- Gain a better understanding of how transport systems work and the need for them to be aligned with the urban territory and its planning policies, with a view to sustainable development.
- Understand the needs of land and soil recycling in urban areas and apply the concept of recycling (land and soil recycling) to study cases.
- Design a planning participatory process from A to Z and master its organisational, operational, conceptual and ethical issues.
- Build a critical overview of the advantages and limitations of (e-)participation in planning.
- Anticipate all the complexities inherent to a participatory process (at the urban level or at a more local level) and regulate their actions as designers/engineers accordingly.
- Develop an understanding of land and property mechanisms in order to analyse the organisation and development of urban areas.
- Develop knowledge of land policy instruments.

Content

The module offers students the opportunity to mobilise the skills and knowledge acquired in Year 1 of the RePIC programme and apply these in additional courses (Structured Learning). The module contains in-depth courses with practicum exclusively. The students study the offered courses along with supervised practical knowledge. They exchange and work together with students from other teaching programmes and master's degree, reinforcing diversity of profiles. The mix of courses includes a variety of subjects that contribute to the approach, study, understanding and practice of the redevelopment of post-industrial cities, and covers a range of disciplines such as mobility and transport, urban planning, environment, spatial planning, urban engineering, urban resilience, urban economics, land-property markets. The four mandatory courses are:

1. *Urban planning and transportation:* This course looks at the relationship between urban planning and transport. It consists of the application of urban planning and transport planning principles to a practical case study in an urban context. From a theoretical point of view, different principles to stimulate the shift towards carbon-free cities will be explained, focusing in particularly on the design of car-free city centres. Furthermore, an explicit focus will be laid on the development of intelligent urban and transport systems. These various concepts are then put into practice. Students take part in an excursion during which the theoretical concepts are illustrated. Consequently, the students have to realise a group work, in which an integrated urban transport plan will be developed to a pre-defined case study. Groups are

formed on the basis of the different profiles of the students on the course. More information: https://www.programmes.uliege.be/cocoon/20242025/cours/UEEN0004-1.html

2. *Land rehabilitation in urban environments:* The course focuses on the rehabilitation of land and recycling of soils in urban areas rather than the consumption of new land to combat urban sprawl. This frequently implies the need to manage land, from excavation to reuse or landfill, through excavation and treatment for improvement and/or remediation. Lessons relate to the geomechanical aspects associated with these principles of land rehabilitation in urban areas and to the management of the pollution that is frequently detected. More information: https://www.programmes.uliege.be/cocoon/20242025/en/cours/ UEEN0002-1.html

3. *Participatory design at urban scale:* The aim is to provide students with the keys needed for an in-depth understanding of the issues involved in participation, as well as the practical tools for implementing it. The course will focus on giving students the main operational keys to designing and implementing such a process. The issues of recruitment and representativeness of citizens, methodological choices and ethics in implementation will be at the heart of the debates led by and with the students. Remote and asynchronous participation (e-participation) will also be studied through recent case studies, with the necessary critical distance. A range of facilitation tools will be proposed, co-designed and tested through workshops and role-playing. The course is structured around concrete case studies, both on an urban scale and on a building scale. More information: https://www.programmes.uliege.be/cocoon/20242025/cours/UEEN0005-1.html

4. *Land-property markets and planning:* This course explores urban economics through the dynamic of property markets, with a specific focus on land. It introduces a range of theoretical concepts about how land markets work, as well as the various policies and tools used in spatial planning to ensure that these markets operate efficiently. Theoretical teaching is supplemented by three days of field work to illustrate, on the basis of concrete cases, what is taught during the theoretical course. See more information via: https://www.programmes.uliege.be/cocoon/20242025/cours/GEOG0074-1.html

Teaching methods/formats

Seminars, workshops, studio-based learning, project work, group work, guest lecturing, field trips, project-based learning

1. *Urban planning and transportation:* Face-to-face teaching, project work, group work, field work
2. *Land rehabilitation in urban environments:* Face-to-face teaching, seminars, project-based learning, laboratory work
3. *Participatory design at urban scale:* Face-to-face teaching, seminars, project work, project-based learning, portfolio of readings
4. *Land-property markets and planning:* Face-to-face teaching, field work (3 one-day visits)

Mode of assessment

1. *Urban planning and transportation:* The assessment will be based on a group work, including the completion of a peer assessment. Note that the field trip is mandatory. During the exam period, the students will present their group work to a panel of local stakeholders (city officials and neighbourhood representatives. Grading: [1] A written group report forms the basis of the assessment (90 % of the grade). The report is thirty A3 pages long. It consists of fifteen pages of maps and graphs and fifteen pages of interpretation and contextualisation of the results. [2] The oral presentation (10 % of the grade) takes place on site during the January session, within the study perimeter, with the help of a PowerPoint-type support, and lasts 15 minutes. It is followed by a question-and-answer session.

2. *Land rehabilitation in urban environments:* The assessment is based on the writing, by each group of students, of a report (approx. 30 pages) and a presentation of the report at the oral exam during the January session. This 15-minute presentation is given using a PowerPoint presentation. It is followed by questions from the professors on the presentation and the subject covered in the course.

3. *Participatory design at urban scale:* Evaluation will be organised on a continuous basis throughout the semester (no exam in January). Students will be evaluated on: (a) their ability to take an active part in a debate, a workshop or a role play; (b) their ability to synthesise a critical view and to express it publicly with the help of a written support; (c) their ability to interact with various witnesses who will relate their experiences of specific case studies. Oral presentations and short written reports will thus punctuate the en-

tire semester. No other in-session evaluations are expected, provided that students have actively participated in the course. In the case of repeated unexcused absences, the supervisors reserve the right to limit access to the evaluation. Grading: [1] Interviews' analyses (MURAL support) + Debate: 10 % of the grade; [2] Group Work: Presentations of participatory protocols (20' with PowerPoint-type support): 20 % of the grade; Workshop (active participation): 10 % of the grade; [4] Interviews' analyses (MURAL support) + Debate: 10 % of the grade; [5] Groups' Final Presentations of participatory protocols (30' with PowerPoint-type support): 50 % of the grade.

4. *Land-property markets and planning:* An oral exam of 25 minutes and 25 minutes preparation time in January: 100 % of the grade. The oral exam is made of questions related to the theoretical lectures and the field visits: 100 % of the grade. Participation in the field trips is mandatory to take the exam.

Requirement for the award of credit points

The awarding of credit points requires passing the examinations depending on the courses. An examination is deemed to have been passed when the overall mark for the course is equal to or higher than 10/20 (50 %), provided that the conditions specific to each course have been met (attendance at the course (including field visits), submission of assignments (report, presentation, group work…) when required, etc.).

Module applicability in other degree programmes

N/A

Weight of the mark for the final score

15/120

Module coordinator and lecturer(s)

Prof. Dr. Jean-Marie Halleux (ULiège) (Coordinator), Prof. Dr. Jacques Teller (ULiège) & Prof. Dr. Mario Cools (ULiège), Prof. Dr. Serge Brouyère (ULiège) & Prof. Dr. Frédéric Collin (ULiège), Prof. Dr. Catherine Elsen (ULiège) & Prof. Dr. Clémentine Schelings (ULiège)

Further information

SDGs addressed in the module: SDG 4 Quality Education; SDG 9 Industry, Innovation and Infrastructure, SDG10 Inequality, SDG11 Cities, SDG 13 Climate Action, SDG 15 Life on Land, SDG17 Partnership for the Goals

Semester 4

Final Semester

Master Thesis

3 Options: Monography, Research Manuscript, Practical Project
with Joint Supervision of 2 RePIC Universities

(incl. Research Lab Work and Online Colloquium)

30 ECTS

4th semester
Master Thesis

Supervision & Co-Supervision
offered by all RePIC Universities

Master Thesis Module					
Module 4-1	**Credits** 30 CP	**Workload** 810 h	**Term** 4th Semester	**Frequency** Each semester	**Duration** 1 semester
Lectures Individual Supervision, Master Thesis, Online Colloquium			**Contact hours** Individual supervision	**Self-Study** 810 h	**Group Size**

Prerequisites

All students participating in the module are enrolled as master students. Formal: 60 CP (completed all modules of semesters 1 and 2, minimum requirement)

Learning outcomes

After successful completion of the module, students will be able to:

- Develop, plan, prepare and deliver a final thesis which concerns an up-to-date research question on redesigning post-industrial settings while applying a suitable methodology.
- Appraise the ethical issues and professional competencies that arise during the research process.
- Display an independent approach to critical analysis and evaluation of a research problem.
- Synthesise knowledge, skills and competencies acquired during the RePIC programme towards the analysis of societal challenges in post-industrial environments.
- Demonstrate an ability to write critically and logically using proper academic citation in keeping with standards of postgraduate research.
- Position their own research findings in the broader context of post-industrial urban transformation research and practice.

Content

The master thesis is an individual and final project of the two-year master programme. It finalises the academic education on a master level. The student has the right to propose a supervisor, the thesis is assessed by the supervisor and two examiners. The thesis is intended to be a cross-border cooperation between the student and supervision from at least two different RePIC Partner Universities. The master thesis addresses a current research problem and might be integrated into running research projects within the RePIC Consortium. The thesis is accompanied by regular meetings with the supervisor and includes field or lab work. Each thesis is presented by each master candidate (max. 15 minutes oral presentation), with a subsequent multidisciplinary discussion (supervisors, master students, other RePIC Faculty, invited guests) (max. 30 minutes). The colloquium is held online in a virtual conference format to allow all staff and students from across the UNIC Partnership and beyond to participate.

Teaching methods/formats	
Thesis supervision, research-oriented field and/or lab work supervision, group discussions	
Mode of assessment	
Master thesis: 100 % of the grade. The final presentation of the master thesis in the online colloquium is not graded.	
Option 1: Dissertation (about 20,000 words)	
Option 2: Research manuscript aiming at publication in an academic journal (about 10,000 words)	
Option 3: Practical project accompanied by documentation and written analysis	
Requirement for the award of credit points	
Submission in due time, passed exam based on three individual reviews certifying a "satisfactory" performance. A thesis submission after the given deadline leads to a fail. The final presentation of the Master Thesis in the Online Colloquium should not exceed 15 minutes, followed by max. 30 minutes Q&A.	
Module applicability in other degree programmes	
N/A	
Weight of the mark for final sore	
30/120	
Module coordinator and lecturer(s)	
PD Dr. Dennis Edler (Coordinator), RePIC Faculty and external examiners	
Further information	
N/A	

Additional Electives – Language Courses (Extracurricular)

Language Course					
Module AE-1	**Credits**	**Workload** 135 h	**Term** 1st – 4th Sem.	**Frequency** Each semester	**Duration** 1 semester
Lectures Seminars (108 h)			**Contact hours** 108 h	**Self-Study** 27 h	**Group size** 30 students

Prerequisites

Formal: All students participating in the module are enrolled as master students.

Special: Proficiency level, depending on chosen course

Learning outcomes

European language level C1:

Understanding: Students will be able to:

- Understand extended speech even when it is not clearly structured and when relationships are only implied and not signaled explicitly.
- Understand long and complex factual texts, appreciating distinctions of style.
- Understand specialised articles and longer technical instructions, even when they do not relate to their field of study.

Speaking: Students will be able to:

- Express themselves fluently and spontaneously without much obvious searching for expressions.
- Use language flexibly and effectively for social and professional purposes.
- Formulate ideas and opinions with precision and relate their contribution skillfully to those of other speakers.
- Present clear, detailed descriptions of complex subjects integrating sub-themes, developing particular points and rounding off with an appropriate conclusion.

Writing: Students will be able to:

- Express themselves in clear, well-structured text, expressing points of view at some length.
- Write about complex subjects in an essay or a report, underlining what they consider to be the salient issues.
- Select a style appropriate to the reader in mind.

German European language level min. A 2

Understanding: Students will be able to:

- Understand phrases and the highest frequency vocabulary related to areas of most immediate personal relevance.
- Catch the main point in short, clear, simple messages and announcements.
- Read very short, simple texts.
- Find specific, predictable information in simple everyday material e) can understand short simple personal letters.

Speaking: Students will be able to:

- Communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities.
- Handle very short social exchanges.
- Use a series of phrases and sentences to describe in simple terms their educational background.

Writing: Students will be able to:

- Write short, simple notes and messages.
- Write a very simple personal.

Content

Students will have an opportunity to learn another language relevant in one of country of the RePIC Partners corresponding at least European language level A 2 or equivalent. The students will achieve English/French/Dutch/ German/Croatian/Finnish/Irish/Turkish/Spanish language proficiency to meet the international standards of scientific work and communication such as understanding written and spoken scientific (and technical) English and to present data without problems corresponding European language level

C1. Specialised technical language courses will allow to improve their professional vocabulary and communication skills.
Teaching methods/formats
Online or on campus
Mode of assessment
Course attendance and active participation, preparatory and follow up work for classes, oral and written examination
Module applicability in other degree programmes
N/A
Weight of the mark for the final score
N/A
Module coordinator and lecturer(s)
Language Centres of the Partners
Further information
RUB Department German as a Foreign Language, Study-accompanying courses:
https://www.daf.ruhr-uni-bochum.de/sbgk/index.html.en
The study-accompanying courses in German as a foreign language are aimed at the following target groups – free participation:
• international programme and exchange students (e.g., Erasmus+) or students from partner universities
• international regular students in German-language bachelor and master programmes (with the aim of obtaining a degree)
• international regular students in English-language master programmes
• international PhD students of the RUB (enrolled)
• international staff of the RUB (e.g., employees in technology and administration, Postdocs, professors)

9. Study Counselling and Information Services

Helpful addresses on the main counselling topics offered by the contributing universities are listed in the following. Please also refer to the **RePIC Student Handbook** for more information.

Ruhr University Bochum (RUB):

- Student Lifecycle Services: https://einrichtungen.ruhr-uni-bochum.de/en/devision-student-lifecycle-services
- University Library: https://www.ub.ruhr-uni-bochum.de/en/
- Accommodation for international students: https://international.ruhr-uni-bochum.de/en/wohnraum-fuer-austauschstudierende
- Student finance counselling for questions related to financing your studies: https://studium.ruhr-uni-bochum.de/de/studienfinanzierung
- Advisory Centre for the Inclusion of Disabled People: https://www.akafoe.de/inklusion/
- International Office: https://international.ruhr-uni-bochum.de/en/going-abroad-bochum-world
- Coaching, Workshops & Psychological Advice: https://studium.ruhr-uni-bochum.de/en/node/705
- Central Student Advisory Service - for help and support with individual problems before or during your studies: https://www.ruhr-uni-bochum.de/zsb/

Koç University Istanbul (KU):

- KU Office of Learning and Teaching (KOLT): KOLT offers several services for students, teaching assistants and faculty members to promote effective learning. Some of the services for students include academic tutoring, workshops, and conversation circles.
- KURES Counselling Service: KURES accompanies students in their process of coming to know and realizing themselves and supporting their personal development.
- Career Development Centre: The centre guides students in exploring their self and external awareness while providing tools so they can design, improve, and transfer their career journey.
- Office of International Programs (OIP): https://oip.ku.edu.tr/
- Registrar's and Student Affairs: https://registrar.ku.edu.tr/en/
- Diversity, Inclusion, and Disabled Students Coordination Office in the Office of Dean of Students
- Sevgi Gönül Cultural Centre: https://sgkm.ku.edu.tr/
- Sports Facilities: https://mezun.ku.edu.tr/en/sports-facilities/
- Suna Kıraç Library: https://library.ku.edu.tr/

University College Cork (UCC):

- University Student Counselling & Development provides support for students, staff, and parents during your studies: https://www.ucc.ie/en/studentcounselling/contact/

- Disability Support Service: The DSS in UCC supports students with a wide range of disabilities/ learning difficulties. Further details of supports offered by this service can be found at: https://www.ucc.ie/en/dss/
- The International Office in UCC provides detailed information and a point of access for international students before and during their studies: https://www.ucc.ie/en/international/
- UCC Student IT Services provides a central repository of all services available to enrolled students: https://www.ucc.ie/en/sit/. This includes details such as Eduroam Wifi service; Managed Print Service; Student email service and Software.

Erasmus University Rotterdam (EUR):

- Student Counselling: https://www.eur.nl/en/education/practical-matters/advice-counselling/student-counsellors)
- Confidential Counsellor: https://www.eur.nl/en/education/practical-matters/advice-counselling/confidential-counsellor
- Student Psychologist: https://www.eur.nl/en/education/practical-matters/advice-counselling/student-psychologists
- Career Counselling: https://www.eur.nl/en/education/practical-matters/advice-counselling/career-services
- International Office: https://www.eur.nl/en/education/practical-matters/contact/international-office
- EUR Student Charter: 2024/2025: https://www.eur.nl/en/media/2024-06-studentcharter2024-2025
- EUR Integrity Code: https://www.eur.nl/en/media/2021-12-code-integrity-eur

University of Liège (ULiège):

- Student Quality of Life Department (including psychological support, academic orientation Service, students in difficult socio-economic or personal situations, adults continuing studies, pregnant students): https://www.uliege.be/cms/c_9231296/en/student-quality-of-life-department
- Students with specific needs or disabilities: https://www.enseignement.uliege.be/cms/c_9122731/en/en-situation-de-handicap
- Service Guidance Etude Team (personalised remote support: working method, time management...): www.uliege.be/guidance
- International Office: www.uliege.be/international

University of Oulu (UOulu):

- Information for the new international degree and exchange students: https://www.oulu.fi/en/for-students/new-students-welcome-university-oulu
- Tutor Teachers, Study and Career Counselling Services support for studies (problems with studies, time management, motivation and procrastination, problems with thesis work): https://www.oulu.fi/en/for-students/supporting-your-studies

- Study psychologists support (stress, difficulties in learning, life management and well-being): https://www.oulu.fi/en/for-students/supporting-your-studies/study-psychologists
- Self-learning materials, webinars and workshops supporting study technics, time management, well-being etc.: https://www.oulu.fi/en/for-students/supporting-your-studies/study-skills-and-competences
- Accessibility issues: Study psychologists can make recommendations for individual arrangements for studies: https://www.oulu.fi/en/for-students/supporting-your-studies/accessibility-studies.

University of Zagreb (UniZG):

- Student Counselling and Support Services: http://www.unizg.hr/homepage/international-exchange/exchange-students/student-services/student-counselling-and-support-services/
- Academic Advisors (contacts) at faculties/academies: http://www.unizg.hr/homepage/international-exchange/exchange-students/student-services/academic-advisers-contacts-at-facultiesacademies/
- ICT Services & Facilities: http://www.unizg.hr/homepage/international-exchange/exchange-students/student-services/ict-services-facilities
- Exchange students – all supporting services are listed at: http://www.unizg.hr/homepage/international-exchange/exchange-students/student-services/
- The Office for Students with Disabilities: http://www.unizg.hr/homepage/international-exchange/exchange-students/student-services/office-for-students-with-disabilities
- International Relations Office: http://www.unizg.hr/homepage/international-exchange/exchange-students/student-services/international-relations-office/
- University Sports Services: http://www.unizg.hr/homepage/international-exchange/exchange-students/student-services/university-sports-services/
- Student's Health & Well-Being: http://www.unizg.hr/homepage/international-exchange/exchange-students/student-services/students-health-and-well-being/
- Student Organisations: http://www.unizg.hr/homepage/international-exchange/exchange-students/student-services/student-organizations/

University of Deusto (UDeusto):

- Deusto Services: https://www.deusto.es/en/home/campus-life/services
- Administrative Procedures: https://www.deusto.es/en/home/campus-life/academic-information/administrative-procedures
- Deusto Global – International Collaboration: https://www.deusto.es/en/home/international/deusto-global
- Deusto Campus Life: https://www.deusto.es/en/home/campus-life
- University Ombudsperson: https://www.deusto.es/en/home/we-are-deusto/team/university-ombudsperson

All students and alumni from Erasmus Mundus Joint Master Programmes are invited to become members of the **Erasmus Mundus Association (EMA)**, a global network of more than 12,000 members. More information is available at https://www.em-a.eu/membership.