comparative:

The Polytech network is a French group of 13 Universities Polytechnic Schools of Engineering offering more than 80 specialties among 5 major domains, including: Biotechnology, Bioengineering, Food Science; Civil Engineering, Environmental Science; Electrical Engineering, Industrial Engineering; Computer Science, Applied Mathematics; Mechanical Engineering, Materials Science.

More than 13 000 enrolled students are in the Polytech network that represents 3 300 graduates per year. 1 200 PhD students are also studying in the Polytech network. Finally more than 58 000 alumni are representing the Polytech Group in companies, in France and all around the world.

As every school of engineering, member of the Polytech group, Polytech Tours is a public school of engineering, component of the University of Tours (France). Polytech Tours has several accreditations, including the French « Commission du Titre d'Ingénieur », and the European accreditation EURACE. Polytech Tours is also a member of the French conference of business and engineering college ("Conférence des Grandes Ecoles") Polytech Tours includes 5 research and training areas: Urban & Regional Planning Engineering, Computer Science, Mechanical Engineering, Electronics and Energy, and Embedded Computing. In 2011, more than 1070 engineering students have been enrolled, representing 210 graduates, per year. Notice that these five-year curricula confer the official qualification of Engineer (Master's degree).

Polytech Tours is hosting 4 research laboratories of the University of Tours, and 90 PhD students. 90 Faculty members (Professors and Assistant professors), 36 Administrative and Technical staff are permanent employees of Polytech Tours. More than 150 teaching and research staff from industry are involved in Polytech Tours.

From a pedagogical point of view, Polytech Tours aims at offering an education in compliance with short term industrial needs (technical skills; internships; economics and business courses). Our goal is to provide an education to assist engineers for future changeover by guarantying a high level of scientific knowledge. Polytech Tours has also strong links with innovation and research policies (R&D), for instance by proposing research projects in which students are involved in relationship with a research team and/or 6 « Centres for Research and Studies », jointly with industrial partner companies.

Finally Polytech Tours is an international school of engineering. Students are strongly encouraged to spend either one of their three mandatory internships, or one study semester in a foreign country. To do this, several partnerships with more than 32 foreign universities, in 17 different countries, are currently active.

Contact Details

Academic Contact Information

Abdelillah Hamdouch

Professor

abdel-illah.hamdouch@univ-tours.t

Administrative Contact Information Claire Cazeaud

claire.cazeaud@univ-tours.f

CITERES Research Unit (team IPA-PE)

35 allee de Lesseps, 37200 Tours, France

Websites

http://www.polytech-tours.fr/ http://citeres.univ-tours.fr



Research Master "Planning and Sustainability"
Urban and Regional Planning (PS/URP)



course content

Description of the Programme

Duration 1 year (2 semesters)

Total ECTS Credits 60

Starting Date Septembe

→ Objectives

This Master aims to help students to develop a critical understanding of contemporary planning challenges for cities and urban regions, in the context of climate change and growing human needs. The content is focused on European-wide urban issues, but the programme is designed so that students may confront up to date scientific knowledge on planning with their own cultural background and planning experiences. Through the Master, each student becomes familiar with the advantages and limitations of cross-national transfer of 'good practice' in the urban policy field.

As a research Master, this programme trains students to deal with up to date research issues and methods. Through research, it prepares students to start a PhD or to take leadership roles in urban development and management, especially in an international context. It invites students to develop innovative concepts and strategies for qualitative interventions

in urban territories.



Resume with 240 European credits (ECTS), specialization in urban and regional planning (environment, architecture, local development).

English Proficiency

Level B2 of the Common European Framework of Reference for Languages or equivalent, i.e. minimum level required (for non-native English speakers): Paper-based TOEFL score = 577, Internet-based TOELF score = 87, TOEIC score = 750, IELTS = 5, Cambridge = FCE.

→ French Proficiency

Only required for everyday life; minimum recommended level: A2 of the Common European Framework of Reference for Languages, i.e.: TCF 200 points or DELF A2.

→ Application Process and Deadlines

Application process and deadlines are available on the Website: http://www.polytech-tours.fr/

→ Tuition Fees

The tuition fees of the PS:URP master program are about 6000€ for the whole year and include an internship gratification of about 2000€. Candidates who provide, at the moment of their final registration, an official certificate of a research lab attesting that their internship will be financed may pay only 4000€ of tuition fees.

→ Module 1 - Urban and Regional Issues, Planning Institutions and Practice, a Cross-National Approach

This module is an introduction to the topics and approaches that are dealt with in the other modules. It mixes lectures on the institutional context of planning in Europe and in France, with presentations by students of planning issues in their own country. The module offers a first approach to the cross-national analysis of planning issues and systems, which is to be consolidated in the other modules.

3 ECTS, 20 hours

Keywords: Planning systems, institutions, planning practice, comparative studies, crossnational approach, Europe, France.

Module 2 - Cities, City-Regions and Strategic Spatial Planning

This module provides an understanding of the rise of the notion of city-region. It highlights the connections to debates regarding spatial dynamics in Europe, metropolitan governance, competitiveness and sustainable development. The consequences of the city-region for urban planning theory and practice are discussed through a discussion of strategic spatial planning exercises in various European city-regions, especially in England and France.

4 ECTS, 16 hours

Keywords: Territorial competitiveness, city-region, strategic spatial planning, governance, sustainable urban development.

Module 3 - Risks, Decision Making and Planning

Today, the need to reduce the rise of disasters in cities is a priority for European governments. This module focuses on the goals of risks management, defined as a cross- sectors public policy integrating civil security, environmental or health policies. It also defines a territorial approach of hazard mapping and planning as part of a complex urban network system.

Keywords: Flood risk management, structural and non structural measures, flood risk maps, social vulnerability.

→ Module 4 - Project, Heritage and Sustainable Development

Heritage approach, territorial growth and sustainable development proceed from different theoretical perspectives and can be oriented by separated practices. The question is: how could they be hybridised within spatial planning and local development projects? The major purpose of this module is to offer a multidimensional and interdisciplinary analysis of the social and cultural environmental questions, in various territorial scales.

Keywords: urban project, heritage, sustainable urban development, energy.

→ Module 5 - Project Sciences and Analysis of Space : Planning **Process and Complexity**

The growing number of stakeholders has largely contributed to changing the planning process, while the socio-spatial analysis of territories has seen the emergence of "sensitive" approaches. In response, this module offers a theoretical and methodological approach to address planning projects and space analysis through the prism of complexity.

Keywords: Project sciences, sensitive approach, stakeholders, spatial practices.

→ Module 6 - Research Methods

This module has three interrelated aims: (1) to improve the research skills of students; (2) to help students to plan their own research; and (3) to develop critical evaluative skills in relation to the research conducted by other scholars. It focuses firstly on how to conceptualize a research issue and how to carry out investigations. Second, it proposes methods for conducting a literature review as well as case-studies. It also prepares students to use quantitative or qualitative methods, according to the specific research questions they wish to investigate.

Keywords: research process, research design, methodology, quantitative and qualitative methods.

→ Module 7 - Field Trip

The purpose of the trip is to observe various towns, rural areas and natural landscapes, as well as to meet decision-makers in the planning field. This activity will provide students with experiences outside their everyday activities. Students will be involved in planning the actual trip and post-trip activities (including the organization of an exhibition). The Loire Valley is to offer many specific site visits of cultural landscapes and of urban projects.

3 ECTS, 20 hours

Keywords: non-experimental research, observation, photography.

→ Module 8 - French Language and French Culture, Job Training

French language and culture (common with other courses at Polytech Tours). Students attending the URP/PS master program will have to succeed to an English Level Test and to French Level Test.

4 ECTS, 30 hours

Module 9 - Research Training (Research laboratory, CNRS UMR CITERES)

This unit validates the research placement that will be conducted within the research laboratory. Cities, Territory, Environment and Society (CITERES), and especially its research team "Urban and regional planning projects, landscape and environment". The various research programmes carried out by this group provide the intellectual environment for the discussion and the critical assessment of each advise each student and supervise his research student's individual research. A tutor will



