

## Master of Science in Spatial Planning Department of Spatial Planning and Environmental Sciences, Faculty of Geodesy and Cartography, Warsaw University of Technology

### **EVALUATION REPORT**

After an in-depth examination of its academic curriculum and teaching pedagogy, the Spatial Planning (MSc level) offered in the Department of Spatial Planning and Environmental Sciences at the Warsaw University of Technology has been conferred the AESOP Certificate of Quality.

The Spatial Planning (MSc level) Programme delivered at the Warsaw University of Technology has been evaluated by two members of the AESOP Excellence in Education Board (EEB) appointed by the Chair. The EEB certifies that the above programme fulfils the Quality Recognition criteria.

### **Quality in Planning Education**

Warsaw University of Technology is distinctive amongst spatial planning programmes in Poland for being located in the Faculty of Geodesy and Cartography, reflected in the programme's distinctive emphasis on geospatial technologies, environmental issues, spatial design, land management and revitalisation. Further strengths lie in the programme's incorporation of inputs from key stakeholders, from understanding the views of communities to setting assessment briefs that respond to the needs of Polish cities.

This reflects the challenges faced by contemporary Poland in addressing the environmental degradation caused by decades of prioritising intense industrialisation and urbanisation. The programme also addresses the ongoing reforms of Polish planning, as well as other challenges, such as a shortage of housing. Within this context, the programme brings together the following aspects of quality in planning education.

### **Programme Curriculum and Identity**

The programme is organised around two coherent tracks, each building on a common first trimester with a mix of common and specialist modules in the second trimester and specialist modules in the third trimester. The overall mix is three-quarters common modules between the two tracks and one-quarter module modules specific to the track:

**Environmental conditions of spatial planning** – focused on land management, as well as the use of advanced geospatial technologies in decision-making process.





# QUALITY RECOGNITION **AESOP**

• **Urban design in spatial planning** – focused on the preparation and development of planning processes and documents, including formulating land use plans, technologically supported by Geographical Information Systems, Computer Aided Design and Building Information Modelling.

Graduates from the Programme are characterised by strong skills in geospatial technologies such as GIS and remote sensing and spatial multi-criteria analysis. An example course is 'Building Information Modelling' (studied by students on the 'Urban design in spatial planning' track), which requires students to work in groups to apply analysis and simulation tools to realworld concerns such as wind-flow and pedestrian traffic. Notably, the results collected by students are assessed for publication potential, leading to many student publications in academic journals.

Existing strengths in this area are being further developed by experimentation in this area with Virtual Reality (VR) and Augmented Reality environments. The latter has included experimenting with incorporating VR into teaching scenarios including landscape planning, how blind people experience public space and testing spatial models, leading to the development of a future implementation plan.

Territorial scales, from the neighbourhood to the city region, are embedded in the Programme, including the rural, urban and peri-urban. Notably, some courses embed multiple scales, for example, the course; 'Threats and Protection of Urban Ecosystems', which entails students working between the city, housing estate and human scales. In some years this course also includes the opportunity for students to participate in an international competition, though this is dependent on the theme of the competition aligning with the Course.

A particular focus on the regional and supra-national scales is addressed through studio courses, incorporating, for example, courses that work with regional planning directors, address EU-scale politics and incorporate global examples of urban greening plans. On an ad-hoc basis, this is reinforced through collaborative Polish-German workshops. Collaborations with other universities are also used to incorporate an understanding of the challenges faced in the Global South.

The programme's distinctiveness is illustrated by its use of geospatial analysis, for example, of census data and ecosystem service distribution, to highlight uneven distribution patterns, social inequalities, and the social/environmental justice implications of planning decisions. The Programme also incorporates attention to the links between planning, land and property ownership, and real estate development.

Contemporary socio-spatial challenges such as climate change, biodiversity loss and suburbanisation are addressed through specific courses that emphasise the need for a multidisciplinary approach to problem-solving. These include courses that respond to the distinctive Polish context, for example, addressing the revitalisation of post-industrial urban areas. Notably, these courses are linked back to the programme distinctiveness and the development of strong technical skills through courses, for example, addressing how pollution





is measured and managed and how suburbanisation processes are linked to land and property ownership.

#### Quality Assurance

A series of formally constituted committees oversee the quality of the Programme at the Faculty level. There is student representation on the Curriculum Committee, which meets regularly to review the curriculum and evaluate course content There is also student representation on the Faculty Consultative Council, which meets less regularly but includes employer representation and provides a forum to discuss how programmes relate to employer needs. There are opportunities for staff to improve their teaching through formal training and qualifications and awards (including a financial element) are given to those staff who are recognised by students as the best teachers, providing strong incentives to deliver high-quality learning and teaching.

#### Principles of Pedagogy

The incorporation of a variety of pedagogies in the Programme encourages students to develop creative responses to real-world problems, rooted in their own research and inquiry. Studio-based courses incorporate Problem-based Learning, requiring students to work from available geospatial data to develop, for example, design proposals for transport systems or analyses of how information can be provided to facilitate public participation. These incorporate real-world issues such as the structure of land-ownership and municipal policies, using these to develop design evolutions. Relatedly, these courses make extensive use of engagement with invited professionals from different community, government and business backgrounds – as earlier noted, a distinctive feature of the course is that studio design projects often directly respond to the needs of Polish cities, formalised through signed agreements and facilitating aspects such as the arrangement of student competitions and the public display of student work.

As noted above, the integration of multiple disciplinary knowledge underpins the pedagogy of the programme, reinforced through a variety of pedagogies that include studio/project-based learning, independent diploma theses and formal in-class debate. This includes a strong emphasis on group projects, allowing students to take on the role of different actors in planning processes, but it also features innovation in individual learning, such as the ability for students to consult external experts when formulating a research problem for their thesis. The embedding of groupwork and focus on real-world problems gives students opportunities to develop skills in practical reasoning, reflexivity (including through informal peer-review) and judgement. The 'post-disciplinary' approach is also reinforced through the invited involvement of professionals from different disciplinary backgrounds.

Example courses that demonstrate a strong inter-disciplinary approach include 'Environmental Assessment, which integrates knowledge from geo-engineering, architecture and planning, and 'Territorial Marketing', where knowledge from psychology, marketing, culture, economics and planning are brought together. This strong emphasis on cross-





disciplinarity is supported by the aforementioned highly distinctive use of geospatial analysis, supported by student access to high-quality IT infrastructure.

The 'Urban design in spatial planning' track incorporates group projects that respond to realworld problems faced by municipalities. Notably, courses such as 'Local Spatial Development Plan' involve students making site visits, engaging with local communities and residents and consulting with municipal officials, giving students real-world experiences of the tensions and conflicts involved in planning decisions.

The 'Environmental conditions of spatial planning' includes a course on the interaction between law and policy, and technical information about mineral extraction, including where this runs counter to the wishes of local communities. Other courses in this track address EU environmental legislation and procedures and ecosystem services.

There are extra-curricular opportunities for students to further develop their research skills through participation in staff research projects, and initiatives such as the 'Student Research Club', thesis competitions and joint student-staff publications. For students with the best results at bachelor's level there is a possibility to study an individualised Master's programme.

The AESOP Certificate of Quality and this Evaluation Report are valid for a period of six years (2024-2030).

04 October 2024

Tijana Dabovic Chair AESOP Excellence in Education Board

Christopher Maidment Assessor AESOP Excellence in Education Board

and forthe

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has been highly distinguished with the

# **AESOP CERTIFICATE OF QUALITY**

We certify that:

This programme fulfils the European quality standards of planning programmes according to the AESOP Charter, complemented by an effective internationalization of teaching and learning processes.

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