

Mobility management education at the Cracow University of Technology

2010

 **University**
Cracow University of Technology

Country
Poland

Location 
Urban centre

Size 
10,000-20,000

Mobility Organizational Structure 
None

Summary

Cracow University of Technology provides students of the Transportation and Land Use Specialties at the Civil Engineering Faculty with courses on mobility management. Students have the possibility of writing bachelor and master thesis on mobility management issues and they can join the Student Transport Group which as a collective, deals with transport related problems.

The Department of Transportation Systems together with the Student Transport Group organises workshops allowing students to work on real problems, such as the transport service during World Youth Day 2016 in Krakow or the reconstruction of the main streets in the city. Representatives of transport authorities, transport operators and other entities always take a part in these workshops, providing professional support and, at the same time, benefitting from exposure to students' innovative ideas.

Aims

- Learning more about current urban transport problems and solutions to solve them.
- Gain experience and practice on solving real transport problems with the assistance of the transport professionals.

Stakeholders

- Students of the Transportation and Land Use Specialties at the Civil Engineering Faculty.
- Municipalities, Transport Authorities and other transport related entities.

Background

Not available.

Description

Mobility management education at the Cracow University of Technology is carried out in a few different ways:

1. From 2010 Cracow University of Technology offers courses on mobility management addressed to students of Transportation (Urban Transport specialty) and from 2015 to students of Land Use at the Civil Engineering Faculty. The course programme consists of the following:

- Current transport related problems.
- Genesis of mobility management.
- Characteristics and examples of 'soft' measures.
- Characteristics and examples of 'hard' measures.
- Integration of transport and land use planning.
- Mobility plans for generators of traffic, such as work places, schools, shopping malls, etc.



Description

To practice on the subject matter students are obliged to prepare a mobility plan for chosen a traffic generator. The project design includes detailed object description, including transport problems and the inventory of the transport connections and a transport accessibility analysis as well as proposals of measures to induce travel behaviour change and the suggestion of a set of indicators to evaluate the implementation of the proposed measures.

What is more, students take part in a special simulation workshop, acting in the role of representatives of the different stakeholders (local communities, transport authorities, transport operators, ecological associations, local shopkeepers etc.) and trying to make a compromise on the future transport related solutions proposed for the chosen area. This way they can learn what is important for particular stakeholders and how to lead the public participation process.

Students have the possibility to write their bachelor or master thesis based on knowledge gained from working on real transport problems. Courses and thesis are carried out by the employees of the Department of Transportation Systems.

2. A few years ago the Student Transport Group was established to bring together students who are interested in transport issues and who want to work on transport problems in their free time, outside of classes.

Students meet every month, and at the beginning of each semester plan their activities for the months ahead. They always work on real problems. Sometimes these problems are related to observations made by the students on some element that doesn't operate well and sometimes this is work ordered by the transport authority in Krakow or by private companies (e.g. bike traffic measurements, mobility plan).

In the 2016/2017 academic year there were 64 group members divided into several sections; mobility management, land use planning, public transport, bike traffic, parking issues.

At the end of each semester there is a presentation of the projects undergone by each particular section. Students also prepare individual reports on the work done. From time to time representatives of transport operators or transport

authorities as well as any other interested parties are invited to view student presentations, and see first-hand their work, results and innovative ideas. Some projects concerned measures that should be introduced in the University grounds to make it more pedestrian friendly.

Every year the group organises a national conference of Student Transport Groups, students also write articles on their work and publish them in different journals and present them at national and international conferences.

The group receives support and professional assistance from the employees of the Department of the Transportation Systems.

3. From the 2015 the Department of the Transportation Systems together with the above described Student Transport Group organise workshops for students with different stakeholders (2-4 day workshops, outside of Krakow city). Students work on real, serious problems and have to find the best solutions. Experts, not only from the transport sector, are involved in these workshops, sharing their experience and supporting students in their projects. Results of the students' work are then presented to regional or local authorities or to other decision makers.

It is worth mentioning that one of the workshops was very successful and highly visible in the local media. Students, together with experts from many fields (not only transport professionals but also police, fire department, church institutions, etc.) were working on the complex issue of the transport service for the World Youth Days, which took place in Krakow in the summer of 2016. A workshop was organised 6 months before the event in light of its magnitude; during the World Youth Days Krakow received twice as many visitors than the number of the city inhabitants! Transportation management was a real challenge and the view points and results of the students' work were presented to the Provincial Governor, forming a base for the organisation of transport services during the event. In this way students could participate in the planning process and learn from experts.

In total 4 workshops were organised from autumn 2015 through to the end of 2016. All 4 were related to real transport problems occurring in the city, some being organised at the request of the Krakow Municipality.



Indicators

- Number of students who took a part in mobility management classes.
- Number of workshops organised.
- Number of students who took a part in workshops.
- Number of students of the Transport Students' Group.



Results

- Since 2010 around 150 students of 'Transportation' and as of 2015 around 70 students of 'Land Use' have taken part in the mobility management classes.
- Up to the end of the 2016 4 thematic workshops were organised. In total approx. 200 students participated in all the workshops.
- The number of students in the Student Transport Group increases every year. The group had 64 members in the academic year 2016/2017 (48 of them are very active in all group activities).



Expense

Expenses related to the workshop organization:

- Room rental.
- Accommodation (only if workshop is organised outside the city).
- Catering.
- Cost of materials: paper, maps, pencils etc.



Financing

- Since the mobility management course is a part of the University educational programme all expenses of the classes are covered by the Ministry of Education.
- Expenses related to the workshops are partially covered by the University funds and partially, depending on the workshop theme, by the municipalities or transport authorities interested in workshop results.



Lessons Learnt

- The best way of learning, raising awareness and increasing participation is not only through listening to teachers and watching their presentations but also working on real problems, e.g. conceptualise a mobility plan for a chosen traffic generator,
- The opportunity for students to find out how public participation works through inviting them to play the roles of different stakeholders in order to experience what is important for particular groups and how compromise can be reached,
- A successful education for transport professionals can be reached by providing a rich educational offer, consisting not only of obligatory courses, but also by offering interesting alternatives for free time activities, such as workshops or working in student groups, though these also require a great effort from the teachers,
- To see problem resolution through observing professionals is a great learning opportunity, that is why it is very important to provide students with the possibility to cooperate with experts on joint projects,
- Organising workshops over a few days outside the university, or even outside the city, has a very positive influence. After the whole day of working students can rest, play sports or talk with colleagues, which favours integration.

 Pictures

1. Participants of a workshop. Student Transport Group

 Links

The Student Transport Group webpage:
<http://www.knsk.org/>
Information on the student workshop for the transport service on World Youth Days 2016 in Krakow:
<https://www.youtube.com/watch?v=jNSKm1C-Ahg>

 Contact person

Katarzyna Nosal
Cracow University of Technology
knosal@pk.edu.pl