

# Mobile Mapping and Navigation Systems – a New Master's Program in the Field of Geomatics Launched in Covid Pandemic Time

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## SUMMARY

Nowadays, technologies are characterised by solutions that increasingly support users leading to automation and autonomous work. More complex systems integrate technological solutions from various fields of science. It demands conducting interdisciplinary fields of study. The Faculty of Geodesy and Cartography of the Warsaw University of Technology has opened a new master's program, a unique course in Central and Eastern Europe. The specialisation of Mobile Mapping and Navigation Systems (MMNS) was launched in the studies of geodesy and cartography in October 2020 to meet modern technological trends and develop educational opportunities for international students in the best technical university in Poland.

The study program has been created in cooperation with the industry representatives, and it is tailored for modern technological needs to meet the expectation of the geomatics labour market. The student who will graduate from this program should know about designing mobile mapping platforms, especially how to select, calibrate, and integrate the measuring sensors such as GNSS receiver, inertial measurements units, LIDAR, photogrammetric cameras etc. Furthermore, the graduates will know how to elaborate and analyse the geospatial data from mobile mapping platforms.

The studies are conducted with an emphasis on practical classes and field exercises with professional mobile mapping systems. The entire cycle of the master's degree program lasts three semesters (1.5 years), and the program is realised by Faculty scientific staff members supported by experts from a leading company in this field.

In a paper content of the course will be introduced and expectations from graduated students described. Compared to other English-taught programmes conducted in the European region, the

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MMNS studies will be presented according to their duration, the number of hours, courses included and content of syllabuses. One crucial part of the presentation will be discussing problems and opportunities that arose during two academic years with launching and running the courses in pandemic circumstances.

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