Module designation	Infrastructure and Transportation Systems
Semester(s) in which the module is taught	1 st Semester (first year of master program)
Person responsible for the module	Prof. Dr. Sri Maryati, S.T, MIP.
Language	Indonesian
Relation to curriculum	Specialisation Compulsory Course
Teaching methods	Lectures and discussions, empirical studies / case studies, class debates, brainstorming, talk shows / panels, roundtables, guest lectures
Workload (incl. contact hours, self- study hours)	(Estimated) Total workload: around 9 hours per week x 16 weeks = 144 hours
	 Face to face teaching: 2 hours per week = 2 x 16 = 32 hours Self-study hours: 7 hours per week: 7 x 16 = 112 hours
Credit points	3 CU/5 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	Students are able to understand the basic concepts of regional and urban infrastructure systems, along with the characteristics of each type of infrastructure
Content	1. Aspects of Space in Infrastructure and Transportation Systems
	Contemporary Issues in Infrastructure and Transportation Systems
	 Different types of infrastructure: clean water, wastewater, solid waste, stormwater, energy and telecommunications, water resources, land, rail, sea and air transportation
Examination forms	Written exam (mid-term and final), assignment, in-class discussion
Study and examination	Take Home Test/ Midterm Exam (30%) Singl Exam (20%)
requirements	 Final Exam (30%) Critical review & in-class discussion (40%)
Reading list	1. Button, K.J. "Transport Economics (2nd Edition)". Edward Elgar, 1996.
	 Bruton, Michael J Introduction to Transportation Planning. United Kingdom: Taylor & Francis, 2021.
	 Chapin F. Stuart, "Urban Land Use and Planning". University of Illinois Press, 1985.
	 Meyer, Michael D Transportation Planning Handbook ITE Institute of Transportation Engineers.,. Germany: Wiley, 2016.
	 Hutchinson, B.G., "Principles of Urban Transportation System Planning". McGraw-Hill, 1974
	 Kanafani, Adib. "Transportation Demand Analysis". McGraw-Hill, 1983.
	 Law, Averill M. & W David Kelton. "Simulation, Modelling, and Analysis". Mc-Graw-Hill, 1991
	8. Manheim, Marvin L. "Fundamentals of Transportation System". MIT Press, 1979.
	 Meyer, Michael D. & Eric J. Miller. "Urban Transportation Planning". Mc-Graw-Hill, 1982.
	 Morlok, Edward K. "Introduction to Transportation Engineering and Planning". Mc-Graw-Hill Book Co., 1978

PL5132 Infrastructure and Transportation Systems