

**PL4021 Urban and Regional Modeling**

Module designation	Urban and Regional Modeling
Semester(s) in which the module is taught	7/8 <sup>th</sup> Semester (forth year of undergraduate program)
Person responsible for the module	
Language	Indonesian
Relation to curriculum	Elective Course
Teaching methods	Combination of lecture, small group discussion, case study, self-directed learning, and exercise
Workload (incl. contact hours, self-study hours)	<p>(Estimated) Total workload: around 9 hours per week x 16 weeks = 144 hours</p> <ul style="list-style-type: none"> <li>• Face to face teaching: 42 hours (lecture)</li> <li>• Structured activities: 24 hours (lecture) and 24 hours</li> <li>• Independent study: 24 hours (lecture) and 24 hours</li> <li>• Exam: 6 hours</li> </ul>
Credit points	3 CU/5 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	Ability to serve as an interface for public aspirations, facilitating the connection between technical-analytical processes and political aspirations.
Content	This course consists of 2 (two) parts. The first part will discuss the concept of modeling, problem structuring in model, introduction to model formulation, model utilization and interpretation. Part two will be directed toward the introduction and application of model particularly on regional development model and budgeting programming model. This kind of model is expected to be able to provide interface role on public aspiration dimension, in order to facilitate technical-analytical process and politician aspirations
Examination forms	Mid Exam (30%), Final Exam (35%), Assignment (35%)
Study and examination requirements	
Reading list	<ol style="list-style-type: none"> <li>1. Oppenheim, Norbert., Urban Travel Demand Modelling, , John Wiley &amp; Sons Inc, 1995</li> <li>2. Oppenheim, N, Applied Model in Urban &amp; Regional Analysis, , Prentice-Hall Inc, 1981</li> <li>3. Makridakis, S (et.al), Forecasting: Methods and Applications, , John Willey &amp; Son, 1983</li> <li>4. Law, Averill M. &amp; W David Kelton., Simulation, Modelling, and Analysis, , Mc-Graw-Hill, 1991</li> </ol>