

National Yang Ming Chiao Tung University
 Department of Transportation & Logistics Management
 Courses of Disciplines for Ph.D. Written Qualification Examination

Disciplines	Courses		Courses	
Policy and Planning	Transportation System Analysis, Transportation Economics and Policy, Supply Chain Strategies and Planning, Logistics Operation Planning Models, Transportation Projects Evaluation, Special Topics in Traffic Regulations, Advanced Transportation, Policy and Planning for Public Transit, Sustainable Transportation Planning, Maritime Transport Policy and Shipping Management, Travel Demand Analysis, Methods of Urban and Regional Planning, System Simulation, Travel Demand Theory and Practice, Transportation Science and Technology Policy	Quantitative Analysis Methods	<u>Optimization Method:</u> Linear Programming, Dynamic Programming, Nonlinear Programming, Integer Programming, Combinatorial Optimization, Mathematical Programming, Heuristics, Network Modeling Analysis <u>Statistical Method:</u> Stochastic Processes, Mathematical Statistics, Multivariate Analysis, Transportation Econometrics, Data Mining, Business Research Methods, Big Data Analytics	
Information and Technology	Traffic Accident Investigation and Reconstruction Technologies, Intelligent Transportation Systems, Transportation Safety, Transportation and Logistics Information System, Network Traffic Control, Theory of Traffic Flow, Heuristics, Road Safety Engineering, Supply Chain Analytics, Data Science Methods, Advanced Traffic Signal Control, Railway Engineering, Maritime Informatics			
Operation and Administration	Revenue Management, Transportation and Service Marketing, Aviation Industry Operations and Management, Logistics and Supply Chain Management, Distribution Logistics Optimization, Service Marketing and Logistics, Transportation Risk Management, Operations Research Applications for Sea and Air Transportation, Logistics System Modeling, Global Supply Chain Management, Electronic Commerce in Transportation and Logistics, Hazardous Material Transportation, Road Safety Design and Management, Shipping Operations and Management, Management of Maritime Organizations			