

g) User-friendly interface for the mathematical models using GAMS MIRO.

Supervisor: Lorena Reyes

The Public transport operations course contains a module for Network design, line planning, Timetabling, vehicle scheduling, crew scheduling and crew rostering. Each of those modules presents at least one mathematical model to solve specifically solve a problem in public transport operations. The task consists of transferring all models to GAMS Miro to provide a user-friendly interface for students.

Student Tasks Summary:

- The student should allow that all parameters of the model are the data interface with GAMS Miro (which data are provided by the user)
- The student should define the output (results) of the model to GAMS Miro
- The student should provide a small report for each model explaining to students how to interact with the model through GAMS Miro, how to download model results and how to interact with the GAMS

References:

- <https://www.gams.com/miro/>
- Gkiotsalitis, K. (2022). Public Transport Optimization. Springer, Cham.
<https://doi.org/10.1007/978-3-031-12444-0>
- Schöbel, A. (2007). Optimization in public transportation (Vol. 3). Springer.
<https://doi.org/10.1007/978-0-387-36643-2>