	Responsable / *Responsible* : S. LAWFORD	Ingénieur ENAC Année scolaire 2025/2026
S9 **PIR-ECO**	**Minor « PIR ECO (Passenger behavior and value of time) »** **(Laboratoire DEVI[1])** - **programme Développement Durable**	**Pre-requisites** : (a) S7 ECO and S8 PREV or (b) be able to demonstrate equivalent skills or motivation

OBJECTIFS / *OBJECTIVES*

Upon completion of this minor, the students will be able to :

- design an empirical research programme in economics
- critically assess the existing research literature
- apply tools from economic theory, graph theory, and econometrics, to real world problems
- prepare a survey and analyse its results
- prepare a research article and presentation, both in English

The students will collaborate as research assistants with enseignants-chercheurs who have proven expertise in economics, air transport economics, econometrics and statistics, and graph theory.

Subject :

Explore the concept of value of time in the context of multimodal travels and changes in the usage of travel time.

The current way of analysing passenger travel choices does not seem to reflect anymore the way people behave when they decide to travel and choose their transport modes. For practicality reasons, current transport models usually consider individual transport modes with the attributes of monetary costs and time costs. However people usually string together several transport modes from origin to destination. Moreover they seem to consider other attributes than just price and time of travel.
Today, some transport modes enable people to make better use of their travel time: for instance by offering internet connection, time can become productive instead of 'lost'. Real-time information on traffic often enable travellers to improve the quality of their trips through anticipation and selection of the best solution for the endpoints of the trip. People may also consider the environmental impact of the modes they plan to use.
How can we take those innovations and behaviour changes into account in the analysis of passenger travel choices?

[1] Data, Economics and Interactive Visualization.

Pour en savoir plus / *For more information* : http://formations.enac.fr/fr/formations/feuilleter-le-catalogue/sciences-technologies-sante-STS/formation-d-ingenieur-classique-FI/ingenieur-enac-program-47517.html

Background reading :

AMAR GEORGES, (2016) “HOMO MOBILIS: UNE CIVILISATION DU MOUVEMENT, ISBN 978-2-36405-133-1, FYP EDITIONS

Kenyon, Susan and Glenn Lyons (2007) Introducing multitasking to the study of travel and ICT: Examining its extent and assessing its potential importance. Transportation Research A 41(2), 161-175.
Metz D. (2008), The myth of travel time saving, Transport Reviews, Vol. 28, No. 3, 321–336.

Total volume : Approximately 160h for each student.

Maximum number of students : 2 students.

Majors : Students from all majors will be considered.

Pre-requisites : Students must either (a) have taken the Economics minor in S7 and the Econometrics and Forecasting minor in S8, **or** (b) be able to demonstrate equivalent skills or a high degree of motivation to acquire those skills (**includes Erasmus students**).

[1] Data, Economics and Interactive Visualization.