

TRAIL basic course program (December 2021)

	By	Part ¹	ECTS ²	TUD GS credits ³	TUD GS category⁴
Introduction to TRAIL and the PhD student process (0.5d) ⁰ (<i>Marchau & Van Wee</i>)	TRAIL	S	0.25	0.5	discipline/ research

I TRAIL Basic Courses ⁵	By	Part ¹	ECTS ²	TUD GS credits³	TUD GS category⁴
Fundamental Knowledge on Transport, Infrastructure & Logistics (<i>Annema & Van Wee</i>) – (4d) ⁶	OML	D	1 - 4	4 - 5	discipline
TRAIL Theories and Methods (3d) (<i>Marchau & others</i>)	TRAIL	T, M	1 - 3	3 - 5	discipline/ research

II General TRAIL Courses	By	Part ¹	ECTS ²	TUD GS credits³	TUD GS category⁴
TRAIL Writing a Literature Review in the TIL Domain (2d) (<i>Van Wee</i>) ⁶	TRAIL	S	1 - 4	2 - 5	discipline/ research
Machine Learning (4d) ⁶ (<i>Rui / Van Nieuwenhuysse</i>)	OML	M	1 - 4	4 - 5	discipline/ research
TRAIL Data-analysis and Statistics (3d) (<i>Kroesen & Molin</i>)	TRAIL	S	1 - 3	3 - 5	discipline/ research
Societal Relevance of your PhD Research (1d) (<i>Annema & Van Wee</i>)	TRAIL	S	0.25 – 1	0.5 - 2	discipline/ research
Writing and Publishing a TRAIL Research Article (1d) (<i>Geurs & Rezaei</i>)	TRAIL	S	0.5 - 1	1 - 2	discipline/ research
Discrete Choice Analysis: micro-econometrics and machine learning approaches (3d) (<i>Chorus & Van Cranenburgh</i>)	TRAIL	T	2	3	discipline/ research
Stated Choice Data Collection (<i>Rasouli & Caiati</i>)	TRAIL	M	1	2	discipline/ research
Transport Innovations (1d) (<i>Annema, Geerlings & Wiegman</i> s)	TRAIL	D	0.5 - 1	1 - 2	discipline

III TRAIL Specialisation Courses	By	Part ⁷	ECTS ²	TUD GS credits ³	TUD GS category⁴
Traffic Flow Operations and AI (3d) (<i>Hoogendoorn & Van Lint</i>)	TRAIL	I	1 - 2	2 - 3	discipline
Behavioural Aspects in Transport (1d) (<i>De Waard & Veldstra</i>)	TRAIL	I	0.5 – 1	1 - 2	discipline
Transport Logistics Modelling (4d) ⁶ (<i>Tavasszy & Zuidwijk</i>)	OML	L	1 - 4	4 - 5	discipline/ research
Facility Logistics Management (4d) ⁶ (<i>Adan & De Koster</i>)	OML	L	1 - 4	4 - 5	discipline
Quantitative Modelling and Analysis of Supply Chains (4d) ⁶ (<i>De Kok</i>)	OML	L	1 - 4	4 - 5	discipline/ research
Advanced Inventory Theory (4d) ⁶ (<i>Dekker & Van Houtum</i>)	OML	L	1 - 4	4 - 5	discipline
Freight Transport Management (4d) ⁶ (<i>Vis & Coelho</i>)	OML	L	1 - 4	4 - 5	discipline
Passenger Transport Systems (4d) ⁶ (<i>Cats & Schmidt</i>)	OML	L	1 - 4	4 - 5	discipline
Capita selecta – various (2d) ^{6,8}	OML		0.5 - 2	2 - 3	

Yearly
Every 1.5 years
Every 2 years

⁰ Between brackets number of course days

¹ D= Domain Knowledge

T = Theory

M = Methodology

S = Skills

² First number = participated in course – second number = participated in course & passed assignment/exam

³ The Promotor decides about the number of TUD GS credits to be administered in DMA

⁴ PhD student can choose either category, since TRAIL 'methodology' and 'skills' courses are strongly linked to the TRAIL 'discipline'

⁵ Mandatory courses for the TRAIL Diploma

⁶ Courses given by TRAIL and Research School Beta within the Graduate Program Operations Management and Logistics (GP-OML).

⁷ T: Transport, I: Infrastructure, L: Logistics

⁸ See TRAIL website for more details

► Detailed information on all courses: www.rstrail.nl