

ICES - Modeling and Forecasting

Start in September

(courses are 7.5 EC; unless otherwise specified)

Highlight the chosen courses

Name student: _____

Track-coordinator: dr. Jord Warmink

Student number: _____

Date: _____

Signature: _____

Signature: _____

	Block 1 (15 EC) Quartile 1	EC	Block 2 (15 EC) Quartile 2	EC	Block 3 (15 EC) Quartile 3	EC	Block 4 (15 EC) Quartile 4	EC
Profile courses (min 30 EC)			Design project water II Transport Modeling	7,5 7,5	Tools for water policy analysis Mathematical Optimization in Transport Mathematical physics of water systems	7,5 7,5 7,5	Transport Research Project	7,5
Profile electives	Hydrology Simulation (IEM; follow up of Module 8 CiT/TBK) Discrete Optimization (AM) Statistics and probability (IEM)	7,5 6 6 5	Data analysis in water engineering & management Traffic Operations Data Science (EWI) Simulation (IEM; follow up of Module 8 CiT/TBK)	7,5 7,5 5 6	Building Information Modeling & 5D Planning Data Science (EWI) Theory of Partial Differential Equations (AM) Introduction to Finite Elements (part mod11 WB) Applied Finite Elements for PDE (AM) Optimization Modelling (AM) Scientific Computing (AM)	7,5 5 5 3 6 6 6	River dynamics (prior knowl: Math.Physics of WS) Traffic Management	7,5 7,5
Other CEM courses	Water Systems Water footprint assessment Intelligent Transport Systems Planning and Process management Legal & governance aspects Supply chain management & ICT Sustainable building	7,5 7,5 7,5 7,5 7,5 7,5 7,5	Public Transport in Urban Areas Project management Markets, organizations & innovation Research methodology & academic skills	7,5 7,5 7,5 7,5	Land Use and Transport Interactions Geo Risk Management Collaborative design & engineering Project control & risk management Procurement Strategies & Tendering	7,5 7,5 7,5 7,5 7,5	Integrated water management Hydraulic engineering Sustainable Transport Industrialization & innovation in construction Infrastructure management	7,5 7,5 7,5 7,5 7,5
Free electives (max 15 EC)								

	Block 5 (15 EC) Quartile 1	EC	Block 6 (15 EC) Quartile 2	EC	Block 7 (15 EC) Quartile 3	EC	Block 8 (15 EC) Quartile 4	EC
Profile courses (min 30 EC)			Morphology (pr.knowl: Marine Dynamics)	7,5				
Profile electives	Numerical Methods in ME (ME; prior knowledge: Intro FE) Marine dynamics (prior knowl: Math.Physics of WS) Hydrology Simulation (IEM; follow up of Module 8 CiT/TBK) Discrete Optimization (AM) Statistics and probability (IEM)	5 7,5 7,5 6 6 5	Numerical Methods in ME (ME; prior knowledge: Intro FE) Data analysis in water engineering & management Traffic Operations Data Science (EWI) Simulation (IEM; follow up of Module 8 CiT/TBK)	5 7,5 7,5 5 6				
Other CEM courses	Water Systems Water footprint assessment Intelligent Transport Systems Planning and Process management Legal & governance aspects Supply chain management & ICT Sustainable building	7,5 7,5 7,5 7,5 7,5 7,5 7,5	Public Transport in Urban Areas Project management Markets, organizations & innovation Research methodology & academic skills	7,5 7,5 7,5 7,5				
Free electives (max 15 EC)								
Thesis (37,5 EC)			Preparation Master Thesis	7,5	Master Thesis Water/Traffic/Construction (30 EC)			