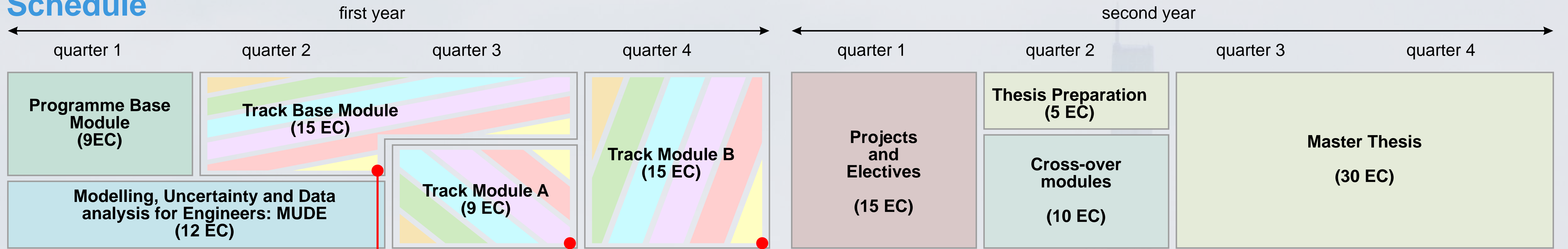


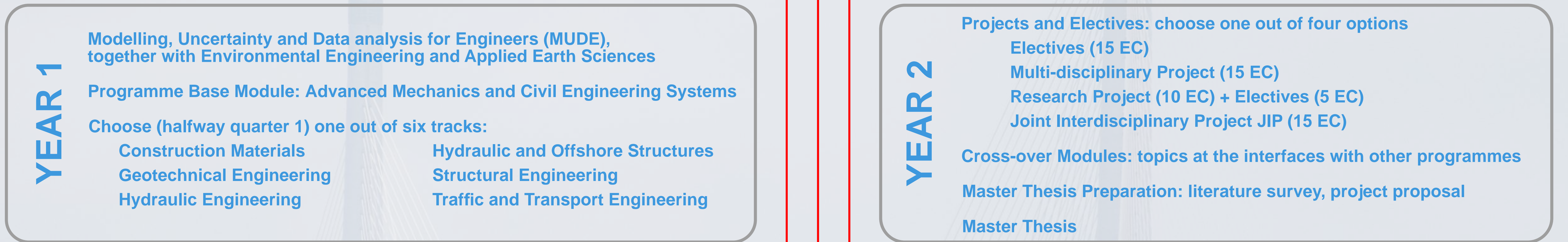
# Master of Science Programme Civil Engineering



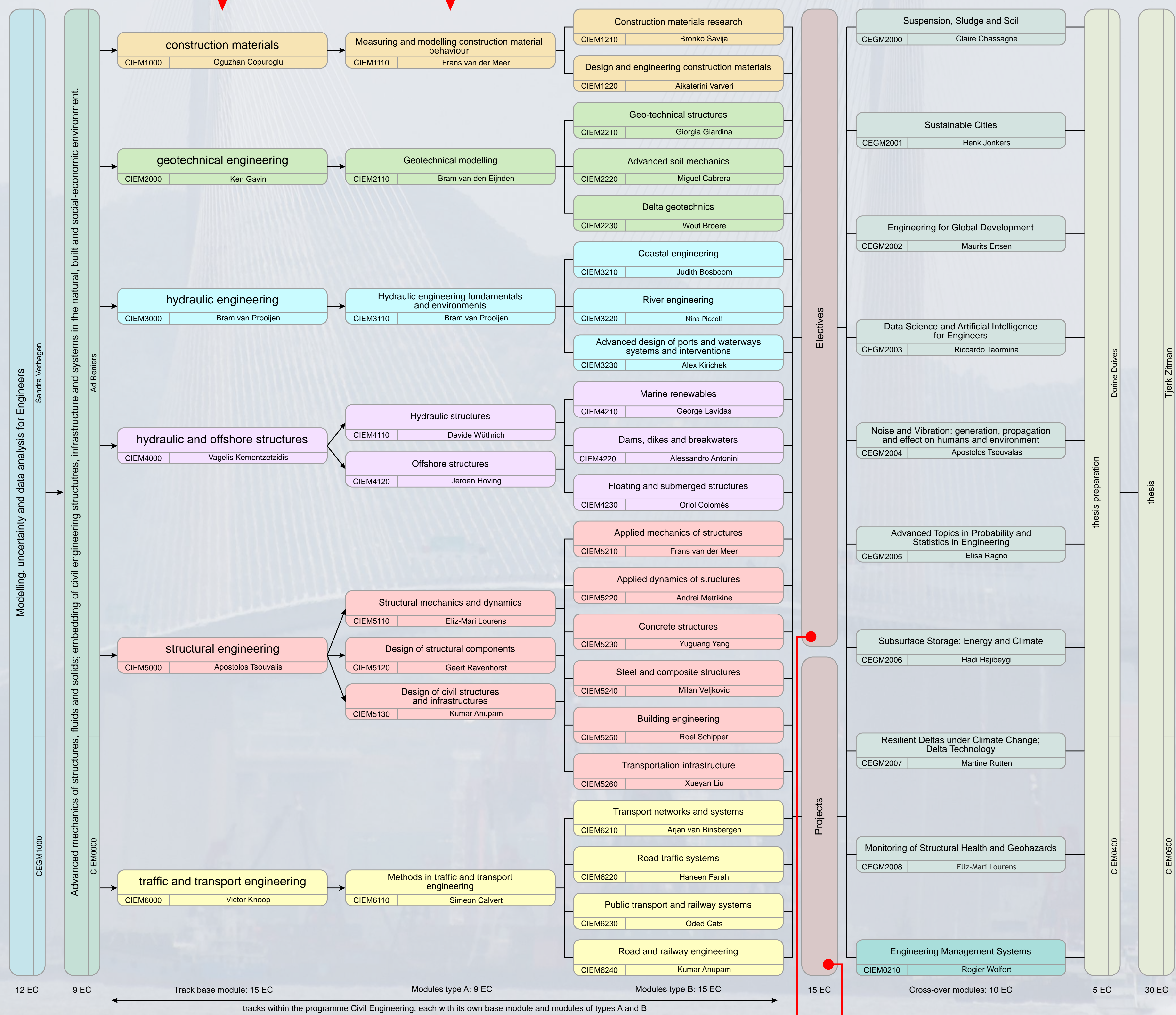
## Schedule



## Programme structure



Embedded learning lines on **Ethics** and **Monitoring & data science**



### Electives (5 EC each)

Advanced computational mechanics CIEM1301   Martin Leseur	Rock Mechanics Applications CIEM2303   Dominique Ngan-Tillard	Onshore hydropower CIEM4301   Juan Pablo Aguilar Lopez	Waves Mechanics and Structures <b>NOT AVAILABLE</b>	Advanced Building Physics CIEM5309   Willem van der Spoel
Forensic Construction Materials Engineering CIEM1302   Oguzhan Copuroglu	Environmental and Energy Geotechnics CIEM2304   Anne-Catherine Dieudonne	Cold regions engineering CIEM4302   Hayo Hendrikse, Jeroen Hoving	CO <sub>2</sub> Neutral Structures CIEM5304   Milan Veljkovic	Contact and Interface Mechanics for Engineering Structures CIEM5310   Kumar Anupam
Upscaling Techniques in Construction Materials Design and Engineering CIEM1303   Cor Kasbergen	Building with Nature CIEM3301   Bregje van Weesenbeek	Flood risk CIEM4303   Cong Mai Van	Fire safety Design CIEM5305   Geert Ravenshorst	Loading and Life Time Prediction of Transportation Infrastructure CIEM5311   Cor Kasbergen
Glass Science and Engineering CIEM1304   Christian Louter	Dredging CIEM3302   Stefan Aarninkhof	Hydraulics Fieldwork CIEM4304   Mark Voorendt	Assesment of existing concrete structures CIEM5306   Eva Lanschot	Emerging Technologies for Transportation Infrastructure CIEM5312   Rolf Dollevoet
Offshore Geotechnical Engineering CIEM2301   Ken Gavin	Advanced modelling of turbulent flows and transport CIEM3303   Wim Uijtewaal	Shell structures CIEM5301   Pierre Hoogenboom	Forensic Structural Engineering CIEM5307   Hoessein Alkisaet	Railway Traffic Management CIEM6301   Egidio Quaglietta
Trenchless Technologies CIEM2302   Wout Broere	Physical Oceanography CIEM3304   Caroline Katsman	Random, parametric and nonlinear vibration CIEM5302 <b>NOT AVAILABLE</b>	Parametric Design and Digital Fabrication CIEM5308   Mariana Popescu	Advanced Data Science for Traffic and Transportation CIEM6302   Panchamy Krishnakumari

### Projects

Multi-Disciplinary Project (15 EC) CEGM3000   Dijana Boric, Martine Rutten, Sandra Verhagen
Research Internship (10 EC) CIEM0120   Mark Voorendt
Joint Interdisciplinary Project (15 EC) TUD4040   Hans Hellendoorn
Transitions, sustainability & Innovation CIEM6303   Arjan van Binsbergen
eXtended Reality (XR) for Civil Engineering CIEM6304   Yan Feng