

## Minor Water Quality Analysis (AWQA)

<b>Coordinator:</b>	POA	<b>credits:</b>	15
---------------------	-----	-----------------	----

Elements	EC	Name	Mode of Exam	Exam Period	Literature
AWQA01	6	Assessment + Future monitoring	Assessment (report and presentation)	T2	Moss, B. 2018. <i>Ecology of freshwaters: Earth's Bloodstream</i> . John Wiley And Sons Ltd. EAN 9781119239406  Practical guides and additional documents will be provided on Canvas.
AWQA02	3	Advanced aquatic ecology	Written exam	T2	
AWQA03	2	International Institutions	Written exam	T1	
AWQA04	4	Sampling methods, species identification & Ecological assessment + Monitoring cycle	Report and presentation	T2	

<b>Entrance requirements:</b>	Standard requirements for all international students (min.180 EC background in relevant field of study, appropriate level of English)
<b>Professional task:</b>	During this module the student will describe the ecological status of a Dutch waterbody according to the European Water Framework Directive (WFD) and analyse the results in contrast with a reference area. Based on this information the student designs a measure for improvement of the biotic quality, including a monitoring program.
<b>Role:</b>	Practical researcher monitoring and evaluation
<b>Methods:</b>	Lectures, trainings, assignments, excursions, fieldwork, team work and self-study
<b>Fields of expertise:</b>	<b>Learning objectives for the student. The student is able to:</b>
Aquatic organisms and monitoring	<ul style="list-style-type: none"> <li>• Determine aquatic organisms up to species level.</li> <li>• Evaluate and report results of monitoring on professional level.</li> <li>• Evaluate ones role as practical researcher monitoring and evaluation in a broader professional perspective.</li> <li>• Design a monitoring plan</li> </ul>
Policies	<ul style="list-style-type: none"> <li>• Describe impacts of main water policies for management of aquatic ecosystems.</li> <li>• Perform ecological assessment of field data according to WFD and is able to evaluate the methodology.</li> <li>• Design measures according to the WFD.</li> </ul>
<b>Aeres competencies</b>	
2. To cooperate 4. To research 6. To organise 10. To appreciate the global perspective	
<b>Final qualifications</b>	
This minor meets the following final qualifications from the bachelor programme of Applied Biology: 1. Design, execute and report biological applied research from the perspective of organism- and population level. 3. Appreciate knowledge of biological specialisation, apply latest developments and obtain new knowledge. 4. Being able to work on a biological problem in a project-based approach.	