WAT course: weekly timetable

Version 2.9.2022

WHAT? Weekly timetable for the common course of WAT Master's Programme. Large part of learning activities are done in groups: students are divided into the groups at the beginning of the course.

WAT COURSE? WAT-E1100 is a 15-credit course. It introduces the key themes and broader context related to water and environmental engineering, and focuses also on the key computational methods and problem-solving approaches related to water and environmental engineering.

ASSIGNMENTS? WAT Course includes Contact Sessions as well as two types of assignments: **Tasks** are related to the key themes and broader context, and **Weekly Exercises** to the methods and problem-solving approaches. Tasks are mainly done in groups or pairs, while Weekly Exercises are usually done individually.

WEEKLY TIMETABLE: WAT-E1100 Water and Environmental Engineering

1st WEEK — Global natural resources (Matti, Olli, Matleena) + Intro (Marko)

	Mon 5.9.	Tue 6.9	Wed 7.9	Thu 8.9	Fri 9.9
Morning (9.00-)	CONTEXT SESSION: Intro + group work practices [Marko]	CONTACT SESSION: sustainability, global resources + SGT cases [Olli & co]	THEMATIC TASK: individual / group work	WEEKLY EXERCISE: statistical analysis	WEEKLY EXERCISE: Individual / group work
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Afternoon (-4pm)	CONTACT SESSION: global water issues [Matti]	CONTACT SESSION: sustainability, global resources + SGT cases [Olli & co]	THEMATIC TASK: SWOT wrap-up [Matti & co]	WEEKLY EXERCISE: Individual / group work	WEEKLY EXERCISE: statistical analysis

2nd WEEK — Water resources management & hydrology (Harri & co)

	Mon 12.9.	Tue 13.9.	Wed 14.9.	Thu 15.9.	Fri 16.9.
Morning (9.00-)	CONTACT SESSION: water resources management & hydrology [Harri & co]	THEMATIC TASK: HBV modelling [Harri]	WEEKLY EXERCISE: modelling	WEEKLY EXERCISE: Individual / group work	THEMATIC TASK: individual / group work
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Afternoon (-4pm)	CONTACT SESSION: water resources management & hydrology [Harri & co]	THEMATIC TASK: individual / group work	WEEKLY EXERCISE: modelling	WEEKLY EXERCISE: modelling	THEMATIC TASK: HBV wrap-up [Harri]

3rd WEEK — Environmental hydraulics (Juha)

	Mon 19.9.	Tue 20.9.	Wed 21.9.	Thu 22.9.	Fri 23.9.
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Morning (9.00-)	CONTACT SESSION: Environmental hydraulics & hydro-environmental engineering solutions [Juha]	Flume group 1 @ 9:00-10:00 Flume group 2 @ 10:30-11:30 Flume group 3 @ 13:00-14:00	Flume group 4 @ 9:00-10:00 Flume group 5 @ 10:30-11:30 Flume group 6 @ 13:00-14:00	Online helpdesk 10:00-12:00 for flume assignment (optional attendance) Individual / group work	CONTACT SESSION: flume assignment wrap-up
Afternoon (-4pm)	CONTACT SESSION: Experimental methods and data analyses; Intro to flume assignment	When your group is not attending a teaching session, you should work independently	When your group is not attending a teaching session, you should work independently		CONTACT SESSION: scientific communication task

4th WEEK — Water & wastewater engineering (Anna)

	Mon 26.9.	Tue 27.9.	Wed 28.9.	Thu 29.9.	Fri 30.9.
Morning (9.00-)	CONTACT SESSION: water & wastewater engineering [Anna]	CONTEXT SESSION + TASK: ENTREPRENEURSHIP by Aalto Ventures Programme AVP	WEEKLY EXERCISE: spatial analysis & GIS	WEEKLY EXERCISE: Individual / group work	THEMATIC TASK on ENTREPRENEURSHIP: pitch clinic
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Afternoon (-4pm)	CONTACT SESSION: water and wastewater engineering [Harri M.] + GIS intro [Teemu]	THEMATIC TASK on ENTREPRENEURSHIP: group work / interviews	ENTREPRENEURSHIP SESSION by AVP	ENTREPRENEURSHIP: introduction to pitching	ENTREPRENEURSHIP PRESENTATIONS + WRAP-UP with AVP

5th WEEK — Environmental management (Meeri)

	Mon 3.10.	Tue 4.10.	Wed 5.10.	Thu 6.10.	Fri 7.10.
Morning (9.00-)	WEEKLY EXERCISE: Life Cycle Assessment	WEEKLY EXERCISE: Individual / group work	WEEKLY EXERCISE WRAP-UP	THEMATIC TASK: individual / group work	CONTACT SESSION: Dilemma board game [Meeri]
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Afternoon (9.00-)	WEEKLY EXERCISE: Individual / group work	WEEKLY EXERCISE: Individual / group work	CONTACT SESSION: environmental and sustainability management [Meeri]	THEMATIC TASK: individual / group work	THEMATIC TASK: wrap-up [Meeri]

6th WEEK — Water & environmental quality (Riku)

	Mon 10.10.	Tue 11.10.	Wed 12.10.	Thu 13.10.	Fri 14.10.
Morning (9.00-)	CONTACT SESSION + TASK: water & enviromental quality [Riku & co]	WEEKLY EXERCISE: introduction to laboratory work	*Starting at 8.00* WEEKLY EXERCISE: laboratory work & analysis *(Groups 3-5)*	*Starting at 8.00* WEEKLY EXERCISE: laboratory work & analysis *(Groups 1-2)*	WEEKLY EXERCISE time to prepare the presentations
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Afternoon (-4pm)	Time to read for the home exam: individual work	WEEKLY EXERCISE: laboratory work & analysis *(Group 6)*	WEEKLY EXERCISE: laboratory work & analysis *(Groups 3-5)*	WEEKLY EXERCISE: laboratory work & analysis *(Groups 1-2)*	TASK &WEEKLY EXERCISE WRAP-UP

7th WEEK — Synthesis (Marko)

	Mon 17.10.	Tue 18.10.	Wed 19.10.	Thu 20.10.	Fri 21.10.
	DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE				
Morning (9.00-)	TIME FOR FINALISING YOUR ASSIGNMENTS	CONTEXT SESSION: Science + Governance & legislation [Marko]	SYNTHESIS DAY: presenting & synthesising the key themes and learning outcomes of WAT Course [Meeri & Marko]	REFLECTION & FEEDBACK DAY [Marko]	PHEEW, FREE TIME FROM WAT COURSE!
				LUNCH TOGETHER!	
Afternoon (-4pm)		SYNTHESIS WORK: Instructions + individual synthesis		Individual work on your portfolio + mentor meetings	*(possibility for mentor meetings + planning your studies and preparing your Personal Learning Portfolio)*

WEEKLY THEMES

1) Global natural resources MATTI & OLLI
2) Water resources management & hydrology HARRI
3) Environmental hydraulics JUHA
4) Water & wastewater engineering ANNA
5) Environmental mgt and sustainability MEERI
6) Water and environmental quality RIKU
7) Synthesis MARKO

WEEKLY METHODS

1) Statistical analysis
2) Simulation modelling
3) Hydraulic flume: measurement & uncertainty
4) Spatial analysis
5) Life Cycle Assessment LCA
6) Laboratory analysis

WAT CONTEXTS

- Team roles & group work (Week 1)
- Entrepreneurship & business (Week 4)
- Governance & legislation + science (Week 7)

LEGEND FOR COLOURS

WATER & ENVIRONMENT: session on context	WATER & ENVIRONMENT: session on weekly theme	WATER & ENVIRONMENT: individual / group work	COMPUTATIONAL METHODS: session on weekly method	COMPUTATIONAL METHODS: individual / group work