

# WAT course: weekly timetable

Version  
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**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 methods related to water and environmental engineering, and provides also a broader view on the general context of the field.

**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		Water & development (Matti, Olli, Matleena) + Intro (Marko)				
		Mon 4.9.	Tue 5.9	Wed 6.9	Thu 7.9	Fri 8.9
Morning (9.00- )		CONTEXT SESSION: Intro + group work practices [Marko]	CONTACT SESSION: sustainability, global resources + SGT cases [Olli, Julia, Matleena]	THEMATIC TASK: individual / group work	WEEKLY EXERCISE: Lecture Guided exercise workshop	WEEKLY EXERCISE: Individual / group work
<i>DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE</i>						
Afternoon (-4pm)		CONTACT SESSION: global water & food issues [Matti]	AALTO DAY ONE: no contact sessions	THEMATIC TASK: SWOT wrap-up [Matti & co]	WEEKLY EXERCISE: Guided exercise workshop	WEEKLY EXERCISE: Guided exercise workshop
2nd WEEK		Hydrology & water resources management (Harri & co)				
		Mon 11.9.	Tue 12.9.	Wed 13.9.	Thu 14.9.	Fri 15.9.
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
<i>DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE</i>						
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		Water & wastewater engineering (Anna)				
		Mon 18.9.	Tue 19.9.	Wed 20.9.	Thu 21.9.	Fri 22.9.
Morning (9.00- )		CONTACT SESSION: Water & wastewater engineering [Anna] Rural area solutions [Harri M.]	CONTEXT SESSION + TASK: GIS INTRODUCTION [Teemu]	WEEKLY EXERCISE: spatial analysis & GIS	WEEKLY EXERCISE: Individual / group work	THEMATIC TASK on ENTREPRENEURSHIP: communication clinics
<i>DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE</i>						
Afternoon (-4pm)		CONTACT SESSION: Introduction to entrepreneurial mindset by AVP	THEMATIC TASK on ENTREPRENEURSHIP: group work / interviews	ENTREPRENEURSHIP SESSION by AVP Analysing the interviews & creating a value proposition	ENTREPRENEURSHIP: introduction to customer communication	ENTREPRENEURSHIP PRESENTATIONS + WRAP-UP with AVP

4th WEEK	Water & environmental quality (Ilkka)				
	Mon 25.9	Tue 26.9	Wed 27.9	Thu 28.9	Fri 29.9
Morning (9.00- )	CONTACT SESSION + TASK: water & environmental quality [Ilkka & co]	WEEKLY EXERCISE: introduction to laboratory work	WEEKLY EXERCISE: laboratory work & analysis (Groups 3-4)	WEEKLY EXERCISE: laboratory work & analysis (Groups 1-2)	WEEKLY EXERCISE time to prepare the presentations
<i>DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE</i>					
Afternoon (13.00- )	Time to read for the home exam: individual work	WEEKLY EXERCISE: laboratory work & analysis (Groups 5&6)	WEEKLY EXERCISE: laboratory work & analysis (Groups 3-4)	WEEKLY EXERCISE: laboratory work & analysis (Groups 1-2)	TASK & WEEKLY EXERCISE WRAP-UP
5th WEEK	Environmental hydraulics (Eliisa & Juha)				
	Mon 2.10.	Tue 3.10.	Wed 4.10.	Thu 5.10.	Fri 6.10.
Morning (9.00-12:00 )	CONTACT SESSION: Environmental hydraulics & hydro-environmental engineering solutions [Juha]	THEMATIC TASK: EHL flume measurements in groups [Juha]	CONTACT SESSION: lecture and group work (hydraulic modelling) [Eliisa]	Independent work: weekly exercise (HEC-RAS model). Help-desk at 10-11 am [Erik]	Independent work time: Work on weekly exercise (HEC-RAS model)
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Afternoon ( 13:00-16:00)	THEMATIC TASK: EHL flume experimental research intro [Juha]	THEMATIC TASK: flume analysis & reporting by groups	WEEKLY EXERCISE: [Erik] HEC-RAS model application, instructions and task starts	Independent work: Weekly exercise (HEC-RAS model). Help-desk at 1-2 pm [Erik]	CONTACT SESSION: lecture and wrap-up (results of the task) [Eliisa & Erik]
6th WEEK	Environmental management & sustainability (Meeri)				
	Mon 9.10.	Tue 10.10.	Wed 11.10.	Thu 12.10.	Fri 13.10.
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]
<i>DRAFT SHOWING THE OVERALL STRUCTURE: FINAL SCHEDULE IN MYCOURSES' WEEKLY SUB-PAGE</i>					
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	TASK & WEEKLY EXERCISE WRAP-UP
7th WEEK	Synthesis (Marko)				
	Mon 16.10.	Tue 17.10.	Wed 18.10.	Thu 19.10.	Fri 20.10.
Morning (9.00- )	CONTEXT SESSIONS: Governance + Science [Marko]	SYNTHESIS WORK: Individual synthesis + group work	FEEDBACK & WAY FORWARD SESSION [Marko]	TIME FOR FINALISING YOUR ASSIGNMENTS	TIME FOR FINALISING YOUR ASSIGNMENTS
Afternoon ( -4pm)	SYNTHESIS WORK: Individual synthesis + group work	SYNTHESIS SESSION [Marko]		(possibility for mentor meetings + planning your studies and preparing your Personal Learning Portfolio)	(possibility for mentor meetings + planning your studies and preparing your Personal Learning Portfolio)

WEEKLY THEMES	
1) Water & development MATTI & OLLI	4) Water and environmental quality ILKKA
2) Hydrology & water resources management HARRI	5) Environmental hydraulics ELIISA & JUHA
3) Water & wastewater engineering ANNA	6) Env. management and sustainability MEERI
	7) Synthesis MARKO

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

WAT CONTEXTS	
- Team roles & group work (Week 1)	- Governance + science (Week 7)
- Entrepreneurship & business (Week 3)	