

# TIMESHEET REPORT

IP: Dissolved Oxygen Sensor

Hochschule Rhein-Waal

WS 2025/26

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GESAMTAUFWAND

111.5 h

Investierte  
Stunden

EINTRÄGE

30

ZEITRAUM

Okt – Feb. 26

SCHWERPUNKT

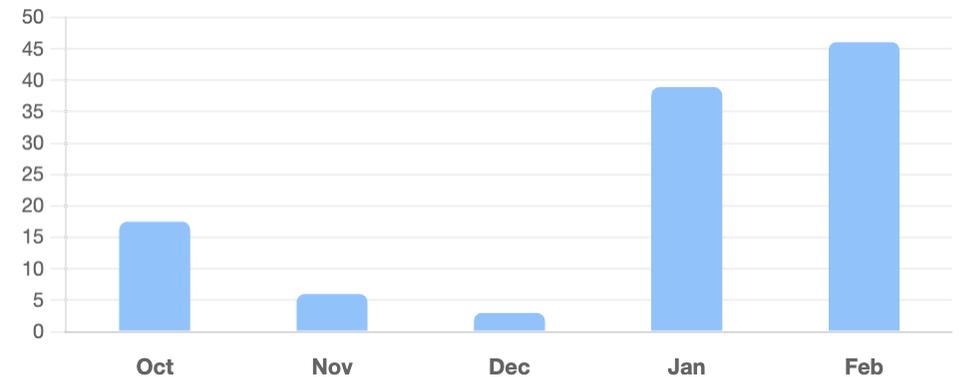
Measurements/Calibr...

## AUFGABENVERTEILUNG



● Introduction	6.0h
● Concept/Brainstorming	17.5h
● Excursion	3.0h
● Allgemein	2.5h
● Copper-Mesh Design	26.5h
● Report	14.9h
● Measurements/Calibration + ...	41.1h

## PROJEKTVERLAUF (MONATLICH)



"Der Verlauf zeigt die initialen Recherchephasen, gefolgt von der intensiven technischen Umsetzung und Dokumentation zum Semesterende."

# Detaillierter Tätigkeitsnachweis

Chronologische Auflistung

DATUM	KATEGORIE (TASK)	BESCHREIBUNG	DAUER
2.10.2025	INTRODUCTION	Introduction Session	3.00 h
9.10.2025	INTRODUCTION	Intro to Arduino + Practical Getting Started Session	3.00 h
16.10.2025	CONCEPT/BRAINSTORMING	Concept Brainstorming and Research	3.00 h
19.10.2025	CONCEPT/BRAINSTORMING	Concept Refinement and Further Research	2.52 h
23.10.2025	CONCEPT/BRAINSTORMING	Concept Refinement and Further Research	3.00 h
30.10.2025	CONCEPT/BRAINSTORMING	Concept Refinement and Further Research	3.00 h
6.11.2025	EXCURSION	Excursion to LINEG	3.00 h
27.11.2025	CONCEPT/BRAINSTORMING	Research on DO-Sensors (specifically the model LINEG uses) and How To Integrate Them	3.00 h
4.12.2025	CONCEPT/BRAINSTORMING	Research on Alternative DO-Sensors and Which Model Is Best Suited	3.00 h
8.1.2026	ALLGEMEIN	Poster Discussion, Copper Mesh Design	2.50 h
14.1.2026	COPPER-MESH DESIGN	Getting Started with Autodesk, Started Designing Sensor Cap As Per Specsheat	5.03 h
15.1.2026	COPPER-MESH DESIGN	Discussion Copper-Mesh Plan (2 Test-Phases), Designing Clamp-Mounting-Mechanism in Fusion360	3.00 h
21.1.2026	COPPER-MESH DESIGN	Copper-Mesh Design (Clamping-Mechanism)	2.52 h
21.1.2026	COPPER-MESH DESIGN	Copper-Mesh Design (Full Cage)	9.98 h

DATUM	KATEGORIE (TASK)	BESCHREIBUNG	DAUER
22.1.2026	COPPER-MESH DESIGN	Copper-Mesh 3d-printed (2 Versions, 1 with full coverage, 1 with top open), Copper-Mesh Assembly with .1mm copper wire, Testing the two copper-mesh designs	6.00 h
22.1.2026	REPORT	Report	2.00 h
23.1.2026	REPORT	Report	4.92 h
23.1.2026	REPORT	Report	1.47 h
30.1.2026	REPORT	Contribution Summary	1.50 h
11.2.2026	MEASUREMENTS/CALIBRATION + COPPER-MESH INFLUENCE	Started Documentation for LINEG measurements, Research and comparison of FDO 925 to SEN0680, Reading Manuals, Estimated Results	1.50 h
11.2.2026	MEASUREMENTS/CALIBRATION + COPPER-MESH INFLUENCE	Work in the IoT-Lab (Preparation for LINEG, Getting readings directly, Trying to get remote readings via wifi + built-in webserver)	6.47 h
12.2.2026	MEASUREMENTS/CALIBRATION + COPPER-MESH INFLUENCE	Preparation for LINEG, Code Optimization for csv logging during entire experiment, Tested everything	2.00 h
12.2.2026	MEASUREMENTS/CALIBRATION + COPPER-MESH INFLUENCE	Measurements at LINEG lab in BSB water (probe 1) and tap water (probe 2)	4.75 h
12.2.2026	MEASUREMENTS/CALIBRATION + COPPER-MESH INFLUENCE	Analysis of first results from bsb-water (probe1) and tap water (probe2)	3.00 h
13.2.2026	MEASUREMENTS/CALIBRATION + COPPER-MESH INFLUENCE	Measurements at LINEG lab in mussel water (probe 3) and calibration-test (global fit from probes 1 through 3, then 1-point calibration at 21°C)) in tap water	6.50 h
13.2.2026	MEASUREMENTS/CALIBRATION + COPPER-MESH INFLUENCE	First analysis of measurements	0.75 h

DATUM	KATEGORIE (TASK)	BESCHREIBUNG	DAUER
13.2.2026	MEASUREMENTS/CALIBRATION + COPPER-MESH INFLUENCE	In-depth analysis of measurements in python, calibration calculations, testing correction of raw values with calibration parameters	5.00 h
14.2.2026	MEASUREMENTS/CALIBRATION + COPPER-MESH INFLUENCE	Analysis of measurements, timeline plotting, finding overall "best" calibration	6.62 h
17.2.2026	MEASUREMENTS/CALIBRATION + COPPER-MESH INFLUENCE	Writing documentation of lab experiments for report/wiki	4.50 h
18.2.2026	REPORT	Integrating documentation into report structure	5.00 h