



It is hereby certified that

Merry Jean Abandonado Caparas

born on 10 January 1997 in Merida Leyte, Philippines

has this day been awarded the degree of

MASTER OF SCIENCE

in Water Management and Governance

DATE AND PLACE
22 April 2022
Delft, the Netherlands

RECTOR

Prof. E.J. Moors PhD, MSc

This degree has been conferred on the successful completion of all requirements of the programme including the presentation of a thesis on the subject of

Monitoring of Social Change in Mining Areas Using Remote Sensing

which was approved by an examination committee under the chairmanship of Dr. ir. L.M. Hermans.

CHAIR EXAMINATION BOARD
K.H. Schwartz PhD, MSc

ACADEMIC REGISTRAR
E.L. Ploeger, MSc



MLD618671

Gezien voor legalisatie van de handtekening The undersigned legalises the signature

van/of E.J. Moors

De minister van Buitenlandse Zaken, voor deze, For the minister of Foreign Affairs,

09 mei 2022 - P.C. Swinkels

This document is hereby certified

1 2 MEI 2022

as a true copy of its original

OR WATER

INFORMATION ON THE FUNCTION OF THE QUALIFICATION

The MSc degree gives access to the PhD programmes of the Dutch universities and many universities abroad. No extra entrance examinations or courses are needed.

ADDITIONAL INFORMATION

Programme structure

The programme is conducted over a period of 18 months during two academic years.

The **Taught Part** is formed by 13 modules. A module consists of a teaching period (usually 3 weeks) and an exam period (at the end of each two consecutive modules). Modules may be shared between or among specializations and/or programmes.

The **Thesis Research Part** consists of two modules on research methodology and MSc research proposal drafting and defense, followed by a period of six months of individual research and writing of the thesis. The MSc thesis is defended publically at the end.



DIPLOMA SUPPLEMENT

IHE Delft

Institute for Water Education Westvest 7 P.O. Box 3015

2601 DA Delft The Netherlands

T +31 15 2151715 E info@un-ihe.org

W www.un-ihe.org

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is hereby certified

INFORMATION ABOUT THE IDENTITY OF THE DEGREE HOLDER
Name: Merry Jean Abandonado Caparas

Date of birth: 10 January 1997

Place of birth: Merida Leyte, Philippines

1047972

INFORMATION ABOUT THE DEGREE

Name of the qualification: Master of Science in Water Management and Governance

Obtained on: 22 April 2022

Awarding institution: IHE Delft Institute for Water Education

IHE Delft is an international higher education institute affiliated with UNESCO. The institute and its MSc programmes are accredited by the Netherlands-Flemish Accreditation

Organisation (NVAO).

INFORMATION ABOUT THE STUDY PROGRAMME

Name of the study programme: MSc programme in Water Management and Governance

Language of instruction / examination:

English

Mode of study:

Student number:

Full time

INFORMATION ABOUT THE DEGREE LEVEL

Level of the qualification: Research university Masters degree

Minimum required credits:

106 ECTS credits

Study load per credit:

1 ECTS equals 28 hours of study load

Entrance requirements:

University-level Bachelor's degree in an appropriate field of study.

B2 level of English in the European reference scheme.

Preferably several years of relevant working experience.

Accreditation:

Obtained from NVAO on 25 July 2019

SUPPLEMENT CERTIFICATION

Place and date of issue: Delft, 22 April 2022

Stamp:



Signature:



E.L. Ploeger MSc Academic Registrar





INFORMATION ABOUT THE CONTENTS AND RESULTS GAINED

Final qualifications of the programme

After successful completion of the programme graduates will be able to:

Knowledge and understanding

- 1 1. Place the specialized knowledge gained into a broader understanding of water issues, challenges, debates and developments
- 2 2. Analyse biophysical and social processes and appraise principles and approaches relevant to water management and
- 3 3. Recognize and distinguish different ways of knowing and framing water questions and problems in order to analyse water management and governance processes from an interdisciplinary perspective

Applying knowledge and understanding

- 4 4. Draft a research plan, including the formulation of research questions and hypotheses and the selection of research methods, theories and techniques
- 5 5. Conduct research independently in a scientifically sound and ethically responsible manner
- 6 6. Contribute to interdisciplinary and evidence-based knowledge development and problem solving
- 7 7. Analyse and contextualize governance arrangements and (integrated) management approaches to address water issues in socially inclusive and ecologically sustainable ways

Making judgements

- 8 10. Interpret research findings critically in order to formulate evidence-based conclusions, solutions and/or recommendate
- 9 11. Reflect critically on the implications of water management and governance interventions on society and nature and formulate and defend own standpoint
- 10 8. Identify and appraise relevant research, concepts and approaches in view of their potential for helping understand or water-related problems
- 11 9. Critically discuss and evaluate own research approaches and outcomes within the context of existing knowle approaches

Communication

- 12 12. Communicate and present effectively, both in writing and orally, making use of information and communication technologies suited for the audience and the purpose
- 13 13. Debate and defend findings and insights, in a clear, systematic and convincing manner
- 14. 14. Communicate effectively across disciplines and cultures to enhance collaborations in teams

Life long learning skills

- 15. Develop competencies required to further expand their knowledge and skills on their own initiative
- 16. Reflect on own professional and educational background in order to identify a personal learning trajectory to realize career objectives and professional development goals

RESULTS

is hereby certified

Module	Name	Year	Result	Credits
	At IHE Delft			
M3771	What and who makes Water Management and Governance expertise?	2020	7-7	9
M3544	Introduction to Water and Development	2021	Pass	1
M3761	Water Resources Management		7.0	5
M3791	Water Governance		6.1	5
M3715	Managing Water Organisations		7.4	5
M ₃₇ 8 ₃	Analyzing Water Use Practices - Institutional Analysis		7.8	5
M3708	Water Conflict and Cooperation		6.7	5
M3694	Environmental Planning and Implementation		7.6	5
M3754	Research Project		8.3	5
M3767	Remote Sensing for Water Resources Management		7.0	5
M3637	Water Resources Planning under Changing Climate and Environment		7.8	5
M3777	Fieldwork		Pass	6
M3594	Thesis Research Proposal Development for WMG	2021	Pass	9
	The IHE Delft average of the marks mentioned above is		7-4	
POUCATEVON	At IHE Delft			
M3806	MSc research, thesis and defence	2022	7.8	36
V	Thesis title: Monitoring of Social Change in Mining Areas Using Remote Sensing			
91	Committee: Dr. ir. L.M. Hermans (chair)			
2/	Dr. B.S. Schijf (external member)			
6/	C.I.B. Michailovsky PhD, MSc			
	J.G. Evers PhD, MSc			
	The IHE Delft overall average mark of the MSc programme is		7-5	
	Total ECTS			106

GRADING SCHEME

Assessment results (including the thesis examination) are represented on a scale of 1.0 to 10.0, with one decimal of accuracy. Marks 6.0 and higher indicate a pass. The following grading scale is used:

9.0 - 10.0	Excellent
8.0 - 8.9	Very good
7.0 - 7.9	Good
6.0 - 6.9	Sufficient
5.9 and below	Fail

Credits are given for those modules for which a passing mark has been obtained.