

# Geoinformation Science and Earth Observation, M-GEO



Croho-opleidingcode: 75014

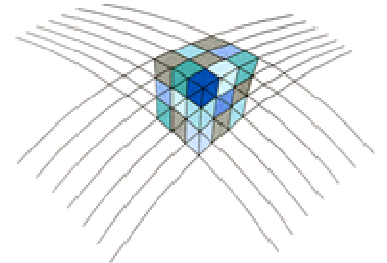
OLD: Suhyb Salama

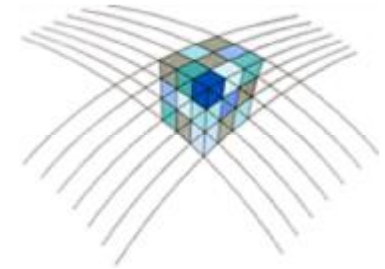
Onderwijsdecaan: Jaap Zevenbergen

NCG MSc GI Onderwijsbijeenkomst  
17 april 2018, Fugro Leidschendam

**NCG**

Nederlands Centrum voor Geodesie en Geo-informatica (NCG)





# 0. Eindtermen

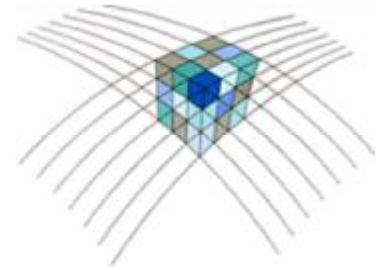
## *Domain/ Academic field*

1. Identify and explain principles, concepts, methods and techniques relevant for geo-information processing and earth observation.
2. Analyse problems and cases from a (geo-)spatial perspective.
3. Use and design models to simulate processes in the system earth with a spatial component.
4. Apply principles, concepts, methods and techniques in the context of system earth, the user and an application domain to solve scientific and practical problems.
5. Independently design and carry out research in the domain according to acceptable scientific quality standards.

## *Scientific*

6. Analyse issues in an academic manner and formulate judgments based on this.
7. Analyse scientific and practical domain problems in a systematic manner and develop scientifically valid solutions for these problems in a societal context.
8. Communicate both orally and in writing on findings of research work to specialists and non-specialists.
9. Explore the temporal and social context of geo-information science and technology and be able to integrate these insights in the scientific work.

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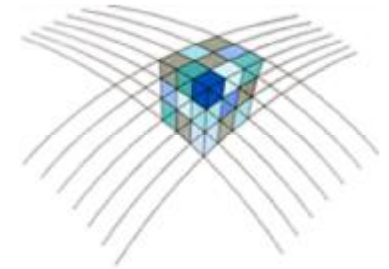
# 0. Eindtermen *(cont.)*

## *Internationalization*

10. Explain and contrast cultural and contextual differences that influence practices of mapping, recording and classifying.
11. Operate professionally and ethically in a multi-cultural environment.

## *General*

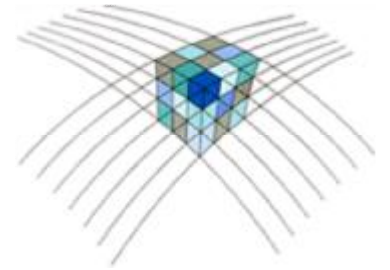
12. Critically reflect on own and other's work.
13. Study in a manner that is largely self-directed and autonomous.



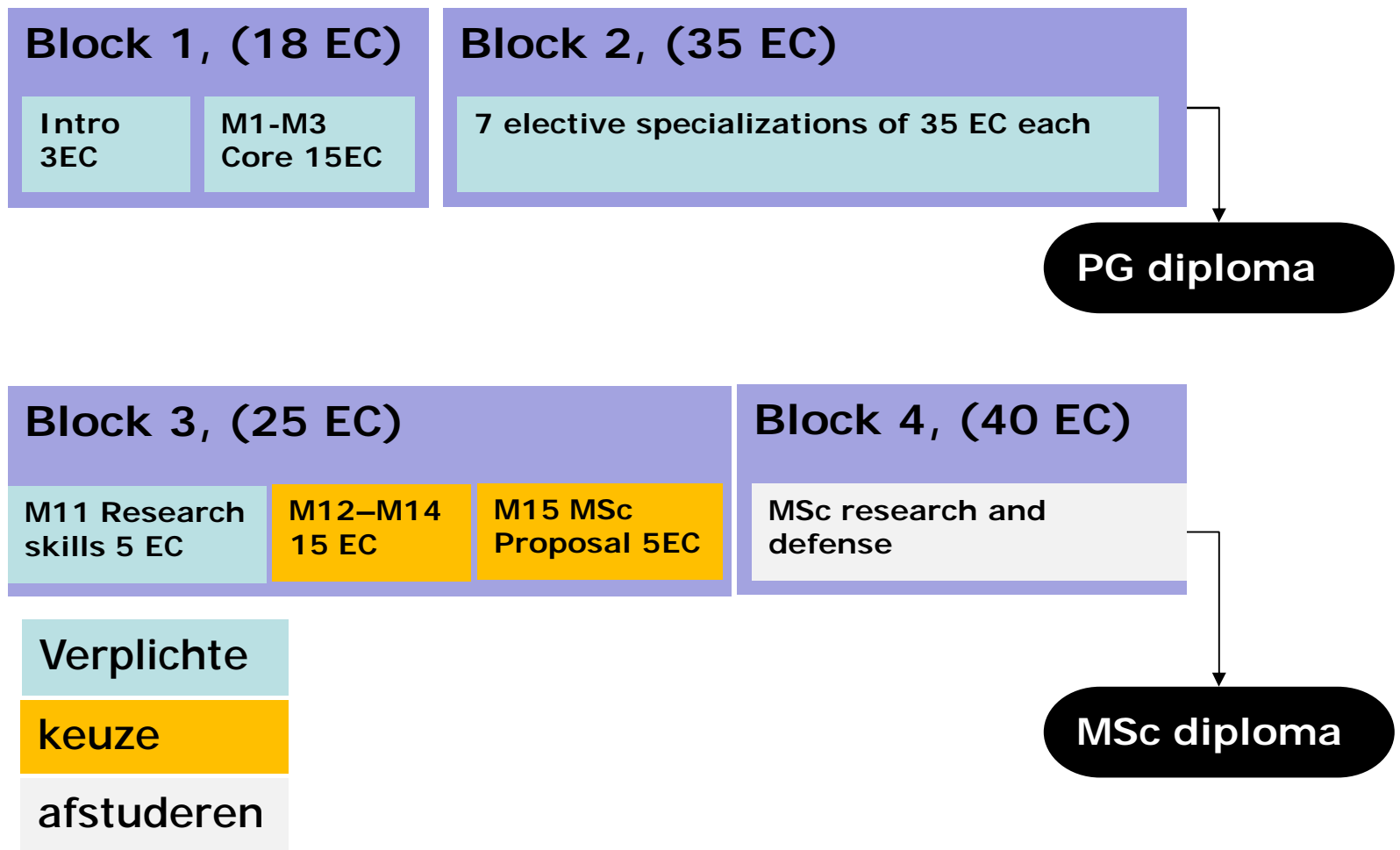
# 1. Structuur opleiding

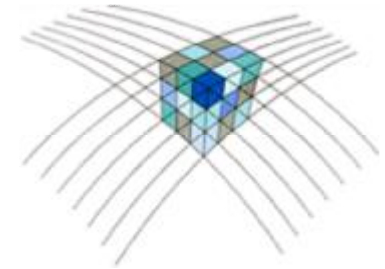
(until 2017-2019 – 118 EC)

- **Block 1, (18 EC): verplicht**
  - Introductie (3 EC)
  - Modules 1-3 (15 EC): Kern GIS en Remote Sensing
  
- **Block 2, (35 EC): verplicht**
  - keuze uit 7 specialisaties
  
- **Block 3, (25 EC): semi**
  - Research skills, (5 EC), verplichte
  - Geavanceerd modules 12-14, (15 EC), keuze
  - MSc voorstel voorbereiden en verdedigen, (5 EC), verplicht
  
- **Block 4, (40 EC): MSc afstuderen, (40 EC), verplicht**



# 1.1 M-GEO



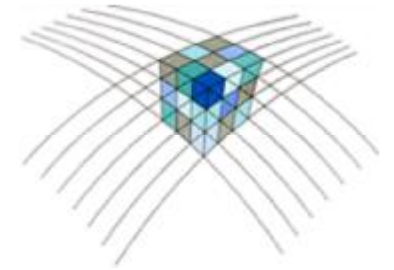


# 1.2 Where on Earth ?

In Nederlands en  
Joint Education:

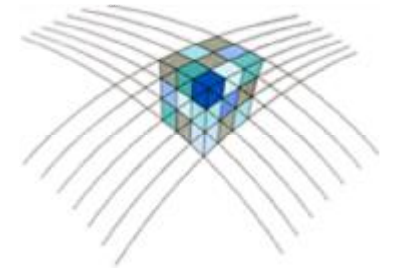
Courses offered at ITC	Courses offered as Joint or Distance Education	
DOMAIN NAME	COURSE NAME	LOCATION / MODALITY
All Domains	Geoinformation Science and Earth Observation	Single, Double Degree (f2f <sup>20</sup> ) Chang 'An University Xi'An, China (CAU)
Applied Earth Sciences (AES)	Spatial Planning and Risk Management	Double Degree (f2f) Gadjah Mada University Yogyakarta, Indonesia (UGM)
Geoinformatics (GFM)	Geoinformatics	Single Degree (f2f) Indian Institute for Remote Sensing Dehradun, India (IIRS)
Natural Resource Management (NRM)	GIS for Natural Resource Management	Double Degree (f2f) Kwame Nkrumah University Kumasi, Ghana (KNUST)
	Geo-Information Science and Earth Observation for Natural Resource Management	Double Degree (f2f) Beijing Normal University Beijing, China (BNU)
	Geo-Information Science and Earth Observation for Environmental Modeling and Natural Resource Management	Double Degree (DE) Lund University Lund, Sweden (iGEON)
	Geo-information Science and Earth Observation for Environmental Modeling and Management	Double Degree (f2f) Erasmus Mundus Consortium Sweden, Poland, UK, Iceland (GEM)
Urban Planning and Management (UPM)	Development Planning and Infrastructure development	Double Degree (f2f) Technical University Bandung Bandung, Indonesia (ITB)
Land Administration (LA)		
Water Resources and Environmental Management (WREM)	Geo-Information Science and Earth Observation for Water Resources and Environmental Management	Double Degree (f2f) Capital Normal University Beijing, China (CNU)

Table 9: Joint Educational Programs and their relations with the domain courses.

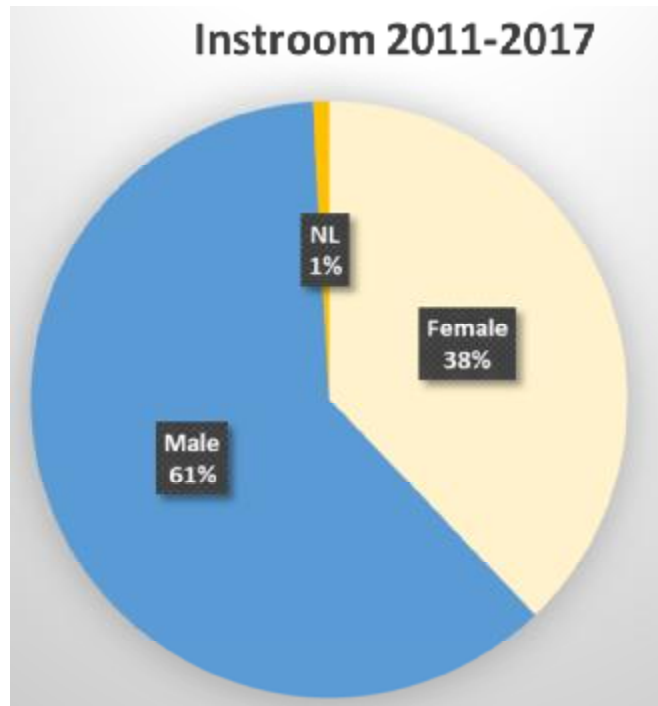


## 2. Vakken 2017-2018

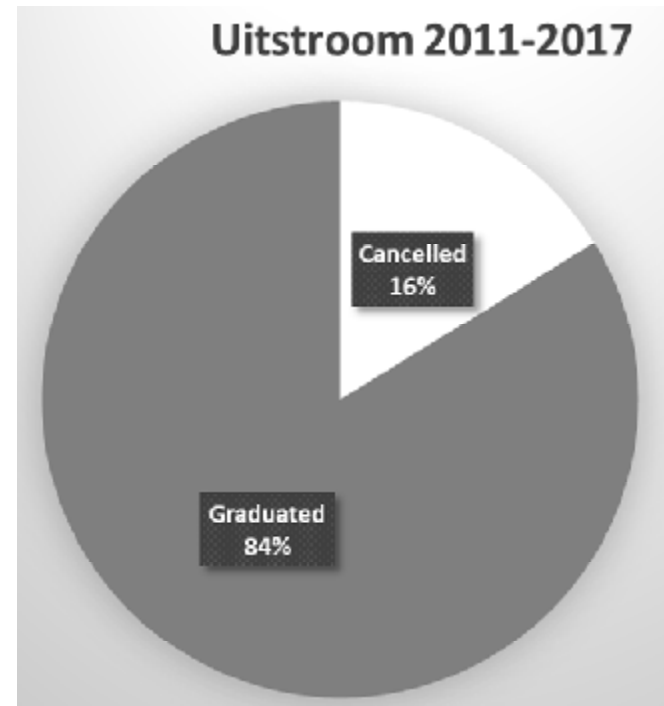
- Core: Kern GIS, remote sensing and data integration
- Specialisaties (35 EC):
  - Applied Earth Science: Natural Hazards and Disaster Risk management or geological remote sensing
  - Geoinformatics
  - Land Administration
  - Natural Resource Management: Forestry, agriculture and Environment
  - Urban Planning and Management
  - Water Resources and Environmental Management
- Research skills: academic writing, conducting literature review
- Keuze modules aangeboden door de specialisaties (15 EC)
- Afstuderen fase



### 3. Kentallen: M-GEO

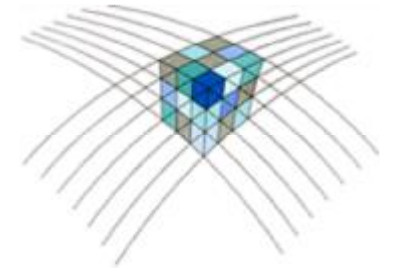


**Total 1262**

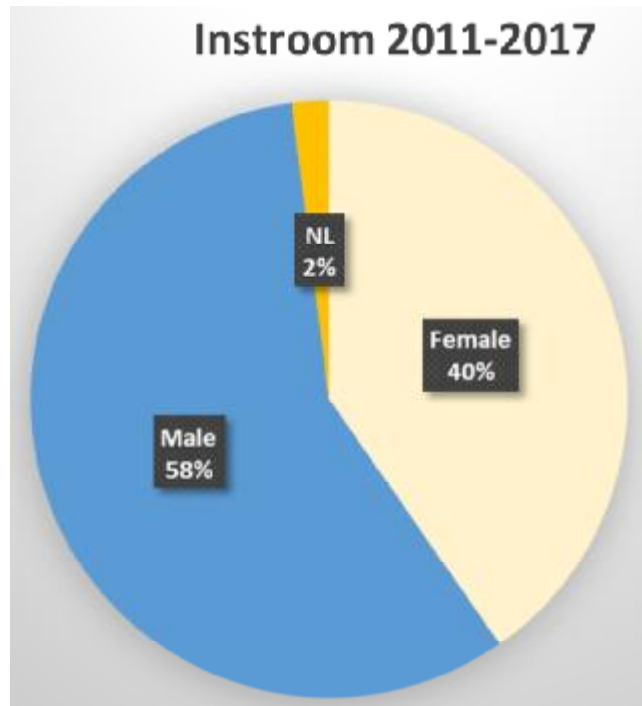


**Total 1067**

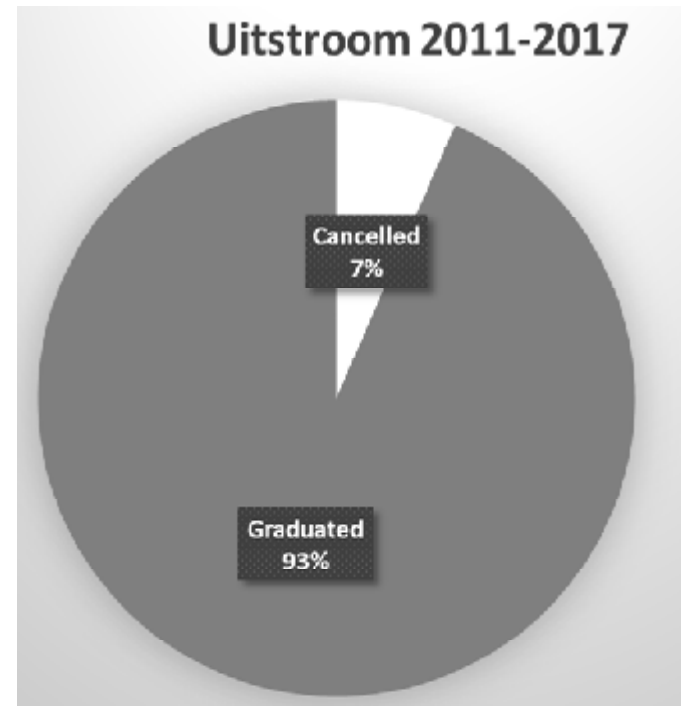




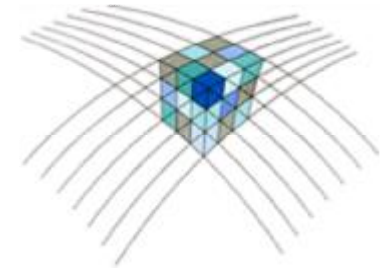
### 3. Kentallen: JEPS M-GEO



**Total 491**



**Total 383**



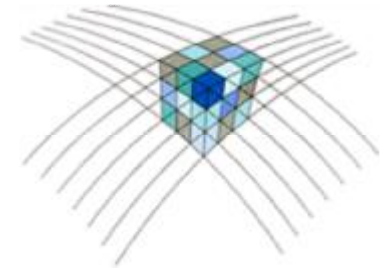
## 4. Uniek



Opleiding	Keuzegids 2015 (2014-2015)		Keuzegids 2016 (2015-2016)		Keuzegids 2017 (2016-2017)		Keuzegids 2018 (2017-2018)		Verschil 2017 - 2018	
	Score	Positie	Score	Positie	Score	Positie	Score	Positie	Score	Positie
GEO	80	2 van 5	76	2 van 6	82	2 van 4	92	1 van 4	10	1

Throughout M-GEO we cover the full range of disciplines involved in geo-information science and remote sensing.

Bijzonder Kenmerk Internationalisering



# 5. Vorige visitatie

30-6-2015 Pagina 8 van 10 Bijlage 1: Schematisch overzicht oordelen panel

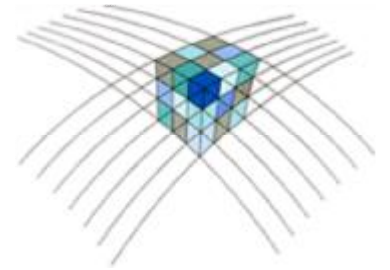
Geldig t/m  
29-6-2021

incl.  
Bijzonder  
kenmerk  
internatinalisering



Standaard	Formulering Standaard	Beoordeling door het panel
1. Beoogde eindkwalificaties	De beoogde eindkwalificaties van de opleiding zijn wat betreft inhoud, niveau en oriëntatie geconcretiseerd en voldoen aan internationale eisen	Goed
2. Onderwijsomgeving	Het programma, het personeel en de opleidingsspecifieke voorzieningen maken het voor de instromende studenten mogelijk de beoogde eindkwalificaties te realiseren	Goed
3. Toetsing en gerealiseerde eindkwalificaties	De opleiding beschikt over een adequaat systeem van toetsing en toont aan dat de beoogde eindkwalificaties worden gerealiseerd	Voeldoende
<b>Eindoordeel</b>		<b>Voeldoende</b>

De standaarden krijgen het oordeel onvoldoende, voldoende, goed of excellent. Het eindoordeel over de opleiding als geheel wordt op dezelfde schaal gegeven.



## 6. Toekomst

- Het wordt 2-jaar MSc (120 EC), vanaf september 2018
- Internationalisering wordt verstrekt (gedoceerd en getoetst)
- Ondernemerschap wordt toegevoegd
- Meer flexibiliteit met een nieuw op maat specialisatie "Tailor Made"
- Meer student-centred and blended learning omgeving
- Meer ruimtes voor zelfreflectie en mogelijkheid voor studiestage in bedrijven, NGO, overheid ezv



# PROGRAMME STRUCTURE 2-YEAR M-GEO AS FROM SEPT. 2019 (120 EC)

year 1			
Q1	Q2	Q3	Q4
core GI&EO (14 EC)	specialization (7 EC)	specialization (7 EC)	specialization (7 EC)
	specialization (7 EC)	common course (7 EC)	elective (7 EC)
Academic skills (4 EC)			

year 2			
Q5	Q6	Q7	Q8
	MSc research proposal and MSc research (45 EC)		
Individual Study Programme (15 EC)			

common courses
specialization course
elective course
MSc research