



Faculty of Earth and Life Sciences

The Examination Board of the Master's programme in Management, Policy Analysis and Entrepreneurship in the Health and Life Sciences, accredited on 3 April 2008, declares that

Daniël Wilhelmus Ferdinand van den Engel

born on 27 March 1985 in Utrecht, the Netherlands

has successfully completed this programme.

The Executive Board of VU University Amsterdam hereby confers upon him the degree of Master of Science, based on Article 7.10a of the Higher Education and Research Act.

Amsterdam, 31 March 2012

Handwritten signature of Marko Buijs in black ink.

Chairman of the Examination Board

Handwritten signature of Jansko Buijs in black ink.

Dean of the Faculty

Handwritten signature of Daniël Wilhelmus Ferdinand van den Engel in black ink.

Candidate



DIPLOMA SUPPLEMENT

This Diploma Supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

1 Information identifying the holder of the qualification

1.1	Last name(s)	Engel, van den
1.2	First name(s)	Daniël Wilhelmus Ferdinand
1.3	Date of birth	27 March 1985
	Place of birth	Utrecht, the Netherlands
1.4	Student identification number	2072483

2 Information identifying the qualification

2.1 Name of qualification and (if applicable) title conferred

Management, Policy Analysis and Entrepreneurship in the Health and Life Sciences, Master of Science

2.2 Main field(s) of study for the qualification

The Master's graduate has knowledge of and insight into important concepts concerning policy processes and theory, management and organisation processes, structure and theory of organisations in the field of health and life sciences. The Master's graduate has the ability to analyse current complex social problems, to translate these problems into research questions, to set up a research design, to conduct literature study and empirical research independently. The graduate has state of the art knowledge of theory development and methodology of transdisciplinary research. He/she has the ability to conduct transdisciplinary research and to integrate knowledge from different scientific disciplines and other sources of information in the field of health and life sciences. The Master's graduate has specialised in one or more fields of Management, Policy-Analysis and Entrepreneurship in Health and Life Sciences. The graduate is capable of operating as an independent professional and will be considered for a PhD research position.

Specialisation Health and Life Sciences Based Management and Entrepreneurship

This specialisation focuses on (the analysis of) multi level processes in management and entrepreneurship in Health and Life Science.

2.3 Name and status of awarding institution

Name: VU University Amsterdam

Status: A Dutch government funded and recognised institution as having taught and research degree awarding powers.

2.4 Language of instruction/examination

English

3 Information on the level of the qualification

3.1 Level of qualification

Master Level

3.2 Official length of programme

The Master's programme takes two academic years, each worth a total of sixty credits in accordance with the European Credit Transfer System.

3.3 Access requirement(s)

Students who are in the possession of a Bachelor of Science degree in Biology, Biomedical Sciences, Health Sciences, or one of the Natural Sciences have direct admission on the condition that they have basic knowledge of policy and management processes. Students who are in the possession of a Bachelor's degree of a Dutch University other than the degrees mentioned above, students with another Bachelor's degree from the Dutch higher vocational qualification or students with a science Bachelor's degree from a foreign university may be admitted to the programme subject to a decision by the examination board of this Master's programme. The examination board has the right to set additional criteria.

4 Information on the contents and results gained

4.1 Mode of study

Full Time

4.2 Programme requirements

Research placements and student placements, comprising 50% of the total programme, complete the research expertise of the Master's graduate. A set of compulsory and optional courses establish the theoretical background of the student. Within the programme the graduate can specialise in a particular field of study.

4.3 Programme details and individual results obtained

The following index lists the courses of the programme the student has attended, the number of credits attributed to each course and the final mark the student has acquired for the course.

VD	Pass
V	Pass
G	Good
VRS	Exemption

	Credits	Grade
Analysis of Governmental Policy	6.0	7.0
Business Management in Health and Life Sciences	6.0	7.0
Clinical development and clinical trials	6.0	7.0
Communication, Organization and Management	6.0	7.5
Entrepreneurship in Health and Life Sciences	6.0	6.0
Ethics in Life Sciences	3.0	7.0
History of Life Sciences	3.0	7.5
Internship I MPA	30.0	VRS
Internship II MPA	30.0	7.0
Managing science and technology in society	6.0	6.5
Qualitative and Quantitative Research Methods	6.0	6.5
Scientific Writing in English	3.0	VD
thesis MPA	9.0	7.5
Credits earned	120.0	

4.4 Grading scheme

ECTS %	ECTS grade	Results
10%	A	8.0 - 10.0
25%	B	7.5 - 7.9
30%	C	7.0 - 7.4
25%	D	6.5 - 6.9
10%	E	6.0 - 6.4
	F	0.0 - 5.0

4.5 Overall classification

On the basis of the grades achieved, the student has been awarded a pass.

A predetermined formula has been applied to calculate the student's grade point average, and the student has been awarded a(n) 7.0.

5 Information on the function of the classification

5.1 Access to further study

After obtaining the Master's degree, the student can gain admission to a PhD position.

5.2 Professional status

The degree gives graduates prospects in a wide range of academic professions. Master's graduates work as researchers at a university or research institution, as policy makers in public service or in a semi- governmental institution or at an NGO, or in industry for example as Clinical Research Assistant, or as (independent) consultant.

6 Additional information

6.1 Extra information

This study programme has been accredited by government per 3 April 2008.

A general, yet diverse, Master's programme in Management, Policy- Analysis and Entrepreneurship in Health and Life Sciences that will guarantee an elaborate experience founded on a solid theoretical basis combined with communicative and entrepreneurial skills that are necessary to function on an international level. Further details about the Master's programme in Management, Policy-Analysis and Entrepreneurship in Health and Life Sciences can be found on the website www.falw.vu.nl

6.2 Further information sources

Programme Secretariat Earth and Life Sciences
De Boelelaan 1087
1081 HV Amsterdam
Phone: 020 - 598 7010
E-mail: studiesecretariaat@falw.vu.nl

7. Certification of the supplement

7.1 Signature(s)

Date: 31 March 2012

A handwritten signature in blue ink that reads "Jaska Bunder". The signature is written in a cursive style with a long horizontal stroke at the end.

Chairman of the Examination Board

A handwritten signature in blue ink, consisting of a large, stylized oval shape with a vertical line through the center and a horizontal line across the middle, resembling the initials "TF".

Secretary of the Examination Board

8. Information on the national higher education system

As a result of the Bologna process, the higher education in the Netherlands is organised around a three-cycle degree system, consisting of bachelor's, master's and PhD degrees.

Two types of programmes are offered in higher education: research-oriented degree programmes offered primarily by research universities, and professional higher education programmes offered primarily by universities of applied sciences.

Primary and secondary education: access to higher education

Children are allowed to begin school at the age of four, but are not legally required to do so until the age of five. Primary education lasts eight years (of which seven are compulsory). During their last year, pupils are advised on which type of secondary education to pursue.

Secondary education, which begins at the age of 12 and is compulsory until the age of 16, is offered in various forms and at different levels. VMBO programmes (four years) combine general and vocational education and prepare pupils to go on to senior secondary vocational education and training (MBO), lasting one to four years. There are two types of general education that grant admission to higher education: HAVO (five years) and VWO (six years). Pupils are enrolled according to their ability. The last two years of HAVO and the last three years of VWO are referred to as the 'second phase' (tweede fase), or upper secondary education. During these years, pupils focus on one of four subject clusters (profielen), each of which emphasizes a certain field of study in addition to satisfying the general education requirements. Each cluster is designed to prepare pupils for study at the tertiary level. A pupil enrolled at a VWO or HAVO school can choose from the following subject clusters:

- 1) Science and Technology (Natuur en Techniek)
- 2) Science and Health (Natuur en Gezondheid)
- 3) Economics and Society (Economie en Maatschappij)
- 4) Culture and Society (Cultuur en Maatschappij)

Only the six-year VWO diploma grants access to bachelor programmes by research universities; the HAVO diploma and the highest level of MBO grant access to bachelor programmes offered by universities of applied sciences.

Higher education

Higher education in the Netherlands is offered at two types of institutions: research universities and universities of applied sciences. Research universities include general universities, universities specializing in engineering and agriculture, and the Open University. Universities of applied sciences include general institutions as well as institutions specializing in a specific field such as agriculture, fine and performing arts or teacher training. Whereas research universities are primarily responsible for offering research-oriented programmes, universities of applied sciences are primarily responsible for offering programmes of higher professional education, which prepare students for specific professions. These tend to be more practice oriented than programmes offered by research universities.

In this binary, three-cycle system, bachelor's, master's and PhD degrees are awarded. Short-cycle higher education leading to the Associate degree is offered by universities of applied sciences. Degree programmes and periods of study are quantified in terms of the ECTS credit system.

The focus of degree programmes determines both the number of credits required to complete the programme and the degree which is awarded. A research-oriented bachelor's programme requires the completion of 180 credits (3 years) and graduates obtain the degree Bachelor of Arts or Bachelor of Science (BA/BSc) degree, depending on the discipline. A bachelor's degree awarded in the applied arts and sciences requires 240 credits (4 years), and graduates obtain a degree indicating the field of study (for example, Bachelor of Engineering, B Eng, or Bachelor of Nursing, B Nursing). An associate degree in the applied arts and sciences requires 120 credits (2 years), and students who complete the 2-year programme can continue studying for a bachelor's degree in the applied arts and sciences.

A research-oriented master's programme requires the completion of 60, 90 or 120 credits (1, 1.5 or 2 years). In engineering, agriculture, and math and the natural sciences, 120 credits are always required. Graduates obtain a Master of Arts or Master of Science (MA/MSc). A master's degree awarded in the applied arts and sciences requires the completion of 60 to 120 credits and graduates obtain a degree indicating the field of study (for example, Master of Architecture, M Arch).

The third cycle of higher education, leading to a PhD, is offered only by research universities. The major requirement is completion of a dissertation based on original research that is publicly defended. All research universities award the PhD. In addition to doctorate, the three engineering universities offer (technological) designer programmes consisting of advanced study and a personal design assignment in a number of engineering fields. The technical designer programme requires two years of study to complete and graduates obtain the degree "Professional Doctorate in Engineering (PDEng)". The training of medical specialists is the responsibility of the professional group in an organisational setting at a university hospital.

Requirements for access to higher education

For access to research-oriented bachelor's programmes, students are required to have a VWO diploma or to have completed the first year (60 credits) of a bachelor's programme at a university of applied sciences. The minimum access requirement to universities of applied sciences is either a HAVO diploma or a diploma of secondary vocational education (MBO diploma), provided certain conditions are met. The VWO diploma also grants access to universities of applied sciences. For access to both types of higher education, pupils are required to have completed at least one of the subject clusters that fulfills the requirements for the higher education programme in question. A quota, or *numerus fixus*, applies for access to certain programmes, primarily in the medical sciences, and places are allocated mainly using a weighted lottery. Potential students older than 21 years who do not possess one of the qualifications mentioned above can qualify for access to higher education based on the basis of an entrance examination and assessment (recognition of prior learning). For access to certain programmes, particularly those in the fine arts, students must have to demonstrate the required artistic abilities. The only access requirement for the Open University is that applicants be at least 18 years of age. For access to all master's programme, a bachelor's degree in one or more specific disciplines is required, in some cases in combination with other requirements. Graduates with a bachelor's degree in the applied arts and sciences may have to complete additional requirements for access to a research-oriented master's programme.

Credit system and grading

A student's workload is measured in ECTS credits. According to Dutch law, one credit represents 28 hours of work and 60 credits represents one year of full-time study. The grading system used in the Netherlands is on a scale from 1 (very poor) to 10 (outstanding). The lowest passing grade is 6; 9s are seldom given and 10s are extremely rare. Grades 1-3 are hardly ever used. The academic year is 42 weeks long.

Quality assurance and accreditation

A guaranteed standard of higher education, and alignment with the Qualifications Framework for the European Higher Education Area, is maintained through a system of legal regulation and quality assurance, in the form of accreditation. The Ministry of Education, Culture and Science is responsible for legislation pertaining to education and the agriculture and public health ministries play an important role in monitoring the content of study programmes in their respective fields.

Quality assurance is carried out through a system of accreditation, administered by the Accreditation Organisation of the Netherlands and Flanders (NVAO). According to the Dutch Higher Education Act, all degree programmes offered by research universities and universities of applied sciences must be evaluated according to established criteria. Programmes that meet the criteria are accredited: i.e. recognized for a period of six years. Only accredited programmes are eligible for government funding; students receive financial aid and graduate with a recognized degree only when enrolled in, and after having completed, an accredited degree programme. All accredited programmes is listed in the Central Register of Higher Education Study Programmes (CROHO).

Besides the accreditation of degree programmes, the Netherlands has a system by which the Ministry of

Education, Culture and Science recognizes higher education institutions by conferring on them the status of either 'funded' or 'approved'. 'Funded' indicates that the institution is fully financed by the government. 'Approved' indicates that the institution does not receive funds from the government and has to rely on its own sources of funding. Whether a degree programme is offered by a 'funded' or an 'approved' institution, it must be accredited and registered in CROHO to be considered recognized.

N.B. If a bachelor or master degree programme is not registered in the CROHO, the quality is not assured by the Dutch quality assurance system. The quality may however be assured by another system.

National Qualifications Framework

An important outcome of the Bologna Process is the development of a "Framework for Qualifications of the European Higher Education Area". This overarching framework provides a general and common structure for qualifications awarded in countries signatory to the Bologna Declaration, and offers recommendations and guidelines for the development of mutual understandable qualifications frameworks at national level. By the year 2010, all countries in the European Higher Education Area should have a national qualifications framework in place that complies with the goals and criteria of the European framework while describing the specific elements of each individual system.

The Netherlands is one of the first countries in the European Higher Education Area to complete the national qualifications framework, which has subsequently been evaluated by the Verification Committee and found to be compatible with the Framework for Qualifications of the European Higher Education Area (QF-EHEA). The National Qualifications Framework of the Netherlands describes in detail the various levels and learning outcomes associated with higher education qualifications, in terms that are internationally compatible. The responsibility for overseeing the framework and updating it when necessary has been allocated to the NVAO. Further information on the framework can be obtained on the NVAO website: www.nvao.net/nqf-nl.