

# **EVALUATION PLAN**

## **TWENTE GRADUATE SCHOOL**

**Version autumn 2009**

## Introduction

The motivation for setting up a Graduate School with an integrated MSc- PhD trajectory has been outlined in the RoUTE '14 Policy Plan of the University of Twente.

*“At a graduate level, the University of Twente offers recognised Master of Science (MSc) and Doctor of Philosophy (PhD) degrees. The MSc and PhD degrees represent two different paths in our graduate education. The MSc programme is for professions at academic level, whereas the PhD programme primarily educates academic researchers, though of course, researchers may be employed in commercial or public sectors. We provide academic education, and therefore research plays an important role in our programmes.*

*The number of talented students that choose to complete doctoral degrees and take up research careers is too small. Therefore, the programmes which educate researchers need to be made more attractive, so we can retain our own talent and attract international talent. Our graduate education needs to be re-organized.*

*Students who want to become researchers will spend part of their master’s programme in the new Graduate School. They will be offered specific programmes to train them to complete PhD research. They can use their internships for writing master’s theses that are the ground work for their PhD research projects. Students in these programmes can fast-track their PhD project, completing their doctorates faster.*

*Also during doctoral research, PhD candidates will be offered courses in the Graduate School. These may not necessarily be related to research, but for example could include philosophy of science, or transferable skills such as educational, management, and entrepreneurial skills. This gives graduates who obtain their PhDs at the University of Twente excellent career opportunities inside and outside the academic world.*

*The Graduate School will welcome its first students in 2009. One specific objective is to retain talent for the University at an early stage by offering special, high-quality educational experiences. This applies to our own talents but also particularly to international talent. The Graduate School sets high standards with rigorous selection procedures for research programmes. It aims to become a breeding ground for research talent. Of course, this will require a grant system, and significant parts of our own grant resources will be specifically assigned to this.”*

From this statement quantitative indicators for the success of the Twente Graduate School in the near future will be derived in the Evaluation Plan.

## 1. Aims and objectives

According to the Institutional Plan (Institutional Plan Twente Graduate School, September 2009) the mission of the Twente Graduate School is to train and educate excellent researchers and to present and promote excellent research, and by doing so enhance the quality of research and education, sharpen the identity and profile of the university, and differentiate and individualise the programmes and services for its students. The Twente Graduate School is intended to be one of the instruments to realise the general aims as formulated in the RoUTe '14 Policy Plan of the University. The mission statement for the Twente Graduate School has been formulated on a rather abstract, high qualitative level. For an evaluation of the success of the Twente Graduate School in the near future we have to rely on quantitative criteria which are based on measurable performance indicators.

The motivation for setting up a Twente Graduate School with an integrated MSc- PhD trajectory has been outlined in the RoUTe '14 Policy Plan of the University of Twente as quoted in the Introduction of this plan. The key issue is that the number of talented students that choose to complete doctoral degrees and take up research careers is too small to carry out all research projects at the UT. The assumption is that the programmes which educate researchers need to be made more attractive, so that we can retain our own talent and attract international talent. So the success of the Twente Graduate School can be measured directly by counting the number of master and PhD students in the Twente Graduate School, in relation to aio/oio vacancies.

## 2. Performance indicators

An increasing number of master and PhD students, national and international, is a decisive factor for the success of the Twente Graduate School. As a consequence, the percentage of vacancies in aio/oio positions should decrease the coming years.

But the attractiveness of the Twente Graduate School has to be monitored not only on the basis of the outcomes of numbers of graduates. Also the elements and measures which are supposed to contribute to a higher attractiveness of the Twente Graduate School have to be evaluated in terms of measurable indicators.

- a. Quality of research. Students who want to become researchers will be offered dedicated, integrated master and PhD programmes, embedded in high quality research programmes. The Twente Graduate School sets high standards with rigorous selection procedures for research programmes. Among others, results from regular research assessments ('onderzoeksvisitaties') are taken into account. At UT level a set of performance indicators for the quality of research is presently being developed  
Indicator: the before mentioned UT PI's (for example, the field normalised citation index of the groups involved should not decrease in the course of time).
- b. Quality of education. Graduate students, also during doctoral research, will be offered courses, not only related to research and general academic skills, but include for example philosophy of science, or transferable skills such as educational, management, and entrepreneurial skills. This gives graduates who obtain their PhD at the University of Twente excellent career opportunities inside and outside the academic world.  
Indicator: employment one year after doctorate
- c. Quality of selection. The Institutional Plan describes the procedures and criteria for admission of students to the Twente Graduate School, in both the master as well as in the PhD phase.  
Indicator: drop out rate in master and PhD phase.
- d. Duration time. Master students can use their internships for writing master's theses that are the ground work for their PhD research projects. Students in these programmes can fast-track their PhD project, completing their doctorates faster. Also the quality of supervision will contribute to a more strict time management (see e. below).  
Indicator: duration time of master and PhD phase.

- e. Quality of supervision. For each graduate student entering into the Twente Graduate School a protocol is laid down in a training and supervision plan, which is 'tailored' to the skills and needs of each graduate student. Periodic review meetings with the supervision team are essential elements in the assessments of quality and progress of the individual student. Indicator: Factual realisation of the supervision plan, monitored by the Twente Graduate School.

An overview of the resulting performance indicators is given below.

#### Incoming students

- number of incoming TGS master students:
  - o National
  - o International
  - o % of total number incoming UT master students
- number incoming TGS PhD students
  - o National
  - o International
  - o % of total number incoming UT PhD students
- percentage aio/oio vacancies

#### Performance

- success rate of master students after two years (drop out rate)
- success rate of incoming PhD's after four years (drop out rate)
- duration time master+PhD trajectory

#### Opinion of graduates

- satisfaction graduates about
  - o coherence in the programme
  - o level of the programme
  - o relevance of the research
  - o quality of supervision
- labour market
  - o employability after one year
  - o in research?
  - o adequate preparation for job

#### Programmes

- number of programmes in TGS by year
- UT research PI's ( a.o. results of research assessments, field normalized citation scores of chairs)

### **3. Methods of evaluation**

Most of the performance indicators as mentioned above will be gathered, registered and monitored in the Graduate Admission and Tracking System of the Twente Graduate School (see Institutional Plan), under responsibility of the Director of the Twente Graduate School. This is a basic element of the quality monitoring system of the School as described in the Institutional Plan. This quality monitoring system also involves the results of the regular quality assessment cycles for accreditation of the involved master programmes and the research assessments ('onderwijs- en onderzoeksvisitaties').

In addition to these quantitative data each student will be subject to an exit interview upon leaving the Twente Graduate School, whether in the mean time or on the end of the programme. The main issues in this interview are the opinion of the student/graduate about the coherence and relevance of the programme and the satisfaction about the supervision.

Two years after graduation all PhD's will be asked to fill in a questionnaire about actual employment, satisfaction about the programme and relevance of the programme for the present job. This 'PhD Monitor' will be set up as the 'WO-Monitor' for master graduates.

### **4. Evaluation criteria**

The crucial question whether the Twente Graduate School is a success can be answered at the earliest after six years of the start (2014 – 2015). In the "Kadernota 2010-2014" quantitative criteria are stated for the success of the RoUTe '14 plan, which comprises also criteria for the Twente Graduate School (Kadernota 2010-2014, appendix 21-a). But these criteria are still subject of discussion.

From the perspective of the Twente Graduate School it can be declared to be a success if:

- the number of programmes in the School increases in course of time while the admission criteria remain the same
- the number of PhD's increases
- the study time for each programme is at most six years
- the number of aio/oio vacancies decreases
- graduates are satisfied about the programme
- graduates can easily entry the labour market

### **5. Overall evaluation**

The Twente Graduate School is one of the instruments to enhance the profile of the University of Twente in an international market. The aim of the Twente Graduate School is to educate researchers in high quality educational programmes, embedded in a high quality research environment. The contribution of the Twente Graduate School to the national and international reputation of our University has to be seen in the framework of all other activities that arise from the policy plan of RoUTe '14. So a possible success of the Twente Graduate School is not a success in itself, it has to be considered as only one aspect within a broad range of activities that influence each other mutually.