

| | | |
|------------------------------|--|--------------------------------|
| Policy note | MSc Programmes offered in Delft | |
| Last update: 26 July 2013 | Approval by Rectorate on date: 27 august 2013 | Author(s): Education Bureau |

1. Facts

Level

Master programmes of UNESCO-IHE are programmes at postgraduate level leading to a Master of Science degree.

Accreditation

The Master programmes are accredited by the Netherlands Flemish Accreditation Organisation (NVAO) and registered in Central Register of Higher Education Programmes (CROHO) of the Ministry of Education as post initial scientific (WO) Master.

Academic calendar

The structure of the programmes is governed by the academic calendar annually established by the Rectorate.

The Master programmes consist of a taught programme of 1 year followed by a research programme of 6 months. The taught programme follows a modular structure, whereby the student follows 14 modules of 3 weeks. After each second module, a separate week is reserved during which the examinations for the two modules take place.

Credit point system

The ECTS system is used to calculate the study load. 1 ECTS credit point is equivalent to 28 working hours.

The taught part of the programme has a work load of 70 ECTS; the MSc thesis research part 36 ECTS.

The calendar is set up in such a way that the average workload for the student per week is 40 hrs.

2. Programme structure

In general the programmes are set up according to the following structure:

1. Introductory modules

The first 2 to 4 modules are introductory modules aimed at bringing students up to the same level and focus on MSc level basic knowledge in the different academic fields.

These modules are common for all students enrolled in the same programme.

2. Specialisation modules

After the introduction modules the students follow a number of specialisation modules, deepening the knowledge of the students in the specialisation of their own choice.

3. International fieldtrip and fieldwork

The specialisation modules are followed by an international fieldtrip. The fieldtrip is an exposure tour to interesting sites in Europe (occasionally USA) and is aimed to become familiar with study-related water sector organisations and companies.

During the fieldwork student learn to collect and analyse data in the field.

4. Elective modules

After the fieldtrip students are offered to select a number of modules of their own choice from a broad range of available modules, aimed at broadening or deepening students' knowledge depending on the students' need.

5. Groupwork

The last part of the taught programme consists of a groupwork where students of different disciplines work in a team to solve a complex problem by integrating the content of the preceding modules.

6. MSc preparatory module

Before students start the MSc research phase, they are offered a module on research methodology aligned with the topic of their research work.

7. MSc research phase

The last six months of the programme is devoted to an individual research work leading to a thesis. During this phase the students are closely mentored by dedicated staff and have regular discussions with their peers.

3. Learning objectives or final qualifications.

For each programme specialisation final qualifications are formulated, following the general description for Master programmes according to the Dublin descriptors.

In addition to these descriptions at programme level, each specialisation has a set of learning objectives that state the knowledge, insight and skills achieved by students who successfully complete the curriculum. A distinction is made between discipline-specific learning objectives, which are required by the field of study, and general academic skills, which are expected from university education graduates. The objectives for the programme and its specialisations are provided in the handbook.

Similarly, each module of the curriculum has a set of learning objectives, which detail the specific outcomes. The individual subjects usually aim to achieve a further detailed subset of the overall learning objectives.

In the programme handbooks an overview / matrix indicating the relationship between learning objectives and modules is required.

4. Educational approaches

Aligned teaching and active learning

Teaching has to be aligned; meaning that lecturers have to apply didactic approaches and assessment methods which make that the learning objectives are achieved. All education is student-centered. In the educational activities students are activated to become a master in their field of expertise. Learning objectives and didactic approaches are geared to stimulating students' individual learning initiatives and experiences.

The programmes are conducted using a combination of lectures, exercises, assignments, examinations, workshops, role plays, field visits and laboratory work.

The programmes apply a T-shape model as a generic competency profile guiding the design of its curricula. This model differentiates between cognitive competencies in a certain field (i.e. hydrology, sanitary engineering, water economics etc; vertical leg of the T), and other cognitive/knowledge competencies in neighbouring fields (e.g. hydraulics, aquatic ecology, land use management etc.) and functional, personal and values competencies and meta-competencies (all summarized in the horizontal bar of the T). The latter include communication, creativity, analysis, synthesizing, self-development, and the ability to learn continuously.

5. Assessment

5.1 Guiding principles

Assessments

- are an integral part of the programme and module design and are aligned with the objectives and teaching and learning activities of the programme and module;
- will provide students with the stimulus to learn in depth, to apply their developing skills and knowledge in new situations, and challenge and change their ways of thinking and doing;
- require clear articulation of purpose, requirements, standards and criteria;
- criteria must be clear and explicit so that students know what is expected of them for each assessment task;
- have to be valid and reliable; and
- are subject to peer review and discussion. External benchmarking is included where appropriate.

5.2 Information for students.

At the start of each module students are informed by the module co-ordinator on the following items:

- The learning objectives of the module;

- Topics and teaching staff;
- Workload: number of contact hours and self study hours; and
- Assessment methods and assessment criteria.

5.3 Guidelines and quality requirements module assessment

All modules of the master programmes are assessed, apart from the international fieldtrip and the summer courses. Written and oral examinations are organized in the designated weeks as indicated in the academic calendar. Assignments, presentations and other means of assessing student's knowledge can take place during the implementation of the module.

Assessments take place according to the description in the module sheets of the programme handbook. All assessments are carried out according to the examination regulations, which are approved before the start of each new academic programme by the Academic Board.

5.4 Guidelines and quality requirements thesis work assessment

The thesis is assessed by a thesis examination committee, normally consisting of three (3) members: a professor as chairperson, the mentor and an external examiner. External examiners are normally from outside the institute or in incidental cases from a chair group within the institute not involved in the supervision of the research work.

The MSc thesis work is assessed according to the MSc thesis assessment criteria as outlined in the examination regulations.

The maximum duration of the MSc research phase is 6 months for a full time study. Extension of this period may be granted on request by the student and is subject to approval by the rector, upon advice from the Examination Board.

6. Programme handbook

A description of each programme is given in a programme handbook

Programme handbooks are annually prepared by the programme committees in collaboration with the Education Bureau.

Programme handbooks contain the following information:

- UNESCO-IHE programme framework;
- Regulations;
- Programme specific information;
- Facilities;
- Academic calendar; and
- Module sheets.

7. Lecture materials

Preparation.

All lecturers involved in the implementation of the modules have to prepare lecture materials for the students.

Lecture material may consist of:

- Lecture notes
- Power point presentations
- Handouts (e.g. lab instructions, assignments, journal articles etc)
- Video materials

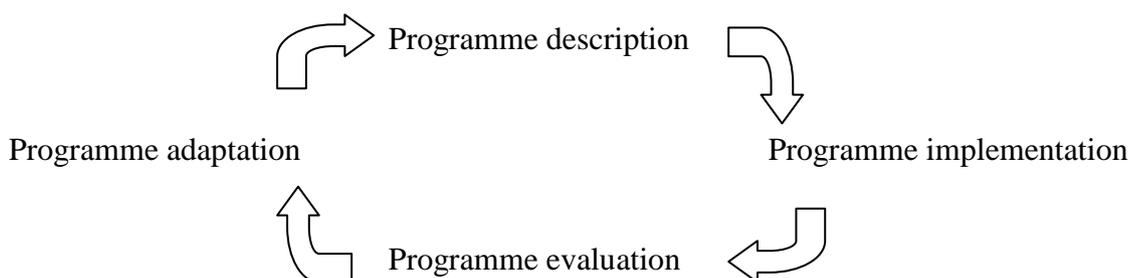
Lecturers have to adhere to the copyright rules as described in the regulations.

Information to students.

What material is used in the module, obligatory and additional, is described in the module sheet of the programme handbook.

8. Annual process of designing and approving subsequent programme

The process of designing and approving a subsequent programme is an annual cyclic process, which starts with the preparation of a description of the programme in the handbook. Once the programme is approved by the programme committee, it is implemented accordingly. During implementation information is collected from various sources (students, colleagues, peers) on how well the programme is implemented.



Reference documents

1. Programme handbooks
2. ECTS guidelines
3. Programme reports
4. Requirements for the publication and distribution of UNESCO-IHE Lecture Notes and Readers
5. Examination regulations
6. MSc thesis result forms
7. Copyright rules and regulations