

# Favourites



Add programmes to your favourites and compare them to find the programme that suits you best.



## Water Transport and Distribution

IHE Delft Institute for Water Education

Certificate / Diploma Short course Delft

[Send by email](#) [Save page as PDF](#)

### Course description

Qualification Certificate

Field of study Agriculture and environment

Course summary The course aims to introduce the basics of planning, design, construction, operation and maintenance of water distribution systems to mid-career professionals working in drinking water supply sector.

Course description The core of the blended learning approach is the MS PowerPoint slideshow prepared with audio presentations, discussed during lectures accompanied by MS Excel spreadsheet hydraulic lessons; these are also available for self study i.e. solving of workshop problems. During the design exercise sessions, network operation is analysed by using EPANET software (US Environmental Protection Agency, Ver.2). Finally, a seminar is organised to present typical operation and maintenance practices in The Netherlands. The participant's performance is assessed by a written open book exam of three hours (50%) and individual design report (50%). The lecturing materials include: (1) N. Trifunovi - Introduction to Urban Water Distribution by Taylor & Francis and (2) S. Sharma - Water Losses in Distribution Systems, lecture notes UNESCO-IHE. Electronic materials include slide presentations, design assignment, EPANET network modelling software and tailor made spreadsheet applications (MS Excel). This course is also available in online mode.

Introduction to Water Transport and Distribution: Main objectives, demand categories, steady-state hydraulics of pressurised flows, hydraulic design, engineering design, network

Study



subjects	construction, operation & maintenance. Water Loss Management and Control: Definitions, components and quantification of water losses, methods of reduction and control, leak location and repair, pressure management.
Course objectives	The course participants will be able to distinguish between network layouts, recognise various consumption categories, size appropriate pipes, reservoirs and pumps, perform computer-aided calculations to compare investment and operational costs; propose preliminary hydraulic design, choose adequate components and judge technical solutions dealing with maintenance, rehabilitation, and expansion.
ECTS credits	5.00
Duration	3 week(s) full-time
Language of instruction	English
Instruction modes	computer exercise, individual assignment, lecture, self study, workshop
Accreditation	-

## About the institution

Department IHE Delft

IHE Delft Institute for Water Education is the largest international graduate water education facility in the world and the only institution in the UN system to confer accredited MSc degrees and promote PhDs. It offers degree programmes, short courses, online courses and tailor-made training. Since 1957 the Institute has provided graduate education to more than 15,000 water professionals from over 160 countries. More than 175 PhD candidates were promoted. IHE Delft is at the centre of a vast international network of water related institutions, and functions as an interface between knowledge networks and centres, public and private sector organizations, scientific and professional associations and other members of the international water community. The Institute runs a substantial number of joint MSc programmes implemented in partnership with universities around the globe. These joint programmes combine the strengths of the collaborating institutions and deliver either multiple degrees or a joint degree.

## Admission

Admission requirements	<ol style="list-style-type: none"> <li>1. Preferably 2 to 3 years of practical or research work experience.</li> <li>2. Relevant wo bachelor (academic bachelor): BSc degree or equivalent qualification in a relevant subject from a recognized university.</li> </ol>
Language requirements	<p>IELTS overall band 6</p> <p>TOEFL internet based 87</p> <p>TOEFL paper based 999</p>
Professional experience required	-



Duration	3 week(s) full-time		
Application deadlines	<b>Start date</b>	<b>EU/EEA Students</b>	<b>Non-EU/EEA students</b>
	30 Mar 2020	28 Feb 2020	28 Feb 2020
	<b>Year</b>	<b>EU/EEA</b>	<b>Non-EU/EEA</b>
	2019 (FT)	€ 2910	€ 2910
			n.a.
		<b>Institutional</b>	

In short, the following rules apply:

- |              |   |
|--------------|---|
| Tuition fees | <ul style="list-style-type: none"> <li>• The "EU/EEA rate" is the regular fee for students from within the EU/EEA.</li> <li>• The "non-EU/EEA rate" is the rate for students from outside the EU/EEA.</li> <li>• The "institutional rate" is for all students who have already obtained a bachelor's or master's degree and who want to start a second programme leading to a degree at the same level or at a lower level.</li> <li>• Note that FT, PT and D stand for "full-time", "part-time" and "dual", respectively.</li> </ul> |
|--------------|---|

Make sure you contact your institution to find out what rate applies to you. The rates listed here are estimates.

Scholarships	Orange Knowledge Programmes (OKP), MENA Scholarship Programme , Netherlands Fellowship Programmes (NFP)
--------------	---

For more scholarships, visit: [www.grantfinder.nl](http://www.grantfinder.nl)

Course website	<a href="#">More information about the course</a>
----------------	---

## Contact

### C. Schutter-Brakel

Contact information for the study programme Admission and Fellowship Officer

c.schutter-brakel@un-ihe.org

### IHE Delft

Contact information for the institution

Student Affairs

info@un-ihe.org



Telephone number

Course website

Institution website

[to search page](#)

[More information about the course](#)

[More information about the institution](#)

