

# Asst./Assoc. Professor of Offshore Soil Mechanics

**Faculty/department** Civil Engineering and Geosciences

**Level** PhD degree

**Maximum employment** 38 hours per week (1 FTE)

**Duration of contract** Tenure track

**Salary scale** €3259 to €6039 per month gross

## Civil Engineering and Geosciences

The Faculty of Civil Engineering and Geosciences provides leading international research and education. Innovation and sustainability are central themes. Research addresses societal issues, and research and education are closely interwoven. The Faculty consists of the Departments of Transport & Planning, Structural Engineering, Geoscience & Engineering, Water Management, Hydraulic Engineering and Geoscience & Remote Sensing.

The Section of Geo-Engineering resides within the Department of Geoscience & Engineering, whereas the Section of Offshore Engineering resides within the Department of Hydraulic Engineering. The two sections actively collaborate on research and education within the theme of Subsurface Engineering, although there is considerable scope and encouragement for further inter-disciplinary research within the Faculty, as well as with colleagues from elsewhere within Delft University of Technology and the wider international community.

The Section of Geo-Engineering has 8 full-time academic staff, 6 part-time academic staff and 30 PhD/Post-Doc researchers. Areas of expertise include soil mechanics, dikes & embankments, foundation engineering, underground space technology, engineering geology, and geo-environmental engineering. There are extensive experimental laboratory facilities, including large-scale soil-structure interaction testing facilities and a geotechnical centrifuge. The Section of Offshore Engineering has 3 full-time academic staff, 5 part-time academic staff and 11 PhD/Post-Doc researchers. Areas of expertise include bottom-fixed structures, arctic engineering, offshore wind, riser and pipeline dynamics, and identification & monitoring. Both sections have close links with the offshore industries.

## Job description

Applications are invited for an Assistant/Associate Professor in Offshore Soil Mechanics, a joint appointment between the Sections of Geo-Engineering and Offshore Engineering, in the Faculty of Civil Engineering and Geosciences. The sections focus on internationally leading research into the testing, characterisation, modelling of, and engineering in, problematic and offshore soils. Current research initiatives include: the short and long term behaviour of deltaic soft soils including gas generation and transport; the liquefaction and internal erosion of loose sands and other estuarial and offshore deposits; and dynamic soil-structure interaction including identification of the dynamic soil properties, offshore pile driving and seabed preparation and maintenance. Applicants from any area of offshore soil mechanics are welcome to apply. Particular areas of

interest include: cyclic loading of soils; dynamic soil-structure interaction; offshore foundations and pipelines; large deformations; soil excavation and gauging. The successful candidate will be expected to contribute fully to educational activities in Geo-Engineering and Offshore Engineering at the BSc, MSc and PhD levels.

### **Requirements**

Applicants should possess a PhD and have research experience in Offshore Soil Mechanics. They should demonstrate outstanding research potential and have published in peer-reviewed, international scientific journals. The successful candidate will be expected to initiate, acquire, execute and coordinate research projects. Team building qualities and communication skills are therefore important. Close cooperation with other members of the scientific staff of Geo-Engineering, Offshore Engineering and the wider university is essential. Inspiring lecturing skills are considered crucial for stimulating student interest.

### **Conditions of employment**

TU Delft offers an attractive benefits package, including a flexible working week, free high-speed internet access from home (with a contract of two years or longer), and the option of assembling a customised compensation and benefits package (the 'IKA'). Salary and benefits are in accordance with the Collective Labour Agreement for Dutch Universities.

The Tenure Track, a process leading up to a permanent appointment with the prospect of becoming an Associate or full Professor, offers talented academics a clear and attractive career path. During the Tenure Track, you will have the opportunity to develop into an internationally acknowledged and recognised academic. We offer a structured career and personal development programme designed to offer individual academics as much support as possible. For more information about the Tenure Track and the personal development programme, please visit [www.tudelft.nl/tenuretrack](http://www.tudelft.nl/tenuretrack).

Appointees are expected to be proficient in written and spoken English.

### **Information and application**

For more information about this position, please contact Prof. M. A. Hicks, phone: +31 (0)15-2787433, e-mail: [m.a.hicks@tudelft.nl](mailto:m.a.hicks@tudelft.nl), or Prof. A. Metrikine, phone: +31 (0)15-2784749, e-mail: [a.metrikine@tudelft.nl](mailto:a.metrikine@tudelft.nl). To apply, please e-mail the following materials: a curriculum vitae, including list of publications, the names and contact details of three professional referees, copies of three significant publications, a personal research statement, and a personal teaching statement. Please submit your application by Tuesday 3 June 2014 to Drs D. Verbunt, [Recruitment-CiTG@tudelft.nl](mailto:Recruitment-CiTG@tudelft.nl).

When applying for this position, please refer to vacancy number CITG14-21.