



RECRUITMENT ANNOUNCEMENT

National Water Resource Engineering and Modeler

ICEM – International Centre for Environmental Management is an award-winning independent technical service centre that assists the government, private sector and communities in defining and implementing policies for sustainable development. Established in Australia in 1999, ICEM has its regional headquarters in Hanoi and is staffed by full-time international and national technical and administrative personnel.

ICEM works in Asia and the Pacific and focuses on climate change, water resources management, disaster risk reduction, renewable energy, environmental assessment, environmental economics, nature-based solutions and biodiversity conservation. ICEM seeks to integrate environmental concerns with development through spatial planning, modelling, socio-economic analysis and environmental assessment tools.

ICEM seeks to employ a **Water Resource Engineering and Modeler** (Vietnamese) on a two-year renewable contract. The candidate will report to the ICEM GIS and Modelling Manager and work closely with relevant senior international colleagues.

Responsibilities

- Work as a key member in the modeling and GIS team to develop, calibrate, and operate the open-source modeling packages applied in ICEM (eg. NAM, HEC-HMS, SWAT, HEC-RAS, MIKE, MIKE 11, MIKE 21, MIKE FLOOD, WEAP)
- Integrate meteorological, hydrological, topographic, and geological data into models
- Conduct modeling linked to water resources management, disasters, climate change and decision support system (DSS)
- Support preparation of training and interpretative materials to accompany our modeling package
- Process model outputs for mapping and visualization and Integrate model data into GIS (QGIS, ArcGIS) for spatial analysis, Model Analysis and GIS-Based Mapping
- Support the development of decision support systems (DSS) using modeling results
- Support research and planning teams in water resource management
- Keep up-to-date with new modeling techniques and optimize simulation processes
- Support to update GIS database for ICEM projects including maintaining ICEM’s metadata management system and Conduct GIS analysis and provide support in preparing GIS products
- Conduct collection, preparation and digitization of spatial data; GIS analysis and provide support in preparing ICEM’s GIS products
- Undertake spatial analysis of datasets as per project requirements
- Prepare thematic maps and figures for analysis, presentations and reporting
- Support the ICEM technical team in the preparation of spatial materials, guidance on modeling tools and techniques for tenders and special events (eg. seminars, workshops and trainings) if required
- Conduct other appropriate technical support activities as required

Qualifications

- University post graduate degree, preferably in Water Resources Engineering, Environmental Engineering, Hydrology, Hydro-informatics, Natural Science, Mining & Geology or related fields



- At least 2-3 years of experience in water resource modeling, hydrology, hydraulic simulations, GIS, mapping, data management and implementation in related fields
- Proficiency in at least one hydrological/hydraulic modeling software: HEC-HMS, HEC-RAS, SWAT, WEAP, MIKE, WEAP; experience in model calibration and validation
- Familiarity with meteorological and hydrological datasets (rainfall, water level, flow rate)
- Experience in GIS (ArcGIS, QGIS) for processing topographic, land use, and flood mapping data
- Ability to analyze raster data (DEM, remote sensing data) for modeling purposes
- Working knowledge of hydrological databases: Geodatabase/ shapefile

Additional qualifications and skills

- Ability to work independently and collaborate with teams effectively
- Ability to use water modeling software support to Mapping and Decision Support System
- Good computer skills – Microsoft Word, Excel, Power Point
- Some knowledge on programing/coding

Applicants should be fluent in English with proven technical writing and presentation skills.

To apply, interested applicants should send a cover memo and updated CV with contact details of two references to ICEM at Nguyen Thu Phuong (admin@icem.com.au). For more information about ICEM, visit www.icem.com.au

Applications close on 20 April 2025.