2. Customised Modules (2-4 days programme)

Customised combinations of various on-demand training programmes to match the specific needs of a water company, organisation or government agency.



3. Consultancy Services (specified durations)

PWSA also provides consultancy services for Malaysian and international clients on various areas/aspects of water supply management, including:

- Call Centre Operations
- Customer Service
- Human Resource Development (HRD)
- Information Technology (IT)
- Finance, Governance and Asset Management



For further information, please contact:



Penang Water Services Academy (PWSA)

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WATER SUPPLY INDUSTRY KNOWLEDGE-BASED TRAINING PROGRAMMES







KNOWLEDGE-BASED PROGRAMMES













The Penang Water Services Academy (PWSA) offers a variety of training and skills development programmes to Malaysian companies, government departments and international clients.

PWSA is managed by PBA Resources Sdn Bhd, a subsidiary of PBA Holdings Bhd (PBAHB). PBAHB is also the holdings company for Perbadanan Bekalan Air Pulau Pinang Sdn Bhd (PBAPP), the licensed water operator that serves the State of Penang.

Leveraging on the resources and expertise of PBAPP, PWSA's knowledge-based programmes focus on real-world experiences in water supply engineering, in the Malaysian and Asian context.

Since PWSA's foundation in 2007, thousands of water supply industry personnel have attended and participated in the following knowledge-based programmes:



1. Fast Track Programmes (1-2 days programme)

1.1. Water Distribution

- · Pipe-Laying Techniques and Best Practices for Repairs
- Under Pressure Tapping
- · Pumping System Design in Water Distribution System
- Non-Revenue Water Management
- · Project Management
- Introduction to Geographic Information Systems (GIS)
- Global Positioning Systems (GPS) for Field Surveys
- Plumbing Installations
- Flow Measurement Methodologies
- Pipe Line Hydraulics
- · Safety at the Workplace
- Energy Conservation (Electrical Systems)

1.2. Water Treatment

- Theory on Water Treatment Process
- Water Treatment Methods
- Water Quality Monitoring and Surveillance
- Water Resource Management (Catchment Maintenance)
- Instrumentation in Water Treatment Plants

1.3. Instrumentation

- Instrumentation Maintenance
- Pump Alignment and Maintenance
- Water Supply Regulations in Malaysia

1.4. Dam Operations and Safety

- Conducting Dam Operations
- Performing Dam Inspections
- Conducting Dam Monitoring
- Executing Dam Maintenance
- Instrumentation and Monitoring
- Dam Safety

1.5. Customer Service

- Overview of Customer Service
- Resolving Technical Issues
- Billing
- · Technical Know-How



