



School of Computing, Engineering and Mathematics  
Centre for Infrastructure Engineering  
Western Sydney University

## SHORT COURSES (NOVEMBER 2017)

### Course 1: Buried pipe behaviour and design

**23 November 2017 8:30am to 4:30pm**

This course describes the behaviour of buried pipes, starting with soil-structure interaction for rigid, semi-rigid, flexible and compressible pipes, and then treating the design limit states for each of these pipe types. The manner in which the structural and soil (backfill) characteristics influence performance is explained. Design procedures are those in the AASHTO standard, which is the foundation of Australian pipe design practice. New design methods developed for pipe joints are also presented.

### Course 2: Culvert and sewer deterioration and repair using polymer liners

**24 November 2017 9:00am to 4:30pm**

This course discusses the effect of pipe and soil deterioration on stability and serviceability of culverts and gravity flow pipes and culverts, then covers behaviour and design of liners used in gravity pipe and pressure pipe repair. Technologies covered include cured in place polymer liners, grouted slip liners, sprayed liner systems and paved inverts. Both codified design practice and research procedures developed by the presenter for other liner problems are covered.

### Registration

\$1000 per course or \$1500 for both courses, register at  
<https://onestop.westernsydney.edu.au/OneStopWeb/SCEM/menu>

### Course format

Both courses are taught in workshop format, where participants undertake a series of exercises to explore and apply the material being presented. You should bring a calculator or laptop with a spreadsheet program.

### Venue

Western Sydney University Parramatta City Campus  
169 Macquarie St. 1 Parramatta Square  
Room 5.69 (Learning Studio) (Level 5 Room 69)  
(see [location map below](#))

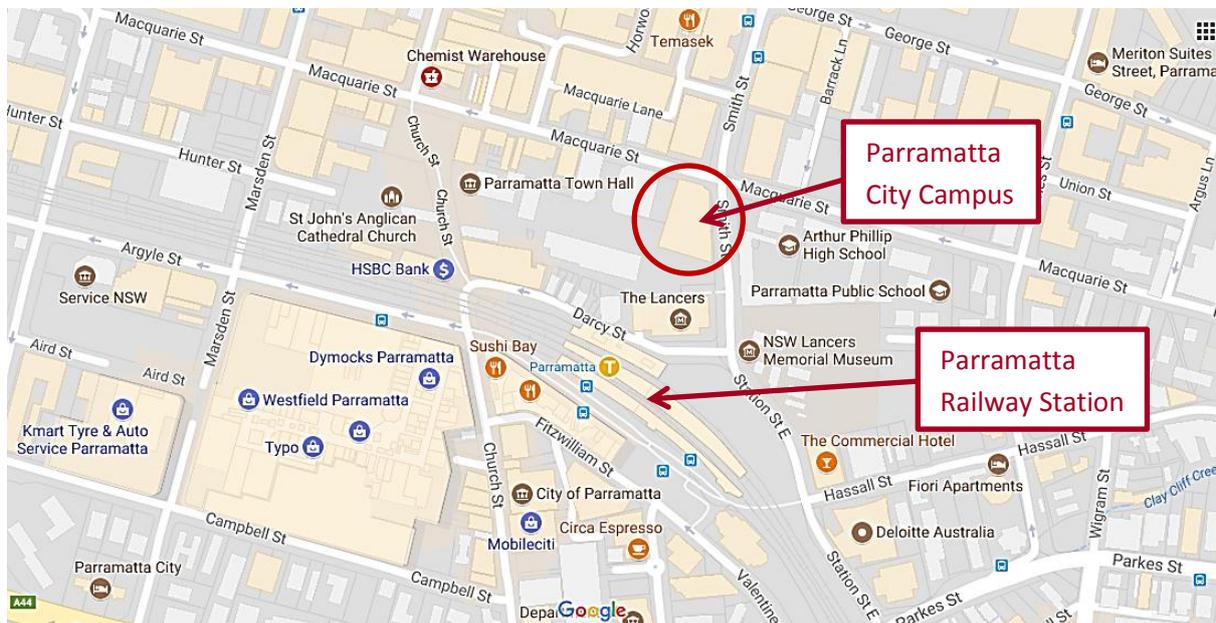
## Course Instructor

**Professor Ian D. Moore, P.Eng., FCAE, FEIC**

Professor Moore holds the Canada Research Chair in Infrastructure Engineering in the Department of Civil Engineering at Queen's University at Kingston, Ontario. His more than 300 technical publications examine both conventional and trenchless installation and replacement of buried metal, concrete and thermoplastic pipes. Prof Moore is a member of various Editorial boards and ASTM, CSA, TRB and other technical committees. His work is incorporated in ASTM, AWWA, AASHTO, CSA and other North American and international codes of practice. Supported by NSERC and various industrial and government transportation and infrastructure agencies, Dr Moore's research is directed towards clarifying limit states for new, repaired and replacement pipes and culverts. He is developing design methods to guide selection of cast in place and pulled in place polymer liners for culverts, sewers, and water pipes, as well as explaining the role of soil-pipe interaction and its influence on ground disturbance and pipe performance during pipe bursting and directional drilling.



## Location Map



## Enquiries

For further enquiries, email to Chin Leo at [c.leo@westernsydney.edu.au](mailto:c.leo@westernsydney.edu.au)