



Queensland



IPWEA

INSTITUTE OF PUBLIC WORKS
ENGINEERING AUSTRALASIA

BASIC GEOMETRIC ROAD DESIGN

**ARRB
WORK-
SHOPS**

30-31 OCTOBER 2019
BRISBANE

BASIC GEOMETRIC ROAD DESIGN

Good road design will achieve operational efficiency, be safe and cost-effective, be aesthetically pleasing, and minimise the environmental impact. The role of the road designer is to produce the most appropriate design that achieves the specified functionality using the design inputs from all relevant disciplines. The purpose of this two day workshop is to provide an understanding of basic geometric road design. This also includes considerations of, the Safe System approach to road safety, extended design domain and whole-of-life costs.

ARRB

30-31 OCTOBER 2019
VENUE TBC



The design must take into account all inputs from stakeholders and road users. This workshop will cover these principles so that delegates will obtain a clear understanding of the key geometric design requirements to achieve good road design. The course will be based on the Austroads Guide to Road Design Part 3: the Safe System approach to road safety (2016). The presenters' expertise in safety in design concepts will also incorporate design considerations and decision-making processes using AusRAP and iRAP safety assessment principles.

CONTENT

- Develop a basic understanding of the fundamentals in geometric road design
- Consider key engineering aspects that relate to a road design project
- Apply the knowledge gained through various design exercises to confirm understanding
- Analyse and re-design existing rural roads to achieve a safe, cost-efficient design that considers whole-of-life costs
- Course mainly refers to Austroads (2016) Guide to Road Design Part 3: Geometric Design

WHO SHOULD ATTEND

The workshop is primarily aimed at, but not limited to:

- Project and program managers/directors
- Consulting, State or Local government road design and construction personnel
 - Construction technicians and engineers
 - Design draftspersons and engineers
 - Graduate technicians and engineers

The workshop will also be of benefit to those involved in construction or operational activities on how to understand and read a road design plan.

CLICK HERE TO REGISTER >

TO REGISTER FOR THIS WORKSHOP
AND MAKE PAYMENTS PLEASE CLICK
THE ABOVE BUTTON.



LEARNING STRATEGIES

Lectures
Case studies
Group Discussions
In-class activities

OUTLINE

DAY 1 will focus on:

- Design fundamentals
- The design process, design brief
- Traffic fundamentals
- Cross section
- Design speed
- Sight distance
- Horizontal design
- It will also include various exercises.

DAY 2 will focus on:

- Vertical alignment
- Horizontal and vertical co-ordination
- Drainage
- Geotechnical investigations
- Earthworks
- Design process summary
- State representative example
- Introduction - whole of life costs
- Focus on safety
- Design for safety
- Reduce crash risk and calculate cost benefit ratio
- It will also include various exercises.

PRESENTERS

DAVID MILLING

SENIOR TECHNOLOGY, LEADER TRANSPORT SAFETY

David joined ARRB in 2008 with a background in road construction and design. He specialises in road safety auditing, safe system road design, crash investigations, motorcycle safety, heavy vehicle access safety and network safety analysis. David has led or been involved in a number of Austroads projects and has presented nationally and internationally on road safety engineering principles. He currently has a special interest in motorcycle safety and infrastructure management to reduce motorcycle casualties.

NOEL O'CALLAGHAN

**PRINCIPAL PROFESSIONAL ENGINEER,
TRANSPORT SAFETY**

Noel O'Callaghan joined the Australian Road Research Board as Principal Engineer, Transport Safety in 2015. Prior to that, he was the Principal Road Design Engineer for DPTI, providing road design advice across the Department on a variety of projects ranging from local roads to major expressways. He was the South Australian representative on the Austroads Road Design Task Force, and the Safety Barrier Assessment Panel.

KNOWLEDGE TRANSFER

COURSE MATERIALS

- Participants are required to bring a copy of the Austroads (2016) Guide to Road Design Part 3: Geometric Design. Available now (from 30 Jun 2018) to anyone as a free downloadable PDF via the Austroads [website](http://www.austroads.com.au). Hard copies discontinued

FEES

PRICE PP FOR IPWEAQ MEMBERS: \$1,700

PRICE PP FOR NON-MEMBERS: \$2,000

Registration fee includes morning and afternoon refreshments and lunch. All prices are quoted in Australian Dollars.

ENDORSEMENTS

Institutes of Engineers, Australia (IEAust). This course is recognised by Engineers Australia for Continuing Professional Development.

Engineers Australia members can choose to record CPD hours for attendance at this event in their personal CPD logs. Members should refer to Engineers Australia's CPD Policy for details of requirements and conditions.



PRIVACY STATEMENT

Personal information provided by you is managed in accordance with the Privacy Act 1988 (Privacy Act). ARRB and IPWEAQ is committed to providing confidentiality to and protecting the privacy of its clients, participants, employees and contractors. We guarantee that we will not sell personal information to any third party.

ARRB and IPWEAQ will not provide individual personal or training information to unauthorised third parties unless prior written permission has been received from the individual. The ARRB and IPWEAQ Privacy Policies can be viewed on each entities website.

CANCELLATIONS

If you are no longer able to attend this event a substitute attendee may take your place. However, if you wish to cancel your registration a full refund, minus a \$220 (incl GST) service fee, will be given provided you have notified us in writing, by email, letter or fax, at least 10 business days before the start of the workshop. No refund is available for cancellations under 10 days.

NATIONALLY RECOGNISED TRAINING

ARRB is progressively obtaining formal accreditation for many of its workshops. [Click here](#) for further information.