

DRAINAGE FOR ROAD DESIGN

**ARRB
WORKSHOPS**

**4-5 JUNE 2019
PORT MELBOURNE**



DRAINAGE FOR ROAD DESIGN

ARRB is pleased to present a two-day workshop on drainage based on the Austroads Guide to Road Design Parts 5, 5a & 5b. The drainage guides will provide designers with information to appropriately manage stormwater run-off through the design of efficient and effective road drainage systems.



CONTENT

The course covers all the basic hydrological and hydraulic calculations required for good road design. Although concentrating on road design applications, learning outcomes can be applied to all drainage design projects incorporating small to medium sized catchments.

Learning outcomes include:

- Familiarising road designers and civil engineers with current best practice in road drainage design (based on the Austroads Guide to Road Design Parts 5, 5a and 5b published in May 2013) and relevant aspects of the Austroads Guide to Bridge Technology Part 8, 2018.
- Outlining application of "Australian Rainfall and Runoff" to road drainage design.
- Describing how drainage conditions can influence road design, road location, design elements and associated structures.
- Providing training focused on meeting local requirements with associated case studies.
- Providing approval authority practitioners with the skills to assess consultant designs and applications.

WHO SHOULD ATTEND

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

- traffic management and local road practitioners
- civil engineers involved in road flood and drainage design
- road design, road safety and traffic management consultants
- engineers requiring specialist training or understanding of issues relating to flooding and drainage for road design
- state road authority staff who deal in network management, local road solutions, heavy vehicle management, road safety and traffic engineering
- graduate engineers looking for specialist skills for career development
- practitioners looking to refresh or expand their basic flood and drainage design knowledge
- authority practitioners required to approve consultant road designs
- engineers and designers contributing to other aspects of flood and drainage design, including subdivisions

4 - 5 JUNE 2019
PORT MELBOURNE
80A TURNER
STREET

CLICK HERE TO REGISTER >

TO REGISTER FOR THIS WORKSHOP
AND MAKE PAYMENTS PLEASE CLICK



LEARNING STRATEGIES

- Lectures
- Case studies
- Group Discussions
- In-class activities

OUTLINE

DAY 1 will focus on:

- Road drainage objectives and principles.
- “Australian Rainfall and Runoff”, Austroads Guide to Road Design and other documentation.
- Application of “Australian Rainfall and Runoff” to road design.
- Issues and considerations related to flooding and drainage in road design.

DAY 2 will focus on:

- Site assessment related to flooding and drainage in road design.
- Scour assessment for bridges and culverts.
- Culverts.
- Floodways.
- Subsurface drainage.
- Environmental considerations.

PRESENTERS

MARK BABISTER FIEAUST CPENG NER RPEQ DIRECTOR AT WMAWATER

Mark is a national leader in water engineering, specialising in flood estimation and floodplain management. He has over thirty years’ experience in water engineering studies, and has successfully led an extensive number of significant hydrologic, hydraulic, floodplain management, infrastructure and dam studies for a wide range of water managers and infrastructure owners. Mark was the Chair of the Technical Committee for the ARR revision and a co-editor of the document and in 2017 was the winner of the Engineers Australia John Holland Civil Engineer of the Year award. In particular he has extensive experience with road projects in many parts of Australia.

DR BILL WEEKS FIEAUST, CPENG NER RPEQ

Dr Bill Weeks is an experienced water resources engineer with wide ranging experience with road and rail projects in all states of Australia as well as in South-East Asia and the Pacific. He has worked extensively as the Subject Matter Expert for Hydrology for the Melbourne Brisbane Inland Rail Project and advised ARTC on flood related issues for this major railway. He was previously the Director (Hydraulics) in the Queensland Department of Transport and Main Roads and was a co-editor of the 2016 edition of “Australian Rainfall and Runoff”.

KNOWLEDGE TRANSFER

COURSE MATERIALS

- Participants will need a copy of Guide to Road Design - Parts 5, 5a & 5b. Please print out a hard copy or bring it on your laptop/tablet. This is available as a free downloadable PDF via the Austroads [website](#) after logging in.

FEES

WORKSHOP FEES

PRICE PP: \$1,800 PLUS GST

IPWEAQ MEMBER

PRICE PP: \$1,500 PLUS GST

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

ENDORSEMENTS

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.