

Road Design

- the geometric design fundamentals

Wollongong | 4 May 2018

Venue: Wollongong City Council
Level 9, 41 Burelli Street
Wollongong

The following Austroads Guide is used as the key reference.

Guide to Road Design
- Part 3: Geometric Design



Speaker Profiles and Programme



www.pavementeducation.com



Presenters Profile

Dr Peter Gibbings, Associate Professor, University of Southern Queensland

Course Primary Presenter

Peter, in addition to his being an Assoc. Prof, is also the Associate Dean (Learning and Teaching) in the Faculty of Health, Engineering and Sciences at the University of Southern Queensland. His professional background is in land surveying having spent 20 years in private practice, including many years designing engineering infrastructure including roads. Peter holds a Bachelor of Surveying Degree from the University of Queensland, a Graduate Diploma of Technology Management from Deakin University, a Master of Geomatics Degree and a Graduate Certificate in Tertiary Teaching and Learning from the University of Southern Queensland, and a Doctor of Education Degree from the Queensland University of Technology. He has a history of significant contribution as a practicing academic to the advancement of education and professional development. His achievements have been recognised by receiving various awards including a prestigious Carrick Australian Award for University Teaching, and Asia Pacific Spatial Excellence Award for Education and Professional Development.

CPEE Professional Development (CPD)

This course, with content based on the relevant CPEE postgraduate distance learning study Unit is facilitated and delivered by recognised practitioners in the field and is of such technical content that the number of hours involved should be fully acceptable toward Continuing Professional Development (CPD) standing.

Organisers & Endorsements

Centre for Pavement Engineering and Education (CPEE): This course is presented by CPEE, a non-profit, specialist private provider (roads and pavements) of tertiary education, founded by AUSTROADS and the Australian Asphalt Pavement Association (AAPA). CPEE offers Graduate Certificate, Graduate Diploma, Master of Technology and Master of Engineering qualifications in roads, pavement engineering and infrastructure asset management, and has formal links to La Trobe University and the University of Tasmania.

The Institute of Public Works Engineering Australasia (IPWEA): is a professional organisation providing member services and advocacy for those involved in and delivering public works and engineering services to the community. Previously known as the Institute of Municipal Engineering Australia (IMEA), the organisation has expanded its traditional local government engineering focus to public works and thereby covering all levels of government and private practice.

Course Size, Enquiries & Management

Due to its practical nature, numbers are limited for this course so it is advisable that you register quickly to avoid missing out. Its unique and targeted content means this course is unlikely to be offered again in this location for some time.



PROGRAM

8.15	Course Start	
8:15am	Introductions, Schedule & Resources	
	Overview & Objectives Objective of Geometric Design; Road Safety; Providing for a Safe System & Design Process	
1	General Road Design Considerations – Principles and Standards History; Social Consideration & Principles for Modern Road Design Standards	
2	Design Factors and the Influence of Geometric Design	
3	Survey Data Collection Purposes of Survey Data; Importance of Digital Terrain Modelling (Terrain (DTM) and Elevation (DEM)) & Different Data Collection Methods	
10.00	Morning Tea	
4	DTM/DEMs Importance of Field Coding; Forming 3 Dimensional Models from Survey Data & Stringing & Contouring	
5a	Horizontal Alignment Aesthetics & Design; Grades & Curvature	
12.30	Lunch	
5b	Vertical Alignment Controlling Factors; Vertical Curves	
5c	Superelevation Templates; Application of Superelevation	
5d	Base and Obstruction Considerations	
5e	3D Views and Drive Throughs Video Presentation	
15.15	Afternoon Tea	
5f	Optimising the Design - Back to Design Factors and Standards Quantities; Reports	
6	Construction, Road Environments, and Intersections Construction Fundamentals; Road Environs Considerations; Intersection Design	
16.20	Close	* program subject to change

Course is supported by:

REAAA: The Road Engineering Association of Asia and Australasia – Australian Chapter serves to develop technical, professional and commercial links within and between countries in the Pacific region. REAAA has some 1000 members in 26 countries in Asia and Australasia.

Roads Australia: Roads Australia is a not-for-profit, non-political industry association. Members are drawn from all corners of the Australian road sector, and we champion the interests of a vital national asset - Australia's road transport system - and provide a forum for policy development, networking and communication. Further, we seek to draw attention to the importance of Australia's road network to the economic and social fabric of the nation, and to ensure that information and decision-making in relation to roads and road transport is well informed and reflects an appropriate level of priorities.

SRA: State Road Agencies are responsible for the management of the road network, which includes planning, designing, construction and maintaining road use through registering vehicles, licensing drivers and traffic management, and providing information and other road user services. SRAs also provide quality assured integrated investigation, testing and design services in the pavement technology and geotechnical engineering disciplines, and provides support to CPEE in developing expertise and undertaking education in all aspects of the flexible pavements industry.

Austrroads: Austrroads is the Association of Australian and New Zealand road transport and traffic agencies and its members are the six Australian state and two territory road transport and traffic authorities, the Department for Infrastructure, Transport, Regional Development and Local Government, the Australian Local Government Association (ALGA), and the NZ Transport Agency.

AustStab: The Australian Stabilisation Industry Association is a national organisation set up to educate and inform the civil engineering industry of the environmental and economic advantages of road recycling and all types of stabilisation. Its members are contractors, binder suppliers, government road authorities and plant manufacturers.

IPWEA: The Institute of Public Works Engineering Australia is a professional organisation providing member services and advocacy for those involved in and delivering public works and engineering services to the community. Previously known as the Institute of Municipal Engineering Australia (IMEA), the organisation has expanded its traditional local government engineering focus to public works and thereby covering all levels of government and private practice.





For more information:

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Cancellation Policy: If you are unable to attend this event a substitute attendee may take your place, without penalty. However, if you wish to cancel your registration, a refund, less a \$125 (Inc. GST) service fee, will be given provided you have notified us in writing, at least 10 days before the start of the event. No refund is available for cancellations under 10 days. CPEE reserves the right to cancel or reschedule any course, whereby a full refund or course transfer will be provided.