

Distance Learning Program for Professional Education in Acoustics

Background

This professional education program is aimed at providing appropriate short courses to meet the needs of those embarking on a career in Acoustics. It is primarily aimed at those entering or who have recently entered the acoustical consulting field. It will also be of value for those working in government agencies and allied organisations needing a fundamental understanding of acoustics. The program is based on a similar program that has been offered via Universities and the UK Institute of Acoustics (IOA). It has the support of the Association of Australasian Acoustical Consultants (AAAC).

There are no specific prerequisites for this program. It is assumed that the applicant will have completed the equivalent of an undergraduate degree in Engineering, Science or Architecture. If not, they may need to seek additional assistance with some mathematics and physics. Each module of the program is offered as a separate Module in distance learning mode so that it can be commenced at any time. Registrants from outside Australasia are welcome as long as they understand that the standards, guidelines, building constructions etc referred to in the modules are those applicable in Australasia.

Each module comprises course notes, assignments and some modules include practical exercises and a test. Registrants work through this material at their own pace and in their own location submitting the work electronically. The practical work in Module 1 and the tests for Module 1 and 2 are undertaken at the registrant's location under supervision of their employer. It is expected that those registrants working for acoustical consultancies will receive support and supervision by their supervisors. Registrants who are working on the program without support from their employer will be given assistance by phone or email from the course coordinator. This can be supplemented with assistance from a company that is a member of the AAAC.

Module Content Each module of the program will consist of

- course notes to be sent to the students electronically,
- tutorials to be completed and returned to UNSW for marking
- practical exercises when appropriate
- test or major assignments to be undertaken and to be returned to UNSW, Canberra for marking
- Certificate to be provided on successful completion

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Distance Learning Program for Professional Education in Acoustics



Module 1 General Principles of Acoustics

This module is currently available for commencement

Content of Module 1, General Principles of Acoustics, This module provides an introduction and overview of the following topics – many of which will then be developed in subsequent modules.

Chapter 1 Basic concepts – oscillatory system, basics of wave systems, decibel scale, frequency analysis, hearing.

Chapter 2 Descriptors for time varying noise levels, L_{eq} , L_{DN} , L_{10} etc.

Chapter 3 Sound and hearing, noise criteria and noise rating, types of hearing loss.

Chapter 4 Behaviour of waves, source mechanisms (monopole, dipole etc), outdoor propagation, principles of barriers.

Chapter 5 Sound in spaces (small and large), reflection, absorption, reverberation time.

Chapter 6 Airborne sound insulation, standardised and weighted level differences, structure borne sound, impact sound.

Chapter 7 Vibration, undamped free oscillations, damped driven oscillations, displacement, velocity, acceleration, vibration control, damage to buildings, sensitive equipment, human vibration.

Chapter 8 Measurement microphones, analysis equipment, dosimeter, intensity probe, accelerometers, general measuring procedures.

Chapter 9 General noise control strategies, mechanical ventilation noise, hearing conservation obligations.

Timing

Module 1, General Principles of Acoustics, can be commenced at any time. The test will be available on a mutually preferred date as long as 4 weeks notice is give.

Registration

Registration includes notes provided electronically, assistance with tutorial work, provision of test and certificate for successful completion.

Registration for Module 1 General Principles of Acoustics

A separate form to be completed for each registrant from any one organisation

Title:..... Date:

Family name:

Given Name:

Organisation

Postal Address:

Suburb:..... State:.....Postcode:.....

Country:

Telephone: (W) Mob

Email:

Registration Fee: please tick box SPECIAL DISCOUNT RATE TILL 15 OCT 2020

Full registration fee	\$990 + \$99 GST = \$1089	<input type="checkbox"/>
AAAC, NZAC or AAAC members or Defence personnel	\$880 + \$88 GST = \$968	<input type="checkbox"/>
3 or more from one organization in one booking	\$770 + \$77 GST = \$847	<input type="checkbox"/>

Invoice will be raised following processing of this application form Payment of the invoice can be made on line by bank transfer or credit card.

Name for Invoice if different from registrant's details above:

Name _____

Position _____

Address _____

Email _____ Phone (W) _____

Cancellation Policy: *If a registrant cancels within 5 working days of payment of the invoice a refund of the registration fee less \$100.00 administration fee will apply.*

ABN 57 195 873 179 CRICOS provider Code 00098G

ENQUIRIES to Marion Burgess

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