

## Proudly supported by



1. What is the difference between sound absorption and sound insulation in architectural acoustics?
2. What is the significance of the weighted sound reduction index ( $R_w$ ) and how does  $R_w+C_{tr}$  differ?
3. How is reverberation time ( $RT$  or  $T_{60}$ ) calculated and why is it important in acoustic design?
4. What acoustic rating systems are used to evaluate ceiling systems in terms of both airborne and impact noise?
5. How do perforation percentage and cavity depth affect acoustic panels?
6. What key factors should architects consider when placing absorbers, diffusers and reflectors in a room?

**By the end of this session you should understand:**

- Explain the purpose of architectural acoustics and the fundamentals of how sound is perceived in the built environment.
- Define key acoustic terminology and describe the behaviour of sound waves in interior spaces.
- Identify appropriate acoustic design requirements for various building types and functions.
- Evaluate and specify construction methods and material placement, such as absorbers, diffusers and reflectors, to achieve effective sound insulation and absorption.

## THE SOUND OF ARCHITECTURE

Proudly supported by



A series of horizontal dotted lines for writing.