



Universal Design and Accessible Buildings

Course: Access Audits and Retrofit Planning



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Introduction:

Universal design and accessible buildings, with access audits and retrofit planning, is a 5-day course for architectural, building engineering, plan review and facility teams that ends with an Accessibility Audit and Retrofit Plan for a case public building. Many buildings still open with stepped entrances, heavy doors, undersized lifts and toilets where a wheelchair user cannot turn, and fixes arrive one complaint at a time. Nominees already design, check or run buildings and learn through inspection walkthroughs of drawings, photographs and a case site. CoreConcept Training Center delivers this universal design course.

Course Objectives:

- Apply the seven universal design principles and user need profiles to judge how a building serves people with mobility, sensory, cognitive and age-related needs
- Check approach routes, parking, set-down points, entrances and ramps against ISO 21542 and the applicable national accessibility code
- Specify doors, lifts, stairs, accessible toilets, changing places rooms, tactile surfaces and visual contrast for new and refurbished buildings
- Plan emergency egress for disabled occupants with refuge areas, evacuation lifts, alarms and personal emergency evacuation plans
- Review plan submissions and street and public space designs with a stage-by-stage accessibility checklist
- Audit an existing public building and prioritise retrofit measures by severity, cost and phasing in an Accessibility Audit and Retrofit Plan

Target Audience:

- Architectural design teams responsible for layouts, entrances, sanitary areas and circulation in public buildings
 - Building and MEP engineering teams responsible for lifts, doors, alarms and egress systems
 - Municipal and consultant plan review teams who check design submissions for access provisions
 - Facility and estate teams responsible for upgrading and maintaining existing buildings
 - Urban design and public works teams responsible for streets, squares and transport stops
 - Project and fit-out coordination teams who close access defects before handover
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Course Outline:

Day 1: Universal Design Principles, User Needs and Access Baseline

- Seven Universal Design Principles Applied to Building Elements
- Social Model of Disability and Physical Barriers in Buildings
- Mobility, Sensory, Cognitive and Age-Related User Need Profiles
- Reference Wheelchair Space and Turning Circle Dimensions
- Access Baseline Scorecard for an Existing Public Building

Day 2: ISO 21542 Requirements and Accessible Approach Routes

- ISO 21542 Structure, Scope and Existing Building Provisions
- Accessible Route Widths, Surfaces, Gradients and Passing Places
- Accessible Parking Bays, Set-Down Points and Dropped Kerbs
- Step-Free Entrance Design With Level Thresholds and Canopies
- Ramp, Landing and Handrail Specification Checks Against Standards

Day 3: Doors, Vertical Circulation, Sanitary Facilities and Sensory Design

- Door Clear Widths, Opening Forces and Automatic Operators
- Passenger Lift, Platform Lift and Stair Design Criteria
- Accessible Toilet Layout and Changing Places Room Planning
- Tactile Walking Surface Indicators for Warning and Guidance
- Visual Contrast, Hearing Induction Loops and Tactile Signage

Day 4: Emergency Egress, Public Realm and Design Review Control

- Evacuation Lifts, Refuge Areas and Personal Emergency Evacuation Plans
- Visual and Audible Fire Alarm Provision for Sensory Impairment
- Accessible Streets, Crossings, Street Furniture and Public Squares
- Design Review Checklist for Plan Submissions at Each Stage
- Common Access Defects in Completed Projects and Root Causes

Day 5: Inspection Walkthrough and Accessibility Audit and Retrofit Plan

- Case Public Building Access Audit Walkthrough With Measurement Kit
 - Barrier Log Scoring by Severity, Frequency and Users Affected
 - Retrofit Option Appraisal, Order-of-Cost Estimates and Phasing
 - Technical Infeasibility Cases and Alternative Access Solutions
 - Accessibility Audit and Retrofit Plan Completion and Peer Review
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Skills You Will Gain:

- Universal Design Application
- Access Audit Measurement
- Accessible Route Design
- Sanitary Facility Specification
- Tactile and Contrast Detailing
- Inclusive Egress Planning
- Accessibility Plan Review
- Retrofit Prioritisation

Why Attend This Course:

- Deliver an Accessibility Audit and Retrofit Plan for a case public building to the estates director or the plan approval committee
- Decide which barriers to remove first and when an alternative access solution is acceptable in an existing building
- Avoid costly rework from undersized lifts, stepped entrances and unusable toilets found only at handover
- Share the design review checklist and barrier log template with designers, reviewers and maintenance staff

Conclusion:

Back at work, the participant presents the Accessibility Audit and Retrofit Plan to the estates or facilities director, the project sponsor and the plan approval committee. They use it to approve the first retrofit package, budget the phased works and adopt the design review checklist for new submissions. After the first package is built, the team should re-measure the treated routes, entrances, lifts and toilets, gather feedback from disabled users, update the barrier log and adjust the order and cost of the remaining phases.

Frequently Asked Questions FAQ:

What should participants know before the universal design and accessible buildings course?

Participants should already design, review or manage buildings and read architectural drawings. No prior accessibility qualification is required. Bringing floor plans or photographs of a building they work on helps them apply the audit and design review exercises.

How does the universal design and accessible buildings course differ from a disability inclusion course?

It addresses the physical building and public realm: routes, entrances, lifts, toilets, tactile surfaces, egress and retrofit costs. Disability inclusion courses focus on people processes such as support plans, workplace adjustments and policy, and treat premises as one item among many.

Why does universal design and accessible buildings practice begin with user needs rather than minimum dimensions?

Minimum dimensions describe one reference user, while real occupants include wheelchair users, people with low vision or hearing loss, older visitors and parents with buggies. Starting from user needs shows where a code minimum still leaves a barrier and where extra space pays off.

What do participants take back from the universal design and accessible buildings course?

Participants take back an Accessibility Audit and Retrofit Plan for a case public building, with a barrier log, severity scoring, retrofit options, order-of-cost estimates and phasing, plus a stage-by-stage design review checklist for new submissions.
