

The Australian Institute of Architects Policy on Tertiary Education of Architects – Standards for Programs in Architecture

1 Program Duration and Nomenclature

1.1 Length of Accredited/Recognised Pre-professional Architecture Program

The Australian Institute of Architects requires a minimum equivalent of 5 years' full time study in an accredited/recognised program. A further period of practical experience is required by State/Territory registration authorities.

1.2 Nomenclature

The nomenclature of “Master of Architecture” is the principal pre-professional degree in architecture that will be the subject of professional accreditation and recognition.

2 Resources

The Australian Institute of Architects maintains that the quality of staff and the adequacy of resources for staff are critical to the quality of architecture education programs.

2.1 Academic Leadership

Academic leadership within architecture programs must be accountable and adequately resourced to provide academic direction for that program. Academic leadership in accredited and recognised architecture programs will be provided by a person or persons with relevant architecture qualifications and experience.

2.2 Staffing

Accredited and recognised architecture programs must be supported by a range of suitably qualified staff able to deliver the program effectively. In order to maintain education quality, staff members should be active in professional practice and/or research. The Australian Institute of Architects maintains that research and publication should be regarded as integral activities of architecture academics. The Institute recognises creative endeavour as valid research - refer The Australian Institute of Architects Research Policy.

2.3 Staff: Student Ratios

The Australian Institute of Architects' national benchmark staff-to-student ratio is 1:17 (equivalent full-time academic staff: equivalent full-time students).

2.4 Facilities

Architecture programs must have the necessary financial support for resources and facilities to ensure effective program delivery.

Studio-based teaching involving small group tuition is a resource intensive model that is fundamental to educating students in architecture design. Students must have access to adequate space(s) suitable for the delivery of architectural design. Information technology should be integrated with studio spaces.

Programs should ensure students have dedicated access to Information Technology facilities and this must include relevant industry software and support services. Students should be exposed to and encouraged to explore current and emerging information technologies.

Library and learning resources, both physical and digital, should be accessible to students. These facilities should provide books, scholarly papers, professional journals, standards and codes and technical literature relevant to the discipline of architecture.

3 Program Content

Graduates exiting from an undergraduate program shall satisfy the following criteria for each component of the framework set out below.

In particular architecture students must develop the ability to integrate the range of knowledge criteria set out below. It is this ability that distinguishes architects from other providers of built environment services. Integrative skills develop in complexity over an architecture course.

3.1. Design Studies and Design Integration

3.1.1 Awareness and Knowledge

- i) An understanding of design procedures, systems and the history of design methods
- ii) An understanding of design precedent, critique, analysis and movements in design theory
- iii) An understanding of the tangible and intangible channels to architectural creativity
- iv) An understanding of material sciences and construction processes.

3.1 .2 Application and Synthesis

- i) An ability to engage imagination and to think creatively
- ii) An ability to inform action through knowledge of architectural design theory and methods
- iii) An ability to define a problem and formulate strategies for action
- iv) An ability to reconcile divergent factors and integrate domains of knowledge in the creation of a design solution
- v) An ability to gather information and apply analysis and critical judgment.

3.2 Documentation and Technical Studies

3.2.1 Awareness and Knowledge

- i) An understanding of building materials, component systems, products and the construction techniques for their assembly
- ii) An understanding of the processes of technical design and the integration of structure, construction technologies and services systems into a functionally effective whole
- iii) An understanding of the principles of structure and their application to the design of built environments
- iv) An understanding of technical systems and requirements for transport, communication, maintenance and safety within built environments
- v) An understanding of processes of construction cost planning and control
- vi) An understanding of active and passive services systems for thermal comfort, lighting and acoustics and their relationship to natural systems
- vii) An awareness of the sources of specialist information and expertise
- viii) An understanding of the interaction between environment, materials and structure.

3.2.2 Application and Synthesis

- i) An ability to reconcile divergent factors and integrate domains of knowledge in the development of buildable solutions
- ii) An ability to utilise technical documentation and specifications in design realisation
- iii) An ability to seek, utilise, evaluate and apply specialist information and expertise.
- iv) An ability to gather information and apply analysis and critical judgment
- v) An ability to inform action through technical knowledge of structure, materials, construction and services systems
- vi) An ability to apply knowledge gained from an analysis of the site, its context and the environment.

3.3 History and Theory Studies

3.3.1 Awareness and Knowledge

- i) An awareness of philosophical, cultural and political movements
- ii) An understanding of the history and theory of Western, non-western, regional and

indigenous architecture

- iii) An understanding of the sources of specialist information and expertise, including an understanding of issues of heritage and conservation in the built environment.

3.3.2 Application and Synthesis

- i) An ability to utilise speculation, iteration and reflection in critical discourse
- ii) An ability to inform action through knowledge of historical and cultural precedents in architecture
- iii) An ability to define personal values systems and ethical positions.

3.4 Practice and Project Management, and Implementation and User Studies

3.4.1 Awareness and Knowledge

- i) An understanding of the conventional building project cycle and the roles and responsibilities of the architect and other participants
- ii) An understanding of the principles of business management and their application to the development of built environments, project procurement and the operation of a professional consultancy
- iii) An understanding of professional ethics and codes of conduct as they apply to the practice of architecture
- iv) An awareness of the operations of the construction and development industries, property development, financial dynamics, real estate investment, alternative methods of procurement and facilities management
- v) An awareness of the potential roles for architects within an international context
- vi) An understanding of the processes of working within a team and how to collaborate with others in the development of a design solution
- vii) An understanding of the social context in which built environments are procured and responsibilities to clients, the public and users
- viii) An understanding of the legal responsibilities of an architect with regard to registration, practice and building contracts
- ix) An understanding of the process of research and definition of functional requirements for differing types of built environments
- x) An understanding of ergonomic and space requirements in the design of built environments and issues of equity and access
- xi) An awareness of the relevant codes, regulations and standards for planning, design, construction, health, safety and use of built environments.

3.4.2 Application and Synthesis

- i) An ability to inform action through knowledge of the professional, business, financial and legal contexts within which built environments are procured
- ii) An ability to inform action through knowledge of society, clients and users

- iii) An ability to receive and/or develop a project brief through definition of the needs of clients, the public and users.

3.5 Elective Studies

3.5.1 Awareness and Knowledge

- i) An awareness of the broader cultural context in which architecture is practised
- ii) An understanding of the specialisations associated with the discipline of architecture.

3.5.2 Application and Synthesis

- i) An opportunity to add personal diversity to architecture programs
- ii) An ability to engage with other modes of thinking
- iii) An opportunity to expand intellectual horizons beyond the core competency requirements of the architecture program.

3.6 Environmental Studies

3.6.1 Awareness and Knowledge

- i) An awareness of social and cultural dimensions of place
- ii) An understanding of issues of ecological sustainability
- iii) An awareness of issues of national and regional planning and their relationship to global and local demography and resources
- iv) An understanding of passive systems for thermal comfort, lighting and acoustics and their relationship to active systems
- v) An awareness of landscape design and management of natural systems
- vi) An understanding of the history and practice of urban design and issues of city planning.

3.6.2 Application and Synthesis

- i) An ability to define personal values systems and ethical positions
- ii) An ability to inform action through knowledge of natural systems and the built environment.

3.7 Communication Skills

3.7.1 Awareness and Knowledge

- i) An understanding of the growing theory of representation and how communication methods are integrally tied to methods and outcomes
- ii) An understanding of the use of systems of evaluation using manual and/or electronic means for the assessment of the performance of built environments (eg thermal, energy, structural, lighting etc.)
- iii) An understanding of the various means (manual and electronic) used to communicate ideas.

3.7.2 Application and Synthesis

- i) An ability to effect action or communicate ideas through the exercise of skills of collaboration, speaking, writing, drawing, modelling and evaluation
- ii) An ability to utilise graphic and model making to explore, develop, define and communicate a design proposal
- iii) An ability to prepare and read design drawings and visual presentations using manual and/or electronic means
- iv) An ability to prepare and read technical construction drawings and documentation using manual and/or electronic means.