QQI
Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

AWARDS STANDARDS - **ARCHITECTURAL TECHNOLOGY**

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Awards Standards - Architectural Technology

FOREWORD

The Awards Standards presented in this document describe the knowledge, skill and competence to be acquired before a QQI "Architectural Technology" award may be made. The standard is expressed, by National Framework of Qualifications (NFQ) Level, in terms of required knowledge, skill and competence. See QQI's Assessment and Standards, Revised 2013 for further details on the functions of Awards Standards.

The Awards Standards are designed to be used (i) by providers when designing new programmes and establishing minimum intended programme learning outcomes; (ii) by awarding bodies when validating new programmes; (iii) in the accreditation of programmes by the relevant professional bodies. They will also be used by providers when reviewing their programmes. It is recognised that the Awards Standards will require existing programmes to be updated, perhaps substantially. They are cumulative meaning that the outcomes required at Level N are those specified in that column in addition to those in all lower level columns. The Awards Standards comprise a generic part (in the yellow panels) and a discipline-specific part.

The expected learning outcomes of the Awards Standards do not constrain how particular programmes of education and training enable learners to achieve the intended programme learning outcomes as long as the outcomes are achieved. Nor do they specify how actual learning outcomes are assessed. Interpretation of these Awards Standards will be aided by a reflection on their context, scope and purposes. These are outlined in the following paragraphs.

The Awards Standards have been developed by an expert group with the support of the QQI executive and have been informed by national and international sources. The members of the expert group are:

• Mr Cormac Allen	Dublin Institute of Technology
• Mr Robin Stubbs	Waterford Institute of Technology
• Ms Anne Boner	Letterkenny Institute of Technology
• Ms Denise Dillon	Galway Mayo Institute of Technology
• Ms Margaret Doyle-Hughes	Carlow Institute of Technology
• Ms Deirdre Ryan	Cork Institute of Technology
• Professor Sam Allwinkle	Chartered Institute of Architectural Technologists (CIAT)
• Mr Pat Kirwan	Royal Institute of the Architects of Ireland (RIAI)
• Mr Eddie Conroy	South Dublin County Council
• Mr Mel McGerr	Murphy + McGerr Architecture
• Mr Conor Finnegan	McCarthy O'Hora
• Mr Martin Vaughan	Department of the Environment, Community and Local Government
• Ms Jette Djaelund	Danish Association of Building Experts, Managers and Surveyors
• Dr Peter Cullen	QQI (Chairperson)

These Awards Standards should not be interpreted as being detailed programme specifications. They do not uniquely specify the courses of study that a learner must take. Rather they should be seen as a reference for the development of programmes and a frame for the elaboration of intended programme learning outcomes. A diverse range of potential programmes and intended programme learning outcomes is compatible with these Awards Standards. The arrangement of the learning outcomes by level does not completely determine the sequence in which corresponding learning opportunities occur in a particular programme. Different programmes may sequence learning outcomes in different pedagogically valid ways.

The Awards Standards are relatively broad statements—specific programmes would be expected to specify intended learning outcomes in much more detail particularly at the level of individual modules. The broadness of the Awards Standards reflects their purpose which is to guide programme developers, reviewers, evaluators and validation panels etc., but at the same time to facilitate diversity and future developments. At Level 9 learning outcomes may be adjusted in order to provide the opportunity for increased focus in selected areas. In presenting learning outcomes under the headings "knowledge", "know-how and skill" and "competence" it is intended that collectively the complete set of outcomes address the act of architectural technology and its realisation.

Awards Standards - Architectural Technology

Knowledge – Breadth Knowledge outcomes are associated with facts and concepts; that is, they refer to knowledge of, or about, something. The more diverse, complex and varied the facts and concepts, the greater the breadth of knowledge and this is a matter of level. Breadth is distinguished from the number of different facts and concepts learned, which relates to volume.

Knowledge – Kind The representation of facts and concepts, including ideas, events or happenings, is cumulative. The more facts and concepts are layered on top of each other, and draw successively upon each other to construct meaning, the higher the level of learning. This process is typically associated with progressively greater abstraction from concrete phenomena into theory.

	NFQ Level 6	**NFQ Level 7**	**NFQ Level 8**	**NFQ Level 9**
	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:
Knowledge - Breadth	*Specialised knowledge of a broad area*	*Specialised knowledge across a variety of areas*	*Understanding of the theory, concepts and methods pertaining to a field (or fields) of learning.*	*A systematic understanding of knowledge, at, or informed by, the forefront of a field of learning*
Knowledge - Kind	*Some theoretical concepts and abstract thinking, with significant underpinning theory*	*Recognition of limitations of current knowledge and familiarity with sources of new knowledge; integration of concepts across a variety of areas*	*Detailed knowledge and understanding in one or more specialised areas, some of it at the current boundaries of the field(s).*	*A critical awareness of current problems and/or new insights, generally informed by the forefront of a field of learning*
Architectural technology in context	Demonstrate an awareness of architectural technology as a profession within a multidisciplinary environment.	Demonstrate a detailed knowledge of architectural technology as a profession within a multidisciplinary environment.	Demonstrate a detailed understanding of architectural technology as a profession, the multidisciplinary context for its practice and how contextual change impacts on the ethical practice of architectural technology involving relationships with clients, other professionals and users of the built environment.	Demonstrate a critical understanding of the role of the specialist architectural technologist within the building design and construction professions, and within the broader construction industry.
Science and technology	Recognise a range of building technologies, with an awareness of the mathematical, scientific and technological prerequisites for architectural technology.	Demonstrate an understanding of the mathematical, scientific and technological prerequisites for architectural technology involving buildings, materials, structures, building services and their performance in the built environment	Demonstrate a detailed understanding of the mathematical, scientific and technological prerequisites for architectural technology practice involving buildings, materials, structures, building services and their performance in the built environment.	Demonstrate a systematic approach to and critical understanding of mathematical, scientific and technological prerequisites for specialised architectural technology practice
Design principles, techniques and methods	Demonstrate an awareness of the application of architectural technology to design and construction projects and the role of sustainable principles in relation to the built environment.	Demonstrate an understanding of the application of architectural technology to design and construction projects, addressing topics that include sustainable principles, techniques and methods used in relation to materials, components, services and finishes relative to building design.	Demonstrate a detailed understanding of the application of architectural technology to design and construction practice addressing topics that include sustainable principles, techniques and methods used in relation to materials, components, services and finishes relative to building design.	Demonstrate a systematic understanding of research and innovation in architectural technology used to impact on and change building design and standards.
	Demonstrate an awareness of technical design principles, techniques and methods relating to architectural technology.	Demonstrate an understanding of the application of technical design principles, techniques and methods to address factors including but not limited to user needs, environmental impact, universal design, safety, appearance, life cycle, conservation and refurbishment.	Demonstrate a detailed understanding of the application of technical design principles, techniques and methods to address factors including but not limited to user and market needs, cost and value, quality, environmental impact, universal design, safety, reliability, appearance, life cycle, conservation and refurbishment.	Demonstrate a systematic and critical understanding of technical design principles, in order to research and innovate for the purposes of optimising decision making in specialised areas.
	Demonstrate an awareness of the evolution of architectural design and technology.	Demonstrate an understanding of the evolution of architectural design and technology and the relationship between them.	Demonstrate a detailed understanding of the evolution of architectural design and technology and the relationship between them.	Demonstrate a critical understanding of the design implications of construction technology and materials sufficient to respond innovatively to the design brief.
	Demonstrate an awareness of the engineering design factors required to develop, resolve and integrate engineering activities in the building design process.	Demonstrate an understanding of engineering design factors and the development and integration of engineering solutions, including but not limited to structural, building services and related engineering design activities in the building design process.	Appraise engineering design factors to collaboratively develop and integrate engineering solutions, including but not limited to structural, building services and related engineering design and specialist engineering contracting activities in the building design process.	Demonstrate a critical understanding of the impacts and transformative potential of a variety of engineering inputs in the building performance design process.

Information and communication	Demonstrate knowledge of the conventions for communicating technical information to peers through verbal and non-verbal means.	Demonstrate knowledge of the necessary verbal and non-verbal skills to communicate effectively in the context of architectural technology projects.	Demonstrate detailed knowledge of the necessary verbal and non-verbal skills to communicate effectively in the context of architectural technology practice.	Demonstrate a systematic knowledge of the means of effective transfer of research, experiences, insights, and knowledge among different experts and professionals.
	Demonstrate a basic knowledge of digital presentation techniques to communicate architectural technology solutions.	Demonstrate a knowledge of the appropriate digital presentation techniques to communicate architectural technology ideas and solutions.	Demonstrate a detailed knowledge of a variety of digital presentation techniques to communicate architectural technology ideas and solutions.	Demonstrate extensive knowledge of innovative digital presentation, communication and dissemination techniques.
Professional practice	Demonstrate a basic knowledge of project and design processes.	Demonstrate a working knowledge of the processes involved in health and safety, contract administration and project management on building projects.	Demonstrate a working knowledge of procurement, health and safety, contract administration and project management techniques relevant to building and buildings.	Demonstrate a critical awareness of the potential impact of procurement, contractual, management and health & safety processes on architectural technology research and innovation.
Statutory and regulatory	Demonstrate a basic knowledge of the importance of statutory and regulatory requirements pertaining to building and buildings.	Demonstrate a working knowledge of statutory and regulatory requirements pertaining to building and buildings.	Demonstrate a detailed knowledge of statutory and regulatory requirements pertaining to building and buildings.	Demonstrate a systematic knowledge of the evolving and changing statutory regulations and standards pertaining to building and buildings.

Know-how and Skill – Range Skills, in both their execution and the demonstration of underpinning procedural knowledge, encompass the use of many different kinds of tool. 'Tool' refers to any device or process that facilitates individuals having some effect on their physical, informational or social environment. Tools include cognitive and social processes as well as physical implements. Tools, and the skills to use them, range from commonplace or familiar to novel or newly-invented. The sheer number of skills acquired is a matter of volume, rather than of level. The diversity of skills is a feature of this strand that contributes to differentiation in level. The completeness of the set of skills (and associated know-how) in respect of an area of activity is another feature that helps indicate the level.

Know-how and Skill – Selectivity The performance of tasks depends on the learner having an appropriate understanding of the environment in which the tasks are performed and being aware of his/her own ability and limitations, while at the same time being able to correctly judge the fit between the demands and ability. Whereas the range of know- how and skill refers to what a learner can do, selectivity (which might also be called procedural responsiveness) refers to the judgement that the learner exercises in carrying out procedures, through selecting from the range of know-how and skills available to him/her, in accordance with his/her appraisal of the demands of the task.

	NFQ Level 6	**NFQ Level 7**	**NFQ Level 8**	**NFQ Level 9**
	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:
Know-how and Skill - Range	*Demonstrate comprehensive range of specialised skills and tools*	*Demonstrate specialised technical, creative or conceptual skills and tools across an area of study*	*Demonstrate mastery of a complex and specialised area of skills and tools; use and modify advanced skills and tools to conduct closely guided research, professional or advanced technical activity*	*Demonstrate a range of standard and specialised research or equivalent tools and techniques of enquiry*
Know-how and Skill - Selectivity	*Formulate responses to well-defined abstract problems*	*Exercise appropriate judgement in planning, design, technical and/or supervisory functions related to products, services, operations or processes*	*Exercise appropriate judgement in a number of complex planning, design, technical and/or management functions related to products, services, operations or processes, including resourcing*	*Select from complex and advanced skills across a field of learning; develop new skills to a high level, including novel and emerging techniques*
Applying architectural technology in practice	Apply, under direction, current technologies and processes to non-complex building design and construction.	Evaluate and apply existing, new and innovative technologies and processes to building design and construction.	Research, evaluate and apply existing, new and innovative technologies and processes to building design and construction.	Select from complex and advanced skills in architectural technology to research, develop and apply new and innovative skills relating to emerging technologies.
	Undertake a measured survey of a building and of a site.	Undertake a measured survey of a building and of a site identifying opportunities and constraints including site history.	Execute detailed analysis and investigation of construction techniques and materials in existing buildings, presenting the results in appropriate formats.	Research, innovate and test building performance design solutions selecting appropriate criteria and methodologies.

	Contribute to the development of a technical design response that addresses design intent, sustainability and universal design principles, material and component selection and structural and building servicing techniques.	Develop a technical design response that addresses design intent, sustainability and universal design principles, material and component selection and structural and building servicing techniques.	Generate a technical design response that addresses design intent, sustainability and universal design principles, material and component selection and structural and building servicing techniques.	Research, evaluate and develop a technical design innovation that addresses performance criteria, sustainability principles and market need.
	Participate in the preparation of the necessary information required to effectively describe a building or structure.	Contribute to the production of the necessary information to effectively procure and construct a building or structure.	Demonstrate an ability to produce the necessary information to effectively procure and construct a building or structure.	Demonstrate a critical awareness of the range and nature of information required in building procurement and construction and the potential of this to support and enhance architectural technology research and innovation.
	Use basic building performance design tools and produce non complex calculations.	Investigate building performance design solutions applying appropriate tools including statutory performance metrics.	Formulate and resolve building performance design solutions selecting appropriate tools including recognised building performance and simulation applications.	Demonstrate a critical understanding of and engage with the field of building performance design and develop new skills including novel and emerging performance and simulation techniques.
	Produce, under direction, appropriate project documentation.	Identify factors affecting project implementation and develop project documentation.	Identify factors affecting project implementation, negotiate and develop documentation and apply management principles relating to procurement and contract, with an understanding of the roles and responsibilities of design team members including the client.	
	Assist in recording on-site construction processes with reference to building regulations.	Record on-site construction processes with reference to regulatory compliance and quality.	Demonstrate an understanding of the techniques and processes required to organise the coordination, monitoring and inspection of on-site construction processes and regulatory compliance and quality.	Demonstrate a critical awareness of the potential impact of on-site construction processes, regulatory compliance and quality on architectural technology research and innovation.
	Demonstrate an awareness of building performance measurement techniques.	Measure as-built building performance and evaluate effectiveness of design solutions.	Measure and review as-built building performance and evaluate effectiveness of design solutions against original client brief and specification, engaging specialist knowledge as appropriate.	Research, evaluate and develop innovative approaches to measuring and assessing as-built building performance and interpret data to inform architectural technology research and innovation.
Information and Communication	Produce free hand sketches, manual drawings and physical models in support of the technical design process.	Produce a portfolio of free hand sketches, manual drawings and physical models in the context of a professional practice.		
	Demonstrate an ability to use digital technologies appropriately.	Organise and co-ordinate digital data for collaborative work practices in a design and construction setting.	Manage, organise and communicate digital data, information and knowledge for multidisciplinary collaborative work practices in a design and construction setting.	Research, innovate and develop specialised knowledge of tools and methods for optimising implementation of multidisciplinary collaborative processes.
Professional Practice	Demonstrate an awareness of the need to identify hazards and risks during design and construction stages.	Identify hazards and risks during design and construction stages and work under supervision to maintain safe systems of work in line with relevant legislation and regulatory frameworks.	Demonstrate a capacity to identify, appraise and mitigate hazards and risks during design and construction stages and work with design team peers to develop and maintain safe systems of work in line with relevant legislation and regulatory frameworks.	
	Demonstrate an awareness of the need to organise one's own work in support of the technical design process.	Demonstrate the organisational skills required for professional practice.	Apply a range of management skills required for professional practice.	Demonstrate a range of management skills required to organise and lead architectural technology research and investigation.
Statutory and Regulatory	Demonstrate familiarity with the requirements of the building regulations.	Demonstrate an ability to apply a focused range of statutory and regulatory requirements pertaining to building and buildings.	Demonstrate an ability to research and apply statutory and regulatory requirements pertaining to building and buildings.	Demonstrate a specialised skill and ability in the appraisal of statutory and regulatory requirements to inform and support architectural technology research and investigation.

Competence – Context Human situations, whether occupational or general social and civic ones, supply the context within which knowledge and skill are deployed for practical purposes. Such situations range in complexity and hence in the demands they place upon the person acting in them. Highly defined and structured situations or contexts constrain the behaviour of the individual and require lower levels of learning. The range of responses required, and hence the extent to which a broader range or higher level of knowledge and skill have to be drawn upon also depends on how predictable the context is. Acting effectively and autonomously in complex, ill-defined and unpredictable situations or contexts requires higher levels of learning.

	NFQ Level 6	NFQ Level 7	NFQ Level 8	NFQ Level 9
	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:
Competence - Context	*Act in a range of varied and specific contexts involving creative and non-routine activities; transfer and apply theoretical concepts and/or technical or creative skills to a range of contexts*	*Utilise diagnostic and creative skills in a range of functions in a wide variety of contexts*	*Use advanced skills to conduct research, or advanced technical or professional activity, accepting accountability for all related decision making; transfer and apply diagnostic and creative skills in a range of contexts*	*Act in a wide and often unpredictable variety of professional levels and ill-defined contexts*
Response to brief	Demonstrate knowledge of a range of technical design principles, processes and technologies in the context of non-complex design briefs.	Demonstrate knowledge of a variety of technical design principles, processes and technologies in the context of design briefs of medium complexity.	Demonstrate a detailed understanding of a variety of technical design principles, processes and technologies in the context of complex design briefs.	Demonstrate a critical understanding of a variety of innovative technical design processes and solutions when developing and addressing complex design briefs and unseen situations.
	Demonstrate an awareness that decisions may result in liabilities.	Demonstrate an understanding of the impact of decisions on potential liabilities.	Accept responsibility for decisions and appreciate the impact on potential liabilities.	Take significant responsibility and accountability for own work and the work of individuals and groups with regard to all related decision making and leading a team.
	Contribute to the development of technical designs under supervision.	Contribute to the development of technical designs that respond to a range of environmental, social and technological design challenges while meeting regulatory requirements.	Generate creative technical design solutions that respond to complex environmental, social, contextual and technological design challenges while meeting regulatory requirements.	Research and develop creative and innovative technical design solutions that respond to complex environmental, social, contextual and technological design challenges while meeting regulatory requirements.
	Consider aesthetic and design intent in the development of technical design solutions.	Consider aesthetic and design intent in the application and integration of technological and regulatory design factors in the development of technical design solutions.	Respond to and address aesthetic and design intent through the application and integration of technological and regulatory design factors in the development of technical design solutions.	Demonstrate a critical awareness of the importance of aesthetic and design intent in architectural technology research and innovation.

Competence – Role For many purposes, joining and functioning in various kinds of group is a key component in putting knowledge and skill to effective use. Joining a group successfully requires individuals to adopt appropriate roles within the group. This requires the application of social skills and an understanding of the tasks of the group. Higher levels of competence are associated with playing multiple roles as well as with roles requiring leadership, initiative and autonomy. Higher competence is also associated with participation in more complex and internally diverse groups.

Competence - Role	NFQ Level 6	NFQ Level 7	NFQ Level 8	NFQ Level 9
	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:
	Exercise substantial personal autonomy and often take responsibility for the work of others and/or for allocation of resources: form and function within, multiple complex and heterogeneous groups	*Accept accountability for determining and achieving personal and/or group outcomes; take significant supervisory responsibility for the work of others in defined areas of work*	*Act effectively under guidance in a peer relationship with qualified practitioners; lead multiple, complex and heterogeneous groups*	*Take significant responsibility for the work of individuals and groups; lead and initiate activity*
Applying architectural technology in practice	Demonstrate an awareness of the technical and administrative work in the design and construction processes.	Perform technical and administrative work in the design and construction processes.	Autonomously plan, manage and perform technical and administrative work in the design and construction processes.	Take significant responsibility for the work of individuals and groups in the initiation and leading of architectural technology research activity.
	Conduct basic technical activity under supervision.	Conduct technical and related research activity in a wide variety of contexts using specialised skills and tools under supervision.	Conduct research, professional and advanced technical activity in a wide variety of contexts using specialised skills and tools.	Demonstrate an ability in the innovative and creative use of complex specialised skills and tools to conduct advanced research and technical activity in a specialised area.

	Take responsibility for own and joint work processes and results.	Plan and take responsibility for own and joint work processes and results.	Independently participate in multidisciplinary collaboration with a professional approach.	
	Assist in developing technical design solutions individually and as part of a team and under supervision.	Generate technical design solutions acting individually, as part of a team and under supervision.	Produce efficient and appropriate technical design solutions to satisfy procurement, production, performance and regulatory criteria.	
	Work in a team setting and under supervision.	Work in a multi-disciplinary setting from early design stage to achieve quality control of construction and completion of building projects onsite.	Manage and organise multi-disciplinary information from early design stage to achieve quality control of construction and completion of building projects onsite.	Demonstrate an ability to identify, initiate and direct multidisciplinary collaboration in architectural technology research and innovation.
	Act ethically, with honesty, integrity and impartiality in matters arising from participation in the practice of architectural technology.	Act ethically with honesty, integrity, impartiality in matters arising from the practice of architectural technology.	Act ethically, with honesty, integrity, and impartiality both personally and when supervising others, in all matters arising from the practice of architectural technology.	Act ethically, with honesty, integrity, and impartiality both personally and when supervising others, in all matters arising from architectural technology research.
		Apply knowledge of contract administration.	Apply understanding of, and participate in contract administration in the context of building and buildings.	
	Demonstrate an awareness of construction legislation and statutory responsibilities in the context of building and buildings.	Apply knowledge of construction legislation and statutory responsibilities in the context of building and buildings.	Apply understanding of construction legislation and statutory responsibilities in the context of building and buildings.	Apply a critical understanding of statutory and regulatory requirements to inform and support architectural technology research and investigation.

Competence – Learning to learn This strand encompasses the extent to which an individual can recognise and acknowledge the limitations of his/her current knowledge, skill and competence and plan to transcend these limitations through further learning. Learning to learn is the ability to observe and participate in new experiences and to extract and retain meaning from these experiences. While drawing on other aspects of knowledge, skill and competence, this sub-strand places an emphasis on the relationship of the learner to his/her own learning processes. This provides a basis for abstraction and generalisation that, in principle, facilitates regarding this as a separate sub-strand of competence.

	NFQ Level 6	**NFQ Level 7**	**NFQ Level 8**	**NFQ Level 9**
	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:
Competence - Learning to learn	*Learn to evaluate own learning and identify needs within a structured learning environment; assist others in identifying learning needs*	*Take initiative to identify and address learning needs and interact effectively in a learning group*	*Learn to act in variable and unfamiliar contexts; learn to manage learning tasks independently, professionally and ethically*	*Learn to self-evaluate and take responsibility for continuing academic/professional development*
	Identify and develop own possibilities for continued further education and training in different learning environments.	Identify own learning needs, professionally and ethically and organise own learning in different learning environments.	Identify own learning needs, professionally and ethically and organise own learning in different learning environments.	Independently take responsibility for own academic and professional development and specialisation.
	Recognise limitations of own knowledge and the need to seek guidance.	Recognise limitations of own knowledge and seek necessary guidance when working independently.	Recognise limitations of own and others knowledge and seek necessary guidance when working independently or providing support to peers.	Evaluate learning needs of others and take responsibility for directing the continuing academic and professional development of same.

Competence – Insight Insight refers to ability to engage in increasingly complex understanding and consciousness, both internally and externally, through the process of reflection on experience. Insight involves the integration of the other strands of knowledge, skill and competence with the learner's attitudes, motivation, values, beliefs, cognitive style and personality. This integration is made clear in the learners' mode of interaction with social and cultural structures of his/her community and society, while also being an individual cognitive phenomenon. A learner's self-understanding develops through evaluating the feedback received from the general environment, particularly other people, and is essential to acting in the world in a manner that is increasingly autonomous.

	NFQ Level 6	**NFQ Level 7**	**NFQ Level 8**	**NFQ Level 9**
	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:	The graduate should be able to:
Competence - Insight	*Express an internalised personal world view, reflecting engagement with others*	*Express an internalised personal world view, manifesting solidarity with others*	*Express a comprehensive internalised, personal world view manifesting solidarity with others*	*Scrutinise and reflect on social norms and relationships and act to change them*
	Demonstrate awareness of current societal concerns, their changing nature and their interaction with the built environment.	Reflect on the influence of the architectural technologist on the design of sustainable development, universally designed buildings and the natural environment.	Act with consciousness that building and buildings have significant impact on individuals, societies and the environment.	Scrutinise and reflect on the accepted responsibilities and roles of the architectural technologist to clients, to building users and to all involved in the design and construction process and act to change these where appropriate.
	Demonstrate a capacity for engagement at a personal and occupational level.	Express awareness of social, community and ethical issues.	Demonstrate a consciousness of the need to act ethically.	Distil from diverse experiences useful and sustaining insights which can be harnessed in articulating future purpose and direction.

Assessment

References

1. Akalin, A., & Yildrim, K. (2009). Architecture and Engineering students' evaluations of house facades: Preference, complexity and impressiveness. Journal of Environmental Psychology, 124-132.
2. Bizley, G. (2008). Architecture in Detail. Oxford: Architectural Press.
3. DIT. (2014, Marrch 20). www.dit.ie. Retrieved March 20, 2014, from architecture/architectural-technology: http://www.dit.ie/architecture/architectural-technology/history/
4. Emmitt, S. (2013). Architectural technology, Research & Practice. Chichester: John Wiley & Sons Ltd.
5. Gaber, T. (2012). Mythic Foundations: Engaging History for architecture education. International journal of Architectural Research, 07-23.
6. Society of Architectural and Associated Technicians. (1984). The Constructive Link. London: SAAT.
7. Ulusoy, M., & Kuyrukcu. (2012). The Meaning and Importance of the Traditional Architecture in Architecture Education. Procedia - Social and Behavioural Science, 2120-2126.
8. Wienand. (2013). Architectural technology as design discipline: Ascribing design theory to the practice of technical design in architecture. International Congress of Architectural technology (pp. 35-45). Sheffield: ICAT.
9. Bizley, G. (2008). Architecture in Detail. Oxford: Architectural Press.
10. DIT. (2014, Marrch 20). www.dit.ie. Retrieved March 20, 2014, from architecture/architectural-technology: http://www.dit.ie/architecture/architectural-technology/history/
11. Emmitt, S. (2013). Architectural Technology, Research & Practice. Chichester: John Wiley & Sons Ltd.
12. Gaber, T. (2012). Mythic Foundations: Engaging History for Architecture Education. International Journal of Architectural Research, 07-23.
13. Society of Architectural and Associated Technicians. (1984). The Constructive Link. London: SAAT.
14. Ulusoy, M., & Kuyrukcu. (2012). The Meaning and Importance of the Traditional Architecture in Architecture Education. Procedia - and Behavioural Science, 2120-2126.
15. Wienand. (2013). Architectural technology as design discipline: Ascribing design theory to the practice of technical design in architecture. International Congress of Architectural technology (pp. 35-45). Sheffield: ICAT
16. RIAI – Standard of Knowledge, Skill and Competence for Practice as an Architectural Technologist, © RIAI 2010:
17. http://www.riai.ie/uploads/files/RIAI_Standard_Knowledge_Skill_Competence_Architectural_Technologist_2010.pdf
18. QQI Award STANDARDS – Architecture: http://www.qqi.ie/Publications/Architecture%20-%20Awards%20Standards.pdf
19. UK - Subject benchmark statement: Architectural technology : http://www.qaa.ac.uk/en/Publications/Documents/SBS-architectural-technology.pdf

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