QQI

Quality and Qualifications Ireland
Dearbhú Cáilíochta agus Cáilíochtaí Éireann

Awards Standards—Working Draft Architectural Technology 2015

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Foreword

This document presents working draft awards standards for architectural technology and is published for consultation purposes, to give interested parties the opportunity to comment directly to QQI.

The draft awards standards are standards for 'intended programme learning outcomes' rather than standards for assessing candidates for particular qualifications. The awards standards are designed to help programme designers and developers ensure that intended programme learning outcomes are appropriate to the programme's terminal qualification (or award). Similarly, they are for use by validation (or accreditation) panels when recommending whether a new programme should be approved for a specific qualification. 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 expected learning outcomes of the draft 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 draft awards standards will be aided by a reflection on their context, scope and purposes. These are outlined in the following paragraphs.

The Qualifications and Quality Assurance (Education and Training) Act 2012 requires QQI to determine standards of knowledge, skill and competence to be acquired by learners. The drafts 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 comprise a generic part (in the yellow panels) and a discipline-specific part.

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:

Representing		
Education	Cormac Allen	Dublin Institute of Technology
	Robin Stubbs	Waterford Institute of Technology
	Anne Boner	Letterkenny Institute of Technology
	Denise Dillon	Galway Mayo Institute of Technology
	Margaret Doyle-Hughes	Carlow Institute of Technology
	Deirdre Ryan	Cork Institute of Technology
Professional	Professor Sam Allwinkle	CIAT
	Pat Kirwan	RIAI (Henry J Lyons)
Employers	Eddie Conroy	South Dublin County Council
	Mel McGerr	Murphy + McGerr Architecture
	Conor Finnegan	McCarthy O'Hora
Government/Statutory	Martin Vaughan	DECLG
International academic Architectural Technology	Jette Djaelund	Danish Association of Building Experts, Managers and Surveyors
QQI Representative	Dr Peter Cullen	QQI (Chairperson)

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) accreditation of programmes by the Royal Institute of the Architects of Ireland (RIAI). The Awards Standards will also be used by providers when reviewing their programmes. It is recognised that the new Awards Standards will require existing programmes to be updated, perhaps substantially.

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.

How to respond to this consultation document

QQI invites interested persons or organisations to make written observations on the draft by **Wednesday 6 January 2016**. Submissions may be sent by email to consultation@qqi.ie .

Consultation Forum

It is planned that the draft will be discussed with interested stakeholders at an interactive consultation forum scheduled for **26 November 2015. To reserve a place at the forum please email consultation@qqi.ie with your name and organisation.**

Note
This draft is intermediate. The final version may be more succinct and tightly consolidated. The document is designed to be printed and read on A3 paper it will be difficult to read if you scale to A4 when printing.

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 be 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.*

Knowledge				
	NFQ Level 6	**NFQ Level 7**	**NFQ Level 8**	**NFQ Level 9**
	The graduate should be able to demonstrate:	**The graduate should be able to demonstrate:**	**The graduate should be able to demonstrate:**	**The graduate should be able to demonstrate:**
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*
Purpose	Foundational studies in architectural technology possible exit award …. progression to further studies	Educational prerequisites for work in industry as assistant to a building design professional … progression to further studies in same or other disciplines concerning the built environment	Educational prerequisites for work in industry as a professional architectural technologist… progression to further studies in same or other disciplines concerning the built environment	Educational prerequisites for work in industry as a specialist professional architectural technologist… progression to further studies in same or other disciplines concerning the built environment

Knowledge				
	The learner will be able to	**The learner will be able to**	**The learner will be able to**	**The learner will be able to**
Architectural Technology in context	Demonstrate awareness of the context within which architectural technology professionals operate, including cultural, social, political, historical and economic contexts. **K 1.1**	Demonstrate a detailed knowledge of architectural technology as a profession and within a multidisciplinary environment. **K 1.2**	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 **K 1.3**	Demonstrate a critical understanding of the role of the specialist consultant architectural technologist within the architectural technology profession as it evolves. **K 1.4**
Science and technology	Recognise a range of building technologies, with an awareness of the mathematical, scientific and technological prerequisites for architectural technology. **K 2.1**	Demonstrate knowledge of the mathematical, scientific and technological prerequisites for architectural technology involving buildings, materials, structures, and their performance in the built environment **K 2.2**	Demonstrate a detailed understanding of the mathematical, scientific and technological prerequisites for architectural technology practice involving buildings, materials, structures, and their performance in the built environment. **K 2.3**	Demonstrate a systematic approach to and critical understanding of mathematical, scientific and technological prerequisites for specialised architectural technology practice **K 2.4**

Design principles, techniques and methods	Demonstrate an awareness of the application of Architectural Technology to design and construction projects and the role of statutory and regulatory compliance and sustainable principles in relation to the built environment **K 3.1**	Demonstrate an understanding of the application of Architectural Technology to design and construction projects addressing topics that include statutory and regulatory compliance and sustainable principles, techniques and methods used in relation to materials, components, services and finishes relative to building design. **K 3.2**	Demonstrate a detailed understanding of the application of Architectural Technology to design and construction practice addressing topics that include statutory and regulatory compliance and sustainable principles, techniques and methods used in relation to materials, components, services and finishes relative to building design. **K 3.3**	Demonstrate a systematic understanding of research and innovation in architectural technology used to impact on and change building design and standards. **K 3.4**
	Demonstrate an awareness of design principles, techniques and methods. **K 4.1**	Demonstrate an understanding of design principles, techniques and methods considering user needs, such as environmental impact, safety, reliability, appearance, and fitness for purpose, life cycle, and maintenance. **K4.2**	Demonstrate a detailed understanding of the application of design principles, techniques and methods considering user and market needs, such as cost, value, quality, environmental impact, safety, reliability, appearance, and fitness for purpose, life cycle, maintenance, conservation and refurbishment. **K 4.3**	Demonstrate a systematic and critical understanding of design principles, in order to research and innovate to optimise decision making in specialised areas. **K 4.4**
	Demonstrate an awareness of the evolution of architectural design and technology **K 5.1**	Demonstrate an understanding of the evolution of architectural design and technology and the interplay between them **K 5.2**	Demonstrate a detailed understanding of the evolution of architectural design and technology and the interplay between them **K 5.3**	Demonstrate a critical understanding of the design implications of construction technology, materials sufficient to respond innovatively to the design brief **K 5.4**
Information and Communication	Demonstrate knowledge of the conventions for communicating solutions, designs and detailed technical information to peers through verbal and non-verbal means. **K 6.1**	Demonstrate a knowledge of the necessary verbal and non-verbal skills to communicate effectively in the context of architectural technology practice **K 6.2**	Demonstrate a detailed knowledge of the necessary verbal and non-verbal skills to communicate effectively in the context of architectural technology practice **K 6.3**	Demonstrate a systematic knowledge of the means of effective transfer of research, experiences, insights, and knowledge among different experts and professionals **K 6.4**
	Demonstrate presentation techniques to communicate architectural technology solutions. **K 8.1**	Demonstrate a variety of presentation techniques to communicate architectural technology ideas and solutions. **K 8.2**	Demonstrate knowledge and understanding of a variety of presentation techniques to communicate architectural technology ideas and solutions **K 8.3**	Demonstrate extensive knowledge of presentation, communication and dissemination techniques **K 8.4**
Professional practice	Demonstrate a~~n~~ basic knowledge of administrative methods for project and design management, project procurement and process, construction and contract management **K 9.1**	Demonstrate a working knowledge of administrative methods for project and design management, project procurement and process, health and safety, construction and contract management **K 9.2**	Demonstrate detailed knowledge of procurement, health and safety, contract administration and project management techniques. **K 9.3**	Demonstrate a systematic knowledge of procurement, contract administration, project management and health and safety in architectural technology practice to comply with ethical, legislative and regulatory requirements. **K 9.4**

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.

Skill				
	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 & 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& 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 Practise	**The learner will be able to**	**The learner will be able to**	**The learner will be able to**	**The learner will be able to**
	Apply under direction current technologies and processes to non-complex building design and construction **S1.1**	Evaluate and apply existing, new and innovative technologies and processes to building design and construction. **S1.2**	Research and apply existing, new and innovative technologies and processes to building design and construction. **S1.3**	Innovate, research and apply building design and construction technologies and processes. **S1.4**
	Undertake a measured survey of a building and of a site **S2.1**	Undertake a measured survey of a building and of a site identifying opportunities and constraints including site history. **S2.2**	Execute a measured survey of a building and of a site evaluating opportunities and constraints including site history. **S2.3**	Research, innovate and test building performance design solutions selecting appropriate criteria and methodologies **S2.4**
	Recognise an architectural technology design response that addresses design intent, sustainability principles, statutory and regulatory compliance requirements **S3.1**	Contribute to an architectural technology design response that addresses design intent, sustainability principles, and statutory and regulatory compliance requirements. **S3.2**	Generate an architectural technology design response that addresses design intent, sustainability principles, statutory and regulatory compliance requirements **S3.3**	Research and innovate an architectural technology design response that addresses design intent, sustainability principles, and statutory and regulatory compliance requirements. **S3.4**

	Identify building performance design tools and produce non complex calculations **S4.1**	Appraise building performance design solutions selecting appropriate tools (including accredited simulation applications **S4.2**	Assess and develop building performance design solutions selecting appropriate tools (including accredited simulation applications) **S4.3**	Generate innovative solutions to factors affecting implementation of complex projects, negotiate and manage production programmes leading to bespoke procurement contracts **S4.4**
	Produce, under direction, appropriate project documentation **S5.1**	Identify factors affecting project implementation and develop project documentation **S5.2**	Identify factors affecting project implementation, negotiate and develop documentation and manage production programmes towards procurement and contract **S5.3**	Lead project negotiation and implementation **S5.4.**
	Assist in recording on-site construction processes with reference to regulatory compliance **S6.1**	Record on-site construction processes with reference to regulatory compliance and quality **S6.2**	Coordinate, monitor and inspect on-site construction processes and regulatory compliance and quality **S6.3**	Inspect and direct on-site construction processes, regulatory compliance and quality in complex and unfamiliar building projects **S6.4**
	S7.1	Measure as-built building performance and evaluate effectiveness of design solutions **S7.2**	Measure and review as-built building performance and evaluate effectiveness of design solutions against original client brief and specification **S7.3**	Interpret as-built building performance and establish effective design solutions across building typologies. **S7.4**
Information and Communication	Produce free hand sketches, manual drawings and physical models in the context of a professional practice ~~to peers~~ **S8.1**	Produce a portfolio of free hand sketches, manual drawings and physical models in the context of a professional practice **S8.2**	Design and produce a portfolio of presentation and working drawings and physical models in the context of a professional practice **S8.3**	**S8.4**
	Demonstrate ability to use digital technologies appropriately **S10.1**	Demonstrate specialised knowledge of digital technologies including optimising collaborative work practices in a design and construction setting. **S10.2**	Demonstrate detailed knowledge of procurement, contract administration and project management techniques. **S10.3**	Research, innovate and develop specialised knowledge of tools and methods for optimising implementation of collaborative processes. **S10.4**
Professional Practice	Identify hazards and risks during design and construction stages and maintain safe systems of work **S11.1**	Identify hazards and risks during design and construction stages and maintain safe systems of work in line with relevant legislation and regulatory frameworks **S11.2**	Demonstrate an ability to identify hazards and risks during design and construction stages and develop and maintain safe systems of work in line with relevant legislation and regulatory frameworks **S11.3**	Demonstrate a systematic understanding of hazards and risks and the relationship between different construction methods' impact on the mitigation of risk and the optimisation of safe working conditions. **S11.4**
	S12.1	Demonstrate the administrative skills required for professional practice. **S12.2**	Demonstrate the management skills required for professional practice. **S12.3**	Demonstrate the leadership and management skills required for professional practice. **S12.4**

Competence – context

Human situations, whether occupational or general social and civic one's, 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.

Competence – Context				
	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 design principles, processes and technologies in the context of simple design briefs **C1.1**	Demonstrate knowledge of a variety of design principles processes and technologies in the context of medium complexity design briefs **C1.2**	Demonstrate a critical understanding of a variety of technical design principles processes and technologies in the context of complex design briefs **C1.3**	Demonstrate a critical understanding of a variety of innovative design principles, processes, and solutions in the context of complex design briefs and unseen situations **C1.4**
	C2.1	Demonstrate an understanding of the impact of decisions on potential liabilities **C2.2**	Accept responsibility for decisions and appreciate the impact on potential liabilities **C2.3**	Take significant responsibility and accountability for your work and the work of individuals and groups with regard to all related decision making. **C2.4**

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:**
Competence-Role	*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*
	C3.1.	Perform technical and administrative work in the design and construction processes **C3.2**	Autonomously plan, manage and perform technical and administrative work in the design and construction processes **C3.3**	**C3.4**

	Conduct basic technical activity under supervision **C4.1.**	Use specialised skills and tools to conduct research and technical activity in a wide variety of contexts under supervision **C4.2**	Demonstrate mastery of a complex and specialised area of skills and tools to conduct research, professional and advanced technical activity in a wide variety of contexts **C4.3**	Demonstrate innovative and creative use of complex specialised skills and tools to conduct advanced research, professional and technical activity in a specialised area **C4.4.**
	Plan and take responsibility for own and joint work processes and results. **C5.1**	Undertake defined management and planning functions in relation to the practice of an occupation or the field of study. **C5.2**	Independently participate in professional and interdisciplinary collaboration with a professional approach. **C5.3**	Independently initiate and implement professional and interdisciplinary cooperation and take on professional responsibility. **C5.4**
	Assist in developing basic technical design solutions individually and as part of a team and under supervision **C6.1**	Generate technical design solutions acting individually and as part of a team and under supervision **C6.2**	Produce efficient and appropriate technical design solutions to satisfy procurement, production and performance and regulatory (including standards and legislation) criteria **C6.3**	**C6.4**
	Work in a multi-disciplinary setting as part of a team and under supervision **C7.1**	Work in a multi-disciplinary setting from early design stage on to the quality control of construction and completion on-site of building projects **C7.2**	Work in a multi-disciplinary setting from early design stage on to the quality control of construction and completion on-site of building projects **C7.3**	Lead, manage and collaborate with other building professionals within a multi-disciplinary team and take responsibility for significant work of individuals and groups **C7.4**
	Act with honesty, integrity, impartiality and ethically in all matters arising from the practice of Architectural Technology **C8.1**	Act with honesty, integrity, impartiality and ethically in all matters arising from the practice of Architectural Technology **C8.2**	Act with honesty, integrity, impartiality and ethically in all matters arising from the practice of Architectural Technology **C8.3**	Act with honesty, integrity, impartiality and ethically in all matters arising from the practice of Architectural Technology **C8.4**

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.*

Competence - Learning to Learn				
	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*
	Research further education and training and professional development in structured learning environments **C8.1**	Identify and develop own possibilities for continued further education and training in different learning environments **C8.2**	Identify own learning needs, professionally and ethically and to organise own learning in different learning environments **C8.3**	Independently take responsibility for own professional development and specialisation **C8.4**
	Seek guidance when working independently **C9.1**	Seek guidance when working independently **C9.2**	Seek necessary guidance when working independently and provide guidance to peers **C9.3**	Evaluate learning needs of others and take responsibility for continuing academic professional development of same **C9.4**

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.

Competence - Insight				
	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 **C10.1**	Reflect on the role of the architectural technologist as an important project participant with influence on the design of sustainable development of built and natural environments **C10.2**	Act with the consciousness that the projects have significant impact on individuals, societies and the environment **C10.3**	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 **C10.4**

	Demonstrate engagement at a personal and occupational level **C11.1**	Express awareness of social, community and ethical issues. **C11.2**	Demonstrate a consciousness of the need to act ethically within the building industry **C11.3**	Distil from diverse experiences useful and sustaining insights which can be harnessed in articulating future purpose and direction. **C11.4**

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