# Written submission: Consultation on the draft Leaving Certificate Construction Technology specification

NCCA is redeveloping Leaving Certificate Construction Technology. The aim of this consultation is to obtain the open and honest views of all stakeholders: students, teachers, parents, and other interested parties. The feedback gained from the consultation will inform the work of the development group in preparing the final specification.

NCCA would greatly appreciate your feedback on the draft specification which can be found here: <u>Draft Leaving Certificate Construction Technology specification</u>

When providing feedback, observations or comments, please reference the specific section and / or relevant learning outcomes.

The closing date for this consultation is 2<sup>nd</sup> May 2025 at 5pm. Please email your written submission to scconsultations@ncca.ie.

# Data protection and open data section

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NCCA may use the data you provide in the form of quotations. Where this happens, the quote will be anonymised.

# **Respondent's details**

What organisation are you submitting on behalf of?

The Heritage Council

Are you consenting to be listed as a respondent to this consultation?

- o Yes X
- o **No**

If yes, please enter the name you wish to have published in the final report.

Dr Eoin Ó Donnchadha, Heritage in Education Policy Development Officer, The Heritage Council

Are you consenting to have the submission published on ncca.ie?

- o Yes X
- o **No**

# Rationale, Aim, and Key Competencies [Pages 2, 3 and 5]

**Rationale:** The rationale (Page 2) outlines the nature of Construction Technology and the role and importance of Construction Technology in realising the purpose and vision of senior cycle.

**Aim**: The Aim (Page 3) outlines the over-arching purpose of the subject and the relevance and expected impact of the subject on student learning.

In your opinion, do the rationale and aim capture the overarching purpose and nature of Construction Technology; the importance of the subject in realising the vision of senior cycle and the relevance and expected impact of this subject on student learning. Please provide specific feedback / observations / comments.

The "Rationale" and "Aims" sections of this draft specification do a very good job of capturing the overarching purpose of the subject and the relevance and expected impact of the subject on student learning. Moreover, the Heritage Council are particularly pleased to see a reference to heritage in the "Rationale" section, which recognises the subject "cultivates an appreciation for architectural heritage while promoting innovation, craft excellence, and environmentally responsible design".

We have also identified some potential areas for improvement, particularly in relation to the prominence of natural, and especially built heritage in the draft text. One suggestion we would propose is that the text reading "students explore the interconnectedness of architectural design, construction techniques, and environmental considerations, developing an awareness for their impact on the natural world, society, individual behaviours, and the economy" be amended to "students explore the interconnectedness of architectural design, construction techniques, and environmental considerations, developing an awareness for their impact on the interconnectedness of architectural design, construction techniques, and environmental considerations, developing an awareness for their impact on **our natural and built heritage**, society, individual behaviours, and the economy". This change provides more clarity and will encourage teachers and learners to better appreciate the interconnectedness of the natural world and built environment as parts of our heritage.

We acknowledge it is also very positive that this section of the specification emphasises environmental responsibility, sustainability and environmental conservation. One improvement might be made by way of including an explicit reference to heritage skills and materials, as these have strong sustainability connections. By way of suggestion, this might be accommodated within the text as follows: "Leaving Certificate Construction Technology instils a sense of environmental responsibility in students, encouraging eco-friendly decisionmaking, sustainable building and craft practices, **including heritage skills and materials**, and a strong emphasis on design".



The Heritage Council are pleased to see the specification acknowledges the subject's objective of preparing students for future career pathways, particularly as more opportunities are now being developed in relation to heritage skills career pathways. These are likely to appeal to students of Construction Technology in the future. Likewise, we are glad the text acknowledges "active citizenship", which is closely connected to heritage in education, as well as the integration of "traditional craft skills with modern technologies". In the case of the latter though, perhaps the text would be enhanced in terms of clarity and completeness by being amended to: "traditional craft **and heritage skills** with modern technologies".

In relation to the "Aims" section, only one suggestion is proposed. For greater clarity and to better guide teachers and learners, the text reading "drawing insights from both the past and present" might be accompanied by examples. For instance, it might read "drawing insights from both the past and present, **e.g. from our built heritage as well as modern construction methods**".

**Key Competencies:** Key competencies is an umbrella term which refers to the knowledge, skills, values and dispositions students develop in an integrated way during senior cycle. These competencies are linked and can be combined; can improve students' overall learning; can help students and teachers to make meaningful connections between and across different areas of learning; and are important across the curriculum.

The draft specification sets out examples of how key competencies can be developed in Leaving Certificate Construction Technology on pages [Pages 7 and 8]

In your opinion, does this section effectively capture the development of student key competencies in Leaving Certificate Construction Technology? Please provide specific feedback / observations / comments.

This section does a very good job of setting out and illustrating how students can develop key competencies in this subject. That said, there is potential for built heritage, including heritage skills, to be embedded in the text more prominently. This is especially the case owing to the presence of examples centred on creativity and sustainable solutions. By way of suggestion, the following changes to the text are proposed for your consideration:

 Where the text reads "this empowers them to question and challenge current practices while advocating for responsible use and the principles of the circular economy. This enables them to become active citizens who promote sustainable development and positive change", this might be amended to "This empowers them to question and challenge contemporary and heritage practices while advocating for responsible use and the principles of the circular economy. This enables them to



become active citizens who promote sustainable development and positive change."

2) Where the text reads "students are being creative when they explore problems, interact with materials and processes, investigate possibilities, and draw on existing ideas to create unique solutions to construction challenges", this might be changed to "students are being creative when they explore problems, interact with materials and processes old and new, investigate possibilities, and draw on contemporary ideas, as well as those reflecting our built heritage, to create unique solutions to construction challenges".

# Strands of study and learning outcomes [Page 9-23]

**Course overview:** The course overview sets out the knowledge, skills, values and dispositions for students in four strands. The specification emphasises a non-linear, integrated approach to learning across the strands.

The details of the strands are described on pages [Pages 9 and 10] of the specification.

In your opinion, does the structure illustrate the connected nature of the strands and the development of student knowledge, skills, values and dispositions in an appropriate way? Please provide specific feedback / observations / comments.

The structure illustrates the connected nature of the strands very well. Likewise, it provides clarity on student knowledge and skills especially in relation to the distinction between Ordinary and Higher Levels.

#### Strand 1: The Built Environment [Page 11]

Please provide your views on the learning set out in this strand with reference to

- clarity for planning for teaching and learning
- alignment with the rationale and aims
- opportunities for the development of key competencies and
- access and challenge for all students.

Please provide specific feedback / observations / comments.

This section is quite clear in relation to the learning associated with the built environment. The Heritage Council are particularly pleased to see that, in line with the specification's rationale and aims, this strand promotes sustainability, encouraging students "to appreciate the importance of sustainability in the



construction of buildings and the need for sustainable housing and a sustainable planet". This aligns well with the safeguarding of our natural heritage, as well as with the promotion of heritage skills for sustainability. Likewise, it is very encouraging to read that through this strand "students appreciate the importance of the conservation of heritage sites and structures and how design challenges were resolved by previous generations through the use of locally sourced materials and skills". This also aligns very well with the rationale and aims of the specification, and has particular contemporary relevance in our view.

We are also pleased to note that via this strand students will "learn about the evolution of building types over time and understand buildings in a holistic manner - not as stand-alone structures but as structures closely connected to their site, society, climate, region, country and the planet". This is very relevant in terms of students developing an understanding of their built heritage. We would suggest however, that consideration be given to making it even clearer in the specification that built heritage can be valued for, amongst other things, its potential to inform contemporary construction, including in relation to sustainability, materials and design. We understand the draft specification is intended to encourage such an appreciation via its reference to heritage "informing future building practices" and via learning outcome "1.6 recognise the importance of the architectural past in influencing a contemporary built environment". We suggest however, that to enhance clarity and to guide learners more directly the latter be rephrased to "1.6 recognise the importance of built heritage and the architectural past in influencing a contemporary built environment, including with respect to sustainability, materials, skills and design".

The Heritage Council are very pleased that this part of the draft specification has specifically considered heritage, especially in relation to learning outcomes 1.6, 1.7 and 1.8. Our suggestion for rewording 1.6 has been given above, and we would also ask that consideration be given to rephrasing learning outcome 1.8 slightly. Specifically, we would ask you to consider rewording this to: "1.8 justify the preservation and sustainable management of environmental and **built** heritage, including examples of architecture from the past". This rephrasing recognises that built heritage encompasses more than examples of historical architecture. At the same time, in keeping with the draft specification wording, it gives prominence to this aspect of built heritage in the context of this learning outcome.

Learning outcome 1.12 is appreciated for encouraging students to apply their knowledge and skills of design, while also taking cognisance of environmental considerations. This will greatly assist in developing students' thinking and problem solving skills. With regard to clarity however, the wording of this learning outcome might be altered. Specifically, it might be amended from "1.12. devise the site layout for a dwelling that will integrate with the surrounding environment" to "1.12.

devise the site layout for a dwelling that will integrate with the surrounding environment, **taking heed of considerations such as natural and built heritage etc.**" This formulation provides extra guidance with regard to those considerations pertaining to the surrounding environment. While these include those connected to heritage, the final wording could list others too.

# Strand 2: Design, Craft Skills, and Materials [Page 14]

Please provide your views on the learning set out in this strand with reference to

- clarity for planning for teaching and learning
- alignment with the rationale and aims

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- opportunities for the development of key competencies and
- access and challenge for all students.

Please provide specific feedback / observations / comments.

The Heritage Council are again pleased to see that sustainability features highly in this strand of the draft specification. It is very positive that materials and skills are given a strong focus in this strand. From a heritage perspective, we would ask that our list of proposed changes below be considered in preparation of the final specification. These suggestions are designed to exploit existing opportunities to promote learners' engagement with built heritage in service to their learning with regard to materials associated with heritage skills in particular.

- "2.1. discuss the environmental impact of materials considering the lifecycle of materials within the context of the circular economy" might be amended to "2.1. discuss the environmental impact of **modern and traditional** materials, considering the lifecycle of materials within the context of the circular economy".
- 2) "2.2 evaluate how the sustainable use of materials can protect the environment" might be amended to "2.2 evaluate how the sustainable use of materials can protect the environment. Considerations can include: the properties of materials, their lifecycles, sources, associated transport costs etc."
- 3) "2.4 describe different types of construction materials, their properties, and their appropriate use" might be amended to "2.4 describe different types of construction materials, traditional and modern, their properties, and their appropriate use."

# Strand 3: Building Fabric [Page 17]

Please provide your views on the learning set out in this strand with reference to

• clarity for planning for teaching and learning



- alignment with the rationale and aims
- opportunities for the development of key competencies and
- access and challenge for all students.

Please provide specific feedback / observations / comments.

This section does a good job of outlining the learning in this strand. With respect to heritage, there are a few comments we would like to make. Firstly, we are pleased to see that this strand includes consideration of sustainability, the environment, and biodiversity. With regard to potential improvements from our perspective, please see our suggestions listed below.

- "3.14. describe the impact of climate change on the built environment, and identify strategies to enhance resilience" might be altered to read "3.14. describe the impact of climate change on the built environment, **including our built heritage**, and identify strategies to enhance resilience".
- 2) In relation to "3.15. demonstrate an understanding of the relationship between the built environment and wellness", the following text is included in the draft specification: "Design for health, wellness and comfort • biophilic design • design for delight • indoor temperature • air quality • access to natural light • views of nature • spaces for social interaction • flexible spaces". We would ask that consideration be given to including a reference to "design for heritage" here owing to heritage's connections to identity, place, nature, community, and consequently wellbeing.

# Strand 4: Services and Control Technology [Page 20]

Please provide your views on the learning set out in this strand with reference to

- clarity for planning for teaching and learning
- alignment with the rationale and aims
- opportunities for the development of key competencies and
- access and challenge for all students.

Please provide specific feedback / observations / comments.

This section of the specification does a very good job of outlining student learning. The Heritage Council are particularly pleased to read that this strand is concerned with ensuring "students learn how the provision of renewable energies ensures that buildings have a light ecological footprint on the earth", and that "they appreciate the importance of water conservation and of providing clean water for human consumption and understand and evaluate waste management systems



used to treat and manage waste to ensure minimum environmental degradation". This approach is particularly important with regard to the safeguarding of our natural heritage and biodiversity.

### Additional Assessment (AAC1) [Page 26]

#### Exploring the Constructed Environment

Please provide specific feedback / observations / comments on the AAC in Leaving Certificate Construction Technology with reference to how the AAC might motivate students, how it aligns to the learning outcomes in the specification and how it facilitates the development of key competencies.

The Heritage Council note that there is potential here for students to apply their learning to aspects of their own lives and contexts via this assessment. This suggests opportunities will arise for students to engage with their own built and natural heritage via this assessment, depending on the brief and individual students' interpretation of it. We note "the Exploring the Constructed Environment component is designed to naturally integrate into the flow of learning and teaching, exploiting its potential to be motivating for students' engagement and motivation, as well as their ability to relate to and understand subject content.

#### Additional Assessment (AAC2) [Page 28]

Craft Skills Assessment

Please provide specific feedback / observations / comments on the AAC in Leaving Certificate Construction Technology with reference to how the AAC might motivate students, how it aligns to the learning outcomes in the specification and how it facilitates the development of key competencies.

The Heritage Council are pleased to read about the practical dimension of this assessment, as well as its skills focus. We would highlight that various heritage skills relating to built heritage, including stone masonry, thatching, lime plastering, blacksmithing etc. could be explored by students. Consequently, we would advocate that the design and implementation of this assessment is broad and flexible enough to allow students to engage with any number of different craft skills, including these heritage skills.

#### **Supports for Successful Enactment**



Please provide specific feedback / observations / comments on supports that might be needed for successful enactment of this subject specification.

The implementation of this specification could benefit from the support of various stakeholders, including those in education and those in the heritage sector. At present the Heritage Council is developing policy and initiatives relating to heritage in education with a view to doing more to support teachers and learners in this space. In line with our strategic plan, and as a leader in the heritage sector, the Heritage Council will continue to "support and enable heritage-based education and civic engagement that is inclusive and accessible to all" (Heritage Council, 2023, p. 41). We also intend to "strengthen existing partnerships and develop new collaborations with the educational sectors", including at post-primary level (Heritage Council, 2023, p. 41). One would envisage heritage organisations and practitioners choosing to employ some of their resources to support the implementation and delivery of a new Construction Technology subject specification that acknowledges and appreciates heritage's connections to the subject and includes learning outcomes which directly engage students with, and encourage them to appreciate, preserve, promote and protect those aspects of their built and natural heritage that are interwoven with the subject, including heritage skills.