

A Student's Learning Journey

1st Year

Students develop knowledge, understanding, values and skills through engagement with learning outcomes

Learning supported by formative assessment

2nd Year

Students develop knowledge, understanding, values and skills through engagement with learning outcomes

Learning supported by formative assessment

Classroom-Based Assessment 1

Exploring the application of controlled systems in a local context

Teachers engage in a Subject Learning and Assessment Review meeting

3rd Year

Students develop knowledge, understanding, values and skills through engagement with learning outcomes

Learning supported by formative assessment

Classroom-Based Assessment 2

Student self-analysis and evaluation

Teachers engage in a Subject Learning and Assessment Review meeting

SEC Examination

Project – 70%

Written Examination – 30%

Junior Cycle Profile of Achievement (JCPA)

Where can I get more information?

www.curriculumonline.ie

This is the website of the National Council for Curriculum and Assessment (NCCA) where you will find key documents such as the Applied Technology subject specification and the Applied Technology Assessment Guidelines.

www.jct.ie

This is the website of JCT schools' support service. Junior Cycle for Teachers exists to inspire, support and empower teachers in the transformation of junior cycle education in Ireland. For more information on Applied Technology please visit our subject site.



Use the **QR Code** to go directly to www.jct.ie



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An tSraith Shóisearach do Mhúinteoirí

Junior **CYCLE**
for teachers



Junior
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Information
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Applied
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An Roinn Oideachais
agus Scileanna
Department of
Education and Skills

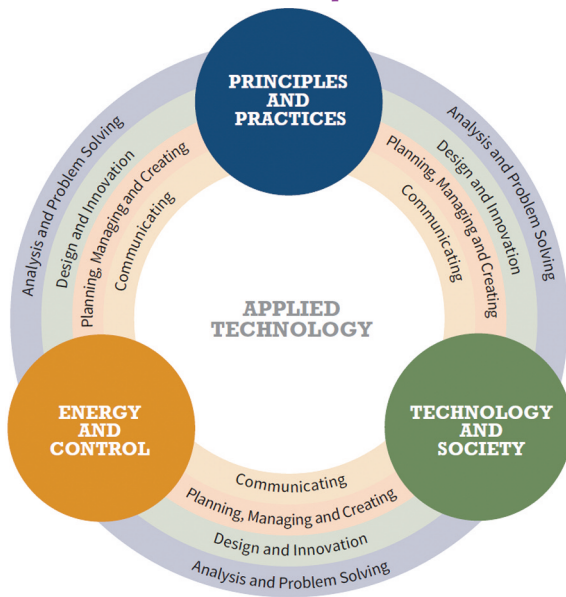
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Junior Cycle Applied Technology

Applied Technology encourages students to develop the necessary conceptual understanding, disciplinary skills and subject knowledge to investigate and solve real-life problems. New technologies can impact on society and the environment. Students will analyse expected benefits and impacts as they make decisions about their design solutions, while considering the end user, the environmental impact and the functionality of their designs.

Structure of the Specification



This specification focuses on developing students' understanding of, and skills in, the application and impact of technologies in the world around them. This will be achieved through three inter-connected strands: **Principles and practices**, **Energy and control** and **Technology and society**.

Throughout each of the strands, there are four elements: **Analysis and problem solving**, **Design and innovation**, **Planning, managing and creating** and **Communicating** which create a framework for student learning.

Learning Outcomes

Learning outcomes are statements that describe what **knowledge, understanding, skills** and **values** students should be able to demonstrate having studied Applied Technology in junior cycle. There are thirty-two learning outcomes across the three strands in Applied Technology.

Learning Experiences

Students will be active participants in their learning. Applied Technology aims to encourage a disposition of enquiry, innovation, creativity, and self-efficacy.

Students will develop resilience through constructive critique and support their learning in a 'safe failure' environment.



Students will develop design solutions drawing on experience and using evidence, reasoning, and decision making to create high quality projects.

Ongoing Assessment

A dual approach to assessment increases the prominence given to Classroom-Based Assessment (CBA) and ongoing formative assessment. The assessment of Applied Technology, for the purposes of the Junior Cycle Profile of Achievement (JCPA), will comprise of two CBAs, a state certified grade comprised from a project and a final written examination.

CBA 1:

Exploring the application of controlled systems in a local context

- Completed within a three-week period in second year
- Completed by students either individually or in groups
- Students investigate an existing control system or a potential control system
- Presented through any appropriate media

CBA 2:

Student self-analysis and evaluation

- Completed within a three-week period in third year
- Completed by students individually
- Students conduct an analysis of their course-work and skills to date in Applied Technology
- Students identify areas of strength and areas for improvement, with a view to informing their planning and decisions for the project
- Presented through any appropriate media

After completion of each CBA, teachers engage in a Subject Learning & Assessment Review (SLAR) meeting to discuss student learning and share effective practice. Both CBAs are assessed by teachers using features of quality as set out in the Assessment Guidelines provided by the NCCA (National Council for Curriculum & Assessment).

Project and written examination

Applied Technology is assessed at a common level. On completion of the Classroom-Based Assessments, students undertake a project. The project is completed after the second CBA in third year. The brief for the project is set and marked by the State Examinations Commission (SEC). The project accounts for **70%** of the final SEC grade with the written examination accounting for the other **30%**.

STEM

Science, Technology, Engineering and Mathematics (STEM) contribute to technological and societal changes in today's world. Junior Cycle Applied Technology fosters and nurtures STEM approaches to learning, skills and dispositions.