

Engineering

JCt4 Newsletter

Junior Cycle for Teachers

Junior Cycle for Teachers exists to **inspire**, **support** and **empower** teachers in the transformation of Junior Cycle education in Ireland.

STE(A)M



The JCT Engineering team are delighted to have become involved in the JCT STE(A)M initiative. We look forward to attending some of the Spring 2019 events that are taking place across the country with various partner organisations.

The workshops will have the broad theme of looking towards "Ireland 2050".

WORKSHOPS



Elective CPD: January - April 2019

Register on www.jctregistration.ie

Every school is provided with a password for registration.

Contact: steam@jct.ie

Welcome

Welcome to the first issue of the JCT Engineering Newsletter. The 2019/2020 academic year sees the introduction of the [Engineering specification](#) for incoming first year students across the country. As of the end of January 2019 we have met over 300 Engineering teachers and delivered the current Professional Learning Experience (PLE) day over 70 times across the country.

Meet the Team:

The Jct4 team look forward to supporting teachers as they engage with the new specification and bring it to life in their classrooms. The Jct4 team comprises of a team leader and 14 full-time advisors. Our advisers are supported by a team of associates. Some of these met in Laois Education Centre in December to see how best to support Engineering teachers going forward.



Advisors and associates meeting in Laois Education Centre in December 2018

Cluster Day PLE

The focus of the [recent cluster day](#) in Junior Cycle Engineering is on engagement with the specification and a look at how the specification will come to life in Engineering classrooms. Other key areas explored on the cluster day are: planning in Engineering using learning outcomes, while taking an approach common to all subjects to ensure a more coherent teaching and learning experience for all students.

Feedback gathered from the completed cluster days has highlighted areas that teachers have requested more support. Thank you for giving the time to provide feedback as it shapes upcoming teacher supports. Acting on this feedback several supports and resources have been devised with more in development.

Jct4 Making Connections



Jct4 was in attendance at the Engineering and Technology Teachers' Association (ETTA) Conference in November. We met with teachers and outlined our plan to support them in the years ahead.



Gerard Duff, Team Leader Jct4, meeting with Joe McHugh TD and Heather Humphreys TD at the launch of The Advanced Certificate in Original Equipment Manufacturing (OEM) a three-year Level 6 apprenticeship, with a focus on the engineering and manufacturing sectors.

Keep in touch

Three ways to keep up to date with the JCT Engineering team are:



www.jct.ie



Mailing List

A Digital Planning Tool

A digital planning tool is one such resource which has been developed in response to feedback outlining the possibility for a digital approach to compliment the planning process. This support can now be found [on our website](#). Accompanying this resource is a screencast outlining the functionality of the document which you can view [here](#).

Webinar

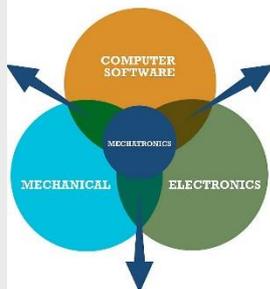
The JCT Engineering webinar is another support that has been designed with teachers' feedback in mind. This webinar will take place on the 1st of April from 6.15 – 7.15 pm. The webinar is entitled ***Engaging with the Engineering Specification***. This webinar will build on your experience from the current PLE and support teaching, learning, assessment and reporting in the Engineering classroom. The webinar will also focus on learning outcomes, explore planning for first years and address other areas such as Mechatronics.

To register for the webinar, click the image.



Mechatronics:

The area of Mechatronics integrated with the strands of Design application and Processes and principles is a fresh approach to the teaching of Engineering. As such our newsletters will continue to explore Mechatronics, and the connections which may be made in planning across the Strands and Elements. In this issue we will highlight the description of the strand as seen in our specification.



'In the Mechatronics strand students may work with a combination of mechanical, manufacturing, electronic and computing systems and software to explore relationships between simple inputs, processes and outputs. They will learn about systems, and how they can be coordinated to ensure the desired output. Students develop the engineering mindset to appreciate how control systems operate on a larger scale, and how the design of control systems can impact on the environment and sustainability. They will appreciate the role that engineers have in employing 'systems thinking' to design products and services that contribute to a better future.' (Engineering Specification, p.17)

We wish you the very best for the year ahead and look forward to supporting you with the implementation of the new specification.

Kind regards,
The Jct4 Engineering Team

