

# 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.

### Engineering CBA 1 Webinar

The NCCA have released revised arrangements for the completion of Classroom-Based Assessments. A link to these guidelines can be found [here](#). Please see page 3 for Engineering key dates. The Engineering team are currently designing a webinar dedicated to support students to develop their skills in preparation for CBA 1. Keep an eye on our [News and Events](#) section of the [jct.ie](#) website and our Twitter page [@Jct4ed](#) for further details to come.

### Infographics

The DES recently published a document titled 'Return to School Guidance for Practical Subjects' and can be found at [tinyurl.com/yxfkh84g](http://tinyurl.com/yxfkh84g). In response to this guidance, Jct4 have created infographics which display key advice to support practical teachers and students when "Working together to stay safe in our practical classroom". These infographics can be found in [resources](#) in the Technologies section of the [jct.ie](#) website.



## Welcome

On behalf of the Engineering team, we hope that you have managed to recharge the batteries over the summer period in preparation for the year ahead. We understand how schools and classrooms have evolved since March 2020. Rest assured, we will be in contact to support you with

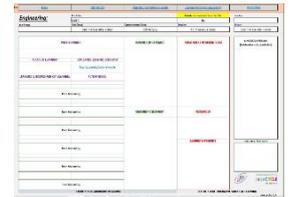


consideration to the current educational landscape. Our resources will be developed to help you plan with an integrated approach to practical and theory lessons. Should Engineering teachers have any queries, our dedicated

Engineering advisors can be contacted from the [Meet the Team](#) tab on the [jct.ie](#) homepage.

## New Engineering Excel Digital Planner

During the 2019/2020 cluster workshops, Engineering teachers were introduced to a *Microsoft Word Digital Planning Tool* to offer further support when planning with learning outcomes, action verbs, strategies and methodologies to inform their classroom approach. The Jct4 Engineering team have responded to feedback from teachers and have developed a new *Excel Digital Planner* which can be accessed under [planning](#) in the Technologies section of the [jct.ie](#) website. The Excel Digital Planner will support teachers in tracking learning outcomes which will help to inform future planning throughout the 3-year cycle.



## Engineering Activities for a Physically Distanced Classroom

The Jct4 Engineering team have developed Engineering activities aimed to model possible rich learning activities teachers can amend to suit the needs of their own student. This particularly relates to the wider context of students and teachers returning to school with COVID-19 procedures in place. These [resources](#) are not designed to be used in a linear fashion, but rather to support the creation of learning experiences that work for individual schools and individual contexts.



## "#Jct4Tuesdays" Blended Learning Resources

The Jct4 team have launched another support for teachers and will share new blended learning ideas every Tuesday [@Jct4ed](#) for the foreseeable future. Teachers can find links to these blended learning ideas under [resources](#) in the Technologies section of the [jct.ie](#) website. Teachers can incorporate these resources into their planning to support students in various approaches to learning in the classroom and these can be accessed remotely if necessary.



## Graphics Webinar



Engineering teachers may find the recent Graphics webinar useful. It's title is '[Graphics: Digital Learning Activities](#)', and was broadcast on May 11<sup>th</sup> 2020. It explored the use of [Tinkercad](#), a free web-based 3D CAD and electronics design tool. The webinar also explored the drawing function on PowerPoint as a digital approach to developing drawing skills. The webinar recording is located [here](#).

## Learning from Home Engineering Challenges

During the period of school closure, March to May of 2020, the Jct4 team developed a series of weekly challenges for students, across the suite of Technology subjects, to engage with practical/project work from home. These challenges may be suitable to pursue ideas and approaches with first and second-year students this year to engage students in a blended learning experience. A link to these challenges can be found under [resources](#) in the technologies section of the [jct.ie](#) website.

## Communication



[www.jct.ie](http://www.jct.ie)



[Mailing List](#)

## Engineering Podcast with Silversmith Dominic Dolan



The Jct4 Engineering team in collaboration with the Arts in Junior Cycle spoke with Silversmith Dominic Dolan for the '[Junior Cycle Talks](#)' channel, on his experiences of working with precious metals throughout his career. Dominic told us of his passion in creating wonderful bespoke jewellery at 'Kinsale Silver' and the impact it has on the lives of his clients. Throughout the

podcast, Dominic takes us through the entire process of his craft, from sketching a simple idea on a sheet of paper, to designing an artefact and finally creating a piece that is finished beautifully. There are many connections that can be drawn from the conversation and may offer ideas for varied approaches to creativity, design, manufacture and finishing in the Engineering room. Dominic's podcast will be available shortly and will be accessed under the '[Junior Cycle Talks](#)' channel where you will see the Jct4 'Hands On' playlist of podcasts.



## Mechatronics – An Alternative Approach

Electronics is a core tenet of the strand of Mechatronics. Investigating the function and application of the electronic components allows students to develop their understanding of electronics when creating simple circuits. Digital software is available to facilitate students to design, build and test electronic circuits. Tinkercad is a free web-based software, not just for drawing, but also for designing electronic circuits. The Engineering team have developed a short video titled '[Building Circuits in Tinkercad](#)' to demonstrate how one could approach building a simple circuit. Such an approach may enable students to engage in possible learning contained within learning outcomes 1.1 and 1.7 in the strand of Processes and Principles, as well as a broader range of learning outcomes from the strands of Design Application and Mechatronics. This video will also allow teachers and students to develop their knowledge and understanding of electronics in the classroom. The video can be accessed [here](#).



## News and Events

Continue to encourage your colleagues to sign up to our mailing list on the link opposite. Watch our [news and events](#) tab within the Technologies section of [jct.ie](#) and follow us on our Twitter page [@Jct4ed](#). These platforms will advertise events and information from Jct4. Please feel free to contact any member of the team with your queries via email. The email addresses can be found in the [Meet the Team](#) tab on the [jct.ie](#) homepage. We would like to wish teachers, students and parents the best for the year ahead.



Kind regards,  
The Jct4 Engineering Team