



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.



2022/2023 CPD

In the current school year, the Engineering Team will be delivering CPD to all registered Engineering teachers across the country. We will be starting online delivery of our CPD in November and conclude in March. We look forward to meeting you again in the coming year.

CBA 2 – Research and Development

Before the summer break, the NCCA announced the theme for CBA 2. This is related to a theme of the SEC project. CBA 2 will be completed during a three-week period in the first term of the current academic year, before the SEC project starts. For more information on the theme of 'Lifting and Lowering: Mechanisms, Devices, and Techniques' please click the following box:

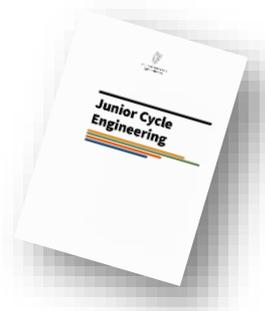
**Click here
for the NCCA
Engineering
page**

Theme is issued here

Our 'Important Considerations for CBA2' document, which outlines some information and steps that can be taken when engaging with Classroom-Based Assessments may be of use as you engage with the process. This document, and other supports for the Classroom-Based Assessments, are available [here](#)

Welcome

On behalf of the Engineering team, we would like to welcome you to the 12th edition of the JCt4 Engineering Newsletter, 'Autumn Edition 2022'. We welcome you back to your respective schools and hope that you had a peaceful and re-charging summer break. As you prepare to start the new academic year, below are some updates and information from the JCt4 Engineering team.



Team Update

This year the team has an advisor change with our colleague Fintan Walsh departing the team. We would like to take this opportunity to formally acknowledge the massive contribution that Fintan has made to the team and the rollout of the new Junior Cycle Engineering Specification. Going forward, Ciaran Callaghan and Francis O' Farrell will be the Engineering Advisors in JCT.

I-Form and 3D printing

Last year, we ran a very successful 3D printing elective in partnership with I-Form and 3D WIT. We would like to thank every teacher who participated in this elective CPD. The program has been a huge success and we are looking forward to working again with our partners to provide more CPD in this area. Please keep an eye on our twitter feed and emails from our mailing list for more information on how to get involved. We are currently looking to do a blended model of delivery with some face-to-face sessions supplemented by an online clinic to support teachers. Places will be limited so keep an eye out for more information in the coming weeks.



ETTA Conference 2022

Area 2 (Limerick, Clare, Kerry, and UL Student Teachers) of the Engineering Technology Teachers' Association (ETTA) are hosting this year's conference. The 2022 National Conference & AGM will be held on Friday 25th and Saturday 26th of November in Limerick. The Conference will be held between the TUS:MMW Limerick Campus and the Greenhills Hotel Limerick. It is a great event where teachers get a chance to engage with other Engineering, Graphics and Applied Technology teachers. The conference halls will have stands with suppliers and other areas that may be of interest to teachers. The JCT Engineering team will also be attendance and we look forward to meeting you at the conference. Contact your local area representative for further information.



TUS

Technological University of the Shannon:
Midlands Midwest
Ollscoil Teicneolaíochta na Sionainne:
Lár Tíre Iarthar Láir



ETTA.ie



Hands-On Podcast Channel

Just a reminder that we have our own podcast channel on Soundcloud, which is available [here](#). We have more podcasts coming in the next few months. We will inform you of new podcasts when they are available, via our mailshot and twitter.

In Previous podcasts, we have held interviews with 3D printing experts, a jewelry designer, a wood turner, Athlone Training Centre and many more people who are of interest to the T4 suite of subject teachers.



Communication



[@Jct4ed](#)



www.jct.ie



[Mailing List](#)

SEC Materials List

Before the summer, the State Examinations Commission released the parts list for the Junior Cycle Engineering project. The parts list was emailed to all schools in June, so please look for an update on it.

Engineering in the world around us

In this section we explore stories from around the world that relate to Engineering and how advances in Engineering are improving the world around us.

The global bee population is in decline, and as a result there is a growing worry that pollination may not happen as regularly, and crops may be in decline.

Eijiro Miyako and his team, at Japan’s National Institute of Advanced Industrial Science and Technology, has started to investigate the use of drones to help with cross pollination of plants.



Miyako says the team is working on developing autonomous drones that could help farmers to pollinate their crops. GPS, high-resolution cameras, and artificial intelligence will be required for the drones to independently track their way between flowers and to land on them correctly.

It will be some time however, before all that is in place.

For more information please follow this link:

<https://www.newscientist.com/article/2120832-robotic-bee-could-help-pollinate-crops-as-real-bees-decline/>

Some potential learning outcomes that relate to this initiative: 1.1, 1.6, 2.2, 3.3, 3.4, 3.5.

Online Learning Event (OLE)

Our Autumn OLE’s are happening again this year between October 24th and 27th. These events focus on other areas of interest within our subjects In previous OLE events, we spoke to associates who trialled design strategies with their students. We also engaged with mechatronics with micro:bit classroom and listened to how teachers brought the new Engineering specification to life in their classrooms. We are currently working on this year’s Autumn OLE event and it will be advertised on our mailing list and via twitter in the coming weeks. We hope you will join us on the night.



News and Events

Please continue to encourage your colleagues to sign up to the Jct4 Engineering newsletter via the mailing list opposite. Watch our [news and events](#) tab within the Technologies’ section of jct.ie and follow us on our Twitter page [@Jct4ed](#). Please feel free to contact any member of the team with your queries via email on the jct.ie homepage.

Best wishes for the year ahead,
Kind regards,

The Jct4 Engineering Team.