



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

**Spring 2023 - Issue 13** 

## JCT's Festival of Professional Learning

The Engineering online learning event takes place on Thursday the 30th of March 2023 from 6:30pm to 7:30pm.

This will be a live Zoom event and will focus on the laser cutter and ways it can support pedagogy in the Engineering room. We hope you will join us on the night. Click the link <a href="here">here</a> to register for this event.



<u>Register Here</u>

## ..... in the News!

A new low-carbon iron-making process dubbed Biolron has been proven following testing by global teams of experts including the Microwave Process Engineering Group at Nottingham University.

The Biolron process uses lignocellulosic biomass such as wheat straw, sugar cane bagasse, canola sticks or barley straw instead of coking coal. The biomass is blended with iron ore and heated by a combination of combusting gases released by the biomass and high-efficiency microwaves, which can be powered by renewable energy. The process converts Pilbara iron ore to metallic iron for the steelmaking process, providing a potentially cost-effective option to cut industry carbon emissions.

For more information please follow this link: https://www.theengineer.co.uk/content/news/biolron-process-shows-potential-for-low-carbon-steel-making

Some potential learning outcomes that relate to this process: 1.5 research applications of existing and emerging technological developments

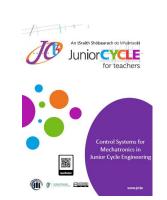
1.8 identify appropriate tools and equipment specific to a task 2.7 apply their knowledge of the properties associated with a range of engineering materials,

3.11 justify their choice of the most appropriate system or systems for a specified purpose



## Useful resources

The Engineering team have compiled a set of Mechatronics and Applied Control resources. The resource focuses on the use of Micro:bit. The booklet contains links to tutorial videos, as well as text based solutions that take you through the process of programming several operations. The resource can be accessed by clicking the image of the resource opposite or click here.





OIDE

On the 1st of September 2023, a newly integrated support service named Oide will be established. Currently, there are four individual teacher education support services that provide a wide range of ongoing supports to primary, post-primary and special schools, including professional learning events for school leaders and teachers. These are the: Centre for School Leadership (CSL), Junior Cycle for Teachers (JCT), National Induction Programme for Teachers (NIPT), Professional Development Service for Teachers (PDST). You can access the Oide website <a href="here">here</a> and/or follow Oide on twitter.

## **Keep in Touch!**

To keep up to date with JCt4 Engineering, please join our mailing list and follow us on Twitter @JCt4ed.











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