

STE(A)M CPD CALENDAR 2020

Dates and Venues January – April 2020



WHAT IS STE(A)M IN JUNIOR CYCLE?

STE(A)M in Junior Cycle is a nationwide elective CPD initiative. Our focus is on the provision of professional learning for all teachers with an interest in using societal challenges as a stimulus to engage within and across subject areas. This CPD is of interest to all teachers but some workshops may be of particular interest to teachers of Geography, Science, Mathematics, Home Economics, Applied Technology, Wood Technology, Engineering and Graphics.

HOW TO REGISTER

Use the QR code to access live links to registration OR use the Education Centre URL (in the table below) to register through the relevant EC website for each workshop.



Follow us on Twitter:
@JCTSteAm for regular updates



IN PARTNERSHIP WITH	EVENT	18TH JAN	25TH JAN	1ST FEB	29TH FEB	7TH MAR	21ST MAR	28TH MAR	25TH APR
seai Sustainable Energy Authority of Ireland ICRAG Irish Centre for Research in Architecture and Geomatics Geological Survey Geological Survey of Ireland	IS THE FUTURE OF URBANISATION GREEN?	Mayo Education Centre www.mayoeducationcentre.ie		Laois Education Centre www.laoisedcentre.ie			Navan Education Centre www.ecnavan.ie	Cork Education Centre www.cesc.ie	
School of Pharmacy University College Cork apc Applied Process Centre BIAZA Bioscience Innovation and Applied Technology	BIODIVERSITY THE FUTURE IS IN OUR HANDS!	Fota Wildlife Park www.cesc.ie		Atlantiquarium, Galway www.galwayec.ie		Dublin Zoo www.ecnavan.ie			Secret Valley Park Wexford www.ecwexford.ie
Amgen Biotech Experience Scientific Discovery for the Classroom	TECHNOLOGY, RESEARCH AND INNOVATION – CHOICES FOR THE FUTURE!			Drumcondra Education Centre www.ecdrumcondra.ie	Navan Education Centre www.ecnavan.ie		Carrick-on-Shannon Education Centre www.carrickedcentre.ie	Kilkenny Education Centre www.ekilkenny.ie	
WorldWise Global Schools AMBER	THE FUTURE OF OUR COMMUNITIES – SUSTAINABLE AND CONNECTED?	Kildare Education Centre www.ekildare.ie	Monaghan Education Centre www.metc.ie		Wexford Education Centre www.ecwexford.ie		Limerick Education Centre www.lec.ie		
Design & Crafts Council Ireland REDISCOVERY CENTRE	THE FUTURE OF STUFF!		Rediscovery Centre, Dublin www.ecdrumcondra.ie			Kilkenny Education Centre www.ekilkenny.ie		Kildare Education Centre www.ekildare.ie	Donegal Education Centre www.donegaledcentre.ie
SSPC Society for the Study of Professional Practice cúrom Centre for Research in Medical Devices	VOICE AND CHOICE THE FUTURE OF HEALTH CARE?		Sligo Education Centre www.ecsligo.ie			CÚRAM Centre Galway www.clareed.ie	Laois Education Centre www.laoisedcentre.ie		Athlone Education Centre www.athloneeducationcentre.com
Microsoft Confirm Smart Manufacturing	TECHNOLOGY IN THE FUTURE! WITH GREAT POWER COMES GREAT RESPONSIBILITY!			University of Limerick www.lec.ie	Microsoft Dream Space www.blackrockec.ie	Waterford Education Centre www.wtc.ie			Microsoft Dream Space www.blackrockec.ie

Daily programme: Registration 9 – 9.15am. Workshops commence at 9.15am. Event ends at 1.45pm

SOLUTION GENERATION

"The future of the world is in my classroom today- a future with the potential for good or bad"
(Ivan Welton Fitzwater)

The world is changing at a rapid pace. In order to respond to the emerging challenges of our future, we need to empower our young people to think, choose and innovate in ways that will enhance and sustain our lives, communities and world, now and into the unknown tomorrow. It is on this premise that the theme for STE(A)M in Junior Cycle 2020 - "SOLUTION GENERATION" - is based.

IS THE FUTURE OF URBANISATION GREEN?



Urbanisation is an inevitable trend. Increasing urbanisation is causing a range of problems. Growth of towns and cities often results in increasing pollution, high demand for energy, lack of resources, destruction of habitats, and social inequality. During these workshops we will examine energy consumption in our buildings and planning for our towns of the future, taking consideration of Geology, using GSI maps, data and statistics. Is it possible to find our way out of the urban development versus environmental degradation dilemma?

"In urbanisation, you think big because you are thinking decades ahead."
(Kushal Pal Singh)



BIODIVERSITY- THE FUTURE IS IN OUR HANDS!



We depend on biodiversity in our daily lives in ways that are not always apparent or appreciated. Human health ultimately depends upon ecosystem products and services which are a requisite for good human health and productive livelihoods. There is growing concern about the consequences of biodiversity loss and change. During these workshops we explore the future of biodiversity at a macro and micro level through a variety of lenses.

"We are at a unique stage in our history. Never before have we had such an awareness of what we are doing to the planet, and never before have we had the power to do something about that." (Sir David Attenborough)



THE FUTURE OF OUR COMMUNITIES – SUSTAINABLE AND CONNECTED?



Change is, ultimately, an inevitability that everything and everyone must one day face. Community development's future is certainly going to be different from both its past and present. One of the most common and noticeable ways that culture has shifted in communities in recent years is in how things are valued and prioritised. In these workshops we will explore what it means to be connected as a community and how our changing values might alter how we connect with each other and our environment.

"We cannot turn the clock back nor can we undo the harm caused, but we have the power to determine the future." (Paul Kagame)



VOICE AND CHOICE-THE FUTURE OF HEALTH CARE?



The design of medicines and medical devices are a significant factor in health equity. Medicine design, manufacturing process and distribution are crucial steps in ensuring equal access. Equity is the absence of avoidable, unfair, or remediable differences among groups of people, whether those groups are defined socially, economically, demographically or geographically or by other means of stratification. During these workshops we will explore how patient voice can influence design and manufacture as well as how choice can impact on efficacy of health policy.

"Ideally everyone should have a fair opportunity to attain their full health potential and no one should be disadvantaged from achieving this potential." (World Health Organisation)



TECHNOLOGY, RESEARCH AND INNOVATION – CHOICES FOR THE FUTURE!



Big data has liberated research. Through the use of large databases and advanced AI researchers can save time, save resources and even save lives. Mobile computing, intelligent robots, self-driving cars, neuro-technological enhancements and genetic editing are ubiquitous. During these workshops we will explore some recent developments emerging from research. We will explore who controls the research agenda while considering some of the dilemmas which occur when research and innovation collide with societal issues.

"Ethics is knowing the difference between what you have the right to do and what is right to do".
(Potter Stewart)



THE FUTURE OF STUFF!



We live in an age of consumption, as evident in our overflowing and expanding homes, garages, and external storage facilities. Studies have shown this accumulation is not making us any happier and comes with a cost to both people and our environment. Fostering an attitude of personal responsibility is a process of weighing the implications of human actions and balancing present and potential future costs. In these workshops we will explore our complicated relationship with things, understanding that it is not as straightforward as it might appear.

"Things embody goals, make skills manifest, and shape the identities of their users."
(Csikszentmihalyi and Eugene Rochberg-Halton)



TECHNOLOGY IN THE FUTURE: WITH GREAT POWER COMES GREAT RESPONSIBILITY!



"There's nothing artificial about AI. It's inspired by people, it's created by people and, most importantly, it impacts people. It is a powerful tool we are only beginning to understand and that is a profound responsibility" (Fei Fei Li)
Advancements in AI and smart technology are changing at an exponential speed. During these workshops we will explore the impact of AI and Smart Manufacturing on the world as we know it and consider the challenges and opportunities that arise from this impact. "We live in a time of great promise and great peril." (Klaus Schwab)

