

## **IGI Continuous Professional Development Online Options**

### **Free Online University Courses – MIT, Harvard, Stanford**

<https://www.edx.org/course/sustainable-energy?index=product&queryID=cedbe1c3bb21faab58171b6cbfad1ee7&position=2>

**-Sustainable Energy MIT** 13 weeks 8-12 hours per week, FREE,

--How to critically evaluate key features, opportunities, and challenges associated with modern energy technologies, and understand how these factors shape their contributions to global decarbonization

Use systems-level tools and skills to analyze the technological, economic, and socio-political dimensions of real-world energy projects

Build consensus among involved stakeholders to achieve sustainability goals

<https://www.edx.org/course/energy-within-environmental-constraints?index=product&queryID=cedbe1c3bb21faab58171b6cbfad1ee7&position=3>

**Energy Within Environmental Constraints - Harvard** – 10 weeks 3-5 hours per week, FREE

The basic engineering, environmental science, and economics of our energy system.

A working understanding of energy technologies.

Environmental impacts of the energy system, focusing on air pollution, climate change, and land use.

Techniques for estimating monetary costs and carbon impacts.

### **Reservoir Geomechanics - Stanford**

[Reservoir Geomechanics | Stanford Online](#) - 4-5 hours/week

This interdisciplinary course encompasses the fields of rock mechanics, structural geology, earthquake seismology and petroleum engineering to address a wide range of geomechanical problems that arise during the exploitation of oil and gas reservoirs.

### **English CPD Online geology and geosciences**

<https://www.prospects.ac.uk/postgraduate-courses/online/cpd/geology-and-geography?featuredCourses=&page=0>

## **Irish College Options**

### **UCD**

[https://www.ucd.ie/professionalacademy/findyourcourse/pd\\_data\\_analytics/](https://www.ucd.ie/professionalacademy/findyourcourse/pd_data_analytics/)

### **Trinity College**

<https://www.tcd.ie/courses/hci-cpd/az-of-cpd-courses/> Trinity CPD courses

<https://www.tcd.ie/courses/short-courses/a-z-of-short-courses/> Trinity Short

Courses <https://www.tcd.ie/courses/microcredentials/a-z-of-microcredentials/>

Trinity Microcredentials Courses - Examples include (Advanced Spatial Analysis using GIS, Air Pollution: Monitoring Assessment and Control, Entrepreneurship for the Nature-based Enterprise, Low Carbon Power Technology, Solar Energy Conversion and Application, Transport Modelling and Planning

<https://www.tcd.ie/academicregistry/fees-and-payments/assets/MC%202223%20Fees%20%20Updated.pdf> – Academic Fees

Microcredentials are usually examined by a mix of an exam hall test and individual assignments over the course of the semester

### **University of Galway**

[Postgraduate Taught Programmes - University of Galway](#)

### **Atlantic Technological University**

[Online, Flexible & Professional Development | ATU - Atlantic Technological University](#)

### **Munster Technological University**

[Course Search | Munster Technological University - MTU](#)

### **University of College Cork**

[Courses | University College Cork \(ucc.ie\)](#)

## **GeoLogica**

Courses are held over consecutive days online, ranging between 3-5 days and 10-20 hours.

<https://geologicaworld.com/courses/upcoming/>

### **Geologic Carbon Storage for Geoscientists and Engineers –**

- USD 1875
- Lifecycle of CCUS project, key concepts processes and workflows of the CCUS industry
- 17.5 hours 2-530pm delivered over 4 days by Associates at Bureau of Economic Geology

### **Subsurface Context for a GeoEnergy Transition –**

- 1125 GBP
- An overview course examining the key geoscience, climate and socio-economic themes that underpin the overall subsurface context for a GeoEnergy Transition
- 17.5 hours 2-530pm Online, range of Tutors, Five 3.5-hour sessions)

### **The Fundamentals of Geothermal Systems: Low to High Enthalpy, Geohazards and Environmental Aspects**

- GBP 900
- Focus on describing geothermal resources (sedimentary) and their application in power production and direct uses in addition to the environmental aspects of the geothermal development
- 14 hours 230-6pm, 3.5 hours online sessions over 4 days, Jason Fischer

### **Carbon Capture and Storage Masterclass**

- 1125GBP
- Establishes the geoscience needs for CCS projects including CO2 subsurface storage volumetrics, flow and the goals associated with safe permanent storage
- 17.5 hours 2-530pm, Richard Worden University of Liverpool, 5days 3.5hour sessions)

### **Critical Minerals for the GeoEnergy Transition**

- 675 GBP
- Crucial role that critical raw materials will play in the energy transition: from exploration through to supply chains, the importance of responsible sourcing
- 10.5 hours 2-530pm, Three days 3.5-hour sessions online, Lucy Crane Cornish Lithium

## **Hydrogen Masterclass: Production, Geological Storage and Operational Engineering**

- 1125GBP
- Overview of the current hydrogen landscape, including its likely role in the energy transition, production, geological storage and economic challenges
- Katriona Edlmann University of Edinburgh - 5 consecutive days Online 20 hours 130-530)