



UNIVERSITY OF LEEDS

Leeds Futures – STEM 2025

Date	Online Subject Taster Session	Audience
Mon 3 March 5-6pm	Introduction to the programme and overview of STEM at Leeds	Everyone
Mon 10 March 5-6pm	The common denominator in Civil Engineering & Computer Science Investigate how maths is embedded in civil engineering and computer science practices. We focus on Vigenère cipher; a method of encrypting text. This cipher was thought to be unbreakable for a long time, but we will show how it can be easily broken using a simple computer programme.	Engineering strand Open to all
Thurs 13 March 5-6pm	Discovery in biomedical sciences Examine a patient case study and see how Biomedical Science underpins each stage of their journey. How is a diagnosis made, how do we discover the mechanisms underlying a disease and can they be targeted by medicines?	Science strand Open to all
Mon 17 March 5-6pm	The Science of Geometry and the Art of Optimisation Train timetables, investment portfolios and hospital staff rosters, almost every workplace presents an organisational challenge. Many are optimisation problems which can be solved by a single process: the simplex algorithm. You'll meet this famous algorithm, along with the fascinating geometrical conundrums it presents.	Engineering strand Open to all
Thurs 20 March 5-6pm	Finding solutions with STEM We will introduce two different areas of chemistry; computational and flow chemistry, and explore how they link with other areas of STEM.	Science strand Open to all
Mon 24 March 5-6pm	Life at the nanoscale Learn how we use physics to better understand biology and disease. Explore the development tools that initially helped launch the field of nanotechnology but that have now reached the capabilities to video nature's nanomachines such as DNA and proteins in action.	Engineering strand Open to all
Thurs 27 March 5-6pm	Animal absurdities: the weird and wonderful wild You probably know why the peacock has such an elaborate tail, but why is the male proboscis monkey's pot belly so irresistible to their female counterparts? When is cannibalism a good idea? What type of sheep can breathe under water and create its own food? We	Science strand Open to all



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	will explore the weird and sometimes disgusting world of the animal kingdom and attempt to explain some animals' stranger features and behaviours.	
Mon 31 March 5-6pm	The role of fluid dynamics in sustainable materials science and engineering Discover how fluid mechanics plays a significant role in how we utilise materials and enhance their sustainability. Investigate how experimental and computational techniques can be implemented to understand the behaviour of fluid flow.	Engineering strand Open to all
Thurs 3 April 5-6pm	Using STEM to feed the nation How is STEM shaping the future of our food systems? Explore how scientists are applying chemistry, biology and physics to create innovative solutions that enhance food security, revolutionise agriculture, feed an ever-growing population and promote sustainable practices.	Science strand Open to all

Friday 25 April 9.30-4pm	Campus Taster Day Explore subjects within your chosen strand in more detail, tour the campus, meet staff and students and get your questions answered. Lunch is provided and travel support may be available.	Open to all
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Date	Online Session	Audience
May	Careers & employability Find out more about careers in STEM from industry professionals and learn about opportunities to maximise your employability and the support offered while on course at Leeds.	Open to all
Progression to University online workshops		
May	Choosing a course and university	Open to all
June	Applying to UCAS & personal statement advice	Open to all
June	Access and support at the University of Leeds	Open to all
Sept	Student Finance	Open to all
Oct	Study Skills and Managing Exam Anxiety	Open to all
Nov	Transition to University	Open to all