



University of
Southern
Queensland

UniSQ Toowoomba Year 9 and 10 Discovery Day

UniSQ Springfield

Activity	Description
Becoming a Teacher	Within this session students will explore what makes for a great teacher, how to become a teacher, and why teaching could be the career for them.
Civil Engineering – Building better Bridges	Students will build a bridge using our lego-type kits and measure the internal forces. Groups will compete to build the best bridge for both cost and load.
Construction of a Paper Tower	This activity is centred around creating a stable structure (a tower) using coloured papers, straws, glue, and other items provided on the day. The group with the best-looking and most stable structure will be declared the winner as judged by the staff present on site. This activity allows students to operate BEE, the excavator, to load, carry and dump the designated material into the stated location. The activity is expected to take around 10 minutes on average. This is an individual activity and the student to do this in the shortest possible time is declared the winner.
Creative Arts and Community Wellbeing	Theatre and film are very different mediums for telling stories, but filmmakers can learn a lot about directing actors and action from theatre practice. Get behind the scenes and operate a camera, capture audio and direct and act in scenes, and record it all!. You will also have the chance to talk to a current film student their experience as a UniSQ student and future industry professional.

<p>Discover Paramedicine</p>	<p>Discover Paramedicine at UniSQ. This hands-on session will explore some of the skills required by Paramedics in the field. There will also be the opportunity to meet current Paramedicine students who will share their experiences as students and future paramedics.</p>
<p>Discover a Career in Nursing – A Pathway to Many Different Options</p>	<p>An overview from current Nursing students and ambassadors on their journey in Nursing so far - why they chose nursing in the first place, possible pathways, key learnings from their programs and much more, and whether nursing could be the right career choice for you</p>
<p>Electrical Engineering – Constructing Coded Messages</p>	<p>Can we use Lego bricks to communicate? In this session we will be using Lego bricks to encode and decode messages – how many different messages will we be able to send with different brick sets? Which team will devise the most brick-tastic messaging scheme? We will look at how Lego can be used as an analogy for digital communications schemes, including data rate, error checking and acknowledgements</p>
<p>Exploring Science with Plasma Globes</p>	<p>Plasma is the most common state of matter in the universe and was the first state of matter to exist after of the big bang. We don't find plasma on the earth's surface naturally, but it is used in lots of modern technology. Students will explore the concept of plasma with hands on activities. This activity will involve learning about plasma through interactive use with plasma globes. While plasma globes are awesome to have and look at, they teach us a lot about what plasma is, about technology and the world around us.</p>



Filmmaking Workshop	A session centred around learning the basics of working on a film set and gaining the opportunity to make a short film
Gen Z: Creating Change	When we think of important problems confronting the world, we often talk about technological fixes. Change also requires a shift in how we think: creativity is essential to making change work. In this session we explore how humanities and communications make change in the world.
How to get a Head Start on your Future Career	From strategies of self-exploration for supporting decision-making around your dream career, to programs available to you that can give you a taster of university life, this workshop is centred around giving you some foundational knowledge for gaining that Head Start in building your career journey
How to land your first job or dream opportunities	From your dream part-time job to leadership positions at school, how do you communicate why you are the best person for the role. This session will help you craft an application, prepare for the interview and give you the confidence to put your best self forward.
How to Make your own Podcast	A session that provides an overview of the radio and podcasting industry, discuss practical experiences in the field, learn recording and editing techniques, and discuss future career possibilities in the field
Mechanical Engineering – Building Mechanical Cars	Students will create a mechano car that will have a motor placed into it to compete for the fastest times on our circuit.



Motivating yourself to study	<p>Explore a career as a sport and exercise scientist. Discover how to measure aspects of human performance using scientifically sound methods and discover how this information is used to improve sporting performance. Led by UniSQ Sport and Exercise students, they will share their experiences as current students and future industry professionals.</p>
Occupational Therapy & Allied Health: Exploring Abilities and Accessibility	<p>Most people in Australia live near the coast. But did you know that coastal wetlands are dominated by saltmarsh, seagrass and mangroves that store carbon, mitigate sea level rise, and provide important habitat for fish and bird species? Unfortunately, coastal areas are under immense pressure from developers and climate change that will cause sea levels to rise threatening our coasts, people and homes. We need to protect and restore coasts to prevent erosion. Coastal wetland restoration is important and today you will see why.</p>
Small Screen Big Impact	<p>Get a behind the scenes view of the television industry, explore UniSQ's state-of-the-art TV studio and hear about the wide range of career opportunities available thanks to all the streaming services. UniSQ television students will share their experiences as current students and many are already working in the industry.</p>
Sports and Exercise Science	<p>This session will explore the Sport and Exercise Science and Clinical Exercise Physiology Degrees at UniSQ and what roles they undertake with healthy individuals, athletes and clinical patients.</p>
Take to the Skies with UniSQ Aviation	<p>In this interactive session you will explore the fundamentals of flight, including - the forces acting on an aircraft; strategies for building a glider; a simulator tour, and photo opportunity</p>
The Magic of Perceptual Shift	<p>Discover how the simple act of adjusting your perception of something will bring about change in your understanding and feelings about that something. This process is often termed as cognitive reframing or perceptual shift. It frequently used in clinical, school as well as stress management settings.</p>



What is your type? Exploring the different blood types

We will introduce the components of blood and the different blood types. We will explore the concept of antigens and antibodies, using 3D printed ABO blood types. We will then perform blood typing testing on unknown samples. Finally, we will discuss about what can go wrong with transfusion as well as genotype and blood type.

Working with Robots? The economics of AI and the future of work

In this session, we'll use economic concepts to explore the likely impacts of artificial intelligence on the future of work. Will AI be a tool, a colleague, or a replacement for human workers? (Spoiler: we don't know yet, but it's interesting and valuable to think through the possibilities).

* Please note: Not all activities are available in all sessions.
Session numbers are limited so more popular activities may fill quickly

