



# Spark your curiosity! Spark your interest in STEM! Spark your passion!

Join us for Kilbreda College's **GIRLS IN STEM** Holiday Program. Open to all girls in Grades 4, 5 and 6. Friday 7 July from 9.00am - 3.30pm. Ten workshops (overleaf) to choose from!



### **The Amazing Race**

A whole new Amazing Race awaits. You will be taken on a race around the world as you solve problems and puzzles from some of the world's most incredible attractions. Prepare to be amazed as you discover the answers to some of the world's greatest mysteries.

**Facilitator: Fiona West** 

### Colourful Chemistry: Exploring Inks and Liquids with Science

In this workshop, you'll become a detective and use science to solve mysteries. You'll learn how to separate colourful inks using paper chromatography, just like a real forensic scientist! Discover what makes each ink unique and find clues to solve a fun mystery. You'll also explore the density of different liquids by creating your own rainbow density column. Get your lab coat and safety goggles on and join us for a hands-on, exciting science adventure!

**Facilitator: Sarah Chuck** 

### **Creative Catapults**

Discover your inner engineer in this workshop as you use simple materials to design and construct a catapult and send objects flying through the air. Catapults have been used since ancient times to throw projectiles much further than a human could alone. How will you design your catapult to maximise distance and send your object flying?

**Facilitator: Rob Lee** 

### **Hunting for Treasure**

Become an ancient treasure hunter and crack the code to solve mysteries of the past. A recent archeological dig uncovered a locked box and a series of clues which will lead to the possibility of unlocking the ancient treasure and becoming a national hero. Can you crack the code?

Facilitator: Jennifer Trodden

### **Kitchen Cooking and Taste Testing**

A fun and creative workshop that allows participants to explore a variety of textures and flavours as they work with everyday ingredients to create scientific culinary masterpieces. A blind taste test will have questioning how your eyes taste and perceive food! In this activity, you will learn about how you can trick your taste buds.

### **IMPORTANT**

Please indicate any Food Allergies on your registration.

**Facilitator: Christine Vaughn** 

### Lift off!

Fly me to the Moon! Would you like to make your own air and water powered bottle rocket and then launch it as high and as far as you can? As part of this workshop you will be given the task of constructing a bottle rocket with a weighted nose cone, fins and attractive design. Can you make it spin? How high will your rocket go?

Facilitator: Simon Gurowski

### Magnify Your World: Journey into the Secret Life of Plants and Microorganisms

Get ready to shrink down to the size of a bug in this awesome workshop! Have you ever wondered what the world looks like to tiny creatures? Using a microscope, you'll explore everyday objects and discover their hidden details, magnified hundreds of times! You'll even conduct an experiment to see how plants move water up to their leaves, just like a real-life scientist. But that's not all - we'll also go on a scavenger hunt around Kilbreda, collecting fascinating living things to examine up close. Put on your lab coat and join us on this exciting adventure into the world of biology!

Facilitator: Sarah Avitabile

### **Masterchef Marketing**

Have you ever wanted to be an inventor? This workshop will provide you with the skills and opportunity to test your creative ideas and develop a working kitchen invention worthy of Masterchef. Draw your design, build your prototype and pitch your product. Will your gadget be featured in the Masterchef kitchen?

**Facilitator: Lisa Dumicich** 

### Maximising Mini Robots: Constructing with Cubelets

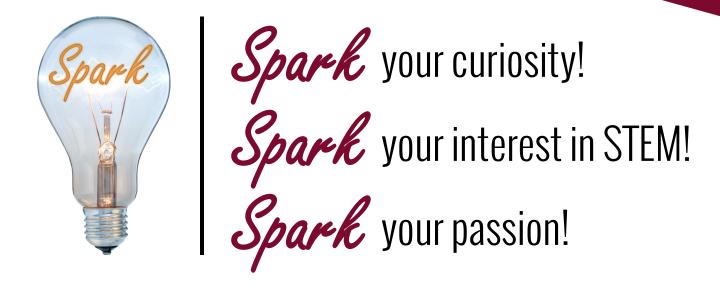
Everything in the universe is made up of tiny building blocks... and robotics is no exception. Inputs and outputs, power and processing... all of these parts make up what we can program. Rather than simply combining cubes, this session uses processing cubes – 'think' cubes like blockers, inverse and thresholds – to create mini robots that depend upon separate data circuits and intelligently sort their sensors. Add some Lego extensions to the mix and there is no end to the complex critters you can create.

Facilitator: Allen Dickson

### **Roll-e-good Roller Coasters**

Have you ever ridden a roller coaster? Have you ever wanted to design your own? In this activity you will learn about the physics involved in roller coasters, and be challenged to create a roller coaster using simple items; paper, tape, straws. However, getting your 'rider' (marble) to the end is only half the fun. How can you savour the fun and make the roller coaster ride last as long as possible?

Facilitator: Karissa Esselbrugge



# **Important Information and Booking Details**

### Fees

\$65 per student.

### **How to Book**

Enrol via **events.humanitix.com/girls-in-stem-holiday-program** to secure your daughter's place.

Students are to choose three workshops across the three sessions.

# **What To Bring**

- Lunch and snack (nut free), water bottle.
- Wear appropriate clothing and footwear for playing outside in cold weather.

## **Medical Information**

If your child has a medical condition, they cannot attend unless medication has been provided, is clearly labelled with your child's name and in the original packaging. Action plans are to be submitted on arrival at the College.

A risk minimisation plan is required for all children with anaphylaxis, asthma, diabetes or any other medical condition.

# **Important Information**

Arrival and registration is from 8.30am in order to commence the program at 9.00am.

Entry is via Gate 4, Como Parade West, Mentone.

The program will finish at 3.30pm, and all children must be collected by this time.

