

# She Maps Learning Solutions Guide

PROGRAMS, PRODUCTS, AND PRICES

2022



Inspiring the next generation to solve some of the world's toughest challenges with STEM.

[www.shemaps.com](http://www.shemaps.com) | 1300 895 795



# Your Drone & Geospatial Education Journey Starts Here!

She Maps' mission is to help schools to overcome these challenges by increasing STEM literacy and building a bridge with industry to connect student learning and real-world problems.

We do this by:

- › **Developing** compelling, high-quality, inspirational, real world STEM curricula and educational resources for teachers and students
- › **Working collaboratively** with teachers to develop inclusive classrooms and increase their STEM teaching capabilities and confidence
- › **Maintaining** an ever-growing library of inspirational teaching resources

We do all this under the guise of drones and geospatial concepts. **Drones are our hook, but the outcomes run far deeper.**

Our signature indoor microdrone program, [Classroom Drone Essentials](#). This program has been taught face to face to over 7,500 students and teachers around the world, and over 1,500 teachers are using our online resources.

Our world-class teacher resources provide teachers with Australian Curriculum mapped units of work, student activities, and teacher presentations. These are linked to real world learning, with industry partners supporting the development of the resources.

This document has been developed to provide you with further information, including pricing, for our programs, professional learning, teaching resources, and recommended drone equipment. We hope this information can assist you in making an informed decision about which program best suits your students and school.

We love hearing from our teachers, so please contact us by phone, email, or any of our social media channels if you have feedback or suggestions for resources you'd like us to create.

**Jules Blundell**

*General Manager, She Maps*

■ 1300 895 795    ✉ [jules@shemaps.com](mailto:jules@shemaps.com)



# Let's Re-Imagine STEM

We believe that integrating STEM into the classroom has become confusing for some teachers.

Should it be a separate subject? Is it cross-curricular and if so, what does that look like?

We want to re-imagine STEM and start with the outcome we want to achieve – to develop a digitally enabled workforce. The teaching of '21st Century Skills' is a buzz term out there, but let's keep it simple. STEM is four letters, four areas of skills that we should be focussed on across our schools. If we focussed on four cross curricular outcomes for STEM (with all the buzzwords underneath each), this is what we believe it would look like.

## SOPHISTICATED PROBLEM SOLVERS

- ▶ Critical and creative thinking
- ▶ Computational thinking
- ▶ Inquiry skills
- ▶ Intellectual curiosity
- ▶ Design thinking
- ▶ Logical reasoning
- ▶ Critical analysis
- ▶ Analytical thinking
- ▶ Data driven decision making
- ▶ Iterative design

## TALENTED CREATIVE THINKERS

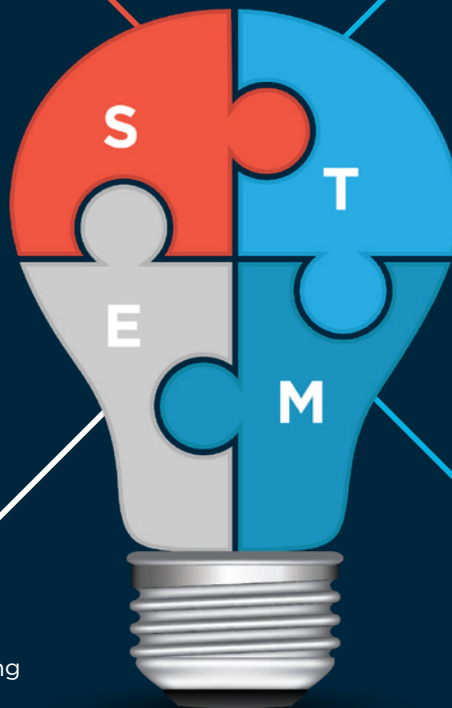
- ▶ Critical and creative thinking
- ▶ Enterprise skills
- ▶ Innovation
- ▶ Design thinking

## EDUCATED DIGITAL NATIVES

- ▶ ICT capability
- ▶ Ethical understanding
- ▶ Intercultural understanding
- ▶ Digital literacy
- ▶ Digital intelligence
- ▶ Digital stack
- ▶ Digital citizenship
- ▶ AR, VR, MR
- ▶ IOT, ML, AI, Blockchain
- ▶ 4th industrial revolution

## MINDFUL COLLABORATORS

- ▶ Personal and social capability
- ▶ Social emotional learning
- ▶ Student led learning
- ▶ Connected learners
- ▶ Communicators



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# She Maps Learning Roadmap

In order to address the need for more science, technology, engineering, and mathematics (STEM) literate workers, and to help bridge the gap between school and industry, She Maps have developed a series of comprehensive K-12 drone and geospatial programs.

Our approach allows students to make real world connections and prepare for drone and geospatial pathways and careers.

## Build student knowledge and capabilities with our foundational skills programs

Learn to fly and code microdrones, explore geospatial concepts, acquire mapping knowledge, build drone mapping capabilities and immerse students in drone data analysis.



**Pippa & Dronie**



**Classroom Drones Essentials**



**Classroom Mapping Essentials**



**Geospatial Toolkit**



**Lighthouse Schools Program**

## She Maps teaching resources

Practice, explore, inquire and apply the foundational skills with our world-class teaching resources.



**Drones to the Rescue Bushfires**



**Drones to the Rescue Floods**



**Drones in Forestry**



**Healthcare in the Himalayas**



**Code, Fly, Deliver**



**Drone Club Kit**



**Tournament of Drones**



**Coming soon!**

# Pippa & Dronie

Pippa & Dronie is an illustrated children’s book that takes students on an adventure with scientists and drone professionals, to explore the different ways modern STEM skills are used to gather data, and solve real world challenges.

Dronie flies through whale snot to collect DNA samples (urgh yuck, but kinda cool), maps coral on the Great Barrier Reef, and in Kakadu National Park a crocodile even tries to jump up and grab her!

Learning promise	Learning outcomes
<ul style="list-style-type: none"> <li>➤ Create positive perceptions of STEM and Geography.</li> <li>➤ Meet real scientists and drone professionals and explore what they do.</li> <li>➤ Explore the interactive coding game to go beyond the book.</li> <li>➤ Be exposed to great STEM role models and the real world applications of drones.</li> </ul>	<ul style="list-style-type: none"> <li>➤ All lessons are mapped to the Australian Curriculum and each lesson has its own learning intentions.</li> <li>➤ The lessons cover Science, Literacy, Maths, Geography, Design and Digital Technologies.</li> <li>➤ Health and PE and incorporates cross-curriculum priorities including Aboriginal and Torres Strait Islander Histories and Cultures.</li> <li>➤ Learn how technology can be used to support problem-solving.</li> </ul>

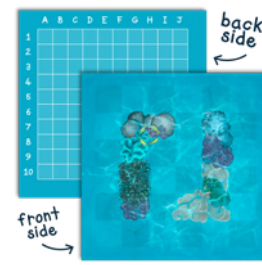
## Pippa & Dronie individual items



**Book + Teacher Resources**  
\$19.95



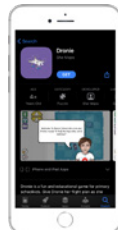
**Big Book**  
\$55



**Image Mat**  
Single \$330 / Double \$462



**Dronie Plushie**  
\$35



**Dronie Coding Game (App)**



**Dronie Coding Game (Web-based)**

[SHOP NOW](#)

[ENQUIRE NOW](#)

## Pippa & Dronie packages

ITEM	SMALL	MEDIUM	LARGE
BOOK	x5	x10	x30
BIG BOOK	x1	x1	x2
IMAGE MAT SINGLE	✓	✓	✓
DRONIE PLUSHIE	✓	✓	✓
TEACHER RESOURCES	✓	✓	✓
DRONIE CODING GAME (APP)	✓	✓	✓
DRONIE CODING GAME	✓	✓	✓
CODING GAME PRINTABLES	✓	✓	✓
AUTHOR READING (VIDEO)	✓	✓	✓
<b>PRICE (INCL GST)</b>	<b>\$534.25</b>	<b>\$634.00</b>	<b>\$1,137.50</b>

[SHOP NOW](#)

[ENQUIRE NOW](#)

### What is an image mat?

Image Mats are great for creating real-world scenarios and coded mission plans!

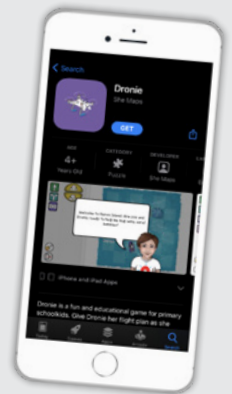
Our standard Image Mat is a 2mx2m fabric banner that is washable so students can walk on it as part of their code development.



We have a range of locations to choose from.

### Dronie the App

Dronie is a fun and educational game for primary school kids. Give Dronie her flight plan as she travels around Australia, helping out real-world scientists, from the Great Barrier Reef to the Pilbara.



The app complements the book and allows your students to further explore the world according to Dronie, as well as learn block coding which gets increasingly more challenging the further they go!



### Buy 1 and give 1

Buy a copy of Pippa and Dronie, and you automatically donate a copy to one of our charity partners, [Ardoch](#) and [Deadly Science](#).

They work with under-represented communities, and provide students with opportunities to experience STEM.



# Classroom Drone Essentials

In this edutainment experience, your students will become geospatial scientists for the day, be exposed to great role models, challenge unconscious bias, explore applications of drone technology, understand safety and drone regulations as well as learn how to fly and code educational microdrones.

## What's covered

### MODULE 1

#### Drone career pathways

In this module, we cover how and where are drones used in industry, meet industry role models and look at the importance of working towards gender parity and diversity within STEM.

### MODULE 3

#### Manual flight

In this module, we practice manual flight and battery management. The students learn how a drone moves manually, and demonstrate competence as a drone pilot to control a microdrone.

### OPTIONAL

#### Junior Drone Pilot License test

Students have the opportunity to gain their Junior Drone Pilots Licence by demonstrating they can set up a safe drone flying area, perform all safety checks, safely manually fly a microdrone, and safely perform coded flight using a microdrone and visual programming.

### MODULE 2

#### Drone safety

In this module, we discuss the different roles and responsibilities of drone pilots, pre-flight safety checks and using manual controls to fly the microdrones.

### MODULE 4

#### Coded flight mission

In this module, the students are given a scenario where they've been tasked with being geospatial scientists for a day to collect data for the local emergency services. Using block coding, the students plan and carry out their mission!

### BONUS

#### Tips and tricks

She Maps will share lots of tips and tricks, including equipment set up, synchronising the drones, classroom management, and general troubleshooting.

## Learning outcomes

- Explore applications of drone technology.
- Understand and act according to relevant drone regulations.
- Evaluate and implement safety processes.
- Manually control a drone in a safe manner.
- Conceptualise a hypothetical mission based on a real life situation and propose ideas for its solution.
- Use block code to automate a drone flight in accordance with the mission.
- Collaborate to iterate and improve their solution.
- Use digital storytelling and persuasive text to demonstrate understanding.
- Explore diversity in STEM and create confident STEM learners.
- Connect students with real world problems and applications.



## There are three convenient ways you can access Classroom Drone Essentials

### TECHNICAL SUPPORT



#### Do-It-Yourself Professional Learning

Access an endless supply of drone and geospatial teaching resources by purchasing a She Maps Membership.

#### The She Maps Membership includes:

- Annual access to all our drone and geospatial programs, and every new resource we add.
- Easy access to lesson plans, assessment rubrics, activity sheets, posters, StoryMaps and inspirational video content.
- Over 40 hours of easy to access online professional development.

This is great for teachers who are already confident flying drones in their classrooms.

#### Pricing:

- Individual License: \$240
- Department License: \$495 (Max 3)
- For whole school or district licenses contact us

[SHOP NOW](#)
[ENQUIRE NOW](#)

### BALANCED SUPPORT



#### Supported Online Professional Learning

Build your confidence and capabilities when you join our online teacher professional learning sessions. Learn how to set up and use microdrones in your classroom. We'll teach you how to teach with drones, including both manual and coded flights.

#### Each online call is led by a qualified She Maps instructor and includes:

- 3 x 45 minute professional learning sessions for 1 teacher.
- 1 x class call to present how drones are used in a real world context and answer student questions.
- She Maps Membership

#### Need to include more teachers?

Add your colleagues to join the same 3 x 45 minute online personalised teacher professional learning sessions.

Single 45 minute sessions can be arranged and personalised to meet school needs.

[SHOP NOW](#)
[ENQUIRE NOW](#)

### School packages

Professional Learning can be packaged up with the purchasing of drone equipment and teaching resources. Check out our Classroom Drone Essentials – Online Together Packages found on page 11.

## MAXIMUM SUPPORT

**Face-2-Face Incursions**

Give your students an amazing immersive experience and book one of our certified She Maps instructors to come to your school deliver our programs.

**Face-2-Face Incursions includes:**

- Learn to fly and code microdrones
- Max 30 students/teachers per session

The pricing does not include travel expenses.

Where possible we always try to ensure one of our She Maps Instructors is in easy travelling distance from your school or education facility.

**Pricing:**

1 x 2.5 hour session: \$2,050 inc. GST  
Half day program

2 x 2.5 hour session: \$3,345 inc. GST  
1 day program

4 x 2.5 hour session: \$4,700 inc. GST  
2 day program

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## Professional learning session – what's covered

During the Online Together professional learning sessions, we cover the following topics:

**Set up**

- ✓ Getting to know our resources and the Classroom Drone Essentials program
- ✓ How to set up your drones and tablets (school or BYOD) for classroom use
- ✓ How to set up a space for safe flying

**Taking flight**

- ✓ How to keep your students and the drones safe when flying
- ✓ Taking that first flight with your students
- ✓ How to code with the Tello

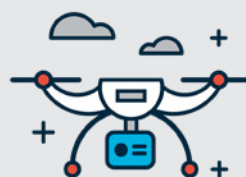
**Curriculum**

- ✓ Aligning our teacher resources to your learning outcomes
- ✓ Extension units of work and activities
- ✓ Support to develop scope and sequence for subject proposal
- ✓ Tips and tricks

**Technical troubleshooting**

- ✓ Classroom management tips and hacks

### Classroom Drones Essentials packaged with drone equipment and balanced support



**DRONE  
EQUIPMENT**



**PROFESSIONAL  
LEARNING**

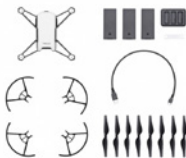








**TEACHER  
RESOURCES**



**ONGOING  
SUPPORT**

## Classroom Drone Essentials - Online Together Bundles

PACKAGE		SMALL	MEDIUM	LARGE
<b>MICRODRONES</b> Tello EDU Boost Combos		5	7	10
<b>TEACHER PROFESSIONAL LEARNING</b> 45 minute sessions		3	3	3
<b>CLASS CALL</b> 45 minute session		3	3	3
<b>IMAGE MATS</b> Great for creating real-world scenarios and coded mission plans!		1	2	2
<b>LIPO BATTERY BAGS</b>		2	2	2
<b>12 MONTHS 1-1 TECH SUPPORT</b> for 1 teacher		✓	✓	✓
<b>12 MONTHS SHE MAPS MEMBERSHIP</b> for 1 Teacher		✓	✓	✓
<b>PRICE INC. GST</b>		<b>\$2,594</b>	<b>\$3,522</b>	<b>\$4,419</b>
		Includes free delivery & over \$1,800 worth of equipment you get to keep!	Includes free delivery & over \$2,750 worth of equipment you get to keep!	Includes free delivery & over \$3,650 worth of equipment you get to keep!

[SHOP NOW](#)
[ENQUIRE NOW](#)

# She Maps Membership

A She Maps Membership provides you annual access to world-class drone and geospatial teaching resources and over 40 hours of online teacher professional learning.

Our resources are developed in collaboration with industry experts, to enable us to develop real world, practical problem-solving lessons that aim to inspire, engage and challenge students.

As part of our membership, you will be invited to attend STEMinars and receive regular emails filled with drone and geospatial content, new teaching resources, programs, competitions and more.

**We welcome you to become part of a growing community of like minded teachers!**



## Teaching resources

Our teaching resources are mapped to the Australian Curriculum and include lesson plans, assessment rubrics, activity sheets, posters, StoryMaps, presentations and inspirational video content. They are ready-to-teach!

## Professional learning (self-paced)

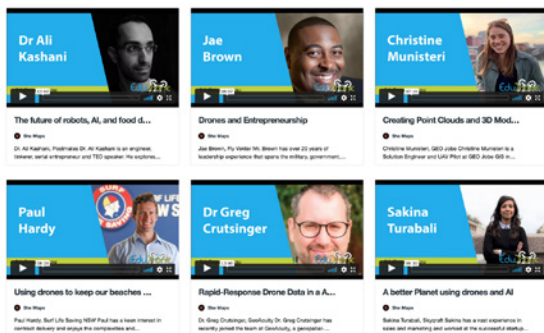
In your own time, you can work your way through our professional learning for our signature program, Classroom Drone Essentials, to our advanced Drone Mapping course, and our competition resources.



## Diverse industry role models

Today, women are vastly underrepresented in science and technology industries. She Maps have created a suite of posters to celebrate some wonderful role models and the important work they do.

**Browse & View Authentic Industry Videos.**



**Video library**

We have recordings of over 100 engaging presentations from industry experts, academia, and classroom teachers, all using drones and geospatial skills in their careers.

These can be used to introduce a topic, or inspire the students to understand how drones are used in industry.

**Tournament of Drones kit**

This Tournament of Drones teachers pack includes everything you need to run an amazing interschool or intraschool tournament of drones.

The competition is designed to test students' teamwork, problem-solving skills, creativity, technical flight skills, and analytical thinking. But most importantly, it is supposed to be FUN!



**Drone Club kit**

This Drone Club Kit will provide you with everything you need to run a successful drone club. It includes essential information, checklists, posters and 30 ready-to-teach activities your students will love!

Whether you are just starting out or looking for a new direction in your STEM club, this kit is a reliable planning tool for coordinators of Drone Club for a variety of situations.

**Individual, department, whole school, and district licenses available.**

[SHOP NOW](#)

[ENQUIRE NOW](#)

**By becoming a She Maps member, you will be assisting us to:**



**Eliminate unconscious bias and grow diversity in how STEM** is perceived and who does it. We need to encourage more girls to pursue a career in STEM, and your teaching can help us achieve that.






**Provide STEM opportunities to underrepresented communities** because as a certified Social Enterprise, we commit 50% of our profits to our Impact Program Projects.

# Drone Club Starter Packs

Start your drone education program by launching a Drone Club at your school. This is a fantastic way to increase interest and engagement in drones for both your students and fellow teachers.

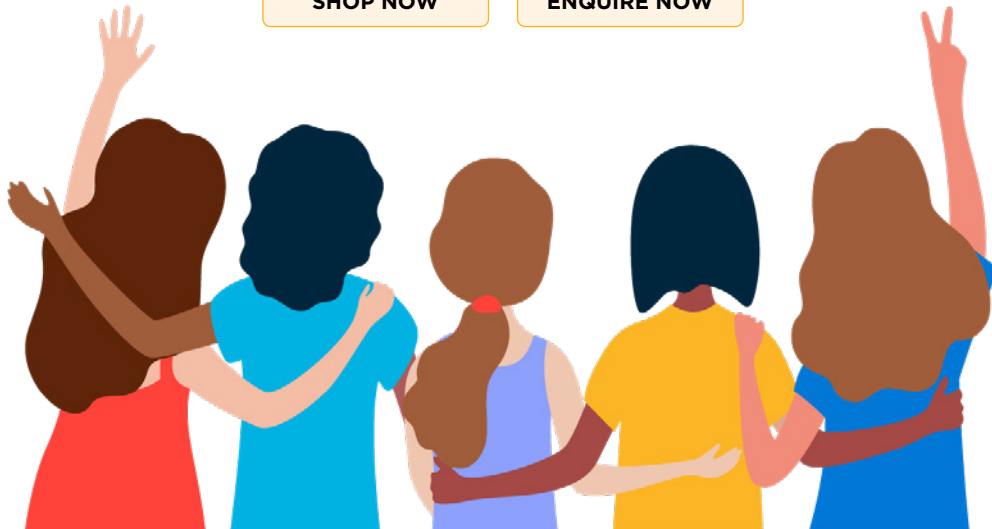
Our Drone Club Kit provides you with everything you need to run a successful drone club. It includes essential information, checklists, posters and 30 ready-to-teach activities your students will love!

## Drone Club packages

SMALL	MEDIUM	LARGE
		
<ul style="list-style-type: none"> <li>▶ 2 x Microdrones (DJI Tello EDU Boost Combo)</li> <li>▶ Drone Club Kit teacher resource</li> </ul>	<ul style="list-style-type: none"> <li>▶ 3 x Microdrones (DJI Tello EDU Boost Combo)</li> <li>▶ Drone Club Kit teacher resource</li> </ul>	<ul style="list-style-type: none"> <li>▶ 4 x Microdrones (DJI Tello EDU Boost Combo)</li> <li>▶ Drone Club Kit teacher resource</li> </ul>
<b>\$667 inc. GST</b>	<b>\$996 inc. GST</b>	<b>\$1,265 inc. GST</b>

[SHOP NOW](#)

[ENQUIRE NOW](#)



# World-Class Drone and Geospatial Teaching Resources

All units of work are designed and created in collaboration with industry experts. They are linked to the Australian Curriculum across multiple learning areas both inside and outside the STEM-identified subjects.

Each resource includes everything you need including learning intentions, curriculum links, lesson outlines, assessment rubrics, teacher presentations, StoryMaps, videos and worksheets.

By using these programs you help to equip your students with the necessary STEM skills and knowledge that will enable them to engage with the careers of the future.

## Drones to the Rescue Bushfires



**SUITABLE YEARS 5-6, 7-8**

This inquiry follows a case study approach using a StoryMap, to investigate the causes and impacts of one of the most common and costly hazards in Australia - bushfires.

**\$39 inc. GST**

## Drones to the Rescue Flooding



**SUITABLE YEARS 5-9**

This inquiry follows a case study approach using a StoryMap, to investigate the causes and impacts of one of the most common and costly hazards in Australia - floods.

**\$39 inc. GST**

## Drones in Forestry



**SUITABLE YEARS 5-9**

Sustainable forests are managed using a variety of digital systems including drone and satellite technologies.

**FREE**

### Healthcare in the Himalayas



**SUITABLE YEARS 5-9**

Using the real world application of drone technology, with our partner Nepal Flying Labs, students will simulate the transport of critical medical supplies to remote villages in Nepal.

**\$39 inc. GST**

### Code, Fly, Deliver



**SUITABLE YEARS 5-9**

Through short videos, the Swoop Aero team guides the students to follow five important steps to create their own drone delivery solution that solves a community need.

**\$39 inc. GST**

### Drone Club Kit



**PRIMARY & SECONDARY**

Our Drone Club Kit provides you with everything you need to run a successful drone club. It includes essential information, checklists, posters and 30 ready-to-teach activities your students will love!

**\$39 inc. GST**

### Tournament of Drones



**PRIMARY & SECONDARY**

This Tournament of Drone teachers pack includes everything you need to run an amazing interschool or intraschool tournament of drones.

**\$39 inc. GST**

### Pippa & Dronie



**SUITABLE F-4**

An illustrated children's book that takes students on an adventure with scientists and drone professionals, to explore the different ways modern STEM skills are used to gather data, and solve real world challenges.

**\$19.95 inc. GST**



**All our teaching resources can be purchased individually or you can access all the resources when purchasing a She Maps Membership for \$240 per annum.**

**BUY NOW**

[SHOP PRIMARY RESOURCES](#)

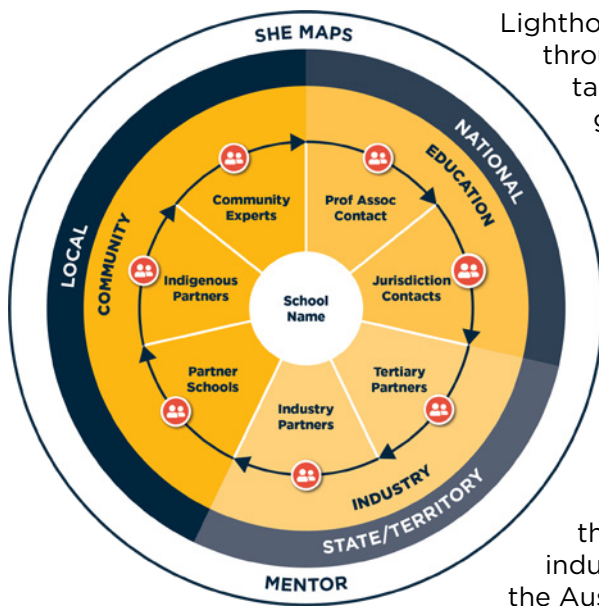
[SHOP SECONDARY RESOURCES](#)

[ENQUIRE NOW](#)



# Lighthouse Schools Program

This is She Maps' highest supported program, providing schools with an evidence-based inquiry approach to continuous improvement in Geo-STEM teaching and learning.



Lighthouse schools join our community of practice through a connected Professional Learning Network, tailored curriculum focused on the development of geospatial skills using drones as the centrepiece and guidance by a She Maps Lighthouse mentor.

This secondary Geo-STEM school program extends student learning as they gain exposure to critical 21<sup>st</sup> century STEM skills and are given industry insights with real-world problems to solve. Teachers are personally supported by a She Maps Lighthouse mentor, and Dr Karen Joyce, a leading international researcher in the spatial sciences. Our Lighthouse Schools Program is a progressive and tailored education initiative where teachers are supported to develop their capability in teaching critical Geo-STEM industry skills, through real-world problems, mapped to the Australian Curriculum.

## This program aims to empower schools to engage in a process of inquiry to:

- Determine the knowledge and skills students and teachers need.
- Deepen teacher capability in Geo-STEM knowledge and skills with the support of:
  - Curriculum-mapped Geo-STEM teaching and learning resources;
  - A She Maps mentor;
  - A tailored Professional Learning Network including sustainable links with industry, universities, and community groups.
- Increase student confidence through engagement in learning experiences.

## How to become involved

This program is an invitation-only program. Register to join the wait list by emailing [hello@shemaps.com](mailto:hello@shemaps.com)



# DroneBlocks

Once your students master block coding, they may be up for more of a challenge. Learning a coding language such as Python or JavaScript is a valuable skill for our digital natives. But for those of us who are not digital natives or coders, teaching students this skill can be a bit daunting!

We have partnered with DroneBlocks to bring their drone coding platform to you. DroneBlocks provides a basic block coding platform, and line based coding platforms to enable you and your students to fly your Tello autonomously.

They also provide a full platform of professional development and resources to support you and your students to learn how to code with various coding languages.

The DroneBlocks Curriculum can be applied with varying age ranges and is extremely conducive to students with diverse learning styles by helping them explore math, science and logic through fun and practical application.

Students will learn Block, Python, and JavaScript coding by executing their code on small indoor friendly Tello drones that will fly autonomously indoors.

## Students will:

- Program Tello and Tello EDU using more advanced programming techniques such as JavaScript, Python, and OpenCV.
- Understand and implement more complex coding functions such as loops, variables, and logic.
- Work through real-world applications with drones such as creating a drone lightshow performance and panorama challenge.
- Use the DroneBlocks Simulator to fly through obstacle courses and create shapes and patterns with the simulator trail.
- Control the Tello camera through OpenCV, and use OpenCV for ArUco marker recognition.
- Code the Tello to be fly with keyboard shortcuts in OpenCV, or design your own custom control panel in NODE-RED.
- Use the Tello EDU swarm function through Python coding and NODE-RED.
- Access the Tello video stream through Python coding, or using the DroneBlocks Desktop App.
- Work through over 100 individual lessons with easy to follow video instructions.
- Troubleshoot common coding software challenges.

## What's covered in the three hour professional learning Python session

This three hour professional learning session is great fun and really stretches educators minds to see how these microdrones can be used to teach so many different STEM lessons.

### Python language

You will test your coding environment and demonstrate your knowledge of Python language by completing an easy to code game. This session covers some of the Python basics such as using import function to use other modules in your Python code, getting input from the person playing your game (the user) and basic algorithm using if-then-else.

### Tello and Python

This session covers installing and testing Tello Python libraries. You will import the required tools, learn about virtual environments and setup a Jupyter notebook. Once you have completed this session you will be able to successfully connect to your Tello drone from Python as well as send it commands and see the camera.

### Computer vision on Tellos

In this session, you will install OpenCV and get your drones to react to ArUco markers. This is a fun and exciting process of getting your drone to perform different commands based on what markers it recognises with its camera.

COURSE 1	COURSE 2	COURSE 3	COURSE 4	COURSE 5
<b>Simulator</b>	<b>Block Code</b>	<b>JavaScript</b>	<b>Python</b>	<b>NODE-Red</b>
Explore DroneBlocks training from anywhere, without a drone	Go from simple to advanced block coding	A simple interface to start mastering line based coding	Coding with Python	Code with NODE-Red

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[ENQUIRE NOW](#)

# Drone Mapping Course

Drone Mapping training is suitable for schools looking to use sub 2kg drones for mapping missions outdoors. This course will provide the participants with everything they need to learn about drone mapping for data capture and analysis.

## Mission planning

We'll guide you through making decisions associated with where you can fly (legally and ethically), the sort of drone to purchase for your application, the apps you'll need for mission planning, and how to create an effective flight plan to acquire data suitable for environmental mapping.

## Data pre-processing

After you've captured your amazing image data, you'll need to perform pre-processing to create an orthomosaic. Perhaps you also want a 3D model. We'll help you navigate the software required to create your mosaics and form the basis of further analysis.

## Field survey

It's often necessary to calibrate and validate our drone data using in-situ field observations. We'll help you create and execute your survey plans to supplement your image data.

## Information extraction

The most important part! Turning your data into information. We'll cover some GIS basics including an introduction to your choice of ArcGIS Pro or QGIS (open source), displaying data, incorporating your field survey and other layers, creating new data through digitising, and finally communicating your output with some effective cartography skills.

## There are three convenient ways you can access drone mapping

### TECHNICAL SUPPORT



#### Do-It-Yourself Professional Learning

Drone mapping course which you can work your way through.

Approximately 16 hours.

### BALANCED SUPPORT



#### Supported Online Professional Learning

We'll teach you how to map with drones. Each virtual call is led by a qualified drone mapping and data analysis expert.

\$750 (3 x 45 minute  
1 participant)

### MAXIMUM SUPPORT



#### Face-2-Face Incursions

Let us come to you and our qualified drone mapping and data analysis expert will teach you how to carry out quality drone mapping missions.

\$4,095 (1 day)  
\$6,200 (2 days)

[SHOP NOW](#)
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# Drone Equipment

Our collective depth of experience in working with schools enables us to provide expert knowledge, advice and support when it comes to purchasing drones and geospatial equipment for your school. But beyond the sale of the equipment, we also provide answers to all your frequently asked questions, and can help you to trouble-shoot any issues you might have.

**We've written some great articles to support you in choosing the right drone equipment for your school.**



## The Ultimate Guide to Buying Educational Drones

[READ ARTICLE](#) ➔



## 3 Types of Microdrones for Drone Lessons in the Classroom

[READ ARTICLE](#) ➔



## What are the Best Educational Drones for Kids in School?

[READ ARTICLE](#) ➔



## Do I Need This Certification to Fly Drones?

[READ ARTICLE](#) ➔

## Why we recommend that you DON'T purchase microdrones from your local retailer. Tello versus Tello EDU

We recommend that schools purchase the Tello EDU, over the Tello. This is because the Tello EDU has been created with schools and learning in mind and sits within the Education division of DJI. It has more access to the SDK (software developers kit), than the consumer range Tello, for more advanced coding features.

[READ ARTICLE](#)



## How to fly microdrones?

The Tello EDU microdrones can work with multiple devices, including phones, tablets and laptops, but when budgets allow, we recommend that schools purchase dedicated tablets to manually fly the drones. When using computers alone, the students never get to experience manual flight, which is definitely part of the fun! You can purchase reconditioned tablets from [www.greengadgets.com.au](http://www.greengadgets.com.au)

When you purchase from She Maps you receive the following benefits:



**Free delivery on orders over \$300**



**12 months technical support**



**Optional 15 minute set up call from a She Maps Instructor**


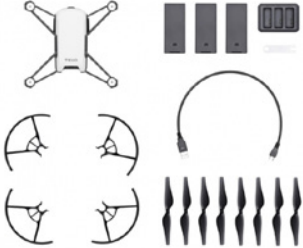


## Classroom kits - equipment only

SMALL	MEDIUM	LARGE
<ul style="list-style-type: none"> <li>5 x Tello microdrones EDU Boost Combo (includes batteries, charge hub &amp; spare propellers)</li> <li>1 x Image mats (2m x 2m)</li> <li>2 x Lipo battery bags</li> </ul>	<ul style="list-style-type: none"> <li>7 x Tello microdrones EDU Boost Combo (includes batteries, charge hub &amp; spare propellers)</li> <li>2 x Image mats (2m x 2m)</li> <li>2 x Lipo battery bags</li> </ul>	<ul style="list-style-type: none"> <li>10 x Tello microdrones EDU Boost Combo (includes batteries, charge hub &amp; spare propellers)</li> <li>2 x Image mats (2m x 2m)</li> <li>2 x Lipo battery bags</li> </ul>
<b>\$1,869 inc. GST</b>	<b>\$2,797 inc. GST</b>	<b>\$3,694 inc. GST</b>

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## Single microdrones

PRODUCT	PRICE
 <p><b>Tello Micdrone TELLO EDU Microdrone - Single</b></p> <p>Tello EDU is an impressive and programmable drone perfect for education. You can easily learn programming languages such as Scratch, Python, and Swift. Write code to command multiple Tello EDUs to fly in a swarm, and develop amazing AI functions. Programming has never been this fun with Tello EDU!</p>	<p>\$219.00 inc. GST</p>
 <p><b>Tello EDU Microdrone - Boost Combo</b></p> <p>Includes: 1 x Tello EDU drone, 3 x batteries, 1 x 3 port charging hub</p> <p>Tello EDU is an impressive and programmable drone perfect for education. You can easily learn programming languages such as Scratch, Python, and Swift. Write code to command multiple Tello EDUs to fly in a swarm, and develop amazing AI functions. Programming has never been this fun with Tello EDU!</p>	<p>\$299.00 inc. GST</p>
 <p><b>Tello Talent Microdrone - Single</b></p> <p>Includes: 1 x spare set of propellers, 1 x propeller guards set, 1 x battery</p> <p>Supports Arduino and Micro Python, a programmable dot matrix LED screen, distance measurement and obstacle avoidance, and the ability to integrate other sensors.</p>	<p>\$389.00 inc. GST</p>
 <p><b>Tello Talent Microdrone - Boost Combo</b></p> <p>Includes: 1 x Tello talent drone, 3 x batteries, 1 x 3 port charging hub, 1 x spare set of propellers, 1 x propeller guards set</p> <p>Supports Arduino and Micro Python, a programmable dot matrix LED screen, distance measurement and obstacle avoidance, and the ability to integrate other sensors.</p>	<p>\$469.00 inc. GST</p>

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## Sub 2kg drones

PRODUCT	PRICE
 <p><b>Autel Evo II Pro V2</b>            1 x Evo II Pro V2            1 x Remote Controller            1 x Intelligent Flight Battery            3 x Propeller Pairs            1 x Single Charger</p>	<p>\$2,699.00 inc. GST</p>
 <p><b>Autel Evo II Pro V2 - Rugged Bundle</b>            1 x Evo II Pro V2            1 x Remote Controller            2 x Intelligent Flight Battery            3 x Propeller Pairs            1 x Single Charger            1 x Safety Case            1 x Micro SD Holder</p>	<p>\$3,099.00 inc. GST</p>
 <p><b>Autel Evo II Pro V2 - Rugged Bundle PLUS</b>            1 x Evo II Pro V2            1 x Remote Controller            3 x Intelligent Flight Battery            3 x Propeller Pairs            1 x Charging Hub            1 x Safety Case            1 x Micro SD Holder</p>	<p>\$3,520.00 inc. GST</p>
 <p><b>AUTEL Fly More Bundle for EVO II</b>            The Autel Evo II Fly More Kit includes 2x 7100mAh intelligent flight batteries, a battery charging hub, 2 pairs of folding propellers, and a shoulder bag to store and carry it all.</p>	<p>\$699.00 inc. GST</p>
 <p><b>AUTEL Smart Controller</b>            The Autel Smart Controller's built-in display at 2000nits is 4 times brighter than a conventional cell phone screen and the 7.9-inch Ultra-HD (2048x1536) touch screen provides clear visibility under direct sunlight. Integrated true tone technology dynamically adjusts the white balance of the display, delivering the best viewing experience for the pilot in any lighting environment.</p>	<p>\$1,759.00 inc. GST</p>

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## Sub 2kg drones

PRODUCT	PRICE
 <p><b>AUTEL EVO II Battery</b> The Autel Evo II Intelligent Flight Battery, with a rated capacity of 82 Wh, has high-energy-density polymer lithium-ion cells. Its cells, powered by laminated cell technology, which greatly reduces the internal resistance and improves the available capacity of the battery, provide an excellent battery life of 40 min.</p>	<p>\$295.00 inc. GST</p>
 <p><b>AUTEL EVO II Hard Case</b> Protect your EVO II &amp; accessories from harsh environments with the Autel EVO II Rugged Hard Case. This EVO II rugged case (IP67-rated) features a hard exterior shell, built-in automatic pressure equalization valve, and an O-ring gasket to keep everything inside protected from water and dust.</p>	<p>\$295.00 inc. GST</p>
 <p><b>AUTEL EVO II Propeller (pair)</b> Highly intense and tough; Willow-shaped propeller ensures least resistance, highest efficiency, and smallest noise; Foldable design; Foolproof installation.</p>	<p>\$25.00 inc. GST</p>
 <p><b>AUTEL EVO II Propeller Guards</b> The Autel Evo II Propeller Guards are designed to protect the aircraft and any bystanders. The split guards are portable and easy to install. They are made for high intensity, easy to install and detach, taking up little space.</p>	<p>\$31.00 inc. GST</p>
 <p><b>AUTEL EVO II Shoulder Bag</b> The Autel EVO II Shoulder Bag can carry around the EVO II drone and essential accessories easily to and from every adventure.</p>	<p>\$139.00 inc. GST</p>
 <p><b>AUTEL EVO II Battery Charging Hub</b> It can easily charge up to 4 EVO batteries with the standard EVO II charger. Two charging modes are supported: simultaneous charging and alternate charging; Red light alarm for abnormal voltage and temperature.</p>	<p>\$125.99 inc. GST</p>

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## Microdrone accessories

PRODUCT	PRICE
 <p><b>LiPo Battery Bag</b> Convenient way of safeguarding your batteries during charging, transportation, and storage.</p>	\$22.00 inc. GST
 <p><b>Microdrone Spare Parts - Tello Propellers</b> 2 x Propeller pairs</p>	\$5.01 inc. GST
 <p><b>Microdrone Spare Parts - Tello Battery Charging Hub</b> The charging hub is designed for use with Tello LIPO batteries. It can hold up to three Tello LIPO batteries at the same time.</p>	\$26.00 inc. GST
 <p><b>Microdrone Spare Parts - Tello Propeller Guards</b> 2 x Guards pairs</p>	\$9.00 inc. GST
 <p><b>Single Battery - Suitable DJI Tello Microdrone</b></p>	\$29.00 inc. GST
 <p><b>PGY TECH Protective Cage for TELLO</b></p>	\$29.00 inc. GST
 <p><b>PGY TECH Carrying Case for TELLO</b></p>	\$40.00 inc. GST
 <p><b>Ryze Tello Gamesir T1d Controller</b></p>	\$49.01 inc. GST

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## Image mats

Great for creating real-world scenarios, coded mission plans and stepping out code. We have a range of locations to choose from, or schools can request a specific location.



### Cloth Image Mat (2m x 2m)

Great for creating real-world scenarios and coded mission plans!

**\$330 inc. GST**

[SHOP NOW](#)



### Cloth Image Mat (2m x 2m) - Double Sided

Great for creating real-world scenarios and coded mission plans! Twice the fun!

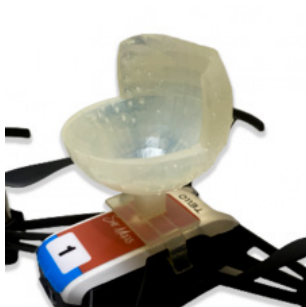
**\$462 inc. GST**

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## 3D printed attachments

We have trialed a number of 3D attachments for the Tello. You can download the print files from their creators on Thingiverse (links below) to print at school, or through our print on demand preferred supplier - [TinkerSteps](#).

Printing the attachments in PLA (what most school 3D printers use) will be a weaker solution compared to printing in resin, which is what TinkerSteps is able to print them in, and what is pictured below.



### Egg Cup for Tello

[Click here for file](#)

**FREE**



### Lego Clip for Tello

[Click here for file](#)

**FREE**



### Mirror Clip for Tello

[Click here for file](#)

**FREE**

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# Become a She Maps Certified Instructor

Our Certified Instructor Program provides you with 1-1 support so you can teach the Classroom Drone Essentials program successfully. This is led by one of our master trainers, giving you 'behind the scenes' access to our program, help you understand how to set up your drones and classroom successfully, and how to execute an engaging program.

This program is taught either online or face-to-face. Each option is taught as a personalised program so you get the most out of the training for your staff.

ONLINE	FACE-TO-FACE
<ul style="list-style-type: none"> <li>▶ 5 x online and personalised 60 minute PD sessions, with homework between sessions.</li> <li>▶ 12 months access to our online Instructor resources portal.</li> <li>▶ 12 months access to our online membership, Orbit.</li> <li>▶ Ongoing tech support for the year.</li> </ul>	<ul style="list-style-type: none"> <li>▶ 3 day personalised program conducted on location.</li> <li>▶ 12 months access to our online Instructor resources portal.</li> <li>▶ 12 months access to our online membership, Orbit.</li> <li>▶ Ongoing tech support for the year.</li> </ul>

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# Tailoring Teaching to Learning

At She Maps, we know that each school is unique. Whilst we have a range of products and programs that you can purchase directly, we can also tailor our programs to meet the individual needs of the school, teachers or students. Got something in mind? Simply ask us!

## Orders and payments

There are two easy ways to place your order

- ▶ Purchase directly on the website using a credit card (fees apply): [www.shemaps.com/stem-gear](http://www.shemaps.com/stem-gear)
- ▶ Contact She Maps to either:
  - Organise a quote so you can raise a purchase order
  - Raise an invoice for Electronic Funds Transfer (EFT) or Credit Card Payments (fees apply)

### Here is the information you require to raise a purchase order:

<b>Company Name:</b>	Kaea Pty Ltd trading as She Maps
<b>ABN:</b>	90 628 152 303
<b>Address:</b>	70 Moresby St, Trinity Beach, Cairns, QLD, 4879
<b>Phone:</b>	1300 895 795
<b>Email:</b>	orders@shemaps.com

*Special Note: Orders cannot be made until we've received a purchase order or payment in full.*

## Order processing

Once payment or the purchase order has been received, you will receive an order confirmation from one of our team members.

### Delivery information drone equipment

Drone equipment orders are usually processed within 48 hours and dispatched thereafter. You can also pre-order and nominate a delayed delivery date (the start of a new term for example) if you wish.

Expect delivery of your drone equipment between 5-10 days.

We really work to fill your order in full, first time with no back-orders. If we can't do that, we pay for the cost of shipping the back-order to you.

### Delivery information image mats

If you order includes Image Mats, then the image mat(s) will be delivered separately from the drone equipment from a different location. You can expect separate delivery for Image Mats is approximately two weeks.

Once you've placed your order, we highly recommend that you let the school reception know to expect the delivery.

## Shortcuts

Scan to buy



BUY NOW

Scan to order



ORDER NOW

Scan to subscribe  
to our newsletter



SUBSCRIBE NOW

Scan to schedule  
a meeting



SCHEDULE TODAY

## Dive a little deeper

A selection of ebooks that will provide you a further information on how to launch a drone program at your school



### Flying High with Drones at your School

Learn the 6 steps to launching a successful drone and geospatial program at your school.



### Your Guide to Funding Drone & Geospatial Program

Understand the cost requirements for launching a drone program at your school. Includes a pre-filled budget submission template for you to take to your school leadership!

**Bundle the She Maps Membership up with drones, and professional learning. Check out our packages on [page 8](#).**

## Find us on socials



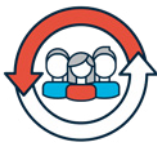
*Disclaimer: Prices in this catalogue are correct as at July 2022. Prices may be changed at any time without further notice. We reserve the right to change our product's prices at any time without further notice.*

# Why Choose She Maps

We are Australia's leading drone and geospatial education company that has an exceptional track record of producing engaging and inspirational learning resources for teachers and students.

She Maps is a certified social enterprise, focused on increasing the diversity in STEM. Our program outcomes are aligned with the 'Women in STEM Decadal Plan', the Australian Government's 'Advancing Women in STEM' agenda and multiple state government STEM education and STEM industry development strategies.

## Our purpose



To grow the diversity in how Science, Technology, Engineering, and Maths (STEM) is perceived and who does it

## Our mission



To inspire a generation to solve some of the world's toughest challenges with STEM

## Our vision



To grow teacher capability and confidence in teaching STEM

Our team is led by Dr Karen Joyce and Paul Mead, and we work with amazing organisations around the world, who are committed to achieving the same goals for their community.



**Dr Karen Joyce**  
Education Director

An experienced educator and internationally known geospatial scientist, who is a drone expert.

- Senior Lecturer in remote sensing and spatial science at JCU.
- Licensed remote pilot with extensive experience flying operationally for environmental monitoring.
- Developed the extensive infrastructure and drone capability at JCU.
- Developed the She Maps programs, extensively mapped to the Australian Curriculum, with the online resources being used by over 1,500 teachers around Australia and overseas.



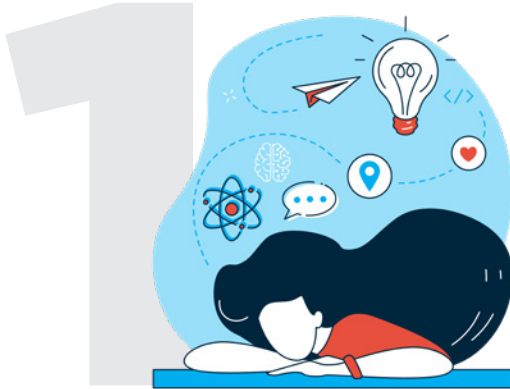
**Paul Mead**  
CEO

Qualified secondary school teacher with a GradDip in Teaching and Learning and a qualified adult educator with a Cert IV in Training and Assessment.

- 11 Years military experience managing complex projects around the world.
- 10+ years business management experience, working in Government and private industry, managing significant projects.
- 5+ years leading the business and strategic development of the She Maps business, including the development of national and international partnerships, and overseeing the delivery of all projects and grants.

# Our Cultural Heart

We are a values led organisation and wear our purpose on our sleeve! You can find out more about who we are, what makes us tick, and what our audacious goals are in this document.



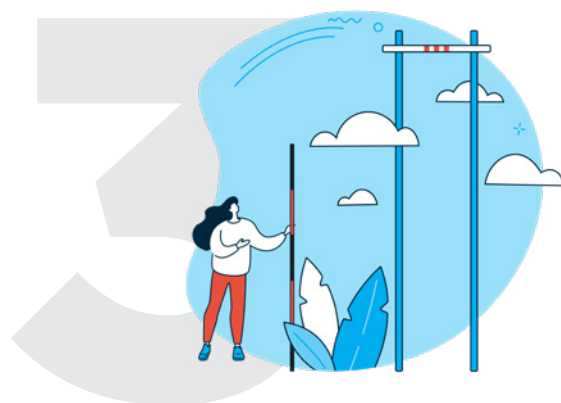
## Future thinking

We see a world where biases have been eliminated. A place where inherent and acquired diversity is embraced and is the foundation for creativity, innovation, and progress.



## Making impact

We aim to make an impact in everything we do. We want to shape the hearts and minds of the next generation, inspiring them to pursue a career in STEM.



## Raise the bar

We set ourselves a bar that is higher than most. Accountability through radical candor, empathy, listening and getting sh!t done!



## Everything matters

Our people, what we do, how we do it... it all counts. We love what we do, we care for and nurture our people, our customers, and our environment.



**DRONE CAREER PATHWAYS**  
**SCIENTIST | PROGRAMMER | ENGINEER**  
**MATHEMATICIAN | SURVEYOR | RESEARCHER**  
**GEOGRAPHIC INFORMATION SYSTEMS MAPPING TECHNICIAN**  
**FILM MAKER | CHOREOGRAPHER**  
**ASSET INSPECTOR | WILDLIFE CONSERVATIONIST**  
**DRONE FARMER | CONSTRUCTION**  
**GIS MAPPING TECHNICIAN | POLICE DRONE OPERATOR**  
**DELIVERY PILOT | ENERGY INSPECTOR**  
**SEARCH & RESCUE WORKER**  
**DRONE-ASSISTED PROPERTY MANAGE**  
**FULFILMENT PILOT | DRONE JOURNALIST**



hello@shemaps.com | 1300 895 795 | www.shemaps.com

