



HEALTH

DEERS



series includes four quarterly magazines, videos, web articles and posters around careers with science, technology, engineering and maths.

Introduce today's students to the careers of tomorrow CAREERSWITHSTEM.COM

## About Careers with STEM

The Careers with STEM series includes four quarterly magazines, along with website articles, teacher resources and videos across four STEM areas: science, technology, engineering and maths. The focus is on independent inquiry and constructivist learning through the application of a range of general capabilities that can 'bridge the academic and vocational divide, providing young people with the resources to navigate the future.'\*

Each magazine issue provides inspiring stories, career role models, job statistics and first step action points towards the careers of the future, and is based on the premise of discovering new areas of innovation through STEM + X – where X is another field of study, a personal passion, or a world-changing goal.

\*Kate Torii and Megan O'Connell, March 2017. **Preparing young people for the future of work**. Mitchell Report 01/2017.

## Who are the Notes for?

The Careers with STEM Teacher Notes are for teachers, careers advisors, parents, STEM-based institutions, or mentors who could use the guides to expose and inspire students towards STEM careers. For teachers, they are ideally suited to the Years 7-12 high school classroom.

The activities are designed specifically for students to gain insight into a variety of STEM careers across a range

of topics, as well as to meet specific, content-based curriculum outcomes. In the classroom, most of the activities will allow teachers to link to industry and skills-based curriculum outcomes.

# Download/read online

Read or download the magazines for free online. CareerswithSTEM.com/read-it-here/



# Discover a world of cutting-edge careers and real-life stories.

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# Using the Careers with STEM magazines in class

CAPABILITIES	ACTIVITY IDEAS
PERSONAL + RESILIENCE	<b>READ:</b> Make your own Luck, Careers with Health p5.
	<b>THINK/DO:</b> Make a list of what action points Lillian Caruana took, as well as the personal skills she used, to find her dream role as a researcher at ANSTO. What does she recommend others do to help find their dream job? What do you think she means when she says people should use their resources? What were Lillian's main resources? Identify the resources you could use when going for your dream job.
	<b>FOLLOW WITH:</b> Use an online template such as the one found here <u>au.hudson</u> . <u>com/job-seekers/career-advice/cover-letter-templates</u> (or find one of your own) to write a cover letter for one of the Hot Jobs listed in the boxes throughout the magazine. Be sure to include a list of your personal skills and other resources that are suited to the job you are aiming for.
LITERACY + SOCIAL	<b>READ: Reef Obsession</b> , Careers with Science p11 as well as <b>Blue Yonder</b> , p12.
	<b>THINK/DO:</b> Imagine you have just completed a work placement or internship with Francesca Gissi. Write a couple of daily or weekly blogs about the activities you carried out, including how you took on a leadership role in one of these activities. You can use Jesse Hawley's <u>blog</u> as a researcher on the CSIRO vessel RV <i>Investigator</i> as a guide.
	<b>FOLLOW WITH</b> : Check and edit your blog against the tips in this video to improve it and make it more engaging:
	www.youtube.com/watch?v=go4wo4WenQQ
CREATIVE + PROBLEM SOLVING THINKING + ICT	<b>READ:</b> VR in the ER, Careers with Science p13, and Top 9 Industries for Science Graduates p6–7.
	<b>THINK/DO:</b> Follow Weber Lui's lead for making virtual reality (VR) or augmented reality (AR) apps as educational tools by choosing one of the top nine jobs for science graduates and planning an application that showcases and teaches students about one or more aspects of that job. Complete some additional research as well as using the notes in the Careers with Science magazine.
	<b>FOLLOW WITH:</b> Read about some of the medical uses of AR and VR as inspiration for your own ideas and to help think about how these apps might impact on the future of health. Visit <u>medicalfuturist.com/top-9-augmented-reality-companies-healthcare</u> .

## **Deep Dive Activity**

Collaborative research into attitudes to robotic surgery.

#### Digital Technologies Curriculum Links:

Yr 7/8 ACTDIP32 - Digital Technologies Process and Production Skills; Yr 9/10 ACTDIP44 - Digital Technologies Process and Production Skills

#### Capabilities:

Numeracy + Teamwork + Social + Creativity + Literacy + ICT

#### Read:

Health and Medicine in the Future: Robots and Machine Learning will Overhaul Surgery, Careers with Health, p13

#### Think/Do:

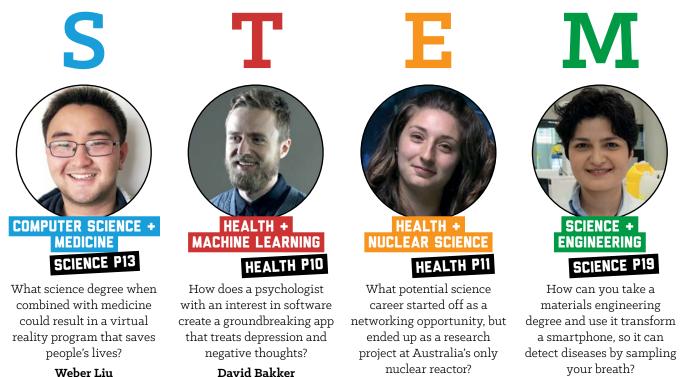
As a team, plan and manage a research project that gathers and stores data online to identify how the general public feels about being operated on by a robot.

#### Before you start, identify how you will meet the following criteria:

CRITERIA	YOUR NOTES	COMPLETED√
<b>Timeline of the project.</b> Sketch out a working timeline at the beginning of the project that one team member can manage and update through the project's duration.		
Write your <b>questionnaire.</b> Draft the questionnaire as a group and then one group member can edit it and upload it for participants to respond to online.		
Carry out at least one <b>virtual meeting</b> during the project.		
<b>Data storage.</b> Store all project research, data and notes in the cloud.		
Collation, analysis and reporting of data. Use computer software such as Prezi or Powerpoint to present: • your project • its findings • projected consequences of your findings to an online audience.		

## Reflection

What I have learnt about careers in STEM	What I found interesting/ inspiring about careers in STEM	What I still want to know about careers in STEM – and where I could go to find out



Weber Liu

Lillian Caruana

# For more career profiles, information and quizzes go to CareerswithSTEM.com







Noushin Nasiri

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