STEM AND MATHEMATICS

STEM AND MATHEMATICS:
A CAREER THAT MAKES A DIFFERENCE

FREE lecture

- A free virtual session for Year 8 to 12 students interested in STEM and mathematics focused careers
- Learn about why a STEM or mathematics career is worth pursuing

STEM and mathematics careers are some of the most valuable, rewarding, and future focused careers on offer. Mathematics study leads to a wide variety of entry points to a host of industries, great salaries, and amazing opportunities, where you will support Australia's future innovation and economy. Have you thought about where continuing to study mathematics could lead you?

We welcome you to explore the possibilities, with Asha Rao. Asha will share her journey to becoming a mathematician. She has not always wanted to be a mathematician. Like many career journeys, hers has not been linear. Now she is a strong advocate for girls and women studying Mathematics and will talk of the benefits of doing so for all students. Asha identifies that one of the differences in workforce opportunities between men and women is their achievement in mathematics at school. Asha will share with us her efforts to break through this source of inequity.

This presentation will support your decision to study mathematical and STEM subjects. For those who question whether it is worth them taking mathematics subjects any longer than they are required, Asha will change your mind after this inspiring event! Join us and be part of the future.

Tuesday 16 August
5.30 to 6.30pm
Free lecture for students, parents and teachers

- The session will be hosted via Zoom.
- Details will be provided in the event ticket when booking.
- All schools, students, parents, careers advisors, and STEM teachers welcome.
- Join as a class, family or individually from any location.
- Book online at www.trybooking.com/BZMUU

About Asha Rao

Indian-Australian Professor and Associate Dean at RMIT, and former Interim Director of the Australian Mathematical Sciences Institute (AMSI), Professor Asha Rao was inducted into the 2021 Victorian Honour Roll of Women in the Trailblazer category. She is passionate about mathematics and gender issues that stymie the progress of women and girls in STEM careers. As the founding chair of Women in Maths, Prof. Rao has put in place several initiatives to improve gender equity within the mathematical sciences in Australia. She is champion for the mathematics and STEM industries, and inspiring others to follow her path.

THE MATHEMATICAL ASSOCIATION OF VICTORIA

TO REGISTER
www.trybooking.com/BZMUU
OR CALL +61 3 9380 2399

ONE MINUTE WITH...ASHA RAO

I'M..

I'm Asha Rao, a Professor of Mathematics. I am the Associate Dean of Mathematical Sciences at RMIT University and former Interim Director of the Australian Mathematical Sciences Institute.

ON MY DESK..

I do a large amount of administration for RMIT which includes looking at how teaching will look like in the future, and how we will organise seminars, workshops and summer school.

I'M READING...

I mainly read non-fiction as I find real life much stranger than fiction. I love reading about humans is all aspects. I love history and my reading list includes Bruce Pascoe's *Dark Emu*, and *Early India: From the Origins to AD 1300* by Romila Thapar. Another is the medical genre, including *The Emperor of Maladies* by Siddhartha Mukherjee and *Being Mortal* by Atul Gawande. I am reading *Delusions of Gender* by Cordelia Fine. This book discusses the changes (and non-changes) in gender and equity over the years. Another at my bedside is *Talking up to the White Woman: Indigenous Women and Feminism* by Aileen Moreton-Robinson

SOMETHING INTERESTING I'VE LEARNT THIS YEAR IS...

That teachers are amazing. When the need arose, we went online and have worked hard to give students as close an experience to face-to-face as possible. We have learnt a lot – the skills and technologies we have learnt will stand us in good stead in the new normal that will come after COVID-19.

DURING COVID-19 LOCKDOWN I KEPT BUSY WITH...

Adjusting to online teaching and finding new ways to connect with my students – using little things to give them the feeling that even though we are doing the learning via technology, I am here for them, as much as I was when it was face-to-face. On weekends, I like to sew and find ways to use mathematics in my sewing. You can also find me in the garden or on a walk.

Professor Asha Rao in her Penrose tiled jacket.

I'D LIKE STUDENTS TO KNOW...

Two things: the first is to carefully watch what we say regarding maths ability. It is so easy for a student to fall into the trap of thinking they are not good at maths. We need to understand the fact that maths is hard but finding it hard doesn't mean you are no good at it. More than anything else, one can only become better at maths by practicing it – that is what makes it easy. But also, that easiness is only until the next concept. I have always said, diving has a degree of difficulty, so why not mathematics? Anyone who does diving knows they need to practice – so is the case with mathematics.

Secondly, relate maths to real life. Find instances in real life that are examples for the maths the students are doing. As someone said, you will come for the examples, but then stay for the maths.

PC OR MAC?

I am definitely a PC person. I find the open source community is much stronger in the technologies that I use such as Latex, which is a compiling package for editing and publishing mathematics.

I GET INSPIRATION FROM...

The people around me. Everyone copes with things in their own way. And we must take the time to offer support to others. The resilience and generosity of people in all situations is amazing and makes me feel fortunate. This was shown especially through COVID over the last couple of years.

MATHEMATICS CAN...

Open doors that you did not even think existed. The future of the world hinges on mathematics – embrace it and it will lift you up.