

# REGIONAL SCIENCE EXCHANGE PROGRAM

An immersion block for regional and rural Victorian Year 10 students with a passion for science, mathematics and technology



Talented Year 10 students from across regional Victoria with a passion for science are invited to attend John Monash Science School (JMSS) in Melbourne for a three-week block as part of our 2022 Regional Science Exchange Program.

John Monash Science School is Victoria's first specialist secondary school focussed on science, mathematics and associated technologies.

The curriculum at JMSS challenges students to explore cutting-edge scientific knowledge in an immersive teaching and learning environment. JMSS is located within the grounds of Monash University and works in partnership with various faculties of the university to develop curriculum, and provide workshops and career directions for JMSS students.

Visiting students will have the opportunity to experience the unique learning environment offered through co-location with Monash University and benefit from working with a large group of keen scientifically-minded students, as well as inclusion in School Houses with Staff Mentors.

As JMSS is a bring your own device (BYOD) environment, students are encouraged bring two devices such as laptop/iPad/tablet/smartphone for daily use as part of lessons.

As part of their exchange experience, students will choose an Emerging Science subject from a range of offerings including:

- Nature and Beauty of Mathematics
- Aquatic Fieldwork Science
- Analytical and Spectroscopic Science
- Biotechnology
- Medical Physics
- Pharmaceutical Science
- Programming for Simulation and Machine Learning
- Astrophysics
- FLEET Science
- Microbiology
- VR Design
- Introduction to Games Programming and Data Science

Students will also have an opportunity to explore Melbourne's diverse cultural landscape through curated excursions - forming a one-of-a-kind immersive educational experience.

#### Interested?



Hear from previous Regional Science Exchange Students at http://jmss.it/regional



Register your interest in participating in the 2022 Regional Science Exchange Program www.regionalscieneexchange.com.au







#### **Timeline**

Applications The application process will commence in

February 2022. Students will apply

directly to their school.

Shortlisting Schools shortlist applicants and submit

applications to JMSS by 4pm Friday 25th

March 2022.

Notice Applicants will be notified by email of

their acceptance or otherwise by Friday

1st April 2022.

Induction Successful applicants and their family

are required to attend an induction meeting with the JMSS staff in regional areas in Term 1 (details to be

confirmed).

Exchange Students will attend JMSS for a

3-week block, either:

Block 1

Term 2, Weeks 3, 4 and 5 (Sunday 1st May

to Friday 20th May 2022).

Block 2

Term 3, Weeks 2, 3 and 4 (Sunday 17th

July to Friday 5th August 2022).

## Accomodation

Students will be billeted out as part of a home-stay arrangement with JMSS families.

A Welcome Lunch for parents, students and host families will be held at JMSS on Sunday of the Exchange blocks at 12pm. All families are welcome to attend, including brothers and sisters. Students will be encouraged to stay with the host family at least one weekend during their 3-week block to experience Melbourne. Weekends are to be negotiated directly with the homestay family. Students in the second block are encouraged to attend Monash University Open Day which is usually the first weekend in August (TBC).

#### **Annual Science Fair**

Students participating in the Regional Science Exchange will return to JMSS for our Science Fair in November 2021 where they will present their projects to an audience of their peers, teachers, academics and our parent community.

### Curriculum

All students will enrol in JMSS Year 10 curriculum and will be able to continue their studies in core subjects like English and Mathematics while at JMSS. JMSS also offers a range of Unit 1 and 2 studies. Students work in both single and double classes with team teaching, and can benefit from sharing information and discussion with up to 50 peers.

Visiting students will also enrol in one of JMSS's Enrichment Science electives. These studies are only available at JMSS and have been co-constructed with assistance from Monash University Academics. Students will be able to nominate their preferences from:

- -Nature and Beauty of Mathematics
- -Aquatic Fieldwork Science
- -Analytical and Spectroscopic Science
- -Biotechnology
- -Medical Physics
- -Pharmaceutical Science
- -Programming for Simulations and Machine
- -Learning
- -Introduction to Games Programming and Data

Science

- -Astrophysics
- -FLEET Science
- -Microbiology
- -VR Design

The final class allocation will depend on timetables and class numbers. Students will undertake three weeks of study in one of these electives. JMSS is also running classes online with Emerging Sciences Victoria (ESV) in 2022 with more information available at www.emsci.vic.edu.au.

Any students (whether on exchange or not) are eligible to participate in ESV classes for a semester at a time.



#### Cost

The costs of this initiative is now covered by the Department of Education. JMSS recently received funding for the Regional Exchange program, thus making it <u>FREE</u> to all students applying. JMSS will also cover school-related costs such as supervision for all school and group activities, as well as a JMSS uniform rugby jumper.

Regional students will have access to JMSS academic and careers' support, counselling and pastoral care.

Students will have homestay arranged for them either with JMSS families or identified families who have had experience with hosting international students.

Students will also be paired up with a JMSS buddy to support them in their new learning environment.

Students will only need to organise their own transport from home to Melbourne and return, including car pooling and public transport options. It is hoped schools will assist with costs and travel arrangements. Applicants may wish to approach local service clubs, community groups and local businesses to sponsor their place on the program, or set up fundraising activities.

# Professional Development for Educators

In addition to the students wishing to take part in this year's Regional Science Exchange, participating schools are expected to nominate a Science or Maths Teacher to undertake Professional Learning with JMSS for either two (2) days (in person or via video-conferencing) or a full five (5) days in person in the last week of students' visit to observe and participate in team teaching, technology use and curriculum development at JMSS.

Teachers and schools are asked to cover the first 2 nights' accommodation costs, along arranging their own transport and meals. JMSS will cover additional nights' accommodation for those teachers electing to visit JMSS in person for the full five days.

#### **Selection Criteria**

The Regional Science Exchange Program is open to Year 10 students throughout 2022 who have talent, interest, curiosity and enthusiasm in the areas of Science, Mathematics and/or Technology.

To apply students need to:

- Describe your interest in science/maths/ technology in a maximum of one A4 typed page.
- Describe in 200 words or less how you will use this opportunity back in your school and/or home town after the experience is over, or how it might impact your future subject or career choices.
- Please consider and list any possible issues regarding being away from home for 3 weeks. These may include part-time work, sporting commitments, and any relevant experiences or issues with staying away from home. Please advise if you are studying any VCE (Year 11 and 12 subjects) in Year 10, and approximately how much work will be required during your 3-week block.
- Applications must include the name of the student, home address and names of parent/s, as well as contact details of the school, science teacher contact, and principal. Geographical location of students' homes and schools attended will also be considered.
   Indigenous students are encouraged to apply.

In support of student applications:

 Teachers are asked to provide a summary of students' academic performance over the period Year 7- 9 with particular reference to science, mathematics and technology capabilities.
 Please comment on student potential and the value of the program to the student and school.
 Maximum of one A4 typed page.



# **Application Process**

Applications are invited from students across regional Victoria. Schools are asked to collate applications and rank students, and forward their applications to erin.hayley@jmss.vic.edu.au by 4.00pm on Friday 25th March 2022.

The final number of places available varies year to year, and is largely determined by available homestay places. As such, we may be unable to offer a place to each student that applies.

Schools will be notified of success or otherwise by Friday, 1st April 2022.

# Virtual School: Emerging Sciences Victoria (ESV)

All Year 9 and 10 students around Victoria are invited to study subjects such as nanotechnology and astrophysics for a whole semester with JMSS via Emerging Sciences Victoria (ESV).

Through ESV, students study with us in real-time and collaborate online with students around Victoria. There are 2 x 1 hour classes per week with some additional preparation tasks and homework.

The subjects offered through ESV are a great extension for students with an interest or passion for science, or used as a science elective, and anywhere from 1 to 50 students may participate. To participate, all students require is a computer with headphones and a microphone, and access to the internet.

For more details, including registration and fee details, please visit www.emsci.vic.edu.au



For further details, and to register your interest for the 2022 Regional Science Exchange, please visit: www.regionalscienceexchange.com.au or phone +61 (03) 9905 1002











