API BURSARY STUDENTS: FINAL YEAR 2022

WHAT OUR RECIPIENTS HAVE DONE AND WHAT THEY LOOK FORWARD TO IN THE FUTURE

DEVELOPING THE POWER SECTOR WORKFORCE FOR OUR FUTURE
We all know that finishing universities studies is a challenge, and an achievement worth celebrating, so we've created this collection of profiles of our final year bursary students as a way to say "yay!" and to recognise their accomplishments.

We also want to say a big "welcome" to these wonderful new entrants to the power sector - it has been an honour supporting these inspiring young professionals through their studies and into careers in power and we look forward to seeing where they go next!

On behalf of the API team and all our bursary students (110+ to date, 40% women), we want to thank our members for their support of the bursary program, including in selecting the students, providing the funding for scholarships (and our operations), and providing work placements and connecting with them throughout their studies.

We wish our graduating students for 2022 all the best as they take the next steps confidently into the power sector!

Why not visit our social media channels to see how we are using these profiles to inspire the next generation, and to showcase the capability and diversity of people in the sector?

David Pointing
Chief Executive Officer
Australia Power Institute

@australianpowerinstitute
@auspowerinstitute

CONGRATULATIONS, WELCOME AND THANK YOU
ABOUT THE API BURSAY PROGRAM … $100K PER YEAR ON SCHOLARSHIPS!

Over the past 16+ years, the API have established a national community of undergraduate students who are passionate about the power sector, and we have supported 600+ graduates to enter the power sector community during this time.

Our goal with the Bursary Program is to inspire a diverse and capable cohort of students early in their university courses to pursue study pathways that will be relevant to the needs of our members and to support their development and studies so they are best prepared for fulfilling technical careers in the power industry workforce.

The API invest $100,000+ in scholarships per year: each student is supported with $1k/year scholarships during their studies and are connected to our API member organisations throughout the tenure. They have opportunities for paid summer work experience (mainly in their third year, but other years too) and are actively connected to the many graduate employment opportunities available with the API’s member community.

The other opportunities the Bursary Recipients receive are:

- **Industry insight Webinars** - Four webinars throughout the year to keep the students connected to industry knowledge and professionals. Two of these webinars include Sparking Connection sessions which allow for informal mentoring and relationship building with our member representatives.

- **Students In Power Summit** - our two day online seminars that celebrates the experiences our students have while on vacation placement (at our member organisations) and an opportunity for them to share the learnings they have forged. Our Bursary students submit a video detailing their experiences, which provides an insight into the industry for not only our younger student recipients to view but to inspire first year university students to consider a future in the power industry.

- **Bursary Advisory Committee** - A leadership opportunity for a select few of our Bursary Recipients. The Advisory Committee guides and supports the API’s activities to develop relevant and interesting activities that promote and deepen the understanding of the skills required for the power sector.

- **TJ Effeney Award** - This Award (created in honour of the late Terry Effeney, one of the Australian energy industry’s greatest contributors) supports Bursary Recipients to undertake a project or program of study (domestic or international) in the energy sector to further their professional career development.

- **Conference Attendance** - The API actively seek free or heavily discounted tickets for our Bursary Recipients to attend industry conferences such as Energy Networks Australia Conference, Energy Week, EECON and CIGRE’s CIDER Symposium.

- **Inspiring the new generation** - roles as ‘ambassadors’ for careers in power through our annual National Science Week event and as speakers in primary and high schools.
Tell us about yourself?
I am a final year electrical and electronic engineering student at Griffith University. I enter every situation with the learning mindset; I can always improve. I enjoy doing my best at everything I apply myself to. More importantly, I enjoy bringing the best out of everyone around me.

Why a career in POWER?
By choosing to study a degree in engineering, I have chosen to turn problems into opportunities. The power industry is experiencing challenges in its transition from the centralised generation of fossil fuel-based power to the future of a widely distributed renewable generation. I want to be part of this transition.

“Problems are opportunities. I chose the power industry so I could be part of the solution in the transition from fossil fuels to renewable.”

Best experience in the industry so far?
Work experience! It’s only through working in the power industry that you really understand the complexities of the challenges that the industry is solving.

Goals for the future?
In the short term, I aim to graduate with first-class honours before joining a graduate program that will enable me to learn and develop the skills I need to succeed in the power industry. I then want to become a Chartered Engineer and Registered Professional Engineer of Queensland (RPEQ) (or equivalent for other states). From here, I want to continue to seek opportunities to further my career.
Best experience in the industry so far?
I enjoyed my placement with Endeavour Energy in the Future Networks Team. I had exposure to project trials within demand management, fault detection and prevention and EV charging. This gave me insight into the directions the power sector can transition.

Goals for the future?
I wish to develop my technical skills and abilities within signal processing, machine learning and artificial intelligence and apply these skills within the power sector. My long-term goal is to be a humanitarian engineer and provide access to power for remote communities.
JOHN TOPE: MY PRESENT, MY FUTURE

Tell us about yourself?
I’ve always enjoyed the challenge of learning how things work. I’m keen to have a crack at anything whether it be running a local music event, learning a coding language or trying to fix my car. I love a good yarn to anyone and everyone and enjoy any activity in the outdoors, whether it be rock climbing, bushwalking, surfing or skiing.

Why a career in POWER?
How is the world going to become 100% renewable??? Engineers! The uncertainty and challenge that the power industry is going to face over the coming years excites me. The power industry is a great way to use technical engineering skills and problem solving to help drive positive change for the future.

Best experience in the industry so far?
My placement at TasNetworks was incredibly rewarding. I was given my own project, where I was able to have a taste of some power system modelling software, challenge myself and create a technical report. I was able to meet many interesting people that all had interesting stories to tell and knowledge to share.

Goals for the future?
I want to be able to inspire younger people to join the engineering industry, as well as travel overseas to work and gain exposure of other power industries.
Tell us about yourself?
I’m a passionate engineer who loves making stuff. In my spare time I work on electronics projects and build up the capability of my personal lab. I particularly enjoy learning how to use new tools because it enables me to create new things or gives me deeper technical insights.

Why a career in POWER?
I have been passionate about environmental protection and sustainability for my entire life. I’ve also always been an electronics tinkerer. As the energy landscape shifts towards renewables, the power industry continues to offer more opportunities to satisfy both my engineering and sustainability itches.

Best experience in the industry so far?
I have most enjoyed site visits to Horizon Power microgrids in regional WA. These visits were a great opportunity to connect schematic with reality whilst also seeing more of our Great Southern Land.

Goals for the future?
I’d like to work in the Australian power electronics sector to help ensure we are creating innovative designs whilst developing sovereign manufacturing capability to ensure we can supply the future needs of our grids.

“I am most excited to see Australia prosper from the steady transition to renewables. The energy industry offers a unique opportunity to help bring about that prosperity for all our fellow Australians.”
DEANNA PARKINSON: MY PRESENT, MY FUTURE

Tell us about yourself?
I have loved all things numbers and data since I was in school, so I’m really excited to be in the final year of my mathematics degree. I have three sisters all interested in STEM. I am an enthusiastic supporter of Women in STEM, and I’m Vice President of the club at UniSA. I am also an Early Careers participant in API’s POWERful Women Leadership Program. I am very excited to continue my career journey!

Why a career in POWER?
With the availability of renewables and their increased incorporation into the grid, Australia is in a unique situation with new challenges and problems to be solved. There are opportunities in the power sector for mathematicians, engineers, data scientists, and more.

Best experience in the industry so far?
Placement! I was fortunate enough to be placed with ElectraNet for the summer, and I’ve had so many learning opportunities I otherwise would not have had.

Goals for the future?
I plan on doing further study and taking my skills into the workforce. I’m not sure where this will take me, but I’ve had great opportunities through API and I’m looking forward to continuing my learning.

“Data gives you knowledge, knowledge gives you power, and power keeps the lights on.”
THARINDU HERATH: MY PRESENT, MY FUTURE

Tell us about yourself?
I have been with the API Bursary Program since 2019 where I have had the fantastic opportunity to work at various member firms including Ausgrid, TransGrid, and now Aurecon. I am really grateful for the experiences and opportunities that have been granted to me by the program and look to forward to further developing my skills and knowledge with a career in the power industry.

Why a career in POWER?
I chose a career in power because I believe that it is an extremely dynamic and interesting field that is currently undergoing immense changes. The transition towards complete renewable generation will be a difficult one, and I would love to be able to contribute to solving the various problems that will arise.

Best experience in the industry so far?
One of my favourite experiences in the industry so far were the various site visits that I’ve had the pleasure of attending with API member companies. These included visits to cable joining pits, pole replacements, the control room, switching stations, and various substations.

Goals for the future?
For the future I want to focus on further developing my skills and understating of Australia’s power network and its operation. I believe that I still have a lot more to learn and many new experiences to have before finding a particular niche that suits me.

“The power industry will undergo immense changes over the next few decades, and I would love to be able to contribute to such key events.”
JORDAN CORSER: MY PRESENT, MY FUTURE

Tell us about yourself?
I’m now a 5th year engineering student, currently completing a placement for my masters, as part of the integrated masters program at UQ. I’ve always been passionate about the environment, a passion that stems from my love of the outdoors – camping, hiking, mountain biking, etc. Aside from this, I love skateboarding, which leads to its own fair share of injuries, I’m learning how to surf, and I play as many sports as I can through the uni (currently netball and dodgeball!)

Why a career in POWER?
As I said, I’m passionate about the environment, and getting a career in power – especially in hybrids and renewables – is a great way to apply this passion. On top of this, I love how varied the work is; there are so many different applications in the power industry for my skills, and I appreciate how this keeps me on my feet.

“The Power industry is evolving very rapidly. There are huge changes coming about in the way we generate power in Australia, and this is creating many challenges, which I’d love to play a part in solving.”

Best experience in the industry so far?
Developing models with Yurika to help inform trading strategies to be utilised on large-scale batteries... and actually having these models mean something. It’s awesome as a student to have genuine discussions with other staff, and have my opinions listened to.

Top skills you bring to the industry?
- Data analysis, software; this is something I both enjoy and I am quite good at. I’ve had several opportunities with Yurika to apply these skills.
- Team work/working with people; I love public speaking, helping others and working in teams.
- Accountability + productivity; completing my industry thesis has meant organising an entire project on my own.
JONATHAN LOPEZ: MY PRESENT, MY FUTURE

Tell us about yourself?
I am a final year student ECSE student at Monash University. When I’m not crumbling under the weight of Uni work, I love to play and watch all kinds of sport (except basketball). Couple of my favorite teams/players are Liverpool, Daniel Ricciardo and Roger Federer. Grew up in Singapore (but I’ll claim I’m Spanish).

Why a career in POWER?
I think that the Power industry is one that really provides me with purpose. So much of what we do these days (and will probably do in the future) revolves around power and it is such a huge core in our lives. I think working in Power allows me to say that “My job helps to make sure other people can do their jobs” and that in itself is so... Powerful. HA! But genuinely, with the way that power generation and the grid are evolving, it is such an exciting time to be a young engineer within this space. Sure AI and Machine Learning are cool but all that wouldn’t work without a stable supply of energy.

“With power being such a core in our lives, it would allow me to say that 'My job helps to make sure other people can do their jobs' and that, in itself, is so... powerful.”

Best experience in the industry so far?
API Placement experience at Aurecon in Melbourne. I have gained so much knowledge and experience from this opportunity that has come about because of the API and I am very grateful to be a beneficiary of this program. I met so many people from industry and got so many chances to see what a real power engineering job entails.

Goals for the future?
To continue to grow the technical and soft skills that are required to be a successful electrical consulting engineer in the Power Industry. Do some good in the renewables space.
INDIGO JAGGER: MY PRESENT, MY FUTURE

Tell us about yourself?
I am a creative person, and I am passionate about developing the most efficient design solutions to engineering problems. My love for engineering and technical knowhow grew throughout high school where I worked on model solar cars and other systems engineering projects. I learnt machining, fabrication, CAD and engineering drawing skills. Since then, I have been lucky enough to get industry experience with many companies and continue advancing my skills. I also love the outdoors and artistic projects.

Why a career in POWER?
I would love to be a part of designing systems that transform energy from potential, kinetic, wind, sun and heat into the electrical energy which powers and drives the modern world. Power is a critical, both to quality of life and environmental impacts. It is rapidly changing with the introduction of renewable energy, and it is immensely exciting to be working on innovative power technologies at the forefront of this evolution. There is also a wide range of opportunities in power to develop a diverse skill set.

“To me, a career in power means contributing to widespread quality of life and the health of the planet while applying a combination of creative and technical thinking”

Best experience in the industry so far?
Working at Wilsons Transformer Company on projects using 3D scanning, CAD and engineering drawing skills. I particularly enjoyed working on research & development projects in the design engineering team.

Goals for the future?
To become qualified and work in a creative engineering role for a company with sustainable and circular-economy values.
Tell us about yourself?
I’m a final year Bachelor of Engineering (Honours) and Bachelor of Commerce at Monash University and I enjoy programming and working on data driven problems. Please check out my LinkedIn to learn more about me!

Why a career in POWER?
In school I loved physics and maths and I thought that electricity was magical. I wanted to keep learning about physics whilst creating something at the same time, so I chose Electrical and Computer Systems Engineering (ECSE). I was not sure what to expect specialising in ECSE but it has turned out be one of the best choices I have ever made.

Best experience in the industry so far?
Whilst undergoing an internship at Aurecon I was fortunate enough to work on a project implementing REFCL’s (Rapid Earth Fault Current Limiter) in buildings along Melbourne train lines. Learning from the engineers within the team and seeing a project fulfilled in real time with real deadlines was an invaluable experience.

Goals for the future?
My goal is to work as an engineer on exciting projects and to continuously develop skills inside and outside of my field.

“You get to learn about the invisible magic that powers modern society. Plus there are jobs!”

DEGREE: Bachelor of Engineering (Honours) and Bachelor of Commerce (specialising in Electrical and Computer Systems Engineering & majoring in Finance)
UNIVERSITY: Monash University

Find me on LinkedIn: https://www.linkedin.com/in/jeremy-v/
Tell us about yourself?
I’m an enthusiastic and innovative fourth-year Electrical Engineering student and am eager to begin my journey into the power industry. I have undertaken vacation placements at Powerlink and Energy Queensland in secondary systems design and transmission design which have greatly contributed to my passion for power engineering. I grew up in a small country town in southeast Queensland before moving to Brisbane where I currently reside undertaking my studies at UQ. I enjoy social sports and activities and have played the cello in an orchestra setting for a large portion of my life.

Why a career in POWER?
My future aspirations involve designing innovative ways to provide solutions within engineering to the rapidly changing world. I feel that the power industry provides endless challenges and opportunities for innovation, particularly over the next 30 years as Australia trends towards net-zero Emissions in 2050.

“I chose to pursue power engineering because of the opportunity to drive change and innovation.”

Best experience in the industry so far?
I have been lucky enough to experience a variety of amazing experiences through Powerlink and Energy Queensland. My most valuable experience was certainly being assigned my own project at each company and being given the opportunity to make my own decisions with supervisor consultation. At both companies, this resulted in site visits which I feel greatly enhanced my knowledge in my projects.

Goals for the future?
My goals for the near future are to:

- Complete my Bachelor of Electrical Engineering (Honours) and Master of Engineering at the University of Queensland
- Secure a graduate position within the power industry
- Continue to further develop my skill set as an innovative engineer in the power sector
SAMUEL O’NEIL: MY PRESENT, MY FUTURE

Tell us about yourself?
I am in my final year at Flinders University, I am currently working on my honours project / thesis. I have two kids and we all love to spend time together playing games and watching movies. We’re all big Marvel fans and enjoy the movies / shows. I enjoy going to quiz nights with my friends from university when I am not under a mountain of assignments. I am eagerly looking forward to finishing my degree and starting work full-time.

Why a career in POWER?
The power generation industry interests me most as it is a fundamental piece of infrastructure that we all rely on every day. It is also one of the largest contributing factors to carbon emissions and I want to be involved in the industry as we shift over from fossil fuels to renewables.

Best experience in the industry so far?
My best experience in the industry so far was the successful completion of my first project. It is really satisfying to see something you designed working.

Goals for the future?
After finishing university, I aim to continue improving my knowledge, I would eventually like to try and get some work on projects involving renewables and other technologies that can improve the state of the electrical network.

“The most exciting part about the industry is that we are on the brink of revolutionary new ideas and solutions to how energy is generated and consumed”
KATE WATSON: MY PRESENT, MY FUTURE

Tell us about yourself?
I’m a final year electrical engineering and environmental science student from Queensland. I love learning new things and being outdoors and my hobbies include distance running, reading and sewing.

Why a career in POWER?
I have chosen a career in power because I wanted to make a difference in the world with my career and there are so many ways to do that in the power industry from being involved in the transition to renewables to ensuring everyone has access to electricity and the price of electricity remains affordable.

Best experience in the industry so far?
Site visits! I love visiting site as it greatly helps in understanding how the components you’re working on fit together and demonstrates how important good design is to construction.

Goals for the future?
I want to become a Chartered Engineer and Registered Professional Engineer of Queensland (RPEQ) as well as spend some time working overseas in an aspect of the industry, such as off-shore wind, that isn’t as prevalent in Australia.

“I chose the power industry because I wanted a career in which I could make a significant difference in the fight against climate change.”

DEVELOPING THE WORKFORCE FOR OUR FUTURE
KYLE ROBERTSON: MY PRESENT, MY FUTURE

Tell us about yourself?
Power industry professional with 10 years' field experience who is driven to work safely, efficiently and reliably in the energy sector. My diverse career background spanning multiple continents has afforded me a strong understanding of testing and commissioning protection & control schemes by applying fundamental industry skills and practices whilst simultaneously employing innovative solutions.

As of 2019, I’ve decided to further my education through a Bachelor of Electrical Engineering. I want to do best by my wife and two kids and show them that it’s never too late to go back to school!

Why a career in POWER?
Why not?!? It’s challenging, rewarding, builds great friendships, and develops my skillsets. What more could I ask for?

Best experience in the industry so far?
Summer placement at Aurecon in the Power Systems Group

Goals for the future?
Graduate with top honours from university and develop my secondary electrical design skills.

“"The power industry shapes the entire planet. As the largest interconnected systems in the world, a stable electricity grid is a prerequisite for adequate medical care, food production, transport, manufacturing and more. It’s something I want to be a part of.”