

AUSTMINE WOMEN IN STEM: METS CAREER PATHWAY PROGRAM

Student Intern Positions –November 2018 – February 2019

Please find below a list of proposed internship placements confirmed with our member companies. Student applications will open on 1 August 2018. Austmine will be hosting an information session at Universities during August and for more information visit our website [here](#) or email info@austmine.com.au.

QLD Positions

AssetOn Group Pty Ltd



Location: Milton, Brisbane, QLD
Website: <https://www.asseton.com.au/>
Discipline: Computer Science or Mechanical Engineering

Position description

AssetOn have a team of experienced professionals that can help students learn about METS and the opportunities available in the industry. They have a supportive culture and innovative team who are willing to share their knowledge and experience. As part of the internship, you will undertake, but not limited to:

- Software development;
- Reliability engineering;
- FMECA studies;
- Life cycle cost modelling; and
- Master data development.

If you are someone who can challenge the status quo and not afraid to speak up and share new ideas and methods, this is a great opportunity.

Company description

AssetOn is an asset management consultancy and specialist resource placement company. We partner with clients to define, design and implement intelligent asset management solutions that bring together people, processes and technology to streamline business operations and save money, across four areas of service:

- Master data as a service;
- Specialised asset management resourcing;
- SAP MM & PM auditing, training and mentoring; and
- Asset management consulting.

Additional information

AssetOn are looking for someone with:

- Software development skills
- Microsoft office suite skills
- Visual Basic (VBA) and Excel skills highly desired

AMC Consultants



Location: Brisbane, QLD
Website: <http://amcconsultants.com>
Discipline: Mining Engineer

Position description

Work with experienced mining engineers and other consulting professionals on minerals industry consultancy projects. Tasks are project specific, will vary accordingly, and are likely to include traditional mine planning activities, but not limited to:

- Open pit design,
- Underground design,
- Scheduling,
- Haulage profile development
- Evaluation.

Company description

AMC Consultants help mining leaders evaluate opportunities, solve hidden productivity challenges, and improve performance across the mining cycle. Put another way, they help miners find smarter ways to mine and unearth hidden business value.

AMC team specialise in surface and underground mines and commodities from base metals to gold, iron ore to mineral sands, and coal to diamonds, using a suite of tools to help safely maximise return on investment and solve complex engineering problems.

Further Information

This position is aimed for students in the second to last years of study, majoring in Mining Engineering.

Sandvik



Location: Brisbane, QLD
Website: <https://www.home.sandvik/en/contact/world/oceania/australia/>
Discipline: Data Science Engineering

Position description

Sandvik is a high tech and global engineering company and this role/internship sits within Sandvik Mining and Rock Technology (SMRT) business, in which the automation business line is a part of. The SMRT business currently has an increased focus on the digitalisation of machinery within the mining industry. As an intern you will be working on an excel based project, analysing information and running models and working in their CRM reviewing processes. This is a great opportunity to be with a company with an open-minded culture, actively working to create a workplace that is characterized by diversity and inclusion.

Company description

Sandvik is a high tech and global engineering company with over 43,000 employees worldwide with a strong commitment to productivity, profitability and safety. There are three main business areas including Sandvik Machining Solutions, Sandvik Minerals Technology and Sandvik Mining and Rock Technology (SMRT) and we currently have 1331 number of employees in the APAC region. The role/internship sits within SMRT business, in which the automation business line is a part of. The

SMRT business currently has an increased focus on the digitalisation of machinery within the mining industry.

Additional information

The successful applicant will undergo a pre-employment medical as part of the employment process at the employer's expense. This is a normal step for many companies engaging in physical or manual activities.

Ausenco



Ausenco is offering 2 positions in 2 different disciplines.

Location:	South Brisbane, QLD
Website:	https://www.ausenco.com/
Discipline / Position 1:	Civil or structural engineer
Discipline / Position 2:	Mechanical engineer

Position description

Ausenco is providing students the opportunity to gain exposure and experience under the direct supervision of a senior engineer. This role will include, but not be limited to, the following activities:

- Participate in engineering assignments under supervision
- Assignment may involve research, design, commissioning of equipment
- Using established procedures, gather and correlate basic data and perform detailed or routine engineering duties and relatively simple tests
- Assist experienced engineers in preparing, coordinating, and reviewing deliverables for the discipline to develop engineering skills in a variety of project related tasks
- Apply mathematical calculations and basic engineering principles to solve defined problems
- Prepare simple plans, designs, calculations and cost estimates for conventional engineering, research and development assignments with guidance from more senior engineers
- Assist to prepare equipment lists and material lists
- Assist to prepare and maintain drawing lists and files

Use your knowledge of basic technical theory and engineering principles within discipline, including fluid flow, heat transfer, thermodynamics, and/or power cycles to learn how you can use these in real-world application.

Company description

Ausenco is a leading engineering company providing consulting, project delivery and asset management solutions to the resources, energy and infrastructure sectors. They add value to client projects and deliver results, even in the most challenging situations. Often that means pushing the boundaries of what's been done before and Ausenco professionals are renowned for combining a realistic view of the world with a willingness to explore and create innovative approaches. Wherever Ausenco work, their core values form the cornerstone of culture and they strive to collaborate with clients and communities to achieve truly sustainable outcomes in health, safety, the environment and community.

Additional information

For a copy of the Ausenco Position description please email info@austmine.com.au.

Mackay Conveyor Equipment



Location: Mackay, QLD
Website: <https://mcequip.com.au>
Discipline: Mechanical engineer

Position description

MCE was founded in October 2010, recruiting experienced key personnel in the area of design, manufacture, project management, and electrical systems to build a team with extensive experience and capability. Work with a dynamic team to get real hands on experience in 3D design, documentations and technical writing and standards implementation. See how you can apply your learnings to real world application. If you are looking for a career where you would be involved in the creation and development of new products, then maybe MCE has just the right opportunity for you!

Company description

MCE design, manufacture and overhaul conveyor equipment for underground coal mines predominantly. MCE focus on quick installation and removal, requiring less people and less risk to people.

Further Information

This position is aimed for students who have completed their third year of study, majoring in Mechanical Engineering.

WSP Australia



Location: Brisbane, QLD
Website: <https://www.wsp.com/en-AU>
Discipline: Mechanical, Civil / Structural or Electrical Engineer

Position description

WSP are offering an intern the opportunity to work as part of a team to assist with delivery of engineering design projects. This role will assist the successful candidate to grow their skills-base and acquire a more specialised understanding of engineering concepts and processes. You will be exposed to, but not limited to:

- Responsibilities expected of an engineering consultant.
- Skills, practical experience and knowledge that is transferable to other employment settings.
- Mentorship, supervision, guidance and feedback from a professional engineer.

Company description

At WSP they develop creative, comprehensive and sustainable engineering solutions for a future where society can thrive. Equipped with an intimate understanding of local intricacies, world-class talent and proactive leadership, WSP plan, design, manage and engineer long lasting and impactful solutions to uniquely complex problems. With 42,000 talented people in more than 500 offices across 40 countries, they engineer projects that will help societies grow for lifetimes to come.

WSP are dedicated to local communities and propelled by international brainpower. They are technical experts and strategic advisors including engineers, technicians, scientists, planners, surveyors and environmental specialists, as well as other design, program and construction management professionals.

At WSP, they design lasting solutions in the Property & Buildings, Transportation & Infrastructure, Environment, Industry, Resources (including Mining and Oil & Gas) and Power & Energy sectors as well as project delivery and strategic consulting services.

WSP make extraordinary efforts to attract, develop, engage and retain the best professionals in the fields of expertise because this is what makes them great.

Their Resources team provides a range of civil, structural mechanical, materials handling and electrical engineering design and project management services to mining and resources clients around Australia.

Additional information

WSP are looking for someone with:

- Excellent communication skills
- Motivated, self-driven and passionate about engineering
- Familiarity with MS Office Suite

Hatch Pty Ltd

Location: Brisbane, QLD
Website: <https://www.hatchaustralia.com>
Discipline: All Engineering Disciplines, Data Science

Position description

Hatch are offering an intern the opportunity to join one of Australia's highest ranked internship programs as published by the Australian Associate of Graduate Employers. You will be offered the opportunity to build relationships with renowned experts, and champion great initiatives to tackle the world's toughest challenges. You will belong to a team that fosters career growth, education and is innovative in nature.

You will be exposed to a range of practical experiences including:

- Collaborating with multi-disciplinary teams to complete project deliverables for clients
- Visiting client sites with your Hatch team to gain an understanding of client requirements
- Receiving coaching and mentoring from experienced professionals and experts
- Presenting on your key learnings and experience at Hatch
- Participating in professional development sessions with senior leadership

Company description

Hatch is passionately committed to the pursuit of a better world through positive change. They embrace the client's visions as their own and partner with them to develop better ideas that are smarter, more efficient, and innovative. Hatch's global network of 9,000 professionals work on the world's toughest challenges. Their experience spans over 150 countries around the world in the metals, energy, infrastructure, digital, and investments market sectors.

Additional information

Applicants must include a copy of their academic transaction to date as part of their application.

Hatch are looking for someone with:

- Are achievement oriented, as evidenced by a strong academic record
- Working toward a bachelor's degree in a relevant discipline

- Leadership and teamwork skills
- Advanced analytical and problem-solving skills
- Collaborators with the ability to think laterally and innovatively to solve problems
- A passion and drive to make a difference
- Are interested in exploring a future with a global consulting company
- Exceptional communication and interpersonal skills

CORE Resources



Location: Albion, QLD
 Website: www.coreresources.com.au
 Discipline: Metallurgical Engineering, Process Engineering, Chemical Engineering

Position description

Core operates an integrated process engineering and metallurgical laboratory business. The internship role will offer opportunity to gain experience across a range of processes relevant to the minerals industry. This may include support for process engineers in development of flowsheets through to conducting and reporting metallurgical tests for our clients. This will provide an opportunity to work with and learn from process engineers and metallurgists who can provide training and guidance in a strongly collaborative work environment.

Company description

Core is a service business, providing specialist metallurgical design services. Core provides services in all aspects of metallurgical testing, process engineering, flowsheet development and site support to assist clients to get projects moving with innovative technical design. Core's client base is global, ranging from small mineral explorers, through to multinational tier 1 groups. Core has strong expertise in almost all mined metals, from traditional base and precious metals through to the strategic metals like cobalt, vanadium graphite and lithium.

Core are looking for someone with:

- Microsoft Office skills

Deswik



Location: Brisbane, QLD
 Website: <http://www.deswik.com.au>
 Discipline: Computer Science

Position description

This internship will enable future software engineers to gain the right development skills to succeed in commercial software development. Deswik's highly technical subject matter (mining) + highly technical software engineering = software and technology problems that are interesting and challenging.

This role may include, but not be limited to, the following activities:

- Implementing and testing changes to code
- Designing and implementing automated tests
- Working with Release Management to ensure the successful release of products

- Working with managers and team leads to make improvements to the tools and technologies used to support the development processes
- Working with technical documentation teams on end user education materials

Company description

Deswik is an equal opportunity employer striving for a diverse, inclusive workplace. Deswik are a company involved in two STEM-related industries (computer science and mining engineering). Deswik have the ambition to be the best at what they do. There is an acceptance within the business to do things differently and try new things. Deswik are open to change and understand technical excellence - their software is used all day, every day, by 9 of the world's top 10 mining companies to solve complicated and valuable problems. Deswik are focused on, and committed to, being a world class consulting and software organization.

Working for Deswik allows you to work for a technical company run by technical people – experience short conversations and managers' who get it.

Deswik are fanatical about delivering outstanding products and customer service, provide fulfilling careers and professional satisfaction for their people. Deswik do things differently and question the status quo, they are flexible and adapt quickly. Above all Deswik are passionate and always strive to be better.

Additional information

Applicants require programming skills in Microsoft .NET environment, knowledge of basic software engineering practices and knowledge areas and excellent written and oral communication skills. Applicants may be required to undertake Cognitive Testing or basic technical skills test. All applicants must submit a copy of their academic transcript with their application.

mining3

Location: Brisbane, QLD
 Website: mining3.com
 Discipline: Computer Science, Mechanical and Electrical Engineering, Mechatronics



Position description

Researchers, engineers and industry experts addressing challenges facing the mining industry. This internship will depend on the final candidate and their discipline and will be thus tailored to their skill set. Mining3 is an ideal work environment for talented students to be a part of commercially viable, industry-led research programs that solve real industry problems. Students will be placed with and mentored by an experienced researcher and work within Mining3's research facilities.

Company description

Mining3 is a world-leading research organisation, directed by its global mining industry members to develop and deliver transformation technology to improve the productivity, sustainability, and safety of the mining industry. Our world-class researchers and engineers develop tangible solutions to industry-identified challenges using both fundamental and applied research, while leveraging our extensive history and acquired knowledge. We accelerate the deliver of real-world solutions from our research, ensuring they are available as rapidly and effectively as possible, by bringing together industry and research expertise.

Paradyn Systems



Paradyn

Location: Fortitude Valley, QLD
Website: <https://paradynsystems.com/>
Discipline: Mining Engineering, Chemical Engineering, Information Technology, Computer Science

Position description

Paradyn Systems is an established IT and Software provider to primarily the Mining industry, with current growth trends, they are keen to attract talented students to the business, with a potential for longer term view to employment. This internship will provide students with practical experience prior to entering the work place, and provide a valuable career path, whilst they are on their exploratory work journey. Paradyn provides an environment whereby students are given experience, both internally and externally in multiple areas including product development, sales, support and service.

This role may include, but not be limited to, the following activities:

- Improve profitability of mining, processing and supply chain operations through the use of advanced software;
- Use of Github to log issues and complete tests;
- Configuring visualisations and analytics;
- Providing consulting and support to clients; and
- Using data visualisations to discover insights within data;

Paradyn Systems are flexible in defining the role to suit the particular strengths of an individual and are passionate about helping each person achieve their career goals by giving experience in different parts of the business. Current employees have tremendous flexibility in working remotely. If you have an analytical mind, like to be challenged, are methodical and hard-working then this is the right internship for you.

Company description

Paradyn Systems has been providing solutions to clients since 2012. The team consists of experienced management, project leaders, data scientists and consultants with diverse backgrounds in mining, engineering, chemistry, artificial intelligence, optimisation, machine learning and data science with many years experience solving real world problems. Paradyn Systems deliver complex intelligent systems that involve autonomous agent-based systems, optimisation, planning, simulation, prediction and forecasting. Their expertise is particularly strong in the areas of supply chain integration for mining, food and beverage, Defence, and chemical industries. Paradyn assists clients with ongoing efforts in advanced data analytics and working towards the goal of autonomous mining supply chains.

Additional information

Paradyn Systems is looking for someone with:

- Strong understanding of MS Excel functions
- Basic understanding of mathematical optimisation or algorithms
- Intermediate knowledge of supply chains or mining
- Quick learner and strong desire to be challenged
- Methodical problem solver
- Interest in advanced IT topics (Eg. AI)
- Interested in working at a startup
- Works well in a team environment
- Drivers license is required.

Sedgman

SEDGMAN

Location: South Bank, QLD
Website: <http://www.sedgman.com>
Discipline: Engineering (Civil, Structural, Process, Mechanical, Mechatronics, Electrical, Systems)

Position description

The Sedgman internship will allow students to work in a challenging and diverse environment to provide basic engineering support to discipline engineers. You will review technical information and make recommendations. You must be receptive to professional development from senior engineers and will undertake engineering administration support work on less complicated aspects of design and simpler phases of minor project support.

As Sedgman continue to expand and execute projects all over the globe, their employees are provided with exciting development opportunities which is what Sedgman value as an organisation. They realise it also takes a broad range of experienced people to deliver projects and therefore are always looking for talented and motivated individuals to join their team.

Company description

Sedgman is a leading provider of mineral processing and associated infrastructure solutions to the global resources industry. Their success is powered by their people and Sedgman believes in a culture that embraces change, navigates risk and thinks big in order to deliver outcomes that exceeds every expectation.

Sedgman offers a complete solution for clients from pre-feasibility through to operations and beyond. Sedgman strive for excellence at every level of resource engineering with a focus on today as well as what is the best solutions for future.

Additional information

Sedgman is looking for someone with:

- Good level of computer skills
- Basic technical ability
- Basic level of technical problem solving ability

MineWare

Location: Milton, QLD
Website: <https://www.mineware.com/>
Discipline: Computer science / Technology



Position description

The MineWare internship will provide students the opportunity to gain first hand practical experience in providing real-time actionable information for real-time productivity improvements. You will obtain work experience within the computer science / technology fields and have exposure with working alongside qualified and experienced colleagues.

As part of your internship, your duties may involve, but not be limited to:

- Update configuration items for existing machines, and run backups for all machines.
- Contribute to service requests such as permissions and report management.

- Complete ISO gap analysis and remediation project tasks.
- Enable automation of software versions reporting.
- Transferral of knowledge into KB articles.
- Addition of configuration file backups to MineWare/FTP/Controller.

Company description

MineWare, a Komatsu company, develops world-leading monitoring and automation systems for ground engagement equipment globally. MineWare's independent monitoring systems for draglines, hydraulic excavators, wheel loaders and electric shovels improve production, reduce maintenance and decrease costs.

Additional information

MineWare are looking for someone with:

- Initiative
- A willingness to take ownership of tasks from start to completion
- Attention to detail
- Self motivated

Experience in the following areas would be advantageous:

- XML
- Windows Operating Systems and Networking
- User security and rights management
- Windows 7 + technology and Windows 2008 + server technologies
- Understanding Firewall, NAT and Routing rules
- Basic network diagnostics
- Basic Microsoft SQL Server and Transact-SQL

CRC ORE



Optimising Resource Extraction

CRC ORE is offering 4 positions as detailed below.

Location: Pullenvale, QLD

Website: <https://www.crcore.org.au/>

Discipline: Engineering (Mining, Mechanical, Engineering) / Geology / Computer science / IT / Mathematics / Mineral Economics

Position description

The CRC ORE internship will provide students the opportunity to gain first hand practical experience in emerging mineral extraction technology. You will obtain work experience within the mining industry and will develop your technical skill set, working alongside qualified and experienced colleagues.

As part of your internship, your duties may involve, but not be limited to:

- Basic software tool development
- Blast modelling
- Sample analysis and reporting
- Development of a web based data collation platform for Grade Engineering / Blasting Data
- Automation of steps in grade engineering evaluation processes
- Report results
- Basic powerpoint presentation development.

Company description

CRC ORE is a Collaborative Research Centre focused on Optimising Resource Extraction in the minerals industry. They are funded by global mining companies, METS companies and research organisations with matched funding from the Australian Federal Government. Headline technology programs under development are Grade Engineering – a process to separate ore from waste much earlier in the mining process and the Integrated Extraction Simulator – a cloud based platform linking individual silos for Whole-of-System process simulation.

In its second term of funding the emphasis is on further development, integration and site validation of these technologies and ultimately to transfer them to new or existing METS companies to deliver to industry.

Additional information

CRC ORE are looking for students with:

- Basic programming skills desirable
- Mathematics skills
- Basic scientific research
- Microsoft Office
- Critical thinking skills
- Problem solving skills

Komatsu Mining Corp



Location: Wacol, QLD

Website: <http://www.komatsu.com.au>

Discipline: Mechanical Engineer or Mechatronics Engineer

Position description

Taking the lead on an industry trend, the Komatsu mining technology team are developing methods to Eliminate Live work through the development of remotely monitored sensing devices. These field devices will remove the need for a manual maintenance inspection by a person.

Under the guidance of an engineering lead, the student will be allocated a project to develop one or more of these sensing device solutions.

Company description

Komatsu Mining Corp. is the world's second largest manufacturer of construction and mining machinery and associated technologies. Founded in Japan in 1921, the company has always focused on providing unrivalled quality in its products, and today the company has an extensive global network of manufacturing and distribution.

Additional information

Komatsu are looking for students with:

- Basic knowledge of sensors and actuators
- Computing skills
- Practical problem solving skills
- CAD software experience

Further Information

The successful applicant will be required to undergo a Drug and Alcohol Screening as part of the employment process at the employer's expense.

Caterpillar of Australia (CAT) are offering 2 positions as follows:

Location: Brisbane, QLD
Website: https://www.cat.com/en_AU.html

Position 1:

Discipline: Information Technology, Mining Engineering, Engineering Computer & Software Systems

Position description

Caterpillar is committed to developing and maintaining a diverse workforce of skilled professionals to serve their customers. A key way to achieve this is to invest in new entrants to the workforce, by providing experiences that will support them in becoming well rounded professionals. This role will be working in the Implementation Team for Mining Technology Enabled Solutions. This team manages the implementation of new autonomous products into mine sites, as well as software upgrades and ongoing product improvement projects. Tasks in this role will include, but not be limited to, the following activities:

- Installation and configuration of database and application software
- Follow project management process
- Documentation, planning and execution of integrated acceptance testing
- Technical problem identification and resolution
- Investigate Application usage for the mining domain

Additional information

Caterpillar are looking for students with:

- Moderate to advanced computer applications skills
- Moderate level communication skills
- Basic to moderate customer service skills

Further Information

The successful applicant will undergo a pre-employment police check, employment verification and medical assessment (at the employer's expense) as part of the employment process. This is a normal step for many companies.

Position 2:

Discipline: Engineering, Computer Science

Position description

Caterpillar is providing students with the opportunity to take an end to end systems level view on a near real time cloud hosted solution for the mining and quarry market. Caterpillar's solution provides a fully integrated order to provisioning service, taking data signals from instrumented machines in the pit and processing these through machine learning algorithms to provide accurate and timely productivity information for their customers. This leading edge technology delivers information to the end user through integrated web and mobile applications to enable them to make decisions that improve and increase the productivity output of their mining operations.

Caterpillar are looking for an intern that has an engineering or computer science background that can work collaboratively with the existing team on understanding the application and extending their use of automation tools to deliver higher levels of product quality, velocity and customer satisfaction. This is a hands on software engineering role that will be supported and coached by existing team

members to deliver on extending the breadth of their automated test suite for both REST end points and User Interface elements, in addition to investigating and delivering a solution to automate their release note generation. As part of Caterpillar's dev-ops approach this will provide significant value to a leading edge product expecting a significant increase in release and deployment frequency to a growing customer base.

Further Information

The successful applicant will undergo a pre-employment police check, employment verification and medical assessment (at the employer's expense) as part of the employment process. This is a normal step for many companies.

Company description

For more than 90 years, Caterpillar Inc has been making sustainable progress possible and driving positive change on every continent. Customers turn to Caterpillar to help them develop infrastructure, energy and natural resource assets.

With 2017 sales and revenue of \$45.462b, Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. The company principally operates through its three primary segments – Construction Industries, Resource Industries and Energy & Transportation – and also provides financing and related services through its Financial Products segment.

Hastings Deering

Hastings Deering



Location: Acacia Ridge, QLD
Website: <http://www.hastingsdeering.com.au/home/>
Discipline: Information Technology

Position description

The Hastings Deering internship will provide students the opportunity to gain first hand practical experience and exposure working with a global Caterpillar equipment and machinery dealer. You will obtain work experience within the information technology field and have exposure working alongside qualified and experienced colleagues.

As part of your internship, your duties may involve, but not be limited to:

- Database reviews
- Provide remote based technical support to software programs
- Troubleshoot problems
- Provide customer service to customers
- Support the Configuration Management Database
- Working with mining technology related in the fields of mine planning and fleet scheduling

Company description

Hastings Deering has an 80 year history of serving customers across Queensland, Northern Territory, Papua New Guinea, New Caledonia and the Solomon Islands, delivering solutions that support their ongoing success. Hastings Deering sells and rents Caterpillar machinery, provides parts and services, and delivers fleet management and productivity solutions for mining and construction job-sites.

Hastings Deering are driven by the aspiration that their customers will choose them time and again because Hastings Deering are the best at delivering outstanding outcomes through genuinely understanding their customers needs.

Additional information

Hastings Deering are looking for someone with:

- Good computer skills
- Attention to detail

Further Information

The successful applicant will undergo a pre-employment medical assessment (at the employer's expense) as part of the employment process. This is a normal step for many companies.