

JKMetSkill

Specifically designed professional development program to accelerate metallurgical performance.

JKMetSkill provides a solid foundation in mineral processing fundamentals supported by practical workshops and project work.

It encourages participants to apply new knowledge directly in the workplace. The program blends face-to-face interaction with online learning.

JKMetSkill can be tailored to the specific needs of the client and delivered in-house.

It is also offered at JKTech offices as a four-day open course.

The program is for early career metallurgists and chemical engineers who want to enhance their technical skills, and other industry professionals such as geologists and mining engineers looking to strengthen their knowledge of mineral processing.

JKMetSkill is designed around three key themes:
Fundamental Process Knowledge

Provides a solid foundation in mineral processing theory and practice using the latest analytical tools and technologies so you can make sound metallurgical decisions using the best available data and observations.

Performance Optimisation

Strengthen your process optimisation toolkit and put it into practice. Use your own processing improvement challenges as a JKMetSkill project, and our technical specialists will provide guidance and support as you develop your optimisation strategies.

Professional Skills

Being the best metallurgist means more than good technical skills; it means that you can manage information effectively, solve problems and convey your ideas clearly and persuasively to others in both written and spoken forms.

Four-Day Open Course

The four-day open course consists of learning modules and workshops that provide an overview of topics ranging from metallurgical calculations, the use of ore characterisation testwork, advanced circuit audit and modelling methodologies, and process engineering statistics.



In-house program

The program can be tailored to the participants requirements. JKTech technical specialists will provide coaching as they work through an individual or group project.

Module 1: Mineral Processing Foundations

Participants select one or all of the modules depending on prior knowledge of the topics:

- Mineralogy
- Liberation and recovery
- Comminution
- Physical separation
- Flotation
- Mineral characterisation methods
- Analytical techniques

We introduce the latest technology tools and examples of world's best practice, underpinned by research-backed scientific fundamentals.

Module 2: Translating Knowledge Into Practice

Select a benchmarking or process optimisation study to conduct in your workplace. Our technical specialists will provide mentoring and technical coaching support and can even provide mineralogical or technical analysis free of charge for projects. Learn from the experts:

- Experimental design
- Sampling theory
- Process characterisation
- Benchmarking
- Project management

Module 3: Embedding the Learning

This five day face-to-face intensive workshop is designed to embed the learning. It brings the cohort together to polish their final project reports and share their experiences. Specialist sessions will focus on:

- Reporting to technical and non-technical audiences
- Good technical decision making
- Managing technical change

The JK Advantage

JKTech has extensive experience providing high quality education and training to major mining companies around the world.

JKTech's specialist expertise in mining processes assists mining operations to realise large returns on their mining operations.

Our program leaders can provide specialist technical support using our world-class mineralogical and metallurgical characterisation laboratory facilities.

Benefits for companies

- Accelerated performance and productivity of engineers in their early careers.
- A developing culture of process improvement.
- A cohort of future technical leaders with the ability to analyse and solve problems.
- Engineers equipped with the right tools and knowledge of international best practice in improving mine site performance.

Benefits for participants

- Advanced technical knowledge and capabilities in metallurgy and mineral process engineering.
- Improved ability to articulate technical mineral processing concepts and ideas to non-metallurgical personnel.
- Skills and behaviours to negotiate workplace tasks and employ analytical techniques in problem-solving in accordance with industry best practice.
- Confidence to identify problems, generate ideas, create solutions, innovate and improve current practices.

JKMetSkill is offered as either an in-house professional development program or a four-day open course at JKTech offices.

JKTech Pty Ltd

P: +61 73365 5842
E: jktech@jktech.com.au
W: jktech.com.au/professional-development



**THE UNIVERSITY
OF QUEENSLAND**
AUSTRALIA