



Curtin University

WA School of Mines: Minerals, Energy and Chemical Engineering

DEVELOPMENT PROGRAM
FOR PROFESSIONALS

Make tomorrow better.



Concept

The WA School of Mines: Minerals, Energy and Chemical Engineering (WASM: MECE) of Curtin University in Australia offers high-quality development programs for mining and related industry professionals.

The concept of the training courses is to offer Continuous Professional Development (CPD) in all modern aspects of mining engineering and provide learners with both a holistic view and detailed aspects of the whole minerals & metals mine lifecycle and an understanding of where the mining industry will stand in the future.

Opportunity

The continuous development for mining industry stakeholders allows improving their knowledge and understanding of mining operations. Curtin can deliver excellence based on its leading global position and according to its vision, mission, and values of passing knowledge and transforming communities through education and research.

Beneficial Impact

Trainees will gain appropriate technical knowledge of the minerals and metals mining cycle and a holistic view of the value-chain of commodities.

The programs are structured in a way that the learners get a better understanding of the interaction between the different operations, develop health, safety and environmental consciousness, as well as social awareness, not to mention the attention of opportunities to add value through engineering and the need for continuous improvement.

Engineers' Attributes

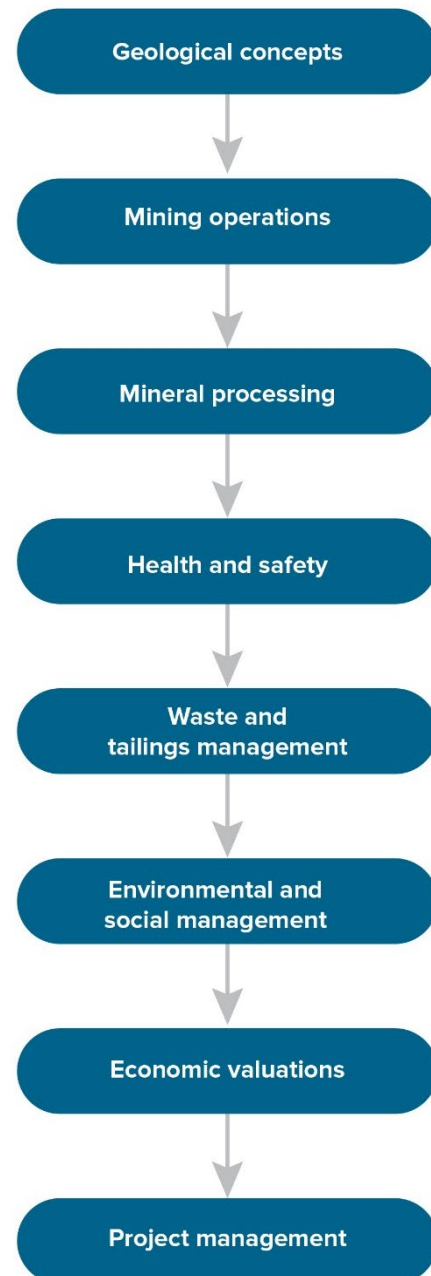
We design our development programs with a series of mining industry attributes in mind. Successful training will lead to acquiring the following skills:

- Appropriate cutting-edge knowledge.
- Holistic view and understanding of the entire value-chain.
- Better understanding of the interaction between operations.
- Health, safety and environmental consciousness, and social awareness.
- Advanced problem-solving analysis, engineering creativity.
- Awareness of opportunities to add value through engineering.
- Understanding of the need for improvement.



Structure of CPD Programs

- The programs will be customer-tailored based on the needs of the trainees.
- Fully immersed courses will cover either the life of the whole mining cycle or parts of it.
- The development programs shall cover the principles of sustainable exploitation of base metals, industrial minerals, critical raw materials, and fossil fuels.
- The purpose of the programs is to provide a holistic view and detailed aspects of where mining stands today or where the industry will stand in the future.
- The program's activities will not consist only of lectures delivered in classrooms. The courses will be activity-based and problem-solving oriented, using multimedia learning material combined with on-site experience.
- The training programs will include visits to mining operations in Western Australia (WA). These visits will be relevant to the course content and related to the training activities.
- The trainees will be able to network with academics, researchers and industry partners, and pursue collaboration opportunities.
- Trainees will be engaged in mining culture activities at Kalgoorlie and the surrounding Goldfields region of Western Australia.



Activity-based Learning

Modern lectures, tutorial sessions and group activities to reinforce learning and cooperation.

Multimedia Learning Material

Combination of different content forms: text, audio, graphics, animation, video, communication applications.

On-site Experience

Mine sites visiting, interaction with WA industry, on-site training and experience gaining.

Networking

Research and industry problem discussions with WASM: MECE team, collaboration opportunities. The development programs can be tailored to the needs of the trainees based on the adaptability- flexibility-learning system. The courses can adapt new technologies and adjust to new conditions to meet the needs of each learning group.

Expression of Interest

The first step to take is submitting via email an Expression of Interest from the organisation / company that wants to have their employees trained. The program coordinator will then initiate discussions with the stakeholders.

The duration, location, and activities of each program will be decided, and the group of trainees will be organised. To ensure high-quality training is provided, Curtin advises that groups of a maximum of 15 trainees are created.

Official Agreements

The next step is to sign an agreement between the collaborating parties. The deal will have to be signed at least three months before the initiation of the development programs to allow the organisers to design the program and make the necessary logistic arrangements (accommodation, transportation, catering, among others).

Initial Enrolment of Trainees

For the optimum design and delivery of professional development programs, the defined group of trainees will be in contact with the program coordinator and share details on their skills and expertise level in mining and related operations. The trainees will be requested to fill in and submit an initial online form with some basic contact details and information on their professional expertise, and preferences related to the programs (type of training courses, preferred duration).

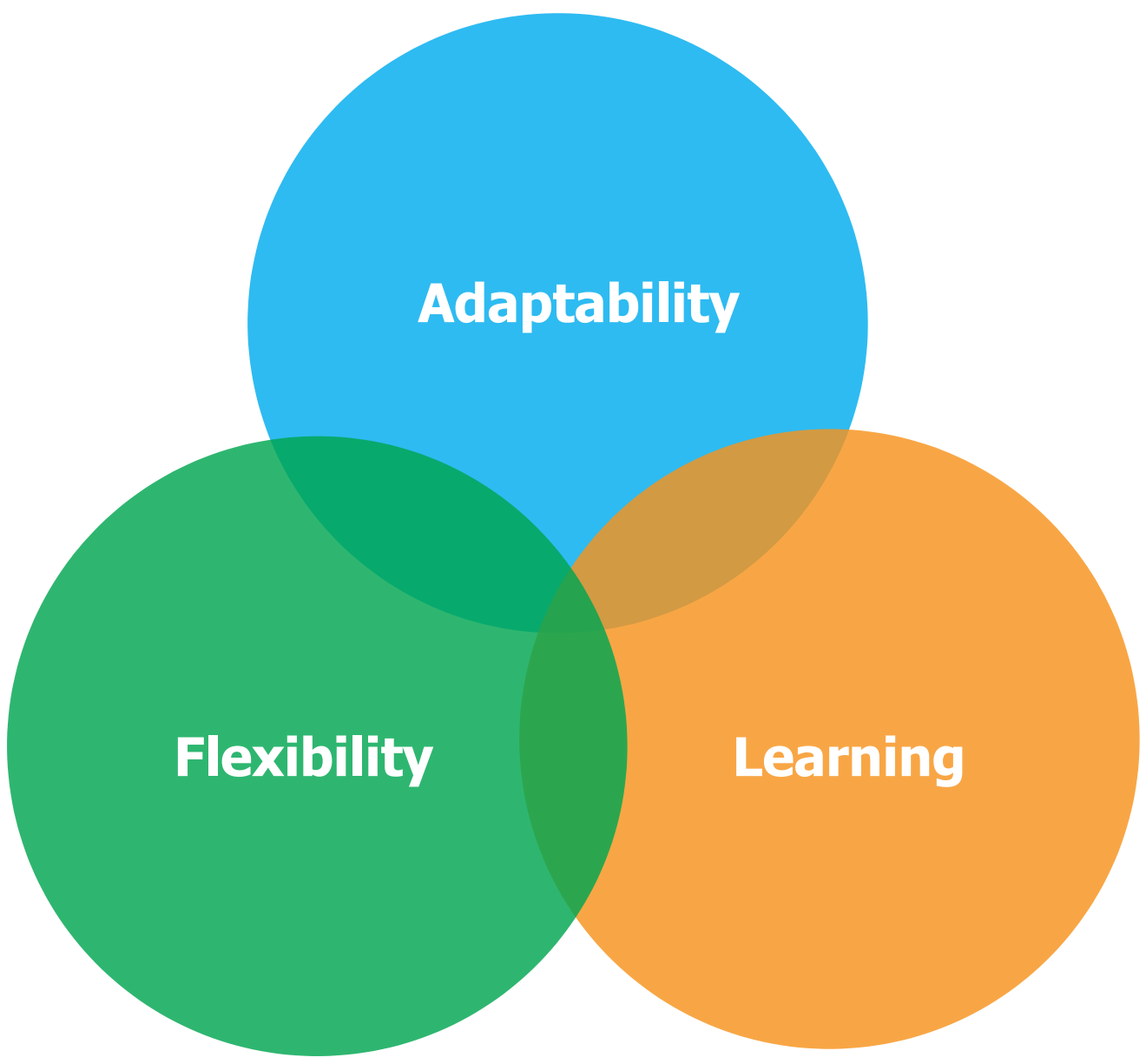
The online form can be accessed by scanning the QR code on this page.



Structure of Learning Programs

The development programs can be tailored to the needs of the trainees based on the adaptability-flexibility-learning system:

The courses can adapt new technologies and adjust to new conditions to meet the needs of each learning group



Duration, location, and activities, can be easily modified to fit the requirements of each group

The aim is to help develop a future mining skill set toward the evolution of T-Shaped professionals

Specifications Online Form

In the concept of the adaptability-flexibility-learning system, the trainees will be asked to fill in a second form and describe the specific modules / areas of interest / mining engineering disciplines on which they want the training programs to be focused.

In this form, the trainees can determine the type of training in the specific modules (theoretical, practical, case-study based or assorted).

To access the form, please scan the QR code on this page.

Each tailored program will be based on these inputs, and further discussions with the trainees will be organised to finalise the training material and details of the courses.

Locations for CPD Programs

The development programs' primary location is the Goldfields region in WA, where WASM: MECE is located. The courses will be hosted on the University's campus, and the site visits will be in mining operations within the region or in WA.

The Curtin University campus in Kalgoorlie is in the heart of Western Australia's mining industry, close to several surface and underground mining operations.

WASM: MECE is in direct and continuous collaboration with many mining companies, conducting high-quality industry-driven research.

Alternatively, the development programs can be hosted at the trainees' preferred location or online. In the latter two scenarios, visits to WA mining operations cannot be included in the program.



Periods for Delivering CPD Programs

The development programs are offered June - July, and November - February every year (except for the last weeks of December). The location, duration, and dates for each CPD program are subjects for discussion and depend on the convenience of the trainees.

The development programs are priced based on the duration and what is offered. The program's duration is defined by the trainees and can be:

- Less than a week
- One week
- Up to two weeks
- More than two weeks

The trainees also determine the location, although it is recommended for the CPD activities to take place in Kalgoorlie, Western Australia.

The cost is then calculated per participant. Program fees include:

- Tuition
- Learning material
- All training activities
- Meals during training days
- Local transportation

Transportation to and from Australia, visa fees, and accommodation during the training program are excluded from the program fees. Accommodation can be arranged from Curtin University on behalf of the trainees.

Different costs apply to training programs offered online.





Contact Us

For Expressions of Interest or if you have questions and request further information about the offered CPD programs for mining and industry-related professionals, please contact the program's coordinator:

Dr George Barakos

University Lecturer, WA School of Mines: Minerals, Energy and Chemical Engineering

Tel: +61 8 9088 6044

Mobile: +61 423 55 4703

Email: george.barakos@curtin.edu.au