

# Mining Cadetship

*Sustainability through training*

February 2005



**TAFE Queensland**  
Queensland Government  
Department of Employment and Training



**Central Queensland**  
UNIVERSITY

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## **Executive Summary**

The proposed mining operations management training and education program is embedded within the Australian Qualifications Framework (which brings together schools, colleges and universities). It is a work-site, work-based program supported by training providers and industry mentors. It is a new initiative for the Queensland Mining Industry that seeks to address the forecast deficiencies of appropriately qualified and experienced people in the mining workforce and particularly management, in the future. It is a long-term cultural intervention with the intention of assisting the way in which the industry perceives itself and how the wider community (locally, in Australia and overseas) sees the mining industry.

The initiative will be monitored by a supporting research program to ensure the delivery of the required education and training outcomes. This research will monitor practical and teaching and learning difficulties of delivering the program and assess its community impact inside and outside of the industry. It will also provide a forum for ongoing consideration of curriculum content so that the industry, working collaboratively with technical specialists and training and education providers, can ensure vocational relevance.

This Mining Cadetship program proposal envisages the collaboration of Central Queensland Institute of Technical and Further Education (CQIT), incorporating TAFE Queensland Mining Services (TQMS), the Central Queensland University (CQU) and others as educational providers, with the Queensland Mining Industry Training Advisory Body (QMITAB) and mining companies.

Industry, University and TAFE working together reflects the growing recognition that to best meet the skills development needs of Australia the different sectors must work more closely together. CQU, as a regional university, has a key mission to be actively engaged as a regional resource, providing teaching and research. In discussion with CQIT and others, a networked centre of mining education and training excellence is envisaged with providers working together with industry to best address industry needs

A networked support base is critical not only to directly supporting cadets but, as importantly, to supporting the teaching staff and mentors (who will play the primary role as educators). Ongoing collaboration with the mining industry is also essential to maintaining the relevance of the cadetship program to the changing needs of the industry. Networked, co-operative engagement across sectors is the key characteristic of the proposed model for development, management, operation and review of the program.

The Mining Cadetship program, commencing with the coal mining industry, provides a platform for the integration of coal and metalliferous mining training and education. It will also help to support the growing links between the mining industries in Australia, China and other countries.

## Glossary

AQF	Australian Qualifications Framework
AQTF	Australian Qualifications Training Framework
BMinOpsMgt	Bachelor of Mine Operations Management
CD ROM	Compact Disc Read Only Memory
CQIT	Central Queensland Institute of TAFE
CQU	Central Queensland University
HECS	Higher Education Contribution Scheme
ITAB	Industry Training Advisory Body
QMITAB	Queensland Mining Industry Training Advisory Body
RCC	Recognition of Current Competency
RPL	Recognition of Prior Learning
RTO	Registered Training Organisation
TAFE	Technical and Further Education
TQMS	TAFE Queensland Mining Service
VET	Vocational Education and Training



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## 1. Introduction

The proposed Mining Cadetship program provides a mining industry integrated vocational education pathway from school into mine management. Distance and flexible education technologies, with Technical and Further Education (TAFE) and university teaching supported by industry mentors, enable mine sites to provide a mini-campus infrastructure. The program provides cadets with the depth and breadth of learning opportunities necessary to enable them to achieve First Class Mine Manager accreditation and a Bachelor degree in Mine Operations Management.

The Mining Cadetship program is primarily targeted at school leavers who want to pursue a career culminating in appointment as a Mine Manager. Nonetheless, the cadetship and its vocational education structure support multiple points of entry to the program and also allow multiple points of exit with an AQF qualification at the level reached.

The cadetship program will be fully industry funded, enabling cadets to complete, as full-time employees and students, the six years of work-based study required. Funding could be provided either through company-sponsored or industry-sponsored cadetships.

The vocational education structure could also be available to those who wish to study whilst employed in the industry as part-time in-service students outside of the cadetship program.

Cadetship programs for careers in mine management are proposed in both underground and open cut mining. It is also anticipated the cadetships would lead to other senior managerial positions in both the coal and metalliferous mining industries – e.g. Technical Services Manager, Training Manager, Safety Manager, Environmental and Occupational Health Manager or Business Services Manager.

The program's vocational education structure is to be provided through a Centre of Mining Education and Training Excellence which brings together expertise from Central Queensland Institute of TAFE (TAFE Queensland Mining Services) and Central Queensland University (Faculties of Engineering and Physical Systems, Business and Law, Arts, Health and Sciences and Informatics and Communications) and others working in collaboration with the Queensland Mining Industry.

Most importantly it provides multiple points of entry and exit to maximise industry's return on their investment and training.



## 2. Background

The most important statutory positions required in general coal mining management operations are:

- Mine Manager (First Class) (underground)
- Mine Manager (Second Class – Under Manager) (underground)
- Mine Deputy (underground)
- Open Cut Examiner

These positions require the competencies included in the National Coal Industry Training Package MNC98 and qualifications pursuant to the Australian Qualifications Framework (AQF).

Career paths in the Mining Industry are typically located in regional and remote Australia. It is therefore critical that they are matched with training and educational opportunities that can be directly accessed by the communities of regional and remote Australia. This Mining Cadetship program is structured to achieve this goal.

The Mining Cadetship program concept was developed by a joint Working Group that brought together representatives from the Queensland Mining Industry to work with TAFE and University and other training and education providers. This concept builds on the experience of the highly successful Mining Industry Cadetship Scheme that ran in Queensland throughout the 1980's. It draws heavily on the work of the Queensland Mining Industry Training Advisory Body (QMITAB) and the Australian Qualification Framework (AQF) that encourages integration and articulation between three education sectors: Secondary Schools, Vocational Education and Training and Higher Education. This ground-breaking work has provided the impetus for the development of a centre of training excellence that brings together TAFE, University and other providers to work with industry.

The Mining Cadetship program is a package that will utilise:

- mine sites as mini-campuses
- industry and training provider learning facilitation and mentoring
- work-based learning
- appropriate financial, pastoral and lifestyle support
- recognised industry and educational qualifications



### 3. The Australian Qualifications Framework (AQF)

The AQF comprises twelve national qualifications. They are issued in:

- the secondary schools sector
- the vocational education and training sector (Registered Training Providers (RTO) TAFE institutes and private providers)
- the higher education sector (universities)

These qualifications are shown below, grouped according to the educational sector in which they are most commonly issued.

It should be noted that vocational education and training is increasingly provided in the schools sector (VET in Schools). This is recognised at the appropriate Certificate I to IV level and/or as credit towards the Senior Secondary Certificate of Education. In Australia, private and public providers operate across all three sectors.

### 4. Australian Qualifications Framework by Educational Sector

Secondary Schools Sector	Vocational Education and Training Sector	Higher Education Sector
		Doctorate
		Masters Degree
		Graduate Diploma
		Graduate Certificate
		Bachelor Degree
	Advanced Diploma / Associate Degree	Advanced Diploma / Associate Degree
	Diploma	
	Certificate IV	
	Certificate III	
	Certificate II	
	Certificate I*	
Senior Secondary Certificate of Education		

\* N.B. Certificate I is not part of the Mining sector qualification structure



## 5. Aims of the Mining Cadetship Program

The aims of the Mining Cadetship Program are to:

- Provide a well supported vocational pathway to a career as a Mine Manager and other mine management positions.
- Contribute to the sustainability of the Mining Industry by supporting relevant skills and knowledge acquisition
- Provide access to educational, training and employment opportunities to people living in regional and remote locations
- Support the application of the Australian Qualification Framework to employment in the Mining Industry.

## 6. Mining Cadetship Program Structure

The Mining Cadetship program comprises the following features:

- Six years of predominantly mine-site based study
- Potential to re-locate to different mine sites in order to support relevant learning.
- On-site mining industry mentoring, and training provider supervision
- Points of entry:
  - a. a primary entry point for post-year 12 secondary school leavers or equivalent
  - b. multiple secondary entry points across the full range of the program with certificates and diplomas awarded prior to entry contributing to the final Bachelor degree award.
  - c. pre-cadetship studentship
- Selection of candidates as Mining Cadets by a panel of mining industry, training and education members. The panel will consider the following criteria in assessing applications:
  - a. Successful completion of a pre-mining cadetship program school studentship, if appropriate
  - b. Personal attributes
  - c. Career potential in the mining industry
  - d. Educational achievements



## 7. Mining Cadetship Program Models

### 7.1 Mining Cadetship Program Structure Model - Underground Mining

Year 6	Bachelor of Mine Operations Management (Minimum 1 year equivalent full-time study) Refer to Appendix 12
Year 5	Advanced Diploma of Underground Coal Mining Management Refer to Appendix 10
Year 4	Diploma of Underground Coal Mining Management Refer to Appendix 8
Year 3	Certificate IV in Underground Coal Mining Refer to Appendix 5
Year 2	Certificate III in Underground Coal Operations Refer to Appendix 3
Year 1	Certificate II in Underground Coal Operations Refer to Appendix 1
Pre Cadetship Studentship	Year 11 and/or 12 Secondary School Senior Secondary Certificate of Education & Part Certificate II

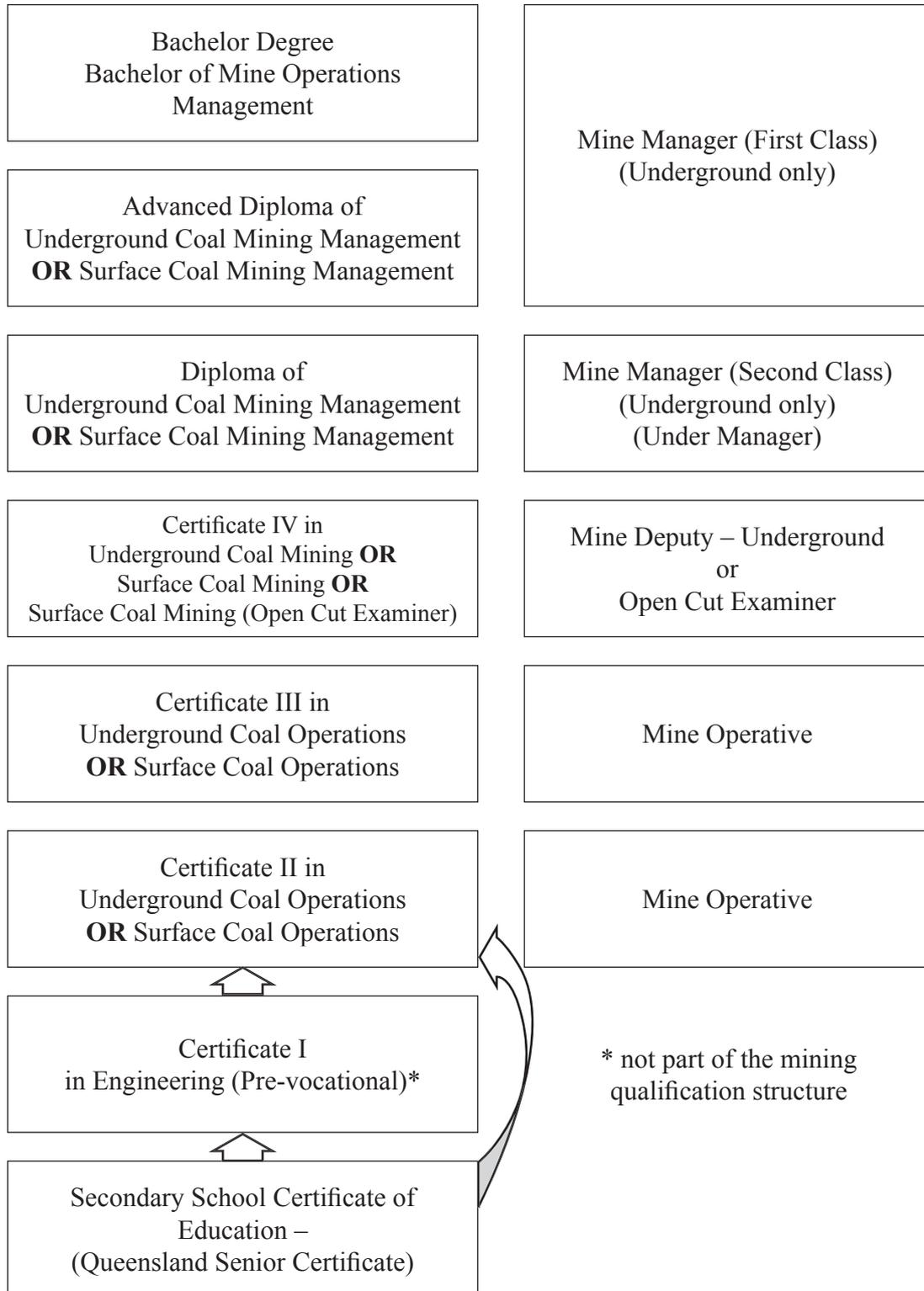


## 7.2 Mining Cadetship Program Structure Model - Open Cut Mining

Year 6	Bachelor of Mine Operations Management (Minimum 1 year equivalent full-time study) Refer to Appendix 12
Year 5	Advanced Diploma of Surface Coal Mining Management Refer to Appendix 11
Year 4	Diploma of Surface Coal Mining Management Refer to Appendix 9
Year 3	Certificate IV in Surface Coal Mining <b>OR</b> Certificate IV in Surface Coal Mining (Open Cut Examiner) Refer to Appendix 6 and 7
Year 2	Certificate III in Surface Coal Operations Refer to Appendix 4
Year 1	Certificate II in Surface Coal Operations Refer to Appendix 2
Pre Cadetship Studentship	Year 11 and/or 12 Secondary School Senior Secondary Certificate of Education & Part Certificate II



**8. AQF Qualification / University-TAFE-School Award / Coal Mining Industry Positions**



## **9. Training and Education Program – links to University and to Secondary Schools**

### **9.1 The Bachelor of Mine Operations Management (BMinOpsMgt)**

Up to the current Advanced Diploma level the curriculum is as determined by the QMITAB. CQIT and CQU will collaboratively deliver the whole program with CQIT taking the primary responsibility from Certificate II up to Diploma level, the two institutions sharing delivery of the Advanced Diploma level and CQU having primary responsibility for the final year, culminating in the award of the Bachelor of Mine Operations Management. It is proposed that the degree could be awarded and the testamur imprinted with CQU, CQIT and QMITAB coats of arms or logos.

The QMITAB, in conjunction with education providers will be responsible for ongoing curriculum development of the combined qualification up to Advanced Diploma level and CQIT, working with the QMITAB, will be responsible for ensuring that cadets meet the appropriate standards, and that these are examined and accredited as required by the mining industry. Recognition of Prior Learning (RPL) or Current Competencies (RCC) will be credited, enabling a CQU Bachelor degree to be awarded with additional study (see appendix 12). This additional study will be assessed by CQU in collaboration with CQIT and the mining industry.

### **9.2 Recognition of Prior Learning and Recognition of Current Competencies**

Through alignment with AQF national standards, the program allows the recognition of cadets' previous appropriate study and work experience gained through recognised providers and industry up to Advanced Diploma level. This is through formal Recognition of Prior Learning (RPL) and Recognition of Current Competencies (RCC). Cadets seeking credits will be required to demonstrate achievement of each unit's or course's learning outcomes.

### **9.3 Educational Program Format Delivery**

Flexible delivery encompassing the internet, CD ROM and other resources will be used as appropriate to course or unit content and required learning outcomes. Courses and units will be supported by face-to-face contact which will include mentors and training program supervisors on mine-sites and off-site at workshops.

## 9.4 Outline of Bachelor of Mine Operations Management (BMinOpsMgt)

It is proposed that the structure of the post Advanced Diploma element leading to the award of the Bachelor of Mine Operations Management would be broadening knowledge and skills development for cadets with courses determined by the cadet's employer in negotiation with the cadetship program administrators culminating in the study of an industry based project (refer to Appendix 12). This would allow cadets to holistically demonstrate the necessary knowledge, skills, attributes and attitudes of degree graduates and mining industry professionals.

Programs will also be considered to service other mining vocational pathways e.g. Safety and Environmental Services Management, Training Services Management, Technical Services Management and Business Services Management – in the both the metaliferous and coal mining industry sectors.

The Bachelor of Mine Operations Management would also be available to people wishing to study it who were not part of the Mining Cadetship scheme. It should be noted however that it would require students to be enrolled as full-fee-paying (fee-for-service) students. The program is not intended to be available under the government funded Student Contribution scheme (formerly known as the Higher Education Contribution Scheme - HECS).

## 9.5 Links to Schools (Studentships)

An important aspect in developing sustainable personnel recruitment and retention is to establish links into local area secondary, and potentially primary schools. This would provide a pathway for students to realise the benefits and opportunities of a career in the mining industry. The availability of a school based studentship that focuses students on the potential for a career in the mining industry in their local area would be an important element in quality personnel recruitment and retention and ultimately industry succession planning. Pre cadetship studentships would enable secondary students with an interest in, and/or expectation of, a career in the mining industry to progress through pre-vocational studies and work experience via a school studentship into the cadetship program.

Successful completion of a studentship would be an important consideration for selection for Mining Cadetships, along with other factors as detailed in Section 6.



## APPENDIX 1

### *Program Structure for MNC 20304 Certificate II in Underground Coal Operations*

**A total of twelve (12) units of Competency comprising:**

**(A) Four (4) mandatory units of competency:**

MNCC 1001A	Work Safely
MNCC 1005A	Comply with site work systems / procedures
MNCC 1006A	Conduct local risk assessment
MNCC 1007A	Communicate in the workplace

**(B) Eight (8) elective units to be completed:**

- a minimum of six (6) units from the Coal Training Package Underground units listed
- a maximum of two (2) units, relevant to the job function, drawn from the Coal Training Package or other endorsed Training Packages

➤ **Underground units**

MNCU 1011A	Conduct underground lifting operations
MNCU 1012A	Operate power tram
MNCU 1013A	Conduct rail vehicle operations
MNCU 1014A	Conduct tracked vehicle/plant operations
MNCU 1015A	Conduct wheeled vehicle operations (non-articulated)
MNCU 1016A	Conduct wheeled grader operations
MNCU 1017A	Conduct wheeled vehicle operations (articulated)
MNCU 1037A	Escape from hazardous situation unaided
MNCU 1040A	Install, maintain and recover gas drainage systems
MNCU 1041A	Install, maintain and recover electrical services
MNCU 1042A	Install, maintain and recover water and air systems
MNCU 1049A	Support shotfiring operations
MNCU 1050A	Conduct rotational drilling
MNCU 1053A	Conduct basic strata control operations
MNCU 1060A	Conduct roadway maintenance
MNCU 1061A	Conduct stonedusting operations
MNCU 1062A	Dewater roadways and work areas
MNCU 1063A	Lay and recover rail
MNCU 1064A	Install and maintain explosion barriers
MNCU 1065A	Construct and maintain basic ventilation devices
MNCU 1072A	Conduct feeder breaker operations
MNCU 1073A	Conduct face ventilation operations
MNCU 1077A	Operate longwall ancillary equipment
MNCU 1091A	Maintain lamp cabin operations
MNCU 1101A	Apply spontaneous combustion management measures

➤ **General Units**

BSBCM 215A	Participate in environmental work practices
MNCG 1004A	Respond to local emergencies and incidents
MNCG 1012A	Maintain bathroom hygiene
MNCG 1013A	Apply initial response First Aid
MNCG 1025A	Access, update and retrieve simple computerised information
MNCG 1026A	Operate a computer to produce documents
MNCG 1029A	Transfer information through a computer
MNCG 1030A	Conduct purchasing
MNCG 1031A	Remove, fit and adjust wheel(s)
MNCG 1032A	Remove, repair and refit tyres and tubes
MNCG 1035A	Apply operational maintenance skills
MNCG 1036A	Provide support to electrical tradesperson
MNCG 1037A	Service mine plant and equipment
MNCG 1038A	Perform basic cutting and welding
MNCG 1040A	Operate gantry crane
MNCG 1041A	Conduct non-slewing crane operations
MNCG 1043A	Conduct dogging operations
MNCG 1044A	Conduct basic rigging operations
MNCG 1045A	Conduct intermediate rigging operations
MNCG 1046A	Conduct basic scaffolding operations
MNCG 1047A	Conduct intermediate scaffolding operations
MNCG 1048A	Conduct forklift operations
MNCG 1049A	Operate elevating work platform
MNCG 1050A	Operate vehicle loading crane
MNCG 1055A	Extend, retract and maintain conveyor componentry
MNCG 1060A	Operate support equipment
MNCG 1061A	Operate light vehicle
MNCG 1062A	Operate medium vehicle
MNCG 1068A	Test operational functions of mine vehicles and equipment
MNCG 1070A	Provide deck support for conveyor-car high wall mining operations
MNMUGC 1216A	Conduct skip operations
MNMUGC 1217A	Operate automated winder
MNMUGC 1218A	Operate manual winder
MNMUGC 224A	Conduct Cage operations
MNMUGC 225A	Operate winder for shaft sinking
MNMUGC 226A	Maintain winder equipment
MNMUGC 227A	Inspect and maintain shaft structures
MNMUGC 228A	Monitor, inspect and service ropes and attachments



## APPENDIX 2

### *Program Structure for MNC 20104 Certificate II in Surface Coal Operations*

**A total of nine (9) units of competency comprising:**

**(A) Four (4) mandatory units of competency:**

MNCC 1001A	Work Safely
MNCC 1005A	Comply with site work systems / procedures
MNCC 1006A	Conduct local risk assessment
MNCC 1007A	Communicate in the workplace

**(B) Five (5) elective units of which:**

- a minimum of three (3) units from the specified Open Cut Coal Training Package units listed
- a maximum of two (2) units, relevant to the job function, drawn from the Coal Training Package or other endorsed Training Packages

➤ **Open Cut units**

MNCO 1013A	Conduct front end loader operations
MNCO 1014A	Conduct haul truck operations
MNCO 1015A	Conduct bulk water truck operations
MNCO 1016A	Conduct grader operations
MNCO 1017A	Conduct scraper operations
MNCO 1018A	Conduct dozer operations
MNCO 1023A	Support bucketwheel system operations
MNCO 1024A	Conduct wheeled dozer operations
MNCO 1025A	Lay and recover cables and hoses
MNCO 1026A	Conduct dewatering operations
MNCO 1028A	Conduct conveyor operations
MNCO 1029A	Conduct mobile slew conveyor operations
MNCO 1032A	Isolate and access plant
MNCO 1033A	Conduct conveyor shifting dozer operations
MNCO 1036A	Conduct mobile crushing and screening plant operations

➤ **General Units**

BSBCMN 215A	Participate in environmental work practices
MNCG 1004A	Respond to local emergencies and incidents
MNCG 1005A	Conduct Fire Team Operations
MNCG 1010A	Assess and implement life support systems and stabilise casualties
MNCG 1011A	Extricate and transport people involved in incidents
MNCG 1012A	Maintain bathroom hygiene
MNCG 1013A	Apply initial response First Aid
MNCG 1025A	Access, update and retrieve simple computerised information
MNCG 1026A	Operate a computer to produce documents
MNCG 1031A	Remove, fit and adjust wheel(s)
MNCG 1032A	Remove, repair and refit tyres and tubes

MNCG 1033A	Conduct lifting operations
MNCG 1035A	Apply operational maintenance skills
MNCG 1036A	Provide support to electrical tradesperson
MNCG 1037A	Service mine plant and equipment
MNCG 1038A	Perform basic cutting and welding
MNCG 1040A	Operate gantry crane
MNCG 1041A	Conduct non-slewing crane operations
MNCG 1042A	Conduct slewing crane operations
MNCG 1043A	Conduct dogging operations
MNCG 1044A	Conduct basic rigging operations
MNCG 1046A	Conduct basic scaffolding operations
MNCG 1048A	Conduct forklift operations
MNCG 1049A	Operate elevating work platform
MNCG 1050A	Operate vehicle loading crane
MNCG 1055A	Extend, retract and maintain conveyor componentry
MNCG 1060A	Operate support equipment
MNCG 1061A	Operate light vehicle
MNCG 1062A	Operate medium vehicle
MNCG 1063A	Operate heavy rigid vehicle
MNCG 1064A	Operate articulated vehicle
MNCG 1068A	Test operational functions of mine vehicles and equipment
MNCG 1070A	Provide deck support for conveyor-car high wall mining operations

➤ **Coal Preparation and Treatment**

MNCP 1001A	Handle raw coal
MNCP 1002A	Monitor coal preparation plant operations
MNCP 1004A	Treat and dispose of rejects and tailings
MNCP 1005A	Conduct sampling operations
MNCP 1006A	Conduct stockpile dozer operations
MNCP 1007A	Conduct stockpile reclaimer operations
MNCP 1008A	Conduct rail dispatch operations
MNCP 1009A	Perform plant operational maintenance



## APPENDIX 3

### *Program Structure for MNC 30304 Certificate III in Underground Coal Operations*

**A total of eighteen (18) units of competency made up of:**

**(A) Twelve (12) units of competency satisfying the criteria for the Certificate II in Underground Coal Operations**

**(B) Six (6) elective units made up of:**

- a minimum of two (2) elective units of competency from the specified Coal Training Package Underground units listed
- a maximum of four (4) units, relevant to the job function, drawn from other endorsed Training Packages.

**Note:**

- The elective units of competency chosen to satisfy the Certificate III in Underground Coal Operations must be additional to the units of competency achieved to satisfy the Certificate II in Underground Coal Operations.
- The maximum number of units drawn from other endorsed Training Packages must not exceed four (4) units, including units from other endorsed Training Packages included in a Certificate II in Underground Coal Operations.

➤ **Underground units**

MNCU 1026A	Conduct environmental monitoring
MNCU 1037A	Escape from hazardous situation unaided
MNCU 1038A	Provide aided rescue to endangered personnel
MNCU 1039A	Respond to in-seam incident
MNCU 1046A	Conduct winding operations
MNCU 1048A	Conduct shotfiring
MNCU 1049A	Support shotfiring operations
MNCU 1050A	Conduct rotational drilling
MNCU 1051A	Conduct directional drilling
MNCU 1053A	Conduct basic strata control operations
MNCU 1054A	Conduct specialised strata control operations
MNCU 1066A	Construct and maintain ventilation devices
MNCU 1070A	Conduct continuous miner operations
MNCU 1071A	Conduct shuttle car operations
MNCU 1073A	Conduct face ventilation operations
MNCU 1074A	Conduct outburst minimising operations
MNCU 1075A	Conduct shearer operations
MNCU 1076A	Conduct longwall face equipment operations
MNCU 1078A	Install and recover longwall equipment
MNCU 1079A	Operate breaker line supports
MNCU 1080A	Conduct flexible conveyor train (FCT) operations
MNCU 1095A	Monitor control processes
MNCU 1101A	Apply spontaneous combustion management measures

➤ **General Units**

MNCG 1001A	Apply the risk management process
MNCG 1005A	Conduct Fire Team Operations
MNCG 1008A	Conduct safety and health investigations
MNCG 1009A	Communicate information
MNCG 1013A	Apply initial response First Aid
MNCG 1027A	Use keyboard skills and advanced functions of software to produce documents
MNCG 1028A	Use advanced functions of software packages to produce documents, reports and worksheet
MNCG 1042A	Conduct slewing crane operations
MNCG 1056A	Install, commission and maintain major conveyor equipment and systems
MNCG 1057A	Repair and splice conveyor belting
MNCG 1069A	Conduct conveyor car high wall mining operations
MNCG 1070A	Provide deck support for conveyor-car high wall mining operations
MNMUGC 1216A	Conduct skip operations
MNMUGC 1217A	Operate automated winder
MNMUGC 1218A	Operate manual winder
MNMUGC 224A	Conduct Cage operations
MNMUGC 225A	Operate winder for shaft sinking
MNMUGC 226A	Maintain winder equipment
MNMUGC 227A	Inspect and maintain shaft structures
MNMUGC 228A	Monitor, inspect and service ropes and attachments
BSBFLM 302A	Support leadership in the workplace
BSBFLM 303A	Contribute to effective workplace relationships
BSBFLM 304A	Participate in work teams



## APPENDIX 4

### *Program Structure for MNC 30104 Certificate III in Surface Coal Operations*

**A total of fifteen (15) units of competency made up of:**

**(A) Nine (9) units of competency satisfying the criteria for the Certificate II in Surface Coal Operations**

**(B) Six (6) elective units made up of:**

- a minimum of two (2) elective units of competency from the specified Coal Training Package Open Cut units listed
- a maximum of four (4) units, relevant to the job function, drawn from the Coal Training Package or other endorsed Training Packages.

**Note:**

- The elective units of competency chosen to satisfy the Certificate III in Surface Coal Operations must be additional to the units of competency achieved to satisfy the Certificate II in Surface Coal Operations.
- The maximum number of units drawn from other endorsed Training Packages must not exceed four (4) units, including units from other endorsed Training Packages included in a Certificate II in Surface Coal Operations.

➤ **Open Cut units**

MNCO 1010A	Conduct dragline operations
MNCO 1011A	Conduct burden and coal drilling operations
MNCO 1012A	Conduct rope/shovel operations
MNCO 1013A	Conduct front end loader operations
MNCO 1014A	Conduct haul truck operations
MNCO 1015A	Conduct bulk water truck operations
MNCO 1016A	Conduct grader operations
MNCO 1017A	Conduct scraper operations
MNCO 1018A	Conduct dozer operations
MNCO 1019A	Conduct surface miner operations
MNCO 1020A	Conduct auger miner operations
MNCO 1021A	Conduct bucketwheel operations
MNCO 1022A	Conduct spreader operations
MNCO 1024A	Conduct wheeled dozer operations
MNCO 1027A	Conduct hydraulic shovel operations
MNCO 1030A	Conduct control centre operations
MNCO 1033A	Conduct conveyor shifting dozer operations
MNCO 1040A	Conduct shotfiring operations
MNCO 1041A	Support shotfiring operations

➤ **General Units**

BSBCMN 313A	Maintain environmental procedures
BSBFLM 302A	Support leadership in the workplace
BSBFLM 303A	Contribute to effective workplace relationships
BSBFLM 304A	Participate in work teams
MNCG 1001A	Apply risk management processes
MNCG 1005A	Conduct Fire Team Operations
MNCG 1008A	Conduct safety and health investigations
MNCG 1009A	Communicate information
MNCG 1010A	Assess and implement life support systems and stabilise casualties
MNCG 1011A	Extricate and transport people involved in incidents
MNCG 1013A	Apply initial response First Aid
MNCG 1027A	Use keyboard skills and advanced functions of software packages to produce complex documents
MNCG 1029A	Transfer information through a computer
MNCG 1030A	Conduct purchasing
MNCG 1045A	Conduct intermediate rigging operations
MNCG 1047A	Conduct intermediate scaffolding operations
MNCG 1056A	Install, commission and maintain major conveyor equipment and systems
MNCG 1057A	Repair and splice conveyor belting
MNCG 1065A	Operate multi combination vehicles on mine sites
MNCG 1068A	Test operational functions of mine vehicles and equipment
MNCG 1069A	Conduct conveyor-car high wall mining operations
MNCG 1070A	Provide deck support for conveyor-car high wall mining operations

➤ **Coal Preparation and Treatment**

MNCP 1003A	Control coal preparation plant operations
MNCP 1005A	Conduct sampling operations
MNCP 1007A	Conduct stockpile reclaimer operations



## APPENDIX 5

### *Program Structure for MNC 40304 Certificate IV in Underground Coal Mining*

**Successful completion of eleven (11) units of competency made up of:**

**(A) Eight (8) mandatory units of competency:**

MNCG 1002A	Implement and apply the risk management processes
MNCU 1104A	Apply the spontaneous combustion management plan
MNCU 1108A	Apply and monitor the ventilation management plan
MNCU 1113A	Apply and monitor the gas management plan
MNCU 1133A	Apply and monitor the strata management plan
MNCU 1138A	Apply and monitor mine transport systems and production equipment
MNCU 1143A	Apply and monitor mine services and infrastructure systems
MNCU 1153A	Apply and monitor mine emergency preparedness and response systems

**(B) Three (3) elective units from the Technical Management and General Management units listed:**

➤ **Technical Management**

MNCU 1037A	Escape from hazardous situation unaided
MNCU 1038A	Provide aided rescue to endangered personnel
MNCU 1039A	Respond to in-seam incident
MNCU 1044A	Conduct special roadway operations
MNCU 1045A	Recover equipment
MNCU 1048A	Conduct shotfiring
MNCU 1049A	Support shotfiring operations
MNCU 1070A	Conduct continuous miner operations
MNCU 1071A	Conduct shuttle car operations
MNCU 1074A	Conduct outburst mining operations
MNCU 1075A	Conduct shearer operations
MNCU 1076A	Conduct longwall face equipment operations
MNCU 1118A	Apply and monitor the gas drainage management plan
MNCU 1123A	Apply and monitor the outburst management plan
MNCU 1128A	Apply and monitor the inrush management plan

➤ **General Management**

MNCG 1007A	Implement and monitor health and hygiene management systems
MNCG 1008A	Conduct safety and health investigations
MNCG 1009A	Communicate information
MNCG 1028A	Use advanced functions of software packages to produce documents, reports and worksheets
BSBCM 402A	Develop work priorities
BSBCM 404A	Develop teams and individuals
BSBCM 410A	Coordinate implementation of customer service strategies
BSBCM 412A	Promote innovation and change
BSBFLM 402A	Show leadership in the workplace

- BSBFLM 403A Manage effective workplace relationships
- BSBFLM 404A Lead work teams
- BSBFLM 405A Implement operational plan
- BSBFLM 409A Implement continuous improvement



## APPENDIX 6

### *Program Structure for MNC 40204 Certificate IV in Surface Coal Mining*

**Successful completion of fourteen (14) units of competency made up of:**

**(A) Six (6) mandatory units of competency**

MNCG 1002A	Implement and apply the risk management processes
MNCG 1009A	Communicate information
MNCG 1105A	Apply the mine occupational health and safety management plan
MNCO 1103A	Apply pit plan
MNCO 1115A	Apply and monitor surface mine emergency preparedness and response procedures
MNCO 1045A	Apply and monitor environmental management policies, plans and procedures

**(B) Eight (8) elective units including:**

- a minimum of two (2) units from the specified Technical Management units
- a minimum of four (4) units from the specified General Management units
- a maximum of two (2) units, relevant to the job function, drawn from the Coal Training Package or other endorsed Training Packages.

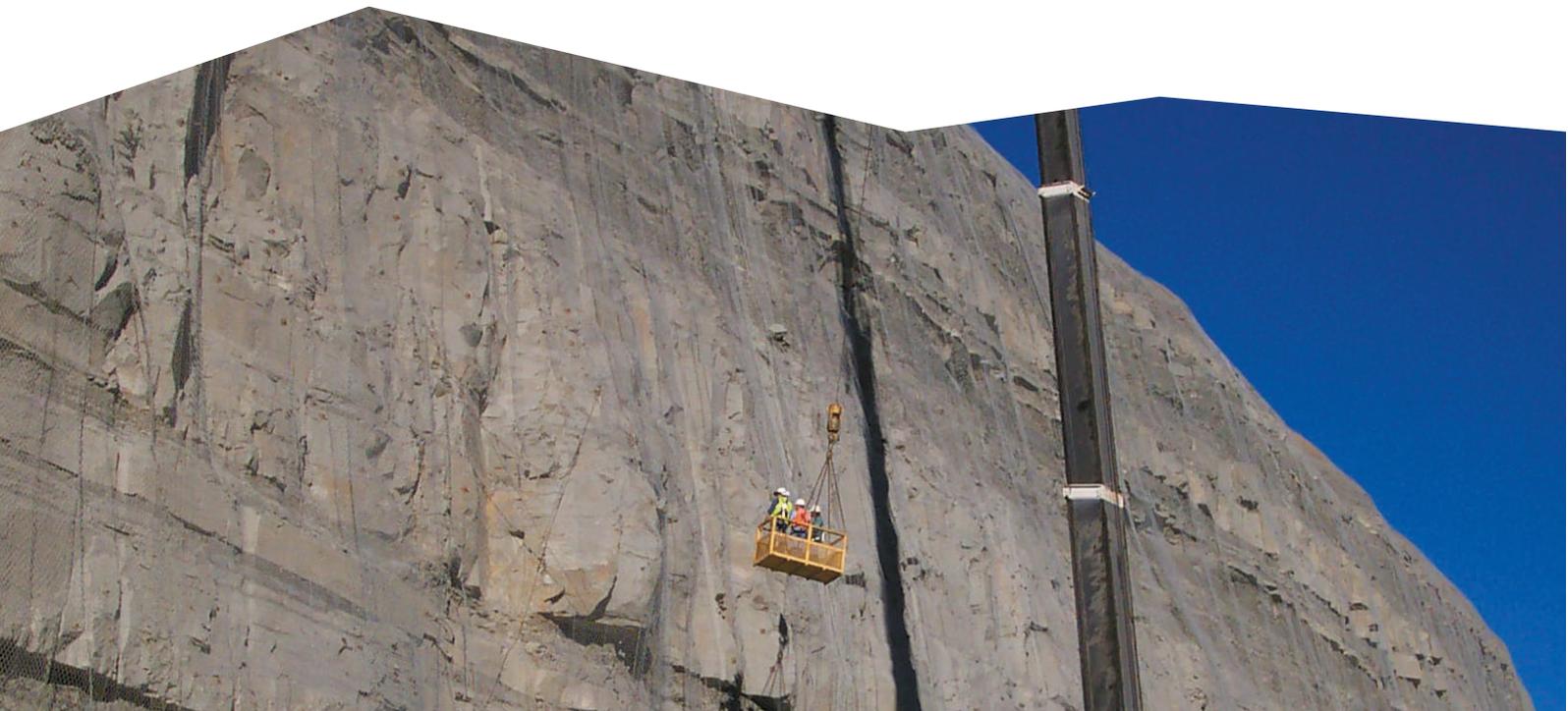
➤ **Technical Management**

MNCG 1005A	Conduct Fire Team Operations
MNCG 1007A	Implement and monitor health and hygiene management systems
MNCG 1008A	Conduct safety and health investigations
MNCO 1031A	Coordinate conveyor system shift
MNCO 1040A	Conduct shotfiring operations
MNCO 1041A	Support shotfiring operations
MNCO 1043A	Monitor the interaction of heavy and light vehicles and mining equipment
MNCO 1046A	Apply and monitor systems and methods of mining
MNCO 1047A	Manage the interaction of light and heavy vehicles and mining equipment
MNCO 1107A	Apply and monitor the site water management plan
MNCO 1112A	Apply and monitor the site stockpile management plan
MNCO 1117A	Apply and monitor site plant and resource management plan
MNCO 1118A	Supervise coal processing operations
MNCO 1122A	Apply and monitor site waste and by-products management plan
MNCO 1127A	Apply and monitor site plant, equipment and infrastructure maintenance management plan

➤ **General Management**

MNCG 1028A	Use advanced functions of software packages to produce documents, reports and worksheets
MNCG 1113A	Apply quality management system
BSBCM 402A	Develop work priorities

- BSBCMN 404A Develop teams and individuals
- BSBCMN 410A Coordinate implementation of customer service strategies
- BSBCMN 412A Promote innovation and change
- BSBFLM 402A Show leadership in the workplace
- BSBFLM 403A Manage effective workplace relationships
- BSBFLM 404A Lead work teams
- BSBFLM 405A Implement operational plan
- BSBFLM 409A Implement continuous improvement



## APPENDIX 7

### *Program Structure for MNC 40104 Certificate IV in Surface Coal Mining (Open Cut Examiner)*

Successful completion of eleven (11) units of competency made up of:

**(A) Eight (8) mandatory units of competency (management and technical)**

MNCG 1002A	Implement and apply the risk management processes
MNCG 1007A	Implement and monitor health and hygiene management systems
MNCG 1008A	Conduct safety and health investigations
MNCO 1115A	Apply and monitor surface mine emergency preparedness and response procedures
MNCO 1040A	Conduct shotfiring operations (mandatory in NSW)

**OR**

MNCO 1041A	Support shotfiring operations (mandatory in Queensland)
MNCO 1042A	Examine and maintain mine safety
MNCO 1043A	Monitor the interaction of heavy and light vehicles and mining equipment
MNCO 1046A	Apply and monitor systems and methods of mining

**(B) Three (3) elective units including:**

- a minimum of one (1) general unit
- a minimum of one (1) unit drawn from the coal open cut units of competency, and
- one (1) unit, relevant to the job function, drawn from the Coal Training Package or other endorsed Training Packages.

➤ **General**

MNCG 1009A	Communicate information
MNCG 1025A	Access, update and retrieve simple computerised information
MNCG 1026A	Operate computer to produce documents
MNCG 1027A	Use keyboard skills and advanced functions of software packages to produce complex documents
MNCG 1028A	Use advanced functions of software packages to produce documents, report and worksheets
MNCG 1029A	Transfer information through computer
BSBCM 402A	Develop work priorities
BSBCM 404A	Develop teams and individuals
BSBCM 410A	Coordinate implementation of customer service strategies
BSBCM 412A	Promote innovation and change
BSBFLM 402A	Show leadership in the workplace
BSBFLM 403A	Manage effective workplace relationships
BSBFLM 404A	Lead work teams
BSBFLM 405A	Implement operational plan
BSBFLM 409A	Implement continuous improvement

➤ **Open Cut**

- MNCO 1010A Conduct dragline operations
- MNCO 1011A Conduct burden and coal drilling operations
- MNCO 1012A Conduct rope/shovel operations
- MNCO 1013A Conduct front end loader operations
- MNCO 1014A Conduct haul truck operations
- MNCO 1016A Conduct grader operations
- MNCO 1017A Conduct scraper operations
- MNCO 1018A Conduct dozer operations
- MNCO 1045A Apply and monitor environmental management policies, plans and procedures



## APPENDIX 8

### *Program Structure for MNC 50204 Diploma of Underground Coal Mining Management*

**Successful completion of eleven (11) units of competency made up of:**

**(A) Eight (8) mandatory units of competency**

MNCG 1002A	Implement and apply the risk management processes
MNCU 1103A	Implement the spontaneous combustion management plan
MNCU 1107A	Implement the ventilation management plan
MNCU 1112A	Implement the gas management plan
MNCU 1132A	Implement strata management plan
MNCU 1137A	Implement mine transport systems and production equipment
MNCU 1142A	Implement mine services and infrastructure systems
MNCU 1152A	Implement mine emergency management system

**(B) Three (3) elective units from General and/or Technical Management units listed:**

➤ **Technical Management**

MNCG 1007A	Implement and monitor health and hygiene management systems
MNCG 1081A	Implement, monitor, rectify and report on contracts
MNCG 1082A	Implement, monitor, rectify and report on inventory control system
MNCU 1048A	Conduct shotfiring

**OR**

MNCU 1049A	Support shotfiring operations
MNCU 1109A	Manage, operate and maintain the mine ventilation system
MNCU 1117A	Implement the gas drainage management plan
MNCU 1122A	Implement the outburst management plan
MNCU 1127A	Implement the inrush management plan

➤ **General Management**

MNCG 1008A	Conduct safety and health investigations
MNCG 1009A	Communicate information
BSBFLM 501A	Manage personal work priorities and professional development
BSBFLM 502A	Provide leadership in the workplace
BSBFLM 503A	Establish effective workplace relationships
BSBFLM 504A	Facilitate work teams
BSBFLM 505A	Manage operational plan
BSBFLM 509A	Promote continuous improvement
BSBFLM 510A	Facilitate and capitalise on change and innovation
BSBFLM 511A	Develop a workplace learning environment
BSBSBM 401A	Establish business and legal requirements
BSBSBM 402A	Undertake financial planning
BSBSBM 406A	Manage finances

## APPENDIX 9

### *Program Structure for MNC 50104 Diploma of Surface Coal Mining Management*

**Successful completion of fourteen (14) units of competency made up of:**

**(A) Two (2) mandatory units of competency**

- MNCG 1002A Implement and apply the risk management processes  
MNCG 1103A Implement and maintain management systems to control risk

**(B) Twelve (12) elective units to be completed including:**

- a minimum of five (5) units from the specified Technical Management units
- a minimum of four (4) units drawn from the specified General Management units
- a maximum of three (3) units, relevant to the job function, drawn from the Coal Training Package or other endorsed Training Packages.

➤ **Technical Management**

- MNCG 1082A Implement, monitor, rectify and report on inventory control system  
MNCO 1047A Manage the interaction of light and heavy vehicles and mining equipment  
MNCO 1044A Manage laser levelling of operating plant  
MNCO 1046A Apply and monitor systems and methods of mining  
MNCO 1102A Implement pit plan  
MNCO 1106A Implement the site water management plan  
MNCO 1111A Implement the stockpile management plan  
MNCO 1116A Implement mine plant and resource management plan  
MNCO 1121A Implement site waste and by-product management plan  
MNCO 1126A Implement and maintain the site plant, equipment and infrastructure maintenance plan  
MNCO 1131A Implement mine services systems  
MNCO 1142A Implement mine fixed plant and infrastructure systems

➤ **General Management**

- MNCG 1007A Implement and monitor health and hygiene management systems  
MNCG 1081A Implement, monitor, rectify and report on contracts  
MNCG 1119A Manage major incidents and emergencies  
BSBFLM 501A Manage personal work priorities and professional development  
BSBFLM 502A Provide leadership in the workplace  
BSBFLM 503A Establish effective workplace relationships  
BSBFLM 504A Facilitate work teams  
BSBFLM 505A Manage operational plan  
BSBFLM 509A Promote continuous improvement  
BSBFLM 510A Facilitate and capitalise on change and innovation  
BSBFLM 511A Develop a workplace learning environment  
BSBSBM 401A Establish business and legal requirements  
BSBSBM 402A Undertake financial planning  
BSBSBM 406A Manage finances

## APPENDIX 10

### *Program Structure for MNC 60204 Advanced Diploma of Underground Coal Mining Management*

Successful completion of eleven (11) units of competency made up of:

**(A) Eight (8) mandatory units of competency**

MNCG 1003A	Establish the risk management system
MNCU 1102A	Establish the spontaneous combustion management plan
MNCU 1106A	Establish the ventilation management plan
MNCU 1111A	Establish the gas management system
MNCU 1131A	Establish the mining method and strata management systems
MNCU 1136A	Establish mine transport systems and production equipment
MNCU 1141A	Establish mine services and infrastructure systems
MNCU 1151A	Establish mine emergency preparedness and response systems

**(B) Three (3) elective units from the units listed:**

➤ **General Management**

MNCU 1109A	Manage, operate and maintain the mine ventilation system
MNCU 1116A	Establish the gas drainage management plan
MNCU 1121A	Establish the outburst management plan
MNCU 1126A	Establish the inrush management plan
MNCG 1006A	Incorporate health and hygiene factors into mine management
MNCG 1101A	Establish and maintain the environmental management system
MNCG 1102A	Establish the statutory compliance management system
MNCG 1107A	Establish and maintain the mine Occupational Health and Safety management system
MNCG 1125A	Initiate, monitor and supervise contracts
MNCG 1126A	Conduct business negotiations
BSBMGT 503A	Prepare budgets and financial plans
BSBMGT 601A	Contribute to strategic direction
BSBMGT 603A	Review and develop business plans
BSBMGT 605A	Provide leadership across the organisation
BSBMGT 607A	Manage knowledge and information
BSBMGT 608A	Manage innovation and continuous improvement



## APPENDIX 11

### *Program Structure for MNC 60104 Advanced Diploma of Surface Coal Mining Management*

Successful completion of fourteen (14) units of competency made up of:

**(A) Six (6) mandatory units of competency**

MNCG 1003A	Establish the risk management system
MNCG 1101A	Establish and maintain the environmental management system
MNCG 1102A	Establish the statutory compliance management system
MNCG 1107A	Establish and maintain the mine Occupational Health and Safety management system
MNCG 1111A	Establish and maintain the quality system
MNCG 1116A	Establish mine emergency preparedness and response systems

**(B) Eight (8) elective units including:**

- four (4) units from the specified Technical Management units
- four (4) units from the specified General Management units

➤ **Technical Management**

MNCO 1101A	Plan pit development
MNCO 1105A	Establish the mine water management system
MNCO 1110A	Establish the mine stockpile management system
MNCO 1120A	Establish waste and by-product management system
MNCO 1125A	Establish plant, equipment and infrastructure maintenance system
MNCO 1130A	Establish mine services system
MNCO 1135A	Establish ground control and slope stability systems
MNCO 1140A	Establish the mine infrastructure and fixed plant systems

➤ **General Management**

MNCG 1119A	Manage major incidents and emergencies
MNCG 1125A	Initiate, monitor and supervise contracts
MNCG 1126A	Conduct business negotiations
BSBMGT 601A	Contribute to strategic direction
BSBMGT 603A	Review and develop business plans
BSBMGT 605A	Provide leadership across the organisation
BSBMGT 607A	Manage knowledge and information
BSBMGT 608A	Manage innovation and continuous improvement
BSBMGT 503A	Prepare budgets and financial plans



## APPENDIX 12

### *Program Structure/Content – Bachelor of Mine Operations Management*

The content of this final qualification component will be determined by the cadet's employer in negotiation with the Industry Sponsor / Industry Mentor and the Academic Mentor. The generic structure is an industry based Project (comprising a two part project) plus from six (6) to ten (10) courses from specialty packages: Engineering, Sustainable Development, Environmental Science, Business, Law, Safety, and Information Technology. These courses could be drawn from but will not be restricted to, the following selection:

#### **Engineering**

ENTA 11010	Engineering Graphics
ENTA 12011	CAD & Design
ENTA 12013	Engineering Management
ENTA 13017	Project Management
ENTA 13018	Quality Management
ENTA 13019	Contract Management
ENTA 13020	Maintenance Management
ENTC 12002	Geology & Geomechanics
ENTC 13011	Environmental Engineering
ENTC 13015	Surveying
ENTM 13008	Mechanical/Electrical Drives
ENTM 13011	Materials Handling
ENTM 13012	Materials in Service
ENMM 20010	Introduction to Maintenance Engineering
ENMM 20011	Establish the Maint. Strategy
ENMM 20012	Maintenance Organisation
ENMM 20013	Maintenance Systems and Documentation
ENMM 20014	Maintenance Leadership
ENMM 20015	Auditing Maintenance Systems
ENMM 20017	Advanced Condition Monitoring
ENMM 20018	Turnaround Management
ENMM 20019	Computers in Maintenance
ENMM 20020	Maintenance Materials Management
ENPO 20001	Physical & Chemical Processes
ENPO 20002	Process Control & Inst
ENPO 20003	Industrial Process Management
ENPO 20010	Intro to Process Engineering
ENPO 20011	Op Issues in Process Mgt
ENPO 20013	Prof Issues in Process Mgt
ENPO 20004	Process Simulation, Modelling & Optimisation

## **Sustainable Development**

EVST 20009	Thinking Systemically and Sustainably
MGMT 20083	Models of Sustainable Development
GEOG 11024	Conservation in Australia

## **Environmental Science**

ENEV 20001	Air Quality Management 1
ENEV 20002	Waste Minimisation and Cleaner Production
ENEV 20005	Environmental Planning and Economics
ENEV 20007	Energy, Resources and Environment
ENEV 20008	Environmental Engineering
ENVR 11011	Environmental Science A
ENVR 11012	Environmental Science B
ENVR 20001	Science and the Environment
ENVR 19007	Environmental and Social Impact Assessment
EVST 19008	Environmental Management
EVST 19020	Environmental Management Systems
EVST 20002	Land Management and Rehabilitation (This course has a residential school component)
EVST 20003	Environmental Risk Management (This course has a residential school component)
EVST 20012	Water Management 1 (This course has a residential school component)
EVST 20021	Environmental Management Systems and Sustainable Development

## **Business**

MGMT 19103	Logistics Management
MGMT 19104	Cont Purchasing and Mats Mgt
MGMT 19105	Quality Management
MGMT 19114	Strategic Management
ACCT 11059	Using Acc. for Decision Making
ECON 19032	Microeconomics
ECON 19033	Macroeconomics
HRMT 11011	Human Resources in Orgs
LAWS 19031	Mercantile Law
HRMT 19020	Managing Organisational Change
HRMT 19021	Australian Industrial Relations
MGMT 20124	People, Work and Organisations
MGMT 20121	Leaders and Organisations
MGMT 20094	Organisational Analysis
MGMT 20093	Managing in a Dynamic Environment
MGMT 20085	Managing Operational Effectiveness
MGMT 12097	Industrial Relations
HRMT 20007	Human Resource Management
ACCT 19083	Corporate Governance and Ethics

COMM 12017 Public Relations Management  
COMM 12025 Organisational Communication  
MGMT 20112 Strategy Development and Initiatives

### **Law**

LAWS 20039 Environmental Law and Regulation  
LAWS 20038 International Business Law  
LAWS 20037 Law for Management  
LAWS 19037 Law for Global Business  
LAWS 11046 Law and the Environment

### **Safety**

OCHS 12005 Risk Mgt & Safety Technology  
OCHS 12015 Law & Mgt of OHS  
OCHS 13008 Human Factors  
OCHS 13010 Applied Worksite Analysis (Has a block learning component in Rockhampton)  
OCHS 13011 Occupational Rehab & Compensation  
OCHS 13016 Occupational Health, Hygiene & Toxicology

### **Information Technology**

COIS 11014 Engineering Computing  
COIS 20024 Systems Management Overview (Requires Internet access)  
COMM 12020 Communication in the Digital Age



## APPENDIX 13

### Web Links

Anglo Coal	<a href="http://www.anglocoal.com.au">http://www.anglocoal.com.au</a>
Anglo Coal (Callide Management Pty Ltd)	<a href="http://www.bmacoal.com">http://www.bmacoal.com</a>
Australian Coal Association	<a href="http://www.australiancoal.com/industrystats.htm">http://www.australiancoal.com/industrystats.htm</a>
Australian Premium Coals Pty Ltd	<a href="http://www.macarthurcoal.com.au">http://www.macarthurcoal.com.au</a>
BHP Billiton Mitsubishi Alliance	<a href="http://www.bmacoal.com">http://www.bmacoal.com</a>
Blackwater Mine	<a href="http://www.bmacoal.com">http://www.bmacoal.com</a>
Blair Athol Coal Joint Venture	<a href="http://www.pacificcoal.com.au">http://www.pacificcoal.com.au</a>
Callide Boundary Hill Southern	<a href="http://www.anglocoal.com.au">http://www.anglocoal.com.au</a>
Central Queensland Institute of TAFE (CQIT)	<a href="http://www.cqtafe.com/site/">http://www.cqtafe.com/site/</a>
Central Queensland University	<a href="http://www.cqu.edu.au/">http://www.cqu.edu.au/</a>
Collinsville Coal Company Pty Ltd	<a href="http://www.mim.co.au/coal.html">http://www.mim.co.au/coal.html</a>
Cook Resource Mining Pty Ltd	<a href="http://www.xstrata.com">http://www.xstrata.com</a> or <a href="http://www.centennialcoal.com.au">www.centennialcoal.com.au</a>
Coppabella Coal Pty Ltd	<a href="http://www.macarthurcoal.com.au">http://www.macarthurcoal.com.au</a>
Crinum Mine	<a href="http://www.bmacoal.com">http://www.bmacoal.com</a>
Curragh Queensland Mining Pty Ltd	<a href="http://www.wesfarmersenergy.com.au">http://www.wesfarmersenergy.com.au</a>
Ensham Resources Pty Ltd	<a href="http://www.ensham.com.au">http://www.ensham.com.au</a>
German Creek Central	<a href="http://www.anglocoal.com.au">http://www.anglocoal.com.au</a>
German Creek East Joint Venture	<a href="http://www.anglocoal.com.au">http://www.anglocoal.com.au</a>
Goonyella Mine	<a href="http://www.bmacoal.com">http://www.bmacoal.com</a>
Gregory Mine	<a href="http://www.bmacoal.com">http://www.bmacoal.com</a>
Hail Creek Coal Pty Ltd	<a href="http://www.pacificcoal.com.au">http://www.pacificcoal.com.au</a>
Jeebropilly Collieries Pty Ltd	<a href="http://www.newhopecoal.com.au">http://www.newhopecoal.com.au</a>
Jellinbah Mining Pty Ltd	<a href="http://www.jellinbah.com.au">http://www.jellinbah.com.au</a>
Kestral Coal Joint Venture	<a href="http://www.pacificcoal.com.au">http://www.pacificcoal.com.au</a>
Millmerran Operating Company Pty Ltd	<a href="http://www.intergen.com/australia.html">http://www.intergen.com/australia.html</a>
MineSafe	<a href="http://www.minesafe.org/performance_data/fatalities.html">http://www.minesafe.org/performance_data/fatalities.html</a>
MineSafe Organisational links	<a href="http://www.minesafe.org/links/">http://www.minesafe.org/links/</a>

Mines Inspectorate	<a href="http://www.nrm.qld.gov.au/mines/inspectorate/about.html">http://www.nrm.qld.gov.au/mines/inspectorate/about.html</a>
Mining ITAB	<a href="http://www.qmitab.com.au/">http://www.qmitab.com.au/</a>
Moorvale Coal	<a href="http://www.macarthurcoal.com.au">http://www.macarthurcoal.com.au</a>
New Acland Coal	<a href="http://www.newhopecoal.com.au">http://www.newhopecoal.com.au</a>
New Hope Corporation Ltd	<a href="http://www.newhopecoal.com.au">http://www.newhopecoal.com.au</a>
New Oakleigh Collieries Pty Ltd	<a href="http://www.newhopecoal.com.au">http://www.newhopecoal.com.au</a>
Newlands-Collinsville-Abbot Point	<a href="http://www.mim.com.au/nca.html">http://www.mim.com.au/nca.html</a>
Norwich Park Mine	<a href="http://www.bmacoal.com">http://www.bmacoal.com</a>
Oaky Creek Coal Pty Ltd	<a href="http://www.mim.co.au/coal.html">http://www.mim.co.au/coal.html</a>
Pacific Coal	<a href="http://www.pacificcoal.com">http://www.pacificcoal.com</a>
Peak Downs Mine	<a href="http://www.bmacoal.com">http://www.bmacoal.com</a>
Queensland Resource Council	<a href="http://www.qrc.org.au">http://www.qrc.org.au</a>
Rio Tinto Coal Australia	<a href="http://www.pacificcoal.com.au">http://www.pacificcoal.com.au</a>
Roche Mining	<a href="http://www.intergen.com/australia.html">http://www.intergen.com/australia.html</a>
Saraji Mine	<a href="http://www.bmacoal.com">http://www.bmacoal.com</a>
TAFE Queensland Mining Service (TQMS)	<a href="http://www.cqit.net/mining">http://www.cqit.net/mining</a>
Tarong Coal Pty Ltd	<a href="http://www.pacificcoal.com.au">http://www.pacificcoal.com.au</a>
The Moura Joint Venture	<a href="http://www.anglocoal.com.au">http://www.anglocoal.com.au</a>
Thiess Mining	<a href="http://www.thiess.com.au">http://www.thiess.com.au</a>
Xstrata Coal Queensland Pty Ltd	<a href="http://www.mim.co.au/coal.html">http://www.mim.co.au/coal.html</a>

## Notes

