





MASTER OF ECONOMIC GEOLOGY SHORT COURSE

Advanced Field Skills in Economic Geology

7-20 February 2021



CODES, Centre for Ore Deposit and Earth Sciences, University of Tasmania CRICOS Provider Code 00586B



Advanced Field Skills in Economic Geology

is offered as a unit in the national Minerals Geoscience Masters program.

MASTER OF ECONOMIC GEOLOGY

THE MOST COMPREHENSIVE MASTER DEGREE IN MINERAL EXPLORATION AND MINING GEOLOGY ANYWHERE IN THE WORLD

This course work-based Masters program is aimed at geoscientists who want to gain a thorough up-date on advances across the spectrum of economic geology applied to mineral exploration. The Master of Economic Geology at UTAS is part of the national Minerals Geoscience Masters program, jointly offered by the University of Tasmania and the University of Western Australia, in conjunction with Curtin Business School at Curtin University.

Course structure

The Masters course can be completed in either of two ways:

Option 1: requires the completion of six coursework units and a minor research thesis. Four of the units must be completed at CODES, while the remainder may be completed at other participating universities. Duration: 18–24 months full-time; up to 30 months part-time (flexible in recognition of industry participants).

Option 2: requires the completion of eight units of coursework, at least four of which must be undertaken at CODES. Duration: up to 30 months part-time (flexible in recognition of industry participants).

Participating universities offer up to six units annually or in rotation over a two-year period. Most units are of two weeks duration.

Fees

UTAS tuition fees are approximately \$2,381 per unit (8 in total) for domestic students (2020 rate, 2021 rates to be released shortly) and \$8,636 (AUD) per unit for full-fee paying overseas students (FFPOS) (2021 rate). Field-based courses have additional costs. Costs will vary for units taught by other MGM partner institutions.

Entry Requirements

A BSc (Hons), or a BSc (majoring in geoscience) with at least two years industry experience. International students should also refer to http://www.international.utas.edu.au. English language proficiency requirements also apply.

Courses offered by CODES

• KEA707 Ores in Magmatic Arcs (NSW & Qld):

26 November - 8 December 2021

• KEA708 Volcanology and Mineralisation in Volcanic Terrains (New Zealand, western Tasmania):

March 2022

 KEA709 Ore Deposit Geochemistry, Hydrology and Geochronology:

31 May-5 June & 5-9 July 2021

• KEA710 Exploration in Brownfield Terrains:

June 2022

• KEA711 Geometallurgy:

18-29 October 2021

• KEA712 Ore Deposit Models and Exploration Strategies:

October 2022

• KEA713 Geodata Analytics:

February-April 2021 (22-27 March-intensive Module 2)

• KEA716 Fundamentals of Economic Geology:

30 August – 10 September 2021

• KEA718 Advanced Field Skills in Economic Geology:

7-20 February 2021

For further information contact:

Dr Robert Scott

Masters Coordinator, CODES

Private Bag 79, Hobart 7001, Australia

Tel: +61 3 6226 2786

Email: Robert.Scott@utas.edu.au CODES.Info@utas.edu.au

Website: http://www.utas.edu.au/codes/masters-short-courses

COURSE PRESENTERS

Robert Scott is the Coordinator of the Master of Economic Geology program at CODES, and lecturer in Structural Geology in the Discipline of Earth Sciences at the University of Tasmania. He has extensive field mapping skills, and has been training geoscientists in field mapping for three decades. Lejun Zhang is a Senior Research in the TMVC Research Hub, UTAS specialising in the application of alteration mineral chemistry for enhancing exploration in green rock and lithocap environments, and vectoring using SWIR and whole-rock geochemical data.

Michael Baker is a Senior Research Fellow in Economic Geology in the TMVC Research Hub, UTAS. He has extensive research expertise in mineral chemistry and its applications to exploration for porphyry and epithermal deposits.







COURSE INFORMATION AND PRELIMINARY PROGRAM

This field-based short course will be held in Tasmania over two weeks in February 2021. The course will teach fundamental and advanced mapping and field skills suitable for use in the minerals industry, including field-based rock and mineral identification, fact and form surface mapping, Anaconda-style mapping, structural measurement and graphic logging techniques for drill core, and the use of spectral, geochemical and remote sensing data sets in making and interpreting geological maps. This course has been identified as critical by the Minerals industry to teach skills lacking for many graduates.

Part One:

For the first part of the course, detailed structural and volcanic facies mapping will be conducted in polydeformed Cambrian submarine volcanic rocks near the Henty gold mine. The mapping area is ~15 km south, along strike from the world-class Rosebery Zn-Cu-Pb-Au-Ag volcanic-hosted massive sulfide deposit in the Cambrian Mount Read Volcanic belt, western Tasmania.

Techniques covered include graphic and structural core logging, volcanic facies mapping and interpretation and structural mapping and analysis of simply deformed regions.

Part Two:

Following on from Part One will be a series of short Anaconda mapping style exercises at several localities in western and eastern Tasmania (mapping areas to be confirmed - sites being considered include Western Tharsis Cu-Au deposit, Mt Lyell; Jukes Cu-Au prospect, Mt Read Volcanics; Carboniferous magnetite skarns – Trial Harbour; Devonian granite-related magmatic-hydrothermal features – Freycinet Peninsula). The mapping camp will conclude with detailed structural mapping of polydeformed turbidites in NE Tasmania.

Topics covered include the Anaconda mapping technique, magmatic—hydrothermal transition features in granites, mapping and interpretation of fault and vein systems and structural mapping techniques for multiply deformed regions.

Registration fees cover the cost of field trip transport and accommodation. Participants are responsible for air travel to/from Hobart and accommodation in Hobart.

All participants must carry their own PPE (steel-capped boots, long-sleeved shirts, long sturdy trousers, 'wet boots' (for wading), geological hammer, hand lens, scratcher, field notebook, pens/pencils (incl coloured), ruler, protractor, eraser, compass/clinometer. You will also need sun protection, and wet weather gear.



REGISTRATION FORM

Advanced Field Skills in Economic Geology 7-20 February 2021

Please complete and return to:

CODES

University of Tasmania, Private Bag 79 Hobart, Tasmania, Australia 7001

+61 3 6226 2472 Ph:

CODES.Info@utas.edu.au Email:

P	FF	25	n	N	Δ	ı	D	FΤ	Ά	ш	ς

whether they have secured a place by January 22nd.

PERSONAL DETAILS						
Title—Please highlight (Prof / Dr / Mr / Mrs / Ms / Miss)						
First Name: Last N	ame: (surname / family name):					
Preferred Name:						
Position:						
Company / University:						
Address:						
City: State: Postco	ode: Country:					
Email:	Phone (mobile / cell):					
Next of kin (name, relationship and email/phone contact):						
REGISTRATION FEES	PAYMENT					
All fees are in Australian dollars (AUD) and include GST. Fees do not include flights to/from Hobart, or accommodation in Hobart.	Registrations are due by the 19th of January, 2021. Full payments are due by the 31st of January, 2021.					
Please indicate ☑	Preferred payment method. Please indicate ☑					
Minerals Geoscience Masters Program (MGM) Students: (Excludes UTAS tuition fee)	☐ Credit Card Upon receipt of your registration form and confirmation of your place, you					
☐ Full course (\$1,600)- University of Tasmania enrolled	will be provided with a payment reference number and web address for					
☐ Full course (\$1,600)- University of Western Australia enrolled	online payments. Please note: Credit card details <u>cannot</u> be accepted by					
Industry Participants:	email.					
☐ Full course (\$2,400)*	☐ Cheque or Bank Draft					
□ Part one– Western Tasmania (\$1,500)* □ Part two– Tasmania (\$1,500)*	Please make cheques and bank drafts payable to "The University of Tasmania". Bank drafts must be made out in Australian currency (AUD).					
Other Students:	☐ Invoice					
☐ Full course (\$1,600)*	Name, address and email address for person responsible for payment of					
□ Part one– Western Tasmania (\$1,000)* □ Part two– Tasmania (\$1,000)*	invoice:					
□ Part two— rasmania (\$1,000).						
* Participant numbers for this course are capped, with preference to						
enrolled MGM students. Other interested parties will be advised						

Please retain a copy of this form for your records and email or post original to CODES.Info@utas.edu.au