



UTM
UNIVERSITI TEKNOLOGI MALAYSIA



PROFESSIONAL CERTIFICATE IN ROCK MECHANICS AND BLAST FRAGMENTATION

 **OCTOBER 2020** INTAKE

INTRODUCTION

Rock Mechanics is the theoretical and applied science of behaviour of rock. It is that branch of mechanics, which is concerned, with the response of rock to the field of its environment. These techniques apply to surface excavation as well as underground. It has important role in mine planning, design and selection of mining methods, optimum slope angle and to find out optimum drilling and blasting parameters.



During this course we are going to look at what are the various types of rock fragmentation methods used in mines, detail of explosives used in mining industry, how to design and conduct rock blast effectively and efficiently. Finally, session will end with the environmental effect due to blasting activities.

COURSE CONTENT

- Module 1 - Introduction to Rock Mechanics and Theory of Elasticity
- Module 2 - Index properties and their importance
- Module 3 - Geomechanical Properties and their importance
- Module 4 - Introduction to Drilling and blasting, their mechanisms and selection of explosives
- Module 5 - Surface Blast Design and importance of blast design parameters on blast performance
- Module 6 - Assessment, evaluation and monitoring of Blast round and mitigation of blast nuisances
- Module 7 - Rock Mass Classification and Blastability

UTMSPACE ESTD. 1993

IN-HOUSE Courses can be designed in accordance with organizational requirements.

-  Centre for Professional Development,
UTMSPACE Johor Bahru
-  07-521 8159 (Ms. Nurafidah)
-  07-520 5725
-  nurafidah@utmspace.edu.my



HRDF Claimable

CRITERIA COURSE

- Minimum of 3 years of experience in the field of blasting
- Statutory blasting certificate is desirable but not essential
- Any other person having higher qualification and without adequate experience should explain in writing his intention to join above certification. The same shall be evaluated before admission to this certification course.



FACILITATORS



DR. MANOJ KHANDELWAL is a Senior Lecturer of mining engineering at Federation University and is an Australian Endeavour Fellow. Dr Khandelwal has more than a decade of a research and academic teaching experience in Australia and India. Dr Khandelwal has been recognized as a leading expert in the area of

'Mining Geomechanics' and 'Rock Blasting'. So far, Dr Khandelwal has published more than 100 research papers in different reputed journals with high impact factors and reputable conference proceedings. His total citations are more than 2200 (Scopus) and current h index is 27. He is also author of a book. Dr Khandelwal has been awarded several prestigious awards, including Young Scientist Award, Young Engineer award and Young Mining Engineer award. He is the Editor-in-chief of three reputed journals and on the editorial board of more than thirty refereed international journals published from various continents. He is the reviewer for more than 100 international reputed journals.



DR. RAMESH BHATAWDEKAR is Head of Training and Courses at Geotropik, Centre of Excellence at UTM. Dr. Ramesh is Mining Engineer from Indian Institute of Technology, Kharagpur, India. He completed M Phil and Ph. D from UTM. He was awarded Best Post Graduate Student Award and Pro-chancellor Academic Award for his M Phil. Dr. Ramesh was also awarded Life Time Achievement Award by IMEJ, India. Dr. Ramesh is expert in the field of drilling and blasting, mine planning and managing mining equipment. He has 35 years' experience in aggregate and limestone quarries, iron ore mining. Dr. Ramesh has worked in India, Indonesia, and Malaysia. He has successfully completed consultancy assignments in Thailand, Cambodia and Sri Lanka. His passion is innovation and application of Information Technology in Mining. He has published 15 research papers and presented 40 Papers in International Conferences. Dr. Ramesh presented paper in Fragblast 12 International Conference at Lulea University, Sweden during 2018. His H Index is 8 and citations are more than 280. He is invited speaker by China Aggregate Association for last 5 years. He is also a member of Global Aggregate Information Network (GAIN) and Society of Mining, Metallurgy and Exploration (SME), US.

REGISTRATION FORM

To confirm your registration, please complete this form including payment.

YES! Please register the following participant(s) for this course

I am interested but unable to attend. Please put me on your mailing list

Please tick (/) where applicable

Course Name : **Professional Certificate in Rock Mechanics and Blast Fragmentation (Online Programme)**

Registration Date : **27 October 2020**

Fee : **Local Participant** **International Participant**
RM 3,500.00 per pax **USD 875.00** per pax

*DETAILS OF PARTICIPANT ATTENDING THE COURSE :

No.	Name of Participant	Mobile No.	Email	NRIC (for HRDF claim)	Fee (RM)

(Please attach a separate list if necessary)

*UTMSPACE respects the privacy of its customers with regards to personal data. For further details, please visit: www.utmspace.edu.my/pdpa

Total

SPONSORSHIP : Self-Sponsored Company-Sponsored

INDIVIDUAL / COMPANY DETAILS (for issuance of invoice) :

Organisation : _____
Address : _____
Contact Person : _____ Co. Reg. No* : _____
Tel No. : _____ *If applicable Designation : _____
Fax No. : _____ Email : _____

Cancellations received in writing 30 days prior to the programme are eligible for a refund, subject to a 15% cancellation fee. Cancellations received less than 14 days from the date of the programme are not eligible for a refund. However, substitute attendees are welcome. Please note that the speakers and topics are confirmed at the time of printing. However, circumstances beyond the control of the organisers may necessitate substitutions or cancellations of speakers and/or topics. As such UTMSPACE reserves the right to alter or modify the advertised speakers and/or topics.

Authorised Signature* : _____ Date : _____
Name : _____ Designation : _____
** Head of Department / Approving Manager*

Company Stamp

MODE OF PAYMENT

A. Cheque or Bank Draft

Cheque No. / Bank Draft No. : _____ Bank/ Branch : _____

All crossed cheque / bank draft should be made payable to Account Name : UTMSPACE
Account Number : 8601518228 | Bank Name : CIMB Islamic Bank Berhad | Branch : UTM Skudai, Johor

B. Telegraphic Transfer / Local Order

Transaction Date : _____ Reference Number : _____

| Terms & Conditions Apply |

FOR FURTHER INFORMATION, PLEASE CONTACT:

Centre for Professional Development, School of Professional and Continuing Education (UTMSPACE), Universiti Teknologi Malaysia,
No. 34 - 50, Jalan Kebudayaan 1, Taman Universiti, 81300 Skudai, Johor
Tel : (607) 521 8159 | Fax : (607) 520 5725 | Website : www.utmspace.edu.my
E-mail : nurafidah@utmspace.edu.my Contact Person : MS. NURAFIDAH