

## Program Details

<b>Location</b>	Dubrovnik, Croatia <a href="http://www.iuc.hr/">http://www.iuc.hr/</a>
<b>Academic Field</b>	Mining Engineering, Engineering
<b>Target Group</b>	Postgraduate, Professionals, Academic Staff
<b>Tuition Fee</b>	800 € - includes Academic Program, Accommodation and Half-Board
<b>Recommended Credits</b>	4 ECTS-Credits
<b>Duration</b>	One week of full-time studies and excursions
<b>Kind of Exams</b>	Seminar Paper, Project Work
<b>Social Program</b>	Excursion, City Tour, Cocktail Party

## Program Director

Vječislav Bohanek

## Steering Committee

Mario Dobrilović

Alfred Maier

Heidrun Mörtl

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## Sponsors

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## Joint Project of



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Photo: Vječislav Bohanek



## Dubrovnik International ESEE Mining School – DIM 2016

## Innovative Approaches to Blasting

October 23-28, 2016

<http://www.rgn.hr/en/studies/dubrovnik-international-esee-mining-school>



## Description

Once a year, the Dubrovnik International ESEE Mining School brings together international experts in the field of mining in the heart of the ESEE Region.

Focussing on recent developments within the mining industry and the development of the mining sector, our program aims at transferring new-found, innovative theoretical knowledge, tested in practice, to our participants.

Within the thematic workshops and project work the focus lies on direct knowledge transfer from renowned experts to the participants, but also the creation of an open dialogue between graduate students, scholars, researchers, the industry and the wider society. The knowledge and skills gained at DIM aim at increasing the employability of mining engineers.

Furthermore, wider general education on topics of mining, and especially the improvement of mining techniques, resulting in a lower environmental impact, help gain wider societal acceptance of mining. Our program, in the long run, will lead to an increase in sustainable mining activities, which will in the process result in economic growth and the creation of employment in the respective countries.

## Innovative Approaches to Blasting 2016

One of the great challenges of mining within this day and age is that general societal acceptance of the mining sector is rather low due to factors such as the noise of detonation, the vibrations of the blasting and fly rock.

The first edition of the program focuses on the wider societal and economic acceptance of drilling and blasting and aims at educating mining engineers (postgraduates, professionals, academic staff) on the newest innovative, tested techniques of environmentally friendly blasting. Participants will gain expertise on how to reduce noise, vibration and avoid fly rock in theory and practice and thus be able to carry out mining that is sustainable in the future.

Topics in the 2016 edition will include an introduction to blasting, blasting theory, fragmentation, blast design, the legal framework of blasting, and discuss health, safety and environmental measures.

Especially within the ESEE Region, which has a long standing tradition in the field of mining and vast natural resources, it is of utmost importance that mining engineers are educated with the most up to date techniques in order to access the resources available.

## Schedule

	Morning	Afternoon
23.10		<b>Arrival</b> Check in and registration Austin Powder Welcome Dinner
24.10.	<b>Introduction</b> Aministrative Matters Academic Matters  <b>Round Tabel Challenges in the Society</b> Directors + Teaching Staff	<b>Introduction to Blasting</b> Mark Ganster  <b>Drill Hole Deviations</b> Mark Ganster
25.10.	<b>Blast Fragmentation: Planning and Control</b> Peter Moser  <b>Blast Fragmentation: Basics, Models and Measurements</b> Finn Ouchterlony	<b>The Role of Position of Initiation, Initiation Energy and Stemming on Breakage</b> Zvonimir Ester  <b>Legal Framework of Blasting</b> Alfred Maier.
26.10.	<b>Health, Safety and Enviroment</b> Alfred Maier  <b>Code of Good Practice and Fly Rock/Vibrations/Noise</b> Mario Dobrilovic	<b>Excursions Freetime</b>
27.10.	<b>Detonation Theory and Numerical Modeling</b> Muhamed Sućeska  <b>Influence of Initiation Energy on Velocity of Detonation of ANFO and heavy ANFO blends</b> Vječislav Bohanek	<b>Optical systems of explosives charge initiation (OPSIN)</b> Soboliev Valerii  <b>City Tour</b>
28.10.	<b>Field Exercise</b> Limestone Quarry 15km from Dubrovnik	<b>Closing Ceremony</b>
29.10.	<b>Departure</b>	