SOCRATES / ERASMUS PROGRAMME

AT MINING ENGINEERING DEPARTMENT

Prepared by

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1. General Information

Erasmus programme is a European Union education and training programme which aims to increase the quality of higher education in Europe. For this purpose, the Programme promotes the co-operations between higher education institutions (HEI) in Europe. These partnerships and mobility activities are financially supported by the Programme.

Erasmus programme enables more than 180,000 students to study and work abroad each year, as well as supporting co-operation actions between higher education institutions across Europe. It caters not only for students, but also for professors and business staff who want to teach abroad and for university staffs who want to be trained abroad. The coverage of these all actions given in Table 1.

Table .1 Actions include support

For students: ▪ studying abroad ▪ doing a traineeship abroad ▪ linguistic preparation	**For universities/higher education institution staff:** ▪ teaching abroad ▪ receiving training abroad
For universities/higher education institutions: ▪ intensive programmes ▪ academic and structural networks ▪ multilateral projects	**For enterprises:** ▪ hosting students placements ▪ teaching abroad ▪ participating in university cooperation projects

Around 90% of European universities take part in Erasmus and 2 million students have participated since it started in 1987. The annual budget is in excess of €440million, more than 4,000 higher education institutions in 31 countries participate, and even more are waiting to join.

Studies show that a period spent abroad not only enriches students' lives in the academic field but also in the acquisition of intercultural skills and self-reliance. Staff exchanges have similar beneficial effects, both for the people participating and for the home and host institutions. In addition to mobility actions, the Programme supports higher education institutions to work together through intensive programmes, networks and multilateral projects.

Higher education institutions which want to participate in Erasmus actions must have an Erasmus University Charter. The Charter aims to guarantee a high level of quality in mobility and cooperation by setting out fundamental principles for all Erasmus actions that participating institutions must follow.

The European Commission is responsible for the overall implementation of Erasmus Programme. Actions are managed by national agencies in the 31 participating countries or by Executive Agency for Education, Audiovisual and Culture based in Brussels.

Actions under Erasmus Programme run by Turkish National Agency are:

- Mobility Activities
    - Student Mobility
        - Student Mobility for Studies
        - Student Mobility for Placements
    - Staff Mobility
        - Staff Mobility for Teaching Activities
        - Staff Mobility for Training
    - Organization of Mobility
- Erasmus Intensive Language Courses
- Intensive Programmes
- Preparatory Visits

2. Erasmus at Mining Engineering Department

2.1 Cooperation Agreements and Contingencies

The Department of Mining Engineering at Istanbul Technical University has agreement with the following departments under the frame of Erasmus programme.

Table 2. Cooperation agreements of Mining Engineering Departments

Country	Univesity	Nr. of Student and Level	Duration (weeks)
Germany	RWTH Aachen	5 PG	60
	Uni. of Tübingen	3 UG, 1 PG, 1 D	40
Austria	Montanuniversität Leoben	3 UG, 1 PG, 1 D	30
Greece	Nat. Tech. Univ. of Athens	4 UG, 1 PG	40
Spain	Universidad Politecnica de Madrid*	2 UG	20

UG: Undergraduate PG: Postgraduate D: Doctorate *: will be initiated in 2010

2.2 Students

The mining Engineering Department proposes to increase the involvent of this programme. Recently the bilateral agreement has been signed with Universidad Politecnica de Madrid. The students who are selected for Ersamus are given in Table 3.

Table 3. Selected students for Erasmus programme

Academic year	Student Reg. Nr.	Name and Surname	Host University - Country
2009-2010	050070030	Duygu Hoşaf	Leoben Uni.- Austria
	050070052	Cem Küçüktaş	Leoben Uni.- Austria
	050080021	Nesibe Ece Damcıoğlu	Leoben Uni.- Austria
	050050020	Besimcan Yalçın	Nat. Tech. Univ. of Athens-Greece
	050070053	Deyvi Akkriş	Nat. Tech. Univ. of Athens-Greece
2008-2009	050050022	Emre Ekinci	Leoben Uni.- Austria
	050050043	Gonca Kistik	Leoben Uni.- Austria
	050050058	Pelin Koçak	Leoben Uni.- Austria
2007-2008	050030013	Emre Kaya	Leoben Uni.- Austria
	050030023	Onur Kuştepe	Aachen Uni.-Germany
	050050024	Merve Karaabat (iptal)	Leoben Uni.- Austria
	050030054	Murat Perver	Aachen Uni.-Germany
	050020015	Mustafa G. Çiçek	Leoben Uni.- Austria
2006-2007		Ali Akdağ	Aachen Uni.-Germany
2005-2006		M.Mustafa Karahan	Aachen Uni.-Germany
		Muzaffer Şirin	Aachen Uni.-Germany
		Serhan Kaldan	Aachen Uni.-Germany
		Can Muslu	Aachen Uni.-Germany
	PG	Munkhjargal Chimeddorj	Aachen Uni.-Germany

2.3 Course Program and ECTS Credits

Courses Given at Mining Engineering Programme and their ECTS Credits are illustrated in Table 4.

1. Semester									
Course Code	Course Name	ECTS	Credit Hours	Course Hours	App./Lab. Hours	TB	TM	MT	ITB
BIL 101E	Intr. to Comp. and Info. Sys.	3	2	1	2		2		
MAD 111	Intro. to Mining Eng.	3	1	1	0			1	
MAT 101	Mathematics I	8	5	4	2	5			
FIZ 101E	Physics I	6	4	3	2	4			
RES 103	Technical Drawing (CAD)	5	3	2	2		3		
ING 101	English Course I	3	3	3	0				3
	TOTAL	**28**	**18**	**14**	**8**	**9**	**5**	**1**	**3**

2. Semester									
Course Code	Course Name	ECTS	Credit Hours	Course Hours	App./Lab. Hours	TB	TM	MT	ITB
KIM 101	General Chemisrty I	6	4	3	2	4			
BIL 104 E	Intr. to Sci & Eng Comp.	5	3	2	2		3		
MAT 102	Mathematics II	8	5	4	2	5			
FIZ 102 E	Physics II	6	4	3	2	4			
ING102	English Course II	4	3	3					3
	2.yy Elective (ITB)	3	3	3					3
	TOTAL	**32**	**22**	**18**	**8**	**13**	**3**		**6**

3. Semester									
Course Code	Course Name	ECTS	Credit Hours	Course Hours	App./Lab. Hours	TB	TM	MT	ITB
MAD 232	Surface Mining	4	2.5	2	1			2,5	
MAT 261	Linear Alcebra	4	3	3	0	3			
MAD 211	Mineralogy	5	2.5	2	1		2,5		
MEK 205	Eng. Mechanics	4	3	3	0		3		
MAD 241	Blasting Technology and Applications	5	2	2	0			2	
MAT 271 E	Probability and Statistics	3	3	3	0	3			
MAT 202	Numerical Methods	5	3	3	0	3			
	TOTAL	**30**	**19**	**18**	**2**	**9**	**5,5**	**2,5**	

4. Semester									
Course Code	Course Name	ECTS	Credit Hours	Course Hours	App./Lab. Hours	TB	TM	MT	ITB
MAT 201	Differential Equations	6	4	4	0	4			
ING 201	English III	3	3	3	0				3
JEO 112	General Geology	4	3	3	0		3		
MAD 252 **E**	Mining and Environmental	4	2.5	2	1			2.5	
JEO 331	Petrography	4	2.5	2	1		2.5		
MAD 243	Underground Mining	5	2.5	2	1			2.5	
	4.yy Elective courses (TB)	4	3	3	0	3			
	TOTAL	**30**	**20,5**	**19**	**3**	**7**	**5,5**	**5**	**3**

5. Semester									
Course Code	Course Name	ECTS	Credit Hours	Course Hours	App./Lab. Hours	TB	TM	MT	ITB
MAD 341	Mineral Processing I	5	2.5	1	3			2.5	
MAD 311	Geophysics	4	2	2	0		2		
MAD 361	Mineral Deposits	4	2	2	0		2		
MAD 371	Haulage Drainage in Mines	4	2.5	2	1			2.5	
MAD 351 **E**	Rock Mechanics	4	2.5	2	1		2.5		
TUR 101	Turkish I	2	2	2	0				2
	5.yy Elective courses (ITB)	3	3	3	0				3
	5.yy Elective courses (MT)	4	3	3	0			3	
	TOTAL	**30**	**19.5**	**17**	**5**		**6.5**	**8**	**5**

6. Semester									
Course Code	Course Name	ECTS	Credit Hours	Course Hours	App./Lab. Hours	TB	TM	MT	ITB
MAD 352	Mineral Processing II	5	3	2	2			3	
MAD 342 **E**	Hydraulic Power Systems in Mining	4	2	2	0			2	
MAD 322	Design of Supports in Mines and Tunnels	4	2.5	2	1			2.5	
MAD 312	Topography	5	3	2	2		3		
TUR 102	Turkish II	2	2	2	0				2
	6.yy Elective Course-tr (MT)	4	3	3	0			3	
	6.yy Elective Course-E (MT)	4	3	3	0			3	
	Practical Training(summer)	2							
	TOTAL	**30**	**18.5**	**16**	**5**		**3**	**13.5**	**2**

7. Semester									
Course Code	Course Name	ECTS	Kredi	Course Hours	App./Lab. Hours	TB	TM	MT	ITB
ATA 101	Revolutions History I	2	2	2	0				2
MAD 431	Coal Prep. and Technology	4	2	1	2			2	
MAD 411	Mining Machinery	5	2.5	2	1			2.5	
MAD 421	Mine Ventilation and Safety	5	2.5	2	1			2.5	
MAD 441**E**	Mine System Analysis	4	2.5	2	1			2.5	
MAD 471	Electrotechniques in Mines	3	1.5	1	1			1.5	
	7.yy Elective Course (ITB)	3	3	3	0				3
	7.yy Elective Course (MT)	4	3	3	0			3	
	TOTAL	**30**	**19**	**16**	**6**			**14**	**5**

8. Semester									
Course Code	Course Name	ECTS	Kredi	Course Hours	App./Lab. Hours	TB	TM	MT	ITB
ATA 102	Revolutions History II	2	2	2	0				2
MAD 492	Graduation Project	8	3	0	6			3	
EKO 201	Economics	4	3	3	0				3
MAD 422	Mine Planning and Design	4	2	1	2			2	
MAD 432 **E**	Mech.in Min.and Tun.Ex.	4	2.5	2	1			2.5	
ETK 101	Engineering Etics	2	1	1	0				1
	8.yy Elective Course (MT)	4	3	3	0			3	
	Summer Training	2							
	TOTAL	**30**	**16.5**	**12**	**9**			**10.5**	**6**

Each course is defined with its code, name, language, type, credit and assigned ECTS credits.

Courses Types:	Basic Science Course (TB)
	Basic Engineering Science Course (TM)
	Engineering Design Course (MT)
	Humanities and Social Science Course (ITB)
Language:	**E** English