Chairman

Engr. Amanul Mulk	M.Sc (USA)

Professor

Prof. Dr. Noor Mohammad	Ph.D. (UK)

Associate Professors

Engr. Siddique Akbar	M.Sc (Pak)
Engr. Feroz Din	M.Sc (Pak)
Dr. M. Waqar Ali Asad	Ph.D. (USA)

Assistant Professors

Engr. Ehtashamullah Khan	M.Sc (UK)
Engr. Nisar Mohammad	M.Sc (Pak)
Engr. Salim Raza	M.Sc (Pak)
Dr. Ishaq Ahmad	Ph.D. (Germany)
Dr. Khan Muhammad	Ph.D. (UK)

Lecturers

Dr. Safi-ur-Rehman	Ph.D. (Pak)
Engr. Saira Sherin	M.Sc (Pak)
Engr. Talat Bilal	M.Sc (Pak)

Lab. Engineers

Engr. Zahid-ur-Rehman	B.Sc (Pak)
Engr. Sajjad Hussain	B.Sc (Pak)

Department of Mining Engineering

Mining Engineering is one of the most progressive industries today based on its reliance on the state-of-the-art technology for the provision of basic raw materials to other industries. Mineral sector is playing a crucial role in the economic uplift of Khyber Pakhtunkhwa. It provides raw materials for a number of mineral based industries including construction, power, mechanical, electrical, ceramics, paints, etc.

The graduates of this department are employed in the public sector including Mines and Minerals Development Department, Pakistan Mineral Development Corporation (PMDC), Oil and Gas Development Corporation Ltd (OGDCL), Pakistan Stone Development Company (PASDEC), Pakistan Atomic Energy Commission (PAEC) and various other private organizations like cement manufacturing operations and other mining related projects.

Academic Programmes

- B.Sc in Mining Engineering
- M.Sc in Mining Engineering
- Ph.D in Mining Engineering

Laboratories

The Department is equipped with following laboratories:

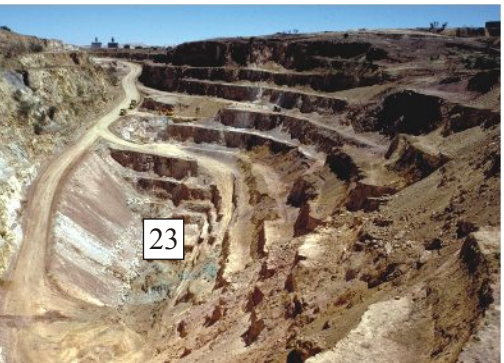
- Mineral Processing Laboratory
- Surveying Laboratory
- Rock Mechanics Laboratory
- Ventilation, and Safety Laboratory
- Geology Laboratory
- Computer Laboratory

Research

Faculty research is actively pursued in the Department. Faculty members have been working on a number of research projects of national importance. Solution of mineral industry's real problems is the primary focus of current research. These projects include the development of improved mine planning and design as well as processing techniques.

Improvement of working conditions and occupational health and safety in mines is another important area of research.

Students both at undergraduate and postgraduate levels actively participate in these research projects under faculty supervision.



Scheme of Studies

Semester 1		Contact hours		Credit hours
No.	**Course**	**Lecture**	**Lab.**	**Total**
MinE-101	Introduction to Mining Engineering	3	0	3
MinE-101L	Introduction to Mining Engineering (Lab)	0	3	1
BSI-116	Applied Chemistry	3	0	3
BSI-116L	Applied Chemistry (Lab)	0	3	1
BSI-111	Linear Algebra	3	0	3
BSI-142	English Composition & Comprehension	3	0	3
BSI-101	Islamic Studies	2	0	2
BSI-110	Pakistan Studies	2	0	2
	Total Contact Hours	16	6	
	Total Credit Hours	16	2	18

Semester 2		Contact hours		Credit hours
No.	**Course**	**Lecture**	**Lab.**	**Total**
MinE-104	General Geology	3	0	2
BSI-162	Engineering Mechanics	3	0	3
BSI-162L	Engineering Mechanics Lab	0	3	1
BSI-122	Calculus	3	0	3
ME-104	Engineering Drawing & CAD	3	0	2
ME-104L	CAD Lab	0	3	1
EE-209	Applied Electricity	3	0	3
ME-107L	Engineering Workshop Lab	0	3	1
	Total Contact Hours	15	9	
	Total Credit Hours	13	3	16

Semester 3		Contact hours		Credit hours
No.	**Course**	**Lecture**	**Lab.**	**Total**
MinE-201	Principles of Explosive Engineering	3	0	3
MinE-211	Mineralogy & Petrology	3	0	2
MinE-106L	Computer Applications Lab	0	3	1
BSI-231	Differential Equations	3	0	3
CE-104	Mechanics of Solids -I	3	0	3
CE-104L	Mechanics of Solids -I Lab	0	3	1
CE-206	Fluid Mechanics-I	3	0	3
CE-206L	Fluid Mechanics-I Lab	0	3	1
	Total Contact Hours	15	9	
	Total Credit Hours	14	3	17

Semester 4		Contact hours		Credit hours
No.	**Course**	**Lecture**	**Lab.**	**Total**
MinE-215	Utilization of Industrial Minerals	3	0	2
MinE-304	Rock Mechanics	3	0	3
MinE-206L	Geology Lab	0	3	1
BSI-242	Numerical Analysis	3	0	3
BSI-351	Probability & Statistics	3	0	3
ME-209	Applied Thermodynamics	3	0	3
ME-209L	Applied Thermodynamics Lab	0	3	1
BSI-221L	Computer Programming Lab	0	3	1
	Total Contact Hours	15	9	
	Total Credit Hours	14	3	17

Semester 5		Contact hours		Credit hours
No.	**Course**	**Lecture**	**Lab.**	**Total**
MinE-204	Structural Geology	3	0	2
MinE-204L	Structural Geology Lab	0	3	1
MinE-301	Surface Mine Design	3	0	3
MinE-302	Underground Mine Design	3	0	3
MinE-300L	Mine Design Lab	0	3	1
MinE-303	Mine Surveying-I	3	0	3
MinE-303L	Mine Surveying-I Lab	0	3	1
MinE-311	Geostatistical Ore Reserve Estimation	3	0	3
MinE-311L	Geostatistical Ore Reserve Estimation Lab	0	3	1
	Total Contact Hours	15	12	
	Total Credit Hours	14	4	18

Semester 6		Contact hours		Credit hours
No.	**Course**	**Lecture**	**Lab.**	**Total**
MinE-306	Mine Economics & Management	3	0	3
MinE-307	Mine Surveying-II	3	0	3
MinE-307L	Mine Surveying-II Lab	0	3	1
MinE-312	Coal Technology	3	0	3
MinE-32x*	Departmental Elective-I*	3	0	3
UET	Free Elective**	3	0	3
BSI-102	Professional Ethics	3	0	2
	Total Contact Hours	18	3	
	Total Credit Hours	17	1	18

Semester 7		Contact hours		Credit hours
No.	**Course**	**Lecture**	**Lab.**	**Total**
MinE-401	Strata Control	3	0	3
MinE-415L	Strata Control and Rock Mechanics Lab	0	3	1
MinE-403	Mine Power Drainage & Material Handling	3	0	2
MinE-404	Mineral Processing-I	3	0	3
MinE-404L	Mineral Processing-I Lab	0	3	1
MinE-405	Technical Report Writing	3	0	3
MinE-407L	Senior Design Project	0	6	2
MinE-42x*	Departmental Elective-II***	3	0	3
	Total Contact Hours	15	12	
	Total Credit Hours	14	4	18

Semester 8		Contact hours		Credit hours
No.	**Course**	**Lecture**	**Lab.**	**Total**
MinE-407L	Senior Design Project	0	6	2
MinE-408	Mine Rescue & Safety	3	0	3
MinE-409	Mine Ventilation	3	0	3
MinE-410	Mineral Processing-II	3	0	3
MinE-410L	Mineral Processing-II Lab	0	3	1
MinE-413	Mining Laws	3	0	2
MinE-414L	Mine Rescue Safety & Ventilation Lab	0	3	1
	First Aid Certification****			
	Total Contact Hours	12	12	
	Total Credit Hours	11	4	15

Total Credit Hours = 137

* MinE-321 Drilling Technology, MinE-322 Extractive Mteallurgy, MinE-323 Cement Technology

** Free Elective: any course from UET

*** MinE-421 System Analysis, MinE-422 Mechanical Mining Techniques, MinE-423 Gems & Gemology, MinE-424 Stone Engineering

**** The students have to complete First Aid Course as a requirement for award of B.Sc Mining Engineering Degree.