

.....	1
.....	6
.....	12
.....	18
.....	23
.....	29
.....	34
.....	38
.....	44
.....	50
.....	55
.....	59

\_\_\_\_\_

1973

1983  
2014

2005

2011

- -

- 1.
- 2.
- 3.
- 4.

5.

6.

1.

2.

3.

4.

5.

3-5

3                      3                      2.5~4  
3~5                      8

	22	
	10	4                      4 2
	12	1                      1 1                      1 9

1.                      1                      /                      70

5                      3                      5  
3  
0.8 1.5

2.                      9                      1

3.                      1

5                      3

4.

3

		15BA51001		Chinese Marxism and the Contemporary Era	32	2	1		
		15BA14001		English for Doctoral Candidates	32	2	1		
		15BC01101		Mining science and New Technology	32	2	1		
		15BD01101		Principles and Methods of System Analysis in Mining Industry	32	2	1		4
		15BD01102		New Development in Rock Mechanics	32	2	1		
		15BC01121		Solution Chemistry of Modern Mineral Flotation	40	2.5	1		
		15BD01121		Hydro-metallurgy	40	2.5	1		
		15BD01122		Structural Chemistry	40	2.5	2		4
		15BD01123		Sediment Kinematic	40	2.5	2		
		17BA51005		Selected Reading in Classical Works of Marxism	16	1	2		
		17SX14019	( )	Second Foreign Language(GermanI)	32	2	1		
		17SX14020	( )	Second Foreign Language(GermanII)	32	2	2		
		18SX00001		Mental Health Education	16	1	2		
		15BY01101		Damage Mechanics and Fracture Mechanics	32	2	2		
		15BY01102		Blasting Theory and New Technology	32	2	2		2

	15BY01103		Artificial Intelligence and Virtual Reality Technology of Mine	32	2	2		
	15BD01203		Disaster Control Engineering of Mining	32	2	2		
	15BY01121		Separation Theory and Technology	40	2.5	1		2
	15BY01122		Mineral Materials Theory and Technology	40	2.5	2		
	15BY01123		Modern Mineral Processing Equipment Monographs	40	2.5	1		
	15BY01124		Agglomeration Theory and Cutting-edge Technology	40	2.5	2		
	15BY01125		Sustainable Utilization of Resources	40	2.5	2		
	15BYJ0101		Research Proposal		1			
	15BYJ0102	9	Academic Communication		1			
	15BYJ0103		Mid-term Evaluation		1			
	15BYJ0104		Dissertation		9			
	15SD01101		Advanced Mining Theory	48		1		
	15SD01102		Advanced Rock Mechanics	48		2		
	15ST01104		Agglomeration	80		1		
	15ST01103		Solid Materials Separation	60		1		

\_\_\_\_\_

1973

1983  
2014

2005

2011

- -

- 1.
- 2.
- 3.
- 4.

5.

6.

- 1.
- 2.

3.

4.

5.

3-5

4~6

	42	
	30	10 4 6 10 2 2 8 2
	12	1 1 1 9

1.

4

70

1

/

5

3

5

3



4.

3

15BA51001	Chinese Marxism and the Contemporary Era	32	2	1
15BA14001	English for Doctoral Candidates	32	2	1
15SA51001	Study on the Theory and Practice of Socialism with Chinese Characteristics	32	2	1
15SA51002	Dialectics of Nature	16	1	2
19SA14001	English for Master Degree Candidate	48	3	1
15BC01101	Mining science and New Technology	32	2	1
15SA07002	Probability Theory and Mathematical Statistics	32	2	1
15SA07004	Numerical Analysis	32	2	1
15SD01101	Advanced Mining Theory	48	3	1
15SD01104	Elasticity and Plasticity	40	2(	

10

	15SD01123		Colloid and Surface Chemistry	48	3	1		10
	15SD01124		Interface Separation Principle	40	2.5	2		
	15SD01125		Advanced Agglomeration	48	3	2		
	15SD01126		Advanced Mineral Processing	48	3	2		
	15SX14009		English Academic Writing	32	2	2		2
	15SX14011		Comparison of Chinese and Western Cultures	32	2	2		
	15SX14013		Skills of CET 6	32	2	2		
	15SX07014		Mathematical Modeling	16	1	2		
	15SX00016		Humanistic Training Course	16	1	2		
	15SX00018		Information Retrieval	16	1	2		
	17BA51005		Selected Reading in Classical Works of Marxism	16	1	2		
	17SX14019	( )	Second Foreign Language(GermanI)	32	2	1		
	17SX14020	( )	Second Foreign Language(GermanII)	32	2	2		
	17SX00021		Employment and Entrepreneurship Practice and Case Analysis	16	1	2		
	18SX00001		Mental Health Education	16	1	2		
	17SY01119		Experiment design and comprehensive evaluation techniques for systems	48	3	2		8
	15SY01103		Computational Geomechanics	40	2.5	2		
	15SY01104		Testing Techniques in Geotechnique Engineering	32	2	2		
	15SY01105		Modern Reinforcement Techniques in Geotechnical Engineering	32	2	2		

	15BY01101		Damage Mechanics and Fracture Mechanics	32	2	2		
	15BY01102		Blasting Theory and New Technology	32	2	2		
	15SY01111		Mineral Processing Experiment Technology	32	2	1		
	15SY01112		Direct Reduction and Smelting Reduction	32	2	2		
	15SY01114		Mineral Analysis Testing Technology	32	2	2		
	15SY01115		Introduction to Mineral Materials	32	2	2		
	15SY01116		Fluid Mechanics and Fluid Machinery	32	2	1		
	15SY01118		Mineral Processing Mathematical Model and Numerical Calculation	32	2	2		
	15BY01121		Separation Theory and Technology	40	2.5	3		8
	15BY01122		Mineral Materials Theory and Technology	40	2.5	4		
	15BY01123		Modern Mineral Processing Equipment Monographs	40	2.5	3		
	15BY01124		Agglomeration Theory and Cutting-edge Technology	40	2.5	4		
	15BY01125		Sustainable Utilization of Resources	40	2.5	4		
	15BYJ0101		Research Proposal		1			
	15BYJ0102	9	Academic Communication		1			
	15BYJ0103		Mid-term Evaluation		1			
	15BYJ0104		Dissertation		9			

\_\_\_\_\_

1973

1983

2014

2005

2011

- -

- 1.
- 2.
- 3.
- 4.
- 5.

- 1.
- 2.

3.

- 4.
- 5.



4.

2

1

1

		15SA51001		Study on the Theory and Practice of Socialism with Chinese Characteristics	32	2	1		
		15SA51003		Marxism and method of social sciences	16	1	2		
		15SA51002		Dialectics of Nature	16	1	2		
		19SA14001		English for Master Degree Candidate	48	3	1		
		19SC01101		Frontier of Mining Science and Technology	32	2	1		9
		15SA07002		Probability Theory and Mathematical Statistics	32	2	1		
		15SA07004		Numerical Analysis	32	2	1		
		15SD01101		Advanced Mining Theory	48	3	1		
		15SD01102		Advanced Rock Mechanics	48	3	2		
		15SD01103		Systems Engineering in Mining	48	3	1		
		15SD01104		Elasticity and Plasticity	40	2.5	1		
		15SD01105	GIS	GIS Principles and Applications	32	2	2		
		19SC01102		Modern Mineral Processing Technology and Equipment	32	2	2		
		15SD01123		Colloid and Surface Chemistry	48	3	1		9
		15SD01124		Interface Separation Principle	40	2.5	2		



15SD01125	Higher Agglomeration	48	3	2
15SD01126	Higher Mineral Processing	48	3	2
15SD01127	Flotation Electrochemistry	32	2	2
15SX14009	English Academic			

	15SY01107		Safety Techniques in Mines	32	2	2		
	15SY01108		Techniques in Mine Digitization	32	2	2		
	15SY01109		Blasting and Its Applications	40	2.5	2		
	15SY01110		Comprehensive Utilization of Secondary Resources	32	2	2		6
	15SY01111		Mineral Processing Experiment Technology	32	2	1		
	15SY01112		Direct Reduction and Smelting Reduction	32	2	2		
	15SY01113		Advanced Mineral Extraction Technology	32	2	2		
	15SY01114		Mineral Analysis Testing Technology	32	2	2		
	15SY01115		Introduction to Mineral Materials	32	2	2		
	15SY01116		Fluid Mechanics and Fluid Machinery	32	2	1		
	15SY01117		New Theory and New Technology of Sintering and Pelletizing	32	2	2		
	15SY01118		Mineral Processing Mathematical Model and Numerical Calculation	32	2	2		
	15SYJ0101		Research Proposal		1			
	15SYJ0102	6	Academic Communication		1			
	15SYJ0103		Mid-term Evaluation		1			
	15SYJ0104		Dissertation		4			
	15ST01101		Geology	56		1		
	15ST01102		Mining Theory	80		1		
	15ST01103		Solid Materials Separation	60		1		

	15ST01104		Agglomeration	80		1		
--	-----------	--	---------------	----	--	---	--	--

\_\_\_\_\_

20

5

” “ ”  
3

20

“

1.

2.

3.

4.

1.

2.

3.

4.

5.

3                      3                      2.5~4  
3~5                      8

	22	
	10	4                      4 2
	12	1                      1 1                      1 9

1.                      1                      /

70

5                      3                      5  
0.8   1.5                      3

2.                      9                      1

3.                      /                      1  
5                      3

4.                      3



		15BA51001		Chinese Marxism and the Contemporary Era	32	2	1		
		15BA14001		English for Doctoral Candidates	32	2	1		
		15BC01101		Mining Science and New Technology	32	2	1		
		15BC01121		Solution Chemistry of Modern Mineral Flotation	40	2.5	1		
		15BD01301		Fundamentals of Aerosol Science and Technology	32	2	1		4
		15BD01302		Chemical Pollution Control	40	2.5	1		
		15BD01303		Bioremediation Technology	40	2.5	1		
		17BA51005		Selected Reading in Classical Works of Marxism	16	1	2		
		17SX14019	( )	Second Foreign Language(GermanI)	32	2	1		
		17SX14020	( )	Second Foreign Language(GermanII)	32	2	2		
		18SX00001		Mental Health Education	16	1	2		
		15BY01125		Sustainable Utilization of Resources	40	2.5	2		
		15BY01302		Advanced Separation Technology	32	2	1		2
		15BY01303		Mining Solid Wastes Recycling	32	2	1		
		15BY01304		Theory and Technology of Mining clean Production	32	2	1		

		15BY01305		Mining Sewage Disposal and Re-use	32	2	1		
		15BYJ0101		Research Proposal		1			
		15BYJ0102	9	Academic Communication		1			
		15BYJ0103		Mid-term Evaluation		1			
		15BYJ0104		Dissertation		9			
		15BT01301		Air Pollution Control Engineering	72		1		
		15BT01302		Water Pollution Control Engineering	64		2		



\_\_\_\_\_

20

5

” “ ”  
3

20

“

1.

2.

3.

4.

1.

2.

3.

4.

5.

4~6

	42	
	30	10 4 6 10 2 2 2 8 2
	12	1 1 1 1 9

1.

1 /

70

5 3 5  
0.8 1.5

2.

9 1

3.

5 3 / 1

4.

3



		15BA51001		Chinese Marxism and the Contemporary Era	32	2	1		
		15BA14001		English for Doctoral Candidates	32	2	1		
		15SA51001		Study on the Theory and Practice of Socialism with Chinese Characteristics	32	2	1		
		15SA51002		Dialectics of Nature	16	1	2		
		19SA14001		English for Master Degree Candidate	48	3	1		
		19SC01301		Environmental Detection Theory and Technology	32	2	2		
		19SC01302		Environmental Science and Engineering Frontier	16	1	2		
		15BC01101		Mining Science and New Technology	32	2	1		
		15BC01121		Solution Chemistry of Modern Mineral Flotation	40	2.5	1		
		15SA07002		Probability Theory and Mathematical Statistics	32	2	1		10
		15SA07004		Numerical Analysis	32	2	1		
		15SD01301		Modern Environmental Biological Technology	32	2	2		
		15SD01302	*	Theory and Technology of Modern Pollution control	48	3	1		
		19SD01301		Environmental pollution chemistry	32	2	2		

		15BD01301		Fundamentals of Aerosol Science and Technology	32	2	1		
		15BD01302		Chemical Pollution Control	40	2.5	1		
		15BD01303		Bioremediation Technology	40	2.5	1		
		15SX14009		English Academic Writing	32	2	2		
		15SX14011		Comparison of Chinese and Western Cultures	32	2	2		
		15SX14013		Skills of CET 6	32	2	2		
		15SX07014		Mathematical Modeling	16	1	2		
		15SX00016		Humanistic Training Course	16	1	2		
		15SX00018		Information Retrieval	16	1	2		2
		17BA51005		Selected Reading in Classical Works of Marxism	16	1	2		
		17SX14019	( )	Second Foreign Language(GermanI)	32	2	1		
		17SX14020	( )	Second Foreign Language(GermanII)	32	2	2		
		17SX00021		Employment and Entrepreneurship Practice and Case Analysis	16	1	2		
		18SX00001		Mental Health Education	16	1	2		
		15SD01123		Colloid and Surface Chemistry	32	2	1		
		15SD01201		Advanced Hydrodynamics	32	2	1		8
		15SD01303		Biochemistry	32	2	1		

	15SY01303		Environmental Energy Engineering	32	2	2	
	15SY01304		Resource Recycling and Utilization Technology	32	2	1	
	15SY01305		Mathematical Model of Environmental Engineering	32	2	1	
	17SY01306		Environmental Materials	32	2	2	
	19SY01301		Environmental catalysis	32	2	2	
	15BY01125		Sustainable Utilization of Resources	40	2.5	2	
	15BY01302		Advanced Separation Technology	32	2	1	
	15BY01303		Mining Solid Wastes Recycling	32	2	1	
	15BY01304		Theory and Technology of Mining Clean Production	32	2	1	
	15BY01305		Mining Sewage Disposal and Re-use	32	2	1	
	15BYJ0101		Research Proposal		1		
	15BYJ0102	9	Academic Communication		1		
	15BYJ0103		Mid-term Evaluation		1		
	15BYJ0104		Dissertation		9		
	15BT01301		Air Pollution Control Engineering	72		1	
	15BT01302		Water Pollution Control Engineering	64		2	

\_\_\_\_\_

1998

2002

2010

1.

2.

3.

4.

1.

2.

3.

4.

5.

6.

3-5

3

3~4

3

2~3  
5

	30	
23	6	9
	2	
	6	
7	1	
	1	1
	4	

1.

40

5

0.5 1.0

3

2.

6

3.

5

3

1

/

4.



2

1

1

		15SA51001		Study on the Theory and Practice of Socialism with Chinese Characteristics	32	2	1		
		15SA51003		Marxism and method of social sciences	16	1	2		
		15SA51002		Dialectics of Nature	16	1	2		
		19SA14001		English for Master Degree Candidate	48	3	1		
		19SC01301		Environmental Detection Theory and Technology	32	2	2		9
		19SC01302		Environmental Science and Engineering Frontier	16	1	2		
		15SA07002		Probability Theory and Mathematical Statistics	32	2	1		
		15SA07004		Numerical Analysis	32	2	1		
		15SD01301		Modern Environmental Biological Technology	32	2	2		
		15SD01302	*	The Theory and Technology of Modern Pollution Control	48	3	1		
		19SD01301		Environmental pollution chemistry	32	2	2		
		15SX14009		English Academic Writing	32	2	2		
		15SX14011		Comparison of Chinese and Western Cultures	32	2	2		
		15SX14013		Skills of CET 6	32	2	2		
		15SX07014		Mathematical Modeling	16	1	2		
									2

	15SX00016		Humanistic Training Course	16	1	2		
	15SX00018		Information Retrieval	16	1	2		
	17SX14019	( )	Second Foreign Language(GermanI)	32	2	1		
	17SX14020	( )	Second Foreign Language(GermanII)	32	2	2		
	17SX00021		Employment and Entrepreneurship Practice and Case Analysis	16	1	2		
	18SX00001		Mental Health Education	16	1	2		
	15SD01123		Colloid and Surface Chemistry	32	2	1		6
	15SD01201		Advanced Hydrodynamics	32	2	1		
	15SD01303		Biochemistry	32	2	1		
	15SY01303		Environmental Energy Engineering	32	2	2		
	15SY01304		Resource Recycling and Utilization Technology	32	2	1		
	15SY01305		Mathematical Model of Environmental Engineering	32	2	1		
	17SY01306		Environmental Materials	32	2	2		
	19SY01301		Environmental catalysis	32	2	2		
	15SYJ0101		Research Proposal		1			
	15SYJ0102	6	Academic Communication		1			
	15SYJ0103		Mid-term Evaluation		1			
	15SYJ0104		Dissertation		4			
	15BT01301		Air Pollution Control Engineering	72		1		
	15BT01302		Water Pollution Control Engineering	64		2		

\_\_\_\_\_

1987  
2004

2012

1992

2013

1993  
2011

“

”

(1)

(2)

(3)

(4)

(5)

1~2

- 1.
- 2.
- 3.
- 4.
- 5.

- 1.
- 2.

3

3~5

3

2.5~4

8

	22	
	10	4 4 2
	12	1 1 1 9

1.

1 /

70

5

		15BA51001		Chinese Marxism and the Contemporary Era	32	2	1		
		15BA14001		English for Doctoral Candidates	32	2	1		
		19BC01201	*	Advanced Safety Science and Technology	32	2	1		
		15BD01202	*	Aerosol Science and Technology	32	2	1		
		15BD01203		Mining Hazards Control Engineering	32	2	1		4
		15BD01204		Occupational Safety and Hygiene	32	2	1		*
		19BD01205		Risk Assessment Methodology	32	2	1		
		15BD01206		Explosion Theory and Hazard Control Technology	32	2	1		
		17BD01207		Development of Combustion Thermodynamics	32	2	1		
		17BA51005		Selected Reading in Classical Works of Marxism	16	1	2		
		17SX14019	( )	Second Foreign Language(GermanI)	32	2	1		
		17SX14020	( )	Second Foreign Language(GermanII)	32	2	2		
		18SX00001		Mental Health Education	16	1	2		
		15BY01202		Development of Industrial Ventilation and Dust Proof	32	2	1		2
		15BY01204		Environmental Safety and Disaster Prevention	32	2	1		

		17BY01205		Intelligent Safety Mine	32	2	1		
		17BY01206		Modern Safety Management	32	2	1		
		15BYJ0101		Research Proposal		1			
		15BYJ0102	9	Academic Communication		1			
		15BYJ0103		Mid-term Evaluation		1			
		15BYJ0104		Dissertation		9			
		15BT01201		Scientific Principle of Safety	32		1		

\_\_\_\_\_

1987  
2004

1992

1993  
2011

2012

2013

“

”

(1)  
(4)

(2)  
(5)

(3)



		42
	30	10 4 6 10 2 2 8 2
	12	1 1 1 9

1.

1 /

70

5 3 5  
3  
0.8 1.5

2.

9

1

3.

5 3 / 1

4.

3



15BA51001	Chinese Marxism and the Contemporary Era	32	2	1
15BA14001	English for Doctoral Candidates	32	2	1
15SA51001	Study on the Theory and Practice of Socialism with Chinese Characteristics	32	2	1
15SA51002	Dialectics of Nature	16	1	2
19SA14001	English for Master			

	15BD01204		Occupational Safety and Health	32	2	1		
	19BD01205		Risk Assessment Methodology	32	2	1		
	15BD01206		Explosion Theory and Hazard Control Technology	32	2	1		
	17BD01207		Development of Combustion Thermodynamics	32	2	1		
	15SX14009		English Academic Writing	32	2	2		
	15SX14011		Comparison of Chinese and Western Cultures	32	2	2		
	15SX14013		Skills of CET 6	32	2	2		
	15SX07014		Mathematical Modeling	16	1	2		
	15SX00016		Humanistic Training Course	16	1	2		
	15SX00018		Information Retrieval	16	1	2		2
	17BA51005		Selected Reading in Classical Works of Marxism	16	1	2		
	17SX14019	( )	Second Foreign Language(GermanI)	32	2	1		
	17SX14020	( )	Second Foreign Language(GermanII)	32	2	2		
	17SX00021		Employment and Entrepreneurship Practice and Case Analysis	16	1	2		
	18SX00001		Mental Health Education	16	1	2		
	15BY01202		Development of Industrial Ventilation and Dust Proof	32	2	1		
	15BY01204		Environmental Safety and Disaster Prevention	32	2	1		

	17BY01205		Intelligent Safety Mine	32	2	1		8
	17BY01206		Modern Safety Management	32	2	1		
	15SY01201		Emergency Rescue and Protection	32	2	2		
	15SY01203		Fire and Explosion	32	2	1		
	15SY01206		Theory and Technology of Smoke Control	32	2	1		
	15SD01205		Technology of Safety System Prediction	32	2	2		
	19SY01201		Dust explosion disaster and emergency treatment	32	2	2		
	15BYJ0101		Research Proposal		1			
	15BYJ0102	9	Academic Communication		1			
	15BYJ0103		Mid-term Evaluation		1			
	15BYJ0104		Dissertation		9			

\_\_\_\_\_

1987  
2004

1992

1993  
2011  
“

2012

2013

”

(1)  
(4)

(2)  
(5)

(3)

- 1.
- 2.
- 3.
- 4.
- 5.

1.

2.

3

3~4

3

2~3  
5

	30	
	23	6 9 2 6
	7	1 1 1 4

## 七、研究环节

1.

40

5

3

2.

6

3.

5

3

1

/

4.

2

1

1



		15SA51001		Study on the Theory and Practice of Socialism with Chinese Characteristics	32	2	1		
		15SA51003		Marxism and method of social sciences	16	1	2		
		15SA51002		Dialectics of Nature	16	1	2		
		19SA14001		English for Master Degree Candidate	48	3	1		
		19SC01201		Developments in Safety Science and Technology	16	1	1		
		15SA07002		Probability Theory and Mathematical Statistics	32	2	1		
		15SA07004		Numerical Analysis	32	2	1		
		15SD01102		Advanced Rock Mechanics	48	3	2		
		15SD01105	GIS	GIS Principles and Applications	32	2	2		9
		15SD01201		Advanced Hydrodynamics	32	2	1		
		15SD01203		Introduction to Public Safety	32	2	1		
		15SD01204		Numerical Simulation Method and Technology	32	2	2		
		19SD01201		Safety Information Engineering	32	2	1		
		15SX14009		English Academic Writing	32	2	2		
		15SX14011		Comparison of Chinese and Western Cultures	32	2	2		2

	15SX14013		Skills of CET 6	32	2	2		
	15SX07014		Mathematical Modeling	16	1	2		
	15SX00016		Humanistic Training Course	16	1	2		
	15SX00018		Information Retrieval	16	1	2		
	17SX14019	( )	Second Foreign Language(GermanI)	32	2	1		
	17SX14020	( )	Second Foreign Language(GermanII)	32	2	2		
	17SX00021		Employment and Entrepreneurship Practice and Case Analysis	16	1	2		
	18SX00001		Mental Health Education	16	1	2		
	15SY01201		Emergency Rescue and Protection	32	2	2		6
	15SY01203		Fire and Explosion	32	2	1		
	15SY01205		System Reliability Analysis	32	2	2		
	15SY01206		Theory and Technology of Smoke Control	32	2	1		
	15SY01107		Mine Safety Technology	32	2	2		
	15SD01205		Technology of Safety System Prediction	32	2	2		
	17SY01208		Aerosol Dynamics	32	2	2		
	17SY01209		Modern Safety Management	32	2	1		
	19SY01201		Dust explosion disaster and emergency treatment	32	2	2		
	15SYJ0101		Research Proposal		1			

	15SYJ0102	6	Academic Communication		1		
	15SYJ0103		Mid-term Evaluation		1		
	15SYJ0104		Dissertation		4		
	15ST01201		Safety System Engineering	40		1	
	15ST01202		Safety Management	48		1	

085218 \_\_\_\_\_

2005

2011

1973

1983

2014

- -

1.

2.

3.

4.

5.

1.

2.

3.

4.

5.

3

2~3

3

3~4

5

	36			
	24	9		
		3	3	1 2
	8	7		
		7	2	
		1		
	4	6		2
				6
				1
				1
				2

8

1.

6

2.

40

0.5 1.0

5

3

3.



# 085218

	19SA14001		English for Master Degree Candidate	48	3	1		
	15SA51001		Study on the Theory and Practice of Socialism with Chinese Characteristics	32	2	1		
	15SA51002		Dialectics of Nature	16	1	2		
	17SA51004		Engineering Ethics	16	1	2		
	15SA07002		Probability Theory and Mathematical Statistics	32	2	1		
	15SX14009		English Academic Writing	32	2	2		
	15SX14011		Comparison of Chinese and Western Cultures	32	2	2		
	15SX14013		Skills of CET 6	32	2	2		
	15SX07014		Mathematical Modeling	16	1	2		
	15SX00016		Humanistic Training Course	16	1	2		
	15SX05017		Intellectual Property	16	1	2		1
	15SX00018		Information Retrieval	16	1	2		
	17SX14019	( )	Second Foreign Language(German)	32	2	1		
	17SX14020	( )	Second Foreign Language(GermanII)	32	2	2		
	17SX00021		Employment and Entrepreneurship Practice and Case Analysis	16	1	2		
	18SX00001		Mental Health Education	16	1	2		
	15SD01101		Advanced Mining Theory	48	3	1		
	15SD01103		System Engineering in Mining	48	3	1		

	15SD01104		Elasticity and Plasticity	40	2.5	1		7
	15SD01102		Advanced Rock Mechanics	48	3	2		
	15SD01105	GIS	GIS Principles and Its Applications	32	2	2		
	15SD01123		Colloid and Surface Chemistry	48	3	1		
	15SD01124		Interface Separation Principle	40	2.5	2		
	15SD01125		Advanced Agglomeration	48	3	2		
	15SD01126		Advanced Mineral Processing	48	3	2		7
	15SY01109		Blasting and Its Applications	40	2.5	2		
	15SY01103		Computational Geomechanics	40	2.5	2		7
	15SY01104		Testing Techniques in Geotechnical Engineering	32	2	2		
	15SY01105		Reinforcement Techniques in Geotechnical Engineering	32	2	2		2
	17SY01119		Experiment design and comprehensive evaluation techniques for systems	48	3	2		
	15SY01110		Comprehensive Utilization of Secondary Resources	32	2	2		
	15SY01112		Direct Reduction and Smelting Reduction	32	2	2		7
	15SY01117		New Theory and Technology of Sintering and Pelletizing	32	2	2		
	19SC01102		Modern Mineral Processing Technology and Equipment	32	2	2		
	15SY01113		Advanced Mineral Extraction Technology	32	2	2		2
	ZSJ0101		Professional Practice Program		2			
	ZSJ0102		Summary and Report of Professional Practice		6			
	ZYJ0101	6	Lectures on Industry Frontier		1			
	ZYJ0102		Research Proposal		1			
	ZYJ0103		Dissertation		2			



085224 \_\_\_\_\_

1987  
2004

1992

1993  
2011

2012

2013

“

”

(1)  
(4)

(2)  
(5)

(3)

- 1.
- 2.
- 3.
- 4.
- 5.

3

3~4

3

2~3

	36			
24	9		1	
	3	3	1	2
8	7			
	7		2	
	1			
4			2	
			6	
4	6		1	
			1	
			2	

8

1.

6

2.

40

0.5 1.0

5

3

3.

## 085224

19SA14001	English for Master Degree Candidate	48	3	1
15SA51001	Study on the Theory and Practice of Socialism with Chinese Characteristics	32	2	1
15SA51002	Dialectics of Nature	16	1	2
15SA07004	Numerical Analysis	32	2	1
17SA51004	Engineering Ethics	16	1	2
15SX14009	English Academic Writing	32	2	2
15SX14011	Comparison of Chinese and Western Cultures	32	2	2
15SX14013	Skills of CET 6	32	2	2
15SX07014	Mathematical Modeling	16	1	2
15SX00016	Humanistic Training Course	16	1	2
15SX05017	IntellectuR			

1

	15SD01203		Introduction to Public Safety	32	2	1		7
	19SC01201		Developments in Safety Science and Technology	16	1	1		
	15SD01205		Technology of Safety System Prediction	32	2	2		
	15SY01104		Testing Technology of Geotechnical Engineering	32	2	2		
	15SD01204		Numerical Simulation Method and Technology	32	2	2		
	15SD01105	GIS	GIS Principles and Applications	32	2	2		
	19ZD01201		Information Application in Safety Engineering	32	2	1		
	15SY01201		Emergency Rescue and Protection	32	2	2		7
	15SY01205		System Reliability Analysis	32	2	2		
	15SY01206		Theory and Technology of Smoke Control	32	2	1		
	17SY01208		Aerosol Dynamics	32	2	2		
	15SY01107		Mine Safety Technology	32	2	2		
	17SY01209		Modern Safety Management	32	2	1		
	19ZY01201		Disaster Emergency Rescue	16	1	1		
	ZSJ0101		Professional Practice Program		2			
	ZSJ0102		Summary and Report of Professional Practice		6			
	ZYJ0101	6	Lectures on Industry Frontier		1			
	ZYJ0102		Research Proposal		1			
	ZYJ0103		Dissertation		2			



	36			
24	9			
	3	3	1	2
8	7			
	7	2		
	1			
4			2	
			6	
4	6		1	
			1	
			2	

8

1.

6

2.

40

0.5 1.0

5

3

3.

085229

19SA14001

	18SX00001		Mental Health Education	16	1	2		
	19SC01301	*	Environmental Detection Theory and Technology	32	2	2		7
	15SD01302	*	The theory and Technology of Modern Pollution Control	48	3	1		
	15SD01303		Biochemistry	32	2	1		
	19SD01301		Environmental pollution chemistry	32	2	2		
	15SD01301		Modern Environmental Biological Technology	32	2	2		7
	15SY01303		Environmental Energy Engineering	32	2	2		
	15SY01304		Resource Recycling and Utilization Technology	32	2	1		
	15SY01305		The Mathematical Model of Environmental Engineering	32	2	1		
	15SD01123		Colloid and Surface Chemistry	32	2	1		
	17SY01306		Environmental Materials	32	2	2		
	19SY01301		Environmental catalysis	32	2	2		
	ZSJ0101		Professional Practice Program		2			
	ZSJ0102		Summary and Report of Professional Practice		6			
	ZYJ0101	6	Lectures on Industry Frontier		1			
	ZYJ0102		Research Proposal		1			
	ZYJ0103		Dissertation		2			