

环境科学专业培养方案

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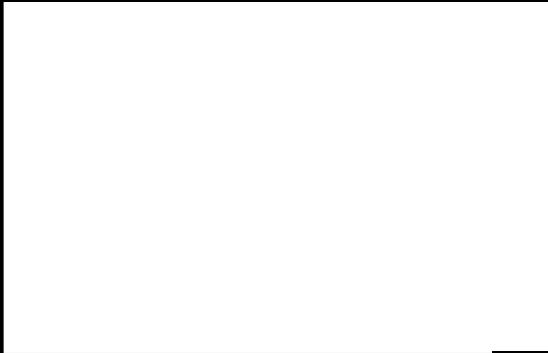
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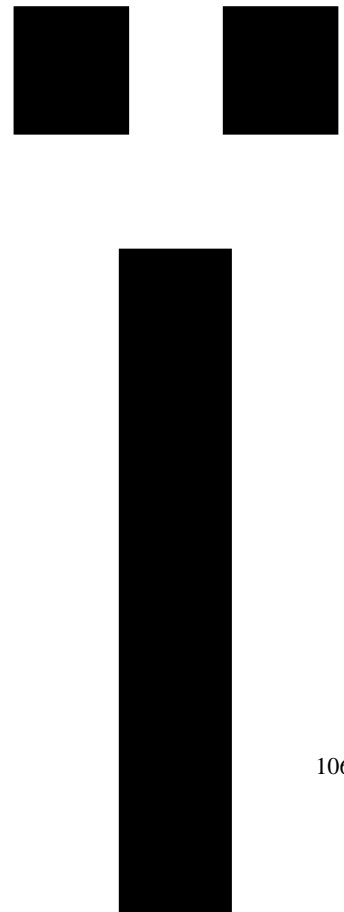
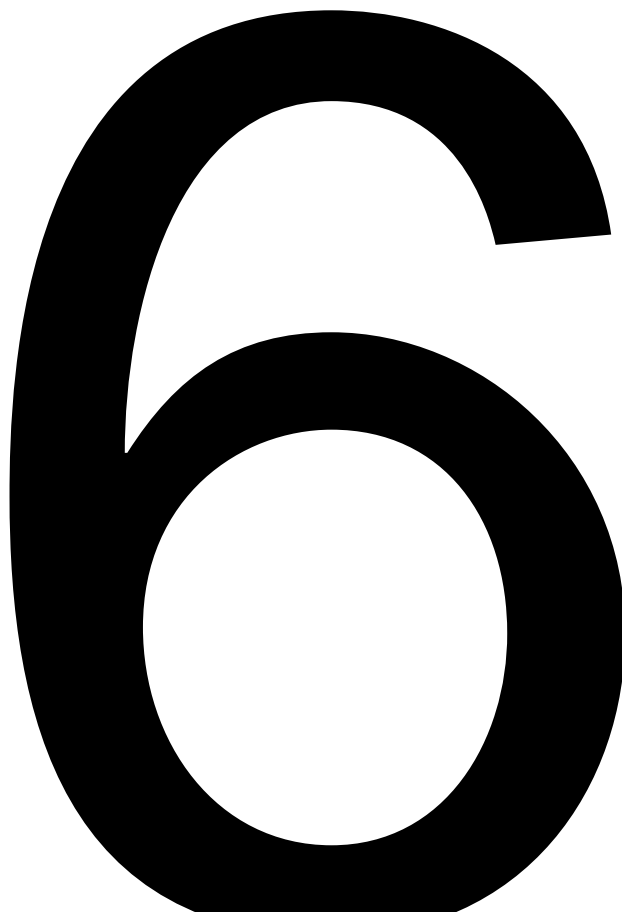
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75			38.5	32	6.5		74.5 (46.9%)
			36	27	9		
165			17	17			17(10.7%)
21.5			2			2	21.5(13.5%)
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	(6			6	
			159	118	16.5	24.5	100%

25.8%

15.7%

1000010304	Basic Principles of Marxism	3	3	48	48		0	3					
1000390303	Introduction to Mao Zedong Thought and the Theoretical System of Socialism with Chinese characteristics	3	3	48	32		16	2					
1000390304	Introduction to Mao Zedong Thought and the Theoretical System of Socialism with Chinese characteristics	4	2	32	32		0	2					
1000030200	Outline of Modern Chinese History	2	3	48	32		16	2					
1000040302	Moral Education and Basics of Law	1	3	48	48		0	4					
1000060208	Situation and Policy	1-8	2	64	64		0	2					

	1000200201	Foundation of Computer Application	1	2	40	16	24			1+2			
	1000410201	College English Reading & Writing	1	2	32	32				2			
	1000410202	College English Reading & Writing	1/2	2	32	32				2			
	1000410203	College English Reading & Writing	2/3	2	32	32				2			
	1000410204	College English Reading & Writing	2/3/4	2	32	32				2			
	1000420201	College English Listening & Speaking	1	0	0	0				0			
	1000420202	College English Listening & Speaking	2	0	0	0				0			
	1000420203	College English Listening & Speaking	3	0	0	0				0			
	1000420204	College English Listening & Speaking	4	2	32	32				2			
	1000110101	College Physical Education	1	1	36	36				2			
	1000110102	College Physical Education	2	1	36	36				2			
	1000110103	College Physical Education	3	1	36	36				2			
	1000110104	College Physical Education	4	1	36	36				2			
	1000540101	Psychological Health Education of College Students	2	2	32	24			8	2			
	1000410052	Career Planning	2	0.5	16	10			6	2			
	1000080106	Employment Guidance	5	0.5	16	10			6	2			

	1010080100	The base of innovation and entrepreneurship for college students	6	1	16	16			2					
	1000220200	Military Theory	2	2	36	24		12	2					
	1000160001	Military Training	1		2			2						
	Chinese and Foreign Culture and Humanities		1-8	8										
	Mathematical Foundation and Scientific Exploration													8
	Social Development and Civic Education												"	2
	Sports Art and Aesthetic Experience												"	
	Health and Ecological Civilization												"	2
	New Information Technology and Future Education												"	
	2051010401	A () Advanced Mathematics A (I)	1	4	64	64			6					
	2051020602	A () Advanced Mathematics A (II)	2	6	96	96			6					
	2050070404	Theory of Probability and Mathematical Statistics	3	3	48	48			4					
	2060010302	B () University Physics B (I)	2	3	64	64			4					
	2060010303	B () University Physics B (II)	3	3	48	48			3					
	2060000200	B College Physics Experiment B	3	1.5	42	6	36		3					
	2094100201	Inorganic and Analytical Chemistry(I)	1	2.5	40	40			4					
	2094120202	Inorganic and Analytical Chemistry(II)	2	2	32	32			4					

	2071060204	Experiments of Analytical Chemistry	1	1	32		32		4				
	2380770202	Experiments of Inorganic Chemistry	2	1	32		32		4				
	2070070303	Instrumental Analysis	4	3	48	48			4				
	2070070303	Experiment of Instrument Analysis	4	1.5	48		48		4				
	2072040305	Environmental Ecology	3	3	48	48			6				
	2072010203	Introduction to Environmental Science	4	2.5	40	40			4			16	
	2072020103	Basic Experiment and Practice of Environmental Science	4	1.5	36		36		6				
	2072070354	Environmental Monitoring	5	3	48	48			4				
	2072080154	Experiments of Environmental Monitoring A	5	2.5	60		60		6				
	2072050205	Environmental Biology	5	3	48	48			4				
	2072060105	Experiments of Environmental Biology	5	2	48		48		6				
	2074060255	Principles of Environmental Engineering	5	3	48	48			4				
	3381010505	Environmental Strategic Planning and Management	5	5	80	80			6				
	2072030305	Environmental Chemistry	6	3	48	48			4				
	2072160105	Experiment of Environmental Chemistry	6	2	48		48		10				
	2072090305	Environmental Impact Assessment	6	3	48	48			4				

	2072120306	Enviromental Engineering	6	4	64	64			6			
	2072130106	Experimnet of Enviromental Engineering	6	2.5	60		60		6			
	2072110206	Environmental & Resource Economics	6	3	48	48			4			
	2070120404	Physical Chemistry	4	2	32	32			4			
	2070130204	Experimnet of Physical Chemistry	4	1	32		32		5			
	2070050403	Organic Chemistry	3	2	32	32			4			
	2070060153	Experimnet of Organic Chemistry	3	1	32		32		4			
	4078030154	Biochemistry	3	2	32	32			4			
	2072340155	Retrieval of Literature	5	1.5	24	24			6			
	3072330155	Specialized English	5	2	32	32			4			
	3072350157	Environmental Toxicology	5	2	32	32			4			
	4388350206	Contaminated Ecology and Remediation Techniques	6	2	32	32			4			
	2072020203	Environmental Geology	3	2	32	32			4			
	2092620402	ArcGIS GIS and Arcgis application	4	2	32	32			4			
	4078910207	CAD CAD Aided Design	3	2	32	32			4			
	3072310306	Air Pollution Control	6	3	48	48			4			

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	3072330256	Physical Pollution Control	4	2	32	32			4			
	4382020156	Construction Project Engineering Management and Budget	6	2	32	32			4			
	4078100206	Environmental Law	4	3	48	48			4			
	3072350156	Case Study of Environmental Impact Assessment	6	2	32	32			8			
	4380650204	Introduction of Environmental Technology Marketization	4	2	32	32			4			
	1000250203	Developmental and Educational Psychology	5	2	32	32			2			
	1000240203	Basic Principles of Education	6	2	32	32			2			
	3072350158	Frontier Subjects Lectures and Comprehensive Skills	1-4	2	32	32						
	2072350106	Professional Internship	5	2	2			2				
	4072020103	Course Internship for Environmental Ecology	3	1.5	36			36				
	2072350107	Course Internship for Environmental Monitoring	5	2	48			48				
	2072350108	Course Internship for Environmental Impact Assessment	7	2	48			48				
	1000210600	Graduation Practice	7	6	6			6				
	2072150708	() Graduation Thesis (Design)	7-8	6	16			16				

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环境工程专业培养方案

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46	()		16	14		2	38(24%)
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			2	1.5		0.5	
			0.5	0.5			
			0.5	0.5			
			1	1			
			2	1.5		0.5	
74			8	8			8(5.1%)
74			34	30.5	3.5		74(46.8%)
			40	31.5	8.5		
17			17	14	3		17(10.8%)
			6			6	

	1000010304	Basic Principles of Marxism	3	3	48	48					3										

		Social Development and Civic Education											8 " " "
		Sports Art and Aesthetic Experience											
		Health and Ecological Civilization											
		New Information Technology and Future Education										2	
	2051010401	A () Advanced Mathematics A (I)	1	4	64	64					6		
	2051020602	A () Advanced Mathematics A (II)	2	6	96	96					6		
	2050070404	Theory of Probability and Mathematical Statistics	3	3	48	48					4		
	2050050403	Linear Algebra	4	3	48	48					4		
	2060010302	B () University Physics B (I)	2	3	64	64					4		
	2060010303	B () University Physics B (II)	3	3	48	48					3		
	2060000200	B College Physics Experiment B	3	1.5	42	6	36				3		
	2094100201	Inorganic and Analytical Chemis (I)	1	2.5	40	40					4		
	2094120202	Inorganic and Analytical Chemis(II)	2	2	32	32					4		
	2071060204	Analytical Chemistry Experiments	1	1	32		32				4		
	2380770202	Inorganic Chemistry Experiments	2	1	32		32				4		
	4072050203	Organic Chemistry	3	2	32	32					4		
	2072070406	Physical Chemistry	4	2	32	32					4		
	3070160303	Introduction of Environmental Engineering	3	1	16	16					2		

	3072120254	Electrical and Electronic Technology	4	2	32	32			4				
	2072100305	Descriptive Geometry and Engineering Drawing	5	3	48	48			4				
	3073020305	Principles of Environmental Engineering	5	2.5	40	40			4				
	2072150156	Experiment of Environmental Engineering Principles	5	2	48		48		4				
	3072260305	Environmental Monitoring	5	3	48	48			4				
	3072270205	B Experiments of Environmental Monitoring B	5	2	48		48		6				
	2072280255	Environmental Engineering Microbiology	5	2.5	40	40			4				
	3072290205	Experiments of Environmental Engineering Microbiology	5	2	48		48		5				
	3072330256	Physical Pollution Control	4	2	32	32			4				
	3072310306	Air Pollution Control Engineering	6	3	48	48			4				
	3072320256	Solid Waste Treatment and Disposal	6	2.5	40	40			4				
	3072300155	() Water Pollution Control Engineering I	5	2	32	32			4				
	3072300306	() Water Pollution Control Engineering II	6	3	48	48			4				
	4382010155	Environmental Planning and Management	5	2	32	32			4				
	3072340356	Environmental Impact Assessment	6	3	48	48			4				

	3072330356	Experiment of Environmental Engineering	6	2.5	60		60		6				
	2070060153	Organic Chemistry Experiments	3	1	32		32		4				
	2072080206	Physical Chemistry Experiments	4	1	32		32		5				
	3072110303	Engineering Mechanics	3	3	48	48			4				
	3073010304	Hydromechanics	4	2.5	40	40			4				
	3388680205	Mathematical Model of Environmental System	5	1.5	24	24			4				
	4078590205	CAD CAD Aided Design	4	2	32	16		16	4				
	4382020156	Construction Project Engineering Management and Budget	6	2	32	32			4				
	4382030156	Environment Engineering Construction Technique	6	1.5	24	24			4				
	4078540157	Environmental Ethics	4	1	16	16			2				
	2070070303	Instrumental Analysis	3	2	32	32			4				
	4072010204	Introduction to Environmental Science	4	2.5	40	40			4				
	2072020103	Basic Experiment and Practice of Environmental Science	4	1.5	36		36		6				
	4078550206	Environmental Ecology Engineering	3	3	48	48			4				
	4072030205	Environmental Chemistry	6	3	48	48			4				

	4388570206	Green Chemistry and Engineering	5	2	32	32			4				
	3078520156	Retrieval of Literature	5	1.5	24	24			6				
	4078510205	Specialized English	5	2	32	32			4				
	4380670205	Environmental Engineering Instrumentation and Automation	5	2	32	32			4				
	3072350156	Case Study of Environmental Impact Assessment	6	2	32	32			8				
	4078570206	Cleaner Production and Process Safety	6	2	32	32			2				
	3073030206	Industrial Wastewater Treatment and Circular Technology	6	2	32	32			4				
	4380770206	Water Supply Engineering	6	2	32	32			4				
	4380780206	Environmental Damage Identification and Assessment	6	2	32	32			4				
	4388600206	Environmental Protection Equipment	6	2	32	32			4				
	2072110206	Environmental & Resource Economics	6	3	48	48			4				
	4078100206	Environmental Law	4	3	48	48			4				
	2072350108	Course Internship for Environmental Impact Assessment	6	2	48		48						
	3078580206	Design for Treatment and Disposal of Solid Wastes	6	1	1			1	1				

	3072360207	Design for Water Pollution Control Engineering	7	2	2			2	2			
	3072360107	Design for Air Pollution Control Engineering	7	1	1			1	1			
	3072370307	Fundamental Training	4	1	1			1	1			
	3072370507	Production Practice	6	2	2			2	2			
	1000210600	Graduation Practice	7	6	6			6	6			
	2074131408	Graduation Thesis (Design)	7	8	6	12		12	12			

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资源循环科学与工程专业培养方案

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46	()		16	14		2	38(24.4%)
			2	1	1		
			10	10			
			4	4			
			2	1.5		0.5	
			0.5	0.5			
			0.5	0.5			
			1	1			
			2	1.5		0.5	
63			30	25.5	4.5		63.5(40.7%)
			33.5	31.5	1.5	0.5	
28			26.5	18	8.5		26.5(17.0%)
20			2			2	20(12.8%)
			3			3	
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			2			2	
			6			6	
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			156	117	15.5	23.5	100%

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	1000010304	Basic Principles of Marxism	3	3	48	48		0	2/4			
	1000390303	Introduction to Mao Zedong Thought and the Theoretical System of Socialism with Chinese	3	3	48	32		16	2			
	1000390304	Introduction to Mao Zedong Thought and the Theoretical System of Socialism with Chinese	4	3	32	32		0	2			
	1000030200	Outline of Modern Chinese History	2	2	48	32		16	2			
	1000040302	Moral Education and Basics of Law	1	3	48	48		0	2/4			
	1000060208	Situation and Policy	1-8	2	64	64			4			
	1000200201	Foundation of Computer Application	1	2	40	16	24		1+2			
	1000410201	College English Reading & Writing I	1	2	32	32			2			
	1000410202	College English Reading & Writing II	1/2	2	32	32			2			
	1000410203	College English Reading & Writing III	2/3	2	32	32			2			
	1000410204	College English Reading & Writing IV	2/3/4	2	32	32			2			
	1000420201	College English Listening & Speaking I	1	0	0	0			0			

	1000420202	College English Listening & SpeakingII	2	0	0	0			0				
	1000420203	College English Listening & SpeakingIII	3	0	0	0			0				
	1000420204	College English Listening & SpeakingIV	4	2	32	32			2				
	1000110101	College Physical Education	1	1	36	36			2				
	1000110102	College Physical Education	2	1	36	36			2				
	1000110103	College Physical Education	3	1	36	36			2				
	1000110104	College Physical Education	4	1	36	36			2				
	1000540101	Mental Health Education for College Students	2	1	20	12		8	2				
	1000410052	Career Planning	2	0.5	20	14		6	2				
	1000090055	Employment Guidance	5	0.5	16	10		6	2				
	1010080100	Basics of Innovation and Entrepreneurship	6	1	16	16			2				
	1000220200	Military Theory	2	2	36	24		12					
	1000160001	Military Training	1		2			2					
	Chinese and Foreign Culture and Humanities		1-8	8							8	" "	
	Mathematical Foundation and Scientific Exploration											2	" "
	Social Development and Civic Education												

		Sports Art and Aesthetic Experience											
		Health and Ecological Civilization											
		New Information Technology and Future Education											
	2051010401	A () Advanced MathematicsA (I)	1	4	64	64			6				
	2051020602	A () Advanced MathematicsA (II)	2	6	96	96			6				
	2050050403	Linear Algebra	4	3	48	48			4				
	2060010302	B () College PhysicsB (I)	2	3	64	64			4				
	2060010303	B () College PhysicsB (II)	3	3	48	48			3				
	2060000200	B College Physics Experiment B	3	1.5	42	6	36		3				
	2080010201	Inorganic and Analytical Chemis	1	2.5	40	40			4				
	2080010201	Inorganic and Analytical Chemis	2	2	32	32			4				
	2071060204	Analytical Chemistry Experiments	1	1	32		32		4				
	2380770202	Inorganic Chemistry Experiments	2	1	32		32		4				
	4072050203	Organic Chemistry	3	2	32	32			4				
	2070060153	Organic Chemistry Experiment	3	1	32		32		5				
	3072260355	Environmental Monitoring	4	3	48	48			4				
	2072140306	Principles of Environmental Engineering	5	3	48	48			4				
	3382580303	Composite Materials Preparation and Application	5	3	48	48			4				

	3382320206	Waste Dismantling Technology and Practice	6	2	36	24		12	4				
	2072120306	Environmental Engineering	5	4	64	64			4				
	2070070303	Instrumental Analysis	3	2	32	32			4				
	3381170205	Industrial Ecology	4	2	32	32			4				
	4382020156	Construction Project Engineering Management and Budget	6	2	32	32			2				
	4078540157	Environmental Ethics	4	1	16	16			2				
	3382290206	Mineral Resources Recycling Utilization Technology	5	2	32	32			4				
	3382300204	Biomass Resources Recycling Utilization Technology	5	2	32	32			4				
	3382310204	Polymer Resource Recycling Utilization Technology	6	2	32	32			4				
	3382310605	Polymer Resource Recycling Utilization Experiment	6	1.5	36		36		6				
	4078570206	Cleaner Production and Process Safety	6	2	32	32			2				
	3380160303	Introduction of Resource Cycle Science and Engineering	1	2	32	32			2				
	4072120253	Electrical and Electronic Technology	4	2	32	32			4				
	2072110304	Engineering Mechanics	3	3	48				4				
	3072270155	Experiments of Environmental Monitoring	4	2	48		48		5				

	2072150156	Experiment of Environmental Engineering Principles	5	2	48		48			4			
	2072130106	B Experiment of Environmental Engineering B	5	2.5	60		60			4			
	2072100305	Descriptive Geometry and Engineering Drawing	5	3	48	48				4			
	3072280306	Environmental Engineering Microbiology	6	2.5	40	40				4			
	3072290206	Experiments of Environmental Engineering Microbiology	6	2	48		48			5			
	4078590205	CAD CAD Aided Design	3	2	32	32				4			
	3382280206	Environmental and Resource Economics	6	3	48	4				4			
	2050070404	Probability Theory and Mathematical Statistics	3	2	32	32				4			
	4078550206	Environmental Ecology	3	3	48	48				6			
	4072020103	Environmental Ecology Apprenticeship	3	1	24			24		4			
	40785130206	Specialized English	5	2	32	32				4			
	3078520156	Retrieval of Literature	5	1.5	24	24				6			
	2072070406	Physical Chemistry	4	2	32	32				4			
	4388570206	Green Chemistry and Engineering	5	2	32	32				4			
	3072320256	Solid Waste Treatment and Disposal	6	2.5	40	40				2			

	3382590206	Environmental Friendly Materials	6	2	32	32			4				
	4388540304	Hydromechanics	4	2.5	40	40			4				
	3073030206	Industrial Wastewater Treatment and Circular Technology	6	2	32	32			2				
	4382010155	Environmental Planning and Management	6	2	32	32			2				
	4078650206	Environmental Law	4	2	48	48			4				
	2380020206	Resource cycle professional skills training	6	2	2			2	2				
	3072360307	Resource Cycle Engineering Course Design	7	3	3			3	3				
	3072370307	Fundamental Training	2	1	1			1	1				
	3072370507	Production Practice	6	2	2			2	2				
	1000210600	Graduation Practice	7	6	6			6	6				
	2074131408	Graduation Thesis (Design)	7	8	6	16		16	16				

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