Appendix 1-12: The Number of Hours and Credits for Each Module in Water Supply and Drainage Engineering

Appendix 1-12: The Number of Hours and Credits for Each Module in WSDSE Engineering

The number of hours and credits for each module in (Water Supply and Drainage Science and Engineering

Module	Curriculum	Chinese credits	ECTS	total class hours	Contact hours	Self-study hours	Remarks
Humanities and Social Sciences	Ideological, Moral and Legal Studies	3	3	90	48	42	
	Outline of Modern and Contemporary Chinese History	3	3	90	48	42	
	Basic Principles of Marxism	3	3	90	48	42	
	Mao Zedong Thought and the Theoretical System of Socialism with Chinese Characteristics,	5	5	150	80	70	
	An Introduction to Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era	3	3	90	48	42	
	Current Affairs and Policies	2	2	60	32	28	
	College English (1)	2.5	2.5	75	40	35	
	College English (2)	3.5	3.5	105	56	49	
	Extended College English Series (1)	1.5	1.5	45	24	21	
	Extended College English Series (2)	1.5	1.5	45	24	21	
	Practical Writing,	1	1.5	45	32	13	
	College Student Psychological Health Education	1	1.5	45	32	13	
	College Student Career Development and Employment Guidance (1)	0.5	1	30	20	10	
	College Student Career Development and Employment Guidance (2)	0.5	1	30	18	12	
	Basics of Innovation and Entrepreneurship	1	1.5	45	32	13	
	College Military Theory	2	2	60	36	24	

Appendix 1-12: The Number of Hours and Credits for Each Module in WSDSE Engineering

	College Sports and Health (1)	1	1.5	45	32	13	
	College Sports and Health (2)	1	1.5	45	32	13	
	College Sports and Health (3)	0.5	1	30	20	10	
	College Sports and Health (4)	0.5	1	30	20	10	
	Arts and Physical Education Elective	2	2	60	32	28	
	Humanities and Social Sciences Elective	2	2	60	32	28	
	Innovation and Entrepreneurship	2	3	90	32	58	
	Freshman Orientation and Military Training	0	4	120	96	24	
	Public Welfare Labor	1	2	60	32	28	
	Social Practice and Volunteer Services	1	2	60	32	28	
Mathematics and Natural Sciences	Advanced Mathematics A (1)	4.5	4.5	135	72	63	
	Advanced Mathematics A (2)	5	5	150	80	70	
	Linear Algebra	2	2	60	32	28	
	Probability and Mathematical Statistics	2.5	2.5	75	40	35	
	College Physics A (1)	3	3	90	48	42	
	College Physics A (2)	3	3	90	48	42	
	College Physics Laboratory	0.5	1.5	45	16	29	
	General Chemistry	2	2	60	32	28	
	Organic Chemistry	1.5	1.5	45	24	21	
	Physical Chemistry	2	2	60	32	28	
Basic Professional Courses	Introduction to Water Supply and Drainage Science and Engineering	1	2	60	16	44	
	Hydraulics	3	3	90	56	34	
	Analytical Water Chemistry	2.5	2.5	75	48	27	
	Hydrology and Hydrogeology	2	2	60	32	28	
	Biology for Water	2.5	2.5	75	48	27	

Appendix 1-12: The Number of Hours and Credits for Each Module in WSDSE Engineering

	Treatment						
	Basics of AutoCAD	**0.5**	**1.5**	**45**	**32**	**13**	
	Computer Applications in Water Supply and Drainage Engineering (including BIM Technology)	**1**	**2**	**60**	**32**	**28**	
	Professional English on Water Supply and Drainage Engineering	**1**	**1**	**30**	**16**	**14**	
Basic Engineering Courses	**Basic Computer Science for College Students**	**1.5**	**1.5**	**45**	**32**	**13**	
	Computer Programming (C Language)	**3**	**3**	**90**	**32**	**58**	
	Engineering Drawing	**2.5**	**2.5**	**75**	**40**	**35**	
	Electrical engineering and electronics	**2**	**2**	**60**	**32**	**28**	
	Engineering Mechanics	**2.5**	**3**	**90**	**40**	**50**	
	Civil Engineering Fundamentals Water Engineering	**1.5**	**2**	**60**	**24**	**36**	
	Water Engineering Economics and Budgeting	**2**	**2**	**60**	**32**	**28**	
	Engineering Geomatics	**2**	**2**	**60**	**32**	**28**	
	Project Management in Construction	**1.5**	**1.5**	**45**	**24**	**21**	
Core Professional Courses	**Pumps and Pumping Stations**	**2**	**2**	**60**	**32**	**28**	
	Water Quality Engineering Experiments	**1**	**1.5**	**45**	**16**	**29**	
	Water Resources Utilization and Protection	**2**	**2**	**60**	**32**	**28**	
	Water Supply and Drainage Network Systems (1)	**2**	**3**	**90**	**48**	**42**	
	Water Supply and Drainage Network Systems (2)	**2**	**3**	**90**	**48**	**42**	
	Building Water Supply	**3**	**3**	**90**	**48**	**42**	

	and Drainage Engineering						
	Water Quality Engineering (1)	2.5	3	90	40	50	
	Water Quality Engineering(2)	3	3	90	48	42	
	Water Engineering Construction	2	2	60	32	28	
	Water Process Equipment Basics	2	2	60	32	28	
	Water Supply and Drainage Engineering Instrumentation and Control	1.5	1.5	45	24	21	
	Interpretation and Application of Water Supply and Drainage Design Standards	0.5	1	30	16	14	
	Water Engineering Operation and Intelligent Management.	1.5	1.5	45	32	13	
Engineering Practice Courses	Electrical and Electronic Engineering Practical Training A	1	2	60	32	28	
	Geomatics Internship	1	2	60	32	28	
	Familiarization Internship	1	2	60	32	28	
	Pump and Pump Station Course Design	1	2	60	32	28	
	Building Water Supply and Drainage Course Design	2	4	120	64	56	
	Water Supply Network Course Design	2	4	120	64	56	
	Drainage Network Course Design	2	4	120	64	56	
	Water Treatment Course Design (including practical training at a water treatment plant)	2	4	120	64	56	
	Wastewater Treatment Course Design	2	4	120	64	56	

Appendix 1-12: The Number of Hours and Credits for Each Module in WSDSE Engineering

	(including practical training at a wastewater treatment plant)						
	Water Engineering Economics and Preliminary Budget Course Design	**1**	**2**	**60**	**32**	**28**	
	Production Internship	**8**	**16**	**480**	**256**	**224**	
	Metalworking Internship	**2**	**4**	**120**	**64**	**56**	
	Graduation Internship	**2**	**4**	**120**	**64**	**56**	
	Comprehensive Graduation Training	**13**	**26**	**780**	**416**	**364**	
	Graduation Education	**0**	**2**	**60**	**32**	**28**	