

2012 Undergraduate Curriculum for Water Supply and Drainage Engineering ( I )

Course Number	Course Title	Assessment	Credits	Instruction Hour Allocation					Credits Distribution for Semesters																Responsible Unit
				Total Hrs	Lec	Lab	Practice	Recitation	1	I	2	II	3	III	4	IV	5	V	6	VI	7	VII	8		
									19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	16 W		
0002609	General Chemistry V	Exam	3.5	56	44	0	12	0	3.5															College of Environmental and Energy Engineering	
0004311	Ethical Conduct and Fundamentals of Law	Exam	3	48	32	0	16	0	3															School of Marxism	
0000011	Physical Education-1	General Assessment	1	32	32	0	0	0	1															Department of Physical Education	
0000007	College English (Band One)	Exam	4	64	64	0	0	0	4															College of Foreign Languages	
0001903	Calculus (Engineering)-1	Exam	5.5	99	64	0	0	35	5.5															College of Applied Sciences	
0001908	Linear Algebra (Engineering)	Exam	3	54	48	0	0	6	3															College of Applied Sciences	
0004312	Modern Chinese History	Exam	2	32	32	0	0	0			2													School of Marxism	
0000012	Physical Education-2	General Assessment	1	32	32	0	0	0			1													Department of Physical Education	
0000008	College English (Band Two)	Exam	4	64	64	0	0	0			4													College of Foreign Languages	
0000072	University Physics I-1	Exam	4	64	64	0	0	0			4													College of Applied Sciences	
0001904	Calculus (Engineering)-2	Exam	5.5	99	64	0	0	35			5.5													College of Applied Sciences	
0002784	Fundamentals of National Defense	General Assessment	2	32	32							2												Students' Affairs Office	
0004361	Introduction to Philosophy	Exam	3	48	48	0	0	0					3											School of Marxism	
0003333	Probability Theory and Mathematical Statistics (Engineering)	Exam	3	54	50	0	0	4					3											College of Applied Sciences	
0000013	Physical Education-3	General Assessment	1	32	32	0	0	0					1											Department of Physical Education	
0000009	College English (Band Three)	Exam	4	64	64	0	0	0					4											College of Foreign Languages	
0000073	University Physics I-2	Exam	4	64	64	0	0	0					4											College of Applied Sciences	
0006457	Fundamentals of Chinese Sociology	Exam	4	64	48	0	16	0							4									School of Marxism	
0000014	Physical Education-4	General Assessment	1	32	32	0	0	0							1									Department of Physical Education	
0000010	College English (Band Four)	Exam	4	64	64	0	0	0							4									College of Foreign Languages	
University Requirements		Sub-total	62.5	1098	974	0	44	80	20		16.5	2	15		9		0		0		0		0		
0000066	Engineering Graphics V	Exam	3	48	48	0	0	0	3															College of Mechanical Engineering & Applied Electronics Technology	

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									19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W		16 W
0000314	Organic Chemistry	Exam	2.5	40	36	4	0	0			2.5													College of Environmental and Energy Engineering
0005223	Engineering Mechanics II	Exam	4	64	58	6	0	0			4													College of Mechanical Engineering & Applied Electronics Technology
0000312	Physical Chemistry III	Exam	3	48	48	0	0	0					3											College of Environmental and Energy Engineering
0003425	Hydraulics	Exam	4	64	64	0	0					4												College of Architecture and Civil Engineering
0000106	Electric Engineering I	Exam	3.5	56	42	14	0								3.5									School of Electronic Information and Control Engineering
0000215	Surveying	General Assessment	2	32	26	6	0								2									College of Architecture and Civil Engineering
0002671	Pump and Pumping Station	Exam	2	32	32	0	0								2									College of Architecture and Civil Engineering
0007675	Water Analysis Chemistry II	Exam	2.5	40	40	0	0								2.5									College of Architecture and Civil Engineering
0000225	Structural Mechanics	Exam	3	48	48	0	0										3							College of Architecture and Civil Engineering
0005813	Hydrology and Hydrogeology	General Assessment	1.5	24	24	0	0										1.5							College of Architecture and Civil Engineering
0007676	Biology of Water and Wastewater Treatment I	Exam	2	32	32	0	0										2							College of Architecture and Civil Engineering
0005811	Foundation of Civil and Architecture Engineering	General Assessment	2	32	32	0	0											2						College of Architecture and Civil Engineering
0003428	Instrument and Control of Municipal Water Engineering	Exam	1.5	24	24	0	0														1.5			College of Architecture and Civil Engineering
0007763	Water Conversation Engineering Economics （Chinese/English）	Exam	1.5	24	24	0	0														1.5			College of Architecture and Civil Engineering
0007074	Freshmen Seminar Course	General Assessment	1	16	16				1															
Discipline Requirements		Sub-total	39	624	594	30	0		4		6.5		7		10		6.5		2		3		0	
0004746	Machine Shop Training A	General Assessment	1	30	0	0	30		1															College of Mechanical Engineering & Applied Electronics Technology
0001942	Practices of Engineering Graphics I	General Assessment	2	60	0	0	60				2													College of Mechanical Engineering & Applied Electronics Technology
0004964	Physics Laborator (Engineering)-1	General Assessment	1	24	2	22					1													College of Applied Sciences
0005843	Cognitive Practice	General Assessment	1	30	0	0	30				1													College of Architecture and Civil Engineering
0003087	Practices of National Defense	General Assessment	1	30	0	0	30					1												Students' Affairs Office Students' Affairs Office
0005837	Hydraulics Experiments	General Assessment	1	24	4	20						1												College of Architecture and Civil Engineering
0004965	Physics Laborator (Engineering)-2	General Assessment	1.5	36	0	36						1.5												College of Applied Sciences
0007688	Experiments of Water Analytical Chemistry	General Assessment	1	24	4	20									1									College of Architecture and Civil Engineering

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									19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W		16 W
0007069	Social Practices	General Assessment	2	48	0	0	48									2								School of Maxism
0001200	Practices of Engineering Surveying	General Assessment	1	30	0	0	30									1								College of Architecture and Civil Engineering
0005841	Course Design of Water Pump and Pumping Station	General Assessment	1	30	0	0	30									1								College of Architecture and Civil Engineering
0007689	Experiments of Water Treatment Biology	General Assessment	1	24	4	20											1							College of Architecture and Civil Engineering
0005838	Water Supply and Sewerage Pipeline	General Assessment	1.5	45	0	0	45										1.5							College of Architecture and Civil Engineering
0007690	Experiments of Water & Wastewater Quality Engineering	General Assessment	1	24	0	24												1						College of Architecture and Civil Engineering
0005839	Course Design of Architectural Water Supply and Sewerage	General Assessment	1.5	45	0	0	45												1.5					College of Architecture and Civil Engineering
0005840	Course Design of Water & Wastewater Quality Engineering	General Assessment	2	60	0	0	60												2					College of Architecture and Civil Engineering
0007687	Professtional Practice	General Assessment	7	210	0	0	210													7				College of Architecture and Civil Engineering
0005845	Senior Project	General Assessment	16	480	0	0	480															16		College of Architecture and Civil Engineering
Practical Requirements		Sub-total	44	1254	14	142	1098		1		4	1	2.5		1	4	2.5		1	3.5	7	0	16	
Discipline Electives			6	88	88								2		2				1.5					
Major Requirements			14	224	224												2		8		4			
Major Electives			7	104	104														3		3.5			
General Education Electives			14.0	224	224				0		0		2		2		7		3		0			
GEESEM:EM			2	32	32												2							
Electives		Sub-total	42	672	672				0		0	0	4	0	4	0	11	0	15.5	0	7.5	0	0	
Total for Theoretical Instruction			144	2394	2246		68	80	24		23	2	26		23		17.5		17.5		10.5		0	
Total for Practical Instruction			44	1254	14	142	1098		1		4	1	2.5		1	4	2.5		1	3.5	7	0	16	
Innovation Requirements			4.0	96			96												2		2			
Total			191	3744	2260	142	1262	80	25		27	3	28.5		24	4	20		20.5	3.5	19.5		16	

Notation: GEESEM:EM is the abbreviation for General Education Electives for Science and Engineering Majors: Economics and Management.

## 2012 Undergraduate Curriculum for Water Supply and Drainage Engineering ( II )

Course Number	Course Title	Assessment	Credits	Instruction Hour Allocation					Credits Distribution for Semesters														Responsible Unit	
				Total Hrs	Lec	Lab	Practice	Recitation	1	I	2	II	3	III	4	IV	5	V	6	VI	7	VII		8
									19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W		16 W
0007730	Basic Concepts of Information Technology	General Assessment	1	16	8	8	0		1															College of Computer Science
0007731	Computer Aided Design and Auto CAD	General Assessment	2	32	16	16	0						2											College of Computer Science
0007732	Basic Design of C++ Programming	General Assessment	3	48	32	16	0								3									College of Computer Science
0007733	Visual Basic Programming Design II	General Assessment	3	48	32	16	0								3									College of Computer Science
0000955	Fundamentals of Engineering Thermodynamics and Heat Transfer	General Assessment	2	32	32	0	0											2						College of Architecture and Civil Engineering
0005835	Scientific English for Water and Wastewater Treatment （Architecture and Civil Engineering）	General Assessment	1.5	24	24	0	0											1.5						College of Architecture and Civil Engineering
Discipline Electives			12.5	200	144	56	0		1				2		6			3.5						
0007701	Water Supply and Drainage Pipeline Engineering	Exam	2.5	40	40	0	0									2.5								College of Architecture and Civil Engineering
0000655	Architectural Water Supply and Sewerage Engineering	Exam	2.5	40	40	0	0											2.5						College of Architecture and Civil Engineering
0007702	Water Quality Engineering-1	Exam	3	48	48	0	0											3						College of Architecture and Civil Engineering
0007703	Water Quality Engineering-2	Exam	3	48	48	0	0											3						College of Architecture and Civil Engineering
0007704	Water Resources Development and Protection	Exam	2	32	32	0	0													2				College of Architecture and Civil Engineering
0006520	Urban Water Engineering Planning and Management （Self-learning）	General Assessment	2	32	6	0	0	26												2				College of Architecture and Civil Engineering
Major Requirements			15	240	214	0	0	26								2.5		8.5		4				
0007719	Special Water Treatment Technology （Self-learning）	General Assessment	1.5	24	6	0	0	18										1.5						College of Architecture and Civil Engineering
0005820	Construction to Project Management I （Chinese/English）	General Assessment	1.5	24	24	0	0											1.5						College of Architecture and Civil Engineering
0005834	Introduction to Environmental Impact Assessment	General Assessment	1.5	24	24	0	0											1.5						
0005836	Urban Flood Control and Disaster Reduction	General Assessment	1.5	24	24	0	0											1.5						College of Architecture and Civil Engineering
0007720	Material and Construction of Water and Wastewater Engineering	Exam	2	32	24	0	8													2				College of Architecture and Civil Engineering
0005832	Building Heating and Ventilation	Exam	2	32	32	0	0													2				College of Architecture and Civil Engineering
0005826	Base of Equipments for Water and Wastewater Processes I	Exam	1.5	24	24	0	0													1.5				College of Architecture and Civil Engineering

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									19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W	18 W	3 W	19 W	0 W		16 W
0005830	Computer Application in Water and Wastewater Engineering	General Assessment	1.5	24	14	0	10													1.5			College of Architecture and Civil Engineering	
0007721	Solar Energy Utilization and Building Energy Saving	General Assessment	1	16	16	0	0													1			College of Architecture and Civil Engineering	
0007722	Heat Pump Technology	General Assessment	1	16	16	0	0													1			College of Architecture and Civil Engineering	
Major Electives			15	240	204	0	18	18										6	0	9				

Vice-Director:

Vice-President:

Date:

Date: