



MedPoint Education Group

Shandong University of Science and Technology Chemical Engineering and Technology

Course Outlines under Term System

COURSES FOR FIRST YEAR

1st Semester

Course No.	Course Titles	Credits		Hours	
		I	II	I	II
101	Chinese 国语 (1)	6		120	
102	Physical Education 体育 (1)	2		30	
103	Advanced Mathematics 高等数学 (1)	5		100	
104	Computer Fundamentals 计算机文化基础	2	2	30	40
105	Inorganic Chemistry 无机化学	3	1.5	60	42
Term Total		18	3.5	340	82
Overall		21.5		422	

2nd Semester

Course No.	Title	Credits		Hours	
		I	II	I	II
201	Physical Education 体育 (2)	2		30	
202	Chinese 国语 (2)	6		120	
203	Advanced Mathematics 高等数学 (2)	5		100	
204	College Physics 大学物理 (1)	3	1.5	60	24
205	Analytical Chemistry 分析化学	2	2	40	36
206	Advanced Chemical Experiments (I) 化学综合实验 I		1		1 week
Term Total		18	4.5	350	60+1 week
Overall		22.5		436+1 week	

COURSES FOR SECOND YEAR

3rd Semester

Course No.	Course Titles	Credits		Hours	
		I	II	I	II
301	Physical Education 体育 (3)	2		30	
302	Chinese 国语 (3)	3		60	
303	Linearity Algebra 线性代数	3		54	
304	College Physics 大学物理 (2)	3	1.5	60	24
305	Basic Computer Technology 计算机技术基础	3	1	30	30
306	Organic Chemistry 有机化学 (1)	2	1	36	20
307	Functional Polymer 功能高分子	3		48	
308	Mechanic Drawing 工程识图	3		54	
Term Total		22	3.5	372	74
Overall		25.5		446	

4th Semester

Course No.	Course Titles	Credits		Hours	
		I	II	I	II
401	Physical Education 体育 (4)	2		30	
402	Chinese 国语 (4)	3		60	
403	Theory of Probability & Mathematical Statistics 概率论与数理统计	3		54	
404	Organic Chemistry 有机化学 (2)	2	1	36	20
405	Physical Chemistry 物理化学 (1)	2	0.5	36	12
406	Instrumental Analysis 仪器分析	1	1	20	20
407	Chemical Technology 化工工艺学	3		48	
408	Chemical Safety Engineering 化工安全工程	2		32	
409	Mechanical Workshop Training 金工实习		2		2 weeks
Term Total		18	5	316	52+2 weeks
Overall		22.5		368+2 weeks	

COURSES FOR THIRD YEAR

5th Semester

Course No.	Course Titles	Credits		Hours	
		I	II	I	II
501	Chemical Engineering Mathematics 化工数学	3		48	
502	Physical Chemistry 物理化学 (2)	2	1	36	28
503	Chemical Engineering Thermodynamics 化工热力学	3		54	
504	Principles of Chemical Engineering 化工原理 (1)	3	1	54	20
505	Electrical Engineering and Electronics 电工电子学	2		36	
506	Experiment Design and Data Processing 实验设计与数据处理	2		36	
507	Advanced Chemical Experiments (II) 化学综合实验 II		1		1 week
508	Plant Basic Practice 认识实习		2		2 weeks
Term Total		15	5	264	48+3 weeks
Overall		20		312+3 weeks	

6th Semester

Course No.	Course Titles	Credits		Hours	
		I	II	I	II
601	Principles of Chemical Engineering 化工原理 (2)	3	1	54	20
602	Chemical Reaction Engineering 化学反应工程	3		48	
603	Chemical Engineering Separation 化工分离工程	2		36	
604	Chemical Equipment 化工设备基础	2		40	
605	Analysis and Development in Chemical Process 化工过程分析与开发	2		36	
606	Chemistry of Fine Chemical Production.	2		36	

	精细化学品化学				
607	System Engineering of Chemical Engineering 化工系统工程	2		36	
608	Industrial Catalysis 工业催化	2		36	
609	Electrical Engineering and Electronics 电工电子学	2		36	
610	Chemical Engineering Instrument & Automation 化工仪表及自动化	2		36	
611	Chemical Engineering Equipment Design 化工设备课程设计		1		1 week
612	Chemical Unit Operation Design 化工原理课程设计		1		1 week
Term Total		22	3	394	20+2 weeks
Overall		25		414+2 weeks	

COURSES FOR FINAL YEAR

7th Semester

Course No.	Course Titles	Credits		Hours	
		I	II	I	II
701	Chemical Engineering Process Simulation & Optimization 化工过程模拟与优化	2		36	
702	Oil Refinery Technology 石油炼制工艺	2		36	
703	Chemical Engineering Design and Drawing 化工设计与制图	2	1	32	20
704	Literature Retrieval 化工文献检索 (Elective)	1		18	
705	Introduction to Environment Engineering 环境工程概论	2		32	
706	Separation Technology and Equipment 分离技术与设备 (Elective)	2		32	
707	Fine Organic Chemical Technology 精细化工工艺学	1	1	18	20
708	Plant Operation Practice 生产实习		3		3 week
709	Chemical Engineering Experiments 化工专业实验		2		2 week
710	Chemical Process Design 化工工艺设计		5		5 week
Term Total		10	12	172	40+10 week
Overall		22		212+10 weeks	

8th Semester

Course No.	Course Titles	Credits		Hours	
		I	II	I	II
801	Graduation Fieldwork 毕业实习		2		2 week
802	Graduation Design 毕业设计		16		16 weeks
Term Total			18		18 weeks
Overall		18		18 weeks	