

食品科学与工程专业国际学生本科指导性培养计划

表一

课程类别	课程性质	课程编号	课程名称	总学分	总学时(学周)	理论授课学时	实践教学				各 学 期 学 时（学周）								考核方式
							实验学时	上机学时	实践学时	实践学周	一	二	三	四	五	六	七	八	
通识与公共基础课程	必修课	112306-8	汉语1-3	12.0	196	196					64	64	64						闭卷
		112309-10	中国概况1-2	4.0	64	64					32	32							闭卷
		113101-4	体育1-4	4.0	144	120			24		36	36	36	36					综合测评
		109133-4	高等数学B1-2	11.0	176	176					80	96							闭卷
		109115	线性代数	2.0	32	32						32							闭卷
		109102	概率与数理统计	3.0	48	48							48						闭卷
		109211	大学物理B	5.0	80	80							80						闭卷
		109208	大学物理实验	1.5	36		36							36					综合测评
		116329	计算机与VB程序设计基础	2.0	32	24		8			32								闭卷
		116330	Visual Basic程序设计	3.0	48	28		20				48							闭卷
	免修课程			14.0	军训、军事理论、思想道德修养与法律基础、中国近现代史纲要、马克思主义基本原理、毛泽东思想和中国特色社会主义理论体系概论、形势与政策。														
	小 计			47.5	852	508	36	28	24		244	308	228	72					
选修课	见公共选修课一览表			8.0	160	选修《跨文化交流与国际视野》《西方文化概论》《中国文化概论》和其他5门跨学科门类课程。													

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							实验学时	上机学时	实践学时	实践学周	一	二	三	四	五	六	七	八	
学科基础课程	必修课	202207	工程制图基础 I	3.0	48	48					48								闭卷
		205165	电工学导论	3.0	48	40	8							48					闭卷
		203151	无机及分析化学B	6.0	96	80	16				96								闭卷
		203112	有机化学A	6.0	96	80	16					96							闭卷
		203111	物理化学B	4.0	64	56	8						64						闭卷
		202109	机械设计基础	4.0	64	58	6							64					闭卷
		207129	食品工程原理	4.0	64	64									64				闭卷
		207248	生物化学	4.0	64	64							64						闭卷
		207113	微生物学	2.5	40	40									40				闭卷
		207115	食品化学	2.5	40	40								40					闭卷
		207130	食品分析与检测	3.0	48	48									48				闭卷
		207131	食品科学导论	1.0	16	16						16							综合测评
		031103	金工实习B	2.0	2					2			2周						综合测评
		007134	食品工程原理实验	1.0	24		24								24				综合测评
		007135	食品工程原理课程设计	1.0	1					1					1周				综合测评
		007253	生物化学实验	1.0	24		24						24						综合测评
		007261	微生物学实验	1.5	36		36								36				综合测评
		007136	食品分析与检测实验	1.5	36		36								36				综合测评

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							实验学时	上机学时	实践学时	实践学周	一	二	三	四	五	六	七	八			
		小 计			51.0	808+3周	634	174			3	144	112	152+2周	152	248+1周					
专业 课程	必修 课	307139	文献检索与科技写作	1.0	16	16										16				综合测评	
		207116	营养与食品卫生学	2.0	32	32									32					闭卷	
		307144	食品保藏原理	2.5	40	40									40					闭卷	
		307132	食品工厂设计与环境保护	2.0	32	32											32			闭卷	
		307122	食品机械与设备	2.5	40	40										40				闭卷	
		307102	果蔬加工工艺学	2.0	32	32										32				闭卷	
		307130	粮油加工工艺学	2.0	32	32										32				闭卷	
		307140	畜产品工艺学	2.5	40	40										40				闭卷	
		307138	发酵工艺学	2.5	40	40										40				闭卷	
		307318	实验设计与统计分析	1.0	16	16								16							综合测评
		307141	食品安全与质量管理	2.5	40	40										40					闭卷
		007137	专业综合实验	3.0	72		72									72					综合测评
		007118	食品工厂课程设计	2.0	2						2							2周			综合测评
		007138	食品专业社会调查	1.0	1						1							1周			综合测评

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课程类别	课程性质	课程编号	课程名称	总学分	总学时 (学周)	理论 授 课 学 时	实践教学				各 学 期 学 时（学周）								考 核 方 式
							实 验 学 时	上 机 学 时	实 践 学 时	实 践 学 周	一	二	三	四	五	六	七	八	
		007139	食品产品设计	2.0	2					2							2周		综合测评
		007103	认识实习	1.0	1					1					1周				综合测评
		007140	生产实习	3.0	3					3							3周		综合测评
		007141	毕业实习	2.0	2					2								2周	综合测评
		007142	毕业设计（论文）	13.0	13					13								13周	综合测评
		小 计		49.5	432+24周	360	72				24				16	72+1周	312	32+8周	15周
	选修课	307205	功能性食品	2.0	32	32									32				综合测评
		307145	食品包装与物流学	2.0	32	32											32		综合测评
		307111	食品生物技术	2.0	32	32										32			综合测评
		207126	食品专业英语	2.0	32	32											32		综合测评
		小 计		8.0	128	128									32		64		
		至少选6学分																	

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表三

课程类别	课程性质	课程编号	课程名称	总学分	总学时	理论授课学时	实践教学				各 学 期 学 时								考核方式	
							实验学时	上机学时	实践学时	实践学周	一	二	三	四	五	六	七	八		
创新创业教育	必修课	Y10010	创新创业基础	1.0	32	20			12				32						综合测评	
	选修课		创新课程	1.0								至少选修 3.0 学分。 学生可在第3-7学期选修科研创新训练 I - V 五个阶段的部分训练。								综合测评
			开放实验	1.0																综合测评
			科研创新训练 I	0.5																综合测评
			科研创新训练 II	0.5																综合测评
			科研创新训练 III	0.5																综合测评
			科研创新训练 IV	0.5																综合测评
			科研创新训练 V	0.5																综合测评
			创新创业项目	2.0																
	第二课堂			2.0							至少获得 2.0 学分，不占总学分									

Courses and Teaching Plan for Undergraduate Foreign Students majoring in *Food Science and Engineering*

Table 1

Course Category	Course type	Course code	Course name	Course credits	Hours (Weeks)	Theore-tical teaching hours	Experiment & Internship				Semester hours(weeks)								Assessment method
							Experimen-tal hours	Computer study hours	Field practice hours	Field practice weeks	1	2	3	4	5	6	7	8	
General and public courses	Compu-lsory	112306-8	Chinese Language 1-3	12.0	196	196					64	64	64						Test
		112309-10	A Survey of China 1-2	4.0	64	64					32	32							Test
		113101-4	Physical Education 1-4	4.0	144	120			24		36	36	36	36					Comprehensive assessment
		109133-4	Advanced mathematics B 1-2	11.0	176	176					80	96							Test
		109115	Linear algebra	2.0	32	32						32							Test
		109102	Probability and mathematical statistics	3.0	48	48							48						Test
		109211	College Physics B	5.0	80	80							80						Test
		109208	College physics experiment	1.5	36		36							36					Test
		116329	Computer and VB programming foundation	2.0	32	24		8			32								Comprehensive assessment
		116330	Visual Basic programming	3.0	48	28		20				48							Test
																			Test
		Exemption			14.0	Military Training, Military theory, Ideological and moral cultivation and legal basis, The outline of modern Chinese history, The fundamental tenets of Marxism, An introduction to Mao Zedong thought and the theoretical system of socialism with Chinese characteristics, Situation and Policy.													
		Sub-total			47.5	852	508	36	28	24		244	308	228	72				
	Option-al	Select from the list of public optional courses			8.0	160	Select <Cross-cultural Communication and International Vision> <An Introduction to Western Culture> <An Introduction to Chinese Culture> and other 5 interdisciplinary courses												

Courses and Teaching Plan for Undergraduate Foreign Students majoring in *Food Science and Engineering*

Table 2

Course Category	Course type	Course code	Course name	Course credits	Hours (Weeks)	Theoretical teaching hours	Experiment & Internship				Semester hours(weeks)								Assessment method
							Experimental hours	Computer study hours	Field practice hours	Field practice weeks	1	2	3	4	5	6	7	8	
Discipline Basic Courses	Computational	202207	Basis of engineering drawing I	3.0	48	48					48								Test
		205165	Electrotechnical guidance theory	3.0	48	40	8							48					Test
		203151	Inorganic and analytical chemistry B	6.0	96	80	16				96								Test
		203112	Organic chemistry A	6.0	96	80	16					96							Test
		203111	Physical chemistry B	4.0	64	56	8						64						Test
		202109	Basic of mechanical designing	4.0	64	58	6							64					Test
		207129	Principles of food engineering	4.0	64	64									64				Test
		207248	Biochemistry	4.0	64	64							64						Test
		207113	Microbiology	2.5	40	40									40				Test
		207115	Food chemistry	2.5	40	40								40					Test
		207130	Food analysis and testing	3.0	48	48									48				Comprehensive assessment
		207131	Introduce to food science	1.0	16	16						16							Comprehensive assessment
		031103	Metalworking practice B	2.0	2					2			2 weeks						Comprehensive assessment
		007134	Experiment on principles of food engineering	1.0	24		24								24				Comprehensive assessment
		007135	principles of food engineering course design	1.0	1					1					1 week				Comprehensive assessment
		007253	Biochemistry experiment	1.0	24		24						24						Comprehensive assessment
		007261	Experiment on Microbiology	1.5	36		36								36				Comprehensive assessment

Courses and Teaching Plan for Undergraduate Foreign Students majoring in *Food Science and Engineering*

Table 2

Course Category	Course type	Course code	Course name	Course credits	Hours (Weeks)	Theoretical teaching hours	Experiment & Internship				Semester hours(weeks)								Assessment method
							Experimental hours	Computer study hours	Field practice hours	Field practice weeks	1	2	3	4	5	6	7	8	
		007136	Experiment on food analysis and testing	1.5	36		36								36				Comprehensive assessment
		Sub-total		51.0	808+3 weeks	634	174			3	144	112	152+2 weeks	152	248+1 week				
Special-ized Course	Computational	307139	Literature retrieval and technical writing	1.0	16	16										16			Comprehensive assessment
		207116	Nutrition and Food Hygiene	2.0	32	32									32				Test
		307144	Principles of food preservation	2.5	40	40									40				Test
		307132	Food plant design and environmental protection	2.0	32	32											32		Test
		307122	Food machinery and equipment	2.5	40	40										40			Test
		307102	Fruit and vegetable processing technology	2.0	32	32										32			Test
		307130	Grain and oil processing technology	2.0	32	32										32			Test
		307140	Animal products technology	2.5	40	40										40			Test
		307138	Fermentation technology	2.5	40	40										40			Test
		307318	Experimental design and statistical analysis	1.0	16	16								16					Comprehensive assessment
		307141	Food safety and quality management	2.5	40	40										40			Test
		007137	Speciality comprehensive experiment	3.0	72		72									72			Comprehensive assessment
		007118	Food factory course design	2.0	2					2							2 weeks		Comprehensive assessment

Courses and Teaching Plan for Undergraduate Foreign Students majoring in *Food Science and Engineering*

Table 2

Course Category	Course type	Course code	Course name	Course credits	Hours (Weeks)	Theoretical teaching hours	Experiment & Internship				Semester hours(weeks)								Assessment method
							Experimental hours	Computer study hours	Field practice hours	Field practice weeks	1	2	3	4	5	6	7	8	
		007138	Food professional social survey	1.0	1					1							1 week		Comprehensive assessment
		007139	Food product design	2.0	2					2							2 weeks		Comprehensive assessment
		007103	Cognition practice	1.0	1					1					1 week				Comprehensive assessment
		007140	Production practice	3.0	3					3							3 weeks		Comprehensive assessment
		007141	Graduation practice	2.0	2					2								2 weeks	Comprehensive assessment
		007142	Graduation project (thesis)	13.0	13					13								13 weeks	Comprehensive assessment
					49.5	432+24 weeks	360	72			24				16	72+1 week	312	32+8 weeks	15 weeks
	Optional	307205	Functional food	2.0	32	32									32				Comprehensive assessment
		307145	Food packaging and logistics	2.0	32	32											32		Comprehensive assessment
		307111	Food biotechnology	2.0	32	32										32			Comprehensive assessment
		207126	English of food specialty	2.0	32	32											32		Comprehensive assessment
		Sub-total			6.0	96	96									32	64		
		Choose at least 6 credits																	

Courses and Teaching Plan for Undergraduate Foreign Students majoring in *Food Science and Engineering*

Table 3

Course Category	Course type	Course code	Course name	Course credits	Hours (Weeks)	Theoretical teaching hours	Experiment & Internship				Semester hours(weeks)								Assessment method	
							Experimental hours	Computer study hours	Field practice hours	Field practice weeks	1	2	3	4	5	6	7	8		
Innovation and Entrepreneurship	Compulsory	Y10010	Foundation of Innovation and Entrepreneurship	1.0	32	20			12										Comprehensive assessment	
	Optional		Innovation Courses	1.0								Earn at least 3.0 credits. Students can take part in part or all of Research Training I - V in semester 3-7.								Comprehensive assessment
			Open Experiments	1.0																Comprehensive assessment
			Research Training I	0.5																Comprehensive assessment
			Research Training II	0.5																Comprehensive assessment
			Research Training III	0.5																Comprehensive assessment
			Research Training IV	0.5																Comprehensive assessment
			Research Training V	0.5																Comprehensive assessment
			Innovation and Entrepreneurship Projects	2.0																Earn at least 2.0 credits. BUT those credits are not included in the graduation credits.
Second Classroom Activities				2.0						Earn at least 2.0 credits. BUT those credits are not included in the graduation credits.										