					1 st	year			2 nd	year			3 rd	year			4 th	year		
	Course	Credits	Hours	Fa	all	Spr	ring	Fa	all	Spr	ing	Fa			ing	Fa			ring	Note
				class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	
Core Required Courses	Chinese Literature: Appreciation and Creative Writing 1	2	2	2																
	Chinese Literature: Appreciation and Creative Writing 2	2	2		2															
	Practical English 1	0	2	1	1															Note 1
	Practical English 2	0	2			1	1													Note 1
	Practical English 3	0	2					1	1											Note 1
	Practical English 4	0	2							1	1									Note 1
	English for Business Communication 1	2	3									2	1							Note 1
	English for Business Communication 2	2	3											2	1					Note 1
	Practical English of Professionals 1	2	3													2	1			Note 1
	Practical English of Professionals 2	2	3															2	1	Note 1
	Applied Information Technology: Office Software	2	3	2	1															Note 1
	Programming Design	2	3			2	1													Note 1
	General Ed	12	12																	Note 2
	Physical Education (1)~(6)	0	12	2		2		2		2		2		2						
	Subtotal	28																		
Professional	Calculus	3	4	3	1															
Required	General Chemistry	3	3	3																
Courses	General Chemistry Lab.	1	3	1	2															
	Physics principles for biologist	3	3	3																

					year				year				year				year		
Course	Credits	Hours	Fa			ring		all		ing	Fa		Spr		Fa			ing	Note
			class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	
General Biology-1	3	3	3																
General Biology Lab1	1	3	1	2															
General Biology-2	3	3			3														
General Discussion on	2	2			2														
Biotechnology																			
Organic Chemistry	3	3			3														
Organic Chemistry Lab.	1	3			1	2													
Laws, Standards, and	2	2			2														
Academic Ethics on																			
Biotechnology																			
Freshman Seminar	1	1	1																
Analytical	3	3					3												
Chemistry(Lab)																			
Biochemistry-1	4	4					4												
Biochemistry Lab1	1	3					1	2											Service Learning
Biochemistry-2	4	4							4										
Microbiology	3	3							3										
Microbiology Lab.	1	3							1	2									
Cell Biology	3	3									3								
Cell Biology Lab.	1	3									1	2							
Bioinformatics-1	2	3											2	1					Computer courses
Molecular Biology	3	3									3								
Biostatistics	3	3									3								
Laboratory Quality	3	3											3						
Management System																			
Research Training 1	1	1											1						
Research Training 2	1	1													1				

							year			2 nd y	/ear				year				year		Note
	Course	e	Credits	Hours		all	Spr	ing	Fa		Spr		Fa		Spr		Fa			ring	
					class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class		class	lab	
		Seminar 1	1	1													1	0			
		Seminar 2	1	1															1	0	
		Subtotal	61																		
		Subtotal Required Course Credits	89																		
Professional	Biomedical	Animal Physiology	3	3					3												
Elective Courses	Program	Animal Cell Culture and Application	2	2							2										
		Immunology	3	3									3								
		Vaccine & Vaccination	3	3											3						
		Laboratory Animal Medicine	3	3															3		
		Gene Transfer	2	2															2		
		Virology	3	3													3				
		Genomics	3	3							3										
		Genetics	3	3					3												
		Special Topics to Genome Project & Annotation	3	3							3										
		Introduction to Pharmacy	3	3					3												
		Bioinorganic Chemistry	3	3									3								
		Applied Bioinstrumentation and Analysis	3	3									3								
		Bioinformatics-2	2	3													2	1			Computer courses
		Special Topics in Molecular Biology	3	3											3						

C						year			2 nd y					year				year		Note
Cours	e	Credits	Hours	Fa		_	ing		all	Spr		Fa			ring	Fa		_	ring	
1				class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	
	Proteomics	3	3											3						
	Developmental	3	3											3						
	Biology																			
	Protein Separation	2	2													2				
	and Two																			
	Dimensional																			
	Electrophoresis																			
	Protein preparation	2	2															2		
	and mass spectrum																			
	analysis																			
Biofood	Nutrition	3	3					3												
Program	Introduction to	3	3					3												
	Biochemistry																			
	Engineering																			
	Plant Physiology	3	3					3												
	Cosmetics Science	3	3					3												
	Herb Plant	3	3					3												
	Cultivation and																			
	Application																			
	Food Chemistry	3	3							3										
	Food Analysis (Lab)	3	3							3										
	Tissue culture and	3	3							3										
	Application																			
	Environmental	3	3							3										
	Ecology																			
	Food Microbiology	3	3									3								
	(Lab)																			
	Agriculture and	2	2									2								
	Food Industrial																			
	Waste Management																			

					1 st y	/ear			2 nd y	ear			3 rd y	ear			4 th	year		Note
Course		Credits	Hours	Fa	111	Spr	ring	Fa	ıll	Spr	ing	Fa	ıll	Spr	ing	Fa			ing	
				class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	
Tì	he Principle and	3	3									3								
Pr	ractice of																			
A	quaponics																			
Er	nzymology	3	3											3						
Fo	ood Safety	3	3											3						
Fe	ermentation	3	3											3						
Tì	he Science and	3	3											3						
Cu	ulture Behind Food																			
M	I aterial																			
Fo	ood Process (Lab)	3	3													3				
	vietary Supplements and Functional	3	3													3				
Fo	oods																			
以上專業選修學程	呈至少需修 20 個學分	Profess	ional ele	ctives	must b	e sele	cted at	least 2	20 cred	lit hou	ırs									

_					1 st	year			2 nd	year			3 rd	year			4 th	year		
	Course	Credits	Hours	Fa	111	Spi	ing	Fa	ıll	Spi	ing	Fa	all	Spi	ring	F	all	Spi	ring	Note
				class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	
Other	Programming Design-1	2	3					2	1											
Elective	Programming Design-2	2	3							2	1									
Course	General Biology Lab2	1	3							1	2									
	Bioorganic Chemistry	2	2					2												
	Biotechnology Law	2	2							2										
	Ecology	2	2									2								
	International Biotech Industry											2								
	Military Training-1	0	2	2																1-semester courses
	Military Training-2	0	2			2														1-semester courses
	Nursing-1	0	2	2																1-semester courses
	Nursing-2	0	2			2														1-semester courses
	Research Paper Writing	1	1											1						
	Industrial Practice	1	1											1						

Biosen	sor	3	3							3			
Biotech	hnical Intellectual Property	2	2							2			
	and Patents												
Introdu	action of Bioindustry	2	2							2			
Physic	Chemistry	3	3							3			
Subtotal Required Cor	urse Credits	89											
Subtotal Elective Cou	rse Credits	39											
Subtotal Professional	Elective Course Credits	20											
Subtotal Elective cours	ses from other schools	19						-					
Grand Total		128						-					

Notes:

- 1.In accordance with the General Provisions for Study, undergraduate students need to satisfactorily complete Service Learning, meet the university-wide basic competencies of English, Information Technology, Chinese, and Sports, and pass the core competencies of their department to be eligible for graduation.
- 2.Students who entered in and since the 2008-09 academic year need to complete at least 12 General Education course credits. General Education courses are divided into three areas: Humanities, Social Science, and Natural Science. Each area is divided into two subcategories: core and extended. Students need to take 1 two-credit course in both of the subcategories within each area to be eligible for graduation. Only 12 course credits will be counted toward graduation. Additional course credits earned in General Education courses are not counted toward graduation.
- 3. Course credits obtained from the Teacher Education Center cannot be counted toward students' final grades.
- 4. Elective courses credits include BT professional courses and courses from other schools, but the BT Department can only admit maximum 19 course credits.
- 5. The newly added elective courses in this academic year can be applied retroactively to students who entered the university prior to the 2021 academic year.
- 6. When retaking the professional courses, students can choose those which are the same course name or the same course content as substitutions under the approval of the department chair. These courses can be regarded as their graduation credits, and can be applied retroactively to students who entered the university prior to the 2021 academic year.
- 7.Students can choose the course from BT master program, which can be counted as their graduation credits under the approval of the department chair, and can be applied retroactively to students who entered the university prior to the 2021 academic year.
- 8. Professional Electives can be selected from two programs of study, students must first complete one of these of study, each consisting of at least 15 course credits.
- 9. Professional electives must be selected at least 20 credit hours.
- 10. When retaking the Calculus course, students can choose Calculus I course as substitutions under the approval of the department chair. These courses can be regarded as their

graduation credits, and can be applied retroactively to students who entered the university prior to the 2021 academic year.

- 11. The credits of interdisciplinary focused course program are not included in course structure diagram that can be regarded as the other department credits
- 12. The required courses on this Course Outline may be counted as elective course credits toward total graduation credits by students who entered the university prior to the 2021 academic year.
- 13. The courses, The Principle and Practice of Aquaponics, may be counted in the Biofood Program by students who entered the university before the 2020-2021 academic year and the Biotechnology Program by students who entered the university before the 2017-2018 academic yea.
- 14. The courses, Agriculture and Food Industrial Waste Management, may be counted in the Biofood Program by students who entered the university prior to the 2020-2021 academic year.
- 15. Graduating students and students in the extended study period who did not pass required courses of Physical Education can waive a maximum of two (2) required Physical Education courses by passing Comprehensive Physical Education I, Comprehensive Physical Education II. This regulation is applicable for those admitted in and prior to 2020-21 academic year.