CN Yang Scholars Programme (BIE)

AY2022 - 2023 Intake onwards

		Number of Academic Units (AU)							
		Major Requirement			Interdisciplinary		Broadening		
Programme	Year of Study	School Core (C)	CNYang Core (C)	Major PE (MPE)	Common Core (CC)	Foundational Core (FC)	and Deepening Electives (BDE)	Total	
	1	6	27		5			38	
Bioengineering	2	26	10		8			44	
(CNYang)	3	21				5	3	29	
(Civialig)	4	9		6		3	9	27	
	Total	62	37	6	13	8	12	138	

Category			AU	Total AU
Interdisciplinary Collaborative Core (ICC)	CC0002 N CC0005 H CC0006 S CC0007 S	Core (University-level) Lavigating the Digital World Lavigating & Wellbeing Lavigatinability: Society, Economy & Environment Lience & Technology for Humanity Lareer and Entrepreneurial Development for the Lordon	2 3 3 3 2	13
	Foundation	onal Core (College-level)		
		ntroduction to Data Science and Artificial rofessional Attachment	3 5	8
	BIE Core			
	EG1001	Engineers In Society	2	
	CB1102	Engineering	1	
	BG1141	Fundamental Biology for Bioengineers	3	
Major Requirement	BG2103	Signal Processing in Biosystems	3	
	BG2104	Electronics for Biomedical Engineering	3	
	BG2110	Bioelectricity	3	33
	BG2119	Anatomy and Physiology	6	
	BG2131	Biomaterials	3	
	BG2142	Biological Thermodynamics	3	
	BG2209	Mechanics for Bioengineers	3	
	BG2211	Introduction to Computational Thinking	3	

	BIE Majo	r Prescribed Electives (MPE)		6
	CY2001	Research Attachment 3	4	
	CY1602 CY2001	Research Attachment 1	4	
	CY1601 CY1602	Mathematics I Mathematics II	4 4	
	CY1308 CY1500	Physics Introduction to Research	2	
	CY1101	Molecule	4 3	
	CY1007	Living with Climate Change	3	
	CY1001	Cell	3	
	CY0002	Ethics	3	
	CY0001	Writing Across the Disciplines	3	
Requirement	CNYSP Co			
Major				66
	BG4211	_	8	
	BG4122	Medical Device Design	3	
	BG4104	Bioengineers	1	
		Machine Learning and Optimization for		
	BG3801	Bioengineering Lab 3	3	
	BG3112	Biofluid Mechanics and Medical Devices	3	
	BG3105	Biomedical Instrumentation	3	
	BG3104	Biomedical Imaging	1	
	BG3102	Control in Biosystems	1	
	BG2802	Bioengineering Lab 2B	3	
	BG2801	Bioengineering Lab 2A	3	

	fessional Attachment						
Year 1 Semester 1					emester 2	_	
Course	Introduction to Chemical and Biomedical	Type	AU	Course		Туре	_
CB1102	Engineering	С	1	EG1001	Engineers in Society	С	
3G1141	Fundamental Biology for Bioengineers	С	3	CY1007	Living with Climate Change	С	
CY1001	Cell	С	3	CY1602	Mathematics II	С	
CY1101	Molecule	С	4	CC0005	Healthy Living & Wellbeing	CC	
CY1308 CY1500	Physics Introduction to Research	C C	3 2				
CY1601	Mathematics 1	C	4				
CC0002	Navigating the Digital World	CC	2				
				Year 1 Sp	Decial Term		
				CY2003	Research Attachment 3 (Making and Tinkering)	С	
				_	Overseas Learning Trip	_	
							-
			22				
rear 2 S	emester 1			Year 2 Se	emester 2		
Course	A 1 IDI II	Type	AU	Course	0: 10 : : 5: :	Type	_
3G2119	Anatomy and Physiology	С	3	BG2103	Signal Processing in Biosystems Electronics for Biomedical	С	
3G2131	Biomaterials	С	3	BG2104	Engineering	С	
3G2142	Biological Thermodynamics	С	3	BG2110	Bioelectricity	С	
BG2211	Introduction to Computational Thinking	С	3	BG2209	Mechanics for Bioengineers	С	
3G2801	Bioengineering Lab 2A	С	1	BG2802	Bioengineering Lab 2B	С	
CY0002	Ethics	С	3	CY0001	Writing Across The Disciplines	С	
CC0006	Sustainability: Society, Economy & Environment	CC	3	CY2001	Research Attachment 1	С	
ML0004	Career and Entrepreneurial Development for the Future World	CC	2	CC0007	Science & Technology for Humanity	CC	
-			21				-
Year 3 S	emester 1			Year 3 Se	emester 2		
Course		Type	AU	Course		Type	_
3G3102	Control in Biosystems	С	3	BG4211	CNYSP Overseas Final Year Project	С	
BG3104	Biomedical Imaging	С	3				
BG3105	Biomedical Instrumentation	С	3	Year 3 Sr	pecial Term		
3G3112	Biofluid Mechanics and Medical Devices	С	3	BG3885	Professional Attachment	FC	
3G3801	Bioengineering Lab 3	С	1				
	BDE 1	BDE	3				
			16				-
Year 4 S	emester 1			Year 4 Se	emester 2		
Year 4 Semester 1 Course		Туре	AU	Course	· · · · · · · · · · · · · · · · · · ·	Туре	
BG4104	Machine Learning and Optimization for Bioengineers	С	3	BG4122	Medical Device Design	С	
	Medical Device Design	С	3	CB0494	Introduction to Data Science and Artificial Intelligence	FC	
BG4122	BIE PE 1	MPE	3		BIE PE2	MPE	
BG4122	DIE I E I		3		BDE 3	BDE	
3G4122	BDE 2	BDE	Ü				
3G4122		BDE	Ü		BDE 4	BDE	
3G4122		BDE	12		Total (AU)	BDE	