

**List of Courses for the CGPA Computation of BEng (Computer Engineering)
under the Double Degree Programme in Business and Computer Engineering (BCE)
(AY2021 and later cohorts)**

BEng (Computer Engineering)				AU Load
Discipline Requirement	Core	SC1003	Introduction to Computational Thinking & Programming	3
		SC1004	Linear Algebra for Computing	3
		SC1005	Digital Logic	3
		SC1006	Computer Organisation and Architecture	3
		SC1007	Data Structures & Algorithms	3
		SC1013	Physics for Computing	2
		EG1001	Engineers in Society	2
		MH1810	Mathematics I	3
		MH1812	Discrete Mathematics	3
		SC2000	Probability and Statistics for Computing	3
		SC2001	Algorithm Design and Analysis	3
		SC2002	Object Oriented Design and Programming	3
		SC2103	Digital System Design	3
		SC2104	Sensors, Interfacing & Digital Control	3
		SC2005	Operating Systems	3
		SC2006	Software Engineering	3
		SC2107	Microprocessor System Design & Development	3
		SC2008	Computer Networks	3
		SC2079	Multidisciplinary Design Project	4
		SC3102	Signal, Systems and Transform	3
		SC3103	Embedded Programming	3
		SC4079	Final Year Project	8
				(70)
	Major Prescribed Electives (MPE)	SC4xxx	Major Prescribe Elective (MPE-a)	3
		SC4xxx	Major Prescribe Elective (MPE-b)	3
		SC4xxx	Major Prescribe Elective (MPE-c)	3
		SC4xxx	Major Prescribe Elective (MPE-d) ¹	3
				(12)

Interdisciplinary Collaborative Core (ICC)	Common Core (CC)	CC0001	Inquiry and Communication in an Interdisciplinary World	2
		CC0002	Navigating the Digital World	2
		CC0003	Ethics & Civics in a Multi-Cultural World	2
		ML0004	Career & Entrepreneurial Development for the Future World	2
		CC0005	Healthy Living & Wellbeing	3
		CC0006	Sustainability: Human Society Economic & Environment	3
		CC0007	Science & Technology for Humanity	3
				(17)
	Foundational Core (FC)	HW0288	Engineering Communication ²	2/4 ²
		SC1015	Introduction to Data Science & AI	3
		SC3079	Professional Internship (10AU) ³	10/9 ³
				(14/16)
		Broadening & Deepening Electives (BDE)	BXxxxx	BA/CE Integration ⁴
BXxxxx			BA/CE Integration ⁴	3
BC2402			Designing & Developing Databases ⁴	4
BC2406			Analytics I: Visual and Predictive Analytics ⁴	4
BC2407			Analytics II: Advanced Predictive Analytics ⁴	4
HE5091			Principles of Economics ⁴	3
AB1501			Marketing ⁴	3
				(24) ⁴
Grand Total			137/139 ⁺	

⁺Total AU is 4AU more than the proposed BEng(CE) single degree programme under NTU ICC due to fulfillments of courses from BUS programme as indicated below.

¹One SC4xxx MPE (3AU) and 6AU of BDE are jointly fulfilled by:

- Three BUS/CE Integration PEs (9AU)

BUS/CE Integration PE* [#] (BXxxxx-PE, 3AU each)		
*Students to choose any 3 courses below		
[#] One of these BXxxxx-PE courses with the highest grade will be used to fulfil MPE-d.		
• BT2404	Service Operations Management	3
• BC2409	BC2409 Supply Chain Analytics	3
• BC2411	Prescriptive Analytics: From Data to Decision	3
• BC3410	BC3410 Financial Service Processes and Analytics	3
• BC3411	Lean Operations & Analytics	3
• BC3412	Business Analytics Consulting	3
• BC3415	BC3415 AI in Accounting and Finance	3

²HW0288 Engineering Communication II (2AU) is fulfilled by:

- AB0602 Communication Management Strategy (4AU)

³SC3079 Professional Internship (10AU) is jointly fulfilled by:

- AB1003 Professional Attachment (5AU)
- AB2008 Career Readiness (1AU)
- AB3602 Strategic Management (3AU)

⁴21AU of BDEs are jointly fulfilled by:

- two BUS/CE Integration PEs and five BA cores (24AU) – *refer to table above*

**List of Courses for the CGPA Computation of BBus (Business Analytics)
under the Double Degree Programme in Business and Computer Engineering (BCE)
(AY2021 and later cohorts)**

BBus (Business Analytics)				AU Load
Discipline Requirement	Core	AD1102	Financial Accounting	3
		AB1201	Financial Management	3
		AB1301	Business Law	3
		AB1202	Statistics & Analysis	3
		AB1501	Marketing	3
		AB1601	Organisation Behaviour and Design	3
		HE5091	Principles of Economics	3
		AD2102	Management Accounting	3
		BC2402	Designing & Developing Databases	4
		BC2406	Analytics I: Visual and Predictive Analytics	4
		BC2407	Analytics II: Advanced Predictive Analytics	4
		AB3602	Strategic Management	3
		AB1403	Intermediate Excel (1AU)	Jointly fulfil by SC4079 Final Year Project (8AUs)
		BE1402	Business Operations & Process (3AU)	
		BE2602	Management Principles, Skills & Competencies (3AU)	
				(7/8¹)
				(46/47)
	Major Prescribed Electives (MPE)	BXxxxx	BA/CE Integration 1	3
		BXxxxx	BA/CE Integration 2	3
		BXxxxx	BA/CE Integration 3	3
				(9)
Interdisciplinary Collaborative Core	Common Core (CC)	CC0001	Inquiry and Communication in an Interdisciplinary World	2
		CC0002	Navigating the Digital World	2
		CC0003	Ethics & Civics in a Multi-Cultural World	2
		ML0004	Career & Entrepreneurial Development for the Future World	2
		CC0005	Healthy Living & Mental Wellbeing	3
		CC0006	Sustainability: Human Society Economic & Environment	3
		CC0007	Science & Technology for Humanity	3
				(17)
	Foundational Core (FC)	AB2008	Careers II	1
		AB0602	Communication Management Strategies	4
		AB0403	Decision Making with Programming & Analytics ²	3
		AB1003	Professional Attachment	5
				(13)

Broadening & Deepening Electives (BDE)	SC2008	Computer Networks	3
	SC3102	Signal, Systems and Transform	3
	SC3103	Embedded Programming	3
	SC4xxx	Major Prescribe Elective (MPE-a)	3
	SC4xxx	Major Prescribe Elective (MPE-b)	3
	SC4xxx	Major Prescribe Elective (MPE-c)	3
			18
Grand Total			103/104[^]

[^] Total AU is 1AU more than the proposed BBus(BA) single degree programme under NTU ICC (Ref: CoB (NBS)-R/00126/21) due to fulfillments of courses from CE programme as indicated below.

¹ AB1403(1AU), BE1402(3AU) and BE2602 (3AU) are jointly fulfilled by:
SC4079 Final Year Project (8AU)

² AB0403 Decision Making with Programming & Analytics (3AU) is fulfilled by:
SC1015 Introduction to Data Science and Artificial Intelligence (3AU)

BUS/CE Integration PE* (BXxxxx-PE, 3AU each)		
*Students to choose any 3 courses below		
• BT2404	Service Operations Management	3
• BC2409	Supply Chain Analytics	3
• BC2411	Prescriptive Analytics: From Data to Decision	3
• BC3410	Financial Service Processes and Analytics	3
• BC3411	Lean Operations & Analytics	3
• BC3412	Business Analytics Consulting	3
• BC3415	AI in Accounting and Finance	3