

**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)**

<b>BEng (Computer Engineering)</b>				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		
				<b>(70)</b>	
		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) <sup>1</sup>	3	
				<b>(12)</b>	

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
			<b>(17)</b>	
	Foundational Core (FC)	HW0288	Engineering Communication <sup>2</sup>	2/4 <sup>2</sup>
		SC1015	Introduction to Data Science & AI	3
		SC3079	Professional Internship (10AU) <sup>3</sup>	10/9 <sup>3</sup>
				<b>(14/16)</b>
	Broadening & Deepening Electives (BDE)	BXxxxx	BA/CE Integration <sup>4</sup>	3
		BXxxxx	BA/CE Integration <sup>4</sup>	3
BC2402		Designing & Developing Databases <sup>4</sup>	4	
BC2406		Analytics I: Visual and Predictive Analytics <sup>4</sup>	4	
BC2407		Analytics II: Advanced Predictive Analytics <sup>4</sup>	4	
HE5091		Principles of Economics <sup>4</sup>	3	
AB1501		Marketing <sup>4</sup>	3	
		<b>(24)<sup>4</sup></b>		
<b>Grand Total</b>				<b>137/139<sup>+</sup></b>

<sup>+</sup>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.

<sup>1</sup>One 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 will be counted as MPE		
• 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

<sup>2</sup>HW0288 Engineering Communication II (2AU) is fulfilled by:

- AB0602 Communication Management Strategy (4AU)

<sup>3</sup>SC3079 Professional Internship (10AU) is jointly fulfilled by:

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

<sup>4</sup>21AU 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)**

<b>B. Bus (Business Analytics)</b>				<b>AU Load</b>	
<b>Discipline Requirement</b>	<b>Core</b>	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)	7/8 <sup>1</sup>
		BE1402	Business Operations & Process (3AU)		
	BE2602	Management Principles, Skills & Competencies (3AU)			
					<b>(46/47)</b>
	<b>Major Prescribed Electives (MPE)</b>	BXxxxx	BA/CE Integration 1	3	
		BXxxxx	BA/CE Integration 2	3	
		BXxxxx	BA/CE Integration 3	3	
			<b>(9)</b>		
<b>Interdisciplinary Collaborative Core</b>	<b>Common Core (CC)</b>	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	
					<b>(17)</b>
	<b>Foundational Core (FC)</b>	AB2008	Careers II	1	
		AB0602	Communication Management Strategies	4	
		AB0403	Decision Making with Programming & Analytics <sup>2</sup>	3	
AB1003		Professional Attachment	5		
				<b>(13)</b>	

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
			<b>18</b>
<b>Grand Total</b>			<b>103/104<sup>^</sup></b>

<sup>^</sup> 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.

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

<sup>2</sup> 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