

**Curriculum Structure for
BEng (CS) and BBus (with BA Specialisation) Double Degree Programme**
Applicable to students matriculated in 2017

This double degree programme is designed to be completed in 4 years with acceleration. Students can only do Professional Attachment under Nanyang Business School. There is no exemption granted to Polytechnic students.

AU requirements

Type	Total No. of AUs
Depth (CS)	80
Depth (Bus)	61
Breadth	15
Unrestricted electives	6
Grand Total	162

4-year Curriculum Structure for BEng (CS) and BBus (with BA Specialisation) Double Degree Programme

Course Code and Title	Type (i.e. Core/ Core elective/ GER core/ GER elective/ Unrestricted elective)	No of Hours Per Week				AU	Pre-requisite / Remarks
		Lec	Tut	Lab	Total		
YEAR 1 SEMESTER 1							
CZ1011 Engineering Mathematics I	Core (CS)	2	1	1 ⁺	4	3	-
CZ1012 Engineering Mathematics II	Core (CS)	2	1	1 ⁺	4	3	CZ1011 (can be taken concurrently)
CZ1003 Introduction to Computational Thinking	Core (CS)	2	1	1	4	3	-
CZ1004 Inventions and Innovations in Computing	Core (CS)	1	1	1 ⁺	2	2	-
CZ0001 Engineers & Society	GER Core	2	1	-	3	3	
AB1202 Statistical and Quantitative Methods	Core (Bus)	3	1	-	4	3	
AB1301 Business Law	Core (Bus)	2	1	-	3	3	-
GC0001 Introduction to Sustainability: Multidisciplinary Approaches and Solutions	GER core					1	online course
TOTAL		14	7	1+3⁺	24	21	

Course Code and Title	Type (i.e. Core/ Core elective/ GER core/ GER elective/ Unrestricted elective)	No of Hours Per Week				AU	Pre-requisite / Remarks
		Lec	Tut	Lab	Total		
YEAR 1 SEMESTER 2							
CZ1005 Digital Logic	Core (CS)	2	1	1	4	3	
CZ1006 Computer Organisation and Architecture	Core (CS)	2	1	1	4	3	CZ1005 (can be taken concurrently)
CZ1007 Data Structures	Core (CS)	2	1	1	4	3	CZ1003
MH1812 Discrete Mathematics	Core (CS)	2	1	1+	4	3	-
AD1101 Financial Accounting	Core (Bus)	3	1	-	4	4	-
AB1601 Organisation Behaviour and Design	Core (Bus)	2	1	-	3	3	-
AB0601 Communication Management Fundamentals	GER core	2	-	-	2	2	-
TOTAL		15	6	3+1+	25	21	
YEAR 2 SEMESTER 1							
CZ2001 Algorithms	Core (CS)	2	1	-	3	3	MH1812, CZ1012 CZ1007
CZ2002 Object Oriented Design and Programming	Core (CS)	2	1	1	4	3	CZ1007
CZ2003 Computer Graphics and Visualisation	Core (CS)	2	1	1	4	3	CZ1011
AD2101 Management Accounting	Core (Bus)	2	1	-	3	4	AD1011
BC2402 Data Mgt and Business Intelligence	BUS Major PE	3	1	-	4	4	
BC2406 Analytics I: Visual and Predictive Analytics	BUS Major PE	4	-	-	4	4	
HY0001 Ethics & Moral Reasoning	GER core					1	online course
TOTAL		15	5	2	22	22	

Course Code and Title	Type (i.e. Core/ Core elective/ GER core/ GER elective/ Unrestricted elective)	No of Hours Per Week				AU	Pre-requisite / Remarks
		Lec	Tut	Lab	Total		
YEAR 2 SEMESTER 2							
CZ2004 Human Computer Interaction	Core (CS)	2	1	1	4	3	-
CZ2005 Operating Systems	Core (CS)	2	1	1	4	3	CZ1006, CZ1007
CZ2006 Software Engineering	Core (CS)	2	1	1	4	3	CZ2002 (can be taken concurrently)
AB1201 Financial Management	Core (Bus)	2	1	-	3	3	-
BC2407 Analytics II: Advanced Predictive Analytics	BUS Major PE	4	-	-	4	4	
Unrestricted elective	Unrestricted elective	2	1	-	3	3	
AB1000 Career Foundations I	Core (Bus)	1	-	-	1	1	
TOTAL		15	5	3	23	20	
YEAR 3 SEMESTER 1							
CZ3001 Advanced Computer Architecture	Core (CS)	2	1	1	4	3	CZ1006
CZ3002 Advanced Software Engineering	Core (CS)	2	1	1	4	3	CZ2006
CZ3003 Software Systems Analysis and Design	Core (CS)	2	1	1	4	3	CZ2006 (can be taken concurrently)
AB1501 Marketing	Core (Bus)	2	1	-	3	3	-
Unrestricted elective	Unrestricted elective	2	1	-	3	3	
ET0001 Enterprise & Innovation	GER core					1	online course
TOTAL		10	5	3	18	16	

Course Code and Title	Type (i.e. Core/ Core elective/ GER core/ GER elective/ Unrestricted elective)	No of Hours Per Week				AU	Pre-requisite / Remarks
		Lec	Tut	Lab	Total		
YEAR 3 SEMESTER 2							
CZ3004 Multidisciplinary Design Project	Core (CS)	1	-	3	4	4	Year 3 standing
CZ3005 Artificial Intelligence	Core (CS)	2	1	1	4	3	CZ1003, CZ2001
AB0602 Communication Management Strategy	GER (Core)	3	1	-	4	4	AB0601
BCxxxx Business/CS Integration 1	BUS Major PE	3	1	-	4	4	
AB2000 Career Foundations II	Core (Bus)	1	-	-	1	1	-
AB2004 Professional Attachment (Special Semester)	Core (Bus)	-	-	-	-	5	AB2000
TOTAL		10	3	4	17	21	
YEAR 4 SEMESTER 1							
CZ4079 Final Year Project	Core (CS)	-	-	-	-	-	
CZ3006 Net Centric Computing	Core (CS)	2	1	1	4	3	CZ1006, CZ2002
CZ4xxx Technical Elective 1	CS Major PE	2	1	-	3	3	
CZ4xxx Technical Elective 2	CS Major PE	2	1	-	3	3	
AB0901 Principles of Economics: A Singapore Perspective	Core (Bus)	2	1	-	3	3	
BCxxxx Business/CS Integration 2	BUS Major PE	3	1	-	4	4	
Science & Technology	GER elective	2	1	-	3	3	
TOTAL		13	6	1	20	19	

Course Code and Title	Type (i.e. Core/ Core elective/ GER core/ GER elective/ Unrestricted elective)	No of Hours Per Week				AU	Pre-requisite / Remarks
		Lec	Tut	Lab	Total		
YEAR 4 SEMESTER 2							
CZ4079 Final Year Project	Core (CS)	-	-	-	-	8	
CZ3007 Compiler Techniques	Core (CS)	2	1	1	4	3	CZ2001, CZ2006
CZ4xxx Technical Elective 3	CS Major PE	2	1	-	3	3	
BCxxxx Business/CS Integration 3	BUS Major PE	3	1	-	4	4	
AB3601 Strategic Management	Core (Bus)	3	1	-	4	4	AB1501, AB1601
TOTAL		10	4	1	15	22	
GRAND TOTAL (Year 1 to 4)						162	

BCxxxx Business/CS Integration Courses (Students to choose any 3 courses)
<ul style="list-style-type: none"> • BC3401 Enterprise Analytics • BC3402 Financial Service Processes and Analytics • BC3403 Social Media and Digital Analytics • BT2403 Service Operations Management • BC3405 Lean Operations & Analytics • BC3406 Business Analytics Consulting • Supply Chain Analytics • Search Engine and Web Analytics • Prescriptive Analytics and Optimization