

Curriculum Structure for
BEng (CS) and BBus (with BA Specialisation) Double Degree Programme
Applicable to students matriculated in 2015

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 Core)	80
Depth (Bus Core)	58
Breadth	15
Unrestricted electives	6
Grand Total	159

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	2	1	1 ⁺	4	3	-
CZ1012 Engineering Mathematics II	Core	2	1	1 ⁺	4	3	CZ1011 (can be taken concurrently)
CZ1003 Introduction to Computational Thinking	Core	2	1	1	4	3	-
CZ1004 Inventions and Innovations in Computing	Core	1	1	1 ⁺	2	2	-
CZ0001 Engineers & Society	GER Core	2	1	-	3	3	
AD1101 Financial Accounting	Core (Bus)	3	1	-	4	4	-
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	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 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	2	1	1+	4	3	-
AD2101 Management Accounting	Core (Bus)	3	1	-	4	4	AD1101
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
AB1202 Statistical and Quantitative Methods	Core (Bus)	2	1	-	3	3	-
BC2402 Data Mgt and Business Intelligence	Core (Bus)	3	1	-	4	4	
BC2406 Analytics I: Visual and Predictive Analytics	Core (Bus)	4	-	-	4	4	
HY0001 Ethics & Moral Reasoning	GER core					1	online course
TOTAL		13	6	2	21	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 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 PredictiveAnalytics	Core (Bus)	4	-	-	4	4	
Unrestricted elective	Unrestricted elective	2	1	-	3	3	
AB1000 Career Foundations I	Core (Bus)	1	-	-	1	1	
TOTAL		14	6	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	Core elective (Bus-BA)	3	1	-	4	4	
AB2000 Career Foundations II	Core (Bus)	1	-	-	1	1	-
AB2004 Professional Attachment (Special Semester)	Core (Bus)	-	-	-	-	2	AB2000
TOTAL		10	3	4	17	18	
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	Core elective	2	1	-	3	3	
CZ4xxx Technical Elective 2	Core elective	2	1	-	3	3	
AB0901 Principles of Economics	Core (Bus)	2	1	-	3	3	
BCxxxx Business/CS Integration 2	Core elective (Bus-BA)	3	1	-	4	4	
Science & Technology	GER elective	2	1	-	3	3	
TOTAL		14	6	1	21	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	Core elective	2	1	-	3	3	
BCxxxx Business/CS Integration 3	Core elective (Bus-BA)	4	-	-	-	4	
AB3601 Strategic Management	Core (Bus)	3	1	-	4	4	AB1501, AB1601
TOTAL		7	3	1	11	22	
GRAND TOTAL (Year 1 to 4)						159	

BCxxxx Business/CS Integration Courses (Students to choose any 3 courses)
• BC3401 Enterprise Analytics • BC3402 Financial Service Processes and Analytics • BC3403 Social Media and Digital Analytics • BC3406 Business Analytics Consulting • BT2403 Service Operations Management • Lean and Process Analytics • Service Operations Analytics • Supply Chain Analytics