

**Curriculum Structure for
BEng (CS) and BBus (IT) Double Degree Programme**
Applicable to students matriculated in 2014

This double degree programme can be accelerated and completed in 4 years. 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)	54
Breadth	15
Unrestricted electives	9
Grand Total	158

Accelerated 4-year Curriculum Structure for BEng(CS) and BBus(IT) Double Degree Programme

With overloading, students can accelerate and complete the programme in 4 years.

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							
MH1812 Discrete Mathematics	Core (CS)	2	1	1 ⁺	4	3	-
CZ1002 Introduction to Computing Systems	Core (CS)	2	1	1	4	3	-
CZ1003 Introduction to Computational Thinking	Core (CS)	2	1	1	4	3	-
CZ1004 Great Ideas in Computing	Core (CS)	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	2+1 ⁺	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
CZ1008 Engineering Mathematics	Core (CS)	2	1	1 ⁺	4	3	-
AB1202 Statistical and Quantitative Methods	Core (Bus)	2	1	-	3	3	-
AB1601 Organisation Behaviour and Design	Core (Bus)	2	1	-	3	3	-
AB0601 Communication Management Fundamentals	GER core	2	-	-	2	2	-
TOTAL		14	6	3+1 ⁺	25	21	
YEAR 2 SEMESTER 1							
CZ2001 Algorithms	Core (CS)	2	1	-	3	3	MH1812, 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	CZ1008
AD2101 Management Accounting	Core (Bus)	3	1	-	4	4	AD1101
BC2402 Data Mgt and Business Intelligence	Core (Bus)	3	1	-	4	4	
AB0901 Principles of Economics	Core (Bus)	2	1	-	3	3	-
GC0002 Ethics & Moral Reasoning	GER core					1	online course
TOTAL		14	6	2	21	20	

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	-
BCxxxx Business/IT Integration 1	Core elective (Bus-IT)	3	1	-	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	
Unrestricted elective	Unrestricted elective	2	1	-	3	3	
AB2000 Career Foundations II	Core (Bus)	1	-	-	1	1	-
ET0001 Enterprise & Innovation	GER core					1	online course
TOTAL		13	6	2+1 ⁺	22	20	

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/IT Integration 2	Core elective (Bus-IT)	3	1	-	4	4	
AB2001 Professional Attachment (Special Semester)	Core (Bus)	-	-	-	-	2	AB2000
TOTAL		9	3	4	16	17	
YEAR 4 SEMESTER 1							
CZ4079 Final Year Project	Core (CS)	-	-	-	-	-	
CZ3006 Net Centric Computing	Core (CS)	2	1	1	4	3	CZ1006 and CZ1007 (both can be taken concurrently)
CZ4xxx Technical Elective 1	Core elective	2	1	-	3	3	
CZ4xxx Technical Elective 2	Core elective	2	1	-	3	3	
BCxxxx Business/IT Integration 3	Core elective (Bus-IT)	3	1	-	4	4	
BCxxxx Business/IT Integration 4	Core elective (Bus-IT)	3	1	-	4	4	
Business & Management	GER elective	2	1	-	3	3	
TOTAL		14	6	1	21	20	

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	
AB3601 Strategic Management	Core (Bus)	3	1	-	4	4	AB1501, AB1601
TOTAL		7	3	1	11	18	
GRAND TOTAL (Year 1 to 4)						158	

BCxxxx Business/IT Integration Courses
Pre-requisite: CZ1007 Data Structures
BC2401 Analysis and Management of IT Projects
BC2405 Decision Tools for Managers
BC3401 Enterprise Computing
BC3402 Technology Management in Financial Services
BC3403 Technologies for Digital Marketing
BC3404 Business Analytics

Note: The list of Major PEs can be chosen from courses listed in the table above. This list of courses will be reviewed and revised from time to time to remain relevant to industry requirements. Students should refer to the Semester Class Schedule when planning and preparing for Course Registration exercises.