

Curriculum for 4-year SCSE Part-time B.Eng Programme

STUDY YEAR	MAJOR REQUIREMENTS		GENERAL EDUCATION REQUIREMENTS (GER)				TOTAL	
	CORE (C)	MAJOR PRESCRIBED ELECTIVE (PE)	GER-CORE (GC)	GER-PRESCRIBED ELECTIVE (GER-PE)				UNRESTRICTED ELECTIVE (UE)
				BUSINESS & MANAGEMENT (BM)	LIBERAL ARTS (LA)	SCIENCE, TECHNOLOGY & SOCIETY (STS)		
1	21		3				0	
2	18		3				0	
3	21	3	1				0	
4	8	9	3				0	
Total	68	12	10	0	0	0	90*	

*Candidate without the requisite working experience will have to do an additional 14 AUs of courses (CZ3079 Professional Internship (8 AUs) + CZ3004 Multi-disciplinary Design Project (4 AUs) + GER-Core ML0001 Absolute Basics for Career by MLCPS (Margaret Lien Centre for Professional Success) (1 AU) and ML0002 Career Power Up! (1 AU), totalling 104 AUs.

Course Code and Title	Type (i.e. Core/ Core elective/ GER core)	AUs	Pre-requisites / Remarks
Year 1 Sem 1			
CZ1011 Engineering Maths I	Core	3	
CZ1003 Introduction to Computational Thinking	Core	3	
CZ1005 Digital Logic	Core	3	
GC0001 Introduction to Sustainability: Multidisciplinary Approaches and Solutions	GER core	1	Online course
HW0001 English Proficiency	Core	0	
TOTAL		10	
Year 1 Sem 2			
CZ1006 Computer Organisation and Architecture	Core	3	CZ1005 (can be taken concurrently)
CZ1007 Data Structures	Core	3	CZ1003
CZ1012 Engineering Maths II	Core	3	CZ1011 (can be taken concurrently)
HW0188 Engineering Communication I	GER core	2	
TOTAL		11	
Year 1 Special Semester			
MH1812 Discrete Mathematics	Core	3	
TOTAL		3	
Year 2 Sem 1			
CZ2001 Algorithms	Core	3	MH1812, CZ1007, CZ1012

CZ2002 Object Oriented Design & Programming	Core	3	CZ1007
CZ2004 Human Computer Interaction	Core	3	
CZ0001 Engineers and Society	GER core	3	
TOTAL		12	
Year 2 Sem 2			
CZ2003 Computer Graphics & Visualization	Core	3	CZ1011
CZ2006 Software Engineering	Core	3	CZ2002 (can be taken concurrently)
CZ3003 Software Systems Analysis and Design	Core	3	CZ2006 (can be taken concurrently)
TOTAL		9	
Year 3 Sem 1			
CZ2005 Operating Systems	Core	3	CZ1006, CZ1007
CZ2007 Introduction to Databases	Core	3	CZ1007, CZ2001 (can be taken concurrently)
CZ3002 Advanced Software Engineering	Core	3	CZ2006
HY0001 Ethics and Moral Reasoning	GER core	1	Online course
TOTAL		10	
Year 3 Sem 2			
CZ4079 Final Year Project	Core	1	
CZ3006 Net Centric Computing	Core	3	CZ1006, CZ2002
CZ3005 Artificial Intelligence	Core	3	CZ1003, CZ2001
CZxxxx Technical Elective 1	Core elective	3	
TOTAL		10	
Year 3 Special Semester			
CZ4079 Final Year Project	Core	5	
TOTAL		5	
Year 4 Sem 1			
CZ4079 Final Year Project	Core	1	
CZ3001 Advanced Computer Architecture	Core	3	CZ1006
CZ4xxx Technical Elective 2	Core elective	3	
CZ4xxx Technical Elective 3	Core elective	3	

SCSE Part-Time BEng (CS)

ET0001 Enterprise And Innovation	GER core	1	Online course
TOTAL		11	
Year 4 Sem 2			
CZ4079 Final Year Project	Core	1	
CZ3007 Compiler Techniques	Core	3	CZ2001, CZ2006
CZ4xxx Technical Elective 4	Core elective	3	
HW0288 Engineering Communication II	GER core	2	HW0288
TOTAL		9	
TOTAL AU REQUIREMENTS		90*	