

Double Degree Programme in Engineering & Economics

List of Courses which contribute to BEng (CE) and BEng (CS) degrees

BEng (Computer Engineering) and BA (Economics) (wef from AY2016)

List of courses that contribute towards BEng (Computer Engineering)				AU Load	
Discipline Requirement	Core	MH1812	Discrete Mathematics	3	79 AUs (PA) 84 AUs (PI)
		CE1011	Engineering Mathematics I	3	
		CE1012	Engineering Mathematics II	3	
		CE1003	Introduction to Computational Thinking	3	
		CE1004	Inventions and Innovations in Computing	2	
		CE1005	Digital Logic	3	
		CE1006	Computer Organisation and Architecture	3	
		CE1007	Data Structures	3	
		CE2001	Algorithms	3	
		CE2002	Object Oriented Design & Programming	3	
		CE2003	Digital Systems Design	3	
		CE2004	Circuits and Signal Analysis	3	
		CE2005	Operating Systems	3	
		CE2006	Software Engineering	3	
		CE2007	Microprocessor-based Systems Design	3	
		CE3001	Advanced Computer Architecture	3	
		CE3002	Sensors and Control Systems	3	
		CE3003	Microcontroller Programming	3	
		CE3005	Computer Networks	3	
		CE3006	Digital Communications	3	
		CE3007	Digital Signal Processing	3	
		CE3004	Multidisciplinary Design Project	4	
		CE3126 / CE3179	Professional Attachment / Professional Internship	5 / 10	
	CE4079	Final Year Project	8		
	Core Elective	CE4xxx	CE Technical Elective 1	3	18 AUs
		CE4xxx	CE Technical Elective 2	3	
		CE4xxx	CE Technical Elective 3	3	
		CE4xxx	CE Technical Elective 4	3	
		CE4xxx	CE Technical Elective 5	3	
		CE4xxx	CE Technical Elective 6	3	
UE	HE1001	Microeconomic Principles	3	24 AUs 12 AUs from compulsory Year 1 and 2 Economics courses. Remaining 12 AUs from 3 rd and 4 th year Economics courses that yield the highest CGPA.	
	HE1002	Macroeconomic Principles	3		
	HE1005	Intro to Probability & Statistical Inference	3		
	HE2005	Principles of Econometrics	3		
	HExxxx	Economics Course 1	3		
	HExxxx	Economics Course 2	3		
	HExxxx	Economics Course 3	3		
	HExxxx	Economics Course 4	4		
General Education Requirements (GER)	GER (Core)	HW0188	Engineering Communication I	2	12 AUs
		HW0288	Engineering Communication II	2	
		ML0001	Absolute Basics for Career	1	
		ML0002	Career Power Up!	1	
		GC0001	Introduction to Sustainability	1	
		HY0001	Ethics and Moral Reasoning	1	
		ET0001	Entrepreneurship and Innovation	1	
		CE0001	Engineers and Society	3	
	GER-UE		Elective	5	
TOTAL				138 AUs	

BEng (Computer Science) and BA (Economics) (wef AY2016)

List of courses that contribute towards BEng (Computer Science)				AU Load	
Discipline Requirement	Core	MH1812	Discrete Mathematics	3	79 AUs (PA) 84 AUs (PI)
		CZ1011	Engineering Mathematics I	3	
		CZ1012	Engineering Mathematics II	3	
		CZ1003	Introduction to Computational Thinking	3	
		CZ1004	Inventions and Innovations in Computing	2	
		CZ1005	Digital Logic	3	
		CZ1006	Computer Organisation and Architecture	3	
		CZ1007	Data Structures	3	
		CZ2001	Algorithms	3	
		CZ2002	Object Oriented Design & Programming	3	
		CZ2003	Computer Graphics and Visualisation	3	
		CZ2004	Human Computer Interaction	3	
		CZ2005	Operating Systems	3	
		CZ2006	Software Engineering	3	
		CZ2007	Database Systems	3	
		CZ3001	Advanced Computer Architecture	3	
		CZ3002	Advanced Software Engineering	3	
		CZ3003	Software Systems Analysis and Design	3	
		CZ3005	Artificial Intelligence	3	
		CZ3006	Net Centric Computing	3	
	CZ3007	Compiler Techniques	3		
	CZ3004	Multidisciplinary Design Project	4		
	CZ3126 / CZ3179	Professional Attachment / Professional Internship	5 / 10		
	CZ4079	Final Year Project	8		
	Core Elective	CZ4xxx	CZ Technical Elective 1	3	18 AUs
		CZ4xxx	CZ Technical Elective 2	3	
		CZ4xxx	CZ Technical Elective 3	3	
		CZ4xxx	CZ Technical Elective 4	3	
		CZ4xxx	CZ Technical Elective 5	3	
CZ4xxx		CZ Technical Elective 6	3		
UE	HE1001	Microeconomic Principles	3	24 AUs 12 AUs from compulsory Year 1 and 2 Economics courses. Remaining 12 AUs from 3 rd and 4 th year Economics courses that yield the highest CGPA	
	HE1002	Macroeconomic Principles	3		
	HE1005	Intro to Probability & Statistical Inference	3		
	HE2005	Principles of Econometrics	3		
	HExxxx	Economics Course 1	3		
	HExxxx	Economics Course 2	3		
	HExxxx	Economics Course 3	3		
	HExxxx	Economics Course 4	4		
General Education Requirements (GER)	GER (Core)	HW0188	Engineering Communication I	2	12 AUs
		HW0288	Engineering Communication II	2	
		ML0001	Absolute Basics for Career	1	
		ML0002	Career Power Up!	1	
		GC0001	Introduction to Sustainability	1	
		HY0001	Ethics and Moral Reasoning	1	
		ET0001	Entrepreneurship and Innovation	1	
		CZ0001	Engineers and Society	3	
		GER-UE		Elective	
	TOTAL				138 AUs