

**AY2018-19 CURRICULUM
COMPUTER SCIENCE**

SUMMARY OF ACADEMIC UNIT REQUIREMENT								
Year of Study	Core	MPE	General Education Requirement (GER)				UE	Total AU
			GER-Core	Prescribed Elective (PE)				
				BM	LA	STS		
1	23	0	10	0	0	0	3	36
2	27	0	1	3	0	3	6	40
3	20	3	3	0	3	0	0	29
4	14	15	0	0	0	0	6	35
Total	84	18	14	9			15	140

Suggested Course Schedules

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
MH1812	Discrete Mathematics	C	3	
CZ1003	Introduction to Computational Thinking	C	3	
CZ1013	Physics for Computing	C	2	
CZ1005	Digital Logic	C	3	
HW0188	Engineering Communication I	GER-Core	2	HW0001 (can be taken concurrently)
GC0001	Sustainability: Seeing Through the Haze	GER-Core	1	online course
HW0001	English Proficiency	GER-Core	0	
	Unrestricted Elective	UE	3	
			17	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ1011	Engineering Mathematics I	C	3	
CZ1012	Engineering Mathematics II	C	3	CZ1011 (can be taken concurrently)
CZ1006	Computer Organisation and Architecture	C	3	CZ1005 (can be taken concurrently)
CZ1007	Data Structures	C	3	CZ1003
CZ0001	Engineers and Society	GER-Core	3	
HY0001	Ethics & Moral Reasoning	GER-Core	1	online course
CZ1015	Introduction to Data Science and Artificial Inte	GER-Core	3	
			19	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ2001	Algorithms	C	3	CZ1007, CZ1012, MH1812
CZ2002	Object Oriented Design & Programming	C	3	CZ1007
CZ2004	Human Computer Interaction	C	3	
CZ2005	Operating Systems	C	3	CZ1006, CZ1007
CZ2007	Introduction to Databases	C	3	CZ2001 (can be taken concurrently)

	Science & Technology	GER-PE	3	
	Unrestricted Elective	UE	3	
			21	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ2003	Computer Graphics and Visualisation	C	3	CZ1011
CZ2006	Software Engineering	C	3	CZ2002 (can be taken concurrently)
CZ3001	Advanced Computer Architecture	C	3	CZ1006
CZ3003	Software Systems Analysis and Design	C	3	CZ2006 (can be taken concurrently)
	Business & Management	GER- PE	3	
ML0003	Professional Development Course	GER-Core	1	online course
	Unrestricted Elective	UE	3	
			19	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ3002	Advanced Software Engineering	C	3	CZ2006
CZ3004	Multidisciplinary Design Project	C	4	Year 3 Standing
CZ3006	Net Centric Computing	C	3	CZ1006, CZ2002
HW0288	Engineering Communication II	GER-Core	2	HW0188, Year 3 Standing
	Technical Elective 1 (CE200X or CZ300X)	MPE	3	
ET0001	Enterprise & Innovation	GER-Core	1	online course
	Liberal Arts	GER-PE	3	
			19	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ3179	Professional Internship	C	10	ML0003, Year 3 standing
			10	

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ4079	Final Year Project	C	-	Final year standing
CZ3005	Artificial Intelligence	C	3	CZ1003, CZ2001
CZ4XXX	Technical Elective 2	MPE	3	
CZ4XXX	Technical Elective 3	MPE	3	
	Unrestricted Elective	UE	3	
			12	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ4079	Final Year Project (cont)	C	8	
CZ3007	Compiler Techniques	C	3	CZ2001, CZ2006
CZ4XXX	Technical Elective 4	MPE	3	

CZ4XX	Technical Elective 5	MPE	3	
CZ4XX	Technical Elective 6	MPE	3	
	Unrestricted Elective	UE	3	
			23	

Total AU for Graduation : **140**