

**AY2020-21 CURRICULUM
COMPUTER SCIENCE**

Last Updated : 15-Feb-21

SUMMARY OF ACADEMIC UNIT REQUIREMENT								
Year of Study	Core	MPE	General Education Requirement (GER)				UE	Total AU
			Core	Prescribed Elective (PE)				
				BM	LA	STS		
1	26	0	12	0	3	0	0	41
2	24	0	0	3	0	3	9	39
3	26	0	2	0	0	0	0	28
4	8	18	0	0	0	0	6	32
Total	84	18	14	9			15	140

Suggested Course Schedules

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
MH1810	Mathematics I	C	3	
MH1812	Discrete Mathematics	C	3	
CZ1103	Introduction to Computational Thinking & Programming	C	3	
CZ1105	Digital Logic (Engineering Fundamentals 1)	C	3	
CZ1113	Physics for Computing	C	2	
HW0188	Effective Communication	GER-Core	2	HW0001 (can be taken concurrently)
	Liberal Arts	GER-PE	3	
GC0001	Sustainability: Seeing Through the Haze	GER-Core	1	online course
HY0001	Ethics & Moral Reasoning	GER-Core	1	online course
HW0001	Introduction to Academic Communication	GER-Core	0	For student who failed QET
			21	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ1104	Linear Algebra for Computing	C	3	MH1810
CZ1106	Computer Organisation and Architecture	C	3	CZ1105 (can be taken concurrently)
CZ1107	Data Structures and Algorithms	C	3	CZ1103
	Engineering Fundamentals 2	C	3	
CZ1115	Introduction to Data Science and Artificial Intelligence	GER-Core	3	CZ1103
EG0001	Engineers and Society	GER-Core	3	
ET0001	Enterprise & Innovation	GER-Core	1	online course
ML0003	Kickstart your Career Success	GER-Core	1	online course
			20	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ2100	Probability and Statistics for Computing	C	3	MH1810
CZ2101	Algorithm Design and Analysis	C	3	CZ1107, MH1812
CZ2002	Object Oriented Design & Programming	C	3	CZ1103
CZ2005	Operating Systems	C	3	CZ1106, CZ1107
	Science & Technology	GER-PE	3	
	Unrestricted Elective 1	UE	3	
	Unrestricted Elective 2	UE	3	

			21	
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YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ2006	Software Engineering	C	3	CZ2002 (can be taken concurrently)
CZ2007	Introduction to Databases	C	3	CZ2101 (can be taken concurrently)
CZ3001	Advanced Computer Architecture	C	3	CZ1106
CZ3006	Net Centric Computing / Computer Networks	C	3	CZ1104, CZ2100
	Business & Management	GER- PE	3	
	Unrestricted Elective 3	UE	3	
			18	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ3004	Multidisciplinary Design Project	C	4	Year 3 standing
CZ3002	Advanced Software Engineering	C	3	CZ2006
CZ3005	Artificial Intelligence	C	3	CZ1107, CZ1115, CZ2101
CZ4062	Computing Security	C	3	CZ2005
CZ4031	Database System Principles	C	3	CZ2007
HW0288	Engineering Communication	GER-Core	2	HW0188, Year 3 Standing
			18	

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
CZ4XXX	CS Prescribed Elective 1	MPE	3	Depends on MPE
CZ4XXX	CS Prescribed Elective 2	MPE	3	Depends on MPE
CZ4XXX	CS Prescribed Elective 3	MPE	3	Depends on MPE
	Unrestricted Elective 4	UE	3	
CZ4079	Final Year Project	C	4	Final year standing
			16	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ4079	Final Year Project (cont)	C	4	Final year standing
CZ4XXX	CS Prescribed Elective 4	MPE	3	Depends on MPE
CZ4XXX	CS Prescribed Elective 5	MPE	3	Depends on MPE
CZ4XXX	CS Prescribed Elective 6	MPE	3	Depends on MPE
	Unrestricted Elective 5	UE	3	
			16	

Total AU for Graduation : **140**