AY2020-21 CURRICULUM COMPUTER SCIENCE

Last Updated: 15-Feb-21

	SUMMARY OF ACADEMIC UNIT REQUIREMENT							
			General Education Requirement (GER)					
Year of Study	Core	MPE	Core	Presci	ribed Electi	ve (PE)	UE	Total AU
			Core	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	Туре	AU	Pre-Requisite		
MH1810	Mathematics I	С	3			
MH1812	Discrete Mathematics	С	3			
CZ1103	Introduction to Computational Thinking & Programming	С	3			
CZ1105	Digital Logic (Engineering Fundamentals 1)	С	3			
CZ1113	Physics for Computing	С	2			
HW0188	Effective Communication	GER-Core	2	HW0001 (can be taken		
		0211 0010		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	Туре	AU	Pre-Requisite	
CZ1104	Linear Algebra for Computing	С	3	MH1810	
C71106	CZ1106 Computer Organisation and Architecture C	3	CZ1105 (can be taken		
CZ1106	Computer Organisation and Architecture		3	concurrently)	
CZ1107	Data Structures and Algorithms	С	3	CZ1103	
	Engineering Fundamentals 2	С	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	Туре	AU	Pre-Requisite		
CZ2100	Probability and Statistics for Computing	С	3	MH1810		
CZ2101	Algorithm Design and Analysis	С	3	CZ1107, MH1812		
CZ2002	Object Oriented Design & Programming	С	3	CZ1103		
CZ2005	Operating Systems	С	3	CZ1106, CZ1107		
	Science & Technology	GER-PE	3			
	Unrestricted Elective 1	UE	3			
	Unrestricted Elective 2	UE	3			

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YEAR 2 SEMESTER 2					
Course Code	Course Title	Туре	AU	Pre-Requisite	
CZ2006	Software Engineering	С	3	CZ2002 (can be taken	
CZ2006	Software Engineering		3	concurrently)	
CZ2007	Introduction to Databases		1	CZ2101 (can be taken	
			3	concurrently)	
CZ3001	Advanced Computer Architecture	С	3	CZ1106	
CZ3006	Net Centric Computing	С	3	CZ1104, CZ2100	
	Business & Management	GER- PE	3		
	Unrestricted Elective 3	UE	3		
			18		

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

YEAR 3 SEMESTER 2					
Course Code	Course Title	Туре	AU	Pre-Requisite	
CZ3079	Professional Internship	С	10	ML0003, Year 3 standing	
			10		

	YEAR 4 SEMESTER 1					
Course Code	Course Title	Туре	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	С	4	Final year standing		
			16			

	YEAR 4 SEMESTER 2					
Course Code	Course Title	Туре	AU	Pre-Requisite		
CZ4079	Final Year Project (cont)	С	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