

**AY2020-21 CURRICULUM FOR COMPUTER SCIENCE
DOUBLE DEGREE IN BUSINESS (with BA Specialisation)**

Last Updated : April - 2022

SUMMARY OF ACADEMIC UNIT REQUIREMENT						
Year of Study	Core	MPE	GER-Core	GER-PE	UE	Total AU
1	37	0	13	0	0	50
2	25	12	0	0	3	40
3	25	4	5	0	3	37
4	18	17	0	3	0	38
Total	105	33	18	3	6	165

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	
CZ1113	Physics for Computing	C	2	
AB1202	Statistical and Quantitative Methods	C	3	
AB1301	Business Law	GER-Core	3	
AB1001	Career Foundations	C	1	
EG0001	Engineers & Society	GER-Core	3	
GC0001	Sustainability: Seeing Through the Haze	GER-Core	1	online course
HY0001	Ethics & Moral Reasoning	GER-Core	1	online course
			23	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
	Engineering Fundamentals 2	C	3	
CZ1105	Digital Logic	C	3	
CZ1106	Computer Organisation & Architecture	C	3	CZ1105 (can be taken concurrently)
AB1002	Career Readiness	C	1	AB1001
AD1101	Financial Accounting	C	4	
AB1601	Organisation Behaviour and Design	C	3	
AB0601	Communication Management Fundamentals	GER-Core	2	
CZ1115	Introduction to Data Science and Artificial Intelligence	GER-Core	3	CZ1103
			22	

YEAR 1 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite
AB1003	Professional Attachment (Special Semester)	C	5	AB1002
			5	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
CZ1104	Linear Algebra for Computing	C	3	MH1810
CZ1107	Data Structures & Algorithms	C	3	CZ1103
CZ2002	Object Oriented Design and Programming	C	3	CZ1103
AD2101	Management Accounting	C	4	AD1101
BC2402	Designing & Developing Databases	MPE	4	
BC2406	Analytics I: Visual and Predictive Analytics	MPE	4	
			21	

YEAR 2 SEMESTER 2

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
CZ2006	Software Engineering	C	3	CZ2002 (can be taken concurrently)
AB1201	Financial Management	C	3	
BC2407	Analytics II: Advanced Predictive Analytics	MPE	4	
	Unrestricted Elective	UE	3	
			19	

YEAR 3 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-Requisite
CZ2005	Operating Systems	C	3	CZ1106, CZ1107
CZ3006	Computer Networks(Net Centric Computing)	C	3	CZ1104, CZ2100
CZ3005	Artificial Intelligence	C	3	CZ1107, CZ1115, CZ2101
CZ3002	Advanced Software Engineering	C	3	CZ2006
AB1501	Marketing	C	3	
ET0001	Enterprise & Innovation	GER-Core	1	online course
	Unrestricted Elective	UE	3	
			19	

YEAR 3 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-Requisite
CZ3004	Multidisciplinary Design Project	C	4	Year 3 standing
CZ4062	Computer Security	C	3	CZ2005
CZ4031	Database System Principles	C	3	CZ2007
AB0602	Communication Management Strategy	GER-Core	4	AB0601
BCXXXX	Business/CS Integration 1	MPE	4	
			18	

YEAR 4 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-Requisite
CZ4079	Final Year Project	C	-	Final Year Standing
CZ3001	Advanced Computer Architecture	C	3	CZ1106
CZ4XXX	Prescribed Elective 1	MPE	3	Depends on MPE
CZ4XXX	Prescribed Elective 2	MPE	3	Depends on MPE
HE5091	Principles of Economics	C	3	
BCXXXX	Business/CS Integration 2	MPE	4	
	Science & Technology	GER-PE	3	
			19	

YEAR 4 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-Requisite
CZ4079	Final Year Project	C	8	
CZ4XXX	Prescribed Elective 3	MPE	3	Depends on MPE
BCXXXX	Business/CS Integration 3	MPE	4	
AB3601	Strategic Management	C	4	AB1501, AB1601
			19	

Total AU for Graduation : **165**

BCxxxx Business/CS Integration Courses (As of 13 July 2020)
(Students to choose any 3 courses)
BT2403 Service Operations Management
BC2408 Supply Chain Analytics
BC3402 Financial Service Processes and Analytics
BC3405 Lean Operations & Analytics
BC3406 Business Analytics Consulting
BC3408 Decision Modelling & Analytics
BC3409 AI in Accounting and Finance