SCHOOL OF COMPUTING SCIENCE AND ENGINEERING (SCSE)

Curriculum

of

B. Tech Computer Science and Engineering
(Specialization in Gaming Technology)
R-2018
(2019-2023)

Proposed Structure:	Programme Core (PC)	Programme Elective (PE)	University Core (UC)– NSC+NSE+HUM&MGT -C + HUM&MGT-E (for 2018, 2019 and 2020 batches)	University/ Open Elective (UE)	Total credits
	98	21	55	06	180

PROGRAM CORE			Credits
CSE1021	Introduction to Problem solving and Programming	LTP	4
CSE2001	Object Oriented programming with C++	LTP	4
CSE2002	Data Structure and Algorithms	LTP	4
CSE2003	Computer Architecture and Organization	LT	4
CSE2004	Theory Of Computation And Compiler Design	LT	4
CSE3001	Database Management Systems	LTP	4
CSE3002	Programming in Java	LTP	4
CSE3003	Operating System	LTP	4
CSE3006	Computer Networks	LTP	4
CSE4001	Internet and Web Programming	LTP	4
CSG1001	Introduction to Game Design	P	2
CSG1002	Game Programming	LP	3
CSG2001	Augmented Reality and Virtual Reality	LTP	4
CSG2002	Software Engineering For Gaming	LP	3
CSG3001	Gaming Hardware fundamentals and applications	LTP	4
CSG3002	Artificial Intelligence and machine learning for Gaming	LTP	4
ECE2002	Digital Logic Design	LTP	4
EEE1001	Electric Circuits and Systems	LTP	4
DSN2096	Engineering Design	LT	2
DSN2097	Internship	PJ	2
DSN2098	Project Exhibition – I	PJ	1
DSN2099	Project Exhibition – II	PJ	1
DSN3099	Engineering Project in Community Service	PJ	2
DSN4098	Comprehensive Exam	PJ	2
		Credits	98

PROGRAM ELECTIVE (21)			Credits
CSD4002	Ethical Hacking	LTP	4
CSE3004	Design Analysis of Algorithms	LT	4
CSE3012	Mobile Application Development	LP	3
CSG2003	Human Computer Interaction	LT	3
CSG2004	Computer Graphics and Multimedia	LT	3
CSG2005	Computer Vision and Robotics	LT	3
CSG4004	Multi-threaded Programming	LT	3
CSG4006	Animation Mechanics and application	LT	3
CSG4010	HTML5 Game Development	LT	3
CSG4014	Competitive Programming	LP	3
NAS1001	NASSCOM Future Skills - Associative Data Analyst	LTP	4
NAS1002	NASSCOM Future Skills - Security Analyst -I	LTP	4
NAS2001	Advanced Data Analytics	LTP	4
NAS2002	Advanced Cyber Security	LTP	4

UNIVERSITY CORE(55)			Credits
Natural Science (26) Credits			
CHY1002	Environmental Science	LT	3
MAT1001	Calculus and Laplace Transforms	LT	4
MAT2002	Discrete Mathematics and Graph Theory	LT	4
MAT3002	Applied Linear Algebra	LT	3
MAT3003	Probability, Statistics And Reliability	LT	4
MAT3008	Computational Game Theory	LT	3
PHY1002	Game Physics	LT	3
PHY2005	Game Physics Development(Physics Engine)	P	2
		Credits	**26**
Humanities and Management (16 Credit)			
ENG1001	Communication for Technical Professionals	LP	3
ENG2003	Interactive Narrative	LT	2
EXC1001	Extra-Curricular Activity	PJ	2
HUM1001	Ethics and values	LT	2
HUM1108	Swachh Bharat	PJ	2
MGT2003	Technology Entrepreneurship	LT	3
SST1002	Soft Skills for Engineers -I	P	1

SST2002	Soft Skills for Engineers - II	P	1
		Credits	**16**
Natural Science Elective (6 Credit)			
MAT2004	Operations Research	LT	3
MAT3009	Design Geometry	LT	3
PHY2003	Computational Physics	LT	3
PHY2002	Energy and Environmental Physics	LT	3
Humanities and Management Elective (07 Credit)			
HUM1002	Emotional Intelligence	LT	3
HUM1013	Indian Culture And Heritage	LT	3
HUM1014	Indian Constitution	LT	3
HUM1004	IT & Society	LT	3
MGT1002	Principles of Management and Organisational Behaviour	LT	3
MGT1022	Engineering Economics	LT	3
MGT2011	Gender, Culture and Stereotyping in Gaming	LT	3
PLA1003	Logic and Problem Solving for Engineers	LT	3
	VTOL Course	OC	

UNIVERSITY/OPEN ELECTIVE(06)			CREDITS
PLA1001	Programming for Computing Engineers	LT	4
CSE4019	Advanced Java Programming	LP	3
CSE3011	Python Programming	LP	3
	Coursera/Edx	OC	

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