NBKR INSTITUTE OF SCIENCE & TECHNOLOGY: VIDYANAGAR (AUTONOMOUS)

(AFFILIATED TO JNTUA ANANTHAPURAMU: SPSR NELLORE)

COMPUTER SCIENCE & ENGINEERING - SCHEME OF INSTRUCTION AND EVALUATION

(With effect from the academic year 2017-2018)

S.N	I B.Tech		II B.Tech		III B.Tech		IV B.Tech	
	I Semester	Credits	I Semester	Credits	I Semester	Credits	I Semester	Credits
1	17SH1101-Functional English	3	17CS2101-Mathematical Foundations of Computer Science	3	17CS3101-Image Processing and Visualization	3	17CS4101-Mobile Application &Development	3
2	17SH1102-Engineering Physics	3	17CS2102-Java Programming	3	17CS3102-Artificial Intelligence	4	17CS4102-R Programming	4
3	17SH1104-Numerical Analysis	3	17CS2103-Operating Systems	3	17CS3103-Cryptography and Network Security	3	17CS4103-Big Data and Hadoop	3
4	17CS1101-Basic Computer Engineering	3	17CS2104-Basic Computer Organization	3	17CS3104-Compiler Design	4	17SH4101-Management Science	3
5	17EE1101-Basic Electrical Sciences	4	17CS2105-Software Engineering	4	17CS3105-Web Application Development using Python	3	Open Elective - 1	3
6	17SH11P1-English Language Lab	2	17SH2106-Probability & Statistics	4	Professional Elective -1 17CS31E1-Advanced Database Management Systems 17CS31E2-Multimedia and Applications 17CS31E3-Software Architecture 17CS31E4-Genetic Algorithms and Applications	3	Professional Elective -3 17CS41E1-Introduction to Robotics and Navigation 17CS41E2-Information Retrieval 17CS41E3-Software Testing and Quality Assurance 17CS41E4-Machine Learning	3
7	17SH11P2-Engineering Physics Lab	2	17MC2101-Environmental Studies	-	17CS31P1-IPV Lab	2	17CS41P1-MAD Lab	2
8	17CS11P1-Basic Computer Engineering Lab	1	17CS21P1-Java Programming Lab	2	17CS31P2-WADP Lab	2	17CS41P2-BDH Lab	2
9	17ME11P2-Computer Aided Engineering Drawing	3	17CS21P2-Operating Systems Lab	2				
	Total	24		24		24		23
	II Semester	Credits	II Semester	Credits	II Semester	Credits	II Semester	Credits
							Professional Elective -4 17CS42E1-Wireless Networks	
1	17SH1201-Professional English	3	17CS2201-Database Management Systems	4	17CS3201-Internet of Things	3	17CS42E2-Free & Open Source Software 17CS42E3-Pattern Recognition 17CS42E4-Virtual Reality	3
2	17SH1201-Professional English 17SH1203-Engineering Chemistry	3	Systems 17CS2202-Formal Languages and Automata Theory	4	17CS3202-Object Oriented Analysis and Design	3	17CS42E2-Free & Open Source Software 17CS42E3-Pattern Recognition	3
			Systems 17CS2202-Formal Languages and		17CS3202-Object Oriented Analysis and Design 17CS3203-High Performance Computing		17CS42E2-Free & Open Source Software 17CS42E3-Pattern Recognition 17CS42E4-Virtual Reality	
2	17SH1203-Engineering Chemistry	3	Systems 17CS2202-Formal Languages and Automata Theory 17CS2203-Design and Analysis of	4	17CS3202-Object Oriented Analysis and Design 17CS3203-High Performance	3	17CS42E2-Free & Open Source Software 17CS42E3-Pattern Recognition 17CS42E4-Virtual Reality Open Elective - 2	3
2 3	17SH1203-Engineering Chemistry 17SH1204-Engineering Mathematics-I	3	Systems 17CS2202-Formal Languages and Automata Theory 17CS2203-Design and Analysis of Algorithms	4 3	17CS3202-Object Oriented Analysis and Design 17CS3203-High Performance Computing 17CS3204-Data mining and Data	3 4	17CS42E2-Free & Open Source Software 17CS42E3-Pattern Recognition 17CS42E4-Virtual Reality Open Elective - 2 17CS42IS-Internship	3 2
2 3 4	17SH1203-Engineering Chemistry 17SH1204-Engineering Mathematics-I 17CS1201-C Programming	3 3	Systems 17CS2202-Formal Languages and Automata Theory 17CS2203-Design and Analysis of Algorithms 17CS2204-Software Project Management	4 3 3	17CS3202-Object Oriented Analysis and Design 17CS3203-High Performance Computing 17CS3204-Data mining and Data warehousing	3 4 4	17CS42E2-Free & Open Source Software 17CS42E3-Pattern Recognition 17CS42E4-Virtual Reality Open Elective - 2 17CS42IS-Internship 17CS42MO-MOOCs	3 2 3
2 3 4 5	17SH1203-Engineering Chemistry 17SH1204-Engineering Mathematics-I 17CS1201-C Programming 17CS1202-Data Structures	3 3 3 3	Systems 17CS2202-Formal Languages and Automata Theory 17CS2203-Design and Analysis of Algorithms 17CS2204-Software Project Management 17CS2205-Computer Networks 17CS2206-Principles of Programming	4 3 3 3 3	17CS3202-Object Oriented Analysis and Design 17CS3203-High Performance Computing 17CS3204-Data mining and Data warehousing 17CS3205-Cloud Computing Professional Elective -2 17CS32E1-C # and .Net Framework 17CS32E2-Bioinformatics 17CS32E3-Intelligent Software Agents 17CS32E4-Microprocessor and	3 4 4 4 4	17CS42E2-Free & Open Source Software 17CS42E3-Pattern Recognition 17CS42E4-Virtual Reality Open Elective - 2 17CS42IS-Internship 17CS42MO-MOOCs	3 2 3
2 3 4 5	17SH1203-Engineering Chemistry 17SH1204-Engineering Mathematics-I 17CS1201-C Programming 17CS1202-Data Structures 17EC1201-Electronic Devices 17SH12P3-Engineering Chemistry Lab 17CS12P1-C Programming Lab	3 3 3 3	Systems 17CS2202-Formal Languages and Automata Theory 17CS2203-Design and Analysis of Algorithms 17CS2204-Software Project Management 17CS2205-Computer Networks 17CS2206-Principles of Programming Languages 17MC2202-Technical English & Soft Skills 17CS22P1-DBMS Lab	4 3 3 3 3	17CS3202-Object Oriented Analysis and Design 17CS3203-High Performance Computing 17CS3204-Data mining and Data warehousing 17CS3205-Cloud Computing Professional Elective -2 17CS32E1-C # and .Net Framework 17CS32E3-Intelligent Software Agents 17CS32E4-Microprocessor and Interfacing 17AC3201-Professional Ethics and Life Skills 17CS32P1-IOT Lab	3 4 4 4 3	17CS42E2-Free & Open Source Software 17CS42E3-Pattern Recognition 17CS42E4-Virtual Reality Open Elective - 2 17CS42IS-Internship 17CS42MO-MOOCs	3 2 3
2 3 4 5 6	17SH1203-Engineering Chemistry 17SH1204-Engineering Mathematics-I 17CS1201-C Programming 17CS1202-Data Structures 17EC1201-Electronic Devices	3 3 3 3 3	Systems 17CS2202-Formal Languages and Automata Theory 17CS2203-Design and Analysis of Algorithms 17CS2204-Software Project Management 17CS2205-Computer Networks 17CS2206-Principles of Programming Languages 17MC2202-Technical English & Soft Skills	4 3 3 3 4	17CS3202-Object Oriented Analysis and Design 17CS3203-High Performance Computing 17CS3204-Data mining and Data warehousing 17CS3205-Cloud Computing Professional Elective -2 17CS32E1-C # and .Net Framework 17CS32E3-Intelligent Software Agents 17CS32E4-Microprocessor and Interfacing 17AC3201-Professional Ethics and Life Skills 17CS32P1-IOT Lab 17CS32P2-OOAD Lab	3 4 4 4 3 0 2 2	17CS42E2-Free & Open Source Software 17CS42E3-Pattern Recognition 17CS42E4-Virtual Reality Open Elective - 2 17CS42IS-Internship 17CS42MO-MOOCs	3 2 3
2 3 4 5 6	17SH1203-Engineering Chemistry 17SH1204-Engineering Mathematics-I 17CS1201-C Programming 17CS1202-Data Structures 17EC1201-Electronic Devices 17SH12P3-Engineering Chemistry Lab 17CS12P1-C Programming Lab	3 3 3 3 3	Systems 17CS2202-Formal Languages and Automata Theory 17CS2203-Design and Analysis of Algorithms 17CS2204-Software Project Management 17CS2205-Computer Networks 17CS2206-Principles of Programming Languages 17MC2202-Technical English & Soft Skills 17CS22P1-DBMS Lab	4 3 3 3 4	17CS3202-Object Oriented Analysis and Design 17CS3203-High Performance Computing 17CS3204-Data mining and Data warehousing 17CS3205-Cloud Computing Professional Elective -2 17CS32E1-C # and .Net Framework 17CS32E3-Intelligent Software Agents 17CS32E4-Microprocessor and Interfacing 17AC3201-Professional Ethics and Life Skills 17CS32P1-IOT Lab	3 4 4 4 3	17CS42E2-Free & Open Source Software 17CS42E3-Pattern Recognition 17CS42E4-Virtual Reality Open Elective - 2 17CS42IS-Internship 17CS42MO-MOOCs	3 2 3

	III - I	III - II	IV - I	IV - II			
	PROFESSIONAL ELECTIVE – 1	PROFESSIONAL ELECTIVE – 2	PROFESSIONAL ELECTIVE – 3	PROFESSIONAL ELECTIVE – 4			
	 Software Architecture (SA) Advanced Database Management Systems (ADBMS) Multimedia and Applications (MMA) Genetic Algorithms and Applications (GAA) 	 C # and .Net Framework (C# & .Net) Bioinformatics (BI) Intelligent Software Agents (ISA) Microprocessor Interfacing (MPI) 	 Introduction to Robotics and Navigation (IRN) Information Retrieval (IR) Software Testing and Quality Assurance (STQA) Machine Learning (ML) 	 Wireless Networks (WN) Free & Open Source Software (FOSS) Pattern Recognition (PR) Virtual Reality (VR) 			
			OPEN ELECTIVE - 1 Choose any one subject from the following all branches which were offered as open electives	OPEN ELECTIVE – 2 Choose any one subject from the following all branches which were offered as open electives (Except Open elective -1)			
OPE	PEN ELECTIVES from other Departments						
	ECE	CE	EEE	ME			
	 Microprocessors And Micro Controllers Neural Networks and Fuzzy Logic VLSI Embedded Systems Cellular Mobile Communication DSP processors & architecture Telecommunication Networks Optoelectronics 	 Air pollution and control Disaster Mitigation And management Environmental impact assessment Remote sensing & GIS Fluid mechanics & Hydraulic machines Building Planning and Construction techniques Cost effective housing techniques Building plumbing services Integrated water shed management. 	 Basics of Power Systems Energy Conversion Techniques Introduction to Control Systems Matlab and Its Applications in Engineering Electrical Energy Conservation & Auditing Electrical & Hybrid Vehicles Industrial Electrical systems 	 Operations Research Power Plant Engineering Industrial Robotics Thermal Engineering Automobile Engineering Total Quality Management 			
	OPEN ELECTIVES offered by CSE department	 Fundamentals of Data Structures (FDS) Database Management Systems (DBMS) Java Programming (JP) Network Management (NM) C++ Programming (CPP) Python Programming (PP) Software Engineering (SE) Web Design and Management 	-				