COURSE AT A GLANCE (NEP-UG)

SUBJECT: COMPUTER SCIENCE *ACADEMIC SESSION-* **2025-28**

CORE-I COURSE

Course Number	Semester	Course Title	Type of Paper P-Practical NP-Non-practical	Credit Hour	Maximum Weightage of Marks
Paper-I	I	INTRODUCTION TO COMPUTER SCIENCE AND PYTHON PROGRAMMING	P	4	100
Paper-II		PROBLEM SOLVING WITH C+PROGRAMMING	P	4	100
Paper-III	II	DATA STRUCTURE	P	4	100
Paper-IV		DATA BASE MANAGEMENT SYSTEM	P	4	100
Paper-V	III	COMPUTER ORGANISATION	NP	4	100
Paper-VI		OPREATING SYSTEM	P	4	100
Paper-VII		WEB TECHNOLOGIES	P	4	100
Paper-VIII	IV	OBJECT ORIENTED PROGRAMMING USING C++	P	4	100
Paper-IX		COMPUTER NETWORK	P	4	100
Paper-X		SOFTWARE ENGINNERING	P	4	100
Paper-XI	V	INTRODUCTION TO ARTIFICIAL INTELLIGENCE	P	4	100
Paper-XII		COMPUTER GRAPHICS	P	4	100
Paper-XIII		PROGRAMMING IN JAVA	P	4	100
Paper-XIV	VI	ALGORITHM DESIGN TECHNIQUES	P	4	100
Paper-XV		PROJECT WORK-1	P	4	100
Paper-XVI	VII	THEORY OF COMPUTATION	NP	4	100
Paper-XVII		COMPUTER ARCHITECTURE	NP	4	100
Paper-XVIII		MA5THEMATICIS FOR MECHINE LEARNING	NP	4	100
Paper-XIX		A-DATA MINING B-WIRELESS SENSOR NETWORK C-CYBER SECIURITY	NP	4	100
Paper-XX	VIII	CLOUD COMPUTING	NP	4	100
Paper-XXI		MECHINE LEARNING	NP	4	100
Paper-XXII		A-COMPILER DESIGN B-INTERNET OF THINGS C-INTRODUCTION TO DATA SCCIENCE	A,B- NP C-P	4	100
Paper-XXIII		A- RESEARCH METHODOLOGY B- PROJECT WORK-II (FOR 4 YEAR-HONS. WITHOUT RESEARCH)	A-P B-P	4	100

CORE-II/CORE-III COURSE

Course Number	Semester Core-II/ Core-III	Course Title	Type of Paper P-Practical NP-Non-practical	Credit Hour	Maximum Weightage of Marks
Paper-I	I/II	INTRODUCTION TO WEB TECHNOLOGY	P	4	100
Paper-II	III/IV	DISCREATE MATHEMATICS	NP	4	100
Paper-III	V/VI	PROGRAMMING IN C++	P	4	100

OTHER COURSES

MULTIDISCIPLINARY COURSES (MDC)UNDER NEP-2020

Three courses to be chosen from **baskets of Multidisciplinary courses** for Semester-I/II/III with 3 credits each. Students are advised to choose one course/ Semester from the basket provided. Students are advised to opt for courses outside their discipline. No repetition of courses allowed.

(Ref: University Letter No-3177/Acd. – I, Dated: 15. 07. 2025 Letter No. 3993/Acd-I Dt: 02.09.2025)

SEMESTER: I

Course No.	Semester	Dept. to Teach	Course Title	Type of Paper P-Practical NP-Non-practical	Credit Hour	Maximum Weightage of Marks
Paper-I	Semester-I	Chemistry	Environmental Chemistry	NP	3	100
		Botany	Gardening and Vermicomposting	NP	3	100
		Economics	Economics in Everyday Life	NP	3	100
		History	History of Education in Modern India	NP	3	100
		Odia	Tulanatmak Sahitya	NP	3	100
		Pol. Sc.	Political Process in India	NP	3	100
		English	Ethical Literature	NP	3	100
		Commerce	Financial Literacy	NP	3	100
		Education	Educational Psychology	NP	3	100

SEMESTER: II

Course No.	Semester	Dept. to Teach	Course Title	Type of Paper P-Practical NP-Non-practical	Credit Hour	Maximum Weightage of Marks
Paper-II	Semester-II	Statistics	Survival Analysis and Biostatistics	NP	3	100
		Zoology	Apiculture	NP	3	100
		Education	Gender and Education	NP	3	100
		Geography/Geology	Climatology	NP	3	100
		Philosophy	Vedic Culture	NP	3	100
		Hindi	Vigyapan Avadharana Aur Prayojanmulak Aayam	NP	3	100
		Home Science	Food Science and Processing	NP	3	100
		Commerce	Fundamentals of Entrepreneurship and E- Commerce	NP	3	100
		Economics	Demography	NP	3	100

SEMESTER: III

Course No.	Semester	Dept. to Teach	Course Title	Type of Paper P-Practical NP-Non-practical	Credit Hour	Maximum Weightage of Marks
Paper-III	Semester-III	Mathematics/Computer Science	Programming in C++	NP	3	100
		Physics	Introduction to Spectroscopy	NP	3	100
		History	Indian Knowledge System	NP	3	100
		Pol. Sc.	Human Rights	NP	3	100
		Sociology	Environmental Issues and Challenges	NP	3	100
		Commerce	Entrepreneurship Development and Start-up	NP	3	100
		Psychology	Health psychology	NP	3	100
		Sanskrit	Philosophy of Bhagavad Gita	NP	3	100
		Botany	Herbarium Preparation	NP	3	100

ABILITY ENHANCEMENT COURSE(AEC) UNDER NEP-2020

Sl. No.	Semester	Course	Credit hour (CH)	Full Mark
Paper-I	I	Odia/Hindi/Sanskrit/Urdu	4	100
Paper-II	II	English	4	100

SKILL ENHANCEMENT COURSES (SEC) UNDER NEP-2020

Three courses to be chosen from the **baskets of SEC** for Semester-II/V/VI respectively with 3 credits each. Student can opt any one of SEC courses in a particular semester from the basket without repetition.

(Ref: University Letter No-3177/Acd. – I, Dated: 15. 07. 2025) NB: All courses are non-practical (NP) papers.

Sl. No.	Semester	Course title	Credit hour (CH)	Marks

Paper-I	II	Personality Development Or Election studies and public opinion Or Quantitative and Logical Thinking Or Analytical Thinking and Logical Reasoning Or Renewable Energy & Energy Harvesting Or Vermicomposting	3	100
Paper-II	V	Yoga in Everyday Life Or Basics of Museum and Achieves Or Working with Communities Or Fundamentals of data science and data management Or Quantitative and Logical Thinking Or Programming With Mathematica	3	100
Paper-III	VI	Life Skill Education Or Quantitative and Logical Thinking Or Income Tax E-return Filing Or Organic Farming Or Biofertilizer Or Type Setting in Latex	3	100

VALUE AIDED COURSES (VAC) UNDER NEP – 2020

(*Ref: University Letter No-3177/Acd. – I, Dated: 15. 07. 2025)*

Sl No	Semester	Paper	Course title	Credit	Marks
Paper-I	I	PAPER I	Environmental Studies and Disaster Management	3	100
Paper-I	III	PAPER II	Ethics & Values	3	100
Paper-I	V	PAPER III	Understanding Odisha	3	100
Paper-I	VI	PAPER IV	Creative Writing	3	100