

**CURRICULUM
BACHELOR OF SCIENCE (IT)
CHOICE BASED CREDIT SYSTEM**

STUDENTS LEARNING OUTCOMES

The curriculum and syllabi for Bachelor of Science(IT) [B.Sc.(IT)] program (2018-19) conform to Outcome Based Education (OBE) for a flexible and structured Choice Based Credit system (CBCS). In general, **ELEVEN STUDENT OUTCOMES** (a-k) have been identified and the curriculum and syllabi have been chosen in such a way that each of the modules meets one or more of these outcomes. Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge, and behaviors that students acquire as they progress through the program. Further, each module in the program spells out clear instructional objectives which are mapped to the student outcomes.

The Student Outcomes are:

- (a) Ability to apply knowledge of Mathematics and science in solving computational problems.
- (b) Ability to understand the Computing concepts and their applications using the acquired broad based knowledge.
- (c) Ability to design, set up and conduct practical.
- (d) Ability to use the techniques, skills, and modern Software tools for software development.
- (e) Ability to learn fundamentals of Algorithms, various data structures and to use them as per need during development of programs.
- (f) Ability to identify and analyze software problems in multiple aspect including coding, testing and implementation in industrial applications.
- (g) Ability to design, develop and verify software systems to meet desired needs within realistic constraints ensuring quality, reliability, security in addition to satisfying economical, ethical, social and environmental constraints.
- (h) Ability to apply Enterprise level application software for design of diverse software products.
- (i) An ability to communicate effectively in diverse groups and exhibit leadership qualities.
- (j) An understanding of professional and ethical responsibility.
- (k) To develop an understanding on global environment and its protection.

B.SC(H) IT**PROGRAM SCHEME****SEMESTER – I**

MODULE CODE	CATEGORY	SUB-CATEGORY	MODULE	L	T	P	C	MARKS		
								INTERNAL	EXTERNAL	TOTAL
COIT1101		PC	COMPUTER FUNDAMENTALS	3	1	0	3.5	30	70	100
COIT1102		PC	IMPERATIVE PROGRAMMING (C)	4	0	0	4	30	70	100
COIT1103		PC	IMPERATIVE PROGRAMMING WITH C LAB	0	0	4	2	30	70	100
COIT1104		PC	SYSTEM AND APPLICATION SOFTWARE	4	0	0	4	30	70	100
COIT1105		PC	SYSTEM AND APPLICATION SOFTWARE LAB	0	0	4	2	30	70	100
COIT1106		PC	LOGICAL ORGANIZATION OF COMPUTER-I	3	1	0	3.5	30	70	100
MATH0112	G		MATHEMATICS	4	0	0	4	30	70	100
MGMT0101	M		MANAGEMENT & PROFESSIONAL LEADERSHIP	4	0	0	4	30	70	100
TOTAL CREDITS				22	2	8	27	TOTAL MARKS		800

L = Lecture**T = Tutorial****P = Practical****C = Credit Point**

SEMESTER – II

MODULE CODE	CATEGORY	SUB-CATEGORY	MODULE	L	T	P	C	MARKS		
								INTERNAL	EXTERNAL	TOTAL
COIT1107		PC	OPERATING SYSTEM	4	0	0	4	30	70	100
COIT1108		PC	OPERATING SYSTEM LAB	0	0	4	2	30	70	100
COIT1109		PC	C++	4	0	0	4	30	70	100
COIT1110		PC	C++ LAB	0	0	4	2	30	70	100
COIT1111		PC	DATA STRUCTURE USING C	4	0	0	4	30	70	100
COIT1112		PC	DATA STRUCTURE USING C LAB	0	0	4	2	30	70	100
COIT1113		PC	LOGICAL ORGANIZATION OF COMPUTER-II	3	1	0	3.5	30	70	100
COIT1114		PC	SYSTEM ANALYSIS & DESIGN	3	1	0	3.5	30	70	100
VALU0115	P	SE	PROFESSIONAL COMMUNICATION-I	2	0	0	2	25	50	75
TOTAL CREDITS				20	2	12	27	TOTAL MARKS		875

L = Lecture

T = Tutorial

P = Practical

C = Credit Point