

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

STUDENTS LEARNING OUTCOMES

The curriculum and syllabi for Master of Science(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 masters. 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 Mathematical Foundations in computing problems.
- (b) Ability to understand the Software concepts and their applications.
- (c) Ability to practice and develop software for interpretation and analysis of data.
- (d) Ability to use the techniques, skills, and modern Software tools necessary for software Development.

- (e) Ability to identify and analyze software problems in multiple aspect including coding, testing and implementation in industrial applications.
- (f) Ability to design, develop and verify a software system to meet desired needs ensuring its reliability and security in addition to satisfying economic, social and ethical constraints.
- (g) Ability to apply Enterprise level application software for design of engineering product/process.
- (h) Ability to function as consultant for the development of sustainable software solutions.
- (i) An understanding of professional and ethical values.
- (j) Ability to communicate effectively in diverse groups and exhibit leadership skills.
- (k) To develop an understanding of global environment and its protection.

**M.SC. IT PROGRAM SCHEME
SEMESTER I**

MODULE CODE	CATEGORY	SUB-CATEGORY	MODULE	L	T	P	C	MARKS		
								INTERNAL	EXTERNAL	TOTAL
COIT5101		PC	PROGRAMMING WITH C	4	0	0	4	30	70	100
COIT5102		PC	PROGRAMMING WITH C LAB	0	0	4	2	30	70	100
COIT5103		PC	MS OFFICE AND WEB TECHNOLOGIES	4	0	0	4	30	70	100
COIT5104		PC	MS OFFICE AND WEB TECHNOLOGIES LAB	0	0	4	2	30	70	100
COIT5105		PC	LOGICAL ORGANIZATION OF COMPUTER	4	0	0	4	30	70	100
COIT5106		PC	LOGICAL ORGANIZATION OF COMPUTER LAB	0	0	4	2	30	70	100
COIT5107		PC	SYSTEM ANALYSIS AND DESIGN	3	1	0	3.5	30	70	100
MATH0114		PC	MATHEMATICAL FOUNDATION OF COMPUTER SCIENCE	3	1	0	3.5	30	70	100
COIT5108		SP	SPECIAL PROBLEM	0	0	2	1	50		50
TOTAL CREDITS				18	2	14	26	TOTAL MARKS		850

L = Lecture

T = Tutorial

P = Practical

C = Credit Point

**M.SC. IT PROGRAM SCHEME
SEMESTER II**

MODULE CODE	CATEGORY	SUB-CATEGORY	MODULE	L	T	P	C	MARKS		
								INTERNAL	EXTERNAL	TOTAL
COIT5109		PC	ARTIFICIAL INTELLIGENCE	4	0	0	4	30	70	100
COIT5110		PC	ARTIFICIAL INTELLIGENCE LAB	0	0	4	2	30	70	100
COIT5111		PC	DATA STRUCTURES USING C++	4	0	0	4	30	70	100
COIT5112		PC	DATA STRUCTURES USING C++ LAB	0	0	4	2	30	70	100
COIT5113		PC	PYTHON PROGRAMMING	4	0	0	4	30	70	100
COIT5114		PC	PYTHON PROGRAMMING LAB	0	0	4	2	30	70	100
COIT5115		PC	OPERATING SYSTEM	4	0	0	4	30	70	100
COIT5116		PC	SOFTWARE ENGINEERING	4	0	0	4	30	70	100
COIT5117	SP	SP	SEMINAR	0	0	2	1	50		50
TOTAL CREDITS				20	0	14	27	TOTAL MARKS		850

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T = Tutorial

P = Practical

C = Credit Point