

SIKKIM SKILL UNIVERSITY
NAMTHANG, SOUTH SIKKIM, SIKKIM



MASTER OF COMPUTER APPLICATION
(FOUR SEMESTERS)

SYLLABUS

SEMESTER- I

SUBJECT CODE	SUBJECT TITLE	SEE MARKS	CIA MARKS	CREDITS
MCA0101	FUNDAMENTAL OF COMPUTERS & EMERGING TECHNOLOGIES	70	30	3
MCA0102	PROBLEM SOLVING USING C	70	30	4
MCA0103	PRINCIPLES OF MANAGEMENT & COMMUNICATION	70	30	3
MCA0104	DISCRETE MATHEMATICS	70	30	3
MCA0105	COMPUTER ORGANIZATION & ARCHITECTURE	70	30	4
MCA0106	PROBLEM SOLVING USING C LAB	70	30	2
MCA0107	COMPUTER ORGANIZATION & ARCHITECTURE LAB	70	30	2
MCA0108	PROFESSIONAL COMMUNICATION LAB	70	30	2

SEMESTER- II

SUBJECT CODE	SUBJECT TITLE	SEE MARKS	CIA MARKS	CREDITS
MCA0201	THEORY OF AUTOMATA & FORMAL LANGUAGES	70	30	3
MCA0202	OBJECT ORIENTED PROGRAMMING	70	30	4
MCA0203	OPERATING SYSTEMS	70	30	3
MCA0204	DATABASE MANAGEMENT SYSTEMS	70	30	3
MCA0205	DATA STRUCTURES & ANALYSIS OF ALGORITHMS	70	30	4
MCA0206	OBJECT ORIENTED PROGRAMMING LAB	70	30	2
MCA0207	DBMS LAB	70	30	2
MCA0208	DATA STRUCTURES & ANALYSIS OF ALGORITHMS LAB	70	30	2

SEMESTER- III

SUBJECT CODE	SUBJECT TITLE	SEE MARKS	CIA MARKS	CREDITS
MCA0301	ARTIFICIAL INTELLIGENCE	70	30	3
MCA0302	SOFTWARE ENGINEERING	70	30	4
MCA0303	COMPUTER BASED OPTIMIZATION TECHNIQUES	70	30	4
MCAEC011	CRYPTOGRAPHY & NETWORK SECURITY	70	30	3
MCAEC021	WEB TECHNOLOGY	70	30	3
MCA0304	ARTIFICIAL INTELLIGENCE LAB	70	30	2
MCA0305	SOFTWARE ENGINEERING LAB	70	30	2
MCA0306	MINI PROJECT	70	30	2

* THE MINI PROJECT (6 WEEKS) CONDUCTED DURING SUMMER BREAK AFTER II SEMESTER AND WILL BE ASSESSED DURING III SEMESTER. THE COURSE WILL BE CARRIED OUT AT THE INSTITUTE UNDER THE GUIDANCE OF A FACULTY MEMBERS.

SEMESTER- IV

SUBJECT CODE	SUBJECT TITLE	SEE MARKS	CIA MARKS	CREDITS
MCAEC032	DATA WAREHOUSING & DATA MINING	70	30	3
MCAEC042	SOFTWARE TESTING AND QUALITY ASSURANCE	70	30	3
MCAEC052	COMPUTER GRAPHICS AND ANIMATION	70	30	3
MCA0401	PROJECT	70	30	14

ELECTIVE SUBJECTS FOR THIRD SEMESTER

ELECTIVE-1	SUBJECT CODE	SUBJECT TITLE
	MCAEC011	CRYPTOGRAPHY & NETWORK SECURITY
	MCAEC012	NEURAL NETWORK
	MCAEC013	SOFTWARE PROJECT MANAGEMENT
	MCAEC014	BIG DATA
	MCAEC015	INTRODUCTION TO MACHINE LEARNING

ELECTIVE-2	SUBJECT CODE	SUBJECT TITLE
	MCAEC021	WEB TECHNOLOGY
	MCAEC022	CLOUD COMPUTING
	MCAEC023	SIMULATION & MODELING
	MCAEC024	SOFT COMPUTING
	MCAEC025	ANDROID OPERATING SYSTEM

ELECTIVE SUBJECTS FOR FOURTH SEMESTER

ELECTIVE-3	SUBJECT CODE	SUBJECT TITLE
	MCAEC031	BLOCKCHAIN ARCHITECTURE
	MCAEC032	DATA WAREHOUSING & DATA MINING
	MCAEC033	PATTERN RECOGNITION
	MCAEC034	DATA ANALYTICS
	MCAEC035	COMPUTER NETWORKS

ELECTIVE-4	SUBJECT CODE	SUBJECT TITLE
	MCAEC041	DIGITAL IMAGE PROCESSING
	MCAEC042	SOFTWARE TESTING AND QUALITY ASSURANCE
	MCAEC043	INTERNET OF THINGS
	MCAEC044	MODERN APPLICATION DEVELOPMENT
	MCAEC045	DISTRIBUTED DATABASE SYSTEMS

ELECTIVE-5	SUBJECT CODE	SUBJECT TITLE
	MCAEC051	MOBILE COMPUTING
	MCAEC052	COMPUTER GRAPHICS AND ANIMATION
	MCAEC053	NATURAL LANGUAGE PROCESSING
	MCAEC054	COMPILER DESIGN
	MCAEC055	DEEP LEARNING