

Course: DE108 Digital Electronics

PROGRAMME: Value Added Course	DEGREE: BCA
COURSE: Digital Electronics	SEMESTER: 1 CREDITS: 1 Duration : 2Hrs
COURSECODE: DE108	COURSE TYPE: THEORY AND PRACTICAL
CONTACT HOURS: 4 (weekly)	

Course Number and Name	
DE108 - DIGITAL ELECTRONICS LAB	
Course Objectives	
<ul style="list-style-type: none"> To acquire the basic knowledge of digital logic levels and application of knowledge to understand digital electronics circuits. To prepare students to perform the analysis and design of various digital electronic circuits. Students will learn and understand the Basics of digital electronics and able to design basic logic circuits, combinational and sequential circuits. 	
Prerequisites	Co-requisites
Basic understanding of Number systems and basic Electronics concepts.	Digital Electronics Trainer Kit
Course Outcomes (COs)	
CO1	Have a thorough understanding of the fundamental concepts and techniques used in digital electronics.
CO2	To understand and examine the structure of various number systems and its application in digital design.
CO3	The ability to understand the Basics of digital electronics and analyse and design basic logic circuits- AND, OR, NOT, NAND, NOR, X-OR gates, Boolean algebra and De-Morgan's Theorem.
CO4	The ability to understand, analyse and design the combinational circuits like- ADDERS, SUBTRACTORS, ENCODERS, DECODERS, MULTIPLEXER, DE-MULTIPLEXER, MAGNITUDE COMPARATORS.
CO5	The ability to understand, analyse and design sequential circuits like FLIP-FLOPS, REGISTERS.
CO6	To develop skill to build, and troubleshoot digital circuits and to understand the basic digital circuits and to verify their operation

Course: PYTHPRO508 - PYTHON PROGRAMMING

PROGRAMME: Certificate Course	DEGREE: BCA
COURSE: Python Programming	SEMESTER: V CREDITS: 1 Duration : 2Hrs
COURSECODE: PYTHPRO508	COURSE TYPE: THEORY AND PRACTICAL
CONTACT HOURS: 4 (weekly)	

Course Number and Name	
PYTHPRO508 – PYTHON PROGRAMMING LAB	
Course Objectives	
<ul style="list-style-type: none"> • Use python to read and write files, work with python standard library. • To learn how to design and program python application. • To learn how to identify python object types. 	
Prerequisites	Co-requisites
Having basic knowledge of programming language.	PYTHON 3.8.6 SOFTWARE
Course Outcomes (COs)	
CO1	Write ,test and debug python programs.
CO2	Implements conditionals and loops for python programs.
CO3	Use functions and represent compound data using lists ,tuples and dictionaries
CO4	Read and write data from and/to files in python and develop applications using python 3.8.6.
CO5	To understand why python is a useful scripting language for developers.
CO6	To Learn how to write functions and pass arguments in python.

