Maharaja Education Trust ®
MIT First Grade College
Department of Computer Applications
Industrial Suburb, Manandavadi Road, Mysuru -570008, www.mitfgc.in
Affiliated to University of Mysore, Accredited by NAAC with "A" Grade, ISO 9001:2015 Certified Institution

COURSE OUTCOME

SEMESTER: I

SUBJECT: -KANNADA   **SUBJECT CODE: KANAEC103**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
KANAEC103.1	Discuss literary works and literary activities by various writers.	L2
KANAEC103.2	Understand the human values, social responsibility along with the richness of language literature.	L2
KANAEC103.3	Discuss about Kannada Nadu-Nudi.	L2
KANAEC103.4	Develop Strong intellectual personality.	L3

SUBJECT: - FUNDAMENTALS OF COMPUTERS   **SUBJECT CODE: BCADSC101**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSC101.1	Describe the fundamentals of computer system, operating system, database management system, internet & web basics.	L2
BCADSC101.2	Identify different components within the computer system, input and output devices.	L1
BCADSC101.3	Interpret the types of software and programming languages.	L2
BCADSC101.4	Illustrate algorithm and flowchart for giving problem	L3
BCADSC101.5	Discuss the different HTML Tags & CSS specification to create webpages.	L2

SUBJECT: - PROGRAMMING IN C   **SUBJECT CODE: BCADSC102**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSC102.1	Explain the fundamental concepts of C programming language.	L2
BCADSC102.2	Use appropriate control structures & data types for building program logic.	L3
BCADSC102.3	Perform formatted I/O operations.	L3
BCADSC102.4	Illustrate use of user defined function for problem solving.	L3
BCADSC102.5	Discuss pointer & user defined data types.	L2

SUBJECT: -ACCOUNTANCY   **SUBJECT CODE: BCADSC104**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSC104.1	Study and understand Accounting, systems of Book, Branches of accounting advantage and limitations	L2
BCADSC104.2	Know the concept of accounting, financial accounting process and Journalization.	L2
BCADSC104.3	Maintenance different account book and reconciliations.	L3
BCADSC104.4	Preparations of different bills, and trial balance.	L3
BCADSC104.5	Understand the basic concepts of Mathematical reasoning, set and functions	L2

SUBJECT: - C PROGRAMMING (PRACTICAL)   **SUBJECT CODE: BCADSCP102**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSCP102.1	Read, understand and trace the execution of programs written in c language.	L1
BCADSCP102.2	Write algorithm & C Program for given problem statement	L3
BCADSCP102.3	Illustrate programs on arrays, pointers, strings & user defined data type.	L3

SUBJECT: -ENGLISH   **SUBJECT CODE: ENGAEC101**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
ENGAEC101.1	Outlines the most delightful and instructive poems and prose piece.	L2
ENGAEC101.2	Analyze literary works for their structure and meaning.	L4
ENGAEC101.3	Write analytically about literature using text guidelines.	L2
ENGAEC101.4	Effectively communicate ideas related to the literary works during class and group activity.	L2
ENGAEC101.5	Compare and Contrast self and society.	L4

SUBJECT: - ENVIRONMENTAL STUDIES   **SUBJECT CODE: ENVAEC101**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
ENVAEC101.1	Analyze critical thinking skills in relation to environmental affairs and an integrative approach to some environmental issues.	L4
ENVAEC101.2	Describe the natural resource their pattern and also distinguish the various types of resource and explain the structure and functions of an Eco-system.	L2
ENVAEC101.3	Classify the term Bio-diversity and their characteristic features.	L4
ENVAEC101.4	Defend to control the various types of pollution and segregation of waste and criticize the merits and demerits of socio and religious factors, climate change and current issues.	L5
ENVAEC101.5	Categorize into few Environmental Act's and justify the Human rights and their sections.	L4,L5

SUBJECT: - MANAGING WORKFORCE   **SUBJECT CODE: MWEOEC101**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
MWEOEC101.1	Manage themselves at work place and know the nuances of managing human resources	L2

SUBJECT: - INFORMATION TECHNOLOGY (PRACTICAL)   **SUBJECT CODE: BCADSCP102**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSCP102.1	identify I/O devices of computer	L2
BCADSCP102.2	Demonstrate hardware assembling & installation of Operating System.	L1
BCADSCP102.3	Use office automation tools.	L2
BCADSCP102.4	Use flowgarithms to create graphical flow chart	L3

SEMESTER: II

SUBJECT:-KANNADA   **SUBJECT CODE: KANAEC203**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
KANAEC203.1	Discuss literary works and literary activities by various writers.	L2
KANAEC203.2	Understand the human values, social responsibility along with the richness of language literature.	L2
KANAEC203.3	Outline the philosophical-scientific thoughts	L2,L4
KANAEC203.4	Develop Strong intellectual personality.	L3

SUBJECT: - DISRECTE MATHEMATICAL STRCUTRES **SUBJECT CODE: BCADSC203**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSCP203.1	Understand the basic concepts of Mathematical reasoning, set and functions.	L2
BCADSCP203.2	Understand various counting techniques and principle of inclusion and exclusions.	L3
BCADSCP203.3	Understand the concepts of various types of relations, partial ordering and equivalence relations.	L1
BCADSCP203.4	Apply the concepts of generating functions to solve the recurrence relations.	L3
BCADSCP203.5	Familiarize the fundamental concepts of graph theory and shortest path algorithm	L3

SUBJECT: - OBJECT ORIENTED CONCEPTS USING JAVA **SUBJECT CODE: BCADSC202**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSC202.1	Understand the features of Java and the architecture of JVM.	L2
BCADSC202.2	Write, compile, and execute Java programs that may include basic data types and control flow constructs and how type casting is done.	L3
BCADSC202.3	Identify classes, objects, members of a class and relationships among them needed for a specific problem and demonstrate the concepts of polymorphism and inheritance.	L1
BCADSC202.4	Demonstrate programs based on interfaces and threads and explain the benefits of JAVA's Exceptional handling mechanism compared to other Programming Language.	L3
BCADSC202.5	Write Java programs that include GUIs and event driven programming and also programs based on files	L3

SUBJECT:-DIGITAL FLUENCY   **SUBJECT CODE: DFSEC101**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
DFSEC101.1	Have an intelligent conversation on the key concepts and applications of Artificial Intelligence (AI), Big Data Analytics (BDA), Internet of Things (IoT), Cloud Computing, and Cyber security.	L2
DFSEC101.2	Develop holistically by learning essential skills such as effective communication, problem-solving, design thinking, and teamwork	L2
DFSEC101.3	Build his/her personal brand as an agile and expansive learner – one who is interested in horizontal and vertical growth?	L2

SUBJECT:-DATA STRUCTURE USING C   **SUBJECT CODE: BCADSC201**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSC201.1	Describe how arrays, records, linked structures, stacks, queues, trees, and graphs are represented in memory and used by algorithms.	L2
BCADSC201.2	Describe common applications for arrays, records, linked structures, stacks, queues, trees, and graphs.	L2
BCADSC201.3	Write programs that use arrays, records, linked structures, stacks, queues, trees, and graphs.	L3
BCADSC201.4	Compare alternative implementations of data structures with respect to performance.	L4
BCADSC201.5	Describe the concept of recursion, computational efficiency of the principal algorithms for sorting, searching and hashing.	L2

SUBJECT: - JAVA PRACTICAL   **SUBJECT CODE: BCADSCP202**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSCP202.1	Implement Object Oriented programming concept using basic syntaxes of control Structures	L3
BCADSCP202.2	Identify classes, objects, members of a class and the relationships among them needed for a finding the solution to specific problem	L1
BCADSCP202.3	Demonstrates how to achieve reusability using inheritance	L3
BCADSCP202.4	Demonstrate understanding and use of interfaces, packages, different exception handling mechanisms and concept of multithreading for robust faster and efficient application development.	L3
BCADSCP202.5	Identify and describe common user interface components to design GUI in Java using Applet & AWT along with response to events	L1,L2

SUBJECT:-ENGLISH   **SUBJECT CODE: ENGAE201**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
ENGAE201.1	Language Component will heighten the awareness of correct usage of English in writing and speaking	L2
ENGAE201.2	Modifies vocabulary by keeping a vocabulary journal	L3
ENGAE201.3	Strengthen the ability to write academic papers, essays and summaries using the prescribed approach.	L3
ENGAE201.4	understand and evaluate language comprehension	L2

SUBJECT:-DATA STRUCTURE PRACTICAL   **SUBJECT CODE: BCADSCP201**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSCP201.1	Understand the concept of data structure & apply algorithm for solving problems of searching & Sorting	L2,L3
BCADSCP201.2	Demonstrate operations of linear & nonlinear data structure.	L3
BCADSCP201.3	implement programs using data structure & recursion to solve given problem statement	L3

SEMESTER: III

SUBJECT: - ARTIFICIAL INTELLIGENCE   **SUBJECT CODE: CMPSEC301**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
CMPSE301.1	Appraise the theory of Artificial intelligence and list the significance of AI	L1
CMPSE301.2	Discuss the various components that are involved in solving an AI Problem	L1, L2
CMPSE301.3	Illustrate the working of AI Algorithm in the given contrast	L1, L2, L3
CMPSE301.4	Analyze the various knowledge representation schemes, Reasoning and Learning techniques of AI	L2, L3, L4
CMPSE301.5	Apply the AI concepts to build an expert system to solve the real-world problems.	L1,L2,L3

SUBJECT: - DATABASE MANAGEMENT SYSTEMS   **SUBJECT CODE:** BCADSC301

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSC301.1	Explain the various database concepts and the need for database systems.	L1,L2
BCADSC301.2	Identify and define database objects, enforce integrity constraints on a database using DBMS.	L1,L2,L3
BCADSC301.3	Demonstrate a Data model and Schemas in RDBMS.	L1,L2,L3
BCADSC301.4	Identify entities and relationships and draw ER diagram for a given real-world problem.	L1,L2,L3
BCADSC301.5	Convert an ER diagram to a database schema and deduce it to the desired normal form.	L1,L2,L3,L4
BCADSC301.6	Formulate queries in Relational Algebra, Structured Query Language (SQL) for database manipulation.	L1, L2,L3, L4, L5
BCADSC301.7	Explain the transaction processing and concurrency control techniques.	L1,L2

SUBJECT: - DATABASE MANAGEMENT SYSTEMS LAB **SUBJECT CODE: BCADSCP301**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSCP301.1	Execute a single line query and group functions.	L1, L2, L3
BCADSCP301.2	Execute DDL and DML Commands	L1, L2 ,L3
BCADSCP301.3	Execute DCL and TCL Commands.	L1, L2, L3,
BCADSCP301.4	Implement the Nested Queries.	L1, L2, L3
BCADSCP301.5	Implement Join operations in SQL	L1, L2, L3
BCADSCP301.6	Create views for a particular table	L1, L2, L3, L4
BCADSCP301.7	Implement Locks for a particular table	L1, L2, L3

SUBJECT: - C# AND .NET TECHNOLOGIES **SUBJECT CODE:BCADSC302**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSC302.1	Describe Object Oriented Programming concepts like Inheritance and Polymorphism in C# programming language.	L2,L3,L4
BCADSC302.2	Interpret and Develop Interfaces for real-time applications.	L2,L3,L4,L5,L6
BCADSC302.3	Build custom collections and generics in C#.	L4,L5,L6

SUBJECT: - COMPUTER NETWORKS **SUBJECT CODE:** BCADSC303

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSC303.1	Explain the transmission technique of digital data between two or more computers and a computer network that allows computers to exchange data.	L1,L2
BCADSC303.2	Apply the basics of data communication and various types of computer networks in real world applications.	L1,L2,L3
BCADSC303.3	Compare the different layers of protocols.	L1,L2,L3,L4
BCADSC303.4	Compare the key networking protocols and their hierarchical relationship in the conceptual model like TCP/IP and OSI.	L1,L2

SUBJECT: - PYTHON PROGRAMMING　　　　　　　　　　　　　　**SUBJECT CODE: BCADSC401**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSC401.1	Explain the basic concepts of Python Programming.	L1, L2
BCADSC401.2	Demonstrate proficiency in the handling of loops and creation of functions.	L1, L2, L6
BCADSC401.3	Identify the methods to create and manipulate lists, tuples and dictionaries.	L1
BCADSC401.4	Discover the commonly used operations involving file handling.	L1, L2
BCADSC401.5	Interpret the concepts of Object-Oriented Programming as used in Python.	L1, L2, L3, L4
BCADSC401.6	Develop the emerging applications of relevant fields using Python.	L1,L2, L6

SUBJECT: - MULTIMEDIA ANIMATION　　　　　　　　　　　　**SUBJECT CODE: BCADSC402**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSC402.1	Write a well-designed, interactive Web site with respect to current standards and practices.	L1, L2, L6
BCADSC402.2	Demonstrate in-depth knowledge of an industry-standard multimedia development tool and its associated scripting language.	L1, L2, L3
BCADSC402.3	Determine the appropriate use of interactive versus standalone Web applications	L1, L2, L4

SUBJECT: - OPERATING SYSTEM CONCEPTS　　　　　　　　**SUBJECT CODE: BCADSC403**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
BCADSC403.1	Explain the fundamentals of the operating system.	L1, L2
BCADSC403.2	Comprehend multithreaded programming, process management, process synchronization, memory management and storage management.	L1, L2, L3
BCADSC403.3	Compare the performance of Scheduling Algorithms	L1, L2, L3
BCADSC403.4	Identify the features of I/O and File handling methods.	L1, L2,L3

SUBJECT:-NETWORK SECURITY   **SUBJECT CODE: E01**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAE01.1	Identify and explain basic network security model and security mechanism	L1,L2
18BCAE01.2	Discuss approaches to information security.	L2
18BCAE01.3	Contrast and illustrate symmetrical and asymmetrical cryptography.	L2,L3
18BCAE01.4	Explain data integrity, authentication, digital signatures and hash function.	L2
18BCAE01.5	Discuss security at application layer.	L2

SUBJECT:-SOFTWARE TESTING   **SUBJECT CODE: E02**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAE02.1	Interpret the fundamentals of software testing.	L2
18BCAE02.2	Describe test categories, test design techniques and test types, analyze requirements and develop and test the test cases for functional and structural test types.	L2
18BCAE02.3	Evaluate various techniques of testing at different levels of SDLC.	L4
18BCAE02.4	Analyze and write test cases to test software applications.	L4,L3
18BCAE02.5	Describe with example with interaction, object oriented and class testing.	L2

SUBJECT:-DIGITAL IMAGE PROCESSING   **SUBJECT CODE: E03**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAE03.1	Describe the fundamental steps of image processing and apply the general terminologies of digital image processing for solving problems.	L2,L3
18BCAE03.2	Apply spacial and frequency domain techniques for image processing.	L3
18BCAE03.3	Discuss and apply image processing algorithm to perform segmentation, enhancement and image feature extraction.	L2,L3
18BCAE03.4	Evaluate methodologies for image segmentation, restoration, image enhancement, compression, morphology techniques.	L4
18BCAE03.5	Describe the fundamentals of color image processing.	L2

SUBJECT:-CLOUD COMPUTING AND BIG DATA ANALYTICS   **SUBJECT CODE: E04**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAE04.1	Describe the fundamental concepts and terminologies of cloud computing.	L2
18BCAE04.2	Discuss the fundamental concepts of big data analytics.	L2
18BCAE04.3	Analyze the applicability of cloud frameworks and discuss cloud management.	L4,L2
18BCAE04.4	Illustrate data preprocessing and data analytics.	L2
18BCAE04.5	Contrast predictive analytics, descriptive analytics and social network analytics.	L2

SUBJECT:-DTP   **SUBJECT CODE: E05**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAE05.1	Express the proficiency in using DTP tools.	L2
18BCAE05.2	CO2 Design various documents graphic objects such as books, greeting cards, logo, pamphlets L6	L6
18BCAE05.3	Create fliers, brochures and multiple page documents.	L6
18BCAE05.4	Illustrate multicolor design for cards, book covers, banners etc,.	L3
18BCAE05.5	Manipulate text and graphics to create balanced and focused layout.	L3

SUBJECT:-INTRODUCTION TO LATEX   **SUBJECT CODE: E06**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAE06.1	Illustrate working with latex software and describe the latex compilation	L2
18BCAE06.2	Interpret the basic syntax of latex.	L2
18BCAE06.3	Express proficiency in formatting commands for mathematical formula, text formation, list, tables etc.	L2
18BCAE06.4	Prepare resume, articles and presentation.	L3
18BCAE06.5	Apply appropriate packages to create documents.	L3

SUBJECT:-MAJOR PROJECT   **SUBJECT CODE: F07**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAF07.1	Apply Technical Knowledge gained with the awareness of impact of technology & their ethical responsibilities to identify suitable problem.	L3
18BCAF07.2	Analyze the use of appropriate tools, form team, segregate work and execute / implement project.	L4
18BCAF07.3	Evaluate the findings of complex problems through critical thinking and decision making capabilities to propose project based solution.	L4
18BCAF07.4	Develop skills to disseminate technical and general information by means of oral as well as written presentation skills with professionalism.	L3
18BCAF07.5	Adapt to professional working environment.	L3

SUBJECT:-SOFTWARE ENGINEERING   **SUBJECT CODE: F01**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAF01.1	Describe the software engineering terminologies, ethics and apply software engineering practices.	L2
18BCAF01.2	Employ the different system models and architectural designs for software.	L3
18BCAF01.3	Analyze process activities on different software models.	L3
18BCAF01.4	Apply software engineering practice over the entire system life cycle.	L3
18BCAF01.5	Illustrate project management skills including planning, scheduling and object oriented design.	L4

SUBJECT:-WEB TECHNOLOGY   **SUBJECT CODE: F04**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAF04.1	Describe the concepts of fundamentals of web.	L2
18BCAF04.2	Develop web pages using HTML, CSS.	L3
18BCAF04.3	Apply java script to build dynamic web pages.	L3
18BCAF04.4	Interpret fundamental PHP syntax and semantics and be fluent in the use of PHP control flow statements Arrays and functions.	L2
18BCAF04.5	Develop server side application using PHP	L3

SUBJECT:-PYTHON   **SUBJECT CODE: F05**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAF05.1	Interpret the fundamental python syntax and semantics.	L2
18BCAF05.2	Discuss python control flow statements.	L2
18BCAF05.3	Determine the methods to create and manipulate python programs by utilizing the data structures like lists, dictionaries tuples and sets.	L3
18BCAF05.4	Express proficiency in handling strings and functions.	L2
18BCAF05.5	Develop program using suitable program development tool.	L3

SUBJECT:-ANDROID PROGRAMMING   **SUBJECT CODE: F06**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAF06.1	Describe the fundamental concepts of Android for mobile application development, application framework.	L2
18BCAF06.2	Express the proficiency in working with Android enumiator.	L2
18BCAF06.3	Develop various Android application related to layouts and rich user interactive interface.	L3
18BCAF06.4	Develop Android applications with SQLITE database.	L3
18BCAF06.5	Design the user interface using the Android UI components and Android application components.	L2

SUBJECT:-. NET PROGRAMMING   **SUBJECT CODE: F02**

CO's	DESCRIPTION OF THE OUTCOMES	BT LEVEL
18BCAF02.1	Articulate OOP concepts and use of C# programming constructs.	L3
18BCAF02.2	Illustrate simple programs using OOP with C#	L3
18BCAF02.3	Express the proficiency in handling of strings, methods, arrays and exception handling.	L2
18BCAF02.4	Describe the concepts of delegates and events.	L2
18BCAF02.5	Develop standalone applications using window forms and ADO .NET	L3