UNDERGRADUATE PROGRAMME: COURSE OUTCOME

Name of the Class	Course Code	Course Title	Course	e Outcomes
	0000	SEM	ESTE	RI
	101	Modern Operating Environment and MS Office	CO1	The student will be able to recognize when to use each of the Microsoft Office programs to create professional business documents.
			CO2	The student will be able to use Microsoft Office programs to create personal and/or business documents following current professional and/or industry standards
(C.A.)			CO3	The student will be able to pursue future courses specializing in one or more of the programs.
			CO4	The student will be able to apply skills and concepts for basic use of computer hardware, software, networks, and the Internet in the workplace and in future coursework as identified by the internationally accepted Internet and Computing Core (IC3) standards.
	101 New	Business Communication Skills	CO1	The student will be able to understand the role of communication in personal and business world.
F.Y.B.B.A (C.A.)			CO2	The student will be able to understand system and communication and their utility
			CO3	The student will be able to develop proficiency in how to write business letters.
F.Y.B.B.A (C.A.)		Financial Accounting	CO1	The students have acquired sound knowledge of basic concepts of accounting
	102		CO2	Students also understood about recording of transactions and preparation of final accounts
			CO3	Students got exposure about various accounting software packages.

Name of the Programme: BBA-CA

F.Y.B.B.A (C.A.)	102 New	Principles of Management	CO1	The student will be able to understand basic concept regarding org. Business Administration.
			CO2	The student will be able to examining various management principles.
			CO3	The student will be able to develop managerial skills among the students.
			CO1	The student will be able to apply knowledge of mathematics, science, and engineering
		Principles of	CO2	The student will be able to learn how to solve common types of computing problems.
(C.A.)	103	Programming and Algorithm	CO3	The student will be able to design and conduct experiments, as well as to analyze and interpret data.
			CO4	The student will be able to design a system, component, or process to meet desired needs within realistic constraints.
			CO5	The student will be able to function on multidisciplinary teams.
F.Y.B.B.A	104	Business Communication	CO1	Students shall understand the concept, process and importance of communication
			CO2	Students shall develop an integrative approach where reading, writing, presentation skills are used together to enhance the students' ability to communicate and write effectively
			CO3	Students shall be awareness among students about Methods and Media of communication
			CO4	Students shall get familiar with information technology and improve job seeking skills.
			CO1	The student will be able to understand basic concept regarding org. Business Administration.
F.Y.B.B.A (C.A.)	105	Principles of Management	CO2	The student will be able to examining various management principles.
			CO3	The student will be able to develop managerial skills among the students.
F.Y.B.B.A	105		CO1	Students will be able to understand role and importance of statistics in various business situations
(C.A.)	New	Dusiness Statistics	CO2	Students will be able to develop skills related with basic statistical technique
			CO3	Students will be able to develop right

				understanding regarding regression, correlation and data interpretation
			CO1	Students will be gain useful knowledge and demonstrate correct application of features of Ms. Office.
F.Y.B.B.A	106	Laboratory Course (Ms. Office, Tally,	CO2	Students will be able to easily create and edit workbooks having multiple sheets for different purposes and situations.
(C.A.)		PPA)	CO3	Tally gives the platform to report the financial transaction with excessive ease.
			CO4	An ability to design a system, component, or process to meet desired needs within realistic constraints.
		SEMI	ESTE	RII
			CO1	The student will be able to understand the working of a digital computer.
EVDDA		Procedure Oriented Programming using "C" Organizational Behavior & Human Resource Management	CO2	The student will able to analyze a given problem and develop an algorithm to solve the problem
(C.A.)	201 201 New		CO3	The student will able to improve upon a solution to a problem.
			CO4	The student will able to use the 'C' language constructs in the right way.
			CO5	The student will able to design, develop and test programs written in 'C'
			CO1	concept of HRM & OB
F.Y.B.B.A (C.A.)			CO2	students about traditional & modern methods of procurement & development in organization.
			CO3	The student will able to know the major trends in HRM & OB
	202		CO1	The student will able to learn the basic concepts and understand the applications of database systems.
F.Y.B.B.A (C.A.)		Database Management Systems	CO2	The student will able to construct an Entity-Relationship (E-R) model from specifications and to transform to relational model.
			CO3	The student will able to construct unary/binary/set/aggregate queries in Relational Algebra.
			CO4	The student will able to understand and apply database normalization principles.
F.Y.B.B.A (C.A.)	202 New	Financial Accounting	CO1	The student will able to develop right understanding regarding role and

				importance of monetary and financial
			transactions in business.	
			CO2	The student will able to cultivate right approach towards classifications of different transactions and their implications.
			CO3	The student will able to develop proficiency preparation of basic financial as to how to write basis accounting statement - Trading and P&L.
			CO1	The students will able to define, explain and illustrate a range of organisational behaviour theories.
			CO2	The students will able to analyse the behaviour of individuals and groups in organisations in terms of organisational behaviour theories, models and concepts.
	203	Organizational Behavior	CO3	The students will able to apply organisational behaviour concepts, models and theories to real life management situations.
F.Y.B.B.A (C.A.)			CO4	The students will able to demonstrate a critical understanding of organisational behaviour theories.
			CO5	The students will able to communicate effectively about organisational behaviour theories and their application using appropriate concepts.
			CO6	The students will able to explain group dynamics and demonstrate skills required for working in groups (team building)
F.Y.B.B.A (C.A.)	203 New	Business Mathematics	CO1	The students will able to understand role and importance of Mathematics in various business situations and while developing softwares.
			CO2	The students will able to develop skills related with basic mathematical technique
F.Y.B.B.A (C.A.)	204	Computer Applications In Statistics	CO1	Students shall understand the power of excel spreadsheet in computing summary statistics.
			CO2	Students shall understand the concept of various measures of central tendency and

				variation and their importance in business
			CO3	Students shall understand the concept of probability, probability distributions and simulations in business world and decision making.
F.Y.B.B.A	204	Relational Data	CO1	The students will able to understand relational database concepts and transaction management concepts in database system.
(C.A.)	New	Base	CO2	The students will able to write PL/SQL programs that use: procedure, function, package, cursor and trigger.
			CO1	The students will able to Describe an example of system architecture for an e-Business.
F.Y.B.B.A (C.A.)	205	E-Commerce Concepts	CO2	The students will able to identify the major electronic payment issues and options.
			CO3	The students will able to discuss security issues and explain procedures used to protect against security threats.
F.Y.B.B.A	205 New	Web Technology (HTML-JSS-CSS)	CO1	The students will able to know & understand concepts of internet programming.
(C.A.)			CO2	The students will able to understand how to develop web based applications using JavaScript.
			CO1	Students will be able to Design, develop and test programs written in 'C'
F.Y.B.B.A (C.A.)	206	Laboratory Course (C- Programming, DBMS and Stat)	CO2	Students will be able to easily design and create a good database and use various SQL operations.
			CO3	Students shall understand the power of excel spreadsheet in computing summary statistics.
		SEME	ESTER	RIII
		Relational Database	CO1	The students will be able to understand basic concepts and the applications of database systems
S.Y.B.B.A (C.A.)	301	Management System	CO2	The students will able to Understand and apply database normalization principles.
			CO3	The students will be able to understand principles of database transaction

				management, database recovery,
				security.
			CO1	The students will be able to understand
			C04	Functions, Cursors, Triggers and
				The student will get brief knowledge
			CO5	shout SOL Fundamentals
				The students will be able to understand
			C06	Functions Cursors Triggers and
			000	packages.
				The students will be able to handle with
			CO/	different Data Base languages
				The students will be able to give
			CO1	knowledge about using digital marketing
S.Y.B.B.A	301	Digital Marketing		in business.
(C.A.)	New	Digital Marketing		The students will be able to make SWOT
			CO2	analysis, SEO optimization and use of
				various digital marketing tools.
				Students will be able to apply concepts
			CO1	of data structure in various domains like
				DBMS, etc.
				Students will be able to handle various
	302	Data Structure	CO2	operations like creation, insertion,
S.Y.B.B.A				deletion, searching, etc. on various data
(C.A.)		Using C		Students will be able to use various date
			CO3	structures like stack queue linked list
				etc in practically
				Students will be able to apply
			CO4	appropriate data structure to specified
			04	problem definition.
			CO1	Students will be able to understand the
			COI	concepts of ADTs.
	202		CO2	Students will be able to learn linear data
SVBBA			02	structures – lists, stacks, and queues.
(C.A.)	New	Data Structure		Students will be able to understand
(0.1.1)	1.0.0		CO3	sorting, searching and hashing
				algorithms.
			CO4	Students will be able to apply Tree and
				Graph structures.
			CO1	students will be able to understand the
			COI	working
				Students will be able to understand
S.Y.B.B.A	303	Introduction to	CO2	various operating systems features
(C.A.)		Operating System		Students will be able to understand basic
			CO3	architectural components involved in
				operating system design
			CO4	Students will be able to understand

				device and resource management
				techniques for timesharing and
				distributed system
				Students will be able to understand the
			CO5	concept of mutual exclusion, deadlock
				detection of distributed operating system
			<i></i>	Students will be able to understand
			COI	System concepts.
	202			Students will be able to understand
S.Y.B.B.A	303	Software	CO2	Software Engineering concepts.
(C.A.)	New	Engineering		Students will be able to understand the
			CO3	applications of Software Engineering
				concepts and Design in Software
				Students shall understand applications of
			CO1	matrices in husiness
				Students shall use I PP and its
			CO2	applications in husiness
SYBBA		BUSINESS		Students shall understand the concept of
(C A)	304	MATHEMATICS	CO3	Transportation problems & its
(0.1.1)			05	applications in business world
				Students shall understand the concept of
			CO4	Drafits and loss losns and EMIs
			04	Profits and loss, loans and EMIS
				The students will be able to understand
	304 New (Option)		CO1	Client Side MVC and SPA
				The students will be able to explore
			CO2	AngularJS Component.
S.Y.B.B.A		Angular IS	CO3	The students will be able to develop an
(C.A.)		Aliguiai - JS		AngularJS Single Page Application.
				The students will be able to create and
			CO4	hind controllers with Javagarint
			001	bind controllers with Javascript.
				The students will be able to apply filter
			CO5	in AngularIS application
				The students will be able to understand
			CO1	how server-side programming works on
			COI	the web.
				The students will be able to use PHP
SYBBA	304		CO2	built-in functions and creating custom
(CA)	New	PHP	001	functions.
	(Option)			
			CO2	The students will be able to understand
				POST and GET in form submission.
				The students will be able to understand
			CO4	how to receive and process form
1	1		1	now to receive and process rollin

				submission data.
			CO5	The students will be able to read and process data in a MySQL database.
			CO1	The students will be able to use the techniques, skills, and modern engineering tools necessary for engineering practice.
S.Y.B.B.A	305	Software	CO2	The students will be able to analyze, design, verifies, validate, implement, apply, and maintain software systems.
(C.A.)	505	Engineering	CO3	The students will be able to design and conduct experiments, as well as to analyze and interpret data.
			CO4	The students will be able to identify, formulates, and solves engineering problems.
	305 New (Option)	Big Data	CO1	The students will be able to develop expert knowledge and analytical skills in current and developing areas of analysis statistics, and machine learning
S.Y.B.B.A (C.A.)			CO2	The students will be able to identify, develop and apply detailed analytical, creative, problem solving skills.
			CO3	The students will be able to understand comprehensive platform for career development, innovation and further study.
) Block Chain	CO1	The students will be able to understand how blockchain systems (mainly Bitcoin and Ethereum) work.
	305		CO2	The students will be able to securely interact with them.
S.Y.B.B.A (C.A.)	New (Option)		CO3	The students will be able to design, build, and deploy smart contracts and distributed applications.
			CO4	The students will be able to integrate ideas from blockchain technology into their own projects
S.Y.B.B.A (C.A.)	306	Computer Laboratory and Practical Work (D.S	CO1	Student will be able to solve the practical problem using Data Structure using C and Relational Database Management

		+ RDBMS)		System
			CO2	Students will be able to implement and summarize concepts of searching and sorting techniques.
			CO3	Students will be able to write well- structured program using procedure oriented design principles.
			CO4	Students will be able to analyze run-time execution of application.
			CO5	Students will be able to implement the Stack ADT using array and linked list data structures.
S.Y.B.B.A (C.A.) AE Ad Co	AECC Add-On	Basic Course in Environmental Awareness	CO1	Students will be able to provide an opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment.
	Course		CO2	Students will be able to develop conscious towards a cleaner and better managed environment.
		SEME	STEF	RIV
			CO1	Students will be able to understand features of object oriented programming.
		Object Oriented	~ ~ ~	Students will be able to produce object-
		Object Oriented	CO2	oriented software using C++
S.Y.B.B.A (C.A.)	401	Object Oriented Programming Using C++	CO2 CO3	oriented software using C++ Students will be able to apply the major object-oriented concepts in programming
S.Y.B.B.A (C.A.)	401	Object Oriented Programming Using C++	CO2 CO3 CO4	oriented software using C++ Students will be able to apply the major object-oriented concepts in programming Students will be able to understand the advanced features of C++ such as stream I/O, Templates, Operator Overloading, etc.
S.Y.B.B.A (C.A.)	401	Object Oriented Programming Using C++	CO2 CO3 CO4 CO1	oriented software using C++ Students will be able to apply the major object-oriented concepts in programming Students will be able to understand the advanced features of C++ such as stream I/O, Templates, Operator Overloading, etc. Students will be able to gain knowledge about Computer Networks concepts.
S.Y.B.B.A (C.A.) S.Y.B.B.A (C.A.)	401 401 New	Object Oriented Programming Using C++	CO2 CO3 CO4 CO1 CO2	oriented software using C++ Students will be able to apply the major object-oriented concepts in programming Students will be able to understand the advanced features of C++ such as stream I/O, Templates, Operator Overloading, etc. Students will be able to gain knowledge about Computer Networks concepts. Students will be able to know about working of networking models, addresses, transmission medias and connectivity devices.
S.Y.B.B.A (C.A.) S.Y.B.B.A (C.A.)	401 401 New	Object Oriented Programming Using C++	CO2 CO3 CO4 CO1 CO2 CO3	oriented software using C++ Students will be able to apply the major object-oriented concepts in programming Students will be able to understand the advanced features of C++ such as stream I/O, Templates, Operator Overloading, etc. Students will be able to gain knowledge about Computer Networks concepts. Students will be able to know about working of networking models, addresses, transmission medias and connectivity devices. Students will be able to acquire information about network security and cryptography.
S.Y.B.B.A (C.A.) S.Y.B.B.A (C.A.) S.Y.B.B.A (C.A.)	401 401 New 402	Object Oriented Programming Using C++ Networking Programming in Visual Basic	CO2 CO3 CO4 CO1 CO2 CO3 CO1	oriented software using C++ Students will be able to apply the major object-oriented concepts in programming Students will be able to understand the advanced features of C++ such as stream I/O, Templates, Operator Overloading, etc. Students will be able to gain knowledge about Computer Networks concepts. Students will be able to know about working of networking models, addresses, transmission medias and connectivity devices. Students will be able to acquire information about network security and cryptography. Students will be able to understand the basics of visual basic and its implementation

				Graphical User Interface based on
				Students will be able to develop and
			CO3	debug application very easily
GVDDA	102	Object Oriented	CO1	Students will be able to acquire an understanding of basic object-oriented concepts and the issues involved in effective class design.
(C.A.)	New	Concepts Through CPP	CO2	Students will be able to enable students to write programs using C++ features like operator overloading, constructor and destructor, inheritance, polymorphism and exception handling.
			CO1	Students will be able to identify the different components in a Communication System and their respective roles.
S.Y.B.B.A (C.A.)	403	Computer Networking	CO2	Students will be able to describe the technical issues related to the local Area Networks.
			CO3	Students will be able to identify the common technologies available in establishing LAN infrastructure.
			CO1	Students will be able to know the services provided by Operating System
			CO2	Students will be able to know the scheduling concept
S.Y.B.B.A (C.A.)	403 New	Operating System	CO3	Students will be able to understand design issues related to memory management and various related algorithms.
			CO4	Students will be able to understand design issues related to File management and various related algorithms
S.Y.B.B.A (C.A.)	404	Enterprise Resource Planning and Management	CO1	Students will be able to understand ERP and learned about different technologies used.
			CO1	Students will be able to know & understand concepts of internet programming.
S.Y.B.B.A (C.A.)	404 New (Option)	Advance PHP	CO2	Students will be able to understand how server-side programming works on the web.
			CO3	Students will be able to understanding How to use PHP Framework (Joomla / Druple)
S.Y.B.B.A (C.A.)	404 New (Option)	Node – JS	CO1	Students will be able to understand the JavaScript and technical concepts behind Node JS.

			CO2	Students will be able to structure a Node
			002	application in modules.
			CO3	Students will be able to understand and use the Event Emitter.
			CO4	Students will be able to understand Buffers, Streams, and Pipes.
			CO5	Students will be able to build a Web Server in Node and understand how it really works.
			CO6	Students will be able to connect to a SQL or Mongo database in Node.
			CO1	Student will be able to solve the practical problem using Object Oriented Programming Using C++ and Visual Basic
			CO2	Student will be able to construct the programs using bottom-up design approach
S.Y.B.B.A	406	Computer Laboratory and Practical Work (VB + C++)	CO3	Students will be able to debug analyze run-time execution of VB and C++ application
(C.A.)			CO4	Students will be able to implement class, function overloading, operating overloading, Polymorphism, templates, etc.
			CO5	Students will be able to use ActiveX controls to improve design and effectiveness of VB application.
			CO6	Students will be able to prepare report in Visual Basic
SVDDA	AddOn	JQuery	CO1	Students will be able to understand the JavaScript language & the Document Object Model.
(C.A.)			CO2	Students will be able to detect and respond to user actions.
			CO3	Students will be able to Alter, show, hide and move objects on a web page.
		SEMI	ESTE	RV
			CO1	Students will be able to understand programming language concepts, particularly Java and object-oriented concepts.
T.Y.B.B.A (C.A.)	501	501 Java Programming	CO2	Students will be able to write, debug, and document well-structured Java applications.
			CO3	Students will be able to implement Java classes from specifications and effectively create and use objects from predefined class libraries.

			CO4	Students will be able to understand the behavior of primitive data types, object references, and arrays.
			CO5	Students will be able to apply decision and iteration control structures to implement algorithms
			CO1	Students will be able to write a well formed / valid XML document.
			CO2	Students will be able to write a server side java application called Servlet to catch update and delete operations on DBMS table.
T.Y.B.B.A (C.A.)	502	Web Technologies	CO3	Students will be able to write a server side java application called Servlet to catch form data sent from client, process it and store it on database.
			CO4	Students will be able to write a server side java application called JSP to catch form data sent from client and store it on database.
	503	Dot Net Programming	CO1	Students will be able to use features of Dot Net Framework along with Visual Basic.
T.Y.B.B.A (C.A.)			CO2	Students will be able to develop Graphical User Interface based on problem specified.
			CO3	Students will be able to develop and debug application very easily.
		Object Oriented	CO1	Students will be able to describe the three pillars of object-orientation methodologies and explain the benefits of each.
			CO2	Students will be able to create use case documents that capture requirements for a software system.
T.Y.B.B.A	504		CO3	Students will be able to create class diagrams that model both the domain model and design model of a software system.
(C.A.)		Engineering	CO4	Students will be able to design the interface between the classes and objects.
			CO5	Students will be able to create an interaction diagrams that models the dynamic aspects of a software system.
			CO6	Students will be able to understand the facets of the Unified Process approach to designing and building a software system.

				Students will be able to describe how			
			CO7	design patterns facilitate development			
				and list several of the most popular			
				patterns.			
			CO8	Students will be able to design the Axioms and corollaries.			
			CO9	Students will be able to build a model for			
				the user interface (UI) of a software			
				application			
				Students will be able to measure the			
			CO10	Level of User satisfaction and software			
				quality assurance.			
	505	Project work (Based on C++ & VB)	CO1	Student is able to prepare software			
				requirements.			
			CO2	Students can understand the user/client			
				requirements.			
			CO3	Students can design the software using			
T.Y.B.B.A (C.A.)				Students con able to design the			
			CO4	framework of the particular topic			
				Students can prepare different types of			
			CO5	reports of the project			
			CO6	Students can prepare the documentation			
				of the entire project.			
		Lab Course (Java & Web tech)	CO1	Students will be able to setup up and use			
	506			a webserver for testing and deploying			
				web applications.			
			CO2	Students will be able to learn to create			
				simple static webpages using html tags.			
			CO3	Students will be able to learn client side			
				scripting using a scripting language.			
				Students will be able to use DOM			
T.Y.B.B.A			CO4	concepts for client side scripting.			
(C.A.)				Students will be able to learn server side			
			CO5	scripting using database connectivity and			
				report generation.			
			COG	Students will be able to learn the concept			
			006	of Java application			
			CO7	Students will be able to use different			
				swing concepts.			
			CO8	Students will be able to learn how to			
				connect front end with backend.			
SEMESTER VI							
	601	Advanced Web Technologies	CO1	Students will be able to understand the			
T.Y.B.B.A (C.A.)				Mark-up language technology such as			
				XML Structure and tools.			
			CO2	Students will be able to understand			

				advanced web technologies such as AJAX.
				Students will be able to understand
			CO3	advanced web topic such as Web
				Students will be able to develop a
			CO4	dynamic webpage by using JavaScript
			CO5	Students will be able to write a valid XML document
	602	Advanced Java	CO1	The students will have the competence in
				the use of Java Programming language.
T.Y.B.B.A (C.A.)			CO2	The students will be able to develop small to medium sized application programs that demonstrate professionally acceptable coding.
T.Y.B.B.A (C.A.)	603	Recent Trends in IT	CO1	Students will be able to analyze the problems.
			CO2	Students will be able to learn how to analyze and create systems to accomplish tasks.
			CO3	Students will be able to evaluate rapidly evolving trends and to integrate knowledge from appropriate fields to make effective and ethical technology decisions.
T.Y.B.B.A (C.A.)	604	Software Testing	CO1	Students will understand various test processes and continuous quality improvement.
			CO2	Students will learn types of errors and fault models.
			CO3	Students will understand the methods of test generation from requirements.
			CO4	Students will understand Test adequacy assessment using: control flow, data flow, and program mutations.
			CO5	Students will be able to use of various test tools.
			CO6	Students will be able to use application of software testing techniques in commercial environments.
T.Y.B.B.A (C.A.)	605	Project work (Based on Java & .Net)	CO1	Student is able to prepare software
			CO2	Students can understand the user/client requirements.
			CO3	Students can design the software using various tools and functions.
			CO4	Students can able to design the

				framework of the particular topic.
			CO5	Students can prepare different types of reports of the project.
			CO6	Students can prepare the documentation of the entire project.
T.Y.B.B.A (C.A.)	606	Lab Course (Advance Java & Advance Web tech)	CO1	Students will be able to study the different Java components.
			CO2	Students will be able to learn the different forms of java and php as applicable for effective presentation.
			CO3	Students will be able to study the major components of java and php their integrated effect.
			CO4	Students will be able to study the different formats and application packages to create and edit.
			CO5	Students will be able to learn the techniques of database connectivity using different software applications.
			CO6	Students will be able to learn the techniques of video capturing and conversion using different software applications