S.U.S. GOVERNMENT COLLEGE SUNAM
PROGRAMME OUTCOMES, COURSE OUTCOMES

Mechanism of Communication: The following mechanism is followed by the institution to communicate the learning outcomes to the teachers and students.

- Hard Copy of syllabi and Learning Outcomes are available in the departments for ready reference to the teachers and students.
- Learning Outcomes of the Programmes and Courses are displayed on the notice boards of each department.
- The students are also made aware of the same through Tutorial classes.

Department of BCA(BCAB3PUP)

Programme Outcomes

1. To produce employable IT workforce, that will have sound knowledge of IT and business fundamentals that can be applied to develop and customize solutions for Small and Medium Enterprises (SME)

2. To develop skilled manpower in the various areas of information technology like:Data base management, Software Development, Computer-Languages, Software engineering, Web based applications etc.

The Program enables the students to:

a) Understand the fundamental concepts of Computers, Business environment and IT Applications inBusiness

b) Successfully understand & analyze technical data to reach actionable conclusions, including technological solutions to thebusiness.

c) Learn technologies & IT languages, so the business problems could beaddressed.

d) Develop competent technical writing skills so as to enable the graduate to communicate business ideas to senior management and generalpublic.

e) To identify and sharpen their IT/ programmingskills.

Learning Outcomes

Our graduates will have

a) The necessary technical, scientific as well as basic managerial and financial procedures to

analyze and solve real world problems within their workdomain

b) Clarity on both conceptual and application oriented skills in commerce, Finance &Accounting and IT Applications in Businesscontext.

c) Improved communication and business management skills, especially in providing tech support.

d) Awareness on ethics, values, sustainability and creativityaspects.

e) The ability and the mindset to continuously update andinnovate.

BCA Course Outcomes

Course Name	Course Out Comes
BCA-I **Fundamental of IT** **BCAB1103T**	In this subject students get introduction to various devices connected with computer like input devices, output devices and different kind of memories. Through this subject students get an overview towards the working of various types of printers and plotters. Students understand working of computer through detailed explanation of block diagram of computer and also are familiar to the use of some special devices such as speech synthesizer system, light pen, data glove, digitizer etc. This subject gives introduction to working of internet and teaches the students how to use the internet After completion of this subject students are able to understand and use all input output devices and portable memories. They are also able to use internet for searching relevant content through search engine like Google. They are also able to find and watch videos, can attend webinar and virtual classes using internet related to their studies. Students can share pheriphals using different type of computer networks.

BCA-I **C Programming Language** **BCAB1104T**	**Objectives** 1. To impart adequate knowledge on the need of programming languages and problem solvingtechniques. 2. To develop an in-depth understanding of functional and logical concepts of C Programming. 3. To provide exposure to problem-solving throughCprogramming. 4. To familiarize the basic syntax and semantics of CLanguage 5. Provides knowledge to build the algorithms forproblems. 6. Enhance programming skills of thestudents. **SubjectOutcomes** **After the completion of this course students will** 1. Learn how to create pictorial representations of theprogram. 2. Learn how to apply logic forproblems. **Learn how to recollect various programming constructs and to develop Cprograms**
BCA-I **Software lab-I** **BCAB1105L**	1. Familiar with PC and windows commands, File creation, editing, directory creation. 2. Using the features of word processing in Microsoft word 3. Using spreadsheet software and be able to create technical and complex spreadsheets for data analysis using MS Excel. 4. Develop effective and professional business presentations using MS power point.
BCA-I **C Programming Language Lab** **BCAB1106L**	**SubjectObjectives** **1.** To introduce the field of programming using Clanguage. **2.** To provide practical knowledge about Cprogramming.

	3. To enhance the analyzing and problem solving skills and use the same for writing programs inC. **SubjectOutcomes** **After the completion of this course students will** 1. Be able to write programs using advance concepts of C- language. 2. Understand and apply the pointers, memory allocation techniques and use of files for dealing with variety of problems. Learn how to Designgraphics programs usingC.
BCA-I **Digital Electronics** **BCAB1203T**	1. Understanding the fundamentals concepts and techniques used in digital electronics. 2. The structure of various number systems and its applications in digital design and conversion among different number systems. 3. Understand logic gates, universal gates, and combinational gates. 4. Ability to understand,analyze and design various combinational and sequential circuits.adders, counters, multiplexer, demultiplexer,ALU. 5. Simple logic using Karnaugh maps.
BCA-I **Data Structure** **BCAB1204T**	This subject provide detailed information about the different kind of structures used to store different type and different nature of data in software back end, database and programming languages. It also covers the detailed knowledge about the different kind of data structures like array, link list, stack, queue, tree etc. it also cover both the physical view as well as logical view of each data structure. This subject provide knowledge about the different algorithms available foe searching and sorting of data. After completion of this course student can be a good programmer if

	he/she learn a programming language. Without deep knowledge of this subject one can't be a good programmer. Through this subject one can be able to store different types of data in appropriate data structure 6. according to different priorities.
BCA-I **Basic Mathematics** **BCAB1205T**	1. Basic math skills are those that involve making calculations of amounts, sizes or other measurements. Core concepts like addition, subtraction, multiplication and division provide a foundation for learning and using more advanced math concepts. Being proficient in basic math skills will help you both in the workplace and your daily life. 2. Mathematics is a fundamental intellectual tool in computing, but computing is also increasingly used as a key component in mathematical problem-solving. 3. Mathematical Concepts are required in many Disciplines of Computer Science. For example, **Calculus** is often used in computer graphics, scientific computing, and computer security. If students want to work in these professions, they should have a fair understanding of calculus
BCA-I **Software Lab-III** **BCAB1206L**	In this lab students implement the different data structures using a programming language. Through this practical subject students are able to use different types of data structure in programs. They are able to choose appropriate data structure to store the data according to the need of program.
BCA-I **Drug Abuse Problem Management And Prevention** **BCAB1207L**	Objectives of drug abuse 1) Long term health impacts such as liver, kidney and heart problems or cancer (depending on the type of drug used and how frequently it was used) 2) Dental health problems (cavities and gum disease) 3) Mental health issues such as anxiety and depression. 4) Dependence.

	5) It can lead to nausea and abdominal pain, which can also lead to changes in appetite and weight loss. 6) Increased strain on the liver, which puts the person at risk of significant liver damage or liver failure. 7) Seizures, stroke, mental confusion and brain damage. 8)Lung disease can be caused.
BCA-II **Discrete Mathematics** **BCAB2102T**	1. Discrete Mathematics is the Foundation of Computer Science. 2. Mathematics Teaches the Usage of Algorithms. 3. Mathematics Provides the Analytical Skills Required in Computer Science. These skills are necessary for problem-solving and data analyzation. Different corners of the profession, from machine learning to software engineering, use these types of mathematics. Without these math classes, students may struggle to manage data structures, databases, and algorithms.
BCA -II **COA** **(Computer System Organization & Architecture)** **BCAB2103T**	This subject helps students to understand architecture of computer system and how to organize it. Its outcomes are as follows: **Outcomes:** 1. It helps in better understanding of memory concept. 2. Various micro-operations help in better understanding of register transfer language. It helps in memory access directly through DMA & helps in execution of each instructions.
BCA-II **Object Oriented Programming using C++** **BCAB2104T**	**Subject Objectives** 1. To develop a greater understanding of the issues involved in programming language design and object oriented paradigms and itsimplementation. 2. To impart adequate knowledge on the need of object oriented programming languages.

	3. To enhance problem solving and programming skills in C++ by implementing the object oriented concepts. **SubjectOutcomes** **After the completion of this course students will** 1. Be able to explain how an existing C++ programworks. 2. Understand how to discover errors in a C++ program and describe how to fixthem . 3. Be able to create a C++ program and describe ways to improveit 4. Gain knowledge to analyze a problem and construct a C++ program that solvesit
BCA-II **Fundamental of DBMS** **BCAB2105T**	The main objectives of database management system are data availability, data integrity, data security, and data independence. It also refers to how data can be drawn from different sources, different types and different formats. It refers to format conversions before becoming part of a project. **Outcomes** Able to design and implement properly structured databases that match the standards based under realistic constraints and conditions. Develops an Entity-Relationship model based on user requirements.
BCA-II **Software Lab IV** **BCAB2106L**	Programming Students should be able to write, compile, and debug C++ programs, and design programs using constructors and destructors. Data structures Students should be able to identify appropriate data structures and algorithms to solve real-time problems. They should also be able to implement data structures such as stacks, queues, search trees, and hash tables. Searching and sorting Students should be able to implement various searching and sorting techniques.File management Students should be

	able to understand and employ file management. Exception handling Students should be able to demonstrate how to control errors with exception handling. Inheritance and polymorphism Students should be able to understand the concepts of inheritance and polymorphism.
B.C.A-II Software lab MS Access BCAB2107L	1. Examine database concepts and explore the Microsoft Office Access environment. 2. Build a new database with related tables. 3. Manage the data in table. 4. Query a database using different methods. Ability To Design a form, Report, Import and export data.
BCA-II Environment And Road Safety Awareness BCAB2108T	The objectives of Environmental Studies (EVS) include: Environmental awareness: To develop an awareness of environmental issues and the role individuals can play in protecting the environment Environmental conservation: To sensitize students to the importance of environmental conservation and sustainability Natural environment: To encourage children to explore and interact with the natural environment and foster curiosity about the world around them Cognitive and psychomotor skills: To engage children in exploratory and hands-on activities to acquire basic cognitive and psychomotor skills Environmental concepts: To acquire environmental concepts for studies at upper primary level Link classroom learning to life: To help students to link classroom learning to life outside the school Understanding beyond subjects: To help students develop understanding beyond subjects
BCA-II Computer Networks BCAB2202T	Computer Networks in a simple language to understanding of various types of computer networks, technologies behind networks, communication equipment like router, hub, and so on and application protocols, e-mails and communication protocols will be introduced to students through this subject.

	It will help to manage the networking system. Outcomes After completing this course, students will be able to: 1. Maintain a computer network. 2. Students learn the basic principles of networks and their benefits, which provide them the gateway for future in net working field.
BCA-II **Management Information System** **BCAB2203T**	1. To describe the role of information technology and decision support systems to solve business problems. 2. Tointroducetheprinciplesofcomputer-basedinformationsystemsanalysisanddesign 3. Toenablestudentstounderstandthevariousknowledgerepresentationmethodsand different expert system structures. 4. To enable the students to use information to assess the impact of the Internet and Internet technology on electronic commerce and electronic business To provide the theoretical models used in database management systems to answer business questions. **Subjectoutcomes** 1. Students will understand the leadership role of Management Information Systems in achieving business competitive advantage through informed decision making. 2. Analyze the business information and systems for evaluation of strategic alternatives. Will learn how to communicate effectively to facilitate decision making.
BCA-II **Computer oriented and Statistical Method** **BCAB2204T**	1. Statistics is a form of math used in computer science that uses quantified models, representations, and synopses for a provided collection of experimental data or actual studies.

	2. The field studies methodologies to obtain, review, evaluate, and form conclusions from data. Some statistical measures include mean, skewness, regression analysis, variance, analysis of variance, and kurtosis. Statistics plays a fundamental part in computer science as it is used for data mining, speech recognition, vision and image analysis, data compression, traffic modeling, and even artificial intelligence, as shared by medium. It is also used for simulations. A background in statistics is needed to understand algorithms and statistical properties of computer science.
BCA-II RDBMS BCAB2205T	1. Fundamental elements of RDBMS. 2. Basic concepts of relational data model, relational database design, relational algebra and database language SQL. 3. Design E-R diagram to represent simple database applications scenarios. 4. Improve the design by normalization. 5. Database protection and Distributed database.
B.C.A-IInd Software lab- VI BCAB2206L	1. Understand the statistics methods. 2. Calculate mean, median,mode of raw data,discrete series and continuous series. 3. Compute standard deviation. 1. Knowledge about bisection method, regula falsi method, Newton-Raphson method etc.
BCA-III Software Lab VII BCAB2207L	Some benefits of using Oracle DBMS include: Scalability: Oracle DBMS is scalable. High performance: Oracle DBMS provides high performance. Data security: Oracle DBMS offers data security. Reliability and availability: Oracle DBMS is reliable and available. Advanced analytics: Oracle DBMS provides advanced analytics. Integration: Oracle DBMS integrates with various applications and systems.
BCA-III System Analysis and Design	2. 1.Understand the principles and tools of SAD. 3. 2.Understand the ethical responsibilities of practicing the computer

BCAB3102T	4. professional including understanding the need for quality. 5. 3.Basic of system testing,Implementation. 6. 4.Able to solve a wide range of problems related to the analysis & design 7. and construction of information systems. 8. 5. Able to present projects.
BCA-III **System Software** **BCAB3103T**	It is type of computer program which is designed to run computers hardware & application programs. Its outcomes are as follows: **Outcomes:** 1. It provides platform for other software. 2. It helps in understanding, scanning parsing of various programs. 9. It helps in making programming easy with the help of linker & loader; also helps in testing & debugging.
BCA-III **Java Programming** **BCAB3104T**	Java programming is intended for software engineers, system analysts, programs managers and so on. Java is highly portable language. Java use both interpreter and compiler to execute the program. Java is an open source platform and easily imports other languages. Students easily create new applications and web pages using this language bcoz java are very easy language. **Outcomes:--** On successful completion of the course, a student will be able to; 1. Understands the basic norms of 'oop' and new concept in java to become a professional in the field of coding. 2. Implement, compile, test and run java programs Understand the new concept introduce in java language as package, interface, multithreading and file handling.
BCA-III **Web Designing using Html and Dhtml** **BCAB3105T**	1. Understand structure and implement Html and Dhtml. 2. Able to use the html and dhtml programming language. 3. Know about URL how to create links ,image as a link,background images.

	4. Client server network is the medium through which clients access resources and services from a central computer . 5. Understand document object model,scripting access, rollover buttons,moving objects with Dhtml.
BCA-III **Lab** **BCAB3106L** **&** **BCAB3206L**	This course provides in depth coverage in oops principles and techniques using java. Practice topics include inheritance, interface, multithreading, packages etc. **Project:** It is a minor project in which student makes a software in groups, with the help of core java and advance java. It help student to be confident about their programming skills and move to" IT Sector" in their future
BCA-III **Software Lab X** **BCAB3107L**	The objective of HTML is to create static web pages by structuring data and designing the basic layout and formatting. HTML is made up of tags and elements that tell the browser how to display the document. DHTML The objective of DHTML is to create dynamic and interactive web pages by combining HTML with other web technologies. DHTML uses client-side scripting languages like JavaScript to add effects, animations, and other interactive features to web pages.
BCA-III **E-Commerce** **BCAB3202T**	E-Commerce also known as electronic commerce refers to buying & selling of goods & services using internet and transfer of money and data to execute these transactions. Its outcomes are as follows: 1. It helps in faster buying process and reduces cost. 2. Provides flexibility to customers. 3. It provides description of products. 4. It helps in advertising and marketing of products faster through internet. Use of smart cards, credit cards, debit cards helps customers in making shopping easier.
BCA-III **Operating systems** **BCAB3203T**	1. Operating system. To understand the design of control unit. 2. CPU Scheduling, synchronization, deadlock handling. 3. The role of paging, segmentation and virtual memory in operating system.

	I/O systems, Device Management and Evaluation of various Disk Scheduling Algorithms.
BCA-III Software Engineering: BCAB3204T	Software Engineering is the study of and practice of engineering to built, design, develop, maintain and reinstall the same software with new features. There are different areas of software engineering and it serves many functions throughout the application software. Engineer's team has to follow any model which is suitable as per their requirements. **Outcomes:--** After completion the course the students will be able to: 1. Select any specific model to make asoftware. 2. Work on the layout of the samemodel. 3. Individually design the software frontend. 4. Coding related todesign. 5. Enhance the metrics of software so the user give priority to their software Decide the testing level for software for further new additions as per new user requirements.
BCA-III Web Designing using ASP.NET BCAB3205T	1. Students will gain the skills and project based experience needed for entry into Web application and development careers. 2. To understand internet technology concepts. 3. To understand the concepts of scripting languages VBScript, JavaScript and ASP. **Outcomes** 1. Develop web pages using ASP 2. Develop a dynamic web page using client side and server side script In languages. 3. Gain knowledge of JavaScript language programming constructs
BCA-III Web Designing Using ASP. NET Lab BCAB3207L	1. To Provide complete knowledge about implementation of various programming concepts using Scripting Languages like JavaScript, VBScript 2. Provide Knowledge about how Java Script programs are used in a web page including the use of event- handlers and the Document Object Model.

	3. To understand dynamic scripting on client side Internet Programming. **Outcomes** 1. Understanddifferencebetweenclientsidewebtechnologiesandserversidewebtechnologies. Students gain the skills and project-based experience needed for entry into web design and development careers.

BCA English (ENGB3PUP)

Programme Outcomes

1. To enable the students to speak and comprehend English easily.
2. Make students enough confident to face interviews. MNC's or companies preferred candidates with better English Skills.
3. Help to gain better knowledge of technology and modern gadgets. The language of internet is also English.
4. It is boon for students as the maximum number of students in this college is from adjacent villages so, they get chance to learn it properly to compete various exams.
5. The paper of every competition exam is set in English so, students have chance to improve scanning, skimming skills with better understanding.

Course Out Comes

Course Name	Course Out Comes
SEM-I&II **ENGB1101T & ENGB1201T**	**Prose Parables** This paper consists of total 6 short stories. The main purpose of all stories in the syllabus is to satire against the thinking of people. All stories in the syllabus, are fictional. These are amusing and entertaining. **Poetry** Poetry teaches the learners to write, read and understand any text. Poetry is the way to imbibe emotions. Poetry explains a lot in few words. It also teach students to respect

	and understand different view points of poets across the world.
SEM-III&IV ENGB2101T & ENGB2201T	**Essays** Essay helps students in learning the language. These are written to relate a story or to recount events. **Paragraph Writing** It helps students to gain knowledge on different important current topics like environment, pollution which are the most concerned topics around the world. **Novel** Novels are totally fictitious which help the students by making them more imaginative. Learners entertained or amused themselves through this way. **Dialogue Writing** Dialogue is an effective way of learning the language. It is used to teach the students that how language is used in the real world.
SEM-V&VI ENGB3101T & ENGB3201T	**Novel** Novels are totally fictitious which help the students by making them more imaginative. Learners entertained or amused themselves through this way. **Precis** Precis writing is a overview of passage. It helps students to make or highlight all important points while reading a long text. A precis mentions all important details of the original paragraph so that anyone who is reading it, is able to understand the idea of the original paragraph. **Poems** Poetry teaches the learners to write, read and understand any text. Poetry is the way to imbibe emotions. Poetry explains a lot in few words. It also teach students to respect and understand different view points of poets across the world. **Curriculum Vitae (C.V)**

	The learners are prepared to write a job application along with a curriculum vitae containing a brief account of one's qualification, previous experience, hobbies and expertise for a particular job etc.
Grammer	Grammar skills always assist the learners to use words in meaningful sentences. It assists students to improve their speaking and writing. The best usage of grammar is to impart the messages more accurately. Incorrect usage can cause barrier in communication.

BCA PUNJABI COMPULSORY (PBIB3PUP)

Programme Outcomes

After reading the syllabus students can become good citizens and good teachers by pursuing higher education in future and at the same time computerize Punjabi language and create Punjabi software and Android applications in future, create Punjabi fonts Apart from this, by learning Punjabi typing, students can get a job in any department of the Punjab government to make it their means of employment.

Course Name	**Course Outcomes**
BCA-I **PBIB1102T &** **PBIB1202T**	In Semester I -1,students under the syllabus of Punjabi compulsory subject in the book' Gyan Sarovar' (collection of essays related to science), edited by Kuldeep Singh Dheer and Narinder Singh Kapoor, Punjabi University Patiala, relevant essays with various subjects were explained to the students. Information on Punjabi phonetic scheme, Punjabi language, Gurmukhi script, spelling under grammar were also elaborated. In the second semester, the book 'The Role of Folklore' edied by Dr. Bhupinder Singh Khaira and Dr. In Surjit Singh ,In which various articles related to folklore were introduced so that the students could get acquainted with various forms of Punjabi folklore and stay connected with their culture.

M.Sc.IT and L.E. (MITM2PUP)

Programme Out Comes

In today's world, it is necessary to use technology, especially when it comes to education. Students from across the globe need to embrace the technological advancements that are the present nowadays. Since education has also been effected by technology, it becomes an integral part of each student's life.

Modern technology not only speeds up the work and provides help in college courses, but it also allows a lot of other conveniences to students in making decisions based on their academia.

The scope of M.Sc-IT for students is really Vast. Msc-IT students have good opportunities in public sector. It provides jobs as a system engineer, software tester, web developer.

Best career options after M.Sc.-IT.

1. One of the most popular career options after Msc -IT is getting MCA and specialize further in their domain. It provides you with the necessary skills, and knowledge to become an IT Professional.
2. If student has taken an interest in numbers and statistics, student can enter the field of data science. It is one of the fastest growing sectors in the world with huge demand for professionals.

course outcomes

Course Name	Course Out Comes
Information Technology & E-Commerce MITMT1101T	New inventions make life too much easier as compare to last era's, like 3d, 4d, and 5d movies, these are the easy example of new inventions which make human life more entertaining. IT is the base of each and every technical invention in computer field. IT used in

	most of the field like – education, business, internet and mobiles. IT changes human life and highly in demand. With the help of IT we can create, process and secure data. IT uses in every field like business and computing as internet, networking, data management, software, internet website, server, database etc. **<u>Out Comes:--</u>** On completion of the course the student should be able to:-- 1. Familiar with working of computer and parts of computer. 2. Understand the input and output devices. 3. Basic ideas of storage devices, Computer Networks and Operating System.
M.Sc. I.T-I C Programming Language **MITMT1102T**	1. To impart adequate knowledge on the need of programming languages and problem solving techniques. 2. To develop an in-depth understanding of functional and logical concepts of C Programming. 3. To provide exposure to problem-solving through C programming. 4. To familiarize the basic syntax and semantics of C Language 5. Provides knowledge to build the algorithms for problems. 6. Enhance programming skills of thestudents. **After the completion of this course students will** 1. Learn how to create pictorial representations of the program. 2. Learn how to apply logic for problems. Learn how to recollect various programming construct sand to develop C programs

M.Sc.IT-I **Web technology** **MITM1103T**	Web technology is the establishment and use of mechanism that make it possible for different computers to communicate.You can also share resources or the building blocks of an effective computer networking system. Well as you know that now everything needs internet to get access in many things.of course the web technology being very important in this modern world.Some web technologies may be complicated but without it a website wouldn't be nice and having a good UI. Web Languages Some examples of web technologies including mark-up languages such as HTML,CSS,XML,CGI,JavaScript and HTTP.Programming language,web servers,databases and business applications are also parts of web technologies. Outcomes It can make you easier to update your content from anywhere at any time.
M.Sc IT -I **Foundation Of Computer Science** **MITMT1104T**	1. Discrete math examines objects that care be represented finitely. It includes a variety of topics that can be used to answer various tangible inquiries. It involves several concepts, including logic, number theory, counting, probability, graph theory, and recurrences. 2. Discrete math provides an important foundation for all areas of computer science. 3. Discrete math is used in various areas including computer architecture, algorithms, computer systems, databases, functional programming, distributed systems, machine learning, operating systems, computer security, and networks. 4. The problem-solving methods taught in discrete math are

	needed for composing complicated software.
M.Sc. I.T-I **C Programming Language Lab** **MITMT1105L**	**1** To introduce the field of programming using C language. **2** To provide practical knowledge about C programming. **3** To enhance the analyzing and problem solving skills and use the same for writing programs in C. **SubjectOutcomes** **After the completion of this course students will** 1. Be able to write programs using advance concepts of C-language. 2. Understand and apply the pointers, memory allocation techniques and use of files for dealing with variety of problems. learn how to Design graphics programs using C.
M.SC -I **Web Technology Lab** **MITM1106L**	Web technologies including mark-up languages such as HTML, CSS, XML, CGI, JavaScript and HTTP. Programming language, web servers, databases and business applications are also parts of web technologies. I can make you easier to update your content from anywhere at anytime. You can also improve your own website with the SEO(search engine optimization) right on the same page where you edit the page. And its reduces your cost, it takes much less time to build a site and it means a lower cost to you. **Outcomes:--** A web developer can create own website. Having a website and online presence strategy allows you to market your business online. A website is also important because it helps to establish credibility as a business. A website not only gives credibility but it also helps to give a positive impression that your company is bigger and more successful.

M.Sc IT-I **DBMS** **MITM1201T**	1 Fundamental elements of RDBMS. 2 Basic concepts of relational data model, relational database design, relational algebra and database language SQL. 3 Design E-R diagram to represent simple database applications scenarios. 4 Improve the design by normalization. Database protection and Distributed database
M.Sc. I.T-I **Programming** **WITH PYTHON** **MITMT1202T**	10. Create your first program in Python IDLE. 11. Implement OOPs concepts in your programming. 12. Use Arrays, and Data structures. 13. Create an application with the support of graphics in Python. Implement error handling.
M.Sc. I.T-I **Operating systems** **MITM1203T**	1. Role of operating system. To understand the design of control unit. 2. CPU Scheduling, synchronization, deadlock handling. The role of paging, segmentation and virtual memory in operating system.
M.Sc.IT-I **COA** **MITMT1204T**	This subject provides knowledge about the architecture of CPU and memories. In this subject students learn about different algorithm used in execution of jobs. This subject provides detailed knowledge about the instruction cycle. The objective of this subject is to provide the knowledge about various aspects like addressing modes, pipelining, internal circuits of CPU. After the completion of this subject the student have the complete knowledge about internal working of computer system, able to troubleshoot and can handle any technical problem in computer

	system. The student can upgrade any computer system to improve the performance of computer.
M.Sc IT **Programing** **Lab III** **MITMT1205L**	Provide a strong foundation in database concepts, technology, and practice Develop skills in using SQL commands for data definition and manipulation Understand the practical application of database management system concepts Design databases and create relational databases Analyze table design Understand advanced database concepts such as Datamining and Big Data Analysis Develop solutions for database applications using procedures, cursors, and triggers
M.Sc IT **Programming** **Lab IV** **MITMT1206L**	objectives of a Python lab are to teach students how to use Python to: Write, test, and debug simple programs Use conditionals and loops Structure programs with functions Represent data with lists, tuples, and dictionaries Read and write data from and to files Understand the basics of programming Convert algorithms into Python programs Construct programs with control structures Design object-oriented programs with Python classes
M.Sc. I.T-II & LE **Object oriented programming language C++** **MITM2101T**	1. Understand the difference between top-downand bottom-up approach. 2. Object oriented programming approach in connection with C++. 3. Apply the concepts of object-oriented programming. 4. The process of data file manipulations using C++. Apply virtual and pure virtual function and complex

	programming situations.
M.Sc.IT-I **Data & File Structure** **MITMT2102T**	This subject provide detailed information about the different kind of structures used to store different type and different nature of data in software back end, database and programming languages. It also covers the detailed knowledge about the different kind of data structures like array, link list, stack, queue, tree etc. it also cover both the physical view as well as logical view of each data structure. This subject provide knowledge about the different algorithms available foe searching and sorting of data. After completion of this course student can be a good programmer if he/she learn a programming language. Without deep knowledge of this subject one can't be a good programmer. Through this subject one can be able to store different types of data in appropriate data structure according to different priorities.
M.Sc(I.T.) **II&LE(Lateral Entry) Software Engineering** **MITMT2103T**	Software Engineering is application of engineering concepts to software development. This subject helps in improvement of software. Its benefits are as follows: **Outcomes:** 1. It helps students to learn steps of development of software. 2. It helps in making the project as students become aware of various types of models. 3. Provides ability to work effectively as team member or as leader in changing environment. It helps in interpretation of data.
M.SC II & **LE** **Computer Networks** **MITM2104T**	The main objective of this module is to introduce to the students the concepts of computer graphics. It starts with an overview of interactive computer graphics, two dimensional system and mapping, then it presents the most important drawing algorithm, two-dimensional transformation, Clipping,fillingandanintroductionto3- D graphics. **SubjectOutcomes**

	After the completion of this course students will 1. Understand the basic objectives and scope of computer graphics. 2. Identify computer graphics applications common graphics APIs. 3. Understand the basic structures of 2D and 3D graphics systems. 4. Identify fields related to computer graphics. 5. Understand the architecture and operations of a 2D graphics system 6. Apply basic image-processing techniques. 7. Create 2D animation and compose Animated Graph. Perform graphics printing.
M.SC IT II & LE **PROGRAMMING LAB V** **MITM2105L**	Understanding object-oriented programming: Students learn how to differentiate between object-oriented and structure-oriented programming. They also learn how to apply object-oriented features, such as inheritance, polymorphism, and encapsulation. 1. Writing and debugging programs: Students learn how to write, compile, and debug programs in C++. 2. Using concepts like constructors and destructors: Students learn how to define class constructors and destructors. They also learn how to design programs that use these concepts. 3. Reusing code: Students learn how to reuse code through inheritance. 4. Applying concepts like overloading: Students learn

	how to overload functions and operators. Implementing files, templates, and exceptions: Students learn how to implement these concepts in their program
M.Sc.IT-I **Lab VI** **MITMT2106L**	In this lab students implement the different data structures using a programming language. Through this practical subject students are able to use different types of data structure in programs. They are able to choose appropriate data structure to store the data according to the need of program.
M.SC II &LE **Algorithm Design And Analysis** **MITM2201T**	Safety and reliability: Ada uses strong typing and other features to reduce bugs and make code more reliable. Readability: Ada is designed to be easy to read and understand, making it easier to maintain and update code. Portability: Ada code can be used across different platforms and architectures. Concurrency: Ada has built-in support for multitasking and real-time systems. Reusable code: Ada's package concept allows developers to organize and encapsulate code into reusable units. Early error detection: Ada's static typing performs type checking at compile-time, which helps detect errors early in development. Support for new technologies: Ada supports new and changing technologies. Reduced development costs: Ada can help reduce development costs. Reduced certification costs: Ada can help reduce certification costs for safety-critical software.
M.SC II &LE **Computer Graphics** **MITM2202T**	Objectives The main objective of this module is to introduce to the students the concepts of computer graphics. It starts with an

	overview of interactive computer graphics, two dimensional system and mapping, then it presents the most important drawing algorithm, two-dimensional transformation; Clipping, filling and an introduction to 3-Dgraphics. **Subject Outcomes** **After the completion of this course students will** 1. Understand the basic objectives and scope of computer graphics. 2. Identify computer graphics applications common graphics APIs. 3. Understand the basic structures of 2D and 3D graphics systems. 4. Identify fields related to computer graphics. 5. Understand the architecture and operations of a 2D graphics system 6. Apply basic image-processing techniques. 7. Create 2D animation and compose Animated Graph. Perform graphics printing.
M.SC II & LE **Artificial Intelligence** **MITM2203T**	The basic objective of AI (also called heuristic programming, machine intelligence, or the simulation of cognitive behavior) is to enable computers to perform such intellectual tasks as decision making, problem solving, perception, understanding human communication (in any language, and translate among them), and the like. To have an appreciation for the engineering issues underlying the design ofAI systems. To have a basic understanding of some of the more advanced

	topics of AIsuch as learning, natural language processing, agents and robotics, expert systems, and planning. That play an important role in AIprograms. **Outcomes** Career Opportunities in Artificial Intelligence Big Data Engineer. The role of a Big Data Engineer is to create an ecosystem for the business systems to interact efficiently. *Business Intelligence Developer. *Data Scientist. *Machine Learning *Engineer. *Research Scientist. *AI Data Analyst. *Product Manager. *AI Engineer.
M.SC II &LE **MINOR PROJECT** **MITMT2204T**	Minor project outcomes 1)It helps students to build projects in different languages like Java,asp.net,asp.net core, python. 2)Improves efficiency 3)Better collaboration 4)Reduced errors 5)Improved quality assurance 6)Simplified dependency management 7)Enhanced problem-solving abilities 8)Increased credibility
M.SC II &LE **PROGRAMMING LAB VII** **MITM2205T**	Safety and reliability: Ada uses strong typing and other features to reduce bugs and make code more reliable. Readability: Ada is designed to be easy to read and understand, making it easier to maintain and update code. Portability: Ada code can be used across different platforms and architectures. Concurrency: Ada has built-in support for multitasking and real-time

	systems. Reusable code: Ada's package concept allows developers to organize and encapsulate code into reusable units. Early error detection: Ada's static typing performs type checking at compile-time, which helps detect errors early in development. Support for new technologies: Ada supports new and changing technologies. Reduced development costs: Ada can help reduce development costs. Reduced certification costs: Ada can help reduce certification costs for safety-critical software.
M.SC II &LE PROGRAMMING LAB VIII MITM2206L	Ada uses strong typing and other features to reduce bugs and make code more reliable. Readability: Ada is designed to be easy to read and understand, making it easier to maintain and update code. Portability: Ada code can be used across different platforms and architectures. Concurrency: Ada has built-in support for multitasking and real-time systems. Reusable code: Ada's package concept allows developers to organize and encapsulate code into reusable units. Early error detection: Ada's static typing performs type checking at compile-time, which helps detect errors early in development. Support for new technologies: Ada supports new and changing technologies. Reduced development costs: Ada can help reduce development costs. Reduced certification costs: Ada can help reduce certification costs for safety-critical software.

DCHN Computer Science (DCHN1PUP)

Programme Outcomes

In today's world, it is necessary to use technology, especially when it comes to education. Students from across the globe need to embrace the technological advancements that are the present nowadays. Since education has also been effected by technology, it becomes an integral part of each student's life.

Modern technology not only speeds up the work and provides help in college courses, but it also allows a lot of other conveniences to students in making decisions based on their academia.

Course Outcomes

Course Name	Course Out Comes
Information Technology DCHN1101T	Technology means to solve the problems and make life easy and quick. New inventions make life too much easier as compare to last era's, like 3d, 4d, and 5d movies, these are the easy example of new inventions which make human life more entertaining. IT is the base of each and every technical invention in computer field. IT used in most of the field like – education, business, internet and mobiles. IT changes human life and highly in demand. With the help of IT we can create, process and secure data. IT uses in every field like business and computing as internet, networking, data management, software, internet website, server,

	database etc. **Outcomes** On completion of the course the student should be able to:-- 1. Familiar with working of computer system. 2. Understand the input and out put devices. Basic ideas of storage devices, Computer Networks and Operating System.
Network Essentials **DCHN1102T**	The main goal of the computer network is Resource Sharing. It is to create all the programs, data and hardware accessible to anyone on the network without considering the resource's physical area and the client. **Outcomes** 1 Information gathering -identify symptoms and problems. 2 Identify the affected areas of the network. Determine if anything has changed. 4 Establish the most probable cause. 5 Determine if escalation is necessary. 6 Create an action plan and solution identifying potential effects.
Diploma Lab **DCHN1101L**	This lab helps to acquire knowledge to students about basics of computer. Its outcomes are as follows: **Outcomes:** 1. Students learn basic things of computer like input-output devices, keyboard, monitor etc. 2. It helps in designing document by using MS-Word; also helps in making slideshows through power point.

	It helps in making excel sheets.
Troubleshooting And Networking DCHN1201T	The process of detection, minimization, and resolving the faults that arise in the network while performing the various day to day activities is known as trouble shooting. It requires a system of thoughts and actions to overcome any challenge that a student faces. **Out Comes** 1. Trouble shooting skills mean greater opportunity for improvement. 2. Greater knowledge about hardware, software and applications. 3. Find the problem and find more than one solution to solve the problem.
Window Server DCHN1202T	The objective of this subject is to provide complete knowledge about the working of client -server mechanism and about the flow of data between client and server. This subject provides information about how to create and handle different types of user accounts in window. After the completion of this subject the student able to install the window on a fresh system and repair the window on a corrupt system. Student can create admin and user accounts on window. The student have complete knowledge about various security techniques and network protocols.
Lab Troubleshooting & Server **DCHN1201L**	Although a server is similar to a desktop PC in many respects, its main objective is to provide information to a group instead of an individual.

	Because servers send data through networks, the growth of the Internet has fueled their use and popularity. **Outcomes** Strengthen business connections. Networking is about sharing, not taking. ... Get fresh ideas. ... Raise your profile. ... Advance your career. ... Get access to job opportunities. ... Gain more knowledge. ... Get career advice and support. ... Build confidence. This helps technicians find the right problems and solutions more quickly. When troubleshooting is done correctly, your whole maintenance operation can overcome backlog, lost production, and compliance issues much more efficiently.

PGDCA (PDCA1PUP)

Course Outcomes

Course Name	Course Out Come
Information Technology & E-Commerce PDCA1101T	Subject Objectives • Provide s the under standing of basic computer hardware architecture & be able to design fundamental login circuits. • Provide under standing about essential IT support skill since including installing, configuring, securing and trouble shooting operating systems and hardware. Knowledge to work with Microsoft products such as: MS Word, MS Excel and MS Power point **Outcomes** • Understanding of various computer codes • Understand the functions of basic digital combinatorial circuits and sequential circuits. • Understand the fundamental hardware components that make up a computer's hardware. • Understand the Role of each of these components. Understand the role of CPU and its components.
C Programming PDCA1102T	This particular subject provides detailed knowledge of C programming language. In this subject students learn each and every aspects of c language in detail like data types, loops, conditional statements, functions, pointers etc. This subject helps the students to create different kind of logics and convert

	them into source code. After completion of this subject students are able to develop different kind of programs in C language. As C is known as mother language of all programming languages, one can learn any other programming language very easily after learning the C language. One can be a good programmer after learning C language.
WINDOW **Operating System & OA** **PDCA1103T**	**Objectives** 1. To provide knowledge of basic operating system concepts. 2. Provides knowledge about the internal working of an operating system 3. Provide knowledge about deep understanding of process concepts, deadlock and memory management. 4. To provide an exposure to scheduling algorithms, devices and information management. **Subject Outcomes** **After the completion of this course students will** 1. Have complete knowledge about what is an operating system and the role it plays 2. Gain all knowledge about various services provided by an operating system Be able to describe, contrast and compare differing structures for operating systems
	In this lab students implement the different kind of

Lab (C) **PDCA1104L**	programs using C programming language. Through this practical subject students are able to use different types of modules available in C language. They are able to choose appropriate data structure to store the data according to the need of program.
PROGRAMMING lab II **PDCA1105L**	**Subject Objectives** It is used to digitally create store manipulate and relay office information and data needed for accomplishing basic task and goal.It makes possible for business organization to improve their productivity and recognize easier ways to do business in profits. **Outcomes** 0ffice tools course would enable the students in crafting professional word documents, excel spread sheets, power point presentations using the Microsoft suite of office tools.
DBMS **PDCA1201T**	1 Fundamental elements of RDBMS. 2 Basic concepts of relational data model, relational database design, relational algebra and database language SQL. 3 Design E-R diagram to represent simple database applications scenarios. 4 Improve the design by normalization. Database protection and Distributed database.
PROGRAMMING WITH PYTHON **PGDA1202T**	OBJECTIVES: 1.Create your first program in Python IDLE. 2.Implement OOPs concepts in your programming. 3.Use Arrays, and Data structures. 4.Create an application with the support of graphics in

	Python. 5.Implement error handling.
WEB TECHNOLOGY **PDCA1203T**	main objectives Web technology refers to the means by which computers communicate with each other using markup languages and multimedia packages. It gives us a way to interact with hosted information, like websites. Outcomes:- Students are able to develop a dynamic webpage by the use of java script and DHTML. Students are able to create a website using html, php etc. Students will be able to write a well formed/valid XML document. Students will be able to connect a java program to a DBMS and perform insert, update and delete operations on DBMS table. 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.
PYTHON LAB **PDCA1204L**	Create your first program in Python IDLE. Implement OOPs concepts in your programming. Use Arrays, and Data structures. Create an application with the support of graphics in Python. Implement error handling. Build basic programs using fundamental programming constructs like variables, conditional logic, looping, and functions. Work with user input to create fun and interactive programs.
WEB TECH LAB **PDCA1205 L**	Programming lab Objective: This lab is intended to teach the basics involved in publishing content on the World Wide Web. This includes the 'language of the Web HTML, the fundamentals of how the Internet and the Web function, a basic understanding of graphic production with a specific stress on creating graphics for the Web, and a general grounding introduction to more advanced topics such as programming and scripting. This will also expose students to the basic tools and applications used in Web publishing. Program Outcomes:

	The students will be able to: Analyze a web page and identify its elements and attributes. Create web pages using XHTML and Cascading Style Sheets. Build dynamic web pages using JavaScript (Client side program

POST GRADUATE DIPLOMA IN DRESS DESSIGNING AND TAILORING (PGDDD&T) PGDTD1PUP

Course Outcomes

Course Name	Course Out Comes
Dress Designing PGDTD1101T	In primary job of fashion designer student is to create the designs for clothes and accessories. Understanding current trends is on important aspect with sketches. In this subject students develop their technical knowledge and practical skills in areas such as drawing , fashion illustration
Pattern Making PGDTD1101L & PGDTD1201L	This subject is about using the techniques of pattern making, also known as pattern drafting, in fashion design to create patterns that will then be used to cut fabric to create a simple pattern, a pattern maker would have to follow five essential steps, gathering their material, taking proper measurements adding styles and designs, grading their design, then draping it to result in the final garments
Style Reading and Patten Making PGDTD1102L & PGDTD1202L	Pattern making is mostly a practical based subject only and students can learn the techniques by watching and practicing on various clothes. After they get a full knowledge, it becomes very interesting subject for the students. It helps the students to create different designs. It helps the students to create different designs with different methods. It helps them to create a perfect dress as per the

	curves and shape of the body .they can stitch a perfect dress. In this subject students can learn about methods of taking measurements from baby and read-made garments.
Dress Designing (theory) PGDTD1201T	In this fashion theories indicates the process of fashion ideas. The theories explain the fashion trend. it also tells about stage.Assign of clothing principals and element of design, factors influencing dress designing, occasions. Fashion, fads and styles effect of fashion trends in dress designing.
Clothing Construction Techniques PGDTD1103L & PGDTD1203L	It learns to the students how to thread a sewing machine , how to sew on curved and straight edge fabric. How to sew a fabric together. Work with measurement. Tools how to sew a zipper. It learns to the students all. Of measurements , fabric cutting techniques sewing and finishing , in this students learn all detail of sleeves , collars , lining , facing and all children garments
Scale Drawing PGDTD1104L & PGDTD1204L	Scale drawing is a useful subject for any fashion designing student because they can be used to plan. Visualize and adjust land caps plan before making a garment skating of different types of dresses on figure is learn in it and also illustrations of accessories