PROGRAMME OUTCOMES, PROGRAMME SPECIFIC OUTCOMES AND COURSE OUTCOMES OF ALL UG AND PG PROGRAMMES

Undergraduate Programmes

B.A. Tamil

Programme Outcomes

On the completion of the programme, the students are

- gaining knowledge on the usage of basic language skills such as Listening, Speaking, Reading and Writing (LSRW) without error.
- ➤ knowing the background history of Tamil literature.
- > understanding the civilization, culture and politics of Tamils with evidence.
- learning the skill of creativity.
- > gaining knowledge to become a researcher through reviews and criticisms.

Programme Specific Outcomes

The programme will enable the students

- to develop writing and communicative skills through Nannool literary book.
- > to write poetry/ poems with the support of Yappilakanam and Thandialangaram lessons.
- > to gain knowledge on Tamil culture and change in politics through the lessons on the history of Tamil culture.
- ➤ to understand the different periods of politics and social life of Tamils through Chitrillakkiyam lessons.
- > to gain knowledge about basic needs of life and code of conduct for the people through Araillakiam lessons.
- > to make aware of the life style and culture of the folk through folk literature lessons.
- > to learn about equality, fraternity, human societies and culture through Penniyam and Dalitiam lessons.
- > to make aware of secularism among them through religious oriented literature lessons.
- > to know the history of temple architecture through kavin kalai (art of sculputure) and kovil kalai (art of temple).

Course Outcomes

The courses will enable the students

> to cope with the modern trends in creating new literary works.

- > to know the culture, tradition and customs through ancient Tamil literature.
- > to understand the origin of language, types and its history.
- > to learn good virtues like discipline, equality and fraternity.
- > to understand the history and evolution of Tamil literature.
- > to know the knowledge about interdisciplinary learning in Tamil language.

B.A. English

Programme Outcomes

- > Students are moulded with four skills.
- > Environmental studies throw light on "Pollution free World".
- ➤ Value Based Education teaches basic rights of human beings.
- > Students are familiar with many Indian writers and their works.
- > Students learn literature of numerous nations.
- > Students are thorough in History of English Literature.
- > Students are familiar with various Literary Forms.
- ➤ Knowledge on Journalism is gathered.
- Personality of the students gets improved.
- ➤ "Phonetics" improves the pronunciation of the students.
- ➤ Non Major Elective subjects pave the way for "Entrepreneurship" and on Banking and Finance".
- ➤ Subject knowledge is strengthened by Shakespearean's plays, Sonnets, Regional Litt., Women's writings, World Literature and African Litt.
- > Students are familiar with popular short stories and one act plays.

Programme Specific Outcomes

- ➤ Students gather knowledge on both "Fiction" and "Non Fiction".
- ➤ Non Major Elective subjects give room for job opportunities.
- > Students shine as "Entrepreneurs" or they are well placed.
- > Students improve their four skills.
- ➤ Pronunciation of the students gets improved.
- After the completion of the programme the students in their lives become full fledged.

Course Outcomes

- > Students get familiar with social, literary, historical, moral, religious and cultural background of any literary work.
- ➤ Once they walk out of the college campus after finishing the programme, they get self confidence.
- The course opens the gate for job opportunities.
- ➤ Since "Literature" reflects life, students learn various lessons for their lives through the literary works.

B.A. Economics

Programme Outcomes

- The programme provides methods of organising and simplifying data so that their significance is comprehensible.
- Statistical knowledge helps the students to use the proper methods to collect the data, employ the correct analyses and effectively present the results.

Programme Specific Outcomes

• Students can become statistical investigator, Statistician, Statistical Analyst, Statistical officer and Statistical programmer.

Course Outcomes

- The students acquire clear idea about the basic economics concepts and problems to face the competitive examinations.
- They gain knowledge about the foreign exchange markets and international institutions and to analyse the trade agreements and foreign trade activities.
- They also understand the significance of mathematical tools and to know the concept and methods of mathematical techniques.

B.Sc. Mathematics

Programme Outcomes

- This programme provides to inculcate the logical, analytical and critical thinking which in turn provides the confidence to face any competitive examination especially in banking sector, TNPSC and Civil Services examinations.
- The students obtain adequate information which facilitates to become a competent teacher after pursuing their graduation.

- The students can acquire the knowledge of solving problems by applying skills and knowledge gained.
- By virtue of the training, they can acquire indepth knowledge in the classical and applied mathematical concepts, and also develop and boost the ability of solving mathematical problems.

- The students can understand the fundamentals of Mathematics.
- They are able to perform basic computation in higher Mathematics.
- They can demonstrate their proficiency in writing proofs and acquire knowledge to handle the practical problems.
- They can also demonstrate the basic manipulative skills in algebra, geometry, trigonometry and statistics.
- Students can able to acquire basic knowledge about various instruments and statistical techniques in mathematical research.

B.Sc. Physics

Programme Outcomes

- ➤ The undergraduate programme is aimed at making the students capable of comprehending the postgraduate syllabus and be able to analyse simple as well as complex situations involving application of scientific concepts in real life situations.
- The graduates will have knowledge of fundamental laws and principles in a variety of areas of Physics along with their applications.
- The graduates will develop research skills which might include advanced laboratory techniques, numerical and mathematical techniques, and computer oriented skills.
- ➤ Graduates from this programme will be eligible to continue M.Sc. degree or joint M.Sc. Ph.D. courses and become a scientist.
- ➤ There are many career opportunities such as a teacher, research analyst and scientific assistant in scientific bodies or industries and would be competent and independent to carry out their specified work.

Programme Specific Outcomes

The programme will enable the students

- > to understand the basic concepts of Physics and applying mathematical and computing techniques into it, and to develop the scientific attitude.
- > to practise problem solving in all the areas of Physics.
- > to apply theories of Physics and its relevance in present day technology.
- > to explore important connections between theory, experiment and current applications.
- > to develop a basis for future learning and work experience.

On the completion of the course the students will enable to

- > understand the concept of properties of matter viz. elasticity, viscosity, low pressure, surface tension and oscillations (free, damped and forced oscillation).
- > learn the basics of geometrical optics, physical optics and modern optics.
- > explain the concept of gravitation, planetary motion, conservation laws, rotational motion of rigid body, moment of inertia, concept of linear and angular momentum, Newton's laws of motion (mechanics) and relativity.
- > acquire knowledge on basics of thermodynamics and to understand the kinetic theory of gases and transport phenomena.
- > to understand the electrostatic properties, magnetostatics, magnetism and the basics of electromagnetic waves.
- ➤ provide knowledge about the basics of computer programming in C++ and to solve problems by writing programs.
- > get an overview about the concept of statistical mechanics and quantum mechanics.
- > understand the basics of solid state physics, atomic physics, nuclear physics and spectroscopy.
- ➤ describe the principle and working of different kinds of analog and digital electronic devices.
- ➤ acquire experimental skills such as handling the instruments, error determination, calculation and analysing the result while handling the laboratory courses.
- ➤ handle the electrical and electronic equipments safely and independently by educating the skill based subjects.

B. Sc. Chemistry

Programme Outcomes

The programme will enable the students

- to have a thorough understanding and knowledge of different branches of chemistry.
- to develop the ability to think analytically and to solve problems.
- to enhance practical skills and interpret knowledge entirely in working environment.

Programme Specific Outcomes

• The programme provides solid understanding of all the fundamental concepts in Inorganic, Organic, Physical, Polymer, Nano and Applied Chemistry that is necessary for the study of more advanced specialized Chemistry.

The courses will help the students to

- learn Photo Chemistry, Nuclear Chemistry, Thermodynamics and Solid State.
- understand the chemistry of ionic compounds, coordination compounds and role of metal ions in biological systems.
- learn about aromatic compounds, natural products, reaction mechanisms and spectroscopy.
- know about chemicals for the treatment of common diseases.
- acquire knowledge about polymerisation process, techniques and recent advances in polymer sciences.
- know about the importance of different types of analytical techniques.
- study the importance of fast growing technology of nanotubes, nanocomposites and fibres and their applications.
- gain knowledge about characterization and testing of soils, fertilizers and pesticides.
- create awareness on eco-friendly microscale experiments in practical courses.
- pursue higher courses, get job opportunities and to face competitive examinations.

B.Sc.Zoology

Programme Outcomes

- ➤ The programme helps to develop scientific tempers and attitudes which in turn can prove to be beneficial for the society since the scientific developments can make a nation or society to grow at rapid pace.
- It equips to learn and know about different biological system.
- ➤ It provides ample opportunities to explore different career avenues.
- > It provides platform for classical genetics among populations, their ethnicity and contemporary techniques like genomics and molecular diagnostic tools.
- ➤ It supports for doing higher studies such as M.Sc., integrated M.Sc., Ph.D. courses and research work for the welfare of mankind.

- The programme is helping to know the human body.
- ➤ It creates awareness and sensitivity on local, national and global problems related to deprivation, socio economic issues, etc.
- ➤ It also gives an opportunity to become a researcher and create employment capabilities in the field of biology.

After the completion of the programme, the students

- > study Biomedical Science and Neuro Science.
- > can join as scientist or assistant professor or teacher.
- > opt for establishing their own industrial unit.
- design different public health strategies for social welfare.

B.Sc. Computer Science

Programme Outcomes

- > The programme develops problem solving abilities using a computer.
- ➤ It trains students in professional skills related to software industry.
- ➤ It helps students to build-up a successful career in Computer Science.
- > It addresses the need of hardware devices and circuits that are important in the real time scenario.
- > The programme not only includes subjects that develop technical skills but also includes subjects to develop soft skills of students which enable them to get leadership skills and employability skills.

- > Computer Science graduates will apply their knowledge and skills to succeed in their career/ professional development and/or postgraduate education to pursue flexible career paths amidst future technological changes.
- > Our graduates will apply basic principles and practices of computing grounded in mathematics and science to successfully complete hardware and/or software related engineering projects to meet customer business objectives and/or productively engage in research.
- > Our graduates will demonstrate strong communication skills and the ability to function effectively in multi-disciplinary teams.
- > Our graduates will demonstrate strong bonding in team and display distinct leadership traits.
- > Our graduates can easily face the civil service as well as public service examinations.

- > Students can have knowledge and expertise in at least one procedure-oriented and object-oriented programming language.
- > Students can have a wide perspective on software development including web based applications as well as graphic applications.
- > Students can have the ability to design and implement optimal databases using current technologies.
- > Students can have understanding of design and working principles of the digital electronics.
- > Students will be able to identify and describe the communication network technologies in local area networks, the internet and security threats.
- > Students will be aware of the design principles of operating systems specializing on atleast one popular operating system.
- > Students will be able to solve simple computational problems involving mathematical structures and processes.
- > Students will know the concepts regarding the architecture and organization of a computer system.
- > Students will be able to design and analyze algorithms as per need by relating the data structure and algorithms.

B. Sc. Computer Application

Programme Outcomes

- This programme provides an understanding of professional, ethical, legal, security, social issues and responsibilities for the computing profession.
- Students can have the ability to apply knowledge of computing and mathematics appropriate to the discipline.
- They can identify, formulate and develop solutions to computational challenges.

- Students can have the ability to engage in continuing professional development.
- They use appropriate techniques, skills and tools necessary for computing practice.
- They analyze impacts of computing on individuals, organizations and society.

 They apply design and development principles in the construction of software systems of varying complexity

Course Outcomes

The courses of the programme will enable the students

- to master various process management concepts including scheduling, synchronization and deadlocks.
- ***** to be familiar with multithreading.
- ❖ to master concepts of memory management including virtual memory
- to master the concepts of protocols, network interfaces and design/performance issues in local area networks and wide area networks.
- to be familiar with wireless networking concepts.
- * to be familiar with network tools and network programming.
- * to understand the structure of modern computer graphics systems.
- * to understand the basic principles of implementing computer graphics primitives.
- * to develop design and problem solving skills with application to computer graphics.
- to apply the knowledge and understand the working, characteristics and limitations of mobile hardware devices including their user-interface modalities.
- to understand and identify the Global System for Mobile Communications, General Packet Radio Service and Bluetooth software model for mobile computing.
- to analyze the process of GSM functioning and learn frequency band spectrum, air interface and channel structure, and interpret and compare the functioning of GSM and Code-division multiple access technology.
- to understand the impact of mobile communication on society either economic or health related issues.

Bachelor of Commerce – B. Com.

Programme Outcomes

• Students can get thorough knowledge on the accounting practices prevailing in sole tradership, partnership, company and nonprofit organization.

- Students can acquaint the basic provisions regarding legal framework governing the business world and industry.
- Students can enlighten with the knowledge of Banking Regulation Act, Indian Banking System, fundamental concepts of auditing, computer application in business, concepts relating to entrepreneurship and practical knowledge.
- Students can gain indepth knowledge on the provisions and amendments in Income Tax
- Students can acquire ever-enlarging frontiers of cost accounting knowledge and acquire the knowledge in the management accounting techniques in business decision making.

Programme Specific Outcomes

This programme could provide well trained professionals for the

- Industries
- Banking Sectors
- Financing Companies
- Transport Agencies

Course Outcomes

On the successful completion of the programme the students will be able to

- develop conceptual understanding of fundamentals of financial and corporate accounting system and gain skills in accounting for various kinds of business transactions.
- acquire knowledge and develop understanding of the necessary frame work of companies with reference to business, industrial laws and various provisions of Company Act 2013.
- develop the qualities of an entrepreneurship to give the ideas about the modern business strategies and to provide the ideas relating to various fields like banking sector, auditing and computer application in business.
- gain knowledge on direct tax and indirect tax, and acquaint to meet the changes or issues besides the theoretical concepts and its application in business.
- equip with the ability to analyse, interpret and use accounting information in managerial decision making and also develop skills to apply the cost control techniques in business.

Bachelor of Business Administration - B.B.A.

Programme Outcomes

The programme will enable the students to

> understand the various management theories and practices in organizations, managing talent, emotional intelligence and public relations.

- ➤ demonstrate application of communication in the dynamic business world, develop critical thinking skill in business related situations, language skill, employability skill, analytical problem solving skill, aptitudinal skill and social skill to enhance self confidence.
- ➤ acquire interpersonal skills that will enable them to deal with customer, employee, and supplier issues and face organizational change.
- know the legal aspects of business environment, understand the banking practices and aware of stock movements' analysis and role of intermediaries in capital market.
- ➤ become conversants with the preparation of financial statements, analyse, interpret the financial data, use it to make financial decisions, application of statistical tools & cost control techniques in decision making.
- ➤ identify the opportunities in retail business, creation of values leading to win the minds of customers, designing appropriate and effective advertising plan strategies, and designing effective advertisement copies.
- > conduct facility planning by making location and layout decisions, and material management decisions.

Programme Specific Outcomes

- ➤ The programme is grooming industry ready professionals with business and management acumen, who shall hold high degree of human values and social consciousness in their professional and personal lives.
- ➤ It is also equipping the students with skills, attributes, leadership and entrepreneurial qualities that society needs, being capable of making a contribution to society through self reliance.
- ➤ It is helping to analyse the various aspect of business research in the area of marketing, human resource and finance and improving presentation skills.

Course Outcomes

- ➤ The graduates develop the ability to relate consumer behavior and market trends, handle the complexities associated with management of human resources in the organizations and take optimal managerial decisions. They are able to meet the challenges of modern management and apply information technology in business.
- ➤ The program provides well trained professionals for Industries, Insurance Companies, Transport Agencies, Banking Sectors, Financial Companies, Warehousing, etc. to meet the well trained manpower requirements.

Course Outcomes for Part IV Common Course

The mandatory course "Yoga" was introduced from 2017 – 2018 batch for all U.G. Programmes at M.S. University on the initiative of Ministry of Human Resource Development, Government of India.

Course Outcomes for Yoga

The offering of this common course is aimed at

- > promoting total personality development of students in colleges and universities.
- invoking positive attitude and spirit to channelize their energies into creative and constructive endeavours.
- > preventing health problems and rehabilitation through Yoga.
- > promoting positive health.

Naan Mudhalvan Programme

The Naan Mudhalvan courses were introduced from 2023-2024 for all U.G. programmes by Manonmaniam Sundaranar University on the initiative of Government of Tamilnadu. The courses for all classes are given as follows:

Year of Programme	Name of NM Courses Taken
	Overview of English Language
FIRST YEAR (Common)	Communication Assessment &
	Certification - Cambridge
	Microsoft Office Fundamentals-
SECOND YEAR (Common)	Microsoft
	Income Tax and GST – odd semester
THIRD YEAR	
ECONOMICS, BBA	Port Logistics – even semester
	Freight Forwarding - odd
THIRD YEAR	
BCOM I& II	Retail Banking and Wealth Management

	- even
	Foundation on Cloud – odd
THIRD YEAR	
COMPUTER SCIENCE & BCA	Data Analytics using PowerBI - even
	Fundamentals of Data Analytics with
THIRD YEAR	Tableau – odd
MATHEMATICS & PHYSICS	
	Data Analytics using PowerBI - even
THIRD YEAR	Content writing and Marketing – odd
TAMIL & ENGLISH	Graphic Design - even
	International Regulatory Requirement in
THIRD YEAR	Good Manufacturing Practices - odd
CHEMISTRY	
	EV battery management - even
	International Regulatory Requirement in
	Clinical Trail and Data Management –
THIRD YEAR	odd
ZOOLOGY	
	Medical Coding - even

An overview of English language Communication - I year B.A/B.Sc/B.Com/B.B.A/B.C.A.

Course Objective

- To ensure that the course is aligned to the Common European framework of reference which is recognized globally.
- To improve the communicative skills of the students

Course Outcome

- The exit test assesses English language ability at A2, B1 on the Common European Framework of reference (International standard for language).
- Each skill is assessed and the candidates are awarded a CEFR level. An average score is awarded for all the skills.

Microsoft Office Fundamentals – II Year B.A/B.Sc/B.Com/B.B.A/B.C.A.

Course Objective

- To acquire knowledge on working with computer applications.
- To enhance the practical knowledge of Microsoft -Excel

Course Outcome

- The student can access information through Microsoft –Excel.
- The student can participate safely and responsibly in online mode.

Freight Forwarding - III Year B.Com.

Course Objective

- To acquire knowledge on the fundamental aspects of Mutual Funds and their operations
- To enable the students to diversify the given corpus

Course Outcome

- He / She can create an appropriate asset allocation based on the customer's risk profile
- The student can choose an appropriate investment for the financial goal to plan his/her taxes more efficiently

Retail Banking and Wealth Management III Year B.Com.

Course Objective

- To acquire knowledge on the fundamental aspects of retail banking and wealth management
- To acquire foundational knowledge and develop customer-centric skills

- To demonstrate a comprehensive understanding of the role and significance of retail banking in the financial landscape.
- To explain the key principles and strategies involved in wealth management, with a focus on the unique characteristics of the market.

Data Analytics using Power BI – III year B.Sc. Computer Science, Mathematics, Physics and B.C.A.

Course Objective

- The main objectives of the course are to prepare the students to become skillful by doing hands on project based learning in the real time environment.
- Data analysis is the process of gathering, modelling and transforming data to get useful information, suggestions and conclusions in decision-making.
- Assessment and improvement of the quality of the data.
- To acquire insights regarding the relationships which are being observed or not

Course Outcome

Students will be able to

- Understand Data Collection, Metadata, and Data Quality
- Intermediate Proficiency in Data Acquisition and Organization
- Intermediate Proficiency in Data Visualization

EV battery management –III year B. Sc. Chemistry

Course Objective

- Summarise the principles of electric vehicle (EV) battery technology and its significance in sustainable transportation.
- Gain proficiency in managing and maintaining EV batteries, including charging, monitoring, and diagnostics..

Course Outcome

- To demonstrate a comprehensive understanding of EV battery technology and its management.
- To implement efficient charging strategies and maintain practices for EV batteries.

Graphic Design - III year B.A Tamil and English

Course Objective

- Effectively communicate content through visuals
- Use software application for editing images for creating powerful and appropriate visuals for a
 variety of outputs which includes posters, flyers, brochures, magazines, menu cards, newspaper
 advertisements, social media posts etc.
- Exhibit problem-solving abilities through digital outputs

Course Outcome

- Develop graphic design solutions with appropriate Multimedia elements and in the format, as applicable to the medium of communication (print, digital)
- Creating Infographics, Brochure Design, Package Design

Port Logistics- III B.A Economics and B.B.A.

Course Objective

- To acquire details of import cargo and its documentation
- To enhance the practical knowledge of vendor information management.

Course Outcome

- Perform various activities in procurement
- Perform inventory analysis and forecasting

Foundation on Cloud - III year B.Sc. Computer Science and B.C.A.

Course Objective

- To acquire knowledge of work with various storage options
- To enhance the practical knowledge of load balancer and traffic management

Course Outcome

- Learn Oracle Cloud Infrastructure (OCI) Architecture and User Management
- Create and configure a Virtual Cloud Network

Postgraduate Programmes

M.A. Tamil

Programme Outcomes

- The students are knowing the background history of Tamil literature.
- > They are learning the skill of creativity.
- They are also gaining knowledge to become a researcher through reviews and criticisms.

Programme Specific Outcomes

At the end of the programme, students will enable

- to develop writing and commutative skills through Tholkappiyam literary book.
- > to know the life style of Tamils during the sangam period through Agam and Puram literatures.
- > to understand the different periods of politics and social life of Tamils through Chitrillakkiyam lessons.
- > to gain knowledge about basic needs of life and code of conduct for the people through Araillakiam lessons.
- > to make aware of the life style and culture of the folk through folk literature lessons.
- > to understand the role of students in media through media literature.
- > to learn about equality, fraternity, human societies and culture through Anthropology lessons.
- > to make aware of secularism among them through religious oriented literature lessons.
- > to get trained in creative writings such as poems, essays and research articles through modern literature.

Course Outcomes

The courses help the students

- > to cope with the modern trends in creating new literary works.
- > to know the culture, tradition and customs through ancient Tamil literature.
- > to learn good virtues like discipline, equality and fraternity.
- > to understand the history and evolution of Tamil literature.
- to know the knowledge about interdisciplinary learning in Tamil language

M.A. English

Programme Outcomes

- ❖ Students are well versed in Modern Literature, Romantic Literature, Indian writings in English, African Literature and writings based on Gender difference.
- * Knowledge on Victorian Age is obtained.
- ❖ Students become familiar with the writings of the Victorian writers.
- Gates are wide opened for the students to know novel types of critical theories.
- ❖ Students are thorough with American Literature and Indian writings in English which are translated in English from other languages.
- ❖ Shakespearean plays give knowledge about his age. Each play teaches a valuable theme for their lives.
- ❖ Knowledge on the historical background of the "Language" and "Linguistics" is obtained.
- ❖ Diasporic women writers give awareness to students about the migrants who meet with cultural conflict.
- ❖ Students become familiar with post colonical writings.
- ❖ English Language Teaching improves the language of various skills of the students.
- ❖ By writing a project, students are able to produce a research paper by analyzing a literary work methodically and critically.

Programme Specific Outcomes

- ❖ Students are familiar with various Literature.
- ❖ New types of "Criticisms" and "Critical theories" are learnt by the students.
- ❖ Knowledge on North East Indian English Literature is obtained.
- ❖ Students derive the knowledge of world Literature and Commonwealth Literature.
- ❖ They exposed to the plays of the intellectual giant Shakespeare
- ❖ Through "Research Methodology" rules and regulations to write a research paper is gained by the students.

Course Outcomes

- ❖ Students become familiar with the literary works of various literature.
- ❖ Communicative skill of the students is enriched. New types of criticisms and critical theories are helpful for the students to review a literary work by applying the new critical theories.
- * "World Literature" makes the students understand the cultural and the moral precepts of various nations.
- ❖ Shakespearean plays demonstrate an overall comprehension of the Elizabethan Age.
- * Research Methodology deals with the various strategies involved in the preparation of project/thesis.
- ❖ Commonwealth Literature deals with the literatures of various nations as having been impacted upon by colonialism.

- ❖ History of English Language and Linguistics deal with the impact factors of ancient languages
- ❖ Literature and Ecology deal with nature issues.
- ❖ Diasporic Women's writings deal with the women writers of various countries whose writings are the expressions of the femimine dilemma.
- ❖ Post colonial writings deal with the literatures of various countries to make the students understand the East West cultural conflicts.
- ❖ English language teaching deals with the various skills associated with English language teaching.
- ❖ Dissertation writing helps the students with a practical knowledge and understanding of literature.

M.Sc. Physics

Programme Outcomes

- The programme provides the students high quality education in physics within an environment committed to excellence in both teaching and research.
- It enables the students to develop transferable skills relevant to a wide range of professional careers.
- It makes the students to apply contemporary research methods, skills and techniques to conduct independent inquiry in a discipline.
- ➤ The programme enables the students to understand the issues of environmental contexts and sustainable development.
- It educates the students in the core of Physics, including substantial practical and experimental physics while enabling students to train in both the theoretical and practical aspects.

- ➤ The programme provides the candidate the required knowledge, general competence and analytical skills on an advanced level needed in industry, consultancy, education, research or in public administration.
- ➤ It enables the students to apply graduate level knowledge and solve problems in the areas of Electrodynamics, Quantum Mechanics, Classical Mechanics, Statistical Mechanics, Mathematical Physics, Nuclear Physics, Solid State Physics, Spectroscopy, Nanoscience and Nanotechnology.
- ➤ Post Graduate from this programme will be eligible to continue research at the higher degree (Ph.D.) level. They will be well qualified to obtain employment in research and development, in the scientific or engineering industries.

- > Students can work independently on projects in multidisciplinary environments.
- They can develop a basis for future learning and work experience.

On the completion of the programme the students are able to

- rigid body dynamics, Lagrangian and Hamiltons formulation and mechanics of small oscillations (Classical Mechanics).
- ➤ apply the basic ideas to create, solve and analyze the problems of interest in Mathematical Physics, Complex analysis and Numerical methods.
- provide knowledge in Quantum Mechanics which enables the students capable of solving many problems.
- understand the basics of elementary particles, nuclear structure, nuclear forces and nuclear reactions.
- > get an overview about the concept of Statistical Physics with the prerequisites of quantum ideas.
- ➤ give detailed knowledge about various types of spectroscopy. The structure of different chemical compounds can be determined by studying these types.
- > provide an insight into the properties of solid state materials and characterize crystals and nanoparticles.
- ➤ describe the principle and working of different kinds of analog and digital electronic devices.
- ➤ acquire basic knowledge about Maxwell's equation and propagation of electromagnetic waves through various media including waveguides.
- ➤ learn the architecture of microprocessor and microcontroller and develop programming skills in assembly language.
- inculcate the knowledge on ordinary and partial differential equations by introducing the effect of non-linearity.
- > collect literature, write the research articles and thesis and to develop the knowledge of the software Origin and Latex.
- ➤ develop the basic skills to handle the advanced instruments effectively and independently. The theory behind the experiments is also studied.
- > provide hands on experience on microprocessor experiments.
- > solve many tedious physical problems numerically by knowing the knowledge of C++ programming.
- > work independently on project, create innovative ideas, develop scientific attitudes and write the thesis effectively.

M.Sc.Mathematics

Programme Outcomes

- This programme provides to inculate the logical, analytical and critical thinking which in turn
 provides the confidence to face any competitive examination especially in banking sector,
 TNPSC and civil service examinations.
- The students can obtain adequate information and become a competent teacher after pursuing their graduation.

Programme Specific Outcomes

- The students can acquire the knowledge of solving problems by applying the skills and the knowledge gained.
- By virtue of the training they can acquire indepth knowledge in the classical and applied mathematical concepts, and also get the ability of solving mathematical problems.
- The students are capable to face the NET / SET Examinations confidently.

Course Outcomes

- The students can understand the fundamentals of mathematics.
- They are able to perform basic computation in higher mathematics.
- They can demonstrate proficiency in writing the proof and the working knowledge to handle the practical problems.
- They can also demonstrate the basic manipulative skills in Algebra, Geometry, Trigonometry and Statistics.
- Students can able to acquire basic knowledge about various instruments and statistical techniques in mathematical research.

M.Sc. Computer Science

Programme Outcomes

- > Students are able to develop the necessary learning skills and independence for further studies.
- > They can initiate and lead projects within the scientific field and be responsible for the work of individuals and groups.
- ➤ They can communicate scientific information, challenges and findings to scholars as well as to general audience.
- ➤ They can have the capability of presenting and describing scientific issues and research findings in foreign languages.
- They can make decisions independently and professionally.

Programme Specific Outcomes

- ➤ The students can design and develop computer programs/computer-based systems in the areas related to algorithms, networking, web design, cloud computing, IT and data analytics of varying complexity.
- They can acquaint with the contemporary trends in industrial/research settings and thereby innovate novel solutions to existing problems.
- ➤ They can demonstrate a sense of societal and ethical responsibility in their professional endeavors, and will remain informed and involved as full participants in our profession and our society.
- > They can acquire strong communication skills and the ability to function effectively in multi-disciplinary teams.
- They are able to build strong bonding in team and display distinct leadership traits.

Course Outcomes

The courses of the programme will make the students

- to familiarize with the buzz words and technology of mobile communication.
- > to understand the issues relating to wireless applications.
- > to understand the concepts of how an intelligent system works and its brief development process.
- ➤ to expose the learners to Neural Network, Fuzzy Logic and Genetic Algorithms, which are the major building blocks of intelligent systems.
- > to design, develop, document and test software using current techniques.
- ➤ to understand web services and implementation model for SOA (Service Oriented Architecture).
- > to acquire a combination of both operating systems & database administration skills.
- > to get knowledge of basic software engineering methods and practices, and their appropriate application.
- ➤ to acquire knowledge and application of collaborative tools for SW development.
- > to provide ability to conduct research activities.

Master of Commerce - M.Com.

Programme Outcomes

- Students have a sound understanding of the basic principles of human resource management, recruitment process, training, performance appraisal, recent trends in human resource and its application in the business and industry.
- Students can develop accounting knowledge, acquire skills of maintaining accounts, develop necessary professional knowledge and skills in finance and taxation and develop competency to make the students employable in the global market.
- Students gain knowledge and skills to implement traditional and modern strategies and practices in management and organisational development.
- Students can practise different statistical techniques and tools in academics, business and research.

Programme Specific Outcomes

This programme can provide well trained professionals such as

- Managers
- Accountants
- Cost Accountants
- Bank Managers
- Teachers

Course Outcomes

The courses of this programme will help the students to

- acquire how interpersonal skills should be practised and developed within an organisation
 and personal life, and also make the students to understand sensitive situations such as
 delivering a difficult message to the employees handling a complaint or building a
 relationship with a new colleague or client.
- empower in the concepts and application of accounting in management, acquire knowledge and skills in investment settings and valuation of securities and also know the responsibilities of retail personnel in the numerous career positions available in the retail field.
- enrich knowledge in the concept of organizational behaviour, organizational development and challenges faced in management.

- acquire skills on the application issues of e-business, internet infrastructure, security over internet, payment systems, various online strategies for E-Business and on the application of Tally 9.0 on accounting systems.
- gain practical knowledge on the formulation of research problems, collection of data, sampling, application of tools, hypothesis testing, interpretation of data and preparation of research report through project work.