### **Animal Science - M.Sc. Zoology**

#### **Program Specific Outcomes:**

- M.Sc., Zoology program produces post-graduates who have great readiness in playing active role either in government or non government organization.
- Students developed analytical and creative thinking from the conducive research environments and interacting with scholars/ faculties
- Students exhibits technical and scientific judgments related to their area of specialization and to general aspects of biology
- Students experienced the use and application of available technologies to understand and to answer questions with scientific nature.
- Different modules enriched them in fundamental and advanced interdisciplinary knowledge and aspired to pursue academic, and medical and health-related professional careers.
- Students to develop their own interest, elective modules allow them to develop / select the specialization in various directions and methods of zoological research.
- Students center their experience through the master thesis, focused on a specific research question, working with a well-equipped research facilities, research mentoring with personal attention help them to succeed

#### Animal Science - M.Phil. Zoology

- Self-directed learning and evaluate acquired knowledge across a broad range of modern Zoology.
- Logically solve the scientific problem in the context of biological process
- Described the principles, mechanism and applications of basic and modern equipments in can be used research laboratory.
- Learn and apply the ethics in animal usage and Biotechnology.
- Understood the handing of Good laboratory practices
- Enhance the ability of writing research project activities, problem-solving and communications.
- Designed and carried out a research project.

• Students will be able to implement the knowledge, skills and values of biological sciences into occupational pursuits, making them attractive candidates in today's job market.

## **Biochemistry - M.Sc. Biochemistry**

- 1. The course aims in gaining an understanding of the processes of metabolic transformation at the molecular level and how these processes are studied.
- 2. It is important to study ezymes, the rate limiting molecule of all the chemical reactions and understanding enzymes could pave research ideas.
- 3. Students can make the Knowledge of the relationship between structure and function at organ and/or organism level, of important cell biological communication principles and processes, and how they are regulated.
- 4. Students can able to Characterize certain functionalities of biomolecules by using spectroscopic technique
- 5. Students will gain conceptual understanding of subject matter, scientific reasoning skills, laboratory manipulative skills.
- 6. The course aims to give participants a basic knowledge of mechanisms of signal transduction and the significance of signal transduction in physiology and pathophysiology.
- 7. Students can understand the capacity to evaluate and synthesise information from a wide range of sources in order to communicate ideas, concepts and construct arguments in both non-scientific and scientific language.
- 8. Students will learn at the end of the course to conserve the nature and will be able to develop new strategies to preserve the sources of life.

#### **Bioinformatics - M.Sc. Bioinformatics (Integrated 5 year)**

## **Program Specific Outcomes:**

- Development of various biological databases of specific interest
- > Development of structure based drug designing using homology based modelling and virtual screening
- Obtain the stability analysis of the three dimensional structures using Molecular Dynmaic Simulations
- > Development of ligand based drug designing using pharmacophore approach
- > Describe the whole genome analysis and variant calls for genetic disorders
- Application of Bioinformatics to Agriculture, Medicine and Synthetic Biology
- Explain the bio ethics, bio safty and IPR.
- Describe the biological networks using systems biology approach.

## **Biomedical sciences - M.Sc. Biomedical science (Integrated 5 year)**

- Biomedical Post graduates have in depth knowledge to compete National Level Eligibility Tests to procure various research fellowships such as summer Internships and Junior Research Fellowship positions. During their tenure students are trained to opt for their self study topic and final year projects to encourage their research interest in desired field.
- Students acquire skills in specific field and generate new scientific insights to compete with International students to set up their research career abroad.
- Nevertheless, they qualify other competitive exams like State level TNPSC and National Level UPSC exams in addition to their scientific talents.
- Students acquire specific skills in using computer based tools to carry out scientific investigations and get placed as Medical transcriptionist and R & D based laboratories.

 Students are skilled enough in planning and carrying out experiments and solve scientific problems by combination of theoretical and practical knowledge, thus start their own business (Entrepreneurs) and some students inclined to get into teaching profession in school and colleges.

 Students demonstrate high experimental skills to qualify for various diagnostic laboratories and multispecialty hospitals.

 Thus students demonstrate multidisciplinary skills suitable enough to compete globally to satisfy their scientific and economic demands, based their Interest, enthusiasm and opportunities without compromising scientific ethics.

 Students acquire skills to write scientific literature enabling them to get placed in scientific publishing concerns.

## Biotechnology - M.Sc. Biotechnology

#### **Program Specific Outcomes:**

PSO1: Apply fundamental knowledge of biological sciences for the human Welfare.

PSO2: Demonstrate the application of biotechnological processes of industrial biochemical processes that are of social and industrial importance.

PSO3: Exhibit skills of handling microbial processes, biochemical analysis by making use of state of the instruments.

PSO4: Acquire skills of handling plants and in vitro culturing and genetic engineering process which are important for addressing biotic and abiotic structure and social issues.

PSO5: Committed for developing a student's self-reliance, creativity, leadership, ethical standards, and capacity for professional and intellectual growth.

PS06: Exhibit strong, independent learning, analytical and problem solving skills with special emphasis on design, communication and an ability to work in teams.

PS07: A key component of the program is directed to research on cutting edge problems under the guidance of national and international scientists

PS08: To have successful career as professional or a researcher through lifelong learning in the field of biotechnology.

#### **Biotechnology - M.Tech. Biotechnology (Integrated 6 year)**

## **Program Specific Outcomes:**

**PS01:** Apply knowledge of Mathematics, Science and Engineering concepts for biologicalissues.

**PS02:** Plan and execute experiments independently

**PS03:** Optimize, scale up and analyst the quality of value-added products

**PS04:** Analyze and interpret data from biological sampling using Insilco Approaches.

**PSO4:** Apply biotechnological techniques to manipulate living organisms.

**PSO5:** Give Reasoning to solve social, health, safety and legal issues.

**PS06:** Understand the potentials, and impact of biotechnological solutions on Environment and society.

**PS07:** Understand the regulatory norms and ethics in BT product/processes development.

**PS08:** Acquire contemporary knowledge in BT and will have the ability to engage in lifelong learning.

#### **Biotechnology - M.Phil Biotechnology**

#### **Program Specific Outcomes:**

PSO1: Graduates can apply their knowledge to research experiments which deals with biological science

PSO2: Graduates will able to analyze and understand problems related to biotechnology and find valid conclusion.

PSO3: Graduates capable of identification, formulation and analysis of data, based on research literature reviews to address complex problems in various spheres such as nutrition, healthcare and environment to name a few.

PSO4: Graduates can able to choose appropriate tools and techniques in biotechnological manipulation.

PSO5: Graduates are capable of applying biotechnology – based ideas and strategies in day to day activities in order to contribute to the environment and society.

PSO6: Graduates demonstrate entrepreneurial skills, while assimilating the elements of engineering management, IPR and allied domains.

PSO7: Graduates will able to develop their oral and communication skill.

PSO8: Graduates will able to communicate and publish good research works.

#### **Botany - M.Sc. Botany**

- Students will be able to demonstrate proficiency in the experimental techniques and methods of analysis appropriate for botany.
- Students will be able to explain how organisms function at that level of the gene, genome, cell, tissue, organ and organ –system. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and behavior of different forms of life.
- Students will be able to identify the major groups of organisms with an emphasis on plants and be able to classify them within a phylogenetic framework. Students will be able to compare and contrast the characteristics of plants, algae and fungi that differentiate them from each other and from other forms of life.
- Students will have excellent research skills (field, laboratory, plant growth facilities and library.
- Students will be able to know Communications skills to discuss and analyze problems using oral and written communication skills.
- To know about the protection and prevention of plant diseases
- To know the production of biofertilizers
- To discuss about the cultivation of medicinal and aromatic plants

## **Botany - M.Phil Botany**

## **Program Specific Outcomes:**

- To know about the preparation of thesis
- To know about the Gene transfer methods
- To understand about necessity of conservation
- To Narrate the production of secondary metabolites through in vitro culture
- To Explain the economic significance of algae
- To Mention about the plant transformation technology
- To understand about molecular modelling techniques are used in drug designing
- To Explain the relevance of recent technologies to control diseases

## Chemistry - M.Sc. Chemistry

- Gains complete knowledge about all fundamental aspects of all branches of chemistry
- > Understands the basic concepts behind complex chemical structures, reagents in organic syntheses, reactive intermediates, important organic reactions and its mechanisms, naming reactions, molecular rearrangements, stereochemistry, instrumental method of chemical analysis and natural products etc.
- ➤ Identify the importance of various elements present in the periodic table, coordination chemistry and structure of molecules, properties of compounds, structural determination of complexes using theories and instruments, complex metal drugs and catalysts, role of metal ions in biological processes and organometallic chemistry
- Gathers attention about the physical aspects of atomic structure, quantum chemistry, thermodynamics, reaction pathways with respect to time, various energy transformations, significance of electrochemistry, molecular spectroscopy, role of catalysts in reactions, polymer chemistry, materials chemistry and biophysical chemistry.
- ➤ Learns about the potential uses of analytical industrial chemistry, medicinal chemistry, and environment oriented chemistry.
- Apply the various analytical techniques like IR, mass, NMR, NQR, EPR, XRD to structural characterization of unknown compounds.

Carry out experiments in the area of organic analysis, estimation, separation, derivative process, inorganic semi micro analysis, preparation, conductometric and potentiometric analysis.

## **Chemistry - M.Phil Chemistry**

#### **Program Specific Outcomes:**

- ➤ To provide a specialization in M.Phil. degree with advanced understanding in the concepts of organic, inorganic and physical chemistry.
- > To accumulate introductory and basic knowledge of research and its methodology to impact quality and comparative study of the literature for investigation of new area of research
- > To impart the necessity of literature survey for research, document writing, laboratory practices, safety, project management and filing patents
- > To understand the principles and applications of various characterization techniques and apply those to structural elucidation of unknown compounds
- To gain knowledge in old and advanced modern organic synthesis
- > To understand the principles and applications or organo-transition metal chemistry and catalysis
- > To demonstrate the influence of organic chemistry to medicinal industry
- > To get broad understanding of chemical biology, Photophysics and photochemistry

#### **Computer Science - M.C.A. Computer Science**

- Apply the knowledge of mathematics and computing fundamentals to various real life applications for any given requirement
- Design and develop applications to analyze and solve all computer science related problems
- Design applications for any desired needs with appropriate considerations for any specific need on societal and environmental aspects
- Analyze and review literatures to invoke the research skills to design, interpret and make inferences from the resulting data
- Integrate and apply efficiently the contemporary IT tools to all computer applications
- Solve and work with a professional context pertaining to ethics, social, cultural and cyber regulations

- To prepare graduates who will contribute to society as broadly educated, expressive, ethical and responsible citizens with proven expertise
- To prepare graduates who will be successful professionals in industry, government, academia, research, entrepreneurial pursuit and consulting firms

#### **Computer Science - M.Tech. Computer Science**

- Apply the knowledge of Engineering and computing fundamentals to various real life applications for any given requirement.
- Design and develop applications to analyze to solve all computer science related problems.
- Design an application to any desired needs with appropriate considerations for specific needs on societal and environmental aspects.
- Analyze and review literatures to invoke the research skills to design, interpret and make inferences from the resulting data.
- Integrate and apply efficiently the contemporary IT tools to all computer applications
- Solve and work with a professional context pertaining to ethics, social, cultural and cyber regulations.
- To prepare graduates who will contribute to society as broadly educated, expressive, ethical and responsible citizens with proven expertise.
- To prepare graduates who will be successful professionals in industry, government, academia, research, entrepreneurial pursuit and consulting firms.

#### **Computer Science - M.Phil. Computer Science**

#### **Program Specific Outcomes:**

- To gain knowledge in the field of Computer Science
- To attain some originality in the research area
- To show the critical evaluation of current research
- To plan and implement of research work
- To gain research objectives in the concern domain
- To work towards incorporating their findings in further research
- To impart sound knowledge in Computer Science and interdisciplinary areas
- To motivate research with proper baseline.

#### **Environmental Biotechnology - M.Sc. Environmental Science and Technology**

- > The course on Environmental Science and technology describes the various types of pollution impact on the environment and the biological approach to control pollution.
- Understand the causes, effects, and solutions of different environmental problems.
- Introduces the concept of non-renewable energy resources and its scenario in India and at global level
- This course is designed to provide an outline ecotoxicology, including an introduction of the major classes of pollutants, their fate in the environment, their disposition in organisms and their mechanisms of toxicity.
- Implement management strategies like bioremediation and bio restoration of contaminated lands
- Learn the different instrumentation, and how to use as an environmental analytical tool for environmental matrices

- ➤ Identify the role of EIA in sustainable environment management
- ➤ Gain an overview of the basic and advanced molecular techniques to apply them in different aspects related to environment.

## **Environmental Biotechnology - M.Phil Environmental Science and Technology**

#### **Program Specific Outcomes:**

- 1. The course on Environmental biotechnology describes the various types of pollution impact on the environment and the biological approach to control pollution.
- 2. Apply various statistical tools for analysis and interpretation of data.
- 3. Learn the different instrumentation, and how to use as an environmental analytical tool for environmental matrices
- 4. The course will enable the student to systematically apply the biotechnological tools to address various environmental problems
- 5. Learn the principles and application of biomedical and biophysical methods employing different analytical instruments
- 6. Learn the molecular level pathway construction
- 7. The students will have an overview about different strategies related to the environment
- 8. The course will impart in depth knowledge specific to environmental research

#### **Environmental Management - M.B.A. Environmental Management**

- Managements graduates trained in corporate environmental management
- Proficient in effluent treatment and solid waste management
- Specially trained in conducting environmental audit including energy audit

- consultants who are theoretically and practically trained for environmental impact assessment projects
- Capable of handling projects in urban/rural sectors related to environment/health/sanitation/education
- Entrepreneurs who initiate activities of NGOs, environmental sensitization and activism
- Project leaders who will deal with the projects related to development and environment particularly applying state of art tools and technologies
- Skilled personnel to handle projects and consultancy related to remote sensing and GIS for urban governance, health, forestry, biodiversity etc.

## **Environmental Management - M.Phil Environmental Management**

#### **Program Specific Outcomes:**

- Critical/generic learning skills.
- Develop self-management, problem solving, critical evaluation skills.
- To be to effective communicate and gain systemic thought.
- Enhanced research skills, reflective skills, writing skills, planning and evaluation skills.

#### **Geography – M.Sc. Geography (Integrated 5 Year)**

- 1. Demonstrate an ability to develop a research proposal and carry out independent research.
- 2. Have an in-depth understanding of, and mastery of the literature in, at least one particular geographic subfield.
- 3. Demonstrate an ability to present and defend research work in oral, written, and graphic forms .

- 4. Students will exhibit professional behaviour and ethical practice during the conduct of their research .
- 5. Students will identify, examine and explain the emerging science in their discipline.
- 6. Discuss both orally and in writing the subject matter related to their discipline.
- 7. Able to effectively display visual GIS findings in a public presentation following established cartographic principles and display visually stimulating, spatially accurate graphics.
- 8. Incorporated cartography and findings into a logical and aesthetically pleasing presentation using Microsoft's PowerPoint.

#### **Geography – M.Tech Geoinformatics (2 Year)**

- 1. To create original solutions to manage and process spatial information and proficiently interact with groups of experts in various fields.
- Work in operational, technical or executive positions related to Geoinformatics in governmental agencies, universities, research centers, the private sector, and multinational corporations.
- 3. Students who have completed their M.Tech in Geoinformatics can be employed as GIS consultants, GIS managers, GIS Engineers, GIS analysts or GIS developers.
- 4. This programme makes the students can be fully equipped with concepts, methodologies and applications of Remote Sensing Technology, GIS and GNSS.
- 5. Acquire skills in handling instruments, tools, techniques and modeling while using Remote Sensing Technology
- 6. Empowers the candidate with confidence and leadership qualities.
- 7. Enable to acquire skills in advance techniques such as hyper spectral, thermal and LiDAR scanning for mapping, modeling and monitoring.
- 8. Familiarises in storing, managing digital data for planning and development.

#### Geology – M.Sc. Geology (2 Year)

#### **Program Specific Outcomes:**

- 1. Students will acquire a solid base of knowledge in the science of geology as a whole as well as earth materials, earth history, sedimentation and stratigraphy, deformational processes and structural features, and geomorphic processes and landforms.
- 2. Make critical and independent inquiry in the geosciences including: the ability to gather and evaluate peer-reviewed literature; identify a research question; design and conduct a research plan to collect laboratory and/or field data; and interpret research results.
- 3. Human interaction with the environment; deep geologic time, including relative and absolute dating approaches; tectonics, the rock cycle, basic Earth structure
- 4. Demonstrate competence in fundamental geological skills including: mineral, rock and soil identification; interpretation of topographic maps, geologic maps, and various forms of imagery; construction of geologic maps and cross sections; three-dimensional conceptualization; and collection of organized field and laboratory data.
- 5. Gain an understanding of the societal relevance of earth systems.
- 6. Make informed decisions on issues of local and global environmental significance based on an understanding of the interrelationships between humans and natural Earth systems
- 7. Eligible to join as geologist in Geological Survey of India (GSI)
- 8. Eligible to join as geologist in Oil industry like (ONGC)

#### **Geology – M.Sc. Geology (Integrated 5 Year)**

#### **Program Specific Outcomes:**

 Students will acquire a solid base of knowledge in the science of geology as a whole as well as earth materials, earth history, sedimentation and stratigraphy, deformational processes and structural features, and geomorphic processes and landforms.

- 2. Make critical and independent inquiry in the geosciences including: the ability to gather and evaluate peer-reviewed literature; identify a research question; design and conduct a research plan to collect laboratory and/or field data; and interpret research results.
- 3. Human interaction with the environment; deep geologic time, including relative and absolute dating approaches; tectonics, the rock cycle, basic Earth structure
- 4. Demonstrate competence in fundamental geological skills including: mineral, rock and soil identification; interpretation of topographic maps, geologic maps, and various forms of imagery; construction of geologic maps and cross sections; three-dimensional conceptualization; and collection of organized field and laboratory data.
- 5. Gain an understanding of the societal relevance of earth systems.
- 6. Make informed decisions on issues of local and global environmental significance based on an understanding of the interrelationships between humans and natural Earth systems
- 7. Eligible to join as geologist in Geological Survey of India (GSI)
- 8. Eligible to join as geologist in Oil industry like (ONGC)

## **Life Science – M.Sc. Life Science (Integrated 5 Year)**

- Tamil and French are served as First language for Local and Other State students. English
  has been taught for all students to develop effective communicative skills.
- To know about the matrix, algebra, linear and integration and developing some basic knowledge in programming in Language C.
- Chemistry-learning of various types of chemical bonds, stereochemistry, chemical
  equilibrium and chemical kinetics. Physics mechanics and elasticity, statics and dynamics,
  atomic and molecular physics and radiation physics. Biophysics study of
  biomacromolecules: proteins, nucleic acids and carbohydrates.

- Plant Diversity I elaborates about algae, lichens and bryophytes. While Plant Biodiversity
  II covers Pteridophytes, Gymnosperms and Paleobotany and evolution. Likely, Animal
  Diversity I has the concept of animal diversity, general organization and cellular
  organization and Animal Diversity II detailed about Mollusca, Echinodermata,
  Hemichordata and Vertebrates.
- General outline of classification of microorganisms, salient features of classification kingdom Moneara, Fungi, Protesta and microbial interaction and symbiotic diversity. In general, microbiology it details about fundamentals and physiology of microorganisms like metabolism, genetics, growth, culturing and identification.
- Study of ecology elaborates the principles and concepts of ecosystem and evolution explain the development of this ecosystem. Developmental biology explains sex determination and its environmental regulation. Also the sex education of human reproduction. Anatomy of plants details about the different types of plants, features of individuals and identification. Embryology explains the microgametophyte and megagametophyte formation, regulation and extend to embryology by fusion of gametophytes. Morphogenesis also details the cellular and nuclear level changes.
- Cell biology explains about the cell structure, internal organelles and its functions.
   Molecular biology details the gene concept, replication, translation, transcription and its
   regulation. Immunology deals with immune system in health and diseases. Enzymology
   explains enzyme nomeclature, catalysis, kinetics and regulation. Biomolecules detailed
   upon nucleic acids, carbohydrates, proteins, amino acids, lipids, vitamins and various
   elements.
- Plant tissue culture elaborates the detailed account on plant cell as well as tissue culturing. Similarly, culturing and analysis of cytotoxicity of animal cell culture also

explained. Through bioprocessing technology, knowing of bioreactors, media formulation and pure culture establishment and production of microbial products and bioprocesing of products.

## Marine Biotechnology – M.Sc. Marine Biotechnology

#### **Program Specific Outcomes:**

- 1. Explore the marine bioresources and understand the diverse richness of ocean.
- 2. Impart knowledge of the fundamentals, developments and methodologies and avenues in marine biotechnology
- 3. Learn about the conservation of resources, mangrove afforestation, disaster management, and to look into alternative renewable resources, bioremediation, waste management, biofertilizer
- 4. Venturing knowledge in marine pharmacology, aquaculture, bioinstrumentation and bioremediation
- 5. Cost effective process, product or technology for future need in blue biotechnology
- 6. Lab-oriented hands-on investigative and research skills leading to research, teaching, technical placements
- 7. Inculcated ability to write research papers and develop communicative and oral skills
- 8. Self-motivated to solve the problems and critically analyze and interpret the results.

## Marine Biotechnology - M.Phil Microbial Biotechnology

- 1. Explore the marine bioresources and understand the diverse richness of ocean.
- Impart knowledge of the fundamentals, developments and methodologies and avenues in marine biotechnology

- 3. Learn about the conservation of resources, mangrove afforestation, disaster management, and to look into alternative renewable resources, bioremediation, waste management, biofertilizer
- 4. Venturing knowledge in marine pharmacology, aquaculture, bioinstrumentation and bioremediation
- 5. Cost effective process, product or technology for future need in blue biotechnology
- 6. Lab-oriented hands-on investigative and research skills leading to research, teaching, technical placements
- 7. Inculcated ability to write research papers and develop communicative and oral skills
- 8. Self-motivated to solve the problems and critically analyze and interpret the results.

Opportunities that are available in marine biotechnology and Green chemistry is emphasized.

#### Marine Science - M.Sc. Marine Science

- Understand the description, physical properties and process of the ocean.
- Analyse the chemical properties, nutrients cycles and biogeochemical interactions of the ocean.
- Understand the organic production, floral and faunal resources of the ocean.
- Study the ocean floor, continents and paleoceanography.
- Understand the marine instrumentations and pharmaceutical and biotechnological applications of marine resources.
- Comprehends the coastal and marine biodiversity, threats and conservation policies and conventions of marine biodiversity.
- Realize the methods of ecosystem monitoring and management and various law of the seas.
- Understand the techniques and applications of fisheries and aquaculture.

#### Marine Science - M.Phil Marine Science

#### **Program Specific Outcomes:**

- Understand the recent trends in marine science research especially deep sea research.
- Analyse the quantitative and computational methods and tools in marine science research.
- Understand the educational and research skills and communication skills.
- Understand the office automation data analysis packages.
- Understand the research tools available for marine science research and energy sources of marine environment.
- Study the navigation and research vessels.
- Understand the resources and impact of environmental changes in Antarctic Sea.
- Study the background area of research topics.

#### Mathematics – M.Sc. Mathematics

#### **Program Specific Outcomes:**

- Mastery of Fundamental Mathematical Concepts (Algebra, Analysis, Geometry)
- Will gain the ability to understand and deal with abstract concepts
- Communicate mathematical concepts effectively
- Ability to think critically and creatively
- Analyze and model real world problems based on mathematical principles
- Ability to solve problems which are modeled
- Communicate the solutions in rigorous mathematical language
- Ability to progress independently and ethically

#### Mathematics – M.Phil Mathematics

- Communicate mathematical concepts effectively
- Ability to think critically and creatively

- Analyze and model real world problems based on mathematical principles
- Ability to solve problems which are modeled
- Communicate the solutions in rigorous mathematical language
- Ability to progress independently and ethically

#### **Medical Physics – M.Sc. Medical Physics**

- > The fundamentals of mathematical and statistical tools, electronics and instumentation, solid state physics and nuclear and particle physics.
- ➤ Basic principles of radiation, x-ray generators, particle accelerators and gained knowledge in various ionizing and non-ionizing radiations used in radiotherapy.
- Various aspects of human anatomy and physiology including cell structure, muscular system and skeletal systems, digestive system, function of endocrine system, radiographic anatomy and tumor pathology
- > Dosimetry and standardization in clinical medical physics, radiation detectors and instrumentations, ion champers, radiation chemistry and chemical dosimetry, various dosimeters, and Personnel monitoring instruments
- > Practical radiotherapy physics, different types of protocols used in tele and brachytherapy techniques and the treatment planning of radiotherapy tumor
- Medical imaging, physical principles of diagnostic radiology, Radiography techniques, Image quality and quality assurance.
- > The production of radio-nuclides, radio-nuclide imaging techniques, principles and working mechanism of PET.
- Biological impact on living cells and tissue at various levels, radiobiological model to fractionated radiation therapy, radiation protection and safety standards, radiation therapy for cancer and modern techniques.

## Microbiology – M.Sc. Microbiology

## **Program Specific Outcomes:**

- Apply the knowledge of biological, microbial and biochemical fundamentals to find the solution for complex molecular functions and physiology.
- > Developing skilled persons in the sector of Disease diagnosis, treatment and prevention.
- Pest control using microbes and improving soil quality and agricultural output through sustainable microbiological applications.
- > To train the students in both theory and practical to accommodate them in both higher education and industries.
- > To augment problem-solving skills of students through industry oriented training programmes at various levels.
- > To enrich the Graduates with solid fundamentals of microbiologyand advanced technologies.
- > To enable them to employ the acquired theoretical knowledge wherever necessary.
- To occur hands on skills in Industry and/or Institutes, to better placement.

#### Microbiology – M.Phil Microbiology

- > Critically evaluate the basic information and ideas from various fields of microbiology.
- Developing skilled persons in the sector of Disease diagnosis, treatment and prevention.
- > To integrate the knowledge microbes and improving the quality of life through sustainable microbiological applications.

- > To train the students to develop, design and apply research projects independently to accommodate them in research.
- > To encorage the students to do original research that ends up in new technological or process application.
- > To enrich the Graduates with solid fundamentals of microbiology and advanced technologies.
- > To equip the students to identify, define and solve the emerging problem.
- Make the student to understand complex ethical and professional issues to accommodate them in Industry and/or Institutes, to better placement.

## Physics – M.Sc. Physics

#### **Program Specific Outcomes:**

- > Fundamentals in core and applied physics
- ➤ Good exposure to the concepts of classical, mathematical, statistical physics, quantum mechanics, condensed matter, electromagnetic theory and nuclear & particles physics
- ➤ In-depth of understanding to advanced topics such as nonlinear dynamics, laser physics, crystal growth and thin films, nanomaterials
- Basics of computational physics including numerical methods and programming practices.
- > Hands on experiments in advanced electronics
- Provoking practical skill in advanced physics laboratory
- Developing Extra-disciplinary and soft skills.

#### **Physics - M.Phil Physics**

- M.Phil. programme provided versatile exposure to research.
- Students were exposed to the advanced topics in theoretical and experimental physics
- Students would experience the advanced Fortran programming fundamentals,
   probability and statistics and data analysis
- Discussion on various aspects of intgrable nonlinear evolution equations
- Description on the non integrable systems, chaos and synchronization.
- The current trends in materials research
- Developing skill on preparation and characterization of advanced materials.
- Exposure to various advanced instruments like AFM, SEM, DLS, sputtering, PPMS and etc.

#### Remote Sensing - M.Tech Geological Remote Sensing and Geoinformatics (2 Year)

#### **Program Specific Outcomes:**

- Capable of handling projects in geological application of Remote Sensing.
- Skilled personnel to handle projects and consultancy related to remote sensing and GIS for urban governance, health, forestry, biodiversity etc.

# Remote Sensing - M.Tech Geological Remote Sensing and Geoinformatics (Integrated 6 Year)

#### **Program Specific Outcomes:**

 Able to successfully apply Remote Sensing and GIS techniques in the fields of mineral exploration, geohazards mitigation, water resources and environmental management and will have the professional competency to independently execute any research studies / projects using the latest geometrics techniques.

#### Statistics – M.Sc. Statistics

#### **Program Specific Outcomes:**

- Students will be enriched with technical skills used in data science, data analytics through projects including big data.
- Students are enhanced with the skills of creating taxonomy of cognitive domain in Statistics (Knowledge, Comprehension, Application, Analysis, Synthesis, evaluation)
- Students are stimulated with self learning skills that helps them in research work in future and also to perform in NET, SLET, GATE.
- Students are groomed up with the present and advanced analytical skills that help them to be an entrepreneur or advisor in Data analytics and Predictive Modeler domain.
- Students can utilize their statistical skills, computation and comprehensive knowledge in other disciplinary courses and projects.
- Students can increase their competency and perform well in government and Central government jobs for statistics like ISS, UPSC.
- Students can synthesize their statistical expertise in Medical research, Finance and can work as a prominent part in the medical survey, research analytics.
- Students will be incorporated with the knowledge of data impurity and handling them
  with statistical techniques and well known with the automation of building a new
  statistical model with the criteria, assumptions and appropriateness.

#### **Economics – M.A. Statistics**

#### **Program Specific Outcomes:**

 The program provides an introduction to a core area of economics known as microeconomics.

- This program introduces economic analysis of individual, business, and industry choices in the marketeconomy.
- Topics include the price mechanism, supply and general education core requirement in social/behavioral sciences.
- It is easy to capture the behaviour of micro economics variables specifically particular to general.
- Increasing the capacity the role of market forces in the economy.

#### **Economics – M.Phil Statistics**

#### **Program Specific Outcomes:**

- Understand the significance of the Economic theory and models
- Getting Knowledge of application of various models and theories to understand the reality in the society
- enhancing capacity to observe the functions of various institutions like RBI, IBRD, IMF,
   etc.,
- Understand the research issues based on subject and social relavance
- Grasping knowledge the role of various sectors to strengthen the Economy
- Enhance the skill of application of statistical tools in the social issues
- Helps to understand the ups and downs of business activities in the domestic as well as foreign economy
- Facilitate to know about the realities of domestic as well as the global economy

#### **Differently Abled Persons – B.C.A. Bachelor of Computer Applications**

#### **Program Specific Outcomes:**

Understand the Components of Computer

- Understand the Applications of Computer
- ➤ Apply Logical skills
- > Develop Programs
- Design WebPages
- ➤ Edit e-content Resources
- Develop projects
- > Test Software Coding

## History – M.A. History

## **Program Specific Outcomes:**

- ✓ Knowledge on the history of the nation and region
- ✓ Displaying the ability of transforming acquired historical knowledge to the later generations
- ✓ Acquired the ability of understanding culture and society of ancient, medial and modern India
- ✓ Ability of understanding various issues of contemporary India is acquired
- ✓ Knowledge on Tamil society and culture is being displayed
- ✓ Overall historical knowledge on the history of India is quite visible
- ✓ Acquired the ability of original thinking
- ✓ Displays the ability of understanding historical events and processes

## History - M.A. History (Integrated 5 Year)

- ✓ Original thinking is promoted
- ✓ Subject knowledge is enhanced

- ✓ The course contributed to the original thinking
- ✓ Trained to participate in discussions and debates
- ✓ Over all personal development achieved
- ✓ Skills acquired for competitive exams at national and regional levels
- ✓ Acquired the ability of original thinking
- ✓ Displays the ability of understanding historical events and processes

#### **History – M.Phil History**

## **Program Specific Outcomes:**

- > Acquired knowledge on historiographical methods needed for historical research.
- Understood the significance of local history.
- Acquired the ability of argumentation.
- Acquired the ability of choosing a problem in history for research.
- > Acquired the ability of probing historical issue from different perspectives
- Demonstrated the ability of conducting historical field work.
- > Demonstrate the ability of communicating historical knowledge in a class room situation.
- Posses the ability of generating research questions on selected topic.

#### **Library and Information Science – M.L.I.Sc. (Library and Information Science)**

- 1. Eligible to become a researcher and to avail the national and international research fellowship in the field of Library and Information Science, Information Technology, Knowledge Management and Higher Education.
- 2. Attain the skills and knowledge on competitive exams, national and state level eligibility tests and other equivalent competitive examinations in the field of Library and Information Science.

- Capability of getting employment as Librarian, Information Officer, Knowledge Manager, Digital Archivist, Trainer on ICT, Information Managers and many more positions in Government, Inter Government, Private and Corporate Administration.
- 4. Placement of middle level technical positions in public, national, district libraries, research and the institutions of national importance at state and central level.
- 5. Eligible to become Programmer, Information Systems Manager, Information Analyst at various organizations by acquiring technology based courses such as PGDLKM.
- 6. Attain the capabilities to design and implement Academic, Research and Generic Information Systems for any type of organization to adopt web and mobile enabled technologies.
- 7. Attain the complete professional skills and abilities for organizing information systems and services.
- 8. Prepare to impart training and induction to the stakeholders in order to make use of the knowledge resources optimally.

## **Library and Information Science – M.Phil (Library and Information Science)**

- 1. Eligible to pursued PhD programme in LIS and related subjects in universities across the globe
- 2. Become senior research and associate fellow a national and international research establishment
- 3. Advertisement of higher level and middle level positions in electronic and print media, finance and public institutions
- 4. Eligibility to become faculty in LIS schools
- 5. Obtain a research degree in Library and information Science and Knowledge management
- 6. Becoming an expert as consultant on information systems, design and development of LIS system.
- 7. Become subject expert to been an information analyst and information organization
- 8. Eligibility to perusing higher studies in LIS.

#### Life-long Learning - M.A. Human Resource Management

#### **Program Specific Outcomes:**

- **1.** Exhibit the comprehensive knowledge framework and understanding of key functions of human resources.
- 2. In-depth knowledge and understanding of human resource management at local, national and International level.
- **3.** Identify and evaluate the management techniques of human resource management.
- 4. Ensuring Effective utilization of resources.
- **5.** Examining the trends of human resource management using advanced techniques.
- **6.** Comprehensive solutions to human resource management problems by evaluating performances.
- **7.** Enabling management for handling grievances effectively.
- 8. Treating Human as most valuable resource in the business.

#### Life-long Learning – M.Phil Human Resource Management

- 1. Enabling the candidates to be familiar with Teaching and Learning skills
- 2. Sharing the knowledge and skills of key areas of HRM functions.
- 3. Application of knowledge and skills on HRM functions.
- 4. Exhibiting the research expertise involving strategic management of Human Resources at national and International level organizations
- 5. Observe, appraise and adopt and undertake effective implementation of entrepreneurial projects.
- 6. Oral and writing presentation of research based viable strategic and innovative model.

- 7. Analysing scientifically the human resource management and development by using advanced management strategies.
- 8. Providing multiple solutions to managerial problems by studying resource utilisation of organisation.

## Performing Arts - M.P.A. Folk Dance

## **Program Specific Outcomes:**

- 1. The students will understand the relative between folk dance and classical dance and their universal aspects.
- 2. The historical background of the folk dances of Tamil Nadu will elucidate the students to understand the evolution and dimensions of folk dances.
- 3. The students will be able to identify the differences of ritual, entertainment (commercial) and artistic performance of folk dances.
- 4. The students will know the other related folk arts to the folk dances.
- 5. The students will understand the mutual influences of folk and classical dance forms.
- 6. The students will get training in body movements, step movements and gestures of various folk dances.

7.

#### Performing Arts - M.P.A. Classical Dance

- 1. The students will know the Universal aspects of both classical and folk dances in general and know the distinctive features of classical dances of Tamil Nadu.
- 2. The students will know the texts of Natya sastras and the references in Tamil literary tradition.

- 3. The students will learn to do hand gestures, leg movement, step movements and body movements.
- 4. The students will know the meaning of famous songs in Sanskrit, Telegu, Kannada, and Malayalam songs for Bharathanatyam.
- 5. The students will know the order of performance of the Bharathanatyam from alarippu, malaranjali etc.
- 6. The students will learn the theory of meyppadu/ Bharan and to express then through the dance.
- 7. The students will get critical knowledge in both theory and practice of Indian classical dance.
- 8. The students will be able to perform Bharathanatyam with full of confidence and courage.

## Physical Education – B.P.Ed. Physical Education

- To integrate the study of childhood, social context of Physical Education.
- To update the subject knowledge, pedagogical knowledge and communication skills.
- To attain the skills and knowledge on competitive exams, national and state level eligible test and other equivalent competitive exam in the field of Physical Education.
- The programme comprises of compulsory and optional theory as well as practical courses and compulsory school internship.
- The programme gives practical exposure to the various physical activities and sports.
- Hand-on training will be given in teaching yogic Physical Education and Sports.
- To learn the fundamental skills and rules of major games and sports.
- Capability of getting employment as Physical Education Teacher, Physical Training Instructor, Physical Trainer, Coach in Government, Government aided and Private institutions.

#### **Physical Education – M.Phil Physical Education**

#### **Program Specific Outcomes:**

- To integrate the study in social context of Physical Education.
- To update the subject knowledge, pedagogical knowledge, computer skills and communication skills.
- To attain the skills and knowledge on competitive exams, national and state level eligible test and other equivalent competitive exam in the field of Physical Education.
- The programme comprises of core and elective theory courses as well as project.
- To learn the advance technologies in sports science.
- The programme gives practical exposure to research and teaching.
- Adequate training will be given on research in Physical Education and allied areas.
- Capability of getting employment as Assistant Professor, Director of Physical Education in Government, Government aided and Private institutions.

#### Social Work - M.S.W. Social Work

- 1. Identify as a professional social worker and conduct one-self accordingly.
- 2. Apply social work values and ethical principles to guide professional practice.
- 3. Develop a strong foundation of theoretical knowledge of Social Work and to generate ideas through application of the knowledge, aptitude and skills in the field of social work.
- 4. Analyse causes and consequences of social problems at individual, family, community and societal levels to determine appropriate change for prevention or intervention.

- 5. Understand human behaviour in the social environment and apply it to guide the processes of assessment, intervention, and evaluation; and apply knowledge to understand person and environment.
- 6. Perform successfully in the chosen careers that require Social Work knowledge, aptitude and skills.
- 7. Gain sufficient self-awareness to eliminate the influence of personal biases and values in working with diverse groups.
- 8. Understand the forms and mechanisms of oppression and discrimination.

#### Social Work - M.Phil Social Work

## **Program Specific Outcomes:**

- Prepare M.Phil research students to identify appropriate research topic.
- Prepare M.Phil research students to understand the assumptions of different methodological approaches.
- Prepare M.Phil research students for engaging in ethical and culturally competent research practices.
- Prepare M.Phil research students with the knowledge, skills and understanding essential to evaluate social work research critically and to carry out rigorous research.
- Prepare M.Phil research students to define and formulate research problems, research questions and hypotheses that can be tested.
- Prepare M.Phil research students to apply appropriate research approaches (qualitative and quantitative) and design.

## Sociology – M.A. Sociology

## **Program Specific Outcomes:**

> This course discusses with marital counseling, child rearing, peacemaking during conflict, social control agencies, stages of social change and explaining social movements.

> This course deals working of theory in a social problem. Youth conflict and

postmodernism, Sharing the household activities, Liberal feminism, Political reservation

for women and Solidarity theory.

> This course discusses current issues and interpretation of a social event on the basis of

nature and characterizes of people, their livelihood, the loss of people like suicide of

farmers, violence at public places, media and Jallikattu, JNU students issues.

> The enthusiasm and inspiration of the students to know societies in other countries

comparing gestures of affection, respect and disrespect. Revolutions in other countries

France and Russia.

> Identifying main feature of the Policy, referring the importance resources. Changes in the

policy over the period of time. Point out the current need of the policy. Research output

success and failure of the policy.

Identifying main feature of the Policy, referring the importance resources. Changes in the

policy over the period of time. Point out the current need of the policy. Research output

success and failure of the policy.

Construction of tool, administering the tool, conduct of Pilot study, meeting the sample

and population. Classification and tabulation of the data.

Mapping and self-assessment by the people about their natural resources- land, soil,

water, Minerals and fossils. Bring out the interrelationship between factors in the form of

the report. Making the people to understand their inadequacy. Getting training to

change their inabilities.

Sociology – M.Phil. Sociology

- Acquired the teaching and learning skill on the subject matter of sociology where the relationship between man and his social environment is dealt with deeply.
- Thorough knowledge on the causes and effects of social problems with the changing scenario are Gained.
- ❖ Familiarise with the Social order, Social continuity social change Social Movements Causes and effects of social change- Social conflicts and Mal Adjustments & goal oriented Behaviour – motivation.
- ❖ Basic differences between Sociology and natural sciences and other social sciences in terms of the contents and approaches are learnt.
- Capacitated to evolve suitable strategies needed for the creation of a just society in the future taking into account the LGP.
- Studied the relevance of Social Psychology in Education Psychotherapy and mental health and business & industry and community and National affairs.
- ❖ Developed skills of differences between physical and social sciences social Science Research particularly on Science and Scientific Method the procedure followed.
- ❖ Independent Research skills on social research like steps involved in scientific method of research and various types of research design, research techniques, analysis and interpretations and writing of thesis are developed.

#### Study of Social Exclusion and Inclusive Policy – M.A. Developmental Studies

- 1. This programme gives a period of sustained in-depth study of a specific topic in different approach.
- 2. This programme creates an environment that encourages the student's originality in thinking and relevance in their research

- 3. The programme enables the students to have skills to critically examine the background literature and making it to relevant to their specific topic of their research.
- 4. This programme provides an opportunity to develop skills in making and testing hypotheses, in developing newtheories, and in planning and conducting experiments
- 5. This programme provides an ambience for developing practical research skills and learn new state of the art techniques.
- 6. The programme is set to expand the opportunity to the students to acquire knowledge of their research area, including its theoretical foundations and the specific techniques used to study it.
- 7. It also paves a platform with an environment in which to develop writing skills, oral presentation and publishing the results of their research in high-profile academic journals, through constructive feedback of written work and oral presentations.
- 8. Finally students will have self-direction and originality in tackling social issues in developmentresearch and act autonomously in the planning and implementation of research by joining in the development organizations.

#### Women's Studies - M.A. Gender Studies

- Introducing and exposing the students to Politics of Gender by promoting critical thinking, to question rationally the kind of social and gender injustices and work towards eliminating the differences,. In the process the students will get sensitized and prepare to work towards eliminating gender biases and discrimination in the society
- Students achievements and self realization would be manifold; gaining sensitivity over the gender issues and start implementing the same at the private and work place
- Mainstream the gender needs into the curriculum, policy, laws, and through various social institutions right from Family to Media etc

- Gender Studies course in way serves as just not the course to be done theoretically but practically train, motivate, sensitize and expose the students to inculcate critical thinking with the scientific
- Rational understanding of the society and social norms imposed on people
- Change their Attitude, behavior and practices toward to bring gender equality
- Realizing their past, present situation and gain knowledge to proceed the future with gender neutral
- Students will have acquired theoretical, methodological, and empirical perspectives for studying and critically analyzing the history, status, and experiences of women from diverse backgrounds.

#### Women's Studies - M.Phil. Gender Studies

- Introducing and exposing the students to Politics of Gender by promoting critical thinking, to question rationally the kind of social and gender injustices and work towards eliminating the differences
- Students realize would be manifold; gaining sensitivity over the gender issues and start implementing the same at the private and work place context, to work towards building alternative perspective in the society with gender lens
- Mainstream the gender needs into the curriculum, policy, laws, and through various social institutions right from Family to Media etc
- Gender Studies course in way serves as just not the course to be done theoretically but practically train, motivate, sensitize and expose the students to inculcate critical thinking with the scientific
- Rational understanding of the society and social norms imposed on people.

- Introducing and exposing the students to Politics of Gender by promoting critical thinking, to question rationally the kind of social and gender injustices and work towards eliminating the differences, In the process the students will get sensitized and prepare to work towards eliminating gender biases and discrimination in the society
- Students achievements and self realization would be manifold; gaining sensitivity over
  the gender issues and start implementing the same at the private and work place
  context, to work towards building alternative perspective in the society with gender lens.

#### English - M.A. English

- 1. Developing passion for literature and language and appreciate the effective use of language in understanding human experience expressed through literature.
- 2. Cultivate the ability to situate the literary text in their historical and cultural context.
- 3. Demonstrate the necessary skills to critically think, read and write the literary texts through appropriate discursive strategies.
- 4. Indicate the practice of writing as a process of motivated inquiry and informed opinions to articulate their own interpretations.
- 5. Demonstrate better understanding of wide range of literary works over the ages through the sense of genre and literary techniques.
- 6. Cultivate independent learning habits and practice strategies for a sustainable and proficient academic growth.
- 7. Initiate and sustain the learning experience to contribute to a multicultural and rhetorical competence towards a global perspective.
- 8. Demonstrate effective language and literary skills to promote necessary employability skills.

#### **English – M.Phil English**

#### **Program Specific Outcomes:**

- 1. Acquire research skills to identify topics and formulate questions for productive inquiry.
- 2. To develop appropriate method to evaluate critically the available sources in the field of research
- 3. Guide the researchers in developing their individual specialization within the broader field of English studies.
- 4. Demonstrate critical reading, writing and thinking skills though analysis and synthesis and evaluation of relevant sources available in the area of research.
- 5. Introduce researchers to the theory and practice of teaching of writing and develop their individual pedagogy.
- 6. Provide research ambience for frequent and extensive writing and develop the required skills to produce quality publishable works.
- 7. Imbibe the research culture through a scientific approach to English language and literary studies.
- 8. Promote job oriented skills through appropriate implication of research methodology and practical application of literary theories.

#### Tamil - M.A. Tamil

- 1. Jobs in comparative Literature departments.
- 2. Jobs in abroad where Tamil is one of the official Languages.
- 3. Ability to work in Translation and Trans literature department.
- 4. Enriched with Tamil Traditional grammar.
- 5. Knowledge in Tamil Tradition, Culture and arts.

- 6. Ability to compare Sangam Classics, and Epic Literature with the literature of other cultures and other continents.
- 7. Approach Tamil language on the philological base.
- 8. Understand the life of Ancient Tamil associated with nature.

#### Tamil - M.Phil Tamil

#### **Program Specific Outcomes:**

- 1. Know the research methods.
- 2. Identify the research methods in field of Tamil Literature & Grammar.
- 3. Illustrate the rules of Hypothesis and its position in research.
- 4. Get the skill to notify the list of secondary sources and enclosures in the research.
- 5. Understand the necessity of the usage of reference books.
- 6. Learn the method to differentiate the use of words from Dictionary to Thesaurus.
- 7. Observe the ideology of improving general knowledge through Encyclopaedias.
- 8. Infer the approaches of modern literary isms and Tamil Literary Principles of theories.

#### **Educational Technology – M.Ed. Educational Technology**

- 1. Understand the basic Indian and Western concepts of education
- 2. Develop ICT for teaching
- 3. Create Instructional Designs to be integrated in to teaching
- 4. Develop skills to design curriculum at different levels
- 5. Evaluate the knowledge, skills and values of dissemination to students
- 6. Compare Education system across globe
- 7. Differentiate the issues in teacher education from their challenges

- 8. Raise proficiency in the analysis and use of student data to improve instruction and programming.
- 9. Enhance proficiency in the integration of technology in teaching, learning, and professional development
- 10. Foster commitment to ethical behavior and social responsibility in decision-making

## **Educational Technology – M.Sc. Mass and Media Communication**

#### **Program Specific Outcomes:**

- 1. Read, write, listen, and present in various contexts and for various audiences.
- 2. Understand emerging communication and media technologies, and the complex causes and opportunities of that evolution.
- 3. Analyze and explain the moral, ethical and cross-cultural dimensions of messages.
- 4. Apply communication and media theories to critically analyze real-world issues and employ practical, innovative solutions.
- 5. Understand emerging communication and media technologies, and the complex causes and opportunities of that evolution.
- 6. Analyze and explain the moral, ethical and cross-cultural dimensions of messages.
- 7. Apply communication and media theories to critically analyze real-world issues and employ practical, innovative solutions.
- 8. Competence to leverage technologies to be integrated in media
- 9. Participate in the internship pertaining to media and communication
- 10. Develop Competence to the students

#### **Educational Technology – M.Phil. Educational Technology**

- 1. To understand the meaning and process of research in education;
- 2. To select suitable research problem after consulting various sources;

- 3. To understand the various methods of sampling; understand the concept, scope and significance of ICT in Education
- 4. To understand the means of ICT integration into teaching and learning
- 5. To know the latest developments in the field of ICT, relevant to Education
- 6. To understand the terms: Communication Technology and Computer mediated teaching
- 7. To develop multimedia based E-content in their respective subject.
- 8. To understand the communication process through the web.
- 9. To acquire the knowledge of instructional technology and its applications.
- 10. To develop different teaching skills for putting the content across to targeted audience.

## **Bharathidasan School of Management – M.B.A. Management**

- 1. An ability to develop a systematic understanding of globalization and its impact on people, businesses and the economy.
- 2. An ability to demonstrate a critical awareness of current issues (e.g., diversity, social responsibility, sustainability, innovation, knowledge management, etc.) in business and management which is informed by leading edged research and practice in the field.
- 3. An ability to function effectively on multi-disciplinary teams (Team work).
- 4. An ability to analyze a problem, identify, formulate and use the appropriate managerial skills for obtaining its solution.
- 5. Recognize and address ethical issues and values and apply them in organizational settings.
- 6. An understanding of professional, ethical, legal, financial, marketing, sales, logistical security and social issues and responsibilities.
- 7. An ability to communicate effectively, both in writing and orally (Speaking / Writing skills).

8. An ability to recognize the importance of professional development by pursuing postgraduate studies or face competitive examinations that offer challenging and rewarding careers in management.

#### Commerce and Financial Management – M.B.A. Commerce and Financial Management

## **Program Specific Outcomes:**

- Demonstrate a general knowledge framework and understanding of key financial functions
- Get In-depth Knowledge and understanding of financial management of domestic and multinational corporate
- Identify, appraise and appreciate successful implementation of business projects
- Effective argumentation in oral and written presentation
- Analyse the trend of the securities market using sophisticated techniques
- Offer comprehensive solutions to business problems by evaluating information using reasoning and analysis
- Consider the multinational perspective in arriving solutions in the present globalised context
- Integrate the social and ethical dimensions in arriving the final solution

#### **Commerce and Financial Management – M.Phil Management**

- Demonstrate the ability to listen and to read attentively and to express ideas with clarity in both oral and written communications.
- Develop research level thinking on advanced finance and financial markets area
- Effective improvement in skills sets namely computing skills, teaching skills and communicative skill.

- Develop abstract management thinking.
- Ability to construct Questionnaire and Schedule for effective primary data collection, and
- Training in statistical tools and its applications.

# Centre for Bharathidasan Studies – M.Phil Tamil (offered by Bharathidasan Studies) Program Specific Outcomes:

- Meaning of Research Researchers necessity in exhibiting
- Collecting data planning and documenting
- Chapterisation different Chapters.
- Freedom Fighters Contribution to Literature.
- Literariness comparing different literatures
- Literature communalism.
- Effective Speaking / Presentation Skils.
- Introducing effective teaching.

#### Centre for DDU - KAUSHAL KENDRA - B.Voc. (Automobile Technology)

- Graduates will demonstrate the ability to design a system, component or process to meet the desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability.
- 2. Graduates will become familiar with modern engineering tools and analyse the problems within the domains of Automobile Engineering as members of multidisciplinary teams.
- 3. Graduates will acquire the capability to identify and solve complex problems related to Automobile Engineering.
- 4. Graduates will demonstrate an understanding of professional and ethical responsibility with reference to their career in the field of Automobile Engineering.

- 5. Graduates will be able to communicate effectively both in verbal and nonverbal forms.
- 6. Graduates will be trained towards developing the impact of Automobile engineering in the global, economic environmental and societal contexts.
- 7. Graduates will be capable of understanding the value for life-long learning.
- Graduates will demonstrate knowledge of contemporary issues focusing on the necessity to develop new material, design, and engineering practice in the field of Automobile Technology.
- Graduates will demonstrate the ability to use the techniques, skills and modern engineering tools necessary for engineering practice in the field of Automobile Engineering.
- 10. Graduates will have a firm scientific, technological and communication base that would help them either to find the desired placement or to become an entrepreneur and explore the knowledge in their field.
- 11. Graduates will be capable of doing higher studies and research in inter and multidisciplinary areas.

#### **Centre for DDU – KAUSHAL KENDRA – B.Voc. (Logistics and Supply Management)**

- Through transportation management the students able to evaluate both domestic and international transportation problems and effectively develop and present actionable solutions.
- Through Inventory Management students able to apply inventory models and techniques to create and recommend appropriate stocking solutions in various business settings.

- 3. Through Warehouse students to understand the concepts of warehouse and DC strategies, tactics, and systems to ensure companies efficiently and effectively manage their distribution processes at the regional, national, and international levels.
- 4. Through Logistics/Supply Chain students can able to identify and assess trade offs between the three key areas of transportation, inventory, and warehouse/DC management and recommend actionable plans and strategies.
- 5. Through traditional logistics focuses its attention on activities such as procurement, distribution, maintenance, and inventory management. Supply Chain Management (SCM) acknowledges all of traditional logistics and also includes activities such as marketing, new product development, finance, and customer service
- 6. After completing the logistics the students getting the knowledge about getting the right product, to the right customer, in the right quantity, in the right condition, at the right place, at the right time, and at the right cost (the 7 Rs).
- 7. B.Voc graduates will demonstrate knowledge of current information, theories and models, and techniques and practices in all of the major business disciplines including the general areas of Accounting and Finance, Information Technologies, Management, Marketing, and Quantitative Analysis.
- 8. After successful completion of the B.Voc programme the students able to relate to the concepts of Logistics and Supply Chain Management, Understand the principles of Procurement and Outsourcing and apply the principles of Inventory Management, use the principles of Warehousing to improve their Warehousing Operations and relate to Marketing and Physical Distribution concepts

Centre for DDU – KAUSHAL KENDRA – B.Voc. (Troubleshooting and Maintenance of Electrical and Electronic Equipments)

#### **Program Specific Outcomes:**

1. Apply the knowledge and the basics of Science and Engineering to solve the problems pertaining to Electronics and Instrumentation Engineering.

- 2. Identify and formulate Electrical and Electronics Engineering problems and be able to analyze the problem.
- 3. Come out with solutions for the complex problems and to design system components or process that fulfill the particular needs taking into account public health and safety and the social, cultural and environmental issues.
- 4. Draw well-founded conclusions applying the knowledge acquired from research and research methods including design of experiments, analysis and interpretation of data and synthesis of information and to arrive at significant conclusion.
- 5. Form, select and apply relevant techniques, resources and Engineering and IT tools for Engineering activities like electronic prototyping, modeling and control of systems and also being conscious of the limitations.
- 6. Understand the role and responsibility of the Professional Electrical and Electronics Engineer and to assess societal, health, safety issues based on the reasoning received from the contextual knowledge.
- 7. Be aware of the impact of professional Engineering solutions in societal and environmental contexts and exhibit the knowledge and the need for sustainable Development.
- 8. Apply the principles of Professional Ethics to adhere to the norms of the engineering practice and to discharge ethical responsibilities.
- 9. Function actively and efficiently as an individual or a member/leader of different teams and multidisciplinary projects.
- 10. Demonstrate the acquisition of the body of engineering knowledge and insight and Management Principles and to apply them as member / leader in teams and multidisciplinary environments.
- 11. Recognize the need for self and life-long learning, keeping pace with technological challenges in the broadest sense.