Arts

ENGLISH

Program Outcomes

The Department of English, Guru Nanak Girls college, Yamuna Nagar, seeks intellectual, professional, and holistic development of its students by encouraging study of literature and language. We also strive to improve their reading, writing, speaking, and listening skills.

- **Reading leading to imbibing Values**: Reading is the foremost step and an integral part of a student of literature. Our courses give exposure to the students to a wide range of literature - British, American and Anglophone traditions. It helps students explore how writers use the creative resources of language in fiction, poetry, prose, and drama to explore the entire range of human experience. By learning how others live and manage their lives, one becomes connected with the world in a way we might not otherwise experience. They gain insight into life by living vicariously through the literary characters. Through reading students, will have an awareness of various perspectives and will become more empathetic towards others.
- **Literature, Nation and Tradition:** Some of the prescribed texts provide students an opportunity to know India's age old literary and cultural tradition. It can be an effective means to address the complex issues of identity, nationalism, and historical tradition.

- **Issue of Social Differentiation:** Literature helps students analyse the ways of the society – both the good and the bad in it. A comparative study of various societies around the world helps students to challenge unwanted centuries of social tradition and belief which promote gender and other types of differentiations.

- **Communication skills and Job Proficiency** - Students of English are encouraged to be imaginative and rhetorically proficient. English is the language of science, computers, diplomacy, and tourism. Knowledge of technical aspects of the spoken language i.e., phonetic sounds, intonation, and stress increases students' communication skills and in turn improves their chances of getting a good job in future.

- **Writing and Analytical skills leading to job proficiency:** Students use various strategies of drafting and revising, and analytical skills to frame their responses, a quality which is crucial for choosing careers in today's information-intensive society. Students of English also develop a writing style of their own. The writing skills can be extended with profit to journalistic, commercial, and web-based writing. It is expected that their exposure to the ideas of variety of writers and their cultural backgrounds, will have a bearing in their own literary styles. With the development of their writing skills there is always a possibility that they might emerge as writers, editors, content developers, teachers etc.

HINDI

Program Outcomes

- To acquaint students with literature that uplifts and prapares them to become good human beings.
- To equip students with the ability to express themselves creatively in Hindi.
- To impart the students with the knowledge of the language and opens various career avenues.
- To help the students to understand Hindi literature and thereby gain a deeper understanding of the cultural context and history.

Punjabi

Program Outcome

- ➢ Punjabi, being the mother tongue and regional language, is taught to students to acquaint them with the correct form and structure of the language.
- ➢ Punjabi is an essential requirement for jobs in some government sectors. Hence students need to be proficient in the usage of this language.
- ➢ Punjabi literature instils new ideas and thoughts in the students.
- ➢ Punjabi language connects the students with culture, folklore and traditions of the states.

Sanskrit

Program Outcomes

- ➢ To provide adequate knowledge of Sanskrit language.
- ➢ To acquire elementary knowledge of other ancient Indian languages i.e., Pali & Prakrit.

- ➢ To develop understanding of ancient scriptures written in Sanskrit, Pali & Prakrit.
- ➢ To gain competencies and professional skills for teaching and conducting research in various fields in Sanskrit Grammar, Classical Sanskrit Literature, Vedic Literature and ancient Indian philosophy.
- ➢ To acquire adequate knowledge of ancient Indian culture and society.

History

Program Outcome

- ➢ Students will have the ability to apply historical methods to evaluate critically the past
- ➢ Students will be able to acquire basic historical research skills, including the effective use of libraries, archives, and data bases.
- ➢ Students will be able to demonstrate broad knowledge of historical events and periods and their significance.
- ➢ Students will demonstrate in discussion and written work their understanding of different culture in past and of how those cultures changed over the centuries.
- ➢ They will be able to produce their own historical analysis of documents and develop the ability to think critically and historically when discussing the past.
- ➢ The study of history will give them the ability to compare different processes, modes of thoughts and modes of expression from different historical time periods and in different geographical areas.
- ➢ Students will be able to offer explanations of major historical developments based on a contextualized analysis of interrelated political, social, economic, cultural, and intellectual processes.
- ➢

Economics

Program Outcomes:

- ➢ The students after completion of B.A. program and M.A. program in Economics will develop understanding of the major concepts & principles in Economics.

- ➢ Students will be able to think critically following the economic way of thinking.
- ➢ They will be able to analyse economic behaviour in practice.
- ➢ They will have an ability to work efficiently in diverse field of Statistics, Economics and Banking.
- ➢ The students will be able to use modern library, searching & retrieval methods to obtain information about topic/subjects relating to economics from various sources.
- ➢ They will secure employment in various services of Economics, Statistics & Banking.
- ➢ Economics students in general will be able to pinpoint & understand the past, present economic conditions of the country. They will also be able to forecast the future course of changes and development through their knowledge of policies and programmes set by the governments and other development agencies. They will be equipped with the techniques to find the solution of the problems like mobilization of manpower and materials available in the country. Students will be able to analyse historical & current events from an economic perspective.
- ➢ As the Undergraduate Course and Postgraduate Course contain the fields like Statistics, Mathematics & economic principles, it enhances them to compute and assess the real situation of the economy including the size and changes of population, income pattern, nature of the extent of employment, rate of development with pattern of investments and savings, policies in relation to other countries.
- ➢ Basically, economic graduates are familiar with the knowledge and application of microeconomics & macroeconomics for the formulation of policies and planning. They are equipped with all the relevant tools/knowledge based on economic principles including market functions & structures, efficiency in manpower and resources management, need of credit for initiating and accelerating projects.
- ➢ Students will have the knowledge of financial institutions and markets and understand the structure and functions of banking.

Public Administration

Program Outcomes

- ➢ To apply the management of local government human resources.
- ➢ To develop strategies for engaging citizens and stakeholders
- ➢ To understand the complexities of network relationships and develop skills in collaborative management
- ➢ To demonstrate an understanding of ethics
- ➢ To understand the roles and relationships (leaders, officials, citizens and stakeholders)
- ➢ To articulate the purposes of and processes for communicating with citizens and stakeholders
- ➢ To develop an understanding of the current policy issues, challenges and solutions
- ➢ To develop skills to lead, manage and serve and to provide solutions challenges

Political Science

Program Outcomes

- ➢ To understand the process and dynamics of Indian government and politics. It also familiarizes with the vital contemporary emerging issues of centre state relations, political parties, emergence of new leadership at different levels, demand for autonomy movement, ethnic conflicts etc.
- ➢ To get acquainted with the basic concepts, principles, and dynamics of public administration.
- ➢ To familiarize with important theories and issues of international relations.
- ➢ To understand the contribution of the main traditions of Indian political thought.
- ➢ To develop understanding of the evolution development and trends of India's foreign policy.

- ➢ To understand the basic concept and issues concerning human rights and challenges.
- ➢ To understand the woman's issues and problems.
- ➢ To get familiarize with the problems and prospects of rural development of India

Music Instrumental

Program Outcomes

- ➢ To give a practical demonstration of Ragas
- ➢ To demonstrate various aspects of Ragas and their differentiation.
- ➢ To study theoretical aspects of prescribed Ragas
- ➢ To write the practical composition according to the notation system.
- ➢ To understand the basic terminologies of Indian music
- ➢ To do the analytical study of various forms of Hindustani music
- ➢ The students gain knowledge about the compositional forms and Notation System of Hindustani Music
- ➢ Students are able to know about the life and contribution of the composers of Hindustani Music.
- ➢ Students learn about the Music in the Vedic period and the works of music Scholars of the past.
- ➢ The students Study about the Gharanas of Music

Music Vocal

Program Outcomes

- ➢ Students will be able to demonstrate the understanding and knowledge of music as a means for creating cultural awareness.
- ➢ Students will be able to create, analyse, and synthesize music as a means of supporting developing careers in music, teaching and performance.
- ➢ Students will be able to discover the relationship between music and the other allied arts.
- ➢ Students will be able to develop problem-solving skills in the creation of artistic work.
- ➢ Students will get sufficient knowledge of raga, laya, swara, various types of taal, laykari etc.
- ➢ When performing with sheet music, student musicians are constantly using their memory to perform. The skill of memorization can serve students well in education and beyond.
- ➢ Learning music promotes craftsmanship, and students learn to want to create good work instead of mediocre work. This desire can be applied to all subjects of study.
- ➢ Learning to sing pieces of music vocal can be challenging, but achievable goal. Students who master even the smallest goal in music will be able to feel proud of their achievement.
- ➢ Musical education can greatly contribute to children's intellectual development as well.
- ➢ Students of music can be more emotionally developed, with empathy towards other cultures They also tend to have higher self-esteem and are better at coping with anxiety.
- ➢ Students can develop their math and pattern-recognition skills with the help of musical education.
- ➢ Musicians can better detect meaningful, information-bearing elements in sounds, like the emotional meaning in a baby's cry. Students who practice music can have better auditory attention and pick out predictable patterns from surrounding noise.
- ➢ Music can help to develop a positive attitude toward learning and curiosity. Artistic education develops the whole brain and develops a student's imagination.
- ➢ Students can fight stress by learning to sing music. Soothing music is especially helpful in helping students relax.
- ➢ Students will be able to understand the social and artistic movements that have shaped Indian Classical Music.
- ➢ Students will be able to develop problem-solving skills in the creation of artistic work.
- ➢ After post-graduation, students will gain knowledge in fundamental concepts in music.
- ➢ Students will become well versed in performing, demonstrating, and teaching of particular art form.

- ➢ Students should gain capability of solo performance, art research etc. It should inculcate lifelong learning to keep up with advances in the subject.
- ➢ Students who study music can improve the development of spatial intelligence, which allows them to perceive the world accurately and form mental pictures. Spatial intelligence is helpful for advanced mathematics and more.
- ➢ Many musical education programs require teamwork as part of a band. In these groups, students will learn how to work together and build camaraderie.
- ➢ Performing a musical piece can bring fear and anxiety. Doing so teaches students how to take risks and deal with fear, which will help them become successful and reach their potential.

Fine Arts

Program Outcomes

- ➢ Painting is not limited to being just an artistic endeavour, but it also helps to enjoy health benefits. It is extremely effective therapeutic and calming techniques for fine arts students and can help increase their mental and physical health.
- ➢ Painting increases the appreciation for visual art by teaching the variety and difficulties of learning techniques. Knowledge of popular modern and historical art pieces and trivia provides students with the knowledge that can be shared promoting social ability within various cultures and degrees of company.
- ➢ Creating art teaches students to stay tuned with aesthetics of the visual world around and makes them appreciate the beauty in and of life

Geography

Program Outcomes

- ➢ To develop the ethical aptitudes and dispositions necessary to acquire and hold leadership positions in industry, government, and professional organizations.
- ➢ To acquire an understanding of and appreciation for the relationship between geography and culture.
- ➢ To acquire an understanding of and appreciation for the role that geography can play in community engagement.
- ➢ To read, interpret, and generate maps and other geographic representations as well as extract, analyze, and present information from a spatial perspective.
- ➢ To understand physical geographic processes, the global distribution of landforms and ecosystems, and the role of the physical environment on human populations.
- ➢ To understand cultural geographic processes, the global distribution of cultural mosaics, and the history and types of interaction between people within and among these mosaics.
- ➢ To understand global human population patterns, factors influencing the distribution and mobility of human population including settlement and economic activities and networks, and human impacts on the physical environment.
- ➢ To understand how the physical environment, human societies, and local and global economic systems are integral to the principles of sustainable development.

Physical Education

Program Outcomes

- ➢ To provide knowledge about the basic principles of Health and Fitness.
- ➢ To provide skill-based education and grooming of the personality.

- To provide the knowledge of various Sports and Physical Activities for participation in Competitive sports to build up all round personality as well team work spirit.
- To become a sports or health and fitness professional.
- To Provide knowledge of relationship of Physical Education with General Education.
- To Sensitize about the importance of Health and personal hygiene.
- To impart the Knowledge about Anatomy and Physiology, Sports Psychology, Sports injuries and their treatment.
- To provide practical and theoretical Knowledge of Yoga and Naturopathy.

Social Work

Program Outcomes

- To gain sufficient self-awareness to eliminate the influence of personal biases and values in working with diverse groups
- To advocate for human rights and social and economic justice.
- To practice personal reflection and self-correction to assure continual professional development
- To engage in career-long learning
- To recognize the extent to which a culture's structures and values may oppress, marginalize, alienate or create or enhance privilege and power
- To engage in practices that advance social and economic justice.
- To analyse, formulate, and advocate for policies that advance social well-being
- To continuously discover, appraise, and attend to changing locales, populations, scientific and technological developments and emerging social trends to provide relevant services
- To provide leadership in promoting sustainable changes in service delivery and practice to improve the quality of social services
- To use empathy and other interpersonal skills

NSS

Program Outcomes

- To understand the community in which they work.
- To understand themselves in relation to their community.
- To identify the needs and problems of the community and involve them in problem-solving.
- To develop among themselves a sense of social and civic responsibility.
- To utilise their knowledge in finding practical solutions to individual and community problems.
- To develop competence required for group-living and sharing of responsibilities.
- To gain skills in mobilising community participation.
- To acquire leadership qualities and democratic attitudes.
- To develop capacity to meet emergencies and natural disasters.
- To practise national integration and social harmony.

Mass Communication and Journalism

Program Outcomes

- The course gives the room for creativity and originality. It puts strong emphasizes on employability and equips the students with all the knowledge, professional skills and inspiration which are required to work on innovative ideas that can be developed inn commercial design and layout of products.
- Offers several interactive sessions and talks from key organizations and learning through exchange programmes, field visits are strongly encouraged to support and motivate students for internship and industry placement.

- ➢ The program offers the skills that allow students in their further education at advance level either in formal postgraduate study or as a continued professional development.

Marketing

Program Outcomes

- ➢ Students will be able to understand basic principles of marketing
- ➢ Students will learn skills of salesmanship, promotion and logistics
- ➢ Students will be able to build brand image
- ➢ Students will learn creative advertising writing skills
- ➢ Students will learn skills of retailing
- ➢ Students will understand ethical issues concerning sales, advertising and marketing
- ➢ Students will learn to manage serve and provide solutions to marketing challenges
- ➢ Students will be able to seek job opportunities in almost every field as marketing is integral part of any job

Commerce

B.COM

Program Outcomes

- ➢ To provide holistic development of the students by providing a combination of technology and value based traditional education.
- ➢ To enhance the computing and recording skills of the students by providing the best of curriculum in accounting and other relevant subjects.
- ➢ To enhance the understanding of the economic and business factors by inculcating the knowledge and information about various national and international standards of business and economics.
- ➢ To develop the understanding of the various taxation and legal standards and their implications, which may further open various career avenues for the students.
- ➢ To provide knowledge of industry and practical outlook, by implementing various industry accepted courses and industrial training for the better development of the students and making them job ready.
- ➢ To enhance the critical thinking, nurture innovation and evaluating ability by imbibing the knowledge of research and statistics amongst the students.
- ➢ To develop motivated and entrepreneurial young girls who have the acumen for leadership and development of the society.

BBA

Program Outcomes

- ➢ To Comprehend the concept of business, its scope, business ethics and values, corporate governance.
- ➢ To elaborate the distinctive features of different forms of organizations, sole proprietor, and partnership.
- ➢ To understand the concept of joint stock company, multinational companies, co-operative and state ownership, non-profit organizations, and trade associations.

- ➢ To develop conceptual knowledge regarding nature of business and its different forms so as to operate effectively in actual business environment.

Science

Chemistry

Program outcomes

- ➢ The students after completing course at graduation level in chemistry will develop an understanding of major concepts, theoretical principles, and experimental findings in chemistry.
- ➢ They will have an ability to work effectively in diverse teams in both classroom and laboratory.
- ➢ They will be able to employ critical thinking and efficient problem-solving skills in the four basic areas of chemistry (analytical, inorganic, organic and physical).
- ➢ They will be able to conduct experiments, analyse data, and interpret results while observing responsible and ethical scientific conduct.
- ➢ The students will have effective written and oral communication skills, especially the ability to transmit complex technical information in a clear and concise manner.
- ➢ They will be able to use modern library searching and retrieval methods to obtain information about a topic, chemical, chemical technique, or an issue relating to chemistry.
- ➢ They will know the proper procedures and regulations for safe handling and use of chemicals and can follow the proper procedures and regulations for safe handling when using chemicals.
- ➢ Students will be able to explain why chemistry is an integral activity for addressing social, economic, and environmental problems.
- ➢ Students will be skilled in problem solving critical thinking and analytical reasoning as applied to scientific problems.
- ➢ They will be able to understand the ethical, historic, philosophical, and environmental dimensions of problems and issues facing chemists.
- ➢ They will find employment in industry, government sectors and in schools as instructors or administrators.
- ➢ They will get familiar with application of safety and chemical hygiene regulations and practice.
- ➢ They will be able to understand the chemical basis for biological phenomena and cellular structure and how physiological conditions influence the structures and reactivity of biomolecules.

Physics

Program outcomes

- To demonstrate a vigorous understanding of the core theories and principles of physics which includes Classical Mechanics, Relativity, Electromagnetism, Elasticity, Kinetic Theory of Gases, Semiconductor Devices, Thermodynamics, Optics, Fiber Optics, Statistical Physics, Specific Heat of Solids, Fourier Analysis, Quantum Mechanics, Lasers, Atomic and Molecular Physics and Spectroscopy, Nuclear Physics, Solid State Physics, Superconductivity and Nano-Physics.
- To learn the concepts of Quantum Mechanics and Relativity introduced at degree level in order to understand nature at atomic level.
- To provide knowledge about material properties and its application for developing technology to ease the problems related to society.
- To understand the set of physical laws describing the motion of bodies under the influence of system of forces.
- To understand the relationship between particles and atoms as well as their creation and decay.
- To analyse the applications of mathematics to the problems in physics using Fourier Analysis and other mathematical tools and develop suitable mathematical method for such application and for formulation of physical theories.
- To learn the structure of solid materials and their different physical properties in Solid State Physics.
- To understand the fundamental theory of nature at small scale and at levels of atomic and sub-atomic particles and to relate the structure of atoms and sub-atomic particles in Atomic and Molecular Spectroscopy.
- To understand the fundamental theories at nano scale in Nanophysics.
- To learn the basics of Computer Programming and to solve mathematical problems using programming language FORTRAN.
- To understand accelerators and detectors in Nuclear Physics.
- Practicals and experiments will enable the students to think and act with precision and accuracy in future life.

Mathematics

Program outcomes

- Students will develop a positive attitude towards mathematics as an interesting and valuable subject of study.
- Student will get a relational understanding of mathematical concepts and concerned structures, and should be able to follow the patterns involved, mathematical reasoning.
- They will be able to analyse a problem, identify and define the computing requirements, which may be appropriate to its solution.
- It will enhance students' overall development and to equip them with mathematical modelling abilities, problem solving skills, creative talent, and power of communication necessary for various kinds of employment.
- Students will develop ability to pursue advanced studies and research in pure and applied mathematical science.
- They will think in a critical manner.
- Students will know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.
- They will formulate and develop mathematical arguments in a logical manner.
- Students will acquire good knowledge and understanding in advanced areas of mathematics and statistics, chosen by the student from the given courses.
- They will understand, formulate, and use quantitative models arising in social science, Business, and other contexts.

Zoology

Program Outcomes

- Students will gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organisms.
- Students analyse complex interactions among the various animals of different phyla, their distribution, and their relationship with the environment.
- They will be able to apply the knowledge of internal structure of cell, its functions in control of various metabolic functions of organisms.
- They will understand the complex evolutionary processes and behaviour of animals.
- Student will be able to correlate the physiological processes of animals and relationship of organ systems.
- The students will understand environmental conservation processes and its importance, pollution control and biodiversity and protection of endangered species.
- They will gain knowledge of Agro based Small-Scale industries like sericulture, fish farming, vermicompost preparation.
- Students will understand about various concepts of genetics and its importance in human health.
- They will be able to apply the knowledge and understanding of Zoology to one's own life and work.
- Students will develop empathy and love towards the animals.

Botany

Program Outcomes

- Critical Thinking: Knowledge and understanding about plant diversity and apply the knowledge of Botany for Scientific queries. An increased understanding of fundamental concepts and their applications of scientific principles is expected at the end of this course. Students will become critical thinker and acquire problem solving capabilities.
- Effective Communication: Successful transfer of scientific knowledge orally, practically and in the form of writeups because of the practical skills in the field and laboratory experiments.
- Social Interaction: Function as an individual, as a member or a leader to perform a task in classroom situation or during field study.
- Effective Citizenship: Responsible for learning, develop honesty in work and respect for self and others.
- Ethics: The designed course also encourages fostering the social values/responsibility for maintaining and protecting the surrounding environment for improved living conditions and thus conveys and practice social, environmental, and biological ethics.
- Environment and Sustainability: Insist the significance of conserving a clean environment for sustainable development as they are gaining knowledge about biodiversity exploration, estimation, and conservation.
- Self-directed and Life-long Learning: Study incessantly by self to cope with growing competition for higher studies, competitive examinations, and employment.

Industrial Microbiology

Program Outcomes

- The whole biosphere depends on the activities of microorganisms and they influence human society in countless ways. Because microorganisms play such diverse roles, modern microbiology has a great impact on different fields such as medicine, agricultural and food sciences, ecology, genetics, biochemistry, and molecular biology.
- Upon graduation, the students will be able to acquire, retain and apply specialized concept and knowledge relevant in abundance of microbiological field.
- They will also acquire knowledge in laboratory safety and in routine and specialized microbiological skills applicable to clinical research, including accurately reporting observations and analysis.
- The course will help them to impart the knowledge of the basic principles of bacteriology, virology, mycology, immunology and parasitology including the nature of pathogenic microorganisms, pathogenesis, laboratory diagnosis, transmission, prevention and control of diseases common in the country.
- They will acquire the ability to function effectively on teams to accomplish a common goal. The students will be able to communicate scientific concepts, experimental results, and analytical arguments clearly and concisely, both verbally and in writing.
- The course is reasoning, and application based, making the students eligible for higher studies, jobs in various sectors and entrepreneurship abilities.
- The core course is emphasized on morphology, physiology, and function of microorganisms in addition to several subjects including biochemistry, cell biology, immunology, virology, molecular biology, and recombinant DNA technology.
- Microorganisms exist virtually everywhere life is possible. The total complement of microbial cells in and on our body—micro biome—contains thousands of species each adapted to grow best in a particular part of our body.
- Gain insight of microbiology starting from history, basic laboratory techniques and fundamental knowledge about the microorganisms.
- They will acquire the skill in the use and care of basic micro biological equipment; performance of basic laboratory procedures in microbiology; proper collection and forwarding of micro biological and parasitological specimens to the laboratory.
- They will be well-informative about the integral role of microorganisms associated with specific disease, vital role of microorganisms in biotechnology, fermentation, medicine, and other industries important to human wellbeing.
- The skill enhancement elective course is designed to provide students with an opportunity to gain hands on experience in state-of-the-art laboratory equipment that could enrich them to perform high through put research on microorganisms and execute diagnostic procedures required in food, dairy and pharmaceutical industries.
- This course will also help them to comprehend and write effective project reports in multi- disciplinary environment.
- It will also help to the development of sound attitudes in relation to the role of medical microbiology in clinical and community medicine.

Biochemistry

Program Outcomes

- To develop skills in graduate students to be able to acquire theoretical and practical knowledge in fundamentals of biology in respective disciplines of plants, animals, microbes and environment.
- To inculcate ability to critically evaluate problems and apply lateral thinking and analytical skills for professional development.
- To create awareness on ethical issues, good laboratory practices and biosafety.

- ➢ To develop ability in youth for understanding basic scientific learning and effective communication skills.
- ➢ To prepare youth for career in teaching, industry, government organizations and self reliant entrepreneurship.
- ➢ To make students aware of natural resources and environment and its sustainable utilization.
- ➢ To provide learning experience in students that instills deep interest in biological science for the benefit of society.

Home Science

Program Outcomes

- ➢ The course will develop skills to acquire theoretical and practical knowledge in fundamentals of sciences.
- ➢ The course will impart knowledge and facilitate the development of skills and techniques in different areas of Home Science namely: Foods and Nutrition, Human Development, Fabric and Apparel Science, Development Communication and Extension, Resource Management with the support of different allied subjects of Life Science, Physical Science and Social Science required for personal, professional and community advancement.
- ➢ Students will be capable of self-directed learning for the continued learning and holistic development for meeting their professional and personal needs in dynamic environment and changing contexts.
- ➢ Students will acquire basic management skills for independently organising events, resource mobilization and leading community-based projects and initiatives.
- ➢ Students will understand and appreciate the role of interdisciplinary sciences in the development and enhancement of quality of life and wellbeing of individuals, families, and community.
- ➢ They will develop knowledge, skills, and competence in the application of science to daily living.
- ➢ The course will inculcate in students, values and attitudes that enhance personal and family growth and to sensitize them to various social issues for the development of human society.
- ➢ The course will promote in students a scientific temper and competencies in research to enable contribution to the national and international knowledge base in Home science and allied fields.
- ➢ The ability to critically evaluate problems and apply lateral thinking and analytical skills for professional development will be inculcated in students.
- ➢ Students will create awareness on ethical issues, good laboratory practices and safety.
- ➢ The course will develop ability in youth for understanding basic scientific learning and effective communication skills.
- ➢ The students will get prepared for career in teaching, industry, government organizations and self-reliant entrepreneurship.
- ➢ Students will get aware of natural resources and environment and its sustainable utilization.
- ➢ The course will provide learning experience in students that instils deep interest in science for the benefit of society.

Fashion Designing

Program Objectives

- ➢ To promote an understanding of fashion and textile design in relation to the need of fashion.
- ➢ To provide hands-on experience using a set of complex technologies found in industry today to build prototypical solutions to solve current needs.
- ➢ To provide experience in responding to market opportunities with creative and innovative products that integrate a set of academic disciplines such as textile materials, design fundamentals, business fundamentals, sourcing, data mining of market information and new developments in material science Duration of the course: Fashion designing shall be a six-semester full time program

Clinical Nutrition and Dietetics

Program Objectives

- ➢ To utilize knowledge from the physical and biological sciences as a basis for understanding the role of food and nutrients in health and disease processes.
- ➢ Students will be able to prepare and deliver effective presentations of technical information to food science and nutrition professionals and to the public.
- ➢ Basically, this is an interdisciplinary program with knowledge of human anatomy, microbiology, biochemistry, and their role in relation to food and health.
- ➢ The program will provide in-depth understanding of the role of food under the specific diseased conditions.
- ➢ Students will be able to provide nutrition counselling and education to individuals, groups, and communities throughout the lifespan using a variety of communication strategies.
- ➢ Students will be able able to apply technical skills, knowledge of health behaviour, clinical judgment, and decision-making skills when assessing and evaluating the nutritional status of individuals and communities and their response to nutrition intervention.
- ➢ To apply food science knowledge to describe functions of ingredients in food.
- ➢ To apply food science knowledge to describe functions of ingredients in food. Apply food science knowledge to describe functions of ingredients in food.
- ➢ To understand nutrition as an integral part in the development of a community

Bio-Technology

Program Outcomes

- ➢ To acquire knowledge on the fundamentals of biotechnology for sound and solid base which enables them to understand the emerging and advanced engineering concepts in life sciences.
- ➢ To acquire knowledge in domain of biotechnology enabling their applications in industry and research. Demonstrate skills to use modern analytical tools/ software/ equipment and analyze and solve problems in various courses of biotechnology.
- ➢ To understand the impact of the technological solutions developed through biotechnology in contexts of society and the environment.
- ➢ To understand the foundational concepts of molecular biology, and how these impact biotechnology research and development in the diverse fields that span healthcare and agriculture.
- ➢ To recognize the importance of Bioethics, IPR, entrepreneurship, communication, and management skills to usher next generation of Indian industrialists.
- ➢ To possess academic excellence, managerial skills, leadership qualities and understand the need for lifelong learning fora successful professional career.

- ➢ To apply knowledge across the disciplines and in emerging areas of biotechnology for higher studies, research, employability, and product development.

COMPUTER SCIENCE

Program Outcomes

- ➢ To develop problem solving abilities using computer.
- ➢ To have necessary skill set and analytical abilities for developing computer-based solutions for real life problems.
- ➢ To imbibe quality software development practices.
- ➢ To have awareness about process and product standard.
- ➢ To have Professional skills related to software industry.
- ➢ To have necessary knowledge base for research and development in Computer Science

B.C.A

Program Outcomes

- ➢ To demonstrate comprehensive disciplinary knowledge gained during course of study.
- ➢ To develop ability to communicate effectively on general and scientific topics with the scientific community and with society at large.
- ➢ To develop capability of applying knowledge to solve scientific and other problems.
- ➢ To develop capablity to learn and work effectively as an individual, and as a member or leader in diverse teams, in multidisciplinary settings.
- ➢ To develop ability of critical thinking, analytical reasoning and research-based knowledge including design of experiments, analysis, and interpretation of data to provide conclusions.
- ➢ To develop ability to use and learn techniques, skills, and modern tools for scientific practice.
- ➢ To develop ability to apply reasoning to access the different issues related to society and the consequent responsibilities relevant to the professional scientific practices.
- ➢ To develop aptitude to apply knowledge and skills that are necessary for participating in learning activities throughout the life.
- ➢ To develop ability to design and develop modern systems which are environmentally sensitive and to understand the importance of sustainable development.
- ➢ To develop ability to demonstrate knowledge and understanding of the scientific principles and apply these to manage projects.

Information technology

Program Outcomes

- ➢ To design and use spreadsheets and database applications for business processes and tracking.
- ➢ To develop the ability to function effectively in teams to accomplish a common goal.
- ➢ To design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- ➢ To analyse a problem and identify and define the computing requirements for the appropriate solutions
- ➢ To develop written and oral presentations of information technology solutions appropriate for a wide range of audiences
- ➢ To develop an ability to communicate effectively with a range of audiences.

- ➢ To develop an understanding of professional, ethical, legal, security, and social issues and responsibilities. Explain ethical and legal issues impacting information technology.

Multi-Media

Program Objectives

- ➢ To have problem solving ability- to assess social issues (societal, health, safety, legal and cultural) and engineering problems.
- ➢ To have adaptive thinking and adaptability in relation to environmental context and sustainable development
- ➢ To have a clear understanding of professional and ethical responsibility
- ➢ To have cross cultural competency exhibited by working independently or as a member of team.
- ➢ To have a good working knowledge of communicating in English – communication with engineering community and society

B. A B.Ed. & B. Sc B.Ed. (Four years integrated course)

Program Outcomes

- ➢ Students will develop understanding of the concepts of teaching and learning.
- ➢ Students will be able to think critically and creatively about scientific problems and experiments.
- ➢ Students can have careers in science those whose interests lie in research or teaching.
- ➢ Students will be able to have jobs in industries or other sectors.
- ➢ Students will have an ability to work efficiently in diverse fields of sciences.
- ➢ They will be able to use subject specific pedagogical knowledge and skills.
- ➢ They will be able to appreciate the role of teacher in prevailing socio-cultural and political system in general and education system.
- ➢ They will be able to translate broad objectives of secondary education in terms of specific programs and activities in relation to the curriculum.
- ➢ They will be able to integrate and apply ICT in facilitating teaching-learning process and school management.
- ➢ They will be able to develop an understanding of paradigm shift in conceptualizing disciplinary knowledge in school curriculum.
- ➢ They will be able to integrate general studies comprising science, social sciences, and professional studies to provide a strong foundation to future teachers.

M.Sc. HOME SCIENCE

FOOD & NUTRITION

Program Outcomes

- ➢ To make the students comprehend the theories of nutritional biochemistry, food science, human nutrition, therapeutic nutrition, and community nutrition.
- ➢ To assist the learners in acquiring the methods of assessment of human nutrition requirements and diet planning
- ➢ To relate the application of concepts of the above-mentioned areas to laboratory settings

- ➢ To comprehend the implementation of therapeutic nutrition, to communicate the health promotion, food science and food service management.
- ➢ To advance knowledge and improve abilities for monitoring, planning and management of community nutrition programs executed by the government.
- ➢ To gain expertise to carry out methodical investigation in the areas of community nutrition, food science and therapeutic nutrition.
- ➢ To evaluate nutrition status and design suitable diets.
- ➢ To use the information about nutrition in therapeutical conditions and health promotion communications.
- ➢ To work in the arena of community nutrition as program organizers and supervisors
- ➢ To work as nutrition expert and quality assurance specialist
- ➢ To run a food service institution.
- ➢ To apply theoretic knowledge and practical exercises for investigation in the arena of community nutrition, food science and therapeutic nutrition.

Human Development

Program Outcomes

The Post-Graduate Program in Human Development will focus on developing knowledge and competence for:

- ➢ Teaching and research in academic and other institutions.
- ➢ Planning and conducting intervention, guidance, and advocacy for empowerment of families and communities.
- ➢ Supervisory, training and consultancy roles and responsibilities in Government and non-government agencies/institution.
- ➢ Entrepreneurship in specific areas of human development and family studies.
- ➢ Planning, monitoring and evaluation of various programs for children and families.
- ➢ Advocacy and policy related roles.

Clothing and Textiles

Program Outcomes

- ➢ To provide professional education covering the whole spectrum of activities in clothing and textiles, and develop "all –round" graduates with vision and a global outlook, a sense of social responsibilities, critical and creative thinking ability
- ➢ To conduct research to create and disseminate knowledge to the academic community, industry, society and the world at large
- ➢ To further enhance learning and teaching in both teaching methodology and practice, the implementation of outcome-based learning, maintain and upgrade an environment that facilities learning, with an aim to stimulate students interest in learning
- ➢ To lead and enhance the development of the clothing and textile industry.
- ➢ To apply professional knowledge for the betterment of mankind
- ➢ To advance knowledge and push the boundaries in the clothing and textiles

- To nurture graduates to be creative, critical, innovative and ethical leaders

M.Sc. Mathematics

Program Outcomes

- To inculcate critical thinking to carry out scientific investigation objectively without being biased with preconceived notion.
- To equip the student with skills to analyse problems, formulate a hypothesis, evaluate, and validate results, and draw reasonable conclusions thereof.
- To prepare students for pursuing research or careers in industry in mathematical sciences and allied fields.
- To imbibe effective scientific and/or technical communication in both oral and writing.
- To continue to acquire relevant knowledge and skills appropriate to professional activities and demonstrate highest standards of ethical issues in mathematical sciences.
- To create awareness to become an enlightened citizen with commitment to deliver one's responsibilities within the scope of bestowed rights and privileges.
- To develop understanding of the fundamental axioms in mathematics and capability of developing ideas based on them.
- To inculcate mathematical reasoning.
- To prepare and motivate students for research studies in mathematics and related fields.
- To provide knowledge of a wide range of mathematical techniques and application of mathematical methods/tools in other scientific and engineering domains.
- To provide advanced knowledge on topics in pure mathematics, empowering the students to pursue higher degrees at reputed academic institutions.
- To create strong foundation on algebraic topology and representation theory which have strong links and application in theoretical physics, in particular string theory.
- To develop good understanding of number theory which can be used in modern online cryptographic technologies.
- To nurture problem solving skills, thinking, creativity through assignments, project work.
- To assist students in preparing (personal guidance, books) for competitive exams e.g., NET, GATE, etc.