



# JAIPUR NATIONAL UNIVERSITY

THE SEEDLING GROUP OF EDUCATIONAL INSTITUTIONS

Approved by UGC, Accredited by NAAC

Thinks Beyond

## P R O S P E C T U S

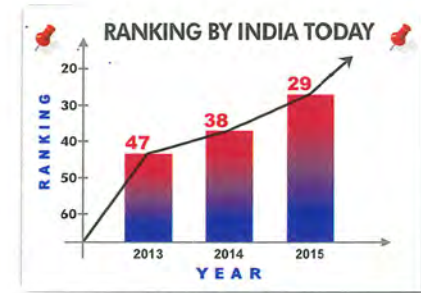


2016-17



# Journey towards Excellence....

Ranked Amongst Top  
30 Best Universities in the country  
(India Today)



TOP 30 UNIVERSITIES			REPUTATION OF THE UNIVERSITY	QUALITY OF ACADEMIC INPUT	FACULTY	RESEARCH PUBLICATIONS/REPORTS/PROJECTS	STUDENT CARE	INFRASTRUCTURE	INNOVATION AND GOVERNANCE	ADMISSION PROCEDURE	PLACEMENT OPPORTUNITIES	GLOBAL EXPOSURE	SECURITY ARRANGEMENTS FOR STUDENTS	TOTAL PERCEPTUAL SCORE	PERCEPTUAL RANKING	TOTAL FACTUAL SCORE	FACTUAL RANKING	FINAL SCORE	FINAL RANKING	INDEXED TO 100	
> 1	1	1	University of Delhi, Delhi	1	1	1	1	1	1	1	1	1	1	73060	1	11838	1	42449	1	100.00	
A 2	3	4	Banaras Hindu University, Varanasi	2	2	2	2	4	4	3	3	3	3	45392	3	8973	9	27182	2	64.04	
A 3	4	3	Jawaharlal Nehru University, New Delhi	5	4	3	3	2	3	2	2	2	2	45606	2	8525	10	27065	3	63.76	
A 4	6	8	Aligarh Muslim University, Aligarh	3	3	4	4	3	2	4	4	4	4	41756	4	8975	8	25366	4	59.76	
A 5	7	7	Osmania University, Hyderabad	4	5	5	6	6	6	7	5	5	6	28685	5	10219	5	19452	5	45.82	
V 6	5	6	University of Hyderabad, Hyderabad	6	7	6	7	5	5	5	7	7	5	26389	6	8447	11	17418	6	41.03	
A 7	8	9	Jamia Millia Islamia, Delhi	6	6	6	4	6	8	6	6	8	7	25639	7	5220	24	15430	7	36.35	
A 8	10	12	Andhra University, Visakhapatnam	9	9	10	10	9	9	9	9	9	8	14494	9	10952	2	12723	8	29.97	
A 9	26	19	University of Kerala, Thiruvananthapuram	8	8	8	8	8	7	8	8	6	8	20899	8	4006	29	12452	9	29.33	
A 10	15	13	Kurukshetra University, Kurukshetra	10	15	11	11	10	11	13	12	13	13	9440	13	10724	3	10082	10	23.75	
A 11	18	23	Christ University, Bengaluru	10	10	9	9	11	10	13	11	10	10	11785	10	7513	16	9649	11	22.73	
A 12	17	22	Guru Nanak Dev University, Amritsar	14	11	14	11	11	11	10	12	11	10	10220	12	7795	14	9008	12	21.22	
V 13	11	16	Bangalore University, Bengaluru	10	11	11	11	11	11	10	13	10	11	10432	11	7275	17	8854	13	20.86	
V 14	12	18	M.S. University, Baroda, Vadodara	14	11	11	11	11	15	13	13	13	13	9052	14	8209	12	8630	14	20.33	
V 15	13	15	Birla Institute of Technology & Science, Pilani	17	19	14	11	11	11	12	13	16	13	7848	15	6610	19	7229	15	17.03	
A 16	30	-	Symbiosis International University, Pune	20	14	17	16	21	16	20	21	26	20	4262	18	9946	6	7104	16	16.74	
A 17	20	31	Banasthali Vidyapeeth, Jaipur	18	22	19	23	19	25	21	19	19	19	1832	21	10298	4	6065	17	14.29	
A 18	39	46	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	13	16	16	17	16	16	13	16	15	18	17	6706	16	5287	23	5997	18	14.13
A 19	23	25	University of Calicut, Malappuram	20	17	19	17	16	22	17	17	17	17	4328	17	6316	20	5322	19	12.54	
A 20	21	17	Jain University, Bengaluru	20	22	19	19	18	19	18	24	26	24	25	1749	22	8124	13	4936	20	11.63
V 21	19	21	Amity University, Noida	27	22	19	23	21	25	25	24	26	24	19	204	30	9618	7	4911	21	11.57
> 22	22	-	Himachal Pradesh University, Shimla	27	22	19	23	21	25	21	17	17	24	25	906	25	6799	18	3852	22	9.07
A 23	32	42	SRM Institute of Science and Technology, Kancheepuram	27	22	19	23	21	25	25	24	26	24	24	102	33	7581	15	3842	23	9.05
A 24	25	-	Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur	16	17	19	19	21	16	18	19	19	21	19	3051	19	4598	28	3825	24	9.01
A 25	44	49	Mahatma Gandhi Kashi Vidyapeeth, Varanasi	20	22	18	19	20	22	23	21	23	21	23	2055	20	4907	26	3481	25	8.20
A 26	34	35	Bharati Vidyapeeth, Pune	18	20	19	23	21	21	25	24	19	24	19	1365	24	5136	25	3250	26	7.66
A 27	28	39	Burdwan University, Burdwan	27	22	19	19	21	22	23	21	23	16	25	1597	23	4806	27	3201	27	7.54
A 28	42	-	Saurashtra University, Rajkot	20	22	19	23	21	19	25	24	26	24	25	679	26	5695	21	3187	28	7.51
A 29	38	47	Jaipur National University, Jaipur	27	22	19	23	21	25	25	24	25	24	25	142	31	5578	22	2860	29	6.74
A 30	-	48	Hemchandracharya North Gujarat University, Patan	27	22	19	23	21	25	25	24	19	24	25	283	28	3928	31	2106	30	4.96

\*\*\* Calcutta University, Kolkata, Goa University, Panaji, SNDT Women's University, Mumbai, Utkal University, Bhubaneswar, Sant Gadge Baba Amruti University, Amruti are not featured in this ranking as they could not share factual data on time

# MESSAGE



**Mrs. Mohini Bakshi**  
Chairperson

Education is important for every individual in a nation. It plays a vital role in changing the face of a country's economy. No country can bring about a revolution in its society unless its people are educated enough to meet the challenges of nation building.

To fulfill these requirements, there must be technical programmes which cater to the technological requirements of the industry while at the same time focusing on original research and development required to project the nation at an international level. Our country today needs advanced technical education to keep pace with the developed countries. Jaipur National University runs such multi-disciplinary programmes in various technical fields.

Jaipur National University is the result of a holistic vision encompassing excellence in education at all levels. Students at the University are empowered with skills and knowledge required by them to meet challenges in a competitive work environment. University education, we believe should become an integral aspect of the development process in the country.

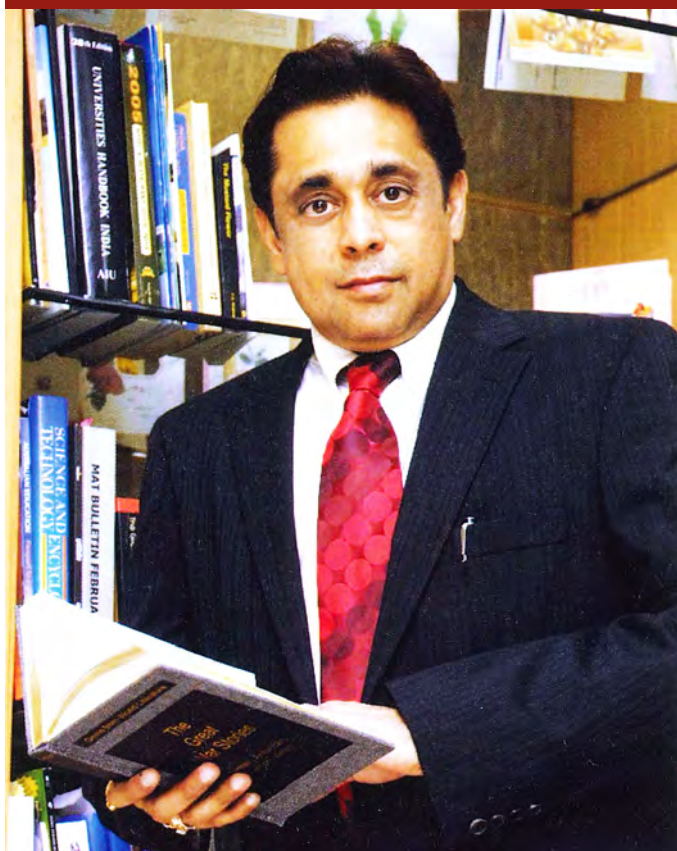
Courses offered at the University are designed to be innovative and contemporary and include disciplines like Engineering, Mass Media, Animation, Information Technology, Computer Science, Law, Pharmacy, Hotel Management, Life Sciences, Education, Languages and Basic Sciences, etc.

At Jaipur National University, we are committed to the creation of thorough professionals and welcome students who aspire to excel.

**From the desk of Chairperson, Mahima Shiksha Samiti**



# MESSAGE



**Dr. Sandeep Bakshi**  
Chancellor/Chairman

Success in life is a matter of concentration and perseverance. The prime duty of education is to give direction to the youth so as to channelize their creative energies towards productive, purposeful and innovative work. Envisaging the emerging trends in education, JNU aims at holistic development of students, maintaining its scholarly ethos by honing and empowering the skills with desired level of competence and character.

Jaipur National University has pioneered efforts to facilitate intellectual stimulation to generate, maintain and disseminate knowledge and to empower the students to meet the challenges of a collaborative and competitive globalized environment. Synergizing excellence through world class ambience among the young aspirants, JNU institutes a culture of inclusiveness and provides a wide access to higher education opportunities. The university has initiated trends which impact global educational policies and practices.

Jaipur National University offers innovative programmes in diverse disciplines addressing the emerging needs of the society. We not only aim at achieving excellence in post graduate and under graduate teaching and learning but also insist on providing high quality research leading to creation and dissemination of knowledge. Facilitated with conducive, high-tech infrastructure and excellent academic support services around the vibrant and sprawling campus, JNU has gained wide international exposure and recognition and has become home to thousands of students, including students from Nigeria, Sudan, Nepal, Malaysia and Bhutan. The unprecedented placements of students in top notch companies is yet another milestone achieved by the university catering to the students as well as the society.

Extra curricular activities are emphasized in such a way that the students are engaged at various levels on campus, joining clubs and organizations, in community service programmes as well as attending cultural and educational events, thereby, enriching their worldview and perspectives. The spectacular mega annual event, "Technorazz" provides students with opportunities to stage their boundless talents and promotes a sense of solidarity and respect in the midst of diversity. Regular curriculum-planning, development and execution, timely evaluation of students' performance and holding annual convocation every year are some of the notable features of the University. With the gradual development of web based technology, online teaching has evolved as one of the important channels of distance learning. The School of Distance Education proudly caters to more than 15000 students, and new courses are introduced as per the emerging requirement.

The University is already in the process of noble field of Medical-Education. The rewards of a JNU degree are numerous and long lasting- from job satisfaction to a better understanding of the world. We aim at making our students experienced in critical thought, appreciative of creative expression, proficient in effective communication, aware of ethical standards and rooted in universal and humanistic values. We work to turn what you love into a rewarding career –to turn your passion into a profession.

I welcome the new students with great pride and delight to "Jaipur National University" to find the wealth of learning opportunities in the hub of excellence. I wish you the best in life!

**From the desk of Chancellor/ Chairman**



# MESSAGE



**Professor K.L. Sharma**  
Pro-Chancellor/Pro-Chairman

"If progress is to be steady we must have long term guides extending far ahead."  
As one of the best universities of India, Jaipur National University, Jaipur (JNU) has an impact not only at local and national levels but at international level too, with the collaborations and associations of many renowned national/foreign institutions. Jaipur National University is recognized as a socially-inclusive institution of higher education in various professional and technical sectors. Since its inception in 2007, the University has been consistently attracting students from all parts of India and abroad.

We endeavour to produce thinking minds with a bright vision of the future driven by a mission to make a difference in the workplace, through deep sense of dedication, integrity and tenacity. With around 10000 students and over 400 faculty members – 16 schools are striving to accomplish the noble Vision and Mission of the University. By working closely with our students' community, we are indeed proud to play a leadership role in stimulating innovative spirits, fostering inquisitiveness and enhancing independent thinking both in our students and faculty members.

We get motivation and inspiration from the Government, Society, and Industries along with our students' community to proceed towards rapid socio-economic transformation in order to establish the image of a "student-centred institution". Besides, the University also organizes various co-curricular activities to provide a global platform to the students for their overall development. We strongly value our collaborations with industries, professional associations and institutions of higher education in India and abroad.

I congratulate the students on their new venture through Jaipur National University as it offers a unique opportunity to the students to become a part of the learning process in an open and advanced academic environment.

Best Wishes!!

**From the desk of Pro-Chancellor/ Pro-Chairman**



# MESSAGE



**Professor H. N. Verma**  
Vice-Chancellor/ President

Jaipur National University, a universally renowned name in the field of technical and professional education, aims at providing its students with excellent career. The University offers several programmes of study and research at Bachelors, Masters and Doctoral levels. Jaipur National University, comprises various magnetic characteristics in the form of great academic reputation, competent faculty, grand infrastructure and soothing surroundings. Each of the programmes offered by the University makes you do and feel something innovative. The University focus on your all round development. For this purpose it holds a number of extra-curricular programmes, as games and sports activities and social and cultural events. Your search for a platform to develop your multi-faceted skill-set, in-depth knowledge, holistic personality development and realization of dreams has brought you to your ideal destination in the form of Jaipur National University –an ideal destination for education. The campus offers a cosmopolitan ambience to its students coming from different parts of India and the globe. Several active clubs in the University inspire students to participate in workshops and seminars, organize competitions and brainstorming sessions which help our students in developing their potential to meet demands and expectations of organizations and institutions in diverse sectors.

I take pride in saying that most of the teachers are well recognized at the national and international levels on the basis of their published works and the honours/awards which they have received in recognition of their scholarship. Coming to the placement record of the University one finds its students working at prestigious positions in reputed corporate, business houses and research institutions.

Jaipur National University has secured a prominent position in the field of education in a small span of seven years, from being a small engineering and management institution to becoming one of the best technical and professional educational destinations in the country.

If you desire to realize your dreams realized I can definitely assure you that being a part of this University will ensure that you have a bright and successful future.

**From the desk of Vice-Chancellor/ President**



# MESSAGE



**Dr. Preeti Bakshi**  
Executive Director

"We know what we are, but know not what we may be."  
- William Shakespeare

Welcome to Jaipur National University. When we opened the doors of the Seedling Academy of Design & Technology and Management in 2002, we immediately got to work assembling a dozen world-class faculty and experts to address major academic issues. As we work together to explore ways to change the world we must recognize that we are interdependent upon each other for success both culturally and intellectually. To realize actual and sustainable change in our attitudes and communities, we need to embrace our individual differences while celebrating our commonality. Thus we intend to help students to explore career options and their professional skills, abilities and interests, while working with them to gain valuable work experiences as well as preparing them for fulfilling careers.

The diverse and welcoming community of the University established in 2007 is the perfect setting for students to gain the knowledge and experiences necessary for modern global workplace. The university collaborates with a range of business organizations and industries to ensure the programmes we offer are as desired in today's global workplace. From Biotechnology to Literature and Education to Business & Engineering, there is variety in the programmes to enable students' professional development. We invite the students to come and explore the many ways this university should be their new home away from home. Through community-based programmes, cooperative education, internships, distance learning, and research projects, students can lay hands upon experience that will help their careers in the real world following graduation. Whether it's preparing students to take their place in an ever-changing world, conducting cutting-edge research to improve lives, or partnering with local communities and businesses, Jaipur National University is making an impact, both locally and globally.

Within the rigorous yet caring learning environment of JNU, students acquire intellectual and practical skills needed for effective and inclusive development and health care systems. With one of the largest and most innovative course offerings of any development studies programmes in India, students have flexibility to concentrate their learning in many fields of development. With most of our students coming from different states and developing countries, Jaipur National University is a stimulating blend of cultures, experiences and ideas that are shaping the values and ethics of development and its practice worldwide.

As the Executive Director of Jaipur National University, I heartily welcome all the students and reaffirm our commitment to continuing its long tradition as a global university.

Have a great year ahead!

**From the desk of Executive Director**



# About the University

Jaipur National University, Jaipur, a Private self-financed University, sponsored by Mahima Shiksha Samiti, came into existence on October 22, 2007, through an Ordinance of the Government of Rajasthan. The University is one of the many institutions of the Seedling Group of educational institutions under the aegis of the Mahima Shiksha Samiti.

The University received mandatory approvals and recognitions for its programmes from the National Regulatory Bodies, namely, UGC, AICTE, PCI, NCTE, BCI and Nursing Council of India. The School of Distance Education and Learning of the University has also been recognised and approved by the Joint Committee of the UGC-AICTE-DEC.

Furthermore, the University has earned the trust and goodwill from the student fraternity, parents, public and the concerned agencies for its excellence in teaching and emphasis on high standards of research work.

In a short span of seven years, Jaipur National University has carved a niche for itself in the country for its commitment to providing quality education and offering a conducive learning environment. The University is becoming a preferred choice for professional and technical education, as well as for lovers of quality academic pursuits.

The University aims to meet the demands and challenges of acquiring knowledge and learning of life-skills, with a difference. Academic flexibility is achieved through interdisciplinary teaching and research.

Extensive studies, semester system, regular evaluation, advisory system, functional research and interrelated degree programmes are its salient features.

Keeping in view the philanthropic orientation of the Sponsoring Body and the Policies of the State, the University is fulfilling its social responsibility by awarding Scholarship and freeships. The university is committed to providing quality education for the development of the students, thereby contributing to the progress of the State and Society at large.

## Vision

To promote and impart quality professionals and bring about technical education and holistic transformation of students to make them globally competent in this complex and challenging world.

## Mission

Emphasis on student centric learning to inspire critical thinking, personal growth and lifelong passion for learning.

Commitment to the highest standards of academic rigour and vitality. Serving social, cultural and economic needs of the community & the society



# Location of the University

Jaipur National University is located in the capital of Rajasthan, Jaipur a well-known tourist destination for both Indians and foreigners. Its palaces, forts, gardens and museums are architectural marvels. Jaipur is known for its art and craft and gems & jewellery industry throughout the world.

The University Campus is aesthetically designed covering an area of more than 120 acres. With the Aravali Hills on one side and the sprawling green fields on the other, Jaipur National University presents a perfect panorama of the vision of a University given by Gurudev Tagore.

Jaipur is fast emerging as a hub of higher professional education in India on the pattern of Pune, Bengaluru and Hyderabad. The University is situated close to the city and the airport. One can reach the University from the main Railway Station and Central Bus Stand within half an hour.

The proximity of Jaipur to Delhi is an added advantage. The National Super-Express Highway No. 8 has reduced the distance between both the cities to four hours. Besides extensive road connectivity, Jaipur is easily approachable by Rail and Air from all major cities of India, including Mumbai, Ahmedabad, Delhi, Kolkata, Bengaluru and Hyderabad.



# School of Engineering and Technology

The School of Engineering & Technology is well equipped to educate and train students in different Engineering Programmes.

## UG Programmes

School of Engineering & Technology

B.Tech. (Biotechnology)

B.Tech. (Chemical Engineering)

B.Tech ( Civil Engineering)

B.Tech (Computer Science Engineering)

B.Tech (Electrical Engineering)

B.Tech. (Electronics & Communication Engineering)

B.Tech. (Food Technology)

B.Tech. (Mechanical Engineering)

B.Tech + MBA (Dual degree)

## PG Programmes

M.Tech. CSP (Communication and Signal Processing)

M.Tech. EES (Embedded System)

M.Tech. PSE (Power System Engineering)

M.Tech. CSE (Control System Engineering)

Ph.D. (Electronics & Communication Engineering)



# Electrical Engineering

Electrical Engineering focuses on the study of generation, transmission, storage and utilization of electrical energy. Some of its important domains are Control Engineering with emphasis on accuracy in controlling equipment in electrical and chemical industries as well as residential and commercial multiplexes.

## Programme Structure

Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Electrical Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET + PI
B.Tech Electrical Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET + PI
M. Tech in Power System Engineering	2 Years	B.Tech with min. 55%	ET + PI
M.Tech in Control System Engineering	2 Years	B.Tech with min. 55%	ET + PI

## Courses offered in B.Tech Electrical Engineering (BTEE)

Semester	Course Title
I	English
	Engineering Mathematics –I
	Engineering Physics - I
	Engineering Chemistry – I
	Introduction to IT
	Fundamentals of Electrical Science
	Language Lab.
	Engg. Physics Lab. I
	Engg. Chem. Lab. I
	PC Software Lab.
	Practical Geometry
	Engineering Workshop Practice
	General Proficiency (C)
	Environmental Studies





Semester		Course Name
II		English
		Engineering Mathematics – II
		Engineering Physics - II
		Engineering Chemistry – II
		Programming and Problem Solving using ‘C’ Language
		Fundamentals of Electronics
		Mechanical Engineering
		Communication Techniques
		Engg. Physics Lab II
		Engg. Chem. Lab II
		Comp. Prog. Lab
		Machine Drawing
		Basic Electronics Lab.
		General Proficiency (C)
III		Electronic devices & circuits-I
		Computer programming-I
		Circuit Analysis-I
		Electrical Machines-I
		Electrical Measurements &Measuring Instruments
		Mathematics-III
		Electronic devices & circuits Lab-I
		Computer programming Lab-I
		Circuit Analysis Lab
		Electrical Machines Lab-I
		Electrical Measurement Lab
IV		Discipline & Extra Curricular Activities
		Electronic Devices & Circuits-II
		Digital Electronics
		Electrical Machine-II
		Computer Programming-II
		Circuit Analysis-II
		Instrumentation
		Electronic Devices & Circuits Lab-II
		Digital Electronics Lab
		Electrical Machine Lab. -II
		Computer Programming Lab-II
		Humanities & Social Sciences
		Discipline & Extra Curricular Activities

Semester		Course Name
V		Power Electronics-I
		Microprocessors & Interfacing
		Control System Engineering
		Principle of Communication System
		Transmission & Distribution
		Web Technol ogy
		Introduction to VLSI
		Generalized theory of electrical machine
		Nano Technology
		Non Convention Energy Resources
		Practical training seminar-I
		Microprocessor & Interfacing Lab-I
		Power Electronics Lab-I
		Control System Lab
		Professional Ethics & Disaster Management/ Entrepreneurship Development
	Discipline & Extra Curricular Activities	
VI		Digital Communication
		Modern Control System
		Power Generation & Control
		Power Electronics-II
		Electromagnetic Field Theory
		High voltage Engineering
		Microwave Engineering
		Advanced Microprocessor
		Data Base Management System Microcontroller
		Electrical & Electronics Engineering Materials
		Industrial Economics & Management
		Digital Communication Lab
		Power Electronics Lab-II
		Computer Based Power System Lab
		Discipline & Extra Curricular Activities



Semester	Course Name
VII	Utilization of Electric power including Traction
	Power System Analysis
	Protection of Power System
	Electric Drives and their control
	Power system engineering
	Power system Reliability
	Computer Networks
	Digital signal processing
	Advanced power systems
	Electric Machine Design
	Practical Training seminar-II
	Power system and High Voltage Lab
	Computer based electric machine design Lab
	Minor Project
	Discipline & Extra Curricular Activities
VIII	EHV AC/DC Transmission
	Artificial Intelligence Techniques
	Static Protective Relays
	Network Operating systems
	FACTS Devices & Their Application
	Advanced power Electronics
	Advanced Electrical Machines
	Computer Based power Systems Lab
	Power Electronics and control Lab
	Information Technology Lab
	Project
	Seminar
	Discipline & Extra Curricular Activities





**Courses offered in M.Tech Power System Engineering (MTPSE)**

Semester		Course Name
I		Advance Power System Analysis
		Power System Stability
		Electrical Distribution System
		Advanced Power Electronics
		Renewable Power Generation Sources
		Industrial Control Electronics
		Writing Skills And Presentation-I
		Power Electronics Simulation Lab
		Power System Optimization &Control
II		Advanced Power System Protection
		Transient Over Voltages in Power System
		Advanced Distribution Systems
		Power Quality
		System Theory
		Restructured Power System
		Power Electronic Drives
		Writing Skills & Presentation-II
		Control System Simulation Lab
III		EHV AC/DC Transmission & FACTS
		Smart Grid Technologies & Application
		Power System Simulation Lab
		Dissertation Part I
IV		Dissertation Part II

**Courses offered in M.Tech Control System Engineering MTCSE**

Semester		Course Name
I		Basic Control System
		Systems Engineering
		Digital Control Systems
		Real Time Instrumentation Techniques
		Advance PowerElectronics
		Linear System Theory
		Robot Dynamics &Control
		Writing Skills & Presentation-I
		Simulation Lab
II		Control Devices
		Modern Control System
		Non-Linear And Adaptive Control
		Optimal And Robust Control
		Multi-Variable Control System
		Measurement System& ErrorAnalysis
		Power System Dynamics &Control
		Writing Skills & Presentation-II
		Control System Lab
III		Control Systems Design
		Drives andcontrol
		Intelligent Control
		Digital Signal Processing
		Microprocessor Based ControlSystem
		Advance Control System Lab
		Dissertation Part -I
IV		Dissertation Part-II



# Mechanical Engineering

Mechanical Engineering is one of the most sought after branch of Engineering, which forms the foundation for the other disciplines of engineering. Mechanical Engineering graduates get employed in the manufacturing industries of computer and electronic products, machinery, automotive, aerospace and defence services

## Programme Structure

Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Mechanical Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
B.Tech Mechanical Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI



## Courses offered in B.Tech Mechanical Engineering (BT-ME)

Semester	Course Name
I	English
	Engineering Mathematics –I
	Engineering Physics - I
	Engineering Chemistry – I
	Introduction to IT
	Fundamentals of Electrical Science
	Language Lab.
	Engg. Physics Lab. I
	Engg. Chem. Lab. I
	PC Software Lab.
	Practical Geometry
	Engineering Workshop Practice
	General Proficiency (C)
	Environmental Studies
II	English
	Engineering Mathematics – II
	Engineering Physics - II
	Engineering Chemistry – II
	Programming and Problem Solving using 'C' Language
	Fundamentals of Electronics
	Mechanical Engineering
	Communication Techniques
	Engg. Physics Lab II
	Engg. Chem. Lab II
	Comp. Prog. Lab
	Machine Drawing
	Basic Electronics Lab.
	General Proficiency (C)
III	MECHANICS OF SOLIDS-1
	MATERIAL SCIENCE AND ENGINEERING
	ENGINEERING THERMODYNAMICS
	MANUFACTURING PROCESSES
	OBJECT ORIENTED PROGRAMMING IN C ++
	ADVANCED ENGINEERING MATHEMATICS
	MATERIAL SCIENCE AND TESTING LAB.
	BASIC MECHANICAL ENGINEERING LAB
	PRODUCTION PRACTICE-I
	COMPUTER PROGRAMMING LAB.
	MECHANICAL ENGINEERING DRAWING
	DISCIPLINE & EXTRA- CURRICULAR ACTIVITY



Semester		Course Name
IV		KINEMATICS OF MACHINES
		FLUID MECHANICS & MACHINES
		MACHINING AND MACHINE TOOLS
		DESIGN OF MACHINE ELEMENTS – I
		INDUSTRIAL ENGINEERING
		I.C. ENGINES
		KINEMATICS OF MACHINES LAB
		FLUID MECHANICS LAB
		PRODUCTION PRACTICE-II
		MACHINE DESIGN SESSIONAL-I
		THERMAL ENGINEERING LAB-1
		DISCIPLINE & EXTRA- CURRICULAR ACTIVITY
	V	
		DYNAMICS OF MACHINES
		MEASUREMENT & METROLOGY
		QUALITY ASSURANCE AND RELIABILITY
		SOCIOLOGY AND ECONOMICS FOR ENGINEERS
		5ME6.1N: COMPUTER AIDED DESIGN
		AUTOMOBILE ENGINEERING
		STATISTICS FOR DECISION MAKING
		HEAT TRANSFER LAB.
		DYNAMICS OF MACHINES LAB-II
		PRODUCTION ENGINEERING LAB.
		PROFESSIONAL ETHICS AND DISASTER MANAGEMENT
		DISCIPLINE & EXTRA- CURRICULAR ACTIVITY
VI		DESIGN OF MACHINE ELEMENTS - II
		NEWER MACHINING METHODS
		MECHATRONICS
		VIBRATION ENGINEERING
		STEAM ENGINEERING
		NON DESTRUCTIVE EVALUATION AND TESTING
		DESIGN AND MANUFACTURING OF PLASTIC PRODUCTS
		MAINTENANCE MANAGEMENT
		6ME7N: MACHINE DESIGN SESSIONAL-II
		INDUSTRIAL ENGINEERING LAB-I
		MECHATRONICS LAB
		VIBRATION Engineering LAB.
		DISCIPLINE & EXTRA- CURRICULAR ACTIVITY

Semester		Course Name
VII		FINITE ELEMENT METHODS
		REFRIGERATION AND AIR CONDITIONING
		OPERATIONS RESEARCH
		TURBOMACHINES
		OPERATIONS MANAGEMENT
		MICRO AND NANO MANUFACTURING
		ROBOTICS
		CNC MACHINES AND PROGRAMMING
		THERMAL ENGINEERING LAB-II
		FINITE ELEMENT LAB.
		Practical Training and Industrial Visit
		Project Stage-I
		DISCIPLINE & EXTRA- CURRICULAR ACTIVITY
VIII		COMPUTER INTEGRATED MANUFACTURING SYSTEMS
		LAWS FOR ENGINEERS
		POWER GENERATION
		PRODUCT DEVELOPMENT/DESIGN AND LAUNCHING
		CAM LAB.
		CAD LAB.
		INDUSTRIAL ENGINEERING LAB-II
		Project Stage-II
		Seminar
		DISCIPLINE & EXTRA- CURRICULAR ACTIVITY





# Electronics and Communication Engineering

Electronics and Communication Engineering is related to designing, development, testing and supervision of electronic devices & products.

The objective of the M.Tech. (Embedded System) is to provide in depth knowledge in various areas of Embedded System and to promote research and innovation. The syllabus has been designed to enable rigorous analysis in Embedded System.

The objective of the M. Tech programme in Communication and Signal processing is to provide in depth knowledge in electronics engineering and to promote innovation. The syllabus has been designed to enable rigorous analysis in signal process electronic devices and mathematical model

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Electronics and Communication Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
B.Tech Electronics and Communication Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
M.Tech Communication and signal Processing	2 Years	B.Tech with min. 55%	ET+PI
M.Tech Embedded System	2 Years	B.Tech with min. 55%	ET+PI
Ph.D in Electronics and Communication Engineering	Min. 2 Years	Min 55 % aggregate in M.Tech/M.E./M.Sc Electronics/M.Sc Physics with Electronics	ET+PI



## Courses offered in B.Tech Electronics and Communication Engineering (BTEEC)

Semester	Course Title
I	English
	Engineering Mathematics –I
	Engineering Physics - I
	Engineering Chemistry – I
	Introduction to IT
	Fundamentals of Electrical Science
	Language Lab.
	Engg. Physics Lab. I
	Engg. Chem. Lab. I
	PC Software Lab.
	Practical Geometry
	Engineering Workshop Practice
	General Proficiency (C)
	Environmental Studies
II	English
	Engineering Mathematics – II
	Engineering Physics - II
	Engineering Chemistry – II
	Programming and Problem Solving using 'C' Language
	Fundamentals of Electronics
	Mechanical Engineering
	Communication Techniques
	Engg. Physics Lab II
	Engg. Chem. Lab II
	Comp. Prog. Lab
	Machine Drawing
	Basic Electronics Lab.
	General Proficiency (C)
III	Analog Electronics I
	Mathematics-III
	Electronic Measurements & Instrumentation
	Electronic Materials & Processes
	Digital Electronics
	Environmental Engineering
	Data Structures & Algorithms
	Electrical Technology
	Analog Electronics Lab – I
	Digital Electronics Lab
	Instrumentation & Measurements Lab
	Minor Project-I
	Discipline & Extra Curricular Activities

Semester	Course Title
IV	Network analysis and Synthesis
	Electromagnetic Field Theory
	Telecommunication Engineering
	Microprocessors and Applications
	Object Oriented Programming
	Computer Graphics
	Data Base Management System
	Analog Electronics Lab –II
	Humanities & Social Sciences
	Network Lab
	Minor Project-II
	Discipline & Extra Curricular Activities
V	Automatic Control System
	Principles of Communication
	Signal & System
	Antenna & Wave Propagation
	Power Electronics
	Computer Oriented Numerical & Statistical Methods
	Biomedical Instrumentation
	Advanced Data Structures
	Communication Lab-I
	Microprocessors Lab
	Internship Program Seminar
	Minor Project-III
	Discipline & Extra Curricular Activities
VI	Digital Communication
	Digital Signal Processing
	Microwave and Radar Engineering
	VLSI Technology
	Audio Video Systems
	VLSI Design
	Parallel Computation & Architecture
	Optimization Techniques
	Microwave Lab
	Communication Lab - II
	Electronics CAD
	Minor Project-IV
	Discipline & Extra Curricular Activities

Semester	Course Title
VII	Optical Fiber Communication
	Mobile Communication
	Artificial Neural Networks
	VHDL
	Computer Architecture
	Advanced Signal Processing
	Advanced Microprocessors
	Artificial Intelligence and Expert System
	Signal Processing & Fiber Communication lab
	VLSI Lab
	Seminar
	Minor Project-V
	Discipline & Extra Curricular Activities
VIII	Advanced Microprocessors & Micro-Controllers
	Nanotechnology
	Computer Networking
	Introduction to Embedded Systems
	Digital Image Processing
	CMOS RF Circuit Design
	Advanced Microprocessors & Micro-Controllers Lab
	Advanced VLSI and DSP lab
	Industrial Economics & Management
	Seminar
	Major Project
	Discipline & Extra Curricular Activities





### Courses offered in M.Tech Communication and Signal Processing (MTCSP)

Semester	Course Title
I	Antenna Theory
	Signal Theory
	Digital Signal Processor and Architecture
	Advance DSP Lab
	Wireless Communication Lab
	Satellite Communication and Phase array
II	Digital Communication System
	Embedded system for Wireless and Mobile Communication
	Information Theory And Coding
	Advanced Communication Lab
	Technical Report Writing & Communication Skills
	Solid State Microwave Devices
III	Advanced signal processing
	Advanced optical communication
	Telecommunication Switching and networks
	Advanced mobile communication
	Advanced embedded system
	Pre Dissertation Seminar
	1. Dissertation
IV	2. Report

### Courses offered in M.Tech Embedded System (MTEES)

Semester	Course Title
I	Microcontroller for Embedded System Design
	Digital System Design
	Digital Signal Processor and Architecture
	Advance DSP Lab
	Embedded Microcontrollers Lab
	CPLDs, FPGA Architecture and Application
II	Embedded Real Time Operating System
	Embedded System for Wireless and Mobile Communication
	HDLs for Embedded Systems
	Modeling and Simulation Lab
	Technical Report Writing & Communication Skills
	Embedded C
III	Embedded Computing System Design
	Advanced Computer Architectures
	Design of CAD Tools for Embedded System Design
	Embedded Networking
	Memory Design and Testing
	Pre Dissertation Seminar
	1. Dissertation
IV	2. Report



## Courses offered in B.Tech Civil Engineering (BTECE)

Semester	Course Title
I	English
	Engineering Mathematics –I
	Engineering Physics – I
	Engineering Chemistry – I
	Introduction to IT
	Fundamentals of Electrical Science
	Language Lab.
	Engg. Physics Lab. I
	Engg. Chem. Lab. I
	PC Software Lab.
	Practical Geometry
	Engineering Workshop Practice
	General Proficiency (C)
	Environmental Studies
II	English
	Engineering Mathematics – II
	Engineering Physics – II
	Engineering Chemistry – II
	Programming and Problem Solving using 'C' Language
	Fundamentals of Electronics
	Mechanical Engineering
	Communication Techniques
	Engg. Physics Lab II
	Engg. Chem. Lab II
	Comp. Prog. Lab
	Machine Drawing
	Basic Electronics Lab.
	General Proficiency (C)
III	STRENGTH OF MATERIAL -I
	CIVIL ENGINEERING MATERIAL
	ENGINEERING GEOLOGY
	BUILDING PLANNING & CONSTRUCTION TECHNOLOGY
	FLUID MECHANICS
	ADVANCED ENGINEERING MATHEMATICS
	Civil Engineering Material AND CONCRETE Lab
	Engineering Geology Lab
	Building Drawing- I
	Fluid Mechanics Lab.
	Professional Ethics And Disaster Management
	Discipline & Extra Curricular Activity

# Civil Engineering

Civil Engineering focuses on planning, designing and building infrastructure of world-class, which includes Water works, Sewer system, Dams, Hydro Power Plants, Railways & Roadways, Highways, Bridges, Tunnels, Irrigation canals, River navigation, Traffic control, Mass transit, Airport runways, Terminals, Industrial plants, Buildings and Skyscrapers etc.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Civil Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
B.Tech Civil Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI





Semester		Course Title
IV		Strength of Materials-II
		Concrete Technology
		Hydraulics & Hydraulic Machines
		Surveying-I
		Building Planning
		Quantity Surveying & Valuation
		Concrete Technology Lab
		Hydraulics & Hydraulic Machines Lab
		Surveying Lab-I
		Building Drawing-II
		Material Testing Lab
		Discipline & Extra Curricular Activity
V		Theory of Structures-I
		Environmental Engineering-I
		Geotechnical Engineering-I
		Surveying-II
		Hydropower Engineering
		Ground Improvement Techniques
		Advanced Concrete Technology
		Solid Waste Management
		Environmental Engineering Lab-I
		Geotechnical Engineering Lab-I
		Surveying Lab-II
		Computer Aided Building Design
		Structural Engineering Lab
		Discipline & Extra Curricular Activity
	VI	
		Geotechnical Engineering-II
		Environmental Engineering-II
		Design of Concrete Structures-I
		Transportation Engineering -I
		Remote Sensing & GIS
		Rock Mechanics
		Repair Maintanace & Rehabilitation of Structures
		Geotechnical Engineering Lab-II
		Environmental Engineering Lab-II
		Concrete Structures Design-I
		Road Material Testing Lab
		Discipline & Extra Curricular Activity

Semester		Course Title
VII		Water Resource Engineering -I
		Design of Steel Structures-I
		Design of Concrete Structures-II
		Transportation Engineering -II
		Application of Numerical Methods in Civil Engineering./ Engineering hydrology.
		Advance Transportation Engineering
		Design of Prestress Concrete Structures
		Rural Water Supply & Sanitation
		Design of Water Resources Structures -I
		Steel Structures Design-I
		Concrete Structures Design-II
		Application of Numerical Methods in Civil Engineering Lab/Engineeing Hydrology
		Practical Training & Industrial Visit
		Project-I
VIII		Discipline & Extra Curricular Activity
		Water Resource Engineering -II
		Design of Steel Structures-II
		Project Planning & Construction Management
		Bridge Engineering
		Advance Foundation Engineering
		Earthquake Resistant Construction & Design
		Non Conventional Sources of Energy.
		Design of Water Resource Structures -II Lab
		Professional Practice & Estimating Lab
		Steel Structures Design-II Lab
		Design of Foundations Lab
		Structural Analysis by Matrix Methods Lab
		Seminar
	Project-II	
	Discipline & Extra Curricular Activity	



## Courses offered in B.Tech Biotechnology (B.Tech BT)

Semester	Course Title
I	English
	Engineering Mathematics –I
	Engineering Physics – I
	Engineering Chemistry – I
	Introduction to IT
	Fundamentals of Electrical Science
	Language Lab.
	Engg. Physics Lab. I
	Engg. Chem. Lab. I
	PC Software Lab.
	Practical Geometry
	Engineering Workshop Practice
	General Proficiency (C)
	Environmental Studies
II	English
	Engineering Mathematics – II
	Engineering Physics – II
	Engineering Chemistry – II
	Programming and Problem Solving using 'C' Language
	Fundamentals of Electronics
	Mechanical Engineering
	Communication Techniques
	Engg. Physics Lab II
	Engg. Chem. Lab II
	Comp. Prog. Lab
	Machine Drawing
	Basic Electronics Lab.
	General Proficiency (C)
III	Introduction to Biology
	Cell Biology
	Biochemistry-I
	Fluid Mechanics Operation
	Bioprocess Calculations
	Communication Skills
	Cell Biology
	Biochemistry-I
	Fluid Mechanics Operation
	Group Discussion & Seminar
	Discipline and Extracurricular Activity

# Biotechnology

Biotechnology is making significant contributions to the world we live in. Biotechnology is an interdisciplinary fast-growing field of study and knowledge, having application in the domains of chemical, pharmaceutical and textile industries to genetics and agriculture.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Biotechnology	4 Years	Min. 50% aggregate in 10+2 with PCM/PCB	ET+PI
B.Tech Biotechnology + MBA	5 Years	Min. 50% aggregate in 10+2 with PCM/PCB	ET+PI





Semester	Course Title
IV	Microbiology
	Analytical Techniques in Biotechnology
	Biochemistry-II
	Biostatistics
	Molecular Biophysics
	Industrial Biotechnology
	Microbiology
	Analytical Techniques in Biotechnology
	Biochemistry-II
	Group Discussion & Seminar
V	Discipline and Extracurricular Activity
	Molecular Genetics
	Food Biotechnology
	Object oriented programming using C++
	Heat Transfer
	Chemical Engineering Thermodynamics
	Plant tissue culture and Secondary Metabolites
	Molecular Genetics
	Object oriented programming using C++
	Heat Transfer
	Industrial Visit, Report & Presentation
	Discipline and Extracurricular Activity



Semester	Course Title
VI	Bioinformatics
	Recombinant DNA Technology
	Bioprocess Engineering
	Genome Analysis
	Mass Transfer
	Molecular Diagnostic Techniques
	Bioinformatics
	Recombinant DNA Technology
	Bioprocess Engineering
	Mass Transfer
VII	Discipline and Extracurricular Activity
	Environmental Biotechnology
	Database Management System
	Animal Cell culture & Production of Recombinant Molecules
	Immunology
	Modeling & Simulation of Bioprocess
	Management Issues in Biotechnology
	Environmental Biotechnology
	Database Management System
	Immunology
VIII	Group discussion and Seminar
	Discipline and Extracurricular Activity
	Project Work (6 months on latest and emerging topics of Microbiology & Biotechnology)
	Seminar & Defense



## Courses offered in B.Tech Chemical Engineering (B.Tech CH)

Semester	Course Title
I	English
	Engineering Mathematics – I
	Engineering Physics - I
	Engineering Chemistry – I
	Introduction to IT
	Fundamentals of Electrical Science
	Language Lab.
	Engg. Physics Lab. I
	Engg. Chem. Lab. I
	PC Software Lab.
	Practical Geometry
	Engineering Workshop Practice
	General Proficiency
	English
II	Engineering Mathematics – II
	Engineering Physics - II
	Engineering Chemistry – II
	Programming and Problem Solving using 'C' Language
	Fundamentals of Electronics
	Mechanical Engineering
	Communication Techniques
	Engg. Physics Lab. II
	Engg. Chem. Lab. II
	Comp. Prog. Lab
	Machine Drawing
	Basic Electronics Lab
	General Proficiency
	Mathematics - III
III	Applied Chemistry
	Object Oriented Programming in C++
	Process Calculations
	Momentum Transfer Operation
	Power Plant Engineering
	Applied Chemistry
	Object Oriented Programming in C++
	Social Science and Economics
	Group Discussion and Seminar
	Momentum Transfer Operation
	Discipline and Extra-curricular Activities

# Chemical Engineering

In today's modern world the material used in the various fields of engineering are produced in chemical reactors. Designing and operation of such reactors is the main domain of Chemical Engineers because they are well equipped with the knowledge of subjects like fluid mechanics, chemical reaction engineering, heat and mass transfer and economic analysis.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Chemical Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
B.Tech Chemical Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI





Semester		Course Title
IV		Material Science and Technology
		Fluid-Particle Mechanics
		Numerical methods in chemical engineering
		Chemical Engineering Thermodynamics-I
		Heat Transfer Operations
		Non-Conventional Energy Sources
		Fluid-Particle Mechanics
		Numerical methods in chemical engineering
		Heat Transfer Operations
		Techniques in Bio technology
		Discipline and Extra-curricular Activities
V		Instrumentation & Process Control
		Inorganic Chemical Technology
		Mass Transfer - I
		Chemical Reaction Engineering - I
		Chemical Engineering Thermodynamics-II
		Fertilizer Technology
		Practical Training Seminar
		Instrumentation & Process Control
		Chemical Technology
		Mass Transfer - I
		Discipline and Extra-curricular Activities
VI		Chemical Reaction Engineering - II
		Mass Transfer - II
		Petroleum Refining Engineering
		Organic Chemical Technology
		Industrial Pollution and Control
		Pulp and Paper Technology
		Chemical Reaction Engineering
		Mass Transfer - II
		Industrial Pollution and Control
		Petroleum Engineering
		Discipline and Extra-curricular Activities

Semester		Course Title
VII		Hazard, Safety and Risk Analysis
		Transport Phenomena
		Process Equipment Design
		Optimization of Chemical Process
		Bioprocess Engineering
		Polymer Science and Technology
		Practical Training Seminar
		Bioprocess Engineering
		Process Equipment Design
		Discipline and Extra-curricular Activities
VIII		Process Engineering & Plant Design
		Industrial Management
		Process Modeling and Simulation
		Catalytic Processes
		Seminar
		Process Engineering & Plant Design
		Modeling and Simulation
		Novel Separation Techniques
		Project
		Discipline and Extra-curricular Activities



## Courses offered in B.Tech Computer Science Engineering (B.Tech CSE)

Semester	Course Title
I	English
	Engineering Mathematics –I
	Engineering Physics - I
	Engineering Chemistry – I
	Introduction to IT
	Fundamentals of Electrical Science
	Language Lab.
	Engg. Physics Lab. I
	Engg. Chem. Lab. I
	PC Software Lab.
	Practical Geometry
	Engineering Workshop Practice
	General Proficiency
	Environmental Studies
II	English
	Engineering Mathematics – II
	Engineering Physics - II
	Engineering Chemistry – II
	Programming and Problem Solving using 'C' Language
	Fundamentals of Electronics
	Mechanical Engineering
	Communication Techniques
	Engg. Physics Lab II
	Engg. Chem. Lab II
	Comp. Prog. Lab
	Machine Drawing
	Basic Electronics Lab.
	General Proficiency
III	Mathematics III
	Data Structure and Algorithms, through 'C'
	Discrete Mathematical Structure
	Principal of Programming Languages
	Electronic Devices and Circuits
	Switching Theory and Logic System Design
	Data Structure Lab
	Electronics Devices & Circuits Lab
	Digital Electronics Lab
	Web Design Lab using HTML/ DHTML
	General Proficiency

# Computer Science Engineering

Computer Science & Engineering is a study of designing, development and most of computers and computer-based systems. The study of computer science makes one competent to apply the basic principles of computing and use the latest methods to offer service solutions in academia & research.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Computer Science Engineering	4 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI
B.Tech Computer Science Engineering + MBA	5 Years	Min. 50% aggregate in 10+2 with Physics & Mathematics as compulsory Subjects	ET+PI





Semester	Course Title
IV	Object Oriented Programming Using C++
	Software Engineering
	Microprocessor and Interface (8085)
	Database Management System
	Communication Fundamentals
	Optimization Techniques
	Object Oriented Programming Lab
	Software Engineering Lab
	DBMS Lab
	OT Simulation Lab (C/C++)
	General Proficiency
V	Computer Graphics
	Theory of Computation
	Programming in Java
	Object Oriented Modeling and Design
	Computer Architecture
	IC Technology
	Logical and Functional Programming
	Information Theory and Coding
	System Analysis And Design
	Computer Graphics Lab (C/C++)
	Microprocessor Lab
	Java Programming Lab
	Presentation Seminar
	General Proficiency
VI	Computer Networks
	Operating System
	Relational Database Management System
	Application Development using Java
	Simulation and Modeling
	Fuzzy Systems
	Organizational Behaviour
	E-Commerce
	Advance Computer Architecture
	UNIX Shell Scripting and TCP/IP Lab
	RDBMS Lab (SQL Server)
	JAVA Application Lab
	Project Design with Seminar
	General Proficiency

Semester	Course Title
VII	Design & Analysis of Algorithms
	Image Processing & Pattern Recognition
	Client Server Architecture
	Programming with C#.Net and ASP.Net
	Real Time Systems
	Multimedia Systems
	VLSI Tools and Techniques
	Open Source Systems
	Minor Project
	Web based Applications Lab
	C# .Net/ASP.Net Application Development Lab
	Practical Training Presentation
	General Proficiency
VIII	Compiler Construction
	Distributed Systems
	Data Mining and Warehousing
	Cyber Law and IPR
	Artificial Intelligence and Experts Systems
	Mobile Computing
	Information Security and Cryptography
	Industrial Project
	Android Programming Lab
	Compiler Construction Lab
	Seminar
	General Proficiency



## Courses offered in B.Tech Food Technology (B.Tech FT)

Semester	Course Title
I	English
	Engineering Mathematics –I
	Engineering Physics - I
	Engineering Chemistry – I
	Introduction to IT
	Fundamentals of Electrical Science
	Environmental Studies
	Language Lab.
	Engg. Physics Lab. I
	Engg. Chem. Lab. I
	PC Software Lab.
	Practical Geometry
	Engineering Workshop Practice
	General Proficiency
II	English
	Engineering Mathematics – II
	Engineering Physics - II
	Engineering Chemistry – II
	Programming and Problem Solving using 'C' Language
	Fundamentals of Electronics
	Mechanical Engineering
	Communication Techniques
	Engg. Physics Lab II
	Engg. Chem. Lab II
	Comp. Prog. Lab
	Machine Drawing
	Basic Electronics Lab.
	General Proficiency
III	Basic and Food Microbiology
	Food Chemistry
	Fluid Mechanics
	Process Calculation
	Internet Design For Food Technology
	Food Additives and Contaminants
	Basic and Food Microbiology
	Food Chemistry
	Fluid Mechanics & Solid Handling
	Web Designing
	General Proficiency

# Food Technology

Food Technology is a multidisciplinary course which involves the study of various areas such as:  
 Food Science and Technology Food Engineering  
 Food Quality and Safety  
 Food Chemistry and Nutrition Food Microbiology  
 Food Laws and Agribusiness Management

## Programme Structure

Programme	Duration	Eligibility Criteria	Selection Procedure
B.Tech Foodtechnology	4 Years	Min. 50% aggregate in 10+2 with PCM/PCB	ET+PI
B.Tech Foodtechnology + MBA	5 Years	Min. 50% aggregate in 10+2 with PCM/PCB	ET+PI





Semester		Course Title
IV		Biochemistry and Nutrition
		Principles of Food Processing and Preservation
		Heat Transfer Operations -
		Food Hygiene, Sanitation and Plant Utilities
		Food Laws and Food Regulation
		Fermentation Technology
		Biochemistry and Nutrition
		Principles of Food Processing and Preservation
		Heat Transfer Operations
		Group Discussion and Seminar
		General Proficiency
V		Cereals and Legumes Processing Technology
		Egg, Poultry, Meat and Fish Processing Technology
		Milk and Milk Products Technology
		Mass Transfer Operations
		Statistical Quality Control
		Entrepreneurship and Agribusiness Management
		Cereals and Legumes Processing Technology
		Milk and Milk Products Technology
		Mass Transfer Operation
		Practical Training and Seminar
		Educational Tour
VI		General Proficiency
		Fruits and Vegetables Processing Technology
		Oils and Fats Processing Technology
		Bakery and Confectionary Technology
		Advance Techniques in Food
		Food Process Engineering
		Food Analysis and Quality Control
		Fruits and Vegetables Processing Technology
		Oils and Fats Processing Technology
		Bakery and Confectionary Technology
		Food Analysis and Quality Control
		General Proficiency

Semester		Course Title
VII		Instrumentation and Process Control
		Food Packaging
		Plant Design and Project Engineering
		Food Product Development, Marketing And Sales
		Food Industry Waste Management and By product utilization
		Nutraceuticals, Functional and Therapeutic Foods
		Novel Separation Techniques
		Industrial Safety and Hazards
		Instrumentation and Process Control
		Food Packaging
		Plant Design and Project Engineering
VIII		Practical Training and Seminar
		General Proficiency
		Industrial Internship/Project Work
		Seminar and Defense (Based on Project)

## Dual Degree

The dual degree encompasses subjects from engineering along with subjects of Management

\*\* For Management programme/courses please refer School of Business and Management



# Seedling School of Law & Governance

Law as a profession has always attracted to young men and women who are in search of an adventurous career where one can mark in the society.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.A., L.L.B.	5 Years	10+2 pass	ET+ PI or CLAT score of min. 45% marks
BBA, L.L.B. (Hons.)	5 Years	10+2 pass	ET+ PI or CLAT score of min. 45% marks
LLB-3YR	3 Years	Graduation with min. 45% marks	Merit+ PI
LLM	1 Year	LLB with min. 50% marks	ET+ PI
Ph. D.	Min. 2 years	LLM with min. 55% marks	ET+ PI



## B.A., L.L.B (BALLB)

This program enriches students with the knowledge or arts and law.

### Course offered in B.A., L.L.B (BALLB)

Semester		Course Title	Semester		Course Title
I		General English	VI		Copyright and Patent Law
		Sociology			Human Rights
		Political Science I			Family Law II
		Computer Concepts			Company Law
		Legal and Constitutional History			Criminology, Penology and Victimology
II		Law of Tort I	VII		Law of Land Acquisition and Real Estate
		Communicative English			Interpretation of statutes
		Law of Contract I			Law of transfer of property
		Economics I (Principles, Banking, Money Supply)			Principles of Taxation Law
		History I (Indian History)			Law of trademark and Geographical Indication
III		Jurisprudence	VII		Trust, equity and Fiduciary Relationship
		Political Science II (Principles of Political Governance)			Public International Law
		Economics II: Indian Economy	VIII		Banking law
		Political Science III: Indian Foreign Policy			Drafting Pleading and Conveyancing
		History III (World History since 1919)			Private International law
IV		Constitutional Law I			Environmental law
		Law of crimes I	IX		Labour law and Industrial Law- I
		Law of Contracts II			Special crimes
		Economics III			Labour Law-II
		Hindi (Language)			Legal Research Methodology
V		Political Science-IV	X		Forensic Science
		Law of Crime-II (Cr.Pc)			Alternate Dispute Resolution
		Constitutional Law II			Competition Law
		Political Science-V			Corporate Governance
		Political Science VI			Internship and Diary (Internship with Judiciary /Legislatures/Legal Functionaries/Law firms Companies/Local Self Government/Legal Regulatory Authorities) (January)
		Law of Insurance			Professional Ethics and Professional Accounting System
		Administrative Law			Law of Sea/Animal Protection Law
		Family Law I			Cyber Law
		CPC and Limitation Act			International Humanitarian Law
		Law of Evidence			International Criminal Law





**BBA, L.L.B. (Hons.) (BBALLB)**

This programme combines Management with the Bachelor of Law

**Course offered in BBA, L.L.B. (Hons.) (BBALLB)**

Semester		Course Title
I		General English
		Sociology
		Political Science- I
		Computer Concepts
		Legal and Constitutional History
		Law of Tort (M.V. Accident & Consumer Protection Law)
II		Business Communication
		Law of Contract-I
		Economics-I
		Strategic Management
		Jurisprudence
		Management Accounting
III		Economics-II
		Principles of Management
		Financial Management
		Constitutional Law-I
		Law of Crimes-I (Penal Code)
		Law of Contract-II
IV		Economics-III
		Hindi/ Foreign Language
		Organisational Behaviour
		Law of Crimes–II (Criminal Procedure Code)
		Constitutional Law-II
		Marketing Management
V		Human Resource Management
		Business Statistics
		Administrative Law
		Family Law-I
		Civil Procedure and Limitation Act
		Law of Evidence

Semester		Course Title
VI		Copyright and Patent
		Human Rights
		Family Law- II
		Company Law
		Criminology, Penology and Victimology
		Land Acquisition and Real Estate
VII		Interpretation of Statutes
		Law of Transfer of Property
		Principles of Taxation Law
		Trademark and Geographical Indication
		Trust Equity and Fiduciary Relationship
		Public International Law
VIII		Banking Law
		Drafting, Pleading and Conveyancing
		Private International Law
		Environmental Law
		Labour Law and Industrial Law- I
		Special Crimes
IX		Labour Law-II
		Legal Research Methodology
		Forensic Science
		Alternate Dispute Resolution
		Competition Law
		Corporate Governance
X		Internship and Diary (Internship with Judiciary /Legislatures /Legal Functionaries/Law firms Companies/Local Self Government/Legal Regulatory Authorities) (January)
		Professional Ethics and Professional Accounting System
		Law of the Sea / Animal Protection Law
		Cyber Law
		International Humanitarian Law
		International Criminal Law

### LLB -3 Year (LLB 3 YEARS)

This program studies the major areas of legal practise

#### Course offered in LLB -3 Year (LLB 3 YEARS)

Semester		Course Title
I		General English
		Law of tort and motor vehicle accident, consumer protection laws
		Constitutional law- I
		Jurisprudence
		Legal and Constitutional history
II		Law of Crimes-I (Indian Penal Code)
		Law of contract
		Environmental Law
		Constitutional law-II
		Labor and Industrial Law- I
III		Law Of Contract-II: Special Contract
		Family Law-I
	Law of Property	
	Labour law-II	
	Law of crimes-II	
	Company Law	

Semester		Course Title
IV		CPC and Limitation Act
		Human Rights
		LAW OF EVIDENCE
		Family law-II
		BANKING LAW
		HINDI
V		Principal of Taxation
		Law of Insurance
		Administrative Law
		Alternate Dispute Resolution
		Drafting, Pleading And Conveyancing
		Public International Law
VI		Internship (Diary, Evaluation and Viva Voice)
		Professional Ethics and professional Accounting System
		Law of Sea/Law of War
		Cyber law/ Animal protection law
		International Humanitarian Law/International Trade Law
		International Criminal Law

### LLM (LLM)

This programme gives learning opportunities with specialisation

#### Course offered in LLM (LLM)

##### Business law

Semester		Course Title
I		Legal Theory And Research Methodology
		Comparative Constitutional Law
		Law And Justice In Globalising World
		Company Law
		Securities And Investment Law
II		International Trade Law
		Law Of Insurance
		Competition Law
		Specific Contract – E Contract
	Dissertation	

##### Criminal law

Semester		Course Title
I		Legal Theory And Research Methods
		Comparative Constitutional Law
		Law And Justice In Globalising World
		Criminology & Penology
		Comparative Criminal Law And Procedure
		Victim Justice And Human Rights
II		General Principles Of Criminal Law
		General Principles Of Torts
		Socio-Economic Crimes
	Dissertation	



# School of Life & Basic Sciences

Science is a way of life that is based on perspective and the School has turned this inquiry-based thinking evolution into an art form over the years. The school of Life and Basic Science provides the correct platform to the aspiring students who wish to pursue their career in the area of life or basic sciences.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.Sc. Pass Course (CBZ/PCM)	3 Years	10+2 Science/Biology/ Mathematics/Agriculture/ Biotech. or Equivalent	Merit + P I
B.Sc. (Hons.) Biotechnology, Microbiology, Bioinformatics, Biochemistry		10+2 Science-PCB	
M.Sc. Biotechnology, Microbiology, Bioinformatics, Biochemistry, Food and Nutritional Biochemistry, Botany	2 Years	Graduation in any stream with min. 50% or B.Sc. Integrated	Merit + PI
M.Sc. Chemistry		Graduation in any stream of Basic Science with Chemistry as one of the Compulsory Subject - min. 55%	Merit + PI
M.Sc. Physics		Graduation in any stream of Basic Science with Physics and Mathematics and min. 50% or B.Sc. Integrated	Merit + PI
M.Sc. Mathematics		Graduation in any Stream of Basic Science with Mathematics as one of the Compulsory Subject- Min. 55%	Merit + PI
M.Sc. + MBA (Dual Degree) Biotechnology/Microbiology	3 Years	Graduation with min. 55% aggregate	Merit + PI
Ph.D.	Min. 2 Years	Post Graduation in relevant field with Min. 55%	ET + PI

## B.Sc. Pass-Course (PCM)

This course enables the students to take up advanced studies in Chemistry, Mathematics, and Physics.

### Courses offered in B.Sc. Pass - Course (PCM)

Semester	Course Title
I	Chemistry I
	Chemistry II
	Mathematics I
	Mathematics II
	Physics I
	Physics II
	Professionals Communication Skills*
	Practical-I (BS-101 & BS - 102)
II	Practical-II (BS-105 & BS - 106)
	Chemistry I
	Chemistry II
	Mathematics I
	Mathematics II
	Physics I
	Physics II
	Computer Applications*
III	Practical-I (BS-201 & BS - 202)
	Practical-II (BS-205 & BS - 206)
	Chemistry I
	Chemistry II
	Mathematics I
	Mathematics II
	Physics I
	Physics II
IV	Practical-I (BS-301 & BS - 302)
	Practical-II (BS-305 & BS - 306)
	Chemistry I
	Chemistry II
	Mathematics I
	Mathematics II
	Physics I
	Physics II
	Practical-I (BS-401 & BS - 402)
	Practical-II (BS-405 & BS - 406)

Semester		Course Title
V		Chemistry I
		Chemistry II
		Mathematics I
		Mathematics II
		Physics I
		Physics II
		Practical-I (BS-501 & BS - 502)
		Practical-II (BS-505 & BS - 506)
VI		Chemistry I
		Chemistry II
		Mathematics I
		Mathematics II
		Physics I
		Physics II
		Practical-I (BS-601 & BS - 602)
	Practical-II (BS-605 & BS - 606)	

#### B.Sc. Pass - Course (CBZ)

This course enables the students to take up advanced studies in Chemistry, Botany, and Zoology and can find opportunities in all these subject areas.

#### Courses offered B.Sc (Pass Course) CBZ

Semester		Course Title
I		Chemistry I
		Chemistry II
		Diversity of microbes
		Diversity of cryptogams
		Biodiversity –I-Protozoa to Annelida
		Cell biology and Genetics
		Professional Communication Skills*
		Practical-I (Chem-101 & Chem- 102)
		Practical-II (Bot -103 & Bot - 104)
		Practical-III (Zoo -105 & Zoo - 106)

Semester	Course Title
II	Chemistry I
	Chemistry II
	Pteridophyta, Gymnosperms and Palaeobotany
	Morphology and anatomy of Angiosperms
	Biodiversity-II Arthropoda to Hemichordata
	Biochemistry
	Computer Applications*
	Practical-I (Chem -201 & Chem - 202)
	Practical-II (Bot -203 & Bot - 204)
	Practical-III (Zoo -205 & Zoo - 206)
III	Chemistry I
	Chemistry II
	Angiosperm Taxonomy
	Plant Breeding and Evolution
	Chordates
	Molecular Genetics
	Practical-I (Chem -301 & Chem - 302)
	Practical-II (Bot -303 & Bot - 304)
	Practical-III (Zoo -305 & Zoo - 306)
	IV
Chemistry II	
Reproductive Botany (Embryology and Palynology)	
Biotechnology	
Developmental biology	
Anatomy and Physiology	
Practical-I (Chem -401 & Chem - 402)	
Practical-II (Bot -403 & Bot - 404)	
Practical-III (Zoo -405 & Zoo - 406)	
V	
	Chemistry II
	Plant physiology and Biochemistry
	Analytical Techniques
	Immunology
	Applied zoology
	Practical-I (Chem -501 & Chem - 502)
	Practical-II (Bot -503 & Bot - 504)
	Practical-III (Zoo -505 & Zoo - 506)
	VI
Chemistry II	
Ecology	
Economic Botany	
Medical Zoology	
Biodiversity and Environment	
Practical-I (Chem -601 & Chem - 602)	
Practical-II (Bot -603 & Bot - 604)	
Practical-III (Zoo -605 & Zoo - 606)	



**B.Sc. (Hons.) Biotechnology (BTH)**

This course enables the students to take up advanced studies in Chemistry, Botany, and Zoology and can find opportunities in all these subject areas.

**Courses offered B.Sc. (Hons.) Biotechnology (BTH)**

Semester	Course Title
I	Biostatistics & Introduction to Computers
	Cell Biology and Genetics
	Microbiology
	Chemistry – I
	Practical-I (BTH-102 & BTH-103)
	Practical-II (BTH-101 & BTH 104)
II	Introductory Mathematics
	Programming Language Fundamentals and Applications
	Biochemistry – I
	Chemistry – II
	Practical-I (BTH-201 and BTH-202)
	Practical-II (BTH-203 and BTH-204)
III	Molecular Biology
	Biochemistry – II
	Chemistry III
	Professionals Communication Skills
	Practical-I (BTH-301 and BTH-302)
	Practical-II (BTH-303)
IV	Industrial Visit
	Fundamentals of Bioinformatics and Nanotechnology
	Biophysics and Instrumentation
	Plant Tissue Culture and Plant Biotechnology
	Developmental Biology
	Practical-I(BTH-401 and BTH-402)
V	Practical-II(BTH-403 and BTH-404)
	Environmental Biotechnology
	Animal Biotechnology
	Bioprocess Engineering
	Immunology
	Practical-I(BTH-501 and BTH-502)
VI	Practical-II(BTH-503 and BTH-504)
	Introduction to Genomes
	Recombinant DNA Technology
	Biodiversity and Environment
	Industry Relations and Entrepreneurship
	Practical-I(BTH-601 and BTH-602)
	Practical-II (BTH-603)
	Industrial Training

**B.Sc. (Hons.) Microbiology (MH)**

Microbiology is the study of microscopic organisms, such as bacteria, viruses, archaea, fungi and protozoa. Many of these microorganisms, however, carry out important functions in their niches that are essential for life forms.

**Courses offered B.Sc. (Hons) Microbiology (MH)**

Semester	Course Title
I	Biostatistics & Introduction to Computers
	Cell Biology and Genetics
	Microbiology
	Chemistry – I
	Practical-I (MH-102 & MH-103)
	Practical-II (MH-101 & MH-104)
II	Introductory Mathematics
	Programming Language Fundamentals and Applications
	Biochemistry – I
	Chemistry – II
	Practical-I (MH-201 and MH-202)
	Practical-II (MH-203 and MH-204)
III	Molecular Biology
	Biochemistry – II
	Chemistry III
	Professionals Communication Skills
	Practical-I(MH-301 and MH-302)
	Practical-II (MH-303)
IV	Industrial Visit
	Fundamentals of Bioinformatics and Nanotechnology
	Biophysics and Instrumentation
	Microbial Physiology and Metabolism I
	Industrial Microbiology
	Practical-I(MH-401 and MH-402)
V	Practical-II(MH-403 and MH-404)
	Virology
	Microbial Physiology and Metabolism II
	Food and Dairy Microbiology
	Immunology
	Practical-I(MH-501 and MH-502)
VI	Practical-II(MH-503 and MH-504)
	Environmental Microbiology
	Medical Microbiology
	Biodiversity and Environment
	Industry Relations and Entrepreneurship
	Practical-I(MH-601 and MH-602)
	Practical-II (MH-603)
	Industrial Training

**B.Sc. (Hons.) Bioinformatics (BITH)**

Bioinformatics is an interdisciplinary field that uses the applications of computational techniques to analyse the information associated with biomolecules on a large-scale. It is a firmly established discipline in computational Biology, and encompasses a wide range of subject areas from Structural Biology and Genomics to Gene Expression Studies, Systems Biology, Chem informatics & Drug Designing, Phylogenetic, Biostatistics, etc.

**Courses offered B.Sc. (Hons) Bioinformatics (BITH)**

Semester	Course Title
I	Biostatistics and Introduction to Computers
	Cell Biology and Genetics
	Microbiology
	Chemistry - I
	Practical-I (BITH-102 & BITH-103)
	Practical-II (BITH-101 & BITH-104)
	Introductory Mathematics
II	Programming Language Fundamentals and Applications
	Biochemistry - I
	Chemistry – II
	Practical-I (BITH-201 and BITH-202)
	Practical-II (BITH-203 and BITH-204)
	Pharmacoinformatics
	Computational Biology
III	Chemistry III
	Professionals Communication Skills
	Practical-I(BITH-301 and BITH-302)
	Practical-II(BITH-303)
	Industrial Visit
	Structural Bioinformatics and Nanotechnology
	Database Management System
IV	Phylogenetics & molecular evolution
	PERL programming
	Practical-I(BITH-401 and BITH-402)
	Practical-II(BITH-403 and BITH-404)
	Biodiversity and Environment
	Computational Biology
	Chemiinformatics & Drug Designing
V	Immunology
	Practical-I(BITH-501 and BITH-502)
	Practical-II(BITH-503 and BITH-504)
	System Biology
	Genomics & Proteomics
	Genome Analysis
	Industry Relations and Entrepreneurship
VI	Practical-I(BITH-601 and BITH-602)
	Practical-II (BITH-603)
	Industrial Training

**B.Sc. (Hons.) Biochemistry (BCH)**

Biochemistry, sometimes called biological chemistry, is the study of chemical processes in living organisms. It deals with the structures and functions of cellular components, such as proteins, carbohydrates, lipids, nucleic acids and other biomolecules.

**Courses offered B.Sc. (Hons) Bioinformatics (BCH)**

Semester	Course Title
I	Biostatistics & Introduction to Computers
	Cell Biology and Genetics
	Microbiology
	Chemistry – I
	Practical-I (BCH-102 & BCH-103)
	Practical-II (BCH-101 & BCH-104)
	Introductory Mathematics
II	Programming Language Fundamentals and Applications
	Biochemistry-I
	Chemistry – II
	Practical-I (BCH-201 & BCH-202)
	Practical-II (BCH-203 & BCH-204)
	Membrane Biochemistry
	Metabolism I
III	Chemistry III
	Professionals Communication Skills
	Practical-I (BCH-301 & BCH-302)
	Practical-II (BCH-303)
	Industrial Visit
	Fundamentals of Bioinformatics and Nanotechnology
	Biophysics and Instrumentation
IV	Metabolism II
	Immunology
	Practical-I (BCH-401 & BCH-402)
	Practical-II (BCH-403 & BCH-404)
	Endocrinology
	Clinical Biochemistry
	Molecular Biochemistry
V	Genomics
	Practical-I (BCH-501 & BCH-502)
	Practical-II (BCH-503 & BCH-504)
	Plant Biochemistry
	Enzymology
	Biodiversity and Environment
	Molecular Physiology
VI	Practical-I (BCH-601 & BCH-602)
	Practical-II (BCH-603 & BCH-604)
	Industrial Training



### M.Sc. Biotechnology (MBT)

Biotechnology is a blend of subjects related to Biology and subjects like Mathematics, Physics, Chemistry and Engineering. It is a broad discipline in which biological processes, organisms, cells or cellular components are exploited to develop new technologies.

#### Courses offered M.Sc. Biotechnology (MBT)

Semester		Course Title
I		Cell Biology
		Biomolecules and Basic Enzymology
		Bioanalytical Techniques
		Immunology
		Virology
		Microbial Diversity and Physiology
II		Metabolism of Biomolecules
		Molecular Biology & Genetics
		Biostatistics and Bioinformatics
		Conventional & Biotechnological diagnosis of Infectious Disease
III		Genetic Engineering
		Environmental Biotechnology
		Animal cell science and technology
		Plant biotechnology and bioresource management
		Bioprocess engineering
IV		Dissertation

### M.Sc. Microbiology (MMB)

This course helps learners to specialize in any of the applied research areas, through one of the chosen electives/specialized papers and work in the field of Medical Microbiology, Food Microbiology, Industrial Microbiology and Environmental Microbiology. This discipline emphasizes the recent trends in the industry that focus on production of compounds like insulin, interferon, recombinant products, including vaccines.

#### Courses offered M.Sc. Biotechnology (MMB)

Semester		Course Title
I		Bacteriology
		Mycology, Phycology & Lichenology
		Immunology
		Biomolecules and Basic enzymology
II		Analytical Techniques
		Virology
		Molecular Biology and Genetics
		Microbial Physiology

II		Biostatistics and Bioinformatics
		Biochemistry II/Metabolism of biomolecules
III		Genetic Engineering
		Industrial Microbiology
		Food Microbiology
		Medical microbiology
		Environmental microbiology
IV		Dissertation

### M.Sc. Bioinformatics (MBIT)

Bioinformatics is an interdisciplinary field. It merges biology, computer science and information technology and is defined as an interface between the biosciences and the computational sciences.

#### Courses offered M.Sc. Biotechnology (MBIT)

Semester		Course Title
I		Basic Mathematics and Statistics (For biology students)
		Fundamentals of Biology (For non-biology students)
		Computers and Advanced Programming in C++
		Immunoinformatics and Biochemical Techniques
		Bioinformatics and genome analysis
		Molecular Biology and Genetic Engineering
II		Computer Aided Drug Designing (CADD)
		Computational Biology
		System Biology
		Data Structure Algorithm
		Java Programming and Data mining
III		Functional and comparative genomics
		Metabolomics and Proteomics
		Gene Expression and Microarray analysis
		Molecular Structure Prediction and Visualization
		PERL and My SQL in Bioinformatics
IV		Pharmacogenomics
		Visual Basic and Web enabling Technology
		Dissertation

### M.Sc. Botany (MBOT)

The subject of Botany encompasses a scientific study of plants that includes structure, growth, reproduction, metabolism, taxonomy, development, diseases and evolutionary relationship of different classes of plants.

#### Courses offered M.Sc. Botany (MBOT)

Semester	Course Title
I	Cell biology
	Biology & Diversity of Viruses & Bacteria
	Morphology and Diversity of Non – Vascular Plants
	Instrumentation & Analytical Techniques
	Plant Biochemistry
II	Morphology and Diversity of Vascular Plants
	Advance Plant Physiology
	Taxonomy and Economic Botany of Higher Plants
	Plant Tissue Culture & Its Applications
	Developmental Plant Biology
III	Embryology of Angiosperms
	Plant Ecology & Environment
	Genetics & Plant Breeding
	Molecular Biology & Genetic Engineering
	Phytochemistry and Ethnobotany
IV	Biostatistics & Bioinformatics
	Environmental Biotechnology
	Plant Biotech and Bioresource Management
	Plant Pathology
	Dissertation

### M.Sc. MBA (Dual Degree) Biotechnology (MBT-MBA)

This dual degree programme encompasses subjects from Life & Basic Sciences along with subjects of business management. Apart from acquiring knowledge of their core area of Life & Basic Sciences, students will also be gaining knowledge of various aspects of Management-Marketing, General Management, Research Methodology, Finance, Human Resources, Production Management, International Business, Operations and Information Technology.

### M.Sc. MBA (Dual Degree) Microbiology (MMB-MBA)

Along with the study of microscopic organisms, such as bacteria, viruses, archaea, fungi and protozoa, this dual degree offers insights into various subjects of business management. In addition to the advanced study of microbiology, students will also be gaining knowledge of various aspects of Management- Marketing, General Management, Research Methodology, Finance, Human Resources, Production Management, International Business, Operations and Information Technology. After the successful completion of M.Sc. + MBA, student will be awarded two Degrees- one in M.Sc. and the other in MBA (Integrated).

### M.Sc. Chemistry (MSCCH)

Amongst the Basic Sciences, Chemistry deals with the study of composition, properties, constitution, and mutual interaction of different kinds of matter. The role of chemistry in modern society can be seen in diverse fields such as chemicals, petroleum products, pharmaceuticals, polymers and plastics and biotechnology.

Semester	Course Name
I	Inorganic Chemistry -I
	Organic Chemistry -I
	Physical Chemistry -I
	Maths for Chemist
	Biology for Chemist
	Inorganic Practical –I
	organic Practical –I
	PHYSICAL Practical –I
	Inorganic Chemistry -II
	Organic Chemistry -II
II	Physical Chemistry -II
	Computer for Chemists
	Inorganic Chemistry Practicals -II
	Organic Chemistry Practicals-II
	Physical Chemistry Practicals -II
III	Spectroscopy
	Group Theory & Instrumentation
	Organic Synthesis-I
	Heterocyclic Chemistry and Photochemistry
	Organic Practical-III
IV	Green Chemistry
	Synthetic Organic Chemistry -II
	Chemistry of Natural Products
	Bio Organic Chemistry
	Project

### M.Sc. Physics (MSCPY)

Physics is a fundamental natural science. Besides exploring and identifying the basic principles and laws governing the motion, energy, structure and interaction of matter, it also deals with the pertinent questions about today's era of science and technology. Physics labs cover the vast areas of research in mechanics, properties of matter, heat, sound, electricity, magnetism, light, and modern physics.

#### Courses Offered M.Sc. Physics (MSCPY)

Semester	Course Title
I	Solid State Physics
	Classical Mechanics
	Quantum Mechanics-I
	Electronics
	General Physics
	Laboratory
	Lasers and Holography
II	Quantum Mechanics-II
	Atomic and Molecular Physics
	Electrodynamics
	Laboratory Project - I
	Electronics Laboratory-II
	Nuclear and Particle Physics
	Mathematical Methods in Physics
III	Thermodynamics and Statistical Physics
	Advanced Digital Electronics
	Microwave and Communication Lab
	Matlab Lab.
	Microwave Devices and Communications
IV	Analog and Digital Communication
	MAJOR PROJECT



### M.Sc. Mathematics (MMAT)

Mathematics is one of the most ancient sciences of the world and has wide applications in various fields of study and research.

#### Courses Offered M.Sc. Mathematics (MMAT)

Semester	Course Title
I	Calculus of variation and special functions
	Differential Equation
	Real Analysis
	Industrial Mathematics
	C Programming (Theory)
	C' Programming (Practical)
	Communication & Soft Skills
II	Seminar
	Numerical and Statistical Techniques
	Abstract Algebra
	Mathematical Programming
	Continuum mechanics
	Computer Application (Theory)
	Optimization Techniques Simulation Lab
	Numerical & Statistical Techniques Lab
	Computer Application (Practical)
	Seminar
III	Linear Algebra
	Combinatorics and Graph Theory
	Integral Transforms
	Differential Geometry
	Advance differential equations
	Viscous Fluid Dynamics
	Seminar
IV	Functional Analysis
	Integral Equations
	Complex Analysis
	Topology and Measure Theory
	Number Theory (Elective-I)
	Operator in Hilbert space (Elective-II)
	Boundary Layer Theory (Elective-III)
	Mathematical Modelling and Numerical Simulation(Elective-IV)
	Dissertation



# School of Business & Management

The School of Business and Management (SBM) is the institute of choice for discerning professionals and students desirous of a premium learning experience.

Programme Structure			
Programme	Duration	Eligibility	Selection Criteria
BBA	3 Years	10+2 any stream with min.50% marks	Merit + P I
B.Com		10+2 any stream with min.45% marks	
MBA	2 Years	Graduation with 50 % marks in any stream with good score in all India level aptitude test like MAT/CAT/CMAT/XAT/CET	ET/GD + PI
MBA Dual Specialization			
MBA (HHM) Hospital & Healthcare Management			
Ph.D. Management	2 Years min.	Post-Graduation in Management /Commerce and Allied Subjects with min. 55% marks	ET + PI



## Bachelor of Business Administration (BBA)

BBA Course is a three year undergraduate business management programme that imparts managerial and entrepreneurial skills to students through BBA Courses.

### Courses Offered Bachelor of Business Administration (BBA)

Semester		Course Title
I		Business Organization
		Business Communication
		Principles of Management
		Business Economics
		Fundamentals of Accounting
		Business Mathematics
II		Financial Accounting
		Business Environment
		Legal Framework
		Management of Financial Institutions
		Business Ethics
		Computer Fundamental
III		Industrial tour and report
		Business Statistics
		Company Law
		Cost Accounting
		Financial Management
		Management Information System
IV		Management of Human Resources
		Research Methodology
		Tax Management
		Marketing Management
		Project Management
		Entrepreneurship Development
V		Management Accountancy
		Survey Report.
		Business Budgeting
		Organizational Behaviour
		International Business
		Operations Management
VI		Indian Financial System
		Outsourcing Management
		Summer Training Project
		Strategic Management
		Management of Services
		E-Commerce
		Corporate Management
		Event Management
		Environmental Management

**Bachelor of Commerce (B.Com)**

The Bachelor of Commerce (B.Com) will provide you with broad foundation knowledge of contemporary business and its practices.

**Courses Offered Bachelor of Commerce (B.Com)**

Semester	Course Title
I	Fundamentals of Accounting
	Business Organization
	Business Economics
	Principles of Management
	Economic Environment of Business
	Computer Application
II	Financial Accounting
	Regulatory Framework of Business
	Business Mathematics
	Business Environment
	Cost Accounting
	Business Communication
III	Corporate Accounting
	Business Statistics
	Management Information System
	Event Management
	Macro Economics
	Auditing – Principles and Practice
IV	Management Accounting
	Law and Practice in Banking
	Financial Management
	Management of Rural Development
	Business Ethics
	Accounting Theory and Practice
V	Tax Management
	Company Law
	Entrepreneurship Development
	Business Budgeting
	Human Resource Management
	Principles and Practice of Insurance
VI	Project Management
	Environmental Management
	E-Commerce
	Marketing Management
	Banking and Finance
	Quantitative Techniques

**MBA**

MBA is a 2 year professional postgraduate degree course. MBA focuses on the fundamentals of modern management, providing students with a comprehensive understanding of business while developing leadership and soft skills to implement that knowledge.

**Courses Offered MBA**

Semester	Course Title
I	Management Accounting
	Principles and Practices of Management
	Organizational Behavior
	Quantitative Techniques for Management
	Managerial Economics
	Business Communication
II	Computer Applications in Management
	Environmental and Disaster Management
	Human Resource Management
	Financial Management
	Marketing Management
	Operations & Production Management
III	Research Methodology
	International Business Management
	Management Information Systems
	Business Ethics and Values
	Strategic Management
	Entrepreneurship & Small Business Management
IV	Specialization Comprehensive Viva
	Industrial Summer Training Project

Note: The student will opt for 3 Electives from one specialization subject area & 1 Elective of Information Technology specialization.

Semester	Course Title
IV	Project Management
	Legal Aspects of Business
	Specialization Comprehensive Viva

Note: The student will opt for 3 Electives from same specialization subject area (For that specialization area where 3 electives were opted in Semester III) & 1 Elective of Information Technology specialization.

**Electives:**

<b>(A) MARKETING</b>	
	1) Consumer Behavior
	2) Advertising and Brand Management
	3) Retail Management
	4) Marketing of Services
	5) Rural Marketing
	6) Sales And Distribution Management
	7) Customer Relationship Management
<b>(B) HUMAN RESOURCE MANAGEMENT</b>	
	1) Human Resource Development System & Strategies
	2) Manpower Planning & Management
	3) Training and Development
	4) International HR and Cross Cultural Management
	5) Organizational Change & Development
	6) Compensation and Performance Management
	7) Industrial Relations
<b>(C) FINANCE</b>	
	1) Financial Restructuring
	2) Management of Financial Services & Institutions
	3) Security Analysis and Portfolio Management
	4) Financial Derivatives
	5) Management Control System
	6) International Financial Management
	7) Corporate Tax Management
<b>(D) INFORMATION TECHNOLOGY</b>	
	1) E-Business
	2) Data Communication and Networking

**MBA (Dual Specialization) - MBA (D)**

MBA dual specialization is a two years post-graduation program. It gives you an extensive understanding of business finance, economics, and marketing as well as a variety of practical skills and work experience. Dual specialization is for candidates aspiring an exciting and challenging career in management.

**Courses Offered MBA (Dual Specialization) - (D)**

Semester	Course Title
I	Management Accounting
	Management Process and Organizational Behavior
	Marketing Management
	Quantitative Techniques for Management
	Managerial Economics
	Business Communication
	Information Technology in Management
	Environmental and Disaster Management
	Industrial Project/ Industrial Visit-I
	Human Resource Management
II	Financial Management
	Operations & Production Management
	Research Methodology
	International Marketing
	Data Communication and Networking
	Entrepreneurship and Small Business Management
	Business Ethics and Values
	Industrial Project/ Industrial Visit-II
	Strategic Management
	Economic and Legal Environment of Business
III	Industrial Project - III (Summer Internship project)/Comprehensive Specialization-Viva
	6 subject papers (Specialization Area- Finance, Human Resource, Marketing, Retail Management and Rural Management)
IV	E-Business
	Project Management
	Industrial Project IV (Sector specific Project Work)/ Comprehensive Specialization - Viva (Preferred to be taken by a student in an industry where he/she would opt to take permanent placement)
	6 subject papers (Specialization Area- Finance, Human Resource, Marketing, Retail Management and Rural Management)

**Electives:**

<b>(A) MARKETING</b>	
	1) Consumer Behavior
	2) Advertising Management
	3) Retail Management
	4) Marketing of Services
	5) Sales And Distribution Management
	6) Customer Relationship Management
	7) Industrial Marketing
	8) Integration Marketing Communication
	9) Marketing Research
	10) Product and Brand Management
	11) Strategic Marketing
<b>(B) HUMAN RESOURCE MANAGEMENT</b>	
	1) Human Resource Development System & Strategies
	2) Human Resource Planning
	3) Training and Development
	4) International HR and Cross Cultural Management
	5) Organizational Development
	6) Strategic Compensation Management
	7) Industrial Relations
	8) Competency Mapping and Talent Management
	9) Strategic Human Resource Management
	10) Performance Management
	11) Empowerment and Participative Management
<b>(C) FINANCE</b>	
	1) Financial Restructuring
	2) Management of Financial Services & Institutions
	3) Security Analysis and Portfolio Management
	4) Financial Derivatives
	5) International Accounting
	6) International Financial Management
	7) Corporate Tax Management
	8) Investment Management
	9) Foreign Exchange Management
	10) Strategic Cost Management and Control
	11) Management Control System
<b>(D) RETAIL MANAGEMENT</b>	
	1) Retail Marketing
	2) Information Technology in Retail Management
	3) Retail Stores and Operation Management
	4) Retail and Supply Chain Management
	5) International Retailing
	6) Franchising and legal Issues in Retail Management
	7) Retail Sales Techniques and Promotions
	8) Visual Merchandising and Communication
	9) Retail Branding and Strategy
	10) E-Retailing and CRM
	11) Mall and Risk management
<b>(E) RURAL MANAGEMENT</b>	
	1) Rural Economy and Development
	2) Rural Banking
	3) Rural Marketing
	4) Micro Financing Initiation in Rural Sector
	5) Non –Formal Education for Rural Development
	6) Socio-Cultural Changes and developments –Rural Sector
	7) Health and Welfare in Rural Segment
	8) Agri-Business Management
	9) Natural Resource Management facilitating Rural Development
	10) Entrepreneurship & Technology for developing Rural Sector
	11) NGOs and its HRD in Rural Sector



**MBA (Hospital & Health Care Management)**

MBA with specialization in Hospital and Healthcare Management is a postgraduate course. This course aims at understanding the issues faced by health care systems, and the skills required for the perfect functioning of the healthcare sector.

**Courses Offered MBA (Hospital & Health Care Management)**

Semester	Course Title
I	Business Communication
	Computer Applications
	Principles of Management
	Organization Behavior
	Financial Management
	Essentials of Biostatistics
	Human Resource Management
	Marketing Management
II	Organizational Management of Clinical & Superspeciality Services
	Research Methodology
	Essentials of Health Economics
	Essentials of Demography
	Strategic Management
	Program Planning, Implementation, Monitoring and Evaluation
	Diagnostic, Support & Utility Services
	Hospital Materials, Equipment & Supply Chain Management
	Comprehensive Viva

The students will go for 1st Project Work for three months from 1st June to 31st August in the field of Hospital Management/Health Care i.e. a student has to select either to go for 1st project work for Hospital segment or Health care segment & the same will not be repeated in 2nd Project Work. The theory classes for Semester III will commence from 1st September.

Semester	Course Title
III	1st Project Work Presentation
	Health Care Delivery System & Policy
	Hospital facility, safety and risk management
	Health and Development
	Hospital Management Information System
	Quality & Accreditation in Healthcare
IV	Health Legislation and Legal Issues
	Introduction to Epidemiology
	2 <sup>nd</sup> Project Work Presentation



## Bachelor of Hotel Management & Catering Technology (BHMCT)

The programme prepares the students with a combination of necessary knowledge and hands-on training to take up responsibilities in the hospitality sector. Fully integrated teaching methods ensure academic excellence and

### Course offered in Bachelor of Hotel Management & Catering Technology (BHMCT)

Semester	Course Title
I	Food Production Foundation -I
	Food & Beverage Service Foundation -I
	Front Office Foundation -I
	Housekeeping Foundation - I
	Applications of Computers
	Basic Hygiene & HACCP
	Food Production -I
	Food & Beverage Service Foundation -I
	Front Office Foundation -I
	Housekeeping Foundation - I
	Applications of Computers
	Inter-Personal Communication
II	Food Production Foundation -II
	Food & Beverage Service Foundation -II
	Front Office Foundation -II
	Housekeeping Foundation - II
	Food Science and Nutrition
	Business Communication
	Food Production Foundation -II
	Food & Beverage Service Foundation -II
	Front Office Foundation -II
	Housekeeping Foundation - II
	Food Science and Nutrition
	Business Communication
III	Food Production Operation -I
	Food & Beverage Service Operation -I
	Front Office Operation -I
	Housekeeping Operation - I
	Basic Accounting
	Principles of Management
	Food Production Operation -I
	Food & Beverage Service Operation -I
	Front Office Operation -I
	Housekeeping Operation - I
	Professional Behaviors & Mannerism



## School of Hotel Management & Catering Technology

Hotel Management focuses on the development of human resource having technical competence for the hospitality industry.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B. Sc. H&HA	3 Years	10 + 2 Pass	ET + PI
BHMCT	4 Years	10 + 2 (any stream) with min. 40% Marks	
BHMCT - MBA	5 Years	10 + 2 (any stream) with min. 40% Marks	

Semester	Course Title
IV	Food Production Operation -II
	Food & Beverage Service Operation -II
	Front Office Operation -II
V	Housekeeping Operation – II
	Personality Development
	20 Weeks Industrial Training
VI	Food Production Operation -III
	Food & Beverage Service Operation -III
	Front Office Management
VII	House Keeping Management
	Management Information Systems
	Advance Food Production
VIII	Food & Beverage Management -I
	Facility Design & Management -I
	Sales & Marketing-I
	Financial Management-I
	Research Methodology
	Professional Elective/ Specialization -I
	Advance Food Production -I
	Food Production Management
	Food & Beverage Management -II
	Facility Design & Management -II
	Sales & Marketing-II
	Financial Management-II
	Research Methodology
	Professional Elective/ Specialization -II
	Advance Food Production -II
	Research Project

**Bachelor of Science in Hospitality & Hotel Administration (B. Sc.) H&HA**

The programme covers all the essential subjects of Hotel Management I the major areas of the industry like food and beverage services, business communication, and Catering, including a hospitality, front office management and organizational behaviour.

**Course offered in Bachelor of Science in Hospitality & Hotel Administration (B.Sc.) H&HA**

Semester	Course Title
I	Food Production Foundation– I
	Food & Beverage Service Foundation– I
	Front Office Foundation– I
	Hotel Housekeeping Foundation– I
	Applications of Computers
	Basic Hygiene & HACCP
	Food Production Foundation– I
	Food & Beverage Service Foundation– I
	Front Office Foundation– I
	Hotel Housekeeping Foundation–I
	Applications of Computers
	Inter personal Communication
II	Food Production Foundation –II
	Food & Beverage Service Foundation – II
	Front Office Foundation– II
	Hotel Housekeeping Foundation - II
	Food Science & Nutrition
	Business Communication
	Food Production Foundation – II
	Food & Beverage Service Foundation – II
	Front Office Foundation– II
	Hotel Housekeeping Foundation - II
	Food Science & Nutrition
	Business Communication
III	Food Production Operation- I
	Food & Beverage Service Operation - I
	Front Office Operation- I
	Housekeeping Operation – I
	Basic Accounting
	Principles of Management
	Food Production Operation- I
	Food & Beverage Service Operation - I
	Front Office Operation-I
	Housekeeping Operation -I
	Professional Behavior & Mannerism

Semester	Course Title
IV	20 weeks Industrial Training
V	Food Production Operation -II
	Food & Beverage Operation -II
	Front Office Operation -II
	Housekeeping Operation -II
	Hotel Accounting
	Hotel Laws & Risk Management
	Facility Design & Management-I
	Food Production Operation- II
	Food & Beverage Operation- II
	Front Office Operation- II
VI	Housekeeping Operation -II
	Personality Development
	Advance Food Production
	Advance Food & Beverage Operation
	Human Resource Management
	Food & Beverage Management
	Sales and Marketing
	Financial Management
	Facility Design & Management- II
	Advance Food Production
	Advance Food & Beverage Operation
	Management Information Systems (MIS)

**BHMCT + MBA (BHMCT - MBA)**

The Programme of Hotel Management focuses on preparing competent and committed professionals for the prevalent trends. Tourism and Hotel Industry. For MBA programme refer to School of Business and Management.



## Bachelor of Pharmacy (BPH)

Bachelor of Pharmacy is a 4 years Undergraduate degree program that deals with the intricacies of the pharmaceutical industry, starting from manufacturing medicines and drugs to dispensing them across various medical stores, distributors and stockists.

### Courses Offered Bachelor of Pharmacy (BPH)

Semester	Course Title
I	Mathematics-I
	Pharmacognosy-I
	Pharmacognosy-I
	Pharmaceutical Chemistry-I (Inorganic Pharmaceutical Chemistry)
	Pharmaceutical Chemistry-I (Inorganic Pharmaceutical Chemistry)
	Anatomy Physiology & Health Education (APHE)-I
	Anatomy Physiology & Health Education (APHE)-I
	Pharmaceutics-I (Dispensing & Community Pharmacy)
	Pharmaceutics-I (Dispensing & Community Pharmacy)
	Functional English & Communication Skills
II	Anatomy Physiology & Health Education (APHE)-II
	Pharmaceutical Chemistry-II (Biochemistry)
	Pharmaceutical Jurisprudence & Ethics
	Pharmacognosy-II
	Pharmaceutics-II (Hospital Pharmacy)
	Anatomy Physiology & Health Education (APHE)-II
	Pharmaceutical Chemistry-II (Biochemistry)
	Pharmacognosy-II
	Pharmaceutics-II (Hospital Pharmacy)
	Pharmaceutical Analysis-I
III	Pharmaceutical Chemistry-III (Physical Chemistry)
	Pharmaceutics-III (Unit operations-I including Engg. Drawing)
	Computer Science and Applications
	Mathematics-II
	Environmental Sciences
	Pharmaceutical Analysis-I
	Pharmaceutical Chemistry-III (Physical Chemistry)
	Pharmaceutics-III (Unit operations-I including Engg. Drawing)
	Computer Science and Applications
	Pharmacognosy-III
IV	Pathophysiology of Common Diseases
	Pharmaceutical Chemistry-IV (Organic Chemistry-I)
	Pharmaceutics-IV (Physical Pharmacy)
	Pharmaceutical Analysis-II
	Pharmacognosy-III
	Pharmaceutical Chemistry-IV (Organic Chemistry-I)
	Pharmaceutics-IV (Physical Pharmacy)
	Pharmaceutical Analysis-II
	Pharmaceutical Analysis-II
	Pharmaceutical Analysis-II

Semester	Course Title
V	Pharmaceutics-V (Pharmaceutical Technology-I)
	Pharmacology-I
	Pharmacognosy-IV
	Pharmaceutics-VI (Unit Operations-II)
	Pharmaceutical Chemistry-V (Organic Chemistry-II)
	Pharmaceutics-V (Pharmaceutical Technology-I)
	Pharmacology-I
	Pharmacognosy-IV
	Pharmaceutics-VI (Unit Operations-II)
	Pharmaceutical Chemistry-V (Organic Chemistry-II)
VI	Pharmaceutical Chemistry-VI (Medicinal Chemistry-I)
	Pharmaceutics-VII (Pharmaceutical Technology-II)
	Pharmacology-II
	Chemistry of Natural Products
	Pharmaceutical Microbiology
	Pharmaceutical Chemistry-VI (Medicinal Chemistry-I)
	Pharmaceutics-VII (Pharmaceutical Technology-II)
	Pharmacology-II
	Chemistry of Natural Products
	Pharmaceutical Microbiology
VII	Pharmaceutical Biotechnology
	Pharmaceutics VIII (Biopharmaceutics& Pharmacokinetics)
	Pharmaceutical Industrial Management
	Pharmacology III
	Pharmaceutical Chemistry VII (Medicinal Chemistry II)
	Elective (Dissertation, Theory)
	Pharmaceutics VIII (Biopharmaceutics& Pharmacokinetics)
	Pharmacology III
	Pharmaceutical Chemistry VII (Medicinal Chemistry II)
	Pharmaceutics IX (Dosage Form Design)
VIII	Pharmaceutical Analysis III
	Pharmaceutical Chemistry VIII (Medicinal Chemistry III)
	Pharmacognosy V
	Pharmacology IV (Clinical Pharmacy & Drug Interaction)
	Pharmaceutics IX (Dosage Form Design)
	Pharmaceutical Analysis III
	Pharmaceutical Chemistry VIII (Medicinal Chemistry III)
	Pharmacognosy V
	Pharmacology IV (Clinical Pharmacy & Drug Interaction)
	Pharmaceutics IX (Dosage Form Design)



# School of Pharmaceutical Sciences

Pharmacy being an integral part of healthcare system, the School of Pharmaceutical Sciences prepares the students to become pharmacists who can cater to the needs of modern healthcare systems. Pharmacists Education in India is in a transitional phase due to the rapid expansion & development of health care facilities from PHCs to the super specialty hospitals. The programmes of School has been approved by AICTE and PCI.

Programme Structure			
Programme	Duration	Eligibility	Selection Criteria
Bachelor of Pharmacy	4 Years	10+2 with min. 45% in PCM/ PCB	ET+PI
Master of Pharmacy (Pharmaceutics)	2 Years	B. Pharm with min 50% marks	
Master of Pharmacy (Pharmaceutical Chemistry)			
Master of Pharmacy (Pharmacology)			
Master of Pharmacy (Pharmaceutical Quality Assurance)			
Ph. D	2 years min.	M. Pharm with min 55% marks	

### Master of Pharmacy (Pharmaceutics) (MPHPS)

M.Pharm. Pharmaceutics or Master of Pharmacy in Pharmaceutics is a postgraduate Pharmacy course. Pharmaceutics is the discipline of pharmacy that deals with all facets of the process of turning a new chemical entity (NCE) into a medication able to be safely and effectively used by patients in the community.

#### Courses Offered Master of Pharmacy (Pharmaceutics) (MPHPS)

Semester		Course Title
I		Modern Analytical Techniques
		Advanced Pharmaceutical Sciences-I
		Modern Analytical Techniques and Animal Handling (Practical)
		Biopharmaceutics and Pharmacokinetic
		Physical Pharmaceutics
		Biopharmaceutics and Pharmacokinetic (Practical)
II		Advanced Pharmaceutical Sciences-II
		Research Methodology
		Advanced Pharmaceutics And Pharmaceutical Packaging
		Novel Drug Delivery System
		Advanced Pharmaceutics And Pharmaceutical Packaging(Practical)
		Novel Drug Delivery System(Practical)



### Master of Pharmacy (Pharmaceutical Chemistry) (MPHCH)

Masters of Pharmacy in Pharmaceutical Chemistry is a two-year postgraduate course in the field of Pharmacy. M. Pharm Pharmaceutical Chemistry is a non-dispensing area of study in Pharmacy which deals more in research aspects of the subject over the service and patient care.

#### Courses Offered Master of Pharmacy (Pharmaceutical Chemistry) (MPHCH)

Semester		Course Title
I		Modern Analytical Techniques
		Advanced Pharmaceutical Sciences-I
		Modern Analytical Techniques and Animal Handling (Practical)
		Medicinal Chemistry
		Stereochemistry And Reaction Mechanism
		Medicinal Chemistry (Practical)
II		Advanced Pharmaceutical Sciences-II
		Research Methodology
		Advanced Medicinal Chemistry
		Advanced Chemistry of Natural Products
		Advanced Medicinal Chemistry (Practical)
		Advanced Chemistry of Natural Products (Practical)



### Master of Pharmacy (Pharmacology) (MPHPC)

M.Pharm. in Pharmacology is essentially concerned with the study of the interactions that occur between a living organism and chemicals affecting normal or abnormal biochemical function.



### Courses Offered Master of Pharmacy (Pharmacology) (MPHPC)

Semester		Course Title
I		Modern Analytical Techniques
		Advanced Pharmaceutical Sciences-I
		Modern Analytical Techniques and Animal Handling (Practical)
		Clinical Pharmacotherapeutics
		Drug Development & Evaluation
		Drug Development & Evaluation (Practical)
II		Advanced Pharmaceutical Sciences-II
		Research Methodology
		Advanced Pharmacology
		Molecular & Clinical Pharmacy
		Advanced Pharmacology(Practical)
		Molecular & Clinical Pharmacy(Practical)

### Courses Offered Master of Pharmacy (Pharmaceutical Quality Assurance) (MPHQA)

Semester		Course Title
I		Modern Analytical Techniques
		Advanced Pharmaceutical Sciences-I
		Modern Analytical Techniques and Animal Handling (Practical)
		Standardization & Stabilization Methods
		Total Quality Management
		Standardization & Stabilization Methods (Practical)
II		Advanced Pharmaceutical Sciences-II
		Research Methodology
		Special Techniques in Drug Analysis
		Pharm. Quality Assurance
		Special Techniques in Drug Analysis (Practical)
		Pharm. Quality Assurance (Practical)

### Master of Pharmacy (Pharmaceutical Quality Assurance) (MPHQA)

M.Pharm in Pharmaceutical Analysis and Quality Assurance is a two-year post-graduate program for pharmacy students. Pharmaceutical is considered a part of the healthcare industry that deals with analysis, review, manufacturing, trial, and quality assurance of drugs/ medicines.

### \*\* The Third & Fourth Semester is Common to All Master Of Pharmacy Programmes

Masters of Pharmacy (Common for all streams)		Introduction to dissertation
Masters of Pharmacy (Common for all streams)		Mid Term Dissertation
Masters of Pharmacy (Common for all streams)		Pre Dissertation Seminar
Masters of Pharmacy (Common for all streams)		Final Dissertation



## Bachelor of Computer Application (BCA)

Bachelor of Computer Applications (BCA) is a 3-year (six semesters) undergraduate programme in Computer Applications. The objective of Bachelor of Computer Applications is to demonstrate the sound knowledge in key areas of Computer Science or Industrial Computing.

### Course offered in Bachelor of Computer Application (BCA)

Semester	Course Title
I	Basic Mathematics
	English
	Computer Basics and PC Software
	Basic Digital Electronics
	Programming Principles and Algorithms (PPA)
	PC Software Lab
	PPA Lab
	Basic Digital Electronics Lab
II	Elements of Statistics
	Business Accounting
	Computer Organization
	Internet Technology and Web Designing
	Programming in 'C'
	C programming Lab
	Web Programming Lab
	Seminar(Presentation Skills)
III	Data Structure Using 'C'
	Discrete Mathematics
	Software Engineering -I
	DBMS-I
	Soft Skills
	Data Structure Lab
	DBMS Lab-I
	Soft Skills Lab
IV	Object Oriented Programming using C++
	Operating System
	Advanced Internet Technologies
	DBMS-II
	Software Engineering -II
	C++ Lab
	Advanced IT Lab
	DBMS Lab-II

Semester	Course Title
V	Unix and Shell Programming
	Core Java
	Computer Based Numerical Methods
	Computer Networks
	Environmental Science
	Unix and Shell Programming Lab
	Java Programming Lab
	Seminar
VI	Management Information System
	.Net Programming
	Introduction to ICT Resources
	Operations Research
	Net Programming Lab
	IC Resource Lab
	Advanced Web Development Project

## School of Computer & Systems Sciences

School of Computer & Systems Sciences The role of IT and IT enabled services in our interaction with many government and non government agencies is increasing with the changing scenario of development. All the programmes being offered by the School have been designed with inputs from leading academicians and industry leaders to mentor and groom technology experts for the future. The curricula of the programmes of the school aim at practical understanding of all the concepts with major emphasis on creative thinking and innovation.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
BCA	3 Years	10 + 2 from any stream with min. 48% marks	Merit + Interview
MCA	3 Years	Graduation in any stream with a min. of 50% and Mathematics and one of the subjects, either at 10+2 or graduation level	Entrance Test + Interview
PGDCA	1 Year	Graduation in any stream with a min. of 48% marks	Merit + Interview
M. Tech. (Computer Science Engg.)	2 Years	Pass with 55% aggregate marks in BE/B. Tech. (CSE/IT/ECE) or MCA/M. Sc. (IT/Computer Science) or equivalent	Entrance Test + Interview
Ph. D. (Computer Science)	2 Years (Min.)	For Com. Sci. min. 55% aggregate in MCA/M.Sc. (Comp. Sc./M.Sc. - IT for Com. Sci. & Engineering: Min. 55% aggregate in M. Tech. (Comp. Sc./IT	Entrance Test + Interview

## Master of Computer Application (MCA)

Master of Computer Application is a three-year professional Master's Degree programme in Computer Science. The broad objective of MCA programme is to prepare graduate students for productive careers in software industry and academia by providing appropriate environment for teaching and research in the core and emerging areas of the discipline.

### Course offered in Master of Computer Application (MCA)

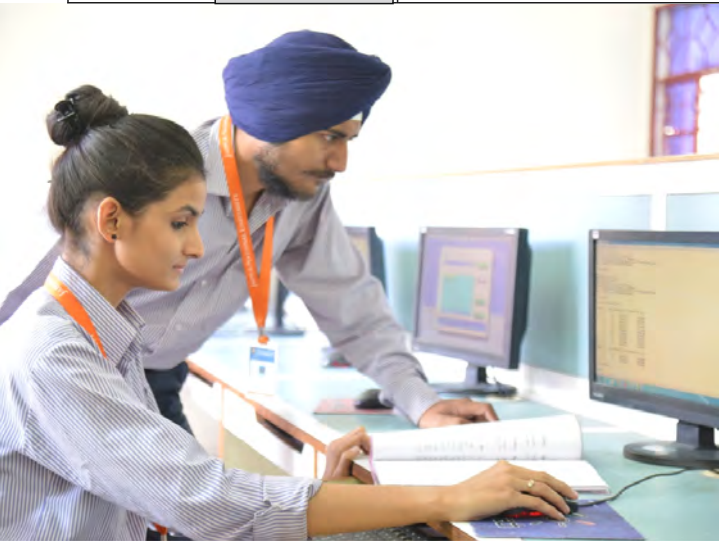
Semester		Course Title	Semester		Course Title
I		Mathematical Foundation of Computer Science	IV		Software Engineering
		Computer and ‘C’ Programming			Java Programming
		Computer Organization & Architecture			Compiler Design
		Data Base Management System			Computer Based Optimization Techniques
		Accounting and Financial Accounting			Microprocessor Design and Assembly Language
		Office Management Lab			Software Engineering Lab
		Programming in C lab			Java Programming Lab
		DBMS Lab			Microprocessor Lab
		Communication & Soft Skills -I			Communication & Soft Skills -IV
		Data Structure Using C			RDBMS Concepts and introduction to SQL
II		Computer Oriented Numerical and Statistical Techniques	Database 10G Administration Workshop I Release-2-WDP (D17092GC31S)		
		Operating System	Oracle Database 10G Administration Workshop II Release-2-WDP (D17090GC31S)		
		Data Communication & Computer Networks	WEB Technology		
		Environmental Science	<b>*Elective I</b>		
		Data Structures Using C Language Lab	Advanced Database Concepts		
		Numerical & Statistical Techniques Lab	Advanced Java Programming		
		Unix &Shell programming Lab	Android Programming		
		Communication & Soft Skills -II	.NET Framework and ASP.NET		
		Object Oriented Programming with C++	Management Information System		
		System Analysis and Design	<b>*Elective II</b>		
III		Computer Graphics	Parallel Processing		
		Artificial Intelligence	Mobile Computing		
		Design and Analysis of Algorithm	Data Warehousing & Data Mining		
		Object Oriented Programming with C++ Lab	Real Time Systems		
		Computer Graphics Lab	System Simulation & Modelling		
		DAA Lab	WEB Technology Lab		
		Communication & Soft Skills - III	<b>*Elective I Lab</b>		
			.NET Lab		
			Communication & Soft Skills -V		
			Industrial Project		
	VI				

### Post Graduate Diploma Course in Computer Applications programme (PGDCA)

PGDCA is a one-year (two semesters) Post Graduate Diploma Course in Computer Applications programme. The programme provides overall proficiency to the students in both hard and soft skills.

#### Course offered in Post Graduate Diploma Course in Computer Applications programme (PGDCA)

Semester	Course Title
I	Mathematical Foundation of Computer Science
	Computer and 'C' Programming
	Computer Organization & Architecture
	Data Base Management System
	Accounting and Financial Management
	Office Management Lab
	Programming in C lab
	DBMS Lab
	Communication & Soft Skills-I
II	Data Structure Using C
	Computer Oriented Numerical and Statistical Techniques
	Operating System
	Data Communication & Computer Networks
	Environmental Science
	Data Structures Using C Language Lab
	Numerical & Statistical Techniques Lab
	Unix & Shell programming Lab
	Communication & Soft Skills-II



### M. Tech. (Computer Science) (M. Tech-CS)

M.Tech. (Computer Science) gives in-depth & detailed knowledge of various fields of computer science. The programme is designed to make students professionally sound to cope with the challenges of modern day IT sector. The students have an option to undertake a project work in lieu of some of the course. The programme aims at preparing the students to take up application, research and development activities in core and some emerging areas in Computer Science, with focus on AI and AI related applications in a distributed computing environment.

Semester	Course Title
I	Cryptography & Network Security
	AI and Fuzzy Logic
	Advanced Operating Systems
	Advanced DBMS
	<b>Elective -1</b>
	Object Oriented Design & Construction
	Modern Compiler Design
	Advance Data Communication & Network
	Cryptography Lab.
II	ADBMS Lab.
	Advanced Data Structures & Algorithms
	Advanced Computer Architecture
	Real Time and Embedded Systems
	Data Mining and Bio Informatics
	<b>Elective -2</b>
	Soft Computing
	Wireless and Mobile Communication
	Simulation and Modelling
	Algorithm Analysis Lab.
	Wireless & Mobile Com Lab
III	Information Retrieval
	Research Methodology
	Parallel & Distributed Computing
	<b>Elective-3</b>
	Digital Signal Processing
	Data Mining & Knowledge Management
	Animation and Advanced Computer Graphics
	Information Retrieval Lab.
IV	Seminar
	Seminar
	Dissertation



# School of Education

Perfecting pedagogy is the life force of this School, which has emerged as a premier institute of Pedagogical Studies and Research. It is also known as the first B Ed college in Rajasthan to introduce educational technology through content analysis, concept mapping, use of Bloom's Taxonomy, and Constructivist Taxonomy.

Programme Structure			
Programme	Duration	Eligibility	Selection Criteria
Bachelor of Education	2 years	Graduation with min.50% marks	ET + P I (Reservation as per Govt. Norms)
Bachelor of Arts	3 years	10+2 any stream	Merit + P I
Bachelor of Arts, Bachelor of Education	4 years	10+2 with min.50% (reservation as per Govt. norms)	ET + P I
Bachelor of Science, Bachelor of Education			
Master of Education	2 years	Graduation in Education with min. 50% marks	ET + P I (Reservation as per Govt. Norms)
M. Phil	1 year	M.Ed./MA in Education with 55% Marks	ET + P I
Ph. D	2 year min.	M.Ed./MA in Education with 55% marks	ET + P I

## Bachelor of Education (BED)

B.Ed or Bachelor of Education is a 2 year professional course that is done after graduation to work as a teacher in schools. According to the National Council of Teacher Education (NCTE) it is mandatory for all teachers to have a B.Ed course. Bachelor of Education (BED) is a professional course and right after completing this course, students can get a job at school level.

### Courses offered in Bachelor of Education (BED)

Semester		Course Title
I		Childhood and Growing up
		Contemporary India and Education
		Language across the curriculum
		Understanding Disciplines and Subjects : Social Science/ Science/ Language
		Yoga Health and Personality
II		Teaching and Learning
		Drama and Art in Education
		Assessment for Learning
		Computer Application in Education
		Pedagogy of a School Subject – Part I
III		Pedagogy of a School Subject – Part II
		School Internship
		Knowledge and Curriculum Part II
IV		Critical Understanding of ICT
		School Internship
		Gender, School and Society
		Creating an Inclusive School
		Peace Education
		Environmental Education
		Post Internship

## Bachelor of Arts (BAP)

It is a 3 year program that enables you with necessary skills to sustain and succeed in different work cultures such as critical and innovative thinking.

### Courses offered in Bachelor of Arts (BAP)

Semester	Course Title
I	ESSENTIAL LANGUAGE SKILLS
	INTRODUCTION TO SOCIOLOGY
	FOUNDATIONS OF POLITICAL SCIENCE
	ANCIENT HISTORY OF INDIA (UPTO 1200 A.D.)
	POETRY AND DRAMA
	MICRO ECONOMICS
	PHYSICAL GEOGRAPHY
	PRINCIPLES OF PSYCHOLOGY
	PRINCIPLES OF PUBLIC ADMINISTRATION
	CONTEMPORARY INDIA AND EDUCATION
	ESSENTIAL LANGUAGE SKILLS
II	INDIAN SOCIETY
	REPRESENTATIVE INDIAN POLITICAL THINKERS
	HISTORY OF RAJASTHAN
	PROSE AND FICTION
	INDIAN ECONOMICS
	GEOGRAPHY OF RAJASTHAN
	ABNORMAL PSYCHOLOGY
	PUBLIC ADMINISTRATION IN INDIA
	LEARNING AND TEACHING
	HINDI
	SURVEY METHODS IN SOCIAL INVESTIGATIONS
III	SELECTED POLITICAL SYSTEM
	MEDIEVAL INDIA (1206-1740 A.D.)
	POETRY AND DRAMA
	MACRO ECONOMICS
	HUMAN GEOGRAPHY
	SOCIAL PSYCHOLOGY
	ADMINISTRATIVE INSTITUTIONS IN INDIA

Semester	Course Title
IV	HINDI COMPULSORY
	SOCIAL PROBLEMS IN CONTEMPORARY INDIA
	INDIAN POLITICAL SYSTEMS
	MAIN TRENDS IN CULTURAL HISTORY OF INDIA
	PROSE AND FICTION
	PUBLIC FINANCE
	GEOGRAPHY OF INDIA
	EXPERIMENTAL PSYCHOLOGY
	STATE ADMINISTRATION IN INDIA
	ELEMENTARY COMPUTER APPLICATION
	SOCIAL THINKERS
V	REPRESENTATIVE WESTERN POLITICAL THINKERS
	WORLD HISTORY
	POETRY AND DRAMA
	STATISTICS FOR ECONOMIC ANALYSIS
	ECONOMIC GEOGRAPHY
	PSYCHOLOGY OF HUMAN DEVELOPMENT
	COMPARATIVE PUBLIC ADMINISTRATION
	COMPUTER
	INTRODUCING SUB SOCIOLOGIES
	INTERNATIONAL RELATIONS SINCE
	MODERN INDIAN HISTORY
VI	PROSE AND FICTION
	MONEY AND BANKING
	WORLD GEOGRAPHY
	FOUNDATIONS OF PERSONALITY
	STATE ADMINISTRATION IN INDIA

## Bachelor of Arts Bachelor of Education (BABED)

Integrated Programme of Teacher Education titled 'Bachelor of Arts Education' (B.A., B.Ed.) is a degree programme. The programme will be of four year duration organized on the semester pattern with 2 semesters in a year.

### Courses offered in Arts Bachelor of Education (BABED)

Semester	Course Title
I	Essential Language Skills (English)
	Yoga ,Health and Personality ( Theory)
	Yoga ,Health and Personality (Practical )
	Sociology-I ( Introduction to Sociology)
	Sociology-II ( Indian Society)
	History-I ( Ancient History of India )
	History-II ( History of Rajasthan )
	Political Science-I (Introduction to Political Science )
	Political Science-II (Introduction to Political Theory )
	English Literature –I (Poetry and Drama)
	English Literature –II (Prose and Fiction )
	Geography-I (Physical Geography)
	Geography-II (Geography of Rajasthan )
	Geography-III (Practical)
	Economics –I (Micro Economics- Basics)
	Economics –II (Micro Economics -Advanced )
	Psychology-I (Introduction to Psychology)
	Psychology-II (Human Development )
	Psychology -III(Practical )
	Public Administration- I
	Public Administration-II
	Hindi Literature-I (हिन्दी भाषा का उद्भव एवं विकास )
	Hindi Literature-II ( भारतीय काव्यशास्त्र )
	Drawing and Painting –I(Fundamental of Visual Art)
	Drawing and Painting-II (Practical- Still Life)
	Drawing and Painting -III (Practical- Creative Design )
	Home Science (Physiology/ Applied Life Science )
	Home Science (Family Resource Management & Housing)
	Home Science (Practical )
	Urdu Literature-I
	Urdu Literature-II

Semester	Course Title
II	Computer Application in Education
	Teaching and Learning
	Sociology-I (Society, Culture and Globalization )
	Sociology-II (Social Problems in India )
	History-I (Medieval History )
	History-II (Main Trends of Indian Culture and Art ))
	Political Science-I (Indian Political Thought )
	Political Science-II (Indian Polity )
	English Literature –I (Poetry and Drama)
	English Literature –II (Prose and Fiction )
	Geography-I (Human Geography)
	Geography-II (Geography of Resources and its Utilization
	Geography-III (Practical)
	Economics –I ( Indian Economics )
	Economics –II (Economy of Rajasthan )
	Psychology-I (Social Psychology)
	Public Administration- I
	Public Administration-II
	Hindi Literature –I (आधुनिक काव्य)
	Hindi Literature –II (प्रयोजनमूलक हिंदी)
	Drawing and Painting –I( Art in education, culture and society )
	Drawing and Painting-II ( Practical- Still Life )
	Drawing and Painting -III ( Practical- Rendering )
	Home Science-I (Child Development )
	Home Science-II(Food and Nutrition )
	Home Science (Practical )
	Urdu Literature -I
	Urdu Literature-II



Semester	Course Title
III	General Hindi
	Knowledge and Curriculum
	Sociology (Survey Methods in Social Investigations )
	Sociology ( Environment and Society )
	Political Science (Indian Constitution)
	Political Science ( Indian Political Thoughts)
	History (World Civilization )
	History (Modern History of India - 1707 AD-1857 AD)
	English Literature ( Poetry and Drama)
	English Literature ( Prose and Fiction)
	Economics ( Macro Economics-I )
	Economics ( Macro Economics-II )
	Geography (Geography of India )
	Geography ( Economic Geography )
	Geography ( Practical )
	Psychology (Psychopathology )
	Psychology (Psychological Assessment and Statistics )
	Psychology ( Practical )
	Hindi Literature (भक्तिकालीन काव्य )
	Hindi Literature ( हिन्दी विद्यार्थे )
	Drawing and Painting (History of Indian Painting and Sculpture)
	Drawing and Painting (Practical -Landscape Painting )
	Drawing and Painting(Practical – Composition)
	Home Science ( Nutrition in Health and Disease
	Home Science ( Family Dynamics and Parent Education)
	Home Science ( Practical )
	Urdu Literature -I
	Urdu Literature -II



Semester	Course Title
IV	Essential Language Skills -II
	Assessment for Learning
	Sociology-I (Rural Sociology)
	Sociology-II ( Social Change in India )
	History-I (Modern History of India (1857 to 1947)
	History-II (Indian After 1947)
	Political Science-I (Representative Western Political Thinkers)
	Political Science-II (State Polity of Rajasthan)
	English Literature –II (Prose and Fiction)
	Geography-I (Geography of Asia)
	Geography-II ( Environmental Geography )
	Geography-III (Practical )
	Economics –I (Public Finance )
	Economics –II (Statistics for Economic Analysis)
	Pedagogy of a School Subject – Part I
	• Pedagogy of English
	• Pedagogy of Sanskrit
	• Pedagogy of Commercial Practices
	• Pedagogy of Political Science
	• Pedagogy of Chemistry
	• Pedagogy of Mathematics
	• Pedagogy of General Science
	• Pedagogy of General Science
	• Pedagogy of a School Subject – Part II
	• Pedagogy of History
	• Pedagogy of Drawing and Painting
	• Pedagogy of Economics
	• Pedagogy of Hindi
	• Pedagogy of Geography
	• Pedagogy of Book Keeping
	• Pedagogy of Biology
	• Pedagogy of Physics
	• Pedagogy of Social Science
	Public Administration-I
	Public Administration-II
	Hindi Literature –I (Natak Tatha Nibandh)
	Hindi Literature –II (Bhasha Vigyan)
	Drawing and Painting –I(History of Indian Painting and Sculpture-II)
	Drawing and Painting-II (Practical- Nature Life )
	Drawing and Painting -III ( Practical- Composition )
	Home Science-I (Home Science Education and Extension)
	Home Science-II(Textile Designing and Apparel Making)
	Home Science (Practical )
	Urdu Literature -I
	Urdu Literature -II

Semester	Course Title
V	Environmental Education
	Contemporary India and Education
	Sociology-I (Population Studies )
	Sociology-II (Classical Socio Thinkers )
	Political Science-I (Western Political Thinkers)
	Political Science-I (International Relations )
	History-I (World History – 1453 to 1815)
	History-II (World History – 1815-1945)
	English Literature-I ( Poetry and Drama)
	English Literature-II ( Prose and Fiction)
	Economics-I (Development Economics-I )
	Economics-II (Development Economics-II )
	Geography-I (World Geography - I)
	Geography-II (Agriculture Geography)
	Geography ( Practical )
	Psychology-I (Child Psychology )
	Psychology-II (Adolescent Psychology )
	Psychology ( Practical )
	Hindi Literature-I (हिंदी पद्य)
	Hindi Literature-II (शैतिकालीन काव्य)
	Drawing and Painting (History of Ancient Art and Western Art )
	Drawing and Painting (Practical – Anatomy )
	Drawing and Painting(Practical- Study from life )
	Home Science (Fundamentals of A/D )
	Home Science (Interior Decoration)
	Home Science (Practical )



Semester	Course Title
VI	General Hindi
	Childhood and Growing Up
	Sociology-I ()
	Sociology-II ()
	Political Science-I ()
	Political Science-I ()
	History-I ()
	History-II ()
	English Literature-I ( Poetry and Drama)
	English Literature-II ( Prose and Fiction)
	Economics-I ()
	Economics-II ()
	Geography-I ()
	Geography-II ()
	Geography)
	Psychology-I ()
	Psychology-II (Adolescent Psychology )
	Psychology ( Practical )
	Hindi Literature-I (हिंदी पद्य)
	Hindi Literature-II (शैतिकालीन काव्य)
	Drawing and Painting (History of Ancient Art and Western Art )
	Drawing and Painting (Practical – Anatomy )
	Drawing and Painting(Practical- Study from life )
	Home Science (Fundamentals of A/D )
	Home Science (Interior Decoration)
	Home Science (Practical )
VII	School Internship (Two Weeks )
	Gender , School and Society
	Creating an Inclusive School
	Pedagogical Inputs
VIII	School Internship (Two Weeks )
	School Internship (Sixteen Weeks )
	Drama and Art in Education
	Guidance and Counselling in Schools
	Peace and Value Education
	Indian Constitution and Human Rights
	Post Internship

## Bachelor of Science Bachelor of Education (BSCBED)

For Science Teachers, Bachelor of Science Education is a degree awarded to students who accomplish the four year programme of study in the field of science (in biology, chemistry, physics, and math) with major Educational courses.

### Courses offered in Bachelor of Science Bachelor of Education (BSCBED)

Semester	Course Title
I	Essential Language Skills-I ( English)
	Yoga ,Health and Personality ( Theory )
	Yoga and Health ( Practical)
	Chemistry –I ( Physico-inorganic Chemistry)
	Chemistry-II ( Physico-organic Chemistry)
	Chemistry ( Practical)
	Botany-I ( Introductory Microbiology)
	Botany –II ( Algae, Fungi and lichen )
	Botany ( Practical)
	Zoology –I ( Animal Diversity)
	Zoology –II ( Cell and Molecular Biology )
	Zoology (Practical)
	Mathematics -I( Calculus)
	Mathematics –II ( Differential Equations )
	Mathematics –( Project)
	Physics –I (Optics )
	Physics –II (Electromagnetism )
	Physics –III (Practical)
	Learning and Teaching
	Computer application in Education
II	Chemistry –I ( Physico-inorganic Chemistry)
	Chemistry-II ( Physico-organic Chemistry)
	Chemistry ( Practical)
	Botany-I (Bryophyta and Pteridophyta)
	Botany –II( Gymnosperms and angiosperms )
	Botany ( Practical)
	Zoology –I ( Genetics and Evolution)
	Zoology –II ( Developmental Biology )
	Zoology (Practical)
	Mathematics -I(Numerical Analysis )
	Mathematics –II (Discrete Mathematics )
	Mathematics –( Project)
	Physics –I (Electronic Devices and Circuits)
	Physics –II ( Solid State Physics)
	Physics –III (Practical)

Semester	Course Title
III	General Hindi-I
	Knowledge and Curriculum
	Chemistry –I ( Physico-inorganic Chemistry)
	Chemistry-II ( Physico-organic Chemistry)
	Chemistry ( Practical)
	Botany-I (Angiosperm Taxonomy and Economic Botany)
	Botany –II (Plant Morphology and Anatomy )
	Botany ( Practical)
	Zoology –I ( Structure and Function of Non Chordates )
	Zoology –II (Animal Physiology and Endocrinology)
	Zoology (Practical)
	Mathematics -I( Algebra of Matrices )
	Mathematics –II ( Abstract Algebra )
	Mathematics –( Project)
	Physics –I (Mechanics, waves and oscillations)
	Physics –II (Theory of Relativity and Modern Physics )
	Physics –III (Practical)
	Essential language skill-II (English)
	Assessment for Learning
	Pedagogy subjects
IV	Chemistry –I ( Physico-inorganic Chemistry)
	Chemistry-II ( Physico-organic Chemistry)
	Chemistry ( Practical)
	Botany-I (Plant Physiology(Part-I))
	Botany –II (Plant Physiology(Part-II))
	Botany ( Practical)
	Zoology –I (Biochemistry and Immunology)
	Zoology –II (Structure and functions of chordate)
	Zoology (Practical)
	Mathematics -I(Real Analysis)
	Mathematics –II (Optimization Techniques)
	Mathematics –( Project)
	Physics –I (Thermodynamics and Statistical Physics)
	Physics –II (Elementary of Quantum Mechanics)
	Physics –III (Practical)



Semester	Course Title
V	Environmental Education
	Contemporary India and Education
	Chemistry –I ( Physico-inorganic Chemistry)
	Chemistry-II ( Physico-organic Chemistry)
	Chemistry ( Practical)
	Botany-I (Cell Biology and Immunology)
	Botany –II (Genetics and Plant Breeding)
	Botany ( Practical)
	Zoology –I ( Micro Biology and Bio Technology )
	Zoology –II ( Applied Zoology and Ethnology )
	Zoology (Practical)
	Mathematics -I( Vector Calculus and Linear Algebra)
	Mathematics –II ( Mechanics )
	Mathematics –( Project)
	Physics –I (Mathematical Physics )
	Physics –II (Atomic and Molecular Physics )
	Physics –III (Practical)
VI	Childhood and Growing Up
	General Hindi-II
	School Internship (Two Weeks )
	Chemistry –I ( Physico-inorganic Chemistry)
	Chemistry-II ( Physico-organic Chemistry)
	Chemistry ( Practical)
	Botany-I (Molecular Biology and Biochemistry)
	Botany –II (Ecology and Applications of Biotechnology)
	Botany ( Practical)
	Zoology –I (Ecology and Biostatistics)
	Zoology –II (Environmental Biology)
	Zoology (Practical)
	Mathematics -I(Mathematical Statistics)
	Mathematics –II (Laplace and Fourier Transformation )
	Mathematics –( Project)
	Physics –I (Nuclear and Particle Physics)
	Physics –II (Experimental Techniques)
	Physics –III (Practical)

Semester	Course Title
VII	Gender , School and Society
	Creating an Inclusive School
	Pedagogical Inputs
	School Internship (Two Weeks )
	Simulative teaching and Learning
	Mastery even sem teaching skills
	Innovative Lesson
	Cooperative learning
	Constructivism
	Problem solving
	project methods
	School Internship (Sixteen Weeks )
VIII	Drama and Art in Education
	Guidance and Counselling in Schools
	Peace and Value Education
	Indian Constitution and Human Rights
	Post Internship
	Criticism Lesson
	Final Practical



## Master of Education (MED)

Master of Education is a master degree programme that deals with the study of new methods of teaching and educational research. The programme focuses on different aspects of education including instruction, curriculum, counselling, leadership, and educational technology.

### Courses offered in Master of Education (MED)

Semester	Course Title
I	Psychology of learning and Development
	Historical , Political and Economy of Education
	Educational Studies
	Introduction to Educational Research
	Communication and Expository Writing
	Self - Development and Yoga
	ICT
II	Philosophical Foundation of Education
	Sociological Foundation of Education
	Curriculum Studies
	Pre-service and In-service Teacher Education
	Dissertation
III	Internship in Teacher Training Institution ( 3 weeks)
	Educational Planning and Management at Elementary /Secondary
	<b>OR</b>
	Issues Curriculum and Assessment at secondary level
	Advanced Educational Research
	Educational Technology and instructional process
	Perspectives , Research and Issues in Teacher Education
IV	Academic Writing
	Dissertation
	• Pedagogy of Social Science Education at Elementary / Secondary Education
	• Pedagogy of Language Education at Elementary / Secondary Education
	• Educational Planning, Management and Finance at Elementary / Secondary Level
	• Educational Administration of Elementary / Secondary Level
	Dissertation

## M.Phil

This programme has a goal to sculpt the teachers with professional excellence as well as humane sensitivity.

### Courses offered in M.Phil

Semester	Course Title
I	FOUNDATION OF EDUCATIONAL RESEARCH
	ELECTIVE PAPERS (ANY ONE)
	1) ADVANCE EDUCATIONAL ADMINISTRATION
	2) ADVANCE EDUCATIONAL PSYCHOLOGY
II	3) EDUCATIONAL STATISTICS AND STATISTICAL INFERENCES
	PROPOSAL FOR DISSERTATION AND REVIEW OF RESEARCH STUDIES
	PSYCHO-SOCIAL BASIS OF EDUCATIONAL RESEARCH
	DISSERTATION



# School of Social Sciences

The School of Social Sciences offers employment friendly programmes at Master's and Doctorate levels in Social Work.

The course contents are so designed to groom the aspirants as Adult Guidance Workers, Career Advisors and Community Development Counsellors.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
Master of Social Work	2 Years	Graduation (any stream) (with min. 48% marks)	ET + PI
M. Phil. (Social Work)	1 Year	MSW with min. 50% Marks	
Ph. D.	2 Years (Min.)	Post Graduation with 55% in Relevant Discipline	



## Master of Social Work (MSW)

Master of Social Work (MSW) programme aims at social work education and building social work knowledge and practice through arrangement of ideological stances, research and field engagements.

### Course offered in Master of Social Work (MSW)

Semester	Course Title
I	Personality and Dynamics of Human Behaviour
	Human Society and Culture
	Social Case Work: Theory and Practice
	Group Work: Theory and Practise
	Field work; Field-work Practicum & Viva-voce
	Social and Human Development
II	Population and Environment-
	Community Organization: Theory and Practice
	Social Work Research-
	Social Welfare Administration and Social Action
	Field-work Practicum & Viva- voce
	Social Work: Themes and Perspectives
III	Social Policy and Planning in India-
	Social Statistics and Computer Applications-
	Trade Unions and Industrial Relations
	Labour Welfare and Social Security
	Women and Society in India-
	Youth Welfare and Development
IV	Field-work Practicum & Viva- voce-
	Counselling and Communication
	Participatory Approaches to Development and Social Work Practice Skills
	Political Economy and Development-
	Human Resource Management
	Labour Legislations in India
	Child Welfare and Development-
	Welfare of the Aged
	Field-work Practicum
	Field-based Research Report Project Work/ Dissertation
	English

## M. Phil. (Social Work)

The M.Phil Programme in Social Work is a research based programme which is meant to produce social work professionals in the most advanced and innovative social work research methods and equip to take up a careers in academics or research and pursue doctoral programmes in social work.

### Course offered in M. Phil. (Social Work)

01	Theoretical Orientations In Sociology ;
02	Research Methodology-
<b>Elective Papers:</b>	
03	Social Labour Welfare
03	Rural and Urban Community Development -
<b>M.PHIL. II<sup>nd</sup> SEMESTER</b>	
04	Dissertation
<b>M.PHIL. (SOCIAL WORK) 1<sup>ST</sup> SEMESTER, THEORETICAL AND CONCEPTUAL ISSUES IN SOCIAL WORK</b>	
01	Theoretical and Conceptual Issues in Social Work -
02	Social Work Research
<b>Elective Papers:</b>	
03	Social Work in Industry
04	Mental Health
05	Rural and Urban Community Development in India
<b>M.PHIL. (SOCIAL WORK ) 1<sup>nd</sup> SEMESTER</b>	
06	Dissertation



# School of Media Studies

Media is referred to as the fourth pillar of democracy, the whistle blower and watchdog of the society. It plays a significant role in nation building.

The programmes of the School are designed to nurture media professionals through sustained and intensive practical and theoretical lessons. The School has qualified and experienced teachers to ensure all round development of the students. The school runs undergraduate (BJMC) and postgraduate (MJMC) programmes in Journalism and Mass Communication. Also it offers short term courses in Broadcast Journalism and Videography.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
BJMC	3 Years	10+2 (any stream) pass	Merit + PI
MJMC	2 Years	Graduation in Relevant Programme with min. 50%	
Diploma in Videography	1 Year	10+2 (any stream) pass	
Ph. D. Mass Communication & Journalism	2 Years (Min.)	Post Graduation with 55% in Relevant Discipline	ET + PI



## Bachelor of Journalism and Mass Communication (BJMC)

The programme offers a wide range of opportunities in the field of mass media journalism, public relations and advertising. Journalists work in all types of media fields and industries.

### Course offered in Bachelor of Journalism and Mass Communication (BJMC)

Semester	Course Title
I	Media Reporting
	Communicative English
	History of Press
	Theoretical Perspectives on Media
	Creative Writing- (Hindi & English)
II	Radio Production
	TV Production
	Communication Research and Methods
	Media Ethics and Laws
	Media and Politics
III	Film Appreciation
	Broadcast Journalism
	Basics of Editing
	Media Economics
	Media Management
IV	Development Communication
	Photo Journalism
	Advertising
	Public Relation
	Environmental Communication
V	Basics of Camera Light & Sound
	New Media
	Project Work
	Theoretical Perspectives of Communication
VI	



## Master of Journalism and Mass Communication (MJMC)

The aim of MJMC programme is to educate students in the fields of journalism, mass communication, media research, advertising and public relations.

Area of specialization- TV / Documentary Production, Newspaper : Layout and Design, Photography: Still & Video, TV news capsule production, Advertisement

### Course offered in Master of Journalism and Mass Communication (MJMC)

Semester	Course Title
I	Information Technology and Web World
	History of Media in India
	Meaning and Making of News I
	Radio Production
	Development Communication
II	Media Ethics & Laws
	Meaning & Making of News II
	Media and Communication Research
	Media and Democracy
	TV Production
III	Corporate Communication and Advertising
	Media & Globalization
	Media Movement & Justice
	Specialized Media Reporting
	Specializations
IV	Basics of Camera

## Diploma in Videography

Videography is much more than mere learning to operate video cameras. This programme is designed to learn basic camcorder videography and non-linear video editing techniques.

### Course offered in Diploma in Videography

Semester	Course Title
I	Functions and Control of Video Camera
	Film Appreciation
	Indoor- outdoor Production
	Television Production Techniques
	Lighting & Camera Techniques
II	Basics of Editing & Techniques
	Capturing & Video Editing Basic
	Mathematics-I

# School of Languages, Literature & Society

The School offers Undergraduate, Post graduate & Research Programmes in English. The objectives of these programmes is to familiarize the students with the literary works of well known writers from Anglo;- Saxon period to present times.

Programme Structure			
Programme	Duration	Eligibility Criteria	Selection Procedure
B.A. (Hons.) English	3 Years	10+2 (any stream) with min. 50% marks	Merit + PI
M.A. English	2 Years	Graduation in English with min. 50% marks	Merit + PI
M. Phil.	1 Year	Graduation in English with min. 55% marks	Merit + PI
M.A. Ph. D. English	4 Years	Graduation in English with min. 50% marks	ET+ PI
Ph. D.	2 Years (Min.)	Graduation in English with min. 55% marks	ET+ PI



## B.A. (Hons.) English (BAENG)

This program will develop students language skills to enable them to communicate in professional contexts. At the end of the program, students will have adequate level of linguistic and cultural competence and will be prepared for the professional world.

### Course offered in B.A. (Hons.) English (BAENG)

Semester	Course Title
I	Modern English Usages & Language-I
	History of English Literature
	Introduction to English Literature -I
	Introduction to English Literature-II
	Introduction to Sociology-I
	French : Compulsory Language (other than English)
II	English Usage, Literary Forms and Devices
	Elizabethan Age and Metaphysicals
	17th and 18th Century Literature
	Pre-Romantic and Romantic Literature
	Elective II Introduction to Sociology II
	Compulsory Language French
III	Phonetics and Phonology
	Nineteenth Century Poetry & Drama
	Nineteenth Century Prose & Fiction
	Twentieth Century Poetry and Drama
	Introduction to Sociology-III
	French: Compulsory Language
IV	20th Century Prose & Fiction
	Modern English Usage & Language-II
	Indian Writing in English-I
	Indian Writing in English-II
	Elective : Introduction to Sociology-IV
	Compulsory Language French
V	American Literature
	New Literatures
	Major Philosophical Trends
	World Classics in Translation
	Environmental Studies
VI	Indian and Western Poetics
	Regional Literature in Translation
	Critical Theories
	Introduction to Language and Linguistics
	Dissertation

**M.A. English (MAENG)**

This programme will provide opportunities for a career in multiple industries including publishing house, advertising marketing, education and media.

**Course offered in M.A. English (MAENG)**

Semester		Course Title
I		Modern English Usages and Grammar
		Chaucer to Elizabethans
		Metaphysicals to Milton
		Augustans & Neo Clasical Writers
II		Pre-Romantics and Romantics
		Phonetics and Spoken English
		Literary Criticism - I
		Victorian Literature
III		Linguistics & Applied Linguistics
		American Literature
		World Literature
		Modern British Literature
IV		Stylistics , Discourse Analysis & Pragmatics
		Indian English Literature
		Modern British Literature -II
		Critical Theory - II
		Dissertation

**M.Phil. (M. Phil.)**

This program aims to help the students to develop ability to organise ideas and present them coherently with a considerable degree of sophistication in keeping with the norms of scholarly research and writing.

**Course offered in M.Phil. (M. Phil.)**

Year		Course Title
I		Critical approaches to Language and Literature
		Application of Literary Theories
		Dissertation





## Programme Structure

Programme	Duration	Eligibility Criteria	Selection Procedure
B. Sc. (Hons.) Agriculture	4 Years	10+2 Science/Agriculture and JET Appeared	Merit + PI

### B. Sc. (Hons.) Agriculture (BAG)

While pursuing this programme students will study Agriculture (Agronomy), Veterinary Science, Forestry, Fisheries, Horticulture, Home Science, and more. After completing this programme students will be eligible to work in the agricultural field and drive real change in the arena.



### Course offered in B. Sc. (Hons.) Agriculture (BAG)

Semester	Course Title
I	Introductory Agriculture and Principles of Agronomy
	Principles of Genetics
	Introduction to Soil Science
	Dimensions of Agricultural Extension
	Agricultural Microbiology
	Introduction to Computer Applications
	Elementary Mathematics
	Comprehensive and Communication Skills in English
	Introductory Agriculture and Principles of Agronomy
	Principles of Genetics
	Introduction to Soil Science
	Dimensions of Agricultural Extension
	Agricultural Microbiology
	Introduction to Computer Applications
II	Comprehensive and Communication Skills in English
	NCC/NSS/ Physical Education
	Agricultural Meteorology
	Principles of Plant Breeding
	Plant Pathogens and Principles of Plant Pathology
	Insect Morphology and Systematics
	Principles of Agricultural Economics
	Fundamentals of Soil and Water Conservation Engineering
	Biochemistry
	Soil Chemistry, Soil Fertility and Nutrient Management
	Agricultural Meteorology
	Principles of Plant Breeding
	Plant Pathogens and Principles of Plant Pathology
	Insect Morphology and Systematics
III	Fundamentals of Soil and Water Conservation Engineering
	Biochemistry
	Soil Chemistry, Soil Fertility and Nutrient Management
	Field Crops-I (Kharif)
	Weed Management
	Introductory Nematology
	Statistics
	Fundamentals of Rural Sociology and Educational Psychology
	Production Technology of Fruits and Plantation Crops
	Production Economics and Farm Management
	Farm Power and Machinery
	Manures And Fertilizers
	Field Crops-I (Kharif)
	Weed Management
	Introductory Nematology
	Statistics
	Production Technology of Fruits and Plantation Crops
	Production Economics and Farm Management
	Farm Power and Machinery

Semester	Course Title
IV	Field Crops- II (Rabi)
	Water Management
	Soil survey, Land Use Planning and Remote Sensing
	Insect Ecology and Integrated Pest Management including Beneficial Insects
	Production Technology of Vegetables and Flowers
	Agricultural Finance and Co-operation
	Crop Physiology
	Entrepreneurship Development and Communication Skills
	Field Crops- II (Rabi)
	Water Management
	Soil survey, Land Use Planning and Remote Sensing
	Insect Ecology and Integrated Pest Management including Beneficial Insects
	Production Technology of Vegetables and Flowers
	Agricultural Finance and Co-operation
V	Crop Physiology
	Entrepreneurship Development and Communication Skills
	Rainfed Farming
	Principles of Plant Biotechnology
	Crop and stored grain pests and their management
	Breeding of Field and Horticultural Crops
	Agricultural Marketing, trade and Prices
	Protected cultivation and Post harvest Technology
	Diseases of Field Crops and their management
	Production technology of Spices, Aromatic and Medicinal crops
	Practical Crop Production -I(Kharif crops)
	Rainfed Farming
	Principles of Plant Biotechnology
	Crop and stored grain pests and their management
VI	Breeding of Field and Horticultural Crops
	Agricultural Marketing, trade and Prices
	Protected cultivation and Post harvest Technology
	Diseases of Field Crops and their management
	Production technology of Spices, Aromatic and Medicinal crops
	Farming Systems, Sustainable Agriculture and Organic Farming
	Principles of Seed Technology
	Extension Methodologies for Transfer of Agricultural Technology
	Livestock Production and Management
	Environmental Science**
	Post harvest management and value addition of fruits and vegetables
	Diseases of Horticultural Crops and their management
	Fundamentals of Agri. Business Management
	Practical Crop Production -II (Rabi)
VII	Farming Systems, Sustainable Agriculture and Organic Farming
	Principles of Seed Technology
	Extension Methodologies for Transfer of Agricultural Technology
	Livestock Production and Management
	Environmental Science**
	Post harvest management and value addition of fruits and vegetables
	Diseases of Horticultural Crops and their management
	Fundamentals of Agri. Business Management
	Practical Crop Production -II (Rabi)
	Farming Systems, Sustainable Agriculture and Organic Farming
	Principles of Seed Technology
	Extension Methodologies for Transfer of Agricultural Technology
	Livestock Production and Management
	Environmental Science**
VIII	Post harvest management and value addition of fruits and vegetables
	Diseases of Horticultural Crops and their management
	Fundamentals of Agri. Business Management
	Practical Crop Production -II (Rabi)
	Farming Systems, Sustainable Agriculture and Organic Farming
	Principles of Seed Technology
	Extension Methodologies for Transfer of Agricultural Technology
	Livestock Production and Management
	Environmental Science**
	Post harvest management and value addition of fruits and vegetables
	Diseases of Horticultural Crops and their management
	Fundamentals of Agri. Business Management
	Practical Crop Production -II (Rabi)
	Farming Systems, Sustainable Agriculture and Organic Farming

## School of Agriculture Sciences

The school provides an exemplary education that balances the expectations of the industry and academic input.

The goal of this programme is to inculcate scientific methods and equipment to bring about positive changes in existing agricultural techniques. The course will include land surveying, animal management, biotechnology, soil sciences, and water resource management.

Semester	Course Title
VII	Advanced Seed Technology
	Applied Weed Management
	Vermi-composting and Organic farming
	Soil, Plant and Water Analysis
	Soil Management
	Dairy Cattle Production
	Plant Growth regulators in Agriculture
	Plasticulture in Agriculture
	Advanced Seed Technology
	Tissue culture and Micro-propagation techniques
	Bio-agents and Integrated Disease Management
	Detection and Management of seed borne pathogens
	Non -Insect Pests and their management
	Bio-control agents and Bio-pesticides
VIII	Plant Growth regulators in Agriculture
	Economic Nematology
	Bio-control agents and Bio-pesticides
	Vermi-composting and Organic farming
	Tissue culture and Micro-propagation techniques
	Plasticulture in Agriculture
	Nursery Management of Horticultural Crops
	Commercial Vegetable Production
	Commercial Fruit Production
	Plant Growth regulators in Agriculture
	Marketing Management
	Project Formulation, Evaluation and Monitoring
	Natural Resource Economics and Management
	Visuals and Graphic Communications
	Govt. Policies and Programmes on Agriculture
	Sampling Techniques
	Dairy Cattle Production
	Poultry Production and Management
	Orientation
	Research Station/KVK/ including village attachment and In-situ interaction of farmers, students and research In-situ interaction of farmers, college faculty and students
	Industrial Attachment*/Skill Development/Experiential
	Educational Tour
	Project Report Preparation and Evaluation

## Courses offered in B. Sc. Nursing (BN) Programme

Years	Course Title
I	Anatomy and Physiology
	Nutrition and Biochemistry
	Nursing Foundation
	Psychology
	Microbiology
	English
	Hindi
	Introduction to Computer
	Nursing Foundation (Pr.)
	Sociology
II	Medical Surgical Nursing – I
	Pharmacology, Pathology and Genetics
	Community Health Nursing- I
	Communication and Education Technology
	Medical Surgical Nursing – I (Pr.)
	Medical Surgical Nursing-II
III	Child Health Nursing
	Mental Health Nursing
	Nursing Research and Statistics
	Medical Surgical Nursing-II (Pr.)
	Child Health Nursing (Pr.)
	Mental Health Nursing (Pr.)
IV	Midwifery and Obstetrical Nursing
	Community Health Nursing- II
	Management of Nursing Services and Education
	Environmental Sciences
	Midwifery and Obstetrical Nursing (Pr.)
	Community Health Nursing- II (Pr.)

# Seedling

## School of Nursing

Nursing, a blend of art and science a profession focused on the autonomous and collaborative care of mankind. It needs to be geared up to meet the growing healthcare needs of the people in the changing environment of advancing technology and rapid scientific progress. Bachelor of Nursing program gives an opportunity to develop the knowledge, skills and ethical behaviour that enables oneself to practice as a competent nurse, clinician and for other health care services. Students after graduation can be absorbed in the healthcare sector to provide person specific medical care.



### Academics

Provide training to nurses to provide expert health care at homes and hospitals.

Provide opportunities for personality development and inculcate a sense of responsibility and integration of health and social aspects. Develop leadership qualities in an individual to be a part of the workforce for managing hospitals.

### Affiliations and Collaborations

School of Nursing of 'Jaipur National University' is recognized by the Government of Rajasthan and functions as per the norms prescribed by Indian Nursing Council. The school has collaboration with speciality hospitals like Fortis, Escorts Hospital and Apex Hospital Jaipur for training its students. The annual intake of students in the school is forty.

### Programme Structure

Programme	Duration	Eligibility Criteria	Selection Procedure
B.Sc. Nursing	4 Years	Min. 50% in 10+2 with Physics/Chemistry/Biology & English	Entrance Test + Interview

### B.Sc. Nursing (BN)

B.Sc. Nursing, Offered by School of Nursing, is a four-year professional programme. This programme is registered with and controlled by Indian Nursing Council.

# School of Fashion Design

The fashion designer is the inspiration for creative ideas and new trends for clothing, fabric development and accessories. The degree in Fashion Design provides the technical and professional knowledge and capabilities to work as a fashion designer and fashion product developer for the global fashion industry.



## Programme Structure

Programme	Duration	Eligibility Criteria	Selection Procedure
Bachelor of Design - Fashion Design	4 Years	10+2 pass	Merit and PI
Diploma in Fashion Design	1 Year	10+2 pass	Merit and PI

### Bachelor of Design - Fashion Design (B. Des. FD)

The program will equip the students with the skills necessary to create fashion from the initial vision, through hand sketching of the design, to draping pattern creation, sewing and execution of the finished product. The curriculum is designed to develop skills so as to respond to changing needs of the fashion industry. Each student is required to prepare a portfolio and selected collection of work will be showcased to people from industry and academia at a graduate runway.

### Courses offered in Bachelor of Design - Fashion Design (B. Des. FD) Programme

Semester	Course Title
I	Sustainable Design
	Communication Skills
	Basic Of Design
	Visualization & Representation-I
	Material Exploration-I
	Computer Application
	Introduction to textile
	Western Art Appreciation
II	Visualization & Representation-II
	Material Exploration-II
	Digital Design-I
	Fabric Construction
	Theory of Textile
	Draping -I
III	Fashion Illustration -I
	Garment Construction-I
	Pattern Making-II
	Material Exploration
	Fabric Construction
	Business of Fashion
IV	Draping II
	Design Process-I
	Fashion Illustration -II
	Digital Design -I
	Garment Construction-II
	Digital Design -II
	Basic of Fashion

V	Professional Practices
	Material Exploration
	Fashion Illustration-III
	Pattern Making & garment construction III
	Draping-III
VI	Merchandising Production Methods
	Fashion Forecasting
	Surface Ornamentation-II
	Fashion Illustration-IV
	Pattern Making & garment construction IV
VII	Design Process-II
	History of Western Costume
	Visual Merchandising
	Fashion Advertisement
	Portfolio Development- I
VIII	Fashion Accessories
	Fashion Styling
	Final Design Collection/Dissertation/ Graduation Project
	Indian art and Costume appreciation

### Courses offered in Diploma in Design Programme

I	History of fashion
	Communication skills and personality Development
	Fashion Model Drawing & Illustration
	Pattern Making & Construction-I
	Elements/Principle of design and Fashion
II	Merchandising & Production Methods
	Fashion Illustration
	Draping
	Design Collection & Portfolio
	Digital Design
	Pattern Making & Construction-II
	Food Production Foundation-I



## Bachelor of Physiotherapy (BPT)

At the undergraduate level, the School of Allied Health Sciences offers a degree programme in Bachelor of Physiotherapy (BPT). It is one of the best Physiotherapy colleges in Jaipur, having state of art infrastructure.

### Course offered in Bachelor of Physiotherapy (BPT)

Semester	Course Title
I	Human Anatomy-I
	Human Anatomy-I
	Human Physiology-I
	Human Physiology-I
	Fundamentals of Biomechanics & Exercise Therapy (BOP-I)
	Fundamentals of Biomechanics & Exercise Therapy (BOP-I)
	Fundamentals of Biomedical Physics (BOP-II)
	Fundamentals of Biomedical Physics (BOP-II)
II	Biochemistry
	Human Anatomy-II
	Human Anatomy-II
	Human Physiology-II
	Human Physiology-II
	Exercise Therapy-I
	Exercise Therapy-I
	Electrotherapy-I
III	Electrotherapy-I
	Sociology & Psychology
	Pharmacology
	Pathology & Microbiology
	Exercise Therapy-II
	Exercise Therapy-II
	Electrotherapy-II
	Electrotherapy-II
IV	Basics of First Aid & Critical Care
	Basics of First Aid & Critical Care
	General Medicine
	General Surgery
	Community Medicine
	Biomechanics & Kinesiology-I
	Biomechanics & Kinesiology-I
	Ethics & Administration
v	Clinical Orthopedics
	Clinical Neurology & Psychiatry
	Clinical Cardiorespiratory Conditions
	Biomechanics & Kinesiology-II
	Biomechanics & Kinesiology-II
	Community Based Rehabilitation
	Clinical Obstetrics, Gynaecology & Pediatrics
	Physiotherapy in Surgery & Hand
VI	Physiotherapy in Surgery & Hand
	Bioengineering
	Physiotherapy in Medicine & Geriatric Conditions
	Physiotherapy in Medicine & Geriatric Conditions
	Physiotherapy in Sports Fitness & Allied Therapeutics
	Physiotherapy in Sports Fitness & Allied Therapeutics
	Physiotherapy in Orthopedic Conditions-I
	Physiotherapy in Neurological Conditions-I
VII	Physiotherapy in Neurological Conditions-I
	Physiotherapy in Obstetrics, Gynaecology & Pediatrics
	Advanced Physical & Functional Diagnosis
	Biostatistics & Research Methodology
	Physiotherapy in Orthopedic Conditions-II
	Physiotherapy in Orthopedic Conditions-II
	Physiotherapy in Neurological Conditions-II
VIII	Physiotherapy in Neurological Conditions-II
	Physiotherapy in Cardiorespiratory Conditions
	Physiotherapy in Cardiorespiratory Conditions
	Eductive Approaches in Physiotherapy Conditions

## M.Sc. Medical Anatomy (MANM)

M. Sc Medical Anatomy is a 2-year post graduate degree program, the minimum eligibility is a B.Sc. Anatomy or any related discipline from a recognized institute or its equivalent exam.

### Course offered in M.Sc. Medical Anatomy (MANM)

Semester	Course Title
I	Basics of Anatomy
	Basics of Physiology
	Basics of Biochemistry
	General Anatomy, Gross Anatomy with Applied aspects
	General & Systemic-Embryology including growth, development and Teratology, General & Systemic-Histology, Comparative Anatomy and Anthropology.
	Neuroanatomy, Histological, museum and embalming techniques including medico legal aspects, Human Genetics.

## M.Sc. Medical Microbiology (MMBM)

The course offered at one of the best MSc Medical Microbiology colleges in Jaipur aims to provide knowledge of medical microbiology that includes microorganisms, diagnosis, disease causation and treatment of pathogens to advanced practical training and major significance to public health.

### Course offered in M.Sc. Medical Microbiology (MMBM)

Semester	Course Title
II	Basics of Anatomy
	Basics of Physiology
	Basics of Biochemistry
	General microbiology and Immunology.
	Systemic Bacteriology and Parasitology.
	Mycology and Virology

## DMLT (as per State Govt.)

Year/Semester	Course Name
I Year	Communication Skills in English
	Computer Application
	Anatomy and Physiology
	Hematology and Blood Banking
	Clinical Pathology
	Clinical Practical Training
	MLT Instruments Practice Lab-1
	Hospital Industrial Training
	Entrepreneurship and Professional Management
	Environmental Studies
II Year	Microbiology including Parasitology and Immunology
	Pathology
	Biochemistry
	Clinical Practical Training-II
	MLT Instruments Practice Lab-II
	Hospital Industrial Training

# School of Allied Health Sciences

The allied health field provides numerous opportunities to our graduates to fill up niche areas of medical services that are always in high demand. Our graduates learn to help prevent, diagnose, and treat various ailments and make a positive difference in the lives of their patients through care, compassion, and meaningful intervention. These healthcare professionals support physicians by taking care of patients at various hospitals, community settings, laboratories, and research institutions.

Bachelor of Physiotherapy	4 Years	10+2 in PCB with min. 50% Marks	Entrance Test + PI
M.Sc. Medical Anatomy	3 Years	B.Sc.PCB/ MBBS /BDS/BAMS/ BHMS/ BPT/ B.Pharm./ B.Sc. Nursing/BVSc & AH	Merit + PI
M.Sc. Medical Microbiology	3 Years	B.Sc.PCB/ MBBS /BDS/BAMS/ BHMS/ BPT/ B.Pharm./ B.Sc. Nursing/BVSc & AH	Merit + PI
DMLT (as per State Govt.)	2Years	10+2 Pass in PCB	As per State Govt. norms

## Institute of Medical Sciences and Research Centre

Upcoming Medical College and 1000 Beds Hospital at Jagatpura, Jaipur. Jaipur National University has made niche for itself in the Country because of its commitment to providing quality education and conducive learning environment. Always sighting into new possibilities and raising its aspirations, the University is venturing into the field of Medical Education and Research. Here the University aspire to set a benchmark not only for medical education but also for treatment of patients by its state of the art 1000 bedded Multi-speciality Hospital.

### Programme Structure

Programme	Duration	Eligibility Criteria	Selection Procedure
Bachelor of Medicine & Bachelor of Surgery	4.5 Years	As per MCI Norms	Through MCI - ET & Counselling



AN	Anatomy
PY	Physiology
BI	Biochemistry
PH	Pharmacology
PA	Pathology
MI	Microbiology
FM	Forensic Medicine
CM	Community Medicine
IM	General Medicine
CT	Respiratory Medicine
PE	Pediatrics
PS	Psychiatry
DR	Dermatology, Venerology, Leprosy
SU	General Surgery
OP	Ophthalmology
EN	ENT,
OG	Obstetrics & Gynaecology
OR	Orthopedics
AS	Anaesthesia
RD	Radiodiagnosis
RT	Radiotherapy
DE	Dentistry
BI	Biochemistry



## JAIPUR NATIONAL UNIVERSITY

### Academic Calendar 2016 – 2017

I/III/V/VII Semester Academic Calendar (Odd Semester July – December)

S.No.	Events	I Sem	III Sem	V Sem	VII Sem
1.	Commencement of Classes	10 Aug 2016 Wednesday	06 July 2016 Wednesday	14 July, 2016 Thursday	
2.	Mid Term Test -I	29 Working Days	59 Working Days	53 Working Days	
		19-22 September 2015 (Monday- Thursday)			
3.	Technorazz - 2016	29, 30 September 2015 (Thursday- Saturday)			
4.	Mid Term Practical				
5.	Mid Term Test -II	21-24 Nov. 2016 (Monday-Thursday) (After 41 working days from Mid Term – I)			
6.	Preparation Leave	25-30 Nov. 2016 (Friday – Wednesday)			
7.	End Sem Theory Examinations	01 – 18 December 2016 (Thursday - Friday)			
8.	End Sem Practical Exam	17- 21 Dec. 2016 (Saturday-Wednesday) 03-04 January 2017 (Tuesday-Wednesday)			
9.	Winter Semester Break	22 December 2016-01 January 2017 (Thursday-Sunday)			

II/IV/VI/VIII Semester Academic Calendar ( Odd Semester July – December)

S.No.	Events	II Sem	IV Sem	VI Sem	VIII Sem
1.	Commencement of Classes	05 January 2017 (Thursday)			
2.	Convection-2017	18 February 2017 (Saturday)			
3.	Mid Term Test -I	41 Working Days			
		27 February -2 March 2017 (Monday-Thursday)			
4.	Mid Term Practical	15-21 March 2017 (Wednesday-Tuesday)			
5.	Mid Term Test -II	03-06 April 2017 ( Monday-Thursday)			
6.	End Sem Practical Exam	27 April 2017-03 May 2017 (Thursday-Wednesday)			
7.	Preparation Leave	04-10 May 2017 (Thursday-Wednesday)			
8.	End Sem Theory Examinations	11-29 May 2017 (Thursday-Monday)			















# JAIPUR NATIONAL UNIVERSITY

Near New RTO Office, Jagatpura, Jaipur-302017 | Ph: 0141-2754399, 2753377  
Mob.: 9351288101 | Email: [info@jnujaipur.ac.in](mailto:info@jnujaipur.ac.in), [seedlingacademy@hotmail.com](mailto:seedlingacademy@hotmail.com)  
[www.jnujaipur.ac.in](http://www.jnujaipur.ac.in)