

**IK Gujral Punjab Technical University
Jalandhar
Distance Education Program
(Approved by UGC)**

Quality Education at Affordable Cost



Prospectus (Jan-2017)

Information Technology

BSc-IT BCA MSc-IT MCA PGDCA
BSc-IT(LE) BCA(LE) MCA(LE)

Journalism & Mass Communication

BA-JMC MA-JMC

Management

BBA B.Com

dde.ptu.ac.in

dde@ptu.ac.in

9478098108

01822-662502

What's Inside?

| | |
|------------------------------------|----|
| Courses at a Glance | 3 |
| About University | 5 |
| About Distance Education Program | 7 |
| Why IKG PTU | 9 |
| Academic Streams & Courses offered | 11 |
| Information Technology | 11 |
| Management | 24 |
| Journalism & Mass Communication | 32 |
| Rules & Regulations | 38 |
| Student Welfare Schemes | 42 |
| Placements & Alumni | 43 |
| Admission Form | 45 |

Courses at a Glance

| Course | Semester | Admission Fee | Exam Fee | Total Fee |
|-----------|----------|---------------|----------|-----------|
| BCA | 1 | 9000 | 700 | 9700 |
| | 2 | 9000 | 700 | 9700 |
| | 3 | 9000 | 700 | 9700 |
| | 4 | 9000 | 700 | 9700 |
| | 5 | 9000 | 700 | 9700 |
| | 6 | 9000 | 700 | 9700 |
| | | | | |
| BCA-LE | 3 | 9500 | 700 | 10200 |
| | 4 | 9500 | 700 | 10200 |
| | 5 | 9500 | 700 | 10200 |
| | 6 | 9500 | 700 | 10200 |
| | | | | |
| BSC-IT | 1 | 7500 | 700 | 8200 |
| | 2 | 7500 | 700 | 8200 |
| | 3 | 9500 | 700 | 10200 |
| | 4 | 9500 | 700 | 10200 |
| | 5 | 9500 | 700 | 10200 |
| | 6 | 9500 | 700 | 10200 |
| | | | | |
| BSC-IT-LE | 3 | 10000 | 700 | 10700 |
| | 4 | 10000 | 700 | 10700 |
| | 5 | 10000 | 700 | 10700 |
| | 6 | 10000 | 700 | 10700 |
| | | | | |
| MCA | 1 | 10000 | 700 | 10700 |
| | 2 | 10000 | 700 | 10700 |
| | 3 | 10000 | 700 | 10700 |
| | 4 | 10000 | 700 | 10700 |
| | 5 | 10000 | 700 | 10700 |
| | 6 | 10000 | 700 | 10700 |
| | | | | |
| MCA-LE | 3 | 10500 | 700 | 11200 |
| | 4 | 10500 | 700 | 11200 |
| | 5 | 10500 | 700 | 11200 |
| | 6 | 10500 | 700 | 11200 |

| Course | Semester | Admission Fee | Exam Fee | Total Fee |
|--------|----------|---------------|----------|-----------|
| MSC-IT | 1 | 8000 | 700 | 8700 |
| | 2 | 8000 | 700 | 8700 |
| | 3 | 9000 | 700 | 9700 |
| | 4 | 9000 | 700 | 9700 |
| | | | | |
| PGDCA | 1 | 8000 | 700 | 8700 |
| | 2 | 8000 | 700 | 8700 |
| | | | | |
| BBA | 1 | 9000 | 700 | 9700 |
| | 2 | 9000 | 700 | 9700 |
| | 3 | 9000 | 700 | 9700 |
| | 4 | 9000 | 700 | 9700 |
| | 5 | 9000 | 700 | 9700 |
| | 6 | 9000 | 700 | 9700 |
| | | | | |
| BCOM | 1 | 6000 | 700 | 6700 |
| | 2 | 6000 | 700 | 6700 |
| | 3 | 6000 | 700 | 6700 |
| | 4 | 6000 | 700 | 6700 |
| | 5 | 6000 | 700 | 6700 |
| | 6 | 6000 | 700 | 6700 |
| | | | | |
| BA-JMC | 1 | 7500 | 700 | 8200 |
| | 2 | 7500 | 700 | 8200 |
| | 3 | 8500 | 700 | 9200 |
| | 4 | 8500 | 700 | 9200 |
| | 5 | 8500 | 700 | 9200 |
| | 6 | 8500 | 700 | 9200 |
| | | | | |
| MA-JMC | 1 | 8500 | 700 | 9200 |
| | 2 | 8500 | 700 | 9200 |
| | 3 | 8500 | 700 | 9200 |
| | 4 | 8500 | 700 | 9200 |

About University

IK Gujral Punjab Technical University is a state university which has a wide network of more than 180 Engineering, Management, Pharmacy, Hotel Management and Architecture Colleges in the State of Punjab that are approved by All India Council of Technical Education (AICTE)/apex regulatory bodies.

Punjab has been one of the most prosperous states in India since independence by way of Green Revolution coupled with white revolution. In order to give the equal momentum to the industrial growth of Punjab educated skilled workforce in sufficient numbers has always been a need of the hour. The Globalization of Indian economy in early 90's further extrapolated the need of such a young innovative workforce.



To address this issue of Technical & professional workforce shortage and to usher into a new era of Industrial Development comparable to International Standards, the Punjab Government constituted Punjab Technical University in 1997 by an Act of State Legislature. The University was entrusted with the responsibility of developing the new generation of technical manpower that can spearhead the industrial development of the State. Punjab Technical University has been founded to be the grooming ground for the future professionals like Engineers, Managers, & Researchers etc.

The university has produced thousands of technical and professional graduates since its inception who are highly placed with reputed organizations and many are also successfully running their entrepreneurial ventures.

University has bagged many awards and achievements and has also made number of national and international collaborations. IKG-PTU was conferred Best Technical University Award in 2013 by KIIT & ISTE. The university also got the prestigious CCI Technology Education Excellence Award in “Best University Promoting High quality Research at Master's and Doctoral Thesis Work” category in 2013.

I.K Gujral Punjab Technical University Jalandhar

Board of Governors

| S.No | Name |
|------|--|
| A. | Chairman: Chief Secretary to Govt. of Punjab |
| B. | Vice Chairman: The Principal Secretary to Government of Punjab. Department of Technical Education and Industrial Training |
| | Ex-officio Members |
| 1. | Vice Chancellor: IK Gujral Punjab Technical University, Jalandhar |
| 2. | Vice Chancellor: Maharaja Ranjit Singh State Technical University, Bathinda |
| 3. | Secretary to Government of Punjab, Department of Finance |
| 4. | Director: Technical Education and Industrial Training, Punjab |
| 5. | Chairman of the North-West Committee, All India Council for Technical Education, Chandigarh |
| 6. | President of the Confederation of Indian Industry or his nominee and |
| 7. | Director of Indian Institute of Technology, Ropar |
| 8. | Principal, Beant College of Engineering and Technology, Gurdaspur |
| | Nominated Members |
| 1. | Shri. Sachit Jain, Joint Managing Director, Vardhman Textile & MD Vardhman Special Steels, Ludhiana. |
| 2. | Dr. Dharinder Tayal, Director, Anovus Institute of Clinical Research |
| 3. | Dr. M.P Poonia, Director, NITTTR, Chandigarh |
| 4. | Prof. Parkash Gopalan, Director, Thapar University ,Patiala |
| 5. | Dr. A.P.Singh, Dean RIC, IK Gujral Punjab Technical University, Jalandhar |

About our Distance Education Program (DEP)

Distance Education plays a crucial role in enriching the knowledge base of any society. The need & importance of Distance Education is becoming more relevant in modern age where it becomes difficult to impart education to masses in conventional regular mode.

IKG-PTU understands the aforesaid need in India & further it has firmly understood that innovative professional education has to be spread to the general masses. This is how the Distance Education Program (DEP) of the Punjab Technical University was conceived in 2001 & since then PTU DEP has grown as a market leader offering quality distance education to lacs of students.

The objective of the Program is to impart affordable, relevant, skill-based & remunerative professional education to the masses of the country including the deprived sections of society.

Today, the university is providing affordable and quality professional education across the state of Punjab including Chandigarh in the following streams:

- **Information Technology (IT)**
- **Management**
- **Journalism & Mass Communication**

IKG-PTU Distance Education Program Officers & Faculty

DDE Officers

| S. No. | Name | Designation |
|---------------|-------------------------|----------------------------------|
| 1. | Sh. Rakesh Verma, IAS | Vice Chancellor |
| 2. | Dr. Amanpreet Singh | Registrar |
| 3. | Sh. Sandeep Kumar Kajal | Director(DDE) |
| 4. | Er. Paramjit Singh | Controller of Examinations |
| 5. | Dr. Nitya Sharma | Dy.Controller of Examinations |
| 6. | Sh. Rajinder Dogra | Dy.Registrar(DDE) |
| 7. | Sh. Rajinder Kumar | Assistant Registrar (DDE) |
| 8. | Sh. Paramjit Singh Gill | Assistant Registrar(Examination) |
| 9. | Sh. Pawan Kumar | Assistant Registrar(Examination) |
| 10. | Sh. Rishi Gupta | Assistant Registrar(Examination) |
| 11. | Sh. Hardeep Singh | Assistant Registrar(Examination) |
| 12. | Smt. Vaneeta Bala | Assistant Registrar(Examination) |

DDE Faculty (Course Coordinators)

| S. No. | Name | Course |
|---------------|----------------------|-----------------|
| 1. | Dr. Pooja Mehta | MBA |
| 2. | Dr. Mandeep Kaur | MCOM |
| 3. | Dr. Sanjeev Bansal | BCOM |
| 4. | Ms. Supriya Babbar | BBA |
| 5. | Sh. Rajdeep Singh | PGDCA, MCA, BCA |
| 6. | Sh. Dinesh Gupta | MSCI-T, BSC-IT |
| 7. | Dr. Ranbir Singh | MA-JMC |
| 8. | Ms. Priyanka Mahajan | BA-JMC |

Why IKG-PTU ?

Distance Education Program of IKG-Punjab Technical University is a unique Program of its kind. With its experience of 14 years of running distance education across the country, the university has evolved its Distance Education Program to the best in class standards. Following are the key reasons to pursue a course under Distance Education Program of IKG-PTU:

A State Government University

IKG-Punjab Technical University is a State Government University established under Punjab Technical University Act, 1996 (Punjab Act No. 1 of 1997).

UGC Recognition

Distance Education Bureau-University Grants Commission has given recognition to IKG-Punjab Technical University for offering Open & Distance Learning Programmes. All the courses being offered by IKG-PTU under Distance Education mode are recognized by UGC.

Nomenclature of all courses as per UGC

The nomenclature of all the courses being offered by IKG-Punjab Technical University Distance Education Program is as per UGC approved list. Accordingly the students getting PTU DEP degrees will never face a problem while applying for any job/higher studies anywhere!

Market Leader in Distance Education

Since 2001, Punjab Technical University has been pioneer in offering quality distance education across the country. University has produced lacs of graduates and post graduates who are well placed in reputed organizations and many are self employed.

Quality Education

IKG-PTU Distance Education Program provides an opportunity to students for their career growth along with holistic development of personality. The university adopts latest and industry oriented curriculum which are revised from time to time as per contemporary requirements. We have exclusive Board of Studies for every discipline which consists of eminent academicians and experts from industry for designing & developing the course curriculum.

Affordable Fee Structure

University has adopted a very nominal fee structure for all courses under Distance Education Program. The objective is to increase the access to quality education for the masses and especially the underprivileged and downtrodden sections of society. Quality education at affordable cost is a unique strength of IKG-PTU DEP which is indeed unparalleled across board.

Free of cost Study Material for all students of Distance Education

University provides free study material to all its students of distance education in the form of Self Learning Material (SLM). University has its own in-house Content Development Centre which has eminent academicians on its panel as Authors, Reviewers/Editors and Subject Experts. The SLMs are developed under direct control of university as per best in class academic standards and keeping in view the distance education pedagogy. The study material is designed strictly as per SLM format and is Self Contained so that students don't need to hunt for additional reading sources.

Same Syllabus & Examination as for regular courses

In order to bring equivalence for the degrees obtained through distance mode & regular mode, IKG-PTU has adopted the same syllabus & examinations for both. This parity of distance education academic structure with the regular counterpart has greatly enhanced the credibility of PTU distance education degrees.

Personal Contact Program (PCP) at university's own Study Centres

University provides **two weeks Personal Contact Program (PCP)** for all students enrolled in various courses in each semester. PCP will be conducted at university's main campus at Kapurthala and own Study Centres as per the schedule notified each semester. Students are required to attend the PCP for face to face interaction with faculty, academic counselling and the practical work.

Study Centres are reputed academic institutions equipped with state of the art infrastructure, experienced faculty and well-established labs for practicals.

Human Values & Professional Ethics (HVPE)

HVPE has been included as a compulsory subject in all the courses to sensitize the students about the human values and to inculcate ethical orientation in their professional and personal conduct. In fact university has established an International Resource Centre for Universal Human Values & Ethics at its campus which is also offering PG programmes in Human Values & Holistic Development.

Online Student Support Services

Distance learners require extensive support services as they are already located away from the university. IKG-PTU has instituted 24X7 student support service in the form of online web portal at Student Support Centre. Students can register any request, query, complaint through this web portal as well as through series of toll free numbers as well as land line & mobile numbers given as helpline at university website. Even an exclusive grievances portal has been activated for speedy settlement of any type of complaints. University is continuously evolving student support service mechanism/channels for better facilitation of distance learners and these will be notified accordingly from time to time.

Academic Streams & Courses Offered

University is offering distance education courses in the following three streams. These courses are being offered only in the state of Punjab & UT Chandigarh.

- **Information Technology (IT)**
- **Management**
- **Journalism & Mass Communication**

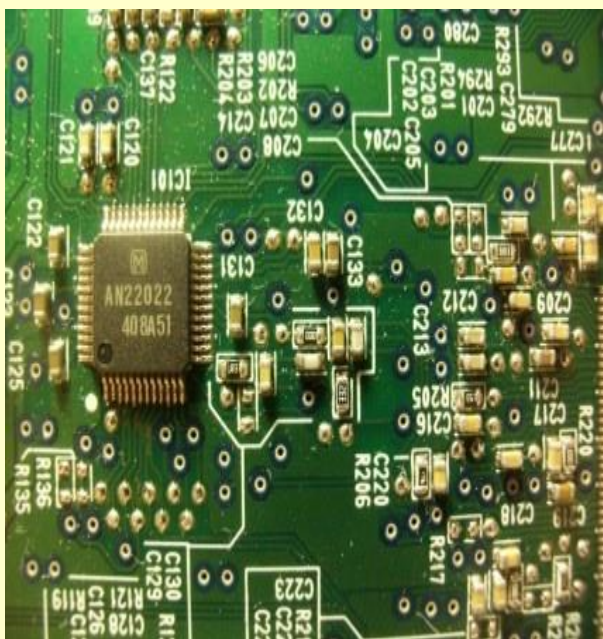
I. Information Technology

Information Technology has touched almost all walks of our life. Be it a household or a professional dependence of everyone on IT & IT Enabled Services (ITES) is crystal clear. E-Correspondence, e-Commerce, e-Booking, e-banking, e-governance are the few examples to name & the use of such technologies is increasing at quite a rapid pace.

Information technology and computer applications have yielded greater accuracy and efficiency in all fields.

The role of Information Technology today has extended to communication, data management, Management Information Systems, Remote banking, Online Education etc.

IT courses under Open & Distance Learning mode at IKG-PTU has been designed to enable the students to compete & contribute towards the technological development of the society.



Career Prospects in IT

Entrepreneurs The computer industry provides services to departments of the same company or to individual clients. These services could range from renting PCs to publishing on computers, helping customers select computers for developing software and training computer professionals. Many software professionals with experience have switched over to lucrative consultancy practices. The demand for specialists is also increasing. Even desktop publishing is catching on fast.

Education The virtual classroom is a reality. Online education is very much an established phenomena. India is looked upon as an intellectual IT hub across the globe and we are training our students in the field with latest job oriented syllabi. Our students are being trained to cater to the need of BPO; IT enabled services, CAD CAM, programming system designs and support systems. Our courses in IT lead to the career opportunities such as IT Consultant. Hardware Design Engineers, System Designers, Programmers, System Analyst, Software Engineering, Training Faculty, R&D Scientists. EDP Manager, Programmer, System Specialist/ Manager and Project Manager etc.

Hardware Jobs Hardware refers to computer chips, circuit boards, computer system and related equipment like keyed equipment such as keyboards, modem and printers. Hardware jobs are in manufacturing of computers and auxiliaries, assembly, marketing and maintenance.

Networking Networking experts give connectivity to the various system nodes over a local or wide area network (LAN/WAN). Designing, building and maintaining information networks, within or between organizations, is their task. Networking is the fastest growing segment in the communications field. The job entails analyzing, installing and configuring the company's network, monitoring network performance, troubleshooting and maintenance are major responsibilities.

Software Jobs System programmer/Software Engineer, Systems Programmers research, develops and adapts application programmes for computer systems. In other words, they direct the computer and tell it what to do and how to function. However, these two jobs can overlap and sometimes the same individual is responsible for both areas. System Programmers and Software Engineers, find employment with software firms, computer manufacturers.

Enterprise Resource Planning (ERP) ERP software is used for planning the resources of the entire worldwide network of an enterprise. Sales, service, distribution, marketing, purchase, manufacturing, inventory, finance, accounts etc. are integrated on one software backbone. ERP is a system solution for enterprise wide computing which combines resource planning and integration of all business functions.

Details of courses offered in Information Technology

| | | |
|----|------------------------|--|
| 1. | BCA | Bachelor of Computer Application |
| 2. | BCA (Lateral Entry) | Bachelor of Computer Application |
| 3. | BSc-IT | Bachelor of Science-Information Technology |
| 4. | BSc-IT (Lateral Entry) | Bachelor of Science-Information Technology |
| 5. | MCA | Masters of Computer Applications |
| 6. | MCA (Lateral Entry) | Masters of Computer Applications |
| 7. | MSc-IT | Master of Science-Information Technology |
| 8. | PGDCA | Post Graduate Diploma in Computer Applications |

| Course | Duration | Max. Duration | Eligibility | Tuition Fee |
|---|----------|---------------|---|-------------------------|
| BCA | 3 years | 6 years | <p>All those candidates who have passed the 10+2 or its equivalent examination in any stream conducted by a recognized Board / University / Council.</p> <p>OR</p> <p>Those candidates who have passed their Matriculation examination AND have also passed three year Diploma in any Trade from Punjab State Board of Technical Education & Industrial Training, Chandigarh or such Examination from any other recognized State Board of Technical Education, or Sant Longowal Institute of Engineering & Technology, Longowal.</p> | Rs.9,000/- per semester |
| BCA (Lateral Entry Admission in 3rd semester) | 2 years | 4 years | <p>3 Year Polytechnic Diploma in IT/CSE (or equivalent)</p> <p>Or</p> <p>10+2 with one year Diploma in Computer Application/IT (or equivalent) from a recognized university with Mathematics as course at 10+2 or DIT/DCA level.</p> | Rs.9500/- per semester |

| Course | Duration | Max. Duration | Eligibility | Tuition Fee |
|--|----------|---------------|--|--|
| BSc- IT | 3 years | 6 years | All those candidates who have passed the 10+2 or its equivalent examination in any stream conducted by a recognized Board / University / Council. OR Those candidates who have passed their Matriculation examination AND have also passed three year Diploma in any Trade from Punjab State Board of Technical Education & Industrial Training, Chandigarh or such Examination from any other recognized State Board of Technical Education, or Sant Longowal Institute of Engineering & Technology, Longowal. | 1st & 2nd Semester Rs. 7,500/- each semester 3rd, 4th, 5th & 6th Semester Rs. 9,500/- each semester |
| BSC-IT (Lateral Entry Admission in 3rd semester) | 2 years | 4 years | 3 Year Polytechnic Diploma in IT/CSE (or equivalent) Or 10+2 with one year Diploma in Computer Application/IT (or equivalent) from a recognized university with Mathematics as course at 10+2 or DIT/DCA level. | Rs.10,000/- per semester |
| MCA | 3 years | 6 years | All those candidates who have passed any recognized Bachelor's degree of minimum three years duration with Mathematics/ Statistics /Business Mathematics / Business Statistics / Quantitative Techniques as Compulsory/ Optional/ Additional Paper as one of the subjects either at 10+2 or at graduation level. Or Have passed BCA course of minimum three years duration from any recognized University. | Rs.10,000/- per semester |
| MCA (Lateral Entry Admission in 3rd semester) | 2 years | 4 years | All those candidates who have passed any recognized Bachelor's degree of minimum three years duration in BCA, B.Sc. (IT/Computer Science) with Mathematics as a course at 10+2 level or at Graduation level. Obtained at least 50% (45% in case of candidates belonging to reserved category) at the qualifying examination. | Rs.10,500/- per semester |
| M. Sc- IT | 2 years | 4 years | All those candidates who have passed any recognized bachelor's degree of minimum three years duration with Mathematics / Statistics / Business Mathematics / Business Statistics / Quantitative Techniques / Computer Science/ Information Technology as compulsory / Optional / additional paper as one of the subjects either at 10+2 or at graduation level. OR PGDCA / BCA / B.Sc.(IT) | 1st & 2nd Semester Rs. 8,000/- each semester 3rd & 4th Semester Rs. 9,000/- each semester |

| Course | Duration | Max. Duration | Eligibility | Tuition Fee |
|--|----------|---------------|-------------------------------|-------------------------|
| PGDCA | 1 year | 2 years | Graduation in any discipline. | Rs.8,000/- per semester |
| Note: Examination fee of Rs. 700/- will be charged per semester in addition to above mentioned tuition fee. | | | | |

Course Scheme

BCA (Bachelor of Computer Applications)

No. of Semesters: 6

| BCA Semester-I | | | | | |
|-----------------------|--|------------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory (T)/ Practical (P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSBC 101 | Communication - I | T | 4 | 40 | 60 |
| BSBC102 | Programming in C | T | 5 | 40 | 60 |
| HVPE101 | Human Value and Professional Ethics | T | 3 | 40 | 60 |
| BSBC103 | Mathematics I | T | 6 | 40 | 60 |
| BSBC104 | Information Technology | T | 4 | 40 | 60 |
| BSBC 105 | Software Lab-I (Programming in C) | P | 2 | 60 | 40 |
| BSBC 106 | Software Lab-II (Information Technology) | P | 2 | 60 | 40 |

| BCA Semester-II | | | | | |
|------------------------|----------------------------------|------------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T) / Practical (P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSBC 201 | Communication II | T | 4 | 40 | 60 |
| BSBC 202 | Basic Mathematics - II | T | 6 | 40 | 60 |
| BSBC203 | OOPS using C++ | T | 5 | 40 | 60 |
| BSBC204 | Computer System Architecture | T | 4 | 40 | 60 |
| EVSC 101 | Environmental Sciences | T | 2 | 40 | 60 |
| BSBC 205 | Workshop on Web Development | P | 2 | 60 | 40 |
| BSBC 206 | Software Lab-III(OOPS Using C++) | P | 2 | 60 | 40 |

| BCA Semester-III | | | | | |
|-------------------------|--|----------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSBC 301 | System Analysis and Design | T | 4 | 40 | 60 |
| BSBC 302 | Data structures | T | 5 | 40 | 60 |
| BSBC 403 | Digital Circuits and Logic Design | T | 5 | 40 | 60 |
| BSBC 304 | Basic Accounting | T | 5 | 40 | 60 |
| BSBC 305 | Software Lab-IV (Data Structures) | P | 3 | 60 | 40 |
| BSBC 306 | Hardware Lab-I (Digital Circuits & Logic Design) | P | 2 | 60 | 40 |

| BCA Semester-IV | | | | | |
|-----------------|---|----------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSBC 401 | Software Engineering | T | 5 | 40 | 60 |
| BSBC 402 | Microprocessors & Microcontrollers | T | 5 | 40 | 60 |
| BSBC 403 | Operating Systems | T | 5 | 40 | 60 |
| BSBC 404 | Database Management Systems | T | 5 | 40 | 60 |
| BSBC 405 | Hardware Lab-II(Microprocessors & Microcontrollers) | P | 2 | 60 | 40 |
| BSBC 406 | Software Lab-V (Database Management Systems) | P | 2 | 60 | 40 |

| BCA Semester-V | | | | | |
|----------------|--------------------------------------|----------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSBC 501 | Data Warehousing & Mining | T | 4 | 40 | 60 |
| BSBC 502 | Programming in Java | T | 5 | 40 | 60 |
| BSBC 503 | Management Information System | T | 4 | 40 | 60 |
| BSBC 504 | Workshop on Advanced Web Development | T | 3 | 40 | 60 |
| BSBC 505 | Software Lab-VI(Programming in Java) | P | 2 | 60 | 40 |
| BSBC 506 | Project Work-I | P | 6 | 60 | 40 |

| BCA Semester-VI | | | | | |
|-----------------|-------------------------------------|----------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSBC 601 | Principles of Management | T | 5 | 40 | 60 |
| BSBC 602 | Computer Graphics | T | 5 | 40 | 60 |
| BSBC 603 | Computer Networks | T | 5 | 40 | 60 |
| BSBC 604 | Information Security | P | 2 | 60 | 40 |
| BSBC 605 | Software Lab-VII(Computer Graphics) | P | 2 | 60 | 40 |
| BSBC 606 | Project Work - II | P | 6 | 120 | 80 |

Course Scheme

BSc IT (Bachelor of Science IT)

No. of Semesters: 6

| BSc IT Semester-I | | | | | |
|--------------------------|---|--------------------------------------|----------------|---------------------------|-----------------|
| Course Code | Course Title | Theory (T)/ Practical (P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSIT101/ BSBC 101 | Communication - I | T | 4 | 40 | 60 |
| BSIT102/ BSBC102 | Programming in C | T | 3 | 40 | 60 |
| HVPE101 | Human Value and Professional Ethics | T | 5 | 40 | 60 |
| BSIT103/ BSBC103 | Mathematics I | T | 6 | 40 | 60 |
| BSIT104/ BSBC104 | Information Technology | T | 4 | 40 | 60 |
| BSIT105/ BSBC 105 | Software Lab-I (Programming in C) | P | 2 | 60 | 40 |
| BSIT106/ BSBC 106 | Software Lab-II (Information Technology) | P | 2 | 60 | 40 |

| BSc IT Semester-II | | | | | |
|---------------------------|--|--------------------------------------|----------------|---------------------------|-----------------|
| Course Code | Course Title | Theory(T) / Practical (P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSIT 201/ BSBC 201 | Communication II | T | 4 | 40 | 60 |
| BSIT202/ BSBC 202 | Basic Mathematics - II | T | 6 | 40 | 60 |
| BSIT203/ BSBC203 | OOPS using C++ | T | 5 | 40 | 60 |
| BSIT 204/ BSBC 303 | Digital Circuits and Logic Designs | T | 4 | 40 | 60 |
| EVSC 101 | Environmental Sciences | T | 2 | 40 | 60 |
| BSIT 205/ BSBC 206 | Software Lab- III (OOPS using C++) | P | 2 | 60 | 40 |
| BSIT 206/ BSBC 307 | Hardware Lab-1 (Digital Circuits and Logic Designs) | P | 2 | 60 | 40 |

| BSc IT Semester-III | | | | | |
|-------------------------------|---|------------------------------------|----------------|---------------------------|-----------------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSIT301/ BSBC 204 | Computer System Architecture | T | 4 | 40 | 60 |
| BSIT 302/ BSBC 302 | Data structures | T | 4 | 40 | 60 |
| BSIT303/ BSBC 403 | Operating Systems | T | 5 | 40 | 60 |
| BSIT 304 | Web Technologies | T | 5 | 40 | 60 |
| BSIT 305 | Software Lab- IV (Operating systems) | P | 2 | 60 | 40 |
| BSIT 306/ BSBC 306 | Software Lab- V (Data structures) | P | 2 | 60 | 40 |
| BSIT 307 | Software Lab- VI (Web Technologies) | P | 2 | 60 | 40 |

| BSc IT Semester-IV | | | | | |
|-----------------------------|---|------------------------------------|----------------|---------------------------|-----------------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSIT401 | Programming in PHP | T | 5 | 40 | 60 |
| BSIT402/ BSBC404 | Database Management Systems | T | 5 | 40 | 60 |
| BSIT403/ BSBC301 | System Analysis and Design | T | 5 | 40 | 60 |
| BSIT404/ BSBC603 | Computer Networks | T | 5 | 40 | 60 |
| BSIT405/ BSBC305 | Basic Accounting | P | 4 | 60 | 40 |
| BSIT406/ BSBC406 | Software Lab-VII (Database Management Systems) | P | 2 | 60 | 40 |
| BSIT407 | Software Lab-VIII (Programming in PHP) | P | 2 | 60 | 40 |

| BSc IT Semester-V | | | | | |
|------------------------------|--|------------------------------------|----------------|---------------------------|-----------------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSIT 501 | Information Security | T | 5 | 40 | 60 |
| BSIT502/ BSBC502 | Programming in Java | T | 5 | 40 | 60 |
| BSIT503/ BSBC401 | Software Engineering | T | 5 | 40 | 60 |
| BSIT 504/ BSBC501 | Data Warehousing and Mining | T | 5 | 40 | 60 |
| BSIT505/ BSBC505 | Software Lab-IX (Programming in Java) | P | 2 | 60 | 40 |
| BSIT 506 | Project Work- I | P | 4 | 120 | 80 |

| BSc IT Semester-VI | | | | | |
|------------------------------|---|------------------------------------|----------------|---------------------------|-----------------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BSIT 601 | Mobile Application Development | T | 5 | 40 | 60 |
| BSIT 602 | Software Testing and Quality Assurance | T | 5 | 40 | 60 |
| BSIT603/ BSBC602 | Computer Graphics | T | 5 | 40 | 60 |
| BSIT 604 | Software Lab-X (Mobile Application Development) | P | 2 | 60 | 40 |
| BSIT 605/ BSBC605 | Software Lab- XI (Computer Graphics) | P | 2 | 60 | 40 |
| BSIT 606 | Project Work- II | P | 4 | 120 | 80 |

Course Scheme

MCA (Master of Computer Applications)

No. of Semesters: 6

| MCA Semester-I | | | | | |
|---|--|--------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T) / Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| MCA101 | Information Management | T | 5 | 40 | 60 |
| MCA102 | Object Oriented Programming in C++ | T | 5 | 40 | 60 |
| MCA103 | Computer Organization and Assembly Language | T | 5 | 40 | 60 |
| MCA104 | Accounting & Financial Management | T | 5 | 40 | 60 |
| MCA105 | Technical Communication | T | 5 | 40 | 60 |
| MCA106 | Software Lab-I (Information Management) | P | 2 | 60 | 40 |
| MCA107 | Software Lab-II (Object Oriented Programming in C++) | P | 2 | 60 | 40 |
| *There will be no practical examination for Technical Communication. Faculty must include the performance in internal assessment of theory. | | | | | |

| MCA Semester-II | | | | | |
|-----------------|---|---------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T) / Practical (P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| MCA201 | Mathematical Foundations of Computer Science | T | 5 | 40 | 60 |
| MCA202 | Relational Database Management System | T | 5 | 40 | 60 |
| MCA203 | Data Structures | T | 5 | 40 | 60 |
| MCA204 | Data Communication and Networks | T | 5 | 40 | 60 |
| MCA205 | Linux Operating System | T | 5 | 40 | 60 |
| MCA206 | Software Lab-III(Relational Database Management System) | P | 2 | 60 | 40 |
| MCA207 | Software Lab-IV(Data Structures) | P | 2 | 60 | 40 |
| MCA208 | Software Lab-V (Based on Linux Operating System) | P | 1 | 60 | 40 |

| MCA Semester-III | | | | | |
|------------------|---|-------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| MCA301 | Database Administration | T | 5 | 40 | 60 |
| MCA302 | Information Security | T | 5 | 40 | 60 |
| MCA303 | Software Engineering & Project Management | T | 5 | 40 | 60 |
| MCA304 | Java Programming | T | 5 | 40 | 60 |
| MCA305 | Elective | T | 5 | 40 | 60 |
| MCA306 | Software Lab-VI[Database Administration] | P | 2 | 60 | 40 |
| MCA307 | Software Lab-VII[Java Programming] | P | 2 | 60 | 40 |

List of Electives (3rd Sem)

| Course Code | Course Title |
|-------------|-----------------------|
| MCA 305A | System Programming |
| MCA 305B | Theory of Computation |
| MCA 305C | Embedded System |

| MCA Semester-IV | | | | | |
|--|---|-------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| MCA401 | Mobile Application Development | T | 5 | 40 | 60 |
| MCA402 | E-Commerce & Web Application Development | T | 5 | 40 | 60 |
| MCA403 | Interactive Computer Graphics | T | 5 | 40 | 60 |
| MCA404 | Advanced Operating Systems | T | 5 | 40 | 60 |
| MCA405 | Software Lab-VIII(Web & Mobile Application Development) | P | 3 | 60 | 40 |
| MCA406 | Software Lab-IX(Interactive Computer Graphics) | P | 2 | 60 | 40 |
| *Students will go undergo 6-8 weeks industrial training after 4 th semester. Examination will be conducted alongwith 5 th semester practical | | | | | |

Course Scheme: MCA (Master of Computer Applications)

| MCA Semester-V | | | | | |
|----------------|--|------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| MCA501 | Artificial Intelligence | T | 5 | 40 | 60 |
| MCA502 | Design & Analysis of Algorithm | T | 5 | 40 | 60 |
| MCA503 | Web Technologies | T | 5 | 40 | 60 |
| MCA504 | Object Oriented Analysis& Design with UML | T | 5 | 40 | 60 |
| MCA505 | Software Lab–XI(Web Technologies) | P | 2 | 60 | 40 |
| MCA506 | Software Lab–XII(Object Oriented Analysis and Design with UML) | P | 2 | 60 | 40 |
| MCA507 | Industrial Training* | P | S/U | - | - |

| MCA Semester-VI | | | | | |
|-----------------|---------------------------------------|------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| MCA601 | Data Warehousing & Mining | T | 5 | 40 | 60 |
| MCA602 | Cloud Computing | T | 5 | 40 | 60 |
| MCA603 | Advanced Computer Architecture | T | 5 | 40 | 60 |
| MCA604 | Software testing & quality management | T | 5 | 40 | 60 |
| MCA605 | Software Lab –XIII (Software testing) | P | 1 | 60 | 40 |
| MCA606 | Project | P | 8 | 180 | 120 |

Course Scheme

M. Sc. IT (Master of Science-Information Technology)

No. of Semesters: 4

| MSc-IT Semester-I | | | | | |
|-------------------|--|------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| MSIT101 | Information Management | T | 5 | 40 | 60 |
| MSIT102 | Object Oriented Programming in C++ | T | 5 | 40 | 60 |
| MSIT103 | Computer Organization and Assembly Language | T | 5 | 40 | 60 |
| MSIT104 | Operating Systems | T | 5 | 40 | 60 |
| MSIT105 | Technical Communication | T | 4 | 40 | 60 |
| MSIT106 | Software Lab – I (Information Management) | P | 2 | 60 | 40 |
| MSIT107 | Software Lab – II (Object Oriented Programming in C++) | P | 2 | 60 | 40 |

| MSc-IT Semester-II | | | | | |
|--------------------|--|-------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| MSIT201 | Data Communication and Networks | T | 5 | 40 | 60 |
| MSIT202 | Relational Database Management System | T | 5 | 40 | 60 |
| MSIT203 | Data Structures | T | 5 | 40 | 60 |
| MSIT204 | Web Technologies | T | 5 | 40 | 60 |
| MSIT205 | Software Lab – III (Relational Database Management System) | P | 2 | 60 | 40 |
| MSIT206 | Software Lab – IV (Data Structures) | P | 2 | 60 | 40 |
| MSIT207 | Software Lab – V (Web Technologies) | P | 2 | 60 | 40 |

| MSc-IT Semester-III | | | | | |
|---------------------|---------------------------------------|-------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| MSIT301 | Computer Graphics | T | 5 | 40 | 60 |
| MSIT302 | Software Engineering | T | 5 | 40 | 60 |
| MSIT303 | Java Programming | T | 5 | 40 | 60 |
| MSIT304 | Accounting and Financial Management | T | 5 | 40 | 60 |
| MSIT305 | Software Lab – VI (Computer Graphics) | P | 2 | 60 | 40 |
| MSIT306 | Software Lab – VII (Java Programming) | P | 2 | 60 | 40 |
| MSIT307 | Minor Project | P | 8 | 60 | 40 |

| MSc-IT Semester-IV | | | | | |
|--------------------|---|-------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| MSIT401 | Advanced Java Programming | T | 5 | 40 | 60 |
| MSIT402 | Information Security | T | 5 | 40 | 60 |
| MSIT403 | Theory of computation | T | 5 | 40 | 60 |
| MSIT404 | Data Warehousing & Mining | T | 5 | 40 | 60 |
| MSIT405 | Software Lab – VIII (Advanced Java Programming) | P | 2 | 60 | 40 |
| MSIT406 | Major Project | P | 8 | 120 | 80 |

Course Scheme

PGDCA (Post Graduate Diploma in Computer Application)

Number of Semesters: 2

| PGDCA Semester-I | | | | | |
|------------------|---------------------------------------|----------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| PDCA-101 | Computer Fundamentals | T | 4 | 40 | 60 |
| PDCA-102 | Programming in C++ | T | 4 | 40 | 60 |
| PDCA-103 | Computer Operating System | T | 4 | 40 | 60 |
| PDCA-104 | Relational Database Management System | T | 4 | 40 | 60 |
| PDCA-105 | Communication and Soft Skills | T | 3 | 40 | 60 |
| PDCA-106 | Computer Fundamental Lab | P | 2 | 60 | 40 |
| PDCA-107 | Programming in C++ Lab | P | 2 | 60 | 40 |
| PDCA-108 | RDBMS Lab | P | 2 | 60 | 40 |

| PGDCA Semester-II | | | | | |
|-------------------|---------------------------------|----------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| PDCA-201 | Programming in JAVA | T | 4 | 40 | 60 |
| PDCA-202 | Web Technologies | T | 4 | 40 | 60 |
| PDCA-203 | Software Engineering | T | 4 | 40 | 60 |
| PDCA-204 | Data Communication and Networks | T | 4 | 40 | 60 |
| PDCA-205 | JAVA LAB | P | 2 | 60 | 40 |
| PDCA-206 | Web Technology Lab | P | 2 | 60 | 40 |
| PDCA-207 | PROJECT | P | 6 | 120 | 80 |

II. Management

Business industry of India has been very dynamic right from the times of ancient trades. This sector offers career and growth opportunities to number of management graduates passing every year. Students seeking to establish their careers in the business industry opt for various under graduate and post graduate level management programs. Management education grooms the skills of students in the fields of management policies and practices, theories of management and leadership, processes of communication, organizational behaviour, organizational change and development, employment relationships, marketing research, analyzing business scenarios, acquires knowledge related to Stock market, Accountancy, E-Commerce, Finance, Marketing, Economics and Taxation laws and so many. Management & commerce education plays a very important role in the changing business world which leads to success in all sectors of economy. The overall economic health of a nation largely depends on advanced studies in the field of management & commerce.



Studying management & commerce courses at both undergraduate and postgraduate levels may interest not only those who seek their career in corporate sector but also those who wish to understand how organizations work. In management courses students learn about the importance of planning, organizing the structure, design and culture of organizations, importance of human capital, research methods, management of finances, budgeting, role of leadership and how people work at organisations etc. Distance education Program of I.K Gujral Punjab Technical University, Kapurthala offers BBA, B.Com in this stream. The uniqueness of the program is its content, topic coverage & the teaching methodology. The syllabus has been rigorously designed by eminent experts from various institutes of national repute. The teaching methodologies include PCPs, counselling, industrial visits, orientation, internship, case study and research work. Focus is also on developing soft skills of the students.

Some of the salient features as follows:

- Courses are specially designed for a higher level Career Placement
- Training on relevant application software.
- Projects to enhance, analytical & deductive skills
- Industry Orientation

Job Prospects

BBA, B.Com are the professional courses and after completion of the courses students can aim for mid management level jobs immediately after in most industries like:

- Manufacturing companies
- Export and trading houses
- Financial concerns
- Banks
- NGO's
- Public Sector Units
- Multinational corporations

BBA & B.Com courses offer entry-level positions in many **corporations**. You would do lot of backend work, and provide support services to your seniors. Exceptional candidates could expect to do some customer interface.

The career pathways that are the most popular with BBA & B.Com are as follows:

- Accounting
- Finance
- Healthcare
- Human Resources
- Education
- Marketing
- Sales
- Management
- Product Management
- Technology Management
- Chartered Accountant
- Chartered Financial Analyst
- Company Secretary
- Loans Executive
- Certified Financial Planner
- Stock Broking



Details of programs in Management

- Bachelor of Business Administration (BBA)
- Bachelor of Commerce (B.Com)

| S. No | Course | Duration | Max Duration | Eligibility | Fee Structure |
|-------|--------|----------|--------------|---|-----------------------|
| 1. | BBA | 3 Years | 6 Years | <p>All those candidates who have passed the 10+2 or its equivalent examination in any stream conducted by a recognized Board / University / Council.</p> <p>OR</p> <p>Those candidates who have passed their Matriculation examination AND have also passed three year Diploma in any Trade from Punjab State Board of Technical Education & Industrial Training, Chandigarh or such Examination from any other recognized State Board of Technical Education, or Sant Longowal Institute of Engineering & Technology, Longowal.</p> | Rs. 9000 per semester |

| S. No | Course | Duration | Max Duration | Eligibility | Fee Structure |
|-------|--------|----------|--------------|---|------------------------|
| 2. | B.Com | 3 years | 6 years | Having passed at least +2 examination of Punjab School Education Board or any other examination recognized as equivalent thereto with at least: 33% marks in the aggregate in case of commerce students who have passed 10+2 examination and 40% for the students who have opted for two of the following commerce subjects in 10+2 a. Accountancy b. Business Studies c. Economics d. Mathematics e. Office Management and Secretarial Practice. f. Principle and Practice of Insurance. g. Tax Procedure and Practice. and 45% for other candidates | Rs. 6,000 per semester |

Note: Examination fee of Rs. 700 will be charged per semester in addition to above mentioned tuition fee.

Course Scheme

BBA (Bachelors of Business Administration)

Number of Semesters: 6

| BBA Semester-I | | | | | |
|----------------|--------------------------------------|----------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| HVPE 101 | Human Values and Professional Ethics | T | 3 | 40 | 60 |
| BBA 101 | Principles of Management | T | 5 | 40 | 60 |
| BBA 102 | Microeconomics | T | 5 | 40 | 60 |
| BBA 103 | Financial Accounting | T | 5 | 40 | 60 |
| BBA 104 | Business Communication –I | T | 5 | 40 | 60 |
| BBA 105 | Introduction to Computers | T | 5 | 40 | 60 |

| BBA Semester-II | | | | | |
|-----------------|----------------------------|----------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BBA 201 | Organization Behaviour | T | 5 | 40 | 60 |
| BBA 202 | Macroeconomics | T | 5 | 40 | 60 |
| BBA 203 | Business Mathematics | T | 5 | 40 | 60 |
| BBA 204 | Corporate Accounting | T | 5 | 40 | 60 |
| BBA 205 | Business Communication –II | T | 5 | 40 | 60 |
| BBA 206 | Computer Applications | T | 5 | 40 | 60 |
| BBA 207 | Viva Voce | P | 1 | | 50 |

| BBA Semester-III | | | | | |
|------------------|--------------------------------|----------------------------|---------|--------------------|----------|
| Course Code | Course Title | Theory(T)/ Practical(P) | Credits | Marks Distribution | |
| | | | | Internal | External |
| BBA 301 | Human Resource Management | T | 5 | 40 | 60 |
| BBA 302 | Marketing Management | T | 5 | 40 | 60 |
| BBA 303 | Cost Accounting | T | 5 | 40 | 60 |
| BBA 304 | Business Statistics | T | 5 | 40 | 60 |
| BBA 305 | Management Information Systems | T | 5 | 40 | 60 |
| BBA 306 | Seminar on Contemporary Issues | T | 4 | 100 | |