



“There is no doubt that the future of our state will and must greatly depend upon the type of education and the way in which we bring up our children as the future servants of Pakistan. Education does not merely mean academic education, and even that appears to be of a very poor type. What we have to do is to mobilize our people and build the character of our future generations”

(Quaid-e-Azam, Muhammad Ali Jinnah)

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Message

From the Vice-Chancellor

Professor Dr. Mujahid Kamran



The University of the Punjab is not only the Flagship University of Pakistan but also enjoys the coveted and prestigious honor of being one of the oldest Universities in the sub-continent. The impressive dedication with which it fulfills its commitment to the nation by providing dynamic manpower in every walk of life is nothing short of folklore. We carry on with the tradition to expand the frontiers of knowledge by introducing new programs according to the changing needs of the market to meet the requirements of our country.

The Institute of Business and Information Technology, originally established as Centre for Management Sciences was set up to provide the students a solid base in the fields of business management and information technology. This Institute follows a strict merit based policy to induct top of the line students and provides them quality training compatible with the modern needs. The Institute will also act as a platform for the practicing managers to share their knowledge and wisdom with the students. The interactive liaison with the industry will be a priority at the Institute. With this conducive learning environment, we plan to make this Institute a hallmark of excellence.

Information Technology Professionals are modernizing, the very method of managing businesses, the world over and Pakistan is no exception. We are witnessing the entire scenario of business practices being changed. The IT revolution has reduced the time frame, while enhancing the quality of services. The businessmen as well as the managers are required to be more productive and efficient to meet the challenges of modern business. The plan is to incorporate all tools of information technology in the curriculum to achieve managerial excellence in potential professionals. We wish to strengthen our society economically by increasing its productivity. To this end our faculty is striving to impart highly sophisticated and rewarding professional training to our assets, the Students.

Those parents and students, who trust and believe in University of the Punjab's century old tradition of quality education, should look for the Institute of Business and Information Technology as an optimum solution to ever increasing costs of quality education. International Quality education at local economical disbursement with a global perspective is what Institute of Business and Information Technology is all about. Institute of Business Information Technology is definitely realty of Pakistani dream. I urge you to consider Institute of Business and Information Technology while making the most important decision about your future and that of Pakistan.

May ALLAH be with you.

Message

From the Director

Professor Dr. Syed Mansoor Sarwar



Dear Reader:

An institute naming Institute of Business and Information Technology emerged as a new trend in the business studies environment of Punjab University equipping students with modern tactics of being successful. Strong determination and perseverance has bestowed it with this most modern infrastructure of beautiful building, state of the art computer labs, most up-to-date server machines multimedia and much more. Our commitment seven years down the road has calcified into a tangible reality and our current infrastructure bears a testament to our success. Now our graduates are working as professionals in reputed organizations of various industrial sectors. We even realigned ourselves with the already prevalent concept of IBIT which now reads "Innovative Business, Infinite Traditions". Our faith remains the same as we solemnly pledge that we will provide value addition education standing tall on our three pillars of Tradition, Quality and Innovation.

The IBIT was granted an amount of Rs 34.696 Million, by the Higher Education Commission, Government of Pakistan. This shows the confidence placed on our abilities. The Institute has used bulk of this grant for updating our facilities and purchasing state of the art equipment for our classrooms and computer labs.

The pooling of the scarce resources, advancement and transfer of technology by leaps and bounds, creating green organizations for preserving the natural environment, developing virtual corporations with no boundaries and ultimately developing the geocentric style of management are not the theoretical concepts any more rather these are inevitable tools to compete and survive in the future. The Institute aims to prepare Pakistani students to tackle the aforementioned challenges of tomorrow. IBIT students with their business expertise, leadership, and team-building skills with optimum mix of computer applications would be an asset for the business community. Pakistan needs better management than anything else. We are understandably proud of our Institute's ability to meet this challenge. But we are at the same time ready to announce that we are strong believers of deeds not words. We will develop the leaders and managers of tomorrow. Information Technology alone is not the answer for growth and development rather a sound management and usage of the tools of Information Technology will be the key to success.

The BBIT (Hons.) is now structured patent programs of this Institute. We continue to focus on quality education at the most economical costs. These programs are meticulously designed to be competitive with the international standards. The courses have best possible blend of IT tools and Management as a Science in today's complex world of Business. We are continuously striving to attract the best faculty to nurture, protect and project our programs and our students. Exciting things are planned for IBIT and we will all witness a new beginning. We plan to go for International Standard Organization (ISO) Quality System Certification and American Assembly of Collegiate Schools of Business (AACSB) accreditation in the next two years. We look forward to make this dream into a real life time asset with the active participation of our students.

We hope that this brochure will convey to you the dynamic quality of the programs available in the Institute of Business and Information Technology, at the University of the Punjab.

May Allah bless you all

ENTRANCE

Entrance to IBIT is nothing but unlocking a whole new world of opportunities to the youth of Pakistan. But the opportunity comes with a bigger challenge. Often Students fail to recognize this and feel the assertiveness of the program too hard to handle. At IBIT, we feel that the key to success lies in the students' attitude. Attitude alone can make or break the new incumbent. The Institute follows a very disciplined and structured approach for entering new students once a year in the BBIT (Hons.) program. It is very important that a student manages the timing of his/her application carefully and submits a complete application.

IBIT's new entrants at BBIT (Hons.) are young, typically raw, and ready to be converted into top class professionals. The Institute provides them with a key to equip themselves with quality education and a flavor of professional life. With mushroom growth of business schools in and around Lahore, the Institute is keen to provide a valuable, general business and technological education. The institute feels that a student can only make use of the key if he or she is made to train on a chain consisting of important links of practical computer management applications, business functional disciplines and analytical skills. The entrance advice from the Director is clear and crisp; he wants the students to be motivated, mature and fully geared to make use of the key available to them from IBIT in the form of a well earned degree.

Institute of Business & Information Technology advertises for admission in third week of July and follows a strict admission calendar religiously and inducts students to BBIT (Hons.) program. In future executives & Ph.D. Scholars also would be admitted to our programs.



Background

The present administration under the vibrant leadership of the Vice-Chancellor, Prof. Dr. Mujahid Kamran, is dedicated in providing the students an institute that excels and commands respect in two distinct and separate spheres of Business and Information Technology. Sincere efforts are being made to make Institute of Business and Information Technology a place where latest Information Technology based business knowledge is given to the students.

Institute of Business and Information Technology has kept this objective in focus and developed the idea of BBIT (Hons.), MBIT (via BBIT-Hons.) and MBIT programs. For this very reason the Institute is making maximum use of the modern facilities such as Computer Hardware and Software, Application Software, Internet, and Multimedia equipment. In an era of Information Technology and Computer Education, everyone linked to the business world finds an important link missing, which can connect two different islands of Technology and Business. The problem stays unsolved even if they hire MBA's from Top Notch Business Schools or Rocket Scientists from the Computer Engineering Universities. That critical link is provided by programs which pivot on business related degrees which carry sufficient as well as efficient component of the computer field. These programs at the same time are very much focused on business related component and this component is neither sacrificed nor compromised, to make the student learn the intricate details of Technology.

These very goals form the basis of developing the scheme of studies for BBIT (Hons.), MBIT (via BBIT-Hons). The essential courses required for Business Executives are kept in the scheme and every effort is made to have a proper balance of business and information technology. The purpose of these programs is not to make a Computer Programmer but to train business graduates to use computers in everyday business. Certainly these programs will provide the most productive blend of business and IT courses.



Vice Chancellor University of the Punjab, Prof. Dr. Mujahid Kamran visiting IBIT

Introduction

Today's organizational environment is markedly different from the one in the past. The days of structure and entrepreneur have given way to combination of best of breed concepts. This has hard-pressed the organizations to adopt a more complicated hierarchy. These organizations face global competition, changes in information technology, diversity, and quality service issues. All these revolutions have forced management of all types of organizations to totally rethink their approach to both operations and human resources. Because of paradigm shift, organizations are now more proactive to external as well as internal environment. The new workplace is characterized by state of the art information technology, total quality management practices, and organizational training. Therefore, the workforce required to meet the challenges need a different type of training and curriculum. Modern business organization expects from the business graduates to develop traits like critical thinking, analytical skills, positive attitude and effective communication.

Effective and efficient organizations have now started seeing themselves as information age organizations. These organizations practice network intelligence as they have seen centralized intelligence and decentralized intelligence causing them more harm than good. Our graduates would provide the necessary impetus to tilt the balance from dynamic uncertain to stable certain dimension. "Institute of Business and Information Technology" (IBIT) is created to fulfill these aspirations and requirements of the business world.

Scope

The scope of IBIT's program is unlimited. The IT tools integrated with modern business practices will generate maximum productivity. This education will be used for all walks of life to obtain the efficiency from scarce resources. The University of the Punjab is already fulfilling its academic obligation to provide the required education compatible with the changing environment.

Inauguration ceremony of IBIT



Mission

Our mission is to educate future leaders committed to serve the needs of the country, possible only through the creation and transfer of knowledge in the field of business. And last but not the least, by the application of information technology and establishment of a framework for lifelong learning that converts into productive careers. Recognizing that knowledge is the fundamental wealth of civilization, the Institute strives to enrich the student that sustains it through:

- A commitment to undergraduate education with a goal of helping the students to question critically, think logically, communicate clearly, act creatively & live ethically.
- A commitment to graduate education to develop creators & innovators who will generate new technology & shape experience for the benefits of the nation.
- A commitment to international awareness and understanding and to the development of a faculty and student body that is capable of participating effectively in a global society.
- A conviction that freedom of thought and expression is the bedrock principle on which all the Institute's activities are based.
- A continuing commitment to affordable higher education.

To successfully anticipate and manage business challenges in the new millennium, IBIT graduates would be nurtured with a firm understanding of basic business principles and be able to leverage them in a rapidly changing environment. IBIT's curriculum balances theoretical knowledge with real world skills and the experimental learning needed to achieve success. The graduates of this Institute will have all the necessary expertise required to become an effective member of any business enterprise. They will be able to compete for executive level positions in the business world. Some of the positions for which they will be competing in the market include but are not limited to Marketing Executives, Merchandisers, Accounts Officers, I.T. Managers, Finance Managers, Banking Executives, so on and so forth.

University of the Punjab

The University of the Punjab is located in the historical and cultural city of Lahore. At present, various on-campus teaching and research programs are organized under some fifty institutes, departments, constituent colleges or Institutes, which run over one hundred degree, diploma or certificate programs. Research leading to Ph.D. degree is an integral part of the academic programs in many disciplines. New academic programs have been introduced recently according to the current requirements. This has gradually expanded the academic activity of the University.

The University continues to retain its original teaching as well as examining functions. In addition to the on-campus teaching and research activities, the university oversees and regulates the academic activities of over 328 affiliated colleges and institutes, imparting undergraduate, postgraduate and professional education. The University of the Punjab has played a leading role in higher education in the country. The university strives to provide a conducive environment for the pursuit of the academic activities. On account of its quality degree programs, pleasant environment and low tuition fees, the university remains the institution of first choice for the students seeking admission.



Punjab University Old Campus Building and Faisal Auditorium in New Campus

Campus Facilities Libraries

Main Library of the Punjab University is a huge resource and is also available for the IBIT students, research scholars and teachers. It was established in 1882 and is the largest library of Pakistan comprising about 400,000 volumes. It subscribes to about 100 periodicals out of which 60 are foreign. Besides being stocked with countless books, magazines, journals and latest software packages, it has internet facilities available for 100 students at a time. Online facilities in the library to have access to information resource Institutes world-wide will soon be available.

IBIT Library

IBIT Library contains latest state of the art Library Information System and carries current and recent books on core business and computer courses as well as applied information Technology based Accounting, Economics, Finance, Human Resource Management, Marketing and related fields. The Library has 10 Pentium-IV computers equipped with internet facility and online excess to international



journals through EBSCO and other databases for students with research interest. It is the first step towards digital library system. Feasibility report has been submitted to JICA for funding purpose.



The IBIT Library is one of the most important resources on campus for teaching and research. In addition to more than numerous physical volumes on the shelves, the library contains a rapidly growing collection of periodicals, documents and technical reports. The idea is to add the aforementioned resources with microfilm, motion pictures, sound recordings, videotapes, filmstrips, computer disks, and maps. Students are given access to approximately 15,000 electronic journals through PU Central Library. Central Library makes available group study rooms, graduate-study carrels and faculty carrels as well as holds the SEC meetings.

The Library provides a full array of modern technological access to print and electronic information through Library Information Systems. An IBIT student can access the online catalog for the Library. Databases and full-text journals may be made available next year onwards via computer on campus, such as faculty offices, Student Technology Centre (STC) computer labs and off campus by logging on through the university modems or via proxy server. The Library is fully air-conditioned and provides an ideal atmosphere for the students to study; it also provides a remote access to many electronic databases and online journals. The most popular databases include scholarly journals and business periodicals in the fields of management, economics, finance, accounting, international business and more. Our librarian along with the dedicated team provides assistance using the Library resources.

The students of IBIT with the aid of our librarians can also access specialized business databases and collections as well as humanities, social sciences, business, education, geology, legal materials, and government publications.

Materials not available in the IBIT Library may be borrowed from other libraries at the University of the Punjab through the Interlibrary Loan Facility. Additional library information may be obtained at any of the information or circulation desks of the three library locations. Regular library hours are posted, as are hours for semester breaks, holidays, summer Semesters, Winter Semester, Summer Semester, and other special circumstances. For more information, visit us on the Web at www.ibitpu.edu/library.

Technology Resource Centre (TRC)

Committed to high quality and high speed service.

Technology resource centre (TRC) is fully staffed and open to all students from 8.15 a.m. till 5:30 p.m. The Center offers a wide variety of software and media equipment which allows the students to access computer applications, the internet, e-mail and audio/visual technologies. High speed Network access is available from workstation to the servers for data sharing and internet browsing. Whereas the workstations are fully loaded with variety of application software including but not limited to word processing program, database applications, spreadsheets, network software, graphics packages etc. IBIT has the largest UPS RAID systems in the country which will ensure uninterrupted power supply for the computer labs assisting the students in their work. High speed high quality laser printing & CD-writing is available to the students. Technology Resource Centre is one of the key features of locally arranged services, which keeps students up to date with their achievements, attendance records and course lectures during the semester.

Students are encouraged to seek guidance and advice from TRC In-charge, Mr. Muhammad Yahya Waris for their computing needs relating to hardware and software applications.

Student Resource Centre (SRC)

Information at your finger tips

The Institute of Business & Information Technology is determined to optimize the use of modern technologies in day to day learning. The Student Resource Centre is a significant achievement in this regard. The Student Resource Centre is a local web page hosted on IBIT Server that contains various informative links. The resource material available at this server contains two type of information:

- Study Resources,
- Informative Material.

Study Resources are further subdivided into following categories:

1. Lecture Notes

Soft copy of study material in the form of acrobat, power point, word files is available on many current topics being discussed in the class. These notes are prepared by the relevant faculty member to utilize the full potential of student's time and effort.

2. Assignments

Assignments given to the students by their teachers are uploaded on the SRC so that students can access them any time for the reference while working on these assignments in the lab. Solutions provided by the teachers to the previous assignments that had already been submitted are also available at this link so that students may get a hint to their weaknesses in the approach and may follow the better approach next time.

3. Case Studies

Various solved and unsolved case studies given by the teachers are also placed on SRC so that student may refer to these case studies to build and enhance their problem solving skills. Students constantly refer to these case studies during their group discussions and group projects.

Informative Material contains following useful information for students and staff:

1. Online Results

Results of quizzes, assignments and examinations are instantly uploaded on the SRC as soon as they are submitted by the teachers. Students need not to wonder and wait for days to receive their results.

2. Attendance Records

Up to date Attendance reports imported from Student Attendance Database are available to students at any time. These links are constantly visited by the student as their attendance records are very crucial to get through the examinations. Students are eager to know their status regarding attendance and the SRC has so far succeeded to fulfill their demand. Please read carefully the course drop/ attendance policy.

3. Notices

The SRC informs students about the current activities and events in the Institute. Most often the Students Resource Centre is the first place to know about any event being taken place at the Institute. This link also contains Time Tables, Class Notices and Examination Schedule Notifications etc.

4. Rules and Regulations

This link is a useful place to learn rules and regulations enforced at the Institute of Business and Information Technology. It contains LAB Rules and Class Rules & Regulations.

The Student Resource Centre is rich in resources and is being enriched further by a team of professionals. The SRC of the Institute is comparable to any such information platform in any compatible international university.

Classrooms

Our Air-conditioned Classrooms are spacious, well-lit, and have comfortable seating. All class rooms are equipped with multimedia, document camera, and overhead projection system to provide teachers as well as students with the latest technological resources and facilitate effective learning. Students are encouraged to interact liberally with the teachers inside and outside the classrooms to enhance their comprehension and knowledge of the subject. In addition, IBIT has two fully equipped auditoriums which are used for conducting seminars, workshops and exhibitions.



Hostels (only for Morning Session)

There are 23 hostels including five separate hostels for female students with total capacity of 3,281 for male and 960 for female students. The hostels are situated in Quaid-E-Azam Campus which is located in one of the beautiful areas of Lahore. A gorgeous canal graces the campus with its tall lush green trees lined on both sides. A continuous wide stretch of grassy land on either side of the canal adds enormously to its beauty. Students in their leisure time enjoy rowing in it.

The hostel facility is only available to morning class students and is subject to the availability of rooms.

Auxiliary Services

The facilities at University of the Punjab include services of an in-house bank, post office, number of canteens, photocopying services and many beautiful parks. A swimming pool is available which is regularly used by students for recreation and competition. A university mosque situated by the side of campus is also available.

The University provides medical facilities to both resident and non-resident students. It runs a health Institute for outdoor patients which includes clinical laboratories, a dental unit and an eye unit.

Transport service is available to the students on subsidized rates across the city that covers about 20 routes. The service can also be utilized for study tours.

Currently study tours are not extended to the evening class students.

A Student Teacher Centre exists on Campus. This includes shopping centre, public call office, a spacious cafeteria, halls for indoor games, public lectures and social gatherings. The centre also provides counseling and guidance services to the students. A foreign information bureau at the Centre assists the students who are desirous to seek admission for higher studies in foreign universities. The visiting students are provided boarding and transport as a token of hospitality and goodwill.

Information

Lahore is Pakistan's heart. Yet IBIT sincerely feels that the city, till now, has provided the necessary impetus and critical mass to the economic stability and prosperity of Pakistan.

The institute is relying religiously on technology being the vital force to make Lahore come up to the level of its potential in revenue generation for Pakistan. The Marketing as well as Finance Majors in conjunction with the IT Majors are being groomed to make Lahore a big Financial Market. The Institute has successfully leveraged in combining different islands like computer applications and business only after studying the real issues on hand and have managed to develop Business Information Technology with a view to develop managers who will govern the information age organizations with a futuristic and progressive approach.

One of the Largest Intranets in Pakistan

Electronic communication is fast replacing the traditional means of communication. Internet is the largest pool of information ever available to the human kind. We have entered the era where living means getting connected and staying aloof is dying. It is essential that an institution like the University of the Punjab must get connected and brings the unfathomable ocean of information to the finger-tips of the research scholar on campus. An optical fiber based, University-wide, network for providing Internet connectivity to the whole campus has been successfully completed. A 6.0 km long network using multimode graded index optical fiber cable as the backbone is only the beginning of the making of a new culture. It serves as an Internet helping to more than 40 teaching Departments and Colleges of the University.

Information Technology Centre

Rapidly developing information technologies are presenting information systems executives with the opportunity to provide timely, high-quality information to support decision-making and innovation in all areas of managing an enterprise. Major changes in the business environment, including globalization, corporate mergers, flexible manufacturing, cost paring and downsizing, are increasing the importance of information technologies as organizations struggle to compete and survive.

Advances in computer hardware, software, and communications are driving developments in computer applications across the board, including information processing, office automation, data base management, data communications, artificial intelligence, and systems development methodologies. Managers have to carefully gauge these trends, evaluate the implications for their own environment, and manage the harnessing of the appropriate information technologies.

The Information Technology Center (ITC) is dedicated to helping future managers achieve these objectives. Sponsors and clients of the center benefit from research in a wide variety of important fields, working papers, monographs, workshops, and symposia. Training and consultation for individual clients can be provided. The center is in the process of securing several research grants from government and industry.

Career

Ask the Director about the career for IBIT students. And he would come back with his example of a resilient coil spring. His advice is always based on his own experience as a professor and a business student. The Institute provides a dedicated resource and bridges the gap between the students' education and potential employers.

The career path is focused by different seminars and training sessions. The Institute has already made necessary arrangements for the career development of its students. Resumes, mock interviews, case studies, management skills, interpersonal skills and self presentation skills are the common tools employed by the Institute to attract potential employers from beyond the geographic border of Pakistan, with special emphasis on markets of Australia, Canada, Europe, the Middle East and the United States.

Students of IBIT have been offered jobs in managerial capacity in many reputed organizations like PIA, Packages, Nestle, Alfalah Bank, Habib Bank, Allied Bank, Warid, Mobilink, Telenor, UBL, ABN AMRO and other local companies and multinational companies in Pakistan. The pay packages offered to these students is ranging from 20,000 to 40,000.

HR Managers from corporate sector with IBIT faculty members



By the Grace of Allah, the positive response our students are getting from the local business market indicates that our programs are update and meeting the requirements of the market forces.

“Value addition throughout the value chain is only possible if the student learns to show resilience during the formative days of their careers and I see a lot of happy employers getting ready to accept our graduates. Smiles back the career conscious Director.”

Career Development

Individual counseling is available to assist students in the exploration of their interests, abilities, career-related skills, work values, career preparation, resume preparation, and job searches. The Program Coordinators often encourages students to take the Myers-Briggs Type Indicator (MBTI) and the Strong Interest Inventory as ways of assessing personality characteristics and interests that may suggest suitable career directions. This exercise is normally carried out to access and gauge student's leanings to help them decide a major track in order to complete their degrees.

IBIT Career Services

The mission of IBIT Career Services is to encourage and educate students and alumni in developing comprehensive career plans and self-directed job search techniques. Career services are looked after by a permanent faculty member, Placement & Industry Liaison, with an objective of assisting students and alumni in finding full-time or part-time, internship and co-op employment opportunities. Services aimed for will provide career development workshops, job listings, resume referral, on-campus

employment interviews, career days and information on careers, employers and job search techniques. On-campus recruiting is being done and further developed for both the graduate as well as undergraduate students.



Head of HR State Bank of Pakistan addressing a workshop arranged in IBIT Seminar Hall



Vice Chancellor Punjab University, Prof. Dr. Mujahid Kamran and Director IBIT in a meeting with the HR team of State Bank of Pakistan in IBIT

Program Coordination

Program Coordinators are available to provide administrative, academic, research and student development guidance to the students for effective learning. The program coordinators are thoroughly familiar with the above mentioned responsibilities at the same time they are available for the coordination and facilitation regarding student mentoring. They maintain, evaluate and improve various administrative and academic processes of the Institute to ensure top class quality through guidance, orientation, and facilitation. Prof. Aamir Sarwar (Program Coordinator Academics & Business Studies) and Prof. Asim Tanveer (Program Coordinator IT) are available for all the help a student requires.

Semester System at IBIT

- ⇒ There shall be two semesters (Fall & Spring) in an academic year.
- ⇒ Each semester shall be of 18 working weeks – sixteen weeks for teaching, one or two weeks for examinations.
- ⇒ During the summer break, the institute may offer summer session of 8 weeks with subject of its choice which will provide opportunity to students who have failed or have withdrawn from a course and those who wish to improve their GPA to qualify to the next semester. A maximum of 8 credit hour courses will be offered during summer semester by the Institute.
- ⇒ The contact hours during the summer session will be doubled to ensure that the course is fully covered in a summer session with half of the duration compared to a regular (Fall or Spring) semester.

Total Period of Study

The normal duration of 4 years Bachelors (Hons.) is Four years.

- ⇒ In case of valid reasons /excuse the period of study will be extended for two additional years (Four Semesters) in all above said three programs. The students who will not complete studies within stated periods shall be struck off from the rolls of the Institute. The students who have been given the right to extend the duration of study for additional two years must register and pay tuition fees for the years. The students who extend their course of study beyond four years shall not be entitled to avail any facility like hostel, transport and medical which university extends to its regular students.

Course Credits of 4 Years Bachelors (Hons.)

- ⇒ A minimum 130 credits are required for the 4 Years Bachelors (Hons.) degree program. The said credit shall normally be earned in eight semesters.
- ⇒ The minimum number of contact hours in a course will be 15 per semester for one credit hour course.
- ⇒ A course may range from one credit hour to four credit hours.
- ⇒ One credit hour stands for at least one hour class contact per week per semester. For practical/laboratory work 3 hours shall be considered equivalent to one credit hour.
- ⇒ Six (06) credit hours Research Project (dissertation)/ Project report/ Internship/ Special paper will be offered in the fourth year.

Course Description

Course contents, if revised, shall be approved by the faculty of the Institute. The teacher concerned will be responsible for determining the details of the course.

Courses for the **4 years Bachelors (Hons.) Program** will be numbered and codified as follows:

- ⇒ All courses given in the first year (1st & 2nd semesters) will be designated by 100.
- ⇒ All courses given in the second year (3rd & 4th semesters) will be designated by 200.
- ⇒ All courses given in the third year (5th & 6th semesters) will be designated by 300.
- ⇒ All courses given in the four year (7th & 8th semesters) will be designated by 400.

The institute shall decide its own compulsory, core/minor, major and elective subjects. The courses offered by the Institute will be announced with a short description of each course along with time, day, classroom, name of the teacher, semester and credit hours.

Grading System

⇒ Equivalence in numerical grades, letter grades and grade points will be as follows:

<u>Percent Marks</u>	<u>Letter Grade</u>	<u>Grade Points</u>
85 & above	A	4.00
80-84	A-	3.70
75-79	B+	3.30
70-74	B	3.00
65-69	B-	2.70
61-64	C+	2.30
58-60	C	2.00
55-57	C-	1.70
50-54	D	1.00
Below 50	F	0.00
Withdrawal	W	
Incomplete	I	

- ⇒ Maximum possible Grade Point Average is 4.00
- ⇒ Maximum Cumulative Grade Point Average for obtaining 4 years Bachelors (Hons.) is 2.00
- ⇒ A fraction of mark in a course is to be counted as '1' mark e.g. 64.1 or 64.9 is to be shown as 65.

Calculation of Grade Point Average (GPA) for a semester

In order to calculate the GPA, multiply Grade Point with the Credit Hours in each Course to obtain total grade points, add up to cumulative Grade Points and divide by the total numbers of Credit Hours to get the GPA for the semester.

Course with 'F' will be counted as 'Zero' Grade Point for calculation of semester Grade Point Average. Calculation of cumulative grade point average will only be made when a candidate has passed all the courses required for the award of degree.

- ⇒ The percentage of marks or values of grades other than given grade points should not be reported on the transcripts.

Example:

If the student obtains a grade A in four credit hours course of "Introduction to Programming Concepts", the grade points for that course would be: 4 (Credit hours for Programming Concepts) x 4 (grade points for A). Continue in this manner for all letter graded courses you have taken and then add the number of grade points you have completed. Finally, divide total grade points earned by total credit hours earned.

$$\text{GPA} = \frac{\text{Total Grade Points earned}}{\text{Total Credit Hours earned}}$$

No	Course Code	Course description	Letter Grade	Grade Points	Course Credit Hours	Total Grade Points
				x	y	$x * y$
1	MGMT 4023	Business Organization & Management	A	4.00	3	12
2	GEN 4043	English Composition	A-	3.70	3	11.1
3	IT 4074	Introduction to Programming Concepts	B	3.00	4	12
4	ACCT 4013	Principles of Accounting	D	1.00	3	3
		Total			13	38.1

GPA in the semester = $38.1/13 = 2.93$

Cumulative Grade Point Average (CGPA) is the Grade Point Average for the entire work at any given period of time. It is calculated in the same manner as above except the calculation will be done on the basis of all the courses completed in all the semesters at any specific period of time.

Method of Calculation of Final CGPA

- ⇒ Student must have earned the prescribed number of credits required for the 4 years Bachelors (Hons.) degree i.e. a minimum of 132 credits.
- ⇒ The Cumulative Grade Points of each semester will be added to obtain grand total and then divide the grand total by total no. of credits of the courses studied. The resulting figure will represent the CGPA secured by a candidate. The CGPA will be reported upto two decimals but for the determination of merit position CGPA will be calculated upto any decimal.
- ⇒ The students obtaining CGPA of 3.70 or above will be declared eligible for role of honors.
- ⇒ For the award of Gold Medal or some other award(s), the 1st position will be calculated on CGPA basis of the whole course.
- ⇒ For award of Gold Medal, roll of honors and all other distinctions of Punjab University, a student must have passed all the examinations at least in B grade, in the first attempt.

Notification of Results

- ⇒ The teachers are required to submit result within one week after the examination so that result shall be declared by the Examination Committee of the Institute within two weeks after the examination. The result will finally be notified by the Controller of Examination, University of the Punjab, Lahore. New semester will commence after the declaration of result. The Director, B.A/B.Sc (Hons.) will ensure declaration of result within stipulated period of two weeks.

Rules & Regulations

Attendance Policy

- ⇒ IBIT requires a student to have an EIGHTY FIVE (85) percent attendance in each course, to obtain a passing grade.
- ⇒ However, in case of unforeseen/exceptional circumstances (e.g., accident / death of father, mother, real sister/ brother etc.), the Director can relax the requirement to EIGHTY (80) percent.

Summary of Attendance Requirement	In % age	In Number *
Classes in each Semester	100%	32
Attendance Required	85%	27
Absents allowed for unforeseen circumstances beyond student control	15%	5
Attendance Required (Including exceptional circumstances)	80%	25
Absents allowed (Including exceptional circumstances)	20%	7

* *Applicable to all courses with approximations.*

- ⇒ Leave Form must be submitted for any planned absence with parent's/guardian's approval.
- ⇒ The teacher concerned will display the list of the students who don't fulfill requirement of attendance at least one day before the examination week and such student shall not be allowed to appear in the final test of the course.
- ⇒ At the end of each month the teacher concerned shall send, to the head of the Institute, a statement giving the total number of lectures delivered and practicals conducted by him/her together with the number of lectures and practicals attended by each student.
- ⇒ In case the student remains absent from the class for seven consecutive lecture without leave his/her name shall be removed from the rolls.
- ⇒ The student having class attendance less than 85% in a particular course will be required to repeat the course when it is offered again.

Students are advised to attend all (100%) classes in each subject. Absents allowed for unforeseen circumstances is a facility to accommodate inherent human limitations and should ONLY be utilized under very severe unavoidable situations.

Withdrawals/Adds/Change of courses

- ⇒ The enrolled students may change the courses in their program not later than 7 days after the date of commencement of the semester with the permission of the head of the Institute if such withdrawals /adds do not affect requirements of minimum /maximum course workload conditions. The students may drop a course within five weeks of commencement of semester which will be represented by 'I' in the transcript. Withdrawals from a course will be allowed by the end of 15th week under the approval of the Head of the Institute which will be represented by 'W' in the transcript.
- ⇒ No student will take any course unless he has cleared the pre-requisite for it as determined by the respective Institute.

Rules of Promotion and Probation

- ⇒ The promotion of a student on probation will be allowed twice in all the programs. Whenever a student scores CGPA less than 2.0 and greater than 1.7 will be on 1st probation for the next semester.
- ⇒ At the end of the 2nd semester, a student must obtain a minimum Cumulative Grade Point Average (CGPA) of 2.00 and must also pass at least 50% of the courses offered by him/her in order to be promoted to the third semester. If the student again decreases his CGPA between 1.7 and 2.00 he/she will go on 2nd (last) probation.
- ⇒ In case student does not achieve minimum desired CGPA 2.0 after availing opportunity of two probations, he/she shall be dropped from the rolls of the Institute and cannot be re-admitted in any case by the same Institute.
- ⇒ The candidate, who fails to secure 1.70 GPA in the first Semester, shall stand automatically dropped from the rolls.
- ⇒ If a student has not availed opportunity of probation during the first two semesters then he/she will have the right to avail probation twice in the following semesters.
- ⇒ In the third semester a student will be required to repeat those courses of the first semester in which he/she had failed.
- ⇒ In the fourth, sixth, eighth and tenth semester, a student will be required to repeat those courses of the second, fourth, sixth and/ or eight semesters in which he had failed.
- ⇒ If a student gets D grade, he/she can repeat the course when offered to improve his/her grade.
- ⇒ A student who completes all the courses and has been required to repeat any course(s), obtains CGPA of less than 2.00 but not less than 1.90 at the end of the 8th semester in case of 4 years Bachelors may be allowed to repeat courses (varying from 2 to 4 credit hours) in which he/she had obtained the lowest grades, in order to improve the CGPA so as to obtain the minimum of 2.00 failing which he/she shall not be awarded degree and removed from the rolls of the Institute.
- ⇒ In case a student repeats the course which he/she has already taken, the old grades will be substituted with the new grades for CGPA calculations.
- ⇒ A student will be allowed to repeat a maximum of 18 credit hours courses in case of 4 years Bachelors (Hons.) program.

Re-Sit Examination

- ⇒ The students who cannot appear in examination because of valid excuse/reason shall be allowed to appear in re-sit examination within one week after the examination subject to the payment of special examination fee of Rupees 1000/- for each course. If the number of courses is more than 2 then a lump sum of Rs. 2500/- shall be paid as special examination fee to the department; provided:
 1. He/She fulfils the condition of having attended the prescribed number of lectures as laid down by the attendance policy.
 2. He/She is admitted as patient in a recognized Hospital, or if he/she is not hospitalized, as defined above, the candidate will be examined by the University Medical Board comprising Chief Medical Officer and senior most Medical officer of the University.

Cancellation of Admission

- ⇒ If a student fails to attend any lecture during the first four weeks of the commencement of the semester as per announced schedule, his/her admission stands cancelled automatically without any notice.

Maintenance of examination records

- ⇒ The teacher concerned shall prepare five copies of the awards. He shall retain one copy with him; send one copy to the Director and Controller of Examinations, University of the Punjab, Lahore. He shall also display a copy of the result on the Notice Board.

Unfair Mean Cases

- ⇒ The teacher-in-charge will report means cases to the Director who shall forward the case within one week to Departmental Examination Committee for necessary action as under:

Any candidate detected in giving or receiving assistance, or found guilty of copying from any paper, book or note, or allowing any other candidate to copy his answer book, or using, or attempting to use these or any other unfair means, shall be dropped from the program not exceeding two semesters.

Freezing of Semester

- ⇒ In case of a valid reason a student may freeze his/her studies maximum for one year (two semesters) subject to the permission of Director. However, freezing in 1st semester is not allowed but in case of grave situation the Departmental Examination Committee will consider the freezing of semester in 1st semester and forward its recommendation to Semester Implementation Committee for final decision.
- ⇒ During the “freezing period” the applicant will lose his studentship status and shall not be entitled to avail any facility like hostel/ medical/ transport, which University extends to its regular students. The student will rejoin the same semester which he/she has frozen on the basis of genuine reason and will be entitled to the facilities curtailed for the freezing period. In case of any problem the students may approach the Semester Implementation Committee.

Record Keeping

- ⇒ IBIT will keep academic record of each student for two semesters only. After which the academic record will be destroyed and IBIT will not be responsible for any liability.

Rules for Admission

- ⇒ Any student, who was rusticated, expelled or whose entry in any College/University Campus was banned for any reason whatsoever at any time during his/her academic career, shall not be admitted to any class without the permission of the Syndicate. The Syndicate may not consider such cases except on the recommendations of the Admission Committee.
- ⇒ Age limit for students seeking admission for BBIT (Hons.) program is 24 years. For all other programs the age requirements, if any, will be announced at the time of admission.
- ⇒ The other admission criterion for different degree programs are to be developed by the Admission Committee and will be advertised to the students applying for admission.
- ⇒ For all other admission related rules refer to University Admission Regulations.

Evaluation System

- ⇒ The teacher is responsible for the evaluation of work/performance of the students of his class and for the award of grades to them on the basis of such evaluation.
- ⇒ The number and nature of tests and assignments depends on the nature of course. However, in case of taught courses there will be at least one home assignment, two quizzes and two tests (Mid Semester and Final Examination) in each course with the weightage as under:
 - Assignment 25%
 - Mid Semester 35%
 - Final Semester 40%

To pass a course, student must obtain 'D' grade 50% marks cumulative in Mid and Final Semester examinations and 50% separately in Assignment out of assigned marks.

- ⇒ There shall be no choice in questions in the Mid Semester and Final Examinations papers.
- ⇒ The scripts of each activity shall be shown to the students concerned by the teachers within one week, taken back immediately in accordance with the announced schedule along with the examination schedule.
- ⇒ In case a student is not satisfied with his/her award even after checking his/her answer book, or clarification from the teacher, he/she may make written complaint to Director who will refer his/her to the Examination Committee of the Institute.
- ⇒ The Mid Semester Examination shall be eight weeks after the commencement of the semester. The final examination shall be held at the end of the semester.
- ⇒ **Duration of Examination:** In view of the weightage for the examination the duration of the papers will be as follows:
 - ⇒ Mid Semester Examination One and half hour
 - ⇒ Final Semester Examination Two Hours
- ⇒ Examinations should be held on consecutive days excluding holidays. The schedule of paper showing to the students shall be displayed along with the examination schedule by the teacher.
- ⇒ Home assignments shall be deposited with the teacher concerned as scheduled by the teacher.

Course File

Maintenance of course file is compulsory for the teacher. It will have a complete record of everything that happened during the semester. The course file will contain:

- ⇒ Description of course
- ⇒ Course coding
- ⇒ Weekly teaching schedule
- ⇒ Dates of mid-semester examination
- ⇒ Copy of each home work assignment
- ⇒ Copy of quiz given
- ⇒ Copy of Mid Semester examination
- ⇒ Copy of Final Semester examination
- ⇒ Copy of result duly signed by the teacher

- ⇒ Difficulties/ problems faced during classroom/ course delivery.

The course file of each subject will be submitted to the office of the Institute one week after the end of Final Semester Examination.

Teacher Evaluation

- ⇒ The evaluation of teacher is mandatory because there is very little control over the teacher when he/she is in the classroom. The head of the Institute shall have every course teacher evaluated by the students on what they have taught by him/her. The evaluation will be done in the last week of the semester without the presence of the teacher so as to maintain impartiality.

Departmental Examination Committee

1. Constitution of Committee

The institute has a Departmental Examination Committee comprising of the following persons:

- ⇒ Director of the Institute.
- ⇒ Three to four senior most faculty members.
- ⇒ The concerned teacher may be co-opted in case of complaint of a student.

2. Functions of the Committee

- ⇒ Ensure content coverage of courses by comparing tests with the course outline and work plan provided by the teacher.
- ⇒ Monitor classroom activities as laid down in the course outline.
- ⇒ Examine all matters regarding uniformity before the declaration of results.
- ⇒ Address and decide student complaints/appeals regarding grade awards. In case a student is not satisfied with decision of Departmental Examination Committee then student may appeal to Semester Implementation Committee.

Student Financial Aid

Assistance Based on Need

Students subject to selective financial aid will be required to file a statement that the student has no means to carryout his/her education further. This may be a DIRECT NEGATION of the student's initial declaration at the time of the submission of his application form. That he /she would not demand any financial assistance from the school on need basis. This provision is being provided to cater for any unforeseen financial distress the student's parent /guardian may experience.

Students wishing to participate in any of the financial aid programs should be registered, at IBIT, with full course load for graduate as well as under graduate programs. Also, only the regular (morning) students are qualified for this program. "Evening", "Special", and students with "Probation" are not eligible for financial aid programs.

Scholarships

The Institute of Business and Information Technology provides merit scholarships to students who have demonstrated exceptional academic achievement. Normally, every semester brings scholarships to Top 3 students of each batch. In addition, IBIT is also making arrangement to offers a number of endowed scholarships that are administered by individuals and other programs. Graduate scholarships are awarded on the basis of scholastic excellence and adequate preparation for graduate study in the student's chosen field, as shown by the student's academic record. Scholarship eligibility criteria include admission into a degree program, enrollment in coursework leading to the degree, reasonable progress in the degree program, good academic standing, CGPA, and in some cases, references and personal statements.

Scholarship funds have been contributed by individual donors, PU alumni, corporations, government agencies and other entities to recognize and reward academic excellence.

Assistantships

Research and teaching assistantships are also available with respect to all the subjects being covered at the undergraduate and graduate levels. Only those students are eligible, who are unconditionally admitted to the institute. Prospective graduate students should see the appropriate department chair for further information. To be continued on a research or teaching assistantship, a student must be in good standing and have performed assigned duties satisfactorily in the preceding semesters as determined by the respective faculty member.

Student Conduct and Discipline

The Institute of Business and Information Technology reserves the right to impose disciplinary penalties, including permanent expulsion, against a student for disciplinary reasons. Information about the rules of conduct and due process procedures are based on the regulations book of the University of the Punjab. Please refer to the Rules and Regulations Book for further explanations.

Hazing

Hazing in educational institutions is prohibited at IBIT. Individuals or student organizations engaging in hazing could be subject to fines and charged with criminal offenses. Additionally, the local law does not affect or in any way restrict the right of IBIT to enforce its own rules against hazing.

At IBIT a person can commit a hazing offense not only by engaging in a hazing activity, but also by soliciting, directing, encouraging, aiding or attempting to aid another person in hazing; by intentionally, knowingly or recklessly allowing hazing to occur; or by failing to report firsthand information that a hazing incident is planned or has occurred in writing to the Program Coordinator or In charge Student Affairs/ Administrative Officer. The fact that a person consented to or acquiesced in a hazing activity is not a defense.

To encourage reporting of hazing incidents, IBIT aims to grant immunity to any person who reports a specific hazing event to the Program Coordinator's Office.

The law defines hazing as an intentional, knowing or reckless act, occurring on or off the campus of an educational institution, by one person alone or acting with others, directed against a student, that endangers the mental or physical health or safety of that student for the purpose of pledging, being initiated into, affiliating with, holding office in or maintaining membership in any organization whose members are or include students at an educational institution. Hazing includes but is not limited to:

- Any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body or similar activity;
- Any type of physical activity, such as sleep deprivation, exposure to the elements, confinement in a small space, calisthenics or other activity that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student;
- Any activity involving consumption of food, liquid, alcoholic beverage, liquor, drug or other substance that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health of the student;
- Any activity that intimidates or threatens the student with ostracism, that subjects the student to extreme mental stress, shame or humiliation, that adversely affects the mental health or dignity of the student or discourages the student from entering or remaining registered in an educational institution, or that may reasonably be expected to cause a student to leave the organization or the institution rather than submit to acts described in this subdivision; and
- Any activity that induces, causes, or requires the student to perform a duty or task that involves a violation of the University Code. The fact that a person consented to or acquiesced in a hazing activity is not a defense to prosecution.

Use of Campus Facilities

The property, buildings or facilities owned or controlled by The Institute of Business and Information Technology are not open for assembly, speech or other activities as are the public streets, sidewalks and parks. No person, organization, group, association or corporation may use property, buildings or facilities owned or controlled by IBIT for any purpose other than in the course of the regular

programs or activities related to the University's role and mission unless authorized by and conducted in compliance with the Rules and Regulations of the University of The Punjab.

Vehicle Emissions Inspections

Vehicles parking or driving on IBIT area side of campus must comply with vehicle emissions inspections standards. Any violation in Semesters of emissions or adding to noise pollution can lead to surrender of usage of ones personal car at IBIT. Vehicles not in compliance will not be allowed to be parked at IBIT.

Student Travel Policy

Student safety is a priority for IBIT at the University of The Punjab. This policy, designed to minimize the risk connected with student travel, is applicable to student travel undertaken by one or more currently enrolled students to reach an activity or event that meets all of the following criteria.

- Travel is planned and funded by the University;
- Travel is more than 25 miles from the University;
- Travel to the activity or event is funded and undertaken using a vehicle owned or leased by the University; or
- Attendance at the activity or event is required by a registered student organization in good standing and Travel Rules & Regulations approved in accordance with this policy.

Travel Rules and Regulations

Students often make out of station visits either for recreational or study purposes. The Institute will ensure that following are fulfilled as far as compliance is concerned. Seat Belts, Alcohol and Illegal Substance Prohibited Passenger Capacity, License and Training, Proof of Insurance, Inspection and Safety Devices, Legal Operation of Vehicles and Driving Schedule. Operators of motor vehicles shall comply with all laws, regulations and posted signs regarding speed and traffic control and shall not operate the vehicle for a continuous period that is longer than three hours without at least a 15-minute rest stop. There shall be no driving between the hours of 09 p.m. and 6 a.m. without prior approval of the appropriate administrative official or Director of the IBIT.

Each vehicle owned or leased by The Institute must be subject to scheduled periodic service and maintenance by qualified persons and comply with all applicable requirements of The University of The Punjab procedures memoranda.

All drivers of vehicles owned or leased by the Institute of Business and Information Technology, shall be the employees of The University of the Punjab authorized to drive the University vehicles in accordance with the policies of the University of the Punjab. He should have a valid driver's license.

IBIT Student's Security and Safety Policy

At IBIT, students come first. We as IBIT family will ensure that security and safety policies include:

- ⇒ Procedures for reporting acts of violence, criminal actions or other emergencies occurring on campus.
- ⇒ Policies concerning security of and access to campus facilities, including labs, library, class room and auditoriums. Institute may ensure enforcement through available system of authority and responsibilities.
- ⇒ A description of programs designed to inform students and employees about the prevention of crimes, and campus security procedures.

- ⇒ The policy of monitoring and recording of students' criminal activity occurring at off-campus locations of student organizations officially recognized by the institution.
- ⇒ The policy regarding the possession, use and sale of alcoholic beverages and illegal drugs, and enforcement of federal and Punjab Government drug and drinking laws.
- ⇒ A description of drug or alcohol-abuse education programs.
- ⇒ Gender assault/harassment programs to prevent gender offenses, and procedures to follow when a gender offense occurs.
- ⇒ A strict and religions adherence to IBIT's disciplinary rules and regulations.

Students' Executive Committee (SEC)

Another salient feature at IBIT is the Student's Executive Committee (SEC). Brilliant minds from all batches executive members is further divided into committees that deal with different areas like public relations, industrial liaison, and IBIT journal & newsletter. SEC provides an excellent opportunity for the students to enhance their skills in their relevant area of interest. It also serves as a forum where the students and administration interact frequently to discuss matters of mutual interest.



Student Executive Committee members during Fun Fair in IBIT



Director IBIT, Prof. Dr. Syed Mansoor Sarwar with Faculty members and students at the IBIT's Award Ceremony 2011



Students attending Annual Dinner in IBIT



Students attending a Seminar arranged in IBIT Seminar Hall



Students attending workshop arranged in IBIT Seminar Hall



Students attending workshop arranged in IBIT Seminar Hall

Blood Donors Society

IBIT has established a Blood Donors Society for helping people in need of blood. Students as well as faculty members volunteer to donate blood to meet emergency situations. Information is collected at the time of submission of forms. Please visit us at our website: (www.ibitpu.edu/bloodsociety) for current and up to date rules & regulations.

Forum for Recreational Sports

The Forum for Recreational Sports provides a diverse offering of recreational and leisure experiences for students, faculty and staff. More than six activities in competitive and recreational area

steam, individual and co-recreational are scheduled throughout the year. Students have been grouped in different houses.

The Club for Recreational Sports consists of following areas:



IBIT Students on a recreational trip to Mangla Dam

- Students are welcome to drop by the Program Coordinator's Office for Informal Registration and create their own club or sports society. They may choose from a variety of activities such as, badminton, basketball, table tennis, indoor track, volleyball, weight rooms, cardiovascular machines, jogging trails, locker/shower facilities and lounges. Students are able to access the University of the Punjab facilities with a valid IBIT student card.
- Inter house Sports provides opportunities for participation in recreational and competitive activities. Divisions for men, women, and co-recreational teams are offered in team activities and in many individual dual sports. Activities include scrabble, table tennis, billiards and many more.
- The Sports Club program serves individual interests in different sports. Some students represent University of the Punjab in intercollegiate competition and/or conduct activities such as practice and instruction. Membership guidelines vary. Some of the current clubs include men's and women's soccer, men's and women's volleyball, cycling, martial arts, and lacrosse.

Bachelor of Business and Information Technology (Honors) **(BBIT-Hons.)**

After 12 years of Education

It is a 4 year full time study program spread over eight semesters. Each Semester comprises of 18 weeks. Students are offered courses in Business and Information Technology which blend into a coherent and professional degree program. The courses of study may be changed from time to time by the Academic Council on the recommendations of the Board of Studies. Such changes will be notified before the commencement of the semester in which they will take effect.

Eligibility Requirements

To be eligible for the BBIT (Hons.) Program a candidate must have: Intermediate or Equivalent qualification from a recognized Board or University.

Admission Criteria

Admission merit is determined on the past academic record and the marks obtained in the Entry Test given to the students for admission. The academic record is evaluated by giving weighted percentage marks obtained in Matriculation, F.A./F.Sc. or its equivalent examinations (50% marks required to be eligible). The net merit is calculated by the following formula.

$$= \frac{\frac{1}{4} \text{ of Marks Obtained in Matric} + \text{Marks Obtained in Intermediate examination} + 20 \text{ Marks of Hafiz-e-Quran (if applicable)}}{\frac{1}{4} \text{ of Total Matric Marks} + \text{Total Intermediate Marks}}$$

Assessment of Study Progress

Students' progress is assessed by formal examinations, quizzes, cases, projects, and home assignments etc. There will be two compulsory examinations in each Semester for each course; Mid-Semester and Final Examination. The dates for these examinations are announced well in advance. Mid-Semester examination takes place during 9th week, while the final examination is given at the conclusion of the course. In addition to these exams, sessional work comprising quizzes, class work, home assignments, class presentation and class discussion if any, and Semester papers is also carried out. The grades in the above examinations and sessional work are determined and given by the concerned instructors. If a student fails to appear in any examination, quiz or fails to submit the Semester paper/home assignment in time or is unable to give his presentation on due date, he/she will be awarded zero mark in respective examination/ assignment etc.

Award of Degree

For the award of BBIT (Hons.) degree, a student must have:

- (a) Passed courses totaling at least 130 credits from the courses given below.
- (b) Completed an internship and a project under the supervision of a member of the faculty and submitted a detailed project report.
- (c) Obtained a Cumulative Grade Point Average (CGPA) of 2.00 or higher out of a maximum of 4.0.
- (d) Fulfilled other requirements outlined in the rules & regulations section of the prospectus.

Scheme of Study for BBIT (Hons.)

The courses taught in BBIT (Hons.) are given below. The courses may be revised as a result of continuous review conducted every Semester to bring them at par with top-class foreign universities' courses and accommodate HEC, industry needs, commerce and the government requirements.

Bachelor of Business and Information Technology-BBIT (Hons)

(After 12 Years of Education)

Semester wise Breakup

Course Code	SEMESTER 1	Cr. Hrs	Course Code	SEMESTER 2	Cr. Hrs
IT 160	Introduction to Information Technology	3	GEN 153 GEN 154	Islamiyat Pakistan Studies	2 2
GEN 150	Introductory Mathematics	3	IT 161 IT 161	Programming Fundamentals Programming Fundamentals Lab	3 1
GEN 151	English Composition	3	GEN 155	Mathematics for Management Sciences	3
MGMT 110	Principles of Management	3	IT 162	Digital Logic Design	3
GEN 152 GEN 157	Introduction to Philosophy Introduction to Sociology	3	GEN 156 GEN 158	Introduction to Psychology International Relations	3
	Total Credit Hours	15		Total Credit Hours	17
	SEMESTER 3			SEMESTER 4	
IT 260 IT 260	Object Oriented Programming Object Oriented Programming Lab	3 1	IT 261	Database Systems	3
GEN 250	Business Communication & Technical Writing	3	ECON 231	Macroeconomic Theory	3
ECON 230	Microeconomic Theory	3	FIN 240	Business Finance	3
STAT 290	Business Statistics	3	STAT 291	Statistics for Business Decision Making	3
ACCT 210	Principles of Accounting	3	MKTG 280	Principles of Marketing	3
	Total Credit Hours	16		Total Credit Hours	15
	SEMESTER 5			SEMESTER 6	
ACCT 310	Cost Accounting	3	MGMT 370	Human Resource Management	3
IT 360	Data Communication and Computer Networks	3	IT 362	E-Commerce (Functions & Technologies)	3
IT 361	Software Engineering	3	IT 363	Internet Programming	3
	Area of specialization course No 1	3	IT 364	Information System Audit and Control	3
	Area of specialization course No 2	3		Area of specialization course No 3	3
				Area of specialization course No 4	3
	Total Credit Hours	15		Total Credit Hours	18
	SUMMER SEMESTER				
BUS 320	Business Internship	3			
	SEMESTER 7			SEMESTER 8	
IT 460	Software Quality Assurance	3	IT 461 BUS 420	IT Project / Business Project	4
MGMT 470	Project Management	3	BUS 421	Business Law	3
MGMT 471	Entrepreneurship and SME Management	3	MGMT 472	Organization Theory and Design	3
	Area of specialization course No. 5	3		Area of specialization course No. 7	3
	Area of specialization course No. 6	3		Area of specialization course No 8	3
	Total Credit Hours	15		Total Credit Hours	16

SUMMARY	
TOTAL NUMBER OF CREDIT HOURS	130
TOTAL NUMBER OF COURSES	40
TOTAL NUMBER OF LABS	2
BUSINESS INTERNSHIP	1
IT PROJECT/BUSINESS PROJECT	1

Note: Term wise course offering is subject to modification to accommodate board of studies recommendations as well as faculty availability.

LIST OF COURSES - BBIT (HONS)

S. No.	Area	Course Description	Cr. Hrs	
1	ACCT 210	Principles of Accounting	3	
2	ACCT 310	Cost Accounting	3	
3	BUS 320	Business Internship	3	
4	BUS 420	Business Project	4	
5	ECON 230	Microeconomic Theory	3	
6	ECON 231	Macroeconomic Theory	3	
7	FIN 240	Business Finance	3	
8	GEN 150	Introductory Mathematics	3	Compulsory
9	GEN 151	English Composition	3	Compulsory
10	GEN 152	Introduction to Philosophy	3	*Optional
11	GEN 153	Islamiyat	2	Compulsory
	GEN 154	and Pakistan Studies	2	Compulsory
12	GEN 155	Mathematics for Management Sciences	3	Compulsory
13	GEN 156	Introduction to Psychology	3	*Optional
15	GEN 157	Introduction to Sociology	3	*Optional
14	GEN 158	International Relations	3	*Optional
16	GEN 250	Business Communication & Technical Writing	3	Compulsory
17	IT 160	Introduction to Information Technology	3	
18	IT 161 IT 161	Programming Fundamentals Programming Fundamentals Lab	4	
19	IT 162	Digital Logic Design	3	
20	IT 260 IT 260	Object Oriented Programming Object Oriented Programming Lab	4	
21	IT 261	Database Systems	3	
22	IT 360	Data Communication and Computer Networks	3	
23	IT 361	Software Engineering	3	
24	IT 362	E-Commerce (Functions & Technologies)	3	
25	IT 363	Internet Programming	3	
26	IT 364	Information System Audit and Control	3	
27	IT 460	Software Quality Assurance	3	
28	IT 461	IT Project	4	
29	MGMT 110	Principles of Management	3	
30	MGMT 370	Human Resource Management	3	
31	MGMT 470	Project Management	3	
32	MGMT 471	Entrepreneurship and SME Management	3	
33	MGMT 472	Organization Theory and Design	3	
34	MKTG 280	Principles of Marketing	3	
35	STAT 290	Business Statistics	3	
36	STAT 291	Statistics for Business Decision Making	3	
37	MKTG/FIN/IT	Area of Specialization 1	3	
38	MKTG/FIN/IT	Area of Specialization 2	3	
39	MKTG/FIN/IT	Area of Specialization 3	3	
40	MKTG/FIN/IT	Area of Specialization 4	3	
41	MKTG/FIN/IT	Area of Specialization 5	3	

42	MKTG/FIN/IT	Area of Specialization 6	3	
43	MKTG/FIN/IT	Area of Specialization 7	3	
44	MKTG/FIN/IT	Area of Specialization 8	3	

*Out of the four optional courses student must successfully pass atleast two courses, totaling six credit hours.

AREA OF SPECIALIZATION COURSES					
MARKETING			FINANCE		
MKTG 380	Marketing Management	3	FIN 340	Advance Financial Management	3
MKTG 381	Marketing Research	3	FIN 341	Commercial Bank Management	3
MKTG 382	Selling and Sales Management	3	FIN 342	Financial Econometrics	3
MKTG 383	Value Chain & Logistics	3	FIN 343	Credit Risk Analysis	3
MKTG 384	Integrated Marketing Communications	3	FIN 344	Introduction to Derivatives	3
MKTG 385	Franchise Structure and Management	3	FIN 440	Insurance and Risk Management	3
MKTG 480	Industrial Marketing	3	FIN 441	Capital Budgeting and Investment Decisions	3
MKTG 481	Direct Marketing Strategies	3	FIN 442	Money and Capital Markets	3
MKTG 482	Retailing and Merchandizing Management	3	FIN 443	Emerging Trends in Finance	3
MKTG 483	Entrepreneurship and New Venture Marketing	3	FIN 444	Corporate Law and Business Ethics	3
MKTG 484	Marketing for Non Profit Organizations	3	FIN 446	Computing Applications and Financial Management	3
MKTG 485	Emerging Trends in Marketing	3	FIN 447	International Finance	3
MKTG 486	Marketing Mathematics / Empirical Tools for Marketing	3			

INFORMATION TECHNOLOGY		
IT 365	Object Oriented Analysis and Design	3
IT 366	Operating Systems	3
IT 367	Data Structures and Algorithms	3
IT 367	Data Structures and Algorithms Lab	
IT 368	Distributed Database Systems	3
IT 369	Computer Graphics	3
IT 461	Internetworking with UNIX TCP/IP	3
IT 462	Artificial Intelligence	3
IT 463	Computer Architecture	3
IT 464	Emerging Trends in IT	3
IT 465	Computer Organization and Assembly Language	3
IT 465	Computer Organization and Assembly Language Lab	
IT 466	Analysis of Algorithms	3
IT 467	UNIX and Shell Programming	3
IT 468	Information Security	3
IT 469	Compiler Construction	3

All Specialization Courses are of '3' credit Hours

The director may include any of the courses in the list of electives as and when considered appropriate and in the best interest of the students and degree program.

Course Coding System

- Coding 3-4 alphabets for course Category e.g. MGMT= Management, MKTG=Marketing etc.
- First digit represents No. of Year in program, e.g. First year =1 (Semester 1 & 2)
- Second digit for subject e.g. MGMT = 7. Complete table given below:
- Third digit represents the number of course available in a given year e.g. 0-9, (e.g. 170 means First Course of MGMT available/offered during the first Year). 1- represents the Year-1, 7- represent the MGMT, and 0-represents the first course of MGMT available/offered in Year-1).

ACCT	1	IT	6
BUS	2	MGMT	7
ECO	3	MKTG	8
FIN	4	STAT	9
GEN	5	TRN	0

Note: Term wise course offering is subject to modification to accommodate board of studies recommendations as well as faculty availability.

Master of Business & Information Technology via BBIT (Hons.) **(MBIT via BBIT-Honors)**

Eligibility Requirements

To be eligible for the MBIT Via BBIT (Hons.) Program, a candidate must have a BBIT (Hons.) /equivalent degree from a recognized university and a CGPA greater than or equal to 3.00.

Assessment of Study Progress

Students' progress is assessed by formal examinations, quizzes, cases, projects, and home assignments etc. There will be two compulsory examinations in each Semester for each course: Mid-Semester and Final Examination. The dates for these examinations are announced well in advance. Mid-Semester examination takes place during 9th week while the final examination is given at the conclusion of the course. In addition to these exams, semester work comprising quizzes, class work, home assignments, class presentation and class discussion if any and Semester papers is also carried out. The grades in the above examinations and session work are determined and given by the concerned instructors. If a student fails to appear in any examination, quiz or fails to submit the Semester paper/home assignment in time or is unable to give his presentation on due date, he/she will be awarded zero mark in respective examination/assignment etc.

Award of Degree

For the award of MBIT degree (via BBIT-Honors), a student must have:

- (a) Passed courses totaling at least "36" credits from the courses given below.
- (b) Obtained a Cumulative Grade Point Average (CGPA) of 3.0 or higher out of a maximum of 4.0.
- (c) Passed the Comprehensive Examination given after the completion of course work.
- (d) Has successfully completed the Thesis or Research Project of 6 credit hours
- (e) Fulfilled other requirements outlined in the rules & regulations section of the prospectus.

This Program will be spread over 3 Semesters and a thesis / research project. Four courses will be offered every semester and there will be two Classes per course per week of 1½ hour duration each.

Scheme of Study for MBIT Via BBIT (Hons.)

The courses taught in MBIT via BBIT (Hons.) are given below. The courses may be revised as a result of continuous review conducted every Semester to bring them at par with top-class foreign universities' courses and accommodate HEC, industry needs, commerce and the government requirements.

(MBITviaBBIT-Hons) – One & a Half Years Program

[After 16 Years of Education (For BBIT (Hons) Graduates of IBIT only)]

Semester wise Breakup

Semester – 1				
Course	Code	Course Name	Cr.	Term
ACCT	510	Intermediate Accounting	3	
MGMT	570	Total Quality Management	3	Any one of the following with the permission of the Director/PC
MGMT	571	Organization Behavior		
IT	560	Management Information System	3	Any one of the following with the permission of the Director/PC
	561	ERP Systems		
		Area of Specialization Course No. 1	3	
Total Credit Hrs.			12	

Semester – 2				
Course	Code	Course Name	Cr.	Term
MGMT	572	Research Techniques & Methods	3	
MGMT	573	Strategic Management	3	Any one of the following with the permission of the Director/PC
MGMT	574	Corporate Governance		
IT	562	Data Warehousing and Data Mining	3	Any one of the following with the permission of the Director/PC
	563	Advance Database Concepts		
	564	Requirement Engineering		
		Area of Specialization Course No. 2	3	
Total Credit Hrs.			12	

Semester – 3				
Course	Code	Course Name	Cr.	Term
ECON	630	Managerial Economics	3	
		Area of Specialization Course No. 3	3	
TRN	600	Major Project / Thesis	6	
TRN	601	Comprehensive Exam	0	
Total Credit Hrs.			12	

The director may include any of the courses in the list of electives as and when considered appropriate and in the best interest of the students and degree program.

Total Credits	36
Total Courses	10
Major Project / Thesis	1
Years to Complete	1.5

Note: Term wise course offering is subject to modification to accommodate board of studies recommendations as well as faculty availability.

LIST OF COURSES - MBITviaBBIT

S. No.	Area	Course Description	Credit Hours
1	ACCT 510	Intermediate Accounting	3
2	ECON 630	Managerial Economics	3
3	IT 560	Management Information System	3
4	IT 561	ERP Systems	3
5	IT 562	Data Warehousing and Data Mining	3
6	IT 563	Advance Database Concepts	3
7	IT 564	Requirement Engineering	3
8	MGMT 570	Total Quality Management	3
9	MGMT 571	Organization Behavior	3
10	MGMT 572	Research Techniques & Methods	3
11	MGMT 573	Strategic Management	3
12	MGMT 574	Corporate Governance	3
13	TRN 600	Major Project / Thesis	6
14	TRN 601	Comprehensive Exam	0
15	FIN/IT/MKTG	Area of Specialization 1	3
16	FIN/IT/MKTG	Area of Specialization 2	3
17	FIN/IT/MKTG	Area of Specialization 3	3

Courses for Specialization (MBITviaBBIT)

AREA OF SPECIALIZATION COURSES			
MARKETING		FINANCE	
MKTG 580	Consumer Behavior	FIN 540	Banking Law and Practice in Pakistan
MKTG 581	Strategic Marketing	FIN 541	Corporate Finance
MKTG 582	Marketing of Services	FIN 542	Investment and Portfolio Management
MKTG 583	E-Marketing	FIN 543	Project Appraisal
MKTG 584	International Business Management	FIN 544	Banking and Financial Markets
MKTG 680	Strategic Brand Management	FIN 545	Derivatives and Risk Management
MKTG 681	International Marketing	FIN 640	Corporate Tax Planning
MKTG 682	Emerging Trends in Marketing	FIN 641	Marketing of Financial Services
MKTG 683	New Product and Services Development	FIN 642	Islamic Finance and Banking
		FIN 643	Emerging Trends in Finance
		FIN 644	International Trade

INFORMATION TECHNOLOGY	
IT 565	Enterprise Software Development
IT 566	Advanced Networks
IT 567	E-Governance
IT 568	Emerging Trends in IT
IT 569	Special Topics in E-commerce
IT 660	Mobile Software Development
IT 661	Internet Programming
IT 662	Design pattern
IT 663	Web Engineering
IT 664	Theory of Automata
IT 665	Digital Logic Design and Computer Architecture
IT 666	System Programming
IT 667	Advanced ERP Systems
IT 668	Object Oriented Software Engineering

All Specialization Courses are of '3' credit Hours

Course Coding System

- Coding 3-4 alphabet for course Category e.g. MGMT= Management, MKTG=Marketing etc.
- First digit represents No. of Year in program, e.g. First year =5 (Semester 1 & 2 of MBITviaBBIT)
- Second digit for subject e.g. MGMT = 7. Complete table given below:
- Third digit represents the number of course available in a given year e.g. 0-9, (e.g. 570 means First Course of MGMT available during the first Year in MBITviaBBIT). 5- represents the Year-1 in MBITviaBBIT, 7- represent the MGMT, and 0-represents the first course of MGMT available/offered in Year-1)

ACCT	1	IT	6
BUS	2	MGMT	7
ECO	3	MKTG	8
FIN	4	STAT	9
GEN	5	TRN	0

COURSE DESCRIPTIONS

Bachelors of Business and Information Technology (BBIT Hons.)

1. Principles of Management

MGMT 110

Introduction management science, theory and practice. Includes nature and purpose of planning. Different types of plans. Various types of objectives, strategies, policies and planning premises. Decision making. The nature and purpose of organizing Basic departmentalization. Line staff authority and decentralization. Manager and organizational development. Motivation, Leadership, Communication. The system and process of controlling. Case studies on all major topics.

2. English Composition

GEN 151

Study and practice of fundamentals of written communication including principles of grammar, punctuation, spelling, organization, and careful analytical reading.

3. Islamiyat

GEN 153

Study of Quran and Hadith. Life of the Prophet (PBUH). Islamic civilization.

4. Pakistan Studies

GEN 154

Pakistan Studies. Historical perspective of ideology of Pakistan. Reformative grand educational movement in the past 1857 era (1857 - 1900). Dawn of 20th century and political awakening among the South Asian Muslim 1906 - 1916. Constitutional Struggle 1916 - 1940. Circumstances leading to independence 1940 - 47. Initial difficulties of Pakistan. Post-creation environment. Islamization process Important national factors i.e., economy, agriculture, industry, and education. Geo-agriculture, industry, and education. Geo-Politics of Pak relation with Muslim world.

5. Mathematics for Management Sciences

GEN 155

Polynomial, logarithmic and exponential functions, Limits and derivatives, Extreme values and related rates. Simple integration, Differential equations. Throughout stresses applications to business and economics.

6. Introduction to Psychology

GEN 156

A general survey of the major areas of psychological research. Emphasis is placed on scientific approaches to the study of behavior.

7. Introduction to Sociology

GEN 157

Surveys the basic concepts, theories and analytical methods of sociology and their application to the study of society. Introduces students to various perspectives and areas of interest in the discipline.

8. Introduction to Information Technology

IT 160

This is the preliminary course and with the help of this course, students will study about Information System Benefits, what is happening in the real world, Hardware, software, telecommunication, and networking equipments. How we can cut down the cost of our business overheads by IS and increase the efficiency of services, productivity, and durability.

(Pre-requisite: None)

9. Programming Fundamentals

IT 161

This is the first course in computer programming. It does not assume has any previous programming experience. Students will learn about computer system fundamentals, usage of window based operating system, tools required to work with the system, and structured programming using C++. Students will get hands on experience of programming environment throughout the course. And at the end of the course students will be able to design the solution and program the simple problems.

(Pre-Requisite: IT 160)

10. Principles of Accounting

ACCT 210

The language of business, recording changes in financial position, measuring business income, completion of accounting cycle. Accounting for merchandising concerns, introduction to financial concerns, and introduction to financial statement analysis. Financial assets, inventories, plant assets and depreciation.

11. Microeconomic Theory

ECON 230

Microeconomic theory and public policy: supply and demand, theory of the firm, market allocation of resources, income distribution, competition and monopoly, Governmental regulation of businesses and unions.

12. Macroeconomic Theory

ECON 231

Macroeconomic theory and public policy: national income concepts, unemployment, inflation, inappropriate economic growth, and international payment problem.

(Prerequisite: ECON 230)

13. Business Finance

FIN 240

Explain the role of finance in our economic system. Identify how financial planning affects and is affected by marketing, management, production, accounting, sales and other business decisions. Identify and explain the financial principles, procedures, theories, functions, and instruments as they relate to financial institutions and capital markets. Grasp the conceptual framework behind foundation topics including valuation techniques, investment, financing and dividend policy decisions, and risk management. Perform calculations based on data from the stocks and bonds. Perform calculations using a financial calculator and time value tables for present value, future value and annuity problems.

(Pre-requisite: ACCT 210)

14. Business Communication and Technical Writing

GEN 250

Theory and practice in business and professional communication designed to evoke confidence in the students which is expected of them as business professional. Continues the practice of ENG 4043 to develop further skills learned in that course. Based on reading and discussion of various types of writing, the student's essays will provide practice in different kinds of rhetorical development including research and documentation.

(Prerequisite: GEN 4043)

15. Object Oriented Programming (C#)

IT 260

Justify the philosophy of object-oriented design and the concepts of encapsulation, abstraction, inheritance, and polymorphism. Design, implement, test, and debug simple programs in an object-oriented programming language. Describe how the class mechanism supports encapsulation and information hiding. Strong concepts of object manipulation and dynamic memory allocation within classes.

(Pre-Requisite: IT 161)

16. Database Systems**IT 261**

This course is an introduction to Relational Databases Management Systems. The course will cover fundamental concepts of Databases with an emphasis on modeling, designing and implementation of Database systems. The theory will be augmented with hands-on exercises on Database system and a project.

(Pre-Requisite: IT 161)

17. Principles of Marketing**MKTG 280**

The course, "*Principles of Marketing*" introduces you to the essentials of marketing (key concepts, methods of analysis, strategies and tactics) critical to managing profitable customer relationships in today's dynamic and connected environment. The objective is to introduce the student to marketing strategy and to the elements of marketing analysis: customer analysis, company analysis and competitor analysis and to familiarize them with the elements of the marketing mix (product, pricing, promotion, and distribution strategies)

18. Business Statistics**STAT 290**

This course provides an introduction to probability theory and the theory of random variables and their distributions. Probability laws. Discrete and continuous random variables. Means, variances, and moment generating functions. Sums of random variables. Joint discrete distributions. Central Limit Theorem. Examples drawn from engineering, science, computing science and business.

19. Statistics for Business Decision Making**STAT 291**

This course provides an introduction to essential techniques of statistical inference. Samples and statistics versus populations and parameters. Brief introduction to method of moments and maximum likelihood. Tests and intervals for means, variances and proportions (one and two-sample). Multiple regressions, residual plots. Analysis of variance, brief introduction to experimental design. Chi-squared tests. Examples drawn from engineering, science, computing science and business. Use of a statistical computer package.

(Prerequisite: STAT 290)

20. Cost Accounting**ACCT 310**

Cost accounting information and its use in managerial control. Deals in detail with cost accumulation, job and process costing, standard costing, and variance analysis.

(Prerequisite: ACCT 210)

21. Business Internship**BUS 320**

During the internship, students enrolled with Institute of Business & Information Technology, University of the Punjab, Lahore in their BBIT (Hons.) Program are required to undergo a comprehensive Internship Program of 6-8 weeks in a well-reputed organization. This enables the students to gain practical exposure in a dynamic learning environment.

(Prerequisite: Instructor's, Program Coordinator's and Director's consent.)

22. Human Resource Management**MGMT 370**

As the World economy becomes more oriented toward knowledge-based work, and organizations increasingly recognize that people truly are a major source of competitive advantage, HRM has taken on a strategic role. Consequently, decisions made in organizations about who to hire, what training to give them, how to reward them, and so on, have become more important. In addition, these decisions are not just made by the HR department. Individual employees and team members are becoming involved in selecting and evaluating co-workers. Managers are responsible for selection, training, performance

management, and compensation decisions. At the same time, our society is becoming increasingly litigious. It is in your best interests as future employees and future managers to understand your responsibilities regarding HR.

(Prerequisite: MGMT 110)

23. Business Project

BUS 420

Business Project is offered to the students during the last Semester of the program. The main objective of the project is to give students hands on experience in developing a business related IT application. The main objective is to identify a problem preferably business related that can be solved using IT application, develop a project proposal, write software requirement specifications, write design specifications, implement the project, and write project report. Students will be required to defend the project and to give a presentation/demonstration of their work.

24. Business Law

BUS 421

An introduction to the fundamental elements of the legal system and its common law origins. The scope of the course includes the application and operation of the legal system in the remedy of business disputes, the development and operation of the court system, and the regulation of business and industry.

25. Data Communication and Computer Networks (DCN) IT 360

Introduction to fundamental concepts of data communication and computer networks for building a sound foundation for subsequent courses in the field of networking, The layered architecture approach with reference to OSI Model, the characteristics of different transmission media, the basic encoding and modulation techniques, various error detection, flow and error control techniques, basic network devices and LAN technologies, fundamental concepts of switched networks, the IP addressing concepts, the necessary skills for LAN implementation.

(Pre-Requisite: IT 160)

26.

Software Engineering

IT 361

Definition, Motivation and Need, Software Characteristics and applications, Software Processes, Introduction to Software Development Cycle, Software Process Models. Project Management Concepts, Product Software Quality Metrics, Requirement Engineering, Software Designing, Software Testing.

(Pre-Requisite: IT 161)

27. Ecommerce (Functions & Technology)

IT 362

This Course focus on the explosive entrepreneurial growth period of e-commerce that occurred Between 1995 to Spring 2000 (Electronic Commerce I). The defining characteristic of Electronic Commerce II firms is that they are profitable, sustainable, efficient, and innovative firms with powerful brand names. Students must understand how to build these kinds of e-commerce businesses in order to prepare for entry into the Ecommerce II period.

(Pre-Requisite: IT 261)

28.

Internet Programming

IT 363

The course is aimed towards the students who plan to join the industry. The course will concentrate on the basic concepts of distributed web application development technologies and their usage. Students will gain hands on experience in current technologies by a term project design implementation.

(Pre-Requisite: IT 260, IT 362)

29. Information System Audit and Control

IT 364

This Course Covers the Audit of Computer based information systems, business and accounting information systems applications, information system risks, management controls, control evaluation and computer assisted audit.

(Pre-Requisite: IT 361)

30. Software Quality Assurance

IT 460

Software Quality Assurance (SQA) is a planned and systematic approach to ensure that software process and products conforms to the user requirements, established standards, and procedures. Timely, cost-effective and high-quality software can be achieved through effective Software Quality Control (SQC) and SQA practices applied throughout the development cycle. The objective of this course is to provide students with breadth and some depth of software quality assurance and management and to help them develop skills necessary for ensuring high quality software.

(Pre-Requisite: IT 361)

31. Entrepreneurship and SME Management

MGMT 471

This course helps to explore the ways by which governments, international organizations can co-operate in re-orientating development strategy towards more effective outward approaches to develop and assist small enterprises. The *Entrepreneurial Perspective* will introduce the entrepreneur and the entrepreneurial process from a research perspective. The course will cover the creation of the venture, its financing, management, growth and ending of the venture. Many people including students, business executives, entrepreneurs and professors can take advantage from this course.

(Prerequisites: MGMT 110 & MGMT 472)

32. Organizational Theory & Design

MGMT 472

Provides a rich theoretical foundation enabling practical work on the complex issues pertaining to the design of effective, efficient and viable organizations and develops ability to recognize organizational phenomena that can be analyzed and interpreted with the concepts and principles of organizational theory. The course is used to develop ability to make recommendations about the specific organizational conditions based on knowledge of organizational theory.

(Prerequisite: MGMT 110)

Specialization Courses

Marketing Specialization Courses

1. Marketing Management

MKTG 380

This course is designed to emphasize the integration of marketing concepts into a coherent marketing plan. It goes beyond a "tools and tactics" approach to marketing, bringing ideas together to ensure the overall plan is target market focused and internally consistent. This course provides the foundational knowledge to effectively manage a marketing function and use marketing principles to establish the organization's future marketing direction and guide business decisions in an increasingly dynamic and volatile business environment.

(Prerequisite: MKTG 280)

2. Marketing Research

MKTG 381

This course aims to provide students with a background in research methods, issues related to conducting marketing research, data analysis, and methods of evaluation related to marketing.

Knowledge of these topics will enable students to both implement and evaluate marketing research during their professional careers. It is assumed that students enrolled in this course have a basic understanding of marketing terminology and concepts.

(Prerequisite: MKTG 280, STAT 290 & STAT 291)

3. Selling and Sales Management

MKTG 382

This course is designed to provide the basic knowledge required to understand the essential components of selling and sales management. The students will examine issues and concepts pertaining to selling including: the personal selling process; prospecting, socializing, pre approach, presentations, closing the deals, negotiating, follow ups, and CRM. The course also covers basic sales force management strategies: planning, recruiting, training & developing, motivating, compensating, evaluating, promoting and retaining the sales force. Throughout, we explore the tools of sales management and discuss how they are integrated when formulating sales management strategy.

(Prerequisite: MKTG 280)

4. Value Chain and Logistics

MKTG 383

In this course, we will present and discuss a variety of tools and frameworks that will help you understand the basis behind effective logistics decision making and how it relates to broader issues in managing the entire supply chain and fulfilling the strategic objectives of a firm. The methods used to convey and develop these ideas will include a mix of traditional lecture, interactive discussion of topics and case studies. We will draw from a number of sources for the class, including well established textbook and recent articles from the popular business press and academic- or practitioner-oriented journals.

(Prerequisite: MKTG 280)

5. Integrated Marketing Communication

MKTG 384

This course introduces students to the theories that inform the practice of promotion techniques within the context of Integrated Marketing Communications (IMC) management. Specific topics include identifying promotional opportunities, corporate and brand image, advertising management, advertising design, media selection, consumer promotions, direct response marketing, public relations and sponsorship and international advertising. Communication activities represent an important part of most business activities. The subject IMC will provide students with techniques to improve the quality of their communications – from identifying the audience's needs through to media planning and strategy.

(Prerequisite: MKTG 280 & MKTG 380)

6. Franchise Structure and Management

MKTG 385

Franchising is getting a popular investment decision for many investors and the franchise model has been applied to industries as different as fast food and building, hotels and home services. In this course, the students will be provided with information on the two key aspects in the franchise management: How to keep the good relationship between franchisor and franchisee; and managing day-to-day franchise operations successfully. The main emphasis of the course will be on franchising structures and related benefits and drawbacks.

(Prerequisite: MKTG 280)

7. Direct Marketing Strategies

MKTG 481

This course is designed to assist the students in understanding and organizing the process of management decision making and activities required to plan and implement direct marketing programs. It provides a systemic approach to the study of direct marketing by emphasizing the scope of direct marketing and the nature of what direct marketers do. This course provides a thorough coverage of the direct marketing field. Each topic includes descriptions of important direct marketing concepts and applications, the related major managerial decision issues, and examples of direct marketing. These

and Acquisitions, Capital rationing and Cash Flow adjustments with the consideration of risk and inflation etc.

(Pre-requisite: FIN 240)

2. Commercial Bank Management

FIN 341

The rock hard, reliable bank around the corner is still popular as a stable, steady growth career option with a lot of business school graduates. The ever growing banking sector of Pakistan with the blend of information technology is offering exciting careers. There are tremendous opportunities for students to start their career in the banking sector. This course will certainly help the students and prepare them to be an effective part of the banking sector.

(Pre-requisite: FIN 240)

3. Financial Econometrics

FIN 342

The course deals with fundamental time series techniques to model and to predict financial data, the modeling of time-varying volatility as well as the estimation and testing of asset pricing models. Ongoing topics in modern financial econometric research, such as the modeling of realized volatility as well as the analysis of financial high-frequency data is covered as well. Moreover, an important objective is to provide a comprehensive knowledge to do empirical work in financial research and practice. Therefore, a part of the course consists of practical exercises where students are instructed to apply econometric concepts to real financial data.

(Pre-requisite: FIN 240, STAT 290, STAT 291)

4. Credit Risk Analysis

FIN 343

This course deals with analysis of financial reports for making investment decisions. The main focus is on equity valuation, with some time being devoted to credit analysis. Fundamental analysis methods will be examined in detail and applied in cases and projects involving listed companies. Topics include model of shareholder value, a comparison of accrual accounting and discounted cash flow approaches to valuation, the analysis of profitability, growth and valuation generation in a firm, testing the quality of financial reports, forecasting earnings and cash flows, pro-forma analysis for strategy and planning, analysis of risk and the determination of price/earnings and market-to-book ratios.

(Pre-requisite: FIN 240)

5. Introduction to Derivatives

FIN 344

This course presents and analyzes derivatives, such as forwards, futures, swaps, and options. These instruments have become extremely popular investment tools over the past 30 years, as they allow one to tailor the amount and kind of risk one takes, be it risk associated with changes in interest rates, exchange rates, stock prices, commodity prices, inflation, etc. They are used by institutions as well as investors, sometimes to hedge (reduce) unwanted risks, sometimes to take on additional risk motivated by views regarding future market movements. The course defines the main kind of derivatives, shows how they are used to achieve various hedging and speculating objectives, introduces a framework for pricing derivatives, and studies several applications of derivative-pricing techniques outside derivative markets.

(Pre-requisite: FIN 240)

6. Insurance and Risk Management

FIN 440

This course will endeavor to give the student the fundamentals of Risk Management and Insurance that can serve as a foundation for those intending to make a career in either field. It will also provide an excellent source of information for our use as informed citizens and consumers. Risk, and insurance to protect ourselves from risk, is a fact of life in this society. Every year billions of dollars exchange hands between insurance companies and the people they insure. But what is the reason for insurance, and how did this industry evolve into the financial giant and major employer that we see today? What are the legal and ethical consideration of insurance in today's business and society? Why does our Life, Health, Auto,

and Home insurance cost so much; and what can we do about it. Is the handling of personal and corporate finance affected by risk? Also, what is this concept of managing risk, and how does that differ from insurance? This course will explore these issues and more.

(Pre-requisite: FIN 240)

7. Capital Budgeting and Investment Decisions FIN 441

This course explains the financial appraisal of capital budgeting projects. The coverage extends from the development of basic concepts, principles and techniques to the application of them in increasingly complex and real-world situations. Identification and estimation (including forecasting) of cash flows, project appraisal formulae and the application of net present value (NPV), internal rate of return (IRR) and other project evaluation criteria are illustrated with a variety of calculation examples. Risk analysis is extensively covered by the use of the risk adjusted discount rate, the certainty equivalent, sensitivity analysis, simulation and Monte Carlo analysis. The NPV and IRR models are further applied to forestry, property and international investments.

(Pre-requisite: FIN 240)

8. Money and Capital Markets FIN 442

This course will cover the financial markets and their components. It will provide the detailed overview of money and capital markets in Pakistan their organization, operation and growth. It will cover the money and capital markets in terms of Products, Providers, Investors, Players, Regulators, Yields, Liquidity, Regulations and Procedures and other aspects of Capital Market Instruments in designing an Optimal Financing Mix alongside critical parameters governing their selection, implications, structuring, pricing, costs, prioritization, etc. In addition, students learn what monetary policy is and how it is implemented to control the macro economy. On completion of the course the students shall be able to demonstrate an understanding of the subject matter and financial environments in Pakistan.

(Pre-requisite: FIN 240)

9. Emerging Trends in Finance FIN 443

- To give students a quick review of critical areas of Finance.
- To acquaint them with practical tools and techniques currently prevailing in financial environment.
- To make their vision broader by involving them in focused research related to new and emerging areas and concepts of finance.

(Pre-requisite: FIN 240)

10. Corporate Law and Business Ethics FIN 444

This course provides an understanding of the legal framework of business. It offers experiential analysis to understand the challenges of CEOs and General Managers in managing legal risks. It also offers the ideas, resources and tools for protecting business assets, resolving legal conflicts, and complying with the law. It focuses on best practices, models and tools for implementing an effective legal risk management system. However, this course is not intended for law professionals. The course provides only a high-level understanding of the Business Law to help management in business decision-making.

(Pre-requisite: FIN 240)

11. Computing Application and Financial Management FIN 446

The purpose of this course to learn the computer techniques including Excel based Financial Modelling software, Excel inbuilt finance functions and add-ins, Financial Management features of Microsoft Excel, Monte Carlo Risk Analysis & Forecasting add-ins, and SAP, SAS and other software's that helps in decision making in financial management topics like capital budgeting, cash management, asset management, risk management, capital structure decisions, WACC, stock valuation, Income statement what-if analysis, Inventory Simulation Model, VaR, Six Sigma,

Forecasting Models, Risk Return Optimisation, Risk Analysis, Risk Management, Option Pricing Model, Break-even Analysis, Business Evaluation Model and different type of financial analysis.

(Pre-requisite: FIN 240)

12. International Finance

FIN 447

International Finance is an advanced and elective course for Finance majors and recommended for students who want to pursue careers in currency trading, global banking, global asset management, multinational corporate finance, or risk management industry. This course will focus on foreign exchange markets, forecasting exchange rate, currency risk hedging techniques, and currency derivative instruments. Students will have a unique opportunity to apply theories in a real-time, competitive simulation to learn currency derivatives trading techniques through a course project.

(Pre-requisite: FIN 240)

Information Technology Specialization Courses

1. Object Oriented Analysis & Design

IT 365

This course provides students a detailed understanding of processes and techniques for building large object-oriented software systems. To develop skills to evolve object oriented system from analysis, to design, to implementation. To understand most of the major object-oriented technologies including basic OO concepts, processes, Languages, databases, user interface, frameworks and design patterns.

(Pre-Requisite: IT 361)

2. Operating Systems

IT 366

This Course has two components: a theory component to teach you the concept and principles that underline modern operating systems, and a practice component to relate theoretical principles with operating system implementation. In the theory component, You will learn about processes and process management, concurrency and synchronization, memory management schemes, file system and secondary storage management, security and protection etc. The practice component will complement the theory component through programming assignments illustrating the use and implementation of these concepts. **(Pre-Requisite: IT 160)**

3. Data Structures & Algorithms

IT 367

To understand different Data Structures, their properties, appropriate usage and cost, different algorithms, their applications and performance and to combine the knowledge of Data Structures and Algorithms to solve a problem optimally (based on the given criteria).

(Pre-Requisite: IT 161)

4. Distributed Database System

IT 368

Introduction, Overview of relational DBMS and Normalization, Distributed DBMS architecture, Distributed database design and Data Distribution Strategies, Replication/Fragmentation, Distributed Transaction Management, Distributed Query Processing, Distributed Concurrency Control, Distributed Data Security, Distributed Database Recovery.

(Pre-Requisite: IT 261)

5. Computer Graphics

IT 369

The study of fundamental mathematical, algorithmic and representational issues in computer graphics. The topics to be covered are: quadrics and tensors, line-drawing, surface modeling and object modeling

reflectance models and rendering texture mapping, polyhedral representations, procedural modeling and animation.

(Pre-Requisite: IT 161)

6. Software Quality Assurance

IT 460

Software Quality Assurance (SQA) is a planned and systematic approach to ensure that software process and products conforms to the user requirements, established standards, and procedures. Timely, cost-effective and high-quality software can be achieved through effective Software Quality Control (SQC) and SQA practices. The objective of this course is to provide students with breadth and some depth of software quality assurance and management and to help them develop skills necessary for ensuring high quality software.

(Pre-Requisite: IT 361)

7. Internetworking with UNIX TCP/IP

IT 461

A course covering the complete range of standard UNIX networking products from the basic TCP/IP configuration through DNS, NIS, NFS and Samba. Hands-on exercises follow most theory sessions.

(Pre-Requisite: IT 360)

8. Artificial Intelligence

IT 462

The aim of this course is to familiarize the students with various areas and technologies related to the field of artificial intelligence. By the end of this course the students should have an understanding of various search techniques, they should understand the interaction between knowledge representation and reasoning and they should have the basic knowledge of various machine learning algorithms.

(Pre-Requisite: IT 161)

9. Computer Architecture

IT 463

Computer Functions and Components, Interconnection Structures. Cache Memory Principles and Design, Internal Memory Organization and Error Correction, Magnetic Disk, RAID, Optical Disk, ALU, Integer and Floating Point Arithmetic, Machine Instructions, Operand Types, Operation Types, Addressing Modes, RISC Architecture, Pipelining, Design Issues.

(Pre-Requisite: IT 162)

10. Emerging Trends in IT

IT 464

Focus of this Course is on emerging trends in information management and information technology. This Course is aimed at providing the students the knowledge about the latest development in the various areas of information technology. Impact on the functions of the chief information officer and others managing the acquisition retention use and disposition of information and the enabling technologies. Exploration of methods and resources for trend discovery and tracking.

(Pre-Requisite: IT 160)

11. Computer Organization and Assembly Language

IT 465

Introduction to the 8086/8088 Microprocessors, Registers, Buses and Memory, Assembly Language and the Assembler Environment, Segmented memory model, flow of assembly language program, bit manipulation, Stack Simulation, Hardware and Software Interrupts, Using DOS and BIOS Services, Writing TSR programs.

(Pre-Requisite: IT 160)

12. Analysis of Algorithms

IT 466

The objective of this course is not to fill your brains with every algorithm that you would ever need. One of the aims of this course is to teach you to reason about algorithms and describe them. In addition, many known algorithms to solve known problems will be taught. At the end of the course, you should be able to choose an appropriate algorithm from a set of algorithms for a given problem.

(Pre-Requisite: IT 161)

13. UNIX and Shell Programming

IT 467

Upon completion of this course, students will be able to: read, write, customize, and debug Shell scripts, understand the Shell's role and responsibilities; e.g. handling processes, command, execution, subshells, pipes, I/O redirection, wildcards, job control, etc. customize Shell initialization files, such as the .cshrc, .profile, .login, etc. use the power of regular expressions to extract data from files and pipes with grep, sed and awk (nawk, gawk), understand how to use the Shell interactively, use the Shell as a programming language including constructs such as loops, decision, making constructs, switch statements, functions, test file attributes, debug scripts.

(Pre-Requisite: IT 366)

14. Information Security

IT 468

Basic notions of confidentiality, integrity, availability; authentication models; protection models; security kernels; secure programming; audit; intrusion detection and response; operational security issues; physical security issues; personnel security; policy formation and enforcement; access controls; information flow; legal and social issues; identification and authentication in local and distributed systems; classification and trust modeling; risk assessment.

(Pre-Requisite: IT 360)

15. Project Management

MGMT 470

The use of projects and project management is becoming more and more important for all kinds of organizations. Businesses regularly use project management to accomplish unique outcomes under the constraints of resources, and project management turn to be one of essential ways of achieving an organization's strategy.

Masters of Business and Information Technology (MBIT Via BBIT Hons.)

1. Intermediate Accounting

ACCT 510

Introduction: Definition and characteristics formation. Partnership-division of net income. Discussion of partnership. Reproduction of partnership. Accounting for corporation organization and operation. Stock holder equity, earning & dividends. Long-term and Intermediate-term investment in bonds. Investment and stocks statement of cash flows. Financial statement. Managerial accounting, concepts & principles. Introduction of job order costing. Introduction of process costing, process cost system, cost behavior concept, cost volume profit.

2. Managerial Economics

ECON 630

This course deals with applications of economic theory. Topics include sophisticated pricing policies, transfer pricing, strategies in dealing with competitors, cooperation strategies, managing under uncertainty, economic forecasting, and profit maximization under different situations, including linear programming solution to business problems.

3. Total Quality Management

MGMT 570

Total Quality Management teacher students the role of quality in organizational effectiveness and competitive strategy. Course focuses on the development of a quality culture, design of processes to integrate quality into operations, and the management of the quality functions. The course prepares students for careers in business, government, manufacturing and operations in corporations and not-for-profit organizations, and in consulting.

4. Organization Behavior

MGMT 571

An introduction to the contributions of the applied behavioral science to the study of people at work in organizations. The fundamentals of individual and group behavior are covered as well as selected topics in motivation, leadership, communication, conflict and organizational change.

5. Research Techniques & Methods

MGMT 572

Objectives of research. Problem formulation. Types of research. Advantages and disadvantages of using primary data in business as well as social sciences. Research design. Procedure for sampling. Probability and non-probability sampling. Observation, questionnaire interviews and other tools of collecting data. Tabulation of data by using statistical tools. Analysis of data in university and bivariate tabular form. Pictorial presentation of data. Inferential analysis and conclusions. Report writing and consolidation of the results.

6. Strategic Management

MGMT 573

Strategic Management is a capstone course drawing together the various standards of management to focus on strategic issue analysis and decision making. The aim is to develop analytical frameworks based on models drawing up concepts from other fields of management studies. It encourages students to recognize strategic issues of core competencies, strategic capabilities and sustainable competitive advantage and provide strategic solutions to excellent business performance.

7. Comprehensive Exam

TRN 601

All Students must pass the exam in order to fulfill the MBIT degree requirement. Student will not be awarded any letter grade however the student would be declared pass or fail. The degree would only be awarded on successful passing of the exam.

Specialization Courses

** Pre-requisite of all the following courses is Specialization in the respective discipline, in BBIT (Hons.) Degree Program.*

Marketing Specialization

1. Consumer Behavior

MKTG 580

This course is designed to provide the basic knowledge required to understand the essential components of consumer and customer behavior and analysis. The students will examine issues and concepts pertaining to selling including: the purchase decisions and influences, shopping trends and motivational forces, role and contribution of word of mouth marketing and opinion leadership in enhancing sales, problem recognition and learning process and post purchase analysis. Throughout, we explore the tools of B2C and B2B marketing with emphasis on consumer behavior in diversified situations and circumstances.

2. Strategic Marketing

MKTG 581

The course focuses at the strategic value of marketing with emphasis on marketing planning and business development, corporate relations development, corporate image building, marketing intelligence, international marketing strategy, strategic relationship management, value-added diversified offerings, brand development and strategic marketing communications. The aim is to provide students with an opportunity to explore the future directions in the field of strategic marketing by integrating the marketing strategy and organizational benchmarks. The course will introduce the core principles and concepts specific to the marketing strategy and highlight the importance of strategic decision making at every stage of marketing by exploring businesses in a variety of industries.

3. Marketing of Services

MKTG 582

The course focuses at the strategic value of services marketing with emphasis on customer relationship management, value-added diversified offerings, corporate relations development, image building, services marketing planning and service delivery and performance. The course will introduce the core principles and concepts specific to the service sector and highlight the importance of service process, delivery, customer loyalty and communications by exploring businesses in a variety of services industries.

4. E-Marketing

MKTG 583

This course combines the creative and technical aspects of the Internet with design, development, advertising, and marketing part of a business. The purpose of this course is to acquaint you with the special behavioral considerations for buyers that emerge when the Internet plays a role in the firm's marketing.

5. International Business Management

MKTG 584

This course focuses on the working knowledge of managing transnational activities effectively. It will introduce the strategies for exchange / transfer of the capital, personnel, knowledge, technology and ideas beyond national boundaries. Students will be exposed to a wide variety of practical issues including models of international business, transfer pricing, global supply and value chain management, foreign direct investment, international acquisitions and mergers, import / export methods, trade payment mechanics and managing foreign exchange risks while exploring new emerging markets and industries worldwide.

6. Strategic Brand Management

MKTG 680

This module provides insights into how to create profitable brand strategies by building, measuring, and managing brand equity. The course will help students in developing a framework that provides a practical step by step learning of brand equity, sources and outcomes of brand equity focusing on building, measuring and managing brand equity continuously.

7. International Marketing

MKTG 681

The course focuses at the strategic value of global marketing with emphasis on international marketing planning, global strategy development, international branding, pricing, distribution and International marketing communications. The aim is to provide students with an opportunity to explore the future directions in the field of international marketing by integrating the multinational vision, export based objectives and international strategies. The course will introduce the core principles and concepts specific to the global marketing strategy and highlight the importance of strategic decision making at every stage of export marketing by exploring businesses in a variety of industries worldwide.

8. New Product and Service Development

MKTG 683

New product and service development is a combination of art and science. This course teaches the students the basic operations and decisions involved in this process; along with the analytical and strategic techniques, models and tools of marketing science used in new product and service development.

Finance Specialization

1. Banking Law and Practice in Pakistan

FIN 540

The course has been designed to familiarize the students with the Laws related to Banking and the banking practices around the globe with special emphasis to Pakistan. The major topics include evolution of banking, types of banks, types and maintenance of accounts, lending, securities and advances; Letter of credit, exchange risks etc. The purpose of this course is to familiarize the students with various practical aspects of commercial banks, their nature, significance, modus operandi, etc. It covers the different departments into which the operation of banks are divided and the interrelationship that exists between them. The course will help the student understand the operations of a commercial bank and application of local laws applicable on the banking practices in general and with special reference to Pakistan.

2. Corporate Finance

FIN 541

The objective of the course is to study the theory behind the financial decision made by the corporate executives and their practical implications. The areas of focus are capital budgeting, capital structure, dividend policy, mergers and acquisitions, real options and convertible debt. Some other areas like Initial Public Offering, Bankruptcy and Liquidations will also be discussed. This course of corporate finance has practical importance for students aspiring to be corporate executives.

3. Investment & Portfolio Management

FIN 542

This course is intended to serve as an introduction to modern quantitative investment analysis. The course will cover topics from three major areas: fixed income and equities, equilibrium theories and portfolio selection and performance evaluation. By the end of the course, you should be able to estimate an optimal portfolio using mean variance techniques, value a stock using discounted cash flow analysis, apply the major theories of valuation of fixed income and equity instruments.

4. Project Appraisal

FIN 543

Project appraisal is conducted at the planning phase of the project cycle. Among other things, project appraisal can be used help to determine a project's feasibility. This course introduces the learner to various tools and techniques that can be used to conduct a project appraisal. These are cost-effectiveness, cost benefit analysis and project budgeting and financing. A project would not be possible without adequate financing and proper budgeting. This course is targeted specifically for project managers, project team members, functional managers with employees assigned to project teams, project stakeholders, any team manager or member interested in project management, professionals and project managers across areas of development who would like to hone or develop their project planning skills to help them manage for results.

5. Banking and Financial Markets

FIN 544

The course will familiarize students with the financial sector of Pakistan. The course cover issues related to the management of financial institutions in a changing market environment. Various financial institutions in are covered including investment banks, development finance institutions, brokerage houses, insurance companies, and leasing and modaraba companies. The course also deals with institutional asset management, particularly portfolio management, and interest rate analysis including the term structure of interest rates.

6. Derivatives and Risk Management

FIN 545

The objective of this course is to provide a thorough introduction to the valuation and hedging of derivatives contracts such as options, futures, and forwards at an advanced level. The practice and application of option and futures in risk management will be demonstrated. Specifically, students will learn how to price advanced financial derivatives using arbitrage pricing, binomial trees and Black-Scholes-Merton model. Empirical hand-on exercises using Microsoft Excel will be assigned throughout the course. The final part of the course will explore the issues in regulation of derivatives market and their importance in the socioeconomic setting. At the end of the course, students will be able to read and analyze current financial news on derivatives trading.

7. Corporate Tax Planning

FIN 640

Tax plays an important role in both business and personal decisions, but the tax code is extremely complex. Most finance courses mention taxes , but the discussion is often and necessarily brief. This course will not teach you the tax code. Instead this course is intended to fill the gap between an MBA well trained in Finance but unfamiliar with taxes and tax experts that you will rely on in your career. This course will teach you the structure of tax codes. You will be shown how taxes influence the finance decisions you will be expected to make investment, capital budgeting and capital structure.

8. Marketing of Financial Services

FIN 641

Marketing financial services is unique from marketing physical goods and marketing other services. Transfer of Information vs. Transfer of Physical Goods — Role of IT is very significant in marketing financial services. Relational Transactions vs. One-Time Transaction — Business transactions may be one-time, like restaurants. In financial services, almost always there is a continuous relationship between the financial service provider and the client. There is always a subsequent relational transaction. As a student enrolled under the Marketing Financial Services program, one will have an overview of the full spectrum of the financial services industry. Various financial products currently available locally and internationally, will be discussed. Determining the logic behind each financial product and how you could best market the particular financial service organization, will be the main topics of this program.

9. Islamic Finance and Banking

FIN 642

This course provides an introduction to the basic concepts of Islamic banking and finance applied locally and globally. It will attempt to differentiate the elements between the Islamic financial system and its conventional counterparts. It will simplify and explain the theories and concepts of the Islamic financial instruments used in the industry. This will expose the participants on how Islamic finance concepts are used in everyday life.

10. Emerging Trends in Finance

FIN 643

- To give students a quick review of critical areas of Finance.
- To acquaint them with practical tools and techniques currently prevailing in financial environment.
- To make their vision broader by involving them in focused research related to new and emerging areas and concepts of finance.

11. International Trade

FIN 644

The course has three basic components. The first part develops the basic models of international trade. The second part covers topics including strategic trade policy, the role of imperfect competition, and political economy angle. The last section covers a few topics from the recent literature including trade and the environment, contracting in trade and outsourcing, and trade and child labor. By the end of this course it is expected that the student will be familiar with the models used in international trade, from the classic ones to the latest developments, understand key policy issues and the theory relevant to their analysis, and develop the capacity to read and understand the journal literature in the area of international trade.

Information Technology Specialization

1. Enterprise Software Development

IT 565

The objective of this training program is to train the attendees in the various aspects of Java – J2EE programming technologies with focus on ensuring understanding of the core concepts and ability to apply them to real world needs. The popularity of the new enterprise architecture J2EE (Java 2 Enterprise Edition) has resulted in demand for EJB (Enterprise JavaBeans) component programmers. This course will emphasize the development of reusable J2EE components and also provide comprehensive coverage of EJB architecture. Topics covered will include J2EE architecture and a brief review of web components: Servlets, JSPs. Technologies that are relevant to EJB: XML (Extensible Markup Language), JMS (Java Message Service), etc. will also be studied with a particular emphasis on the design, architecture and development of EJBs. The course will present a set of advanced skills necessary to implement session, entity and message driven beans, and common EJB design pattern will be defined in implementing an enterprise application.

(Pre-Requisite: IT 161)

2.

Advance Networks

IT 566

The area of computer networking is undergoing rapid development; it's important to focus not only on what computer networks are today, but also on *why* and *how* they are designed the way they are. The aim of this course is to provide a sound conceptual grounding to computer networks and its design principles. In this course, we will study the fundamentals of building *scalable* computer networks. We will go through the thought-process that went into designing the Internet--which is the best example of a computer network that has adapted and scaled to changing environment.

(Pre-Requisite: IT 360)

3. E-Governance

IT 567

This course will introduce you to the ways in which internet technologies are affecting how people interact with government, and how governments, in turn, are using and managing these technologies to (hopefully) better provide information and services to the public. Course content is divided into three main themes, and begins with an overview of development techniques and assessment methods for public web sites and on-line applications. We will then examine key policy issues relevant to implementation of e-government programs, as well as to the broader use of information technology in democratic societies. Finally, you will have a chance to explore the skills and concepts needed to effectively manage e-government projects and programs. Given the nature of the class, we use a variety of internet tools to help us accomplish this, including blogs, RSS feeds, and virtual technologies, such as Second Life.

(Pre-Requisite: IT 362)

4. Emerging Trends in IT IT 464

Introduction and Overview, Escalating Need for Strategic Information, data Warehouses and data marts, OLAP, Multi-dimensional data models, Supply Chain Management, Enhanced Data Model, Mobile Computing, Genome Data Management, Advent of XML, Security and Authorization, Assessment of Current Modelling and Design Practice.

(Pre-Requisite: IT 160)

5. Special Topics in Ecommerce IT 569

To assist course participant to learn to correctly implement Google Analytics and to apply advanced techniques using service to track advertising response rates, sales and conversions. Implement e-commerce tracking, Modify report content using filters, Segment visitors to the website based on behavioral and demographics data, Diagnose issues with websites using Google Analytics

(Pre-Requisite: IT 362)

6. Mobile Software Development IT 660

Mobile Software Development provides an opportunity to study various mobile applications that run on the mobile platforms and the internet, acquire relevant skills and develop an understanding of the issues surrounding the mobile platforms and SDKs including Symbian, Android, iPhone, Blackberry, Palm, Java Me, Brew, Flash Lite and Windows Mobile 7

(Pre-Requisite: Basic HTML and JavaScript is recommended)

7. Internet Programming IT 661

The course is aimed towards the students who plan to join the industry. The course will concentrate on the basic concepts of distributed web application development technologies and their usage. Students will gain hands on experience in current technologies by a term project design implementation.

Introduction, Creating Web pages, Auto generation of Web Pages, CGI Programming, Database Access, Web Servers, Web Clients, Spiders.

(Pre-Requisite: IT362)

8. Design Patterns IT 662

Describe the purpose of design patterns. Understand the ways that design patterns are documented and classified. Use the singleton pattern to provide controlled access to the sole instance of a class. Use the composite pattern to represent whole-part hierarchies of Objects. Use the Factory Method Pattern to eliminate the need to 'hard-code' specific class names. Use the Observer Pattern to minimize coupling between domain and interface objects. Use the Template Method Pattern to implement the common parts of an operation. Use the Strategy Pattern to configure a class with one of many alternate behaviors. Use the Iterator Pattern to separate the traversal mechanism from an aggregate object and to support concurrent traversals on the same object. Use other creational patterns to help make systems independent of how its objects are created. Use other structural patterns to compose classes and objects into larger structures. Use other behavioral pattern to manage algorithms and assign responsibilities to objects.

(Pre-Requisite: IT260)

9. Web Engineering IT 663

A study of the concept, principles, techniques, and methods, of Web Engineering. Topics include requirements engineering, modeling and architectures, design and technologies, testing, operation and maintenance, Web project management, application development process, usability and performance, and security of Web applications.

(Pre-Requisite: IT 661 and IT 361)

10.

Theory of Automata

IT 664

DFA, NFA, NFA DFA equivalence, Minimization of DFA, Mathematic preliminaries*, proof techniques, Closure properties of regular languages, Regular languages, regular expressions, Equivalence regular expressions, DFA, Decidability of regular languages, Non-regular languages, pumping lemma for regular languages, Context free languages, context free grammars, Chomsky normal form, CYK algorithm Pumping lemma for CF languages, PDA, Parse trees, ambiguity

11. System Programming

IT 666

Unix Basics, Basic Unix File System, C Programming, Unix Tools for C Programming, ANSI C Fundamentals, Dynamic Memory in C, Unix System Programming, Unix Network Programming, Unix Graphical User Interface.

(Pre-Requisite: Programming Fundamentals IT161)

12.

Advance ERP Systems

IT 667

This is an advanced ERP course designed to provide students with a detailed knowledge of SAP. Materials are purposed to provide students their first experience with SAP ERP and an introduction to the integrated nature of business processes. Through these materials, students will get exposure to Accounting, Sales, Purchasing, Production Planning, Human Resources, and Credit & Receivables Management.

(Pre-Requisite: IT 561)

Faculty

Full-Time Faculty:

1. **Prof. Dr. Syed Mansoor Sarwar**
Director IBIT
2. **Prof. Aamir Sarwar**
MBA (PU); MA Eco. (PU); MBA (University of Strathclyde, Glasgow, UK)
3. **Prof. Mansoor Mahmood Ashiq**
MBA (City University Business School, London, UK)
4. **Prof. Asim Tanvir**
MBA (MIS – Girne American University Cyprus)
5. **Prof. Zeeshan Khawar**
MCS – Mphil University of Central Punjab
6. **Prof. Muhammad Saleem Raza**
MS (Software Project Management)
7. **Prof. Shamaila Gull**
MBIT (Marketing) IBIT, University of the Punjab.
8. **Prof. Nazish Zehra Rizvi**
MBIT (Marketing) IBIT, University of the Punjab.
9. **Prof. Farheen Batul Zaidi**
MBIT (Finance) IBIT, University of the Punjab.
10. **Prof. Mufassra Naz**
MSc (Information Technology) PUCIT, University of the Punjab.
11. **Prof. Hira Aftab**
MBIT (Finance) IBIT, University of the Punjab.

Visiting Faculty:

1. **Prof. Dr. Absar Ahmad**
B.A (Hons.) MA University of Karachi
M. Phil (Reading), Ph.D. (London)
2. **Prof. Dr. Shahid Kamal**
Ph.D. (Stat.), University of Exeter, UK.
Principal, College of Statistical and Actuarial Sciences (CSAS), PU.
3. **Prof. Dr. Muhammad Anwar**
Ph.D. (Sociology of Education & Education Planning) University of Toronto, Toronto, Canada
4. **Prof. Dr. Rukhsana Kausar**
Ph.D. University of Surrey (UK)

5. **Prof. Dr. Hafeez-ur-Rehman**
Ph.D. (Eco.) University of Wisconsin-Milwaukee (USA).
Director, Department of Economics, P.U.
6. **Mr. Saadat Nisar**
M.E-commerce (Dalhousie University, Canada), LL.B (PU), B.Sc. Mechanical Engineering (UET)
7. **Mr. Muhammad Usman Arif**
LL.M. (The George Washington University Law School, Washington DC).
LL.B (PU).
8. **Prof. Muhammad Asghar**
M. Phil. (BZU), M.Sc (Hons.) (PU)

Administration Staff

1. **Ch. Muhammad Yousaf**
Assistant Controller
2. **Mr. Tariq Mahmood**
Webmaster
3. **Mr. Muhammad Akram Shahid**
Librarian
4. **Mr. Muhammad Yahya Waris**
Asst. Network Administrator

Admission Schedule FALL 2011 BBIT (Hons.) Morning & Afternoon

Dates	Days	Admission Activity
September 05, 2011	Monday	Admission forms will be received online and through courier and in person. No sale of forms and prospectus from Institute.
September 04, 2011	Sunday	First Advertisement in English and Urdu Daily Newspapers.
September 17, 2011	Saturday	Last date for receipt of Applications. All applications must be received by the close of day September 17, 2011 before 04:00 p.m.
September 21, 2011	Wednesday	First Merit List (04:00 p.m.)
September 24, 2011	Saturday	Last date for submission of Challan Form in IBIT after deposit of fee in Bank (banking hours) along with the original documents.
September 25, 2011	Sunday	Second Merit List (02:00 p.m.)
September 27, 2011	Tuesday	Last date for submission of Challan Form in IBIT after deposit of fee in Bank (banking hours) along with the original documents.
September 28, 2011	Wednesday	Third Merit List (10:00 a.m.)
September 30, 2011	Friday	Last date for submission of Challan Form in IBIT after deposit of fee in Bank (banking hours) along with the original documents.
October 01, 2011	Saturday	Fourth and Final Merit List (10:00 a.m.)
October 01, 2011	Saturday	Last date for submission of Challan Form in IBIT after deposit of fee in Bank (banking hours) along with the original documents.
October 3, 2011	Monday	Commencement of Classes

Note:

- Candidates having their names in merit lists and not submitting required documents and deposit Challan before stipulated time will not be considered for admission.
- Prospectus, Admission Form and Challan Forms can be downloaded from IBIT website: www.ibitpu.edu.pk/admissions. Applications can be submitted online, through courier or in person in the office of IBIT between 9:00 a.m. till 4:00 p.m. (Monday – Thursday) and between 9:00 a.m. till 1.00 p.m. on Friday, during the above mentioned dates.
- Candidates submitting applications online can update their results against their respective application numbers by the last due date.

DISCLAIMER

The rules and regulations provided in this prospectus serve the purpose of general information only. It does not contain complete list of regulations that relate to students. The provisions of this prospectus do not constitute a contract, stated or implied, between any applicant, student or faculty member of the Institute of Business and Information Technology. The Institute reserves the right to withdraw courses at any time, amend rules, curriculum, degree programs, requirements and graduation procedures. These changes will be incorporated only after approval of the governing body and forum concerned. Changes will be effective whenever proper authorities so determine and will apply to both prospective and those already enrolled.

Students are held individually responsible to comply with the requirements as laid down by the rules and regulations of University of the Punjab and IBIT. Failure to comply may lead to strict disciplinary action or dismissal from an academic program as per University of the Punjab rules and regulations. The same information is also provided on the Institute's website.

www.ibitpu.edu.pk

In addition, students are encouraged to seek the latest information from the Institute's information office as and when required.

Note:-

The online version of the Institute of Business & Information Technology's Prospectus is the Official version and takes precedence over the printed version. However, students are encouraged to seek the latest information from the Institute's information office as and when required.