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BAHRIA UNIVERSITY

Profile

BAHRIA UNIVERSITY
www.bahria.edu.pk
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Vision
To become an internationally recognized university that contributes towards the development of nation through excellence in education and research.

Mission
To remain committed to the attainment of highest standards in teaching, learning and research, at par with the international standards.
Welcome to Bahria University

Selecting a career path and where to launch it from, are two crucial decisions that you have to make at this stage of your life. At Bahria University, it is our endeavours to help you make these decisions, with conviction and correctness.

Bahria is a multi-discipline, state-of-the-art university which has made remarkable progress in all fields over a short period of time. Our graduates have competed with the best and have shown their mettle in all fields, both in Pakistan and abroad. It is my vision to take Bahria University even further along the path of progress and make it the best educational institute in the country. Our faculty leaves no stone unturned to give you the best in education, leadership and discipline, at the same time fostering an interactive learning environment that will channel your minds towards creativity and originality.

At Bahria University we groom our students not only to become leaders in their respective fields but also responsible citizens of our great country. You may enter Bahria University with different temperaments, attitudes and backgrounds but on graduation you will walk out as well groomed individuals who exude knowledge and confidence.

I hope that the years spent at Bahria University will be most productive period of your lives and pray that you succeed in your future endeavours.
Board of Governors

The Board of Governors of Bahria University is the supreme governing body for all major policy matters concerning the University and its constituent units/colleges. Chief of the Navel Staff is the Chairman of the Board of Governors as well as the Pro-Chancellor of the University.
<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
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<tbody>
<tr>
<td>Admiral Mohammad Asif Sandila NI(M)</td>
<td>Chief of the Naval Staff pro-Chancellor / Chairman Board of Governors</td>
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<tr>
<td>Vice Admiral Shahid Iqbal HI(M) (Retired)</td>
<td>Rector Bahria University</td>
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<tr>
<td>Vice Chief of Naval Staff / COS</td>
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<tr>
<td>Deputy Chief of Naval Staff (Projects)-II</td>
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<td>Commander Karachi</td>
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<td>Deputy Chief of Naval Staff (Admin)</td>
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<td>Commander Pakistan Fleet</td>
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<td>Commander Logistics</td>
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<td>Commander Coast</td>
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<td>Naval Secretary</td>
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<td>Deputy Chief of Naval Staff (Material)</td>
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<td>DGMS (Navy)</td>
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<td>Pro-Rector / Director General, Bahria University Islamabad Campus</td>
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<td>Financial Advisor (Planning), Ministry of Finance, Govt of Pakistan</td>
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<td>Secretary, Ministry of Science &amp; Technology, Govt of Pakistan, or his</td>
<td>nominee not below the rank of Joint Secretary</td>
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<td>Director General NCMPR</td>
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<td>Director General, Bahria University Karachi Campus</td>
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<td>Commander North</td>
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<td>Assistant Chief of Naval Staff (Education)</td>
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<td>Dean Faculty of Engineering Sciences</td>
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<td>Dean Faculty of Health Sciences</td>
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<td>Director Naval Educational Services</td>
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<tr>
<td>Dr Muhammad Qasim Jan HI</td>
<td>Former Vice Chancellor, QAU, Islamabad</td>
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<td>Prof Dr M D Shami SI</td>
<td>Vice President, Islamic Academy of Sciences, Islamabad</td>
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<tr>
<td>Ms Nadira Panjwani</td>
<td>President Schools for Blind Children (Panjwani Trust), Karachi</td>
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<td>Dr Ahmed Nadeem Akbar</td>
<td>Registrar, Pakistan Medical &amp; Dental Council, Islamabad</td>
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<td>Director, Bahria University Islamabad Campus</td>
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<td>Director, Institute of Professional Psychology</td>
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<td>Principal, Bahria Medical &amp; Dental College, Karachi</td>
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<td>Registrar, Bahria University/Secretary BOGs</td>
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<td><strong>Pro-Rector / DG Islamabad Campus</strong></td>
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<td><strong>Director General Karachi Campus</strong></td>
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<td><strong>Registrar</strong></td>
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<td><strong>Director Finance</strong></td>
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<td><strong>Director IT/M</strong></td>
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<td><strong>Director (P&amp;D)</strong></td>
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<td><strong>Director Quality Assurance</strong></td>
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<td><strong>Director Academic Affairs</strong></td>
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<td><strong>Director Research &amp; Development</strong></td>
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<td><strong>Director Student Affairs</strong></td>
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<td>15</td>
<td><strong>Deputy Registrar</strong></td>
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<td><strong>Deputy Director (Health Sciences)</strong></td>
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<td><strong>Deputy Director Examinations-I</strong></td>
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<td><strong>Deputy Director Examinations-II</strong></td>
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<td>19</td>
<td><strong>Deputy Director (P&amp;D)</strong></td>
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<td>20</td>
<td><strong>OD/FCP/Director Sports</strong></td>
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<td>21</td>
<td><strong>Deputy Director (Admin &amp; Coor)</strong></td>
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<td>22</td>
<td><strong>Assistant Director Admissions</strong></td>
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<td>23</td>
<td><strong>Finance &amp; Audit Manager</strong></td>
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<td>24</td>
<td><strong>Manager MIS</strong></td>
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<td>25</td>
<td><strong>Manager WEB</strong></td>
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<td>26</td>
<td><strong>Deputy Manager (Accounts)</strong></td>
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<td>27</td>
<td><strong>System Administrator</strong></td>
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<td>28</td>
<td><strong>Library Officer</strong></td>
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<td><strong>AD(SA)</strong></td>
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<td>30</td>
<td><strong>Placement Officer</strong></td>
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<td>31</td>
<td><strong>Public Relation Officer</strong></td>
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</table>
Rector Bahria University meeting with a Chinese Delegation
Bahria University (BU) is a Federally Chartered Public Sector University which was established on 7th February 2000 through a Presidential Ordinance. It is a multi-campus institution of higher education, which is committed to attain the highest standards in teaching, learning and research compatible with global requirements of practicing different professions. The University is widely recognized for preparing professionals, some to assume roles of future leaders and some to become good executives/managers through development of their physical, mental, moral and professional competence. The enrollment of students has crossed 9,500 in the two campuses located in Islamabad and Karachi.

Islamabad

Bahria University’s main campus is situated at the capital city of Pakistan, Islamabad, in lush green scenic surroundings. Islamabad has an international Airport accessible by all major Airlines of the world. From the airport, Bahria University is about 40 minutes drive by taxi/cab which are readily available (cost approximately Rs. 500 or US$ 5).

The University is located in Sector E-8, Naval Complex, in the heart of Islamabad. The temperatures are extreme; in winters the temperature ranges from 0° C to 18° C (Dec-Feb). Summer temperatures are between 20° C to 44°C (May-Sep). Jul-Aug season brings lots of rain in Islamabad due to NW Monsoon. Cost of living with food is around Rs. 10,000 per month (US$110) in hired hostels arranged by the students privately, close to the University.

Karachi

Karachi has an International Airport serving all major airlines of the world. Bahria University campus is located at 13 National Stadium Road, about 15 minutes drive from the Airport by taxi/cab which are readily available (cost approx Rs. 500 or US$ 5).

Karachi’s temperatures are humid and moderate throughout the year. July and August are rainy months in Karachi. Limited hostel facility is available for male students in Gulistan-e-Jauhar, near the Karachi Campus. Cost of living is approximately Rs. 12,000 to Rs. 14,000 per month (US$150). Other students have to make accommodation arrangements on their own.

Future Plans

Our future plans include establishing new campuses i.e. Institute of Earth & Environmental Sciences in Sector H-11, Islamabad and construction of a custom-built Medical & Dental College at Karachi,
according to the PMDC criteria is already in progress. Phase I of the College Complex is due for opening by end December 2012.
OUR CAMPUSES

Bahria University Headquarters
Address:
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Email: rector@bahria.edu.pk
Website: www.bahria.edu.pk

Cdr Farasat Ali PN (Retired)
Deputy Director (Academics-I)

Cdr Abdul Majid PN (Retired)
Deputy Director (Academics-II)

Cdr Imran Rafique PN (Retired)
Deputy Director (Admin & Coord)

Bahria University Karachi Campus
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13, National Stadium Road, Karachi
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Fax: 0092-21-99240351
Email: director@bimcs.edu.pk

Vice Admiral Khalid Amin HI(M)
Director General

Captain Mohsin H Malik PN
Director

Cdr Salman Ullah Khan PN TI(M)
Deputy Director (Academics)

Cdr Farrukh Ijaz PN
Deputy Director (Admin & Coord)

Bahria University Islamabad Campus
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Director General

Cdre Muhammad Ali (Retired)
Director
Institute of Professional Psychology

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PNS Shifa, Karachi.
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Dr Zainab Fotowwat Zadeh
Director

National Center for Maritime Policy Research, Karachi

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Vice Admiral Asaf Humayun HI(M) (Retired)
Director General

Bahria University Medical & Dental College, Karachi

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Prof Dr Syed Tipu Sultan
MBBS, DA(London), FFARCS (Ireland), FCPS (Honorary), Principle BUMDC

Prof Dr Nasreen Amanat
BDS, MSc (Oral Surgery), FDSRCS (Edinburgh) Principle Dental Section
AFFILIATED COLLEGES

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Fax: 0092-51-4435046
Email: sf_scm@hotmail.com
Website: www.shifacollege.edu

Professor Dr Syed Sheaib Hussain Shah
MBBS, DMJ, M Phil, PhD, CFCE (USA)
Diplomate American Board of Forensic Medicine, Fellow American of Forensic Medicine Examiners International
Principal

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Website: www.imdc.edu.pk

Professor Dr Muhammad Naseem Ullah
MBBS, MRCP(UK), FRCP(London), FRCP(Edinburgh)
Dean

Frontier Medical College
PO Public School, Abbottabad.
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Fax: 0092-992-381028
Email: info@fmc.edu.pk
fmcollege@yahoo.com
Website: www.fmc.edu.pk

Professor Emeritus Dr A J Khan SI
MBBS, DCH, FRFPS (Glasgow)
MRCP (Edinburgh), FRCP (Glasgow)
FRCP (Edinburgh)
Principal

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PO Model Town Humak, Islamabad.
Tel: 0092-51-4492811-5
Fax: 0092-51-4492516

Brig Dr M Sultan Muzaffar SI(M) (Retired)
MBBS, FCPS (Surgery)
Principal

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College of Medicine
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Fax:0092-51-2617388
Email: info@rihs.edu.pk
Website: rihs.edu.pk

Lt Gen Prof Dr K A Karamat (Retired)
MBBS, Dip. Bact. (London), FCPS (UK)
FRC Path (London), FRCP(UK), FPAMS
Principal

Shifa College of Nursing
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Islamabad
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Fax: 0092-51-4435046
Email: sf_scm@hotmail.com
Website: www.shifacollege.edu

Ms Zahira Ladhani
RN, RM, BSc (N) (Pak), MPH (AKU)
Director

Institute of Teachers Education (ITE)
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Tel: 051-5462617
E-mail: info@itef.org.pk
Website: www.itef.org.pk

Miss Saira Said
Director
Why Bahria?

A Progressive University, encompassing all facets of quality education supported by most modern educational aids, highly qualified and experienced teaching faculty offering education in market place academic disciplines
WHY BAHRIA?

ATTRIBUTES:

- Federally chartered
- HEC recognized
- Engineering programs are accredited by PEC
- Medical programs are recognized by PM&DC
- LLB Programme recognized by PBC
- Multi-campus
- Highly qualified regular faculty
- Custom built campuses
- State-of-the-art laboratories
- Well-stocked library
- Classroom and research based teaching
- Leadership Development Centre
- Career Office
- Internship opportunities
- Good student to faculty ratio
- Medical cover for students/staff/faculty
- Students Resource Centre
- Secure and disciplined environment
- Scholarships on merit/need basis
- Two percent seats are reserved for disabled persons.
- Non Politicised enabling environments

Quality Assurance
The University Quality Assurance Cells at both campuses assess and reviews the performance of University academic programs based on national and international quality parameters pertaining to teaching and research. It facilitates the departments in preparation of Self Assessment Reports of academic programs as per guidelines given by the Higher Education Commission.

International Linkages
In order to improve our global image the International Office at Bahria University is always looking out for opportunities to establish strong academic ties with universities across the globe. At present Bahria University has signed MoU with following 13 international universities:

- University of Leicester, UK
- University of Nottingham, UK
- University of Bedfordshire, UK
- Greenwich University, UK
- Corbett Centre, King’s College London, UK
- York St. John University, UK
- Dalhousie University, Canada
- Al-Khawarizmi Intl. College, UAE
- Institute of Oriental Studies, Azerbaijan
- Chabahar Maritime University, Iran
- Trieste University, Italy
- Massachusetts Institute of Technology, USA
- University of Wollongong, Australia
- Yasar University of Turkey

Through the platform of the International Office, students are provided opportunity to participate in international conferences, seminars and different international events. For the past three years, the International Office at Bahria University has been sending delegations to Harvard University, USA to participate in the Harvard National Model United Nations. There have been several foreign visits arranged for the students in order to give them international exposure and acquaintance with foreign
cultures. The students interested in pursuing their studies abroad are provided free counseling and assistance with their admissions and processing of visas.

To promote the University's image abroad, our Rector gave lectures in USA in 2010 at the Dalhousie University and the Kennedy School of Government. He spoke to crowded halls on subjects like "On Security of Educational Institution in Pakistan".

**Leadership Development**

Leaders of today are faced with many challenges, including globalization, the revolution in information technology, a transformation to a knowledge economy and continuous change. Consequently, successful organizations are now characterized by professionals performing as leaders at all levels.

The aim of the Leadership Development Centre (LDC) at Bahria University is to develop programs satisfying current real-world needs. In order to groom the students for positions of high responsibility and management, highly distinguished personalities of the country are regularly invited to address and talk to them on very important national and international issues. Side by side CEOs and top management from the corporate sector visit and deliver talks pertaining to their businesses. This is done to introduce the commercial sector to the students and vice versa enabling them to find suitable job placements.

**Counseling**

Bahria University has taken the initiative to aid its students by introducing emotional counseling at University level. It recognizes
the need for guiding its students not only in academics but through career placement as well as counseling. It aims at grooming confident individuals, who are emotionally stable and take pride in their achievements. We would like our students to excel in every sphere and emerge as productive citizens, ready to deliver their best, academically, spiritually and emotionally. It is a small step, but a step nevertheless towards a brighter future for each and every one of our students.

The popularity of emotional counseling lies in its confidentiality and accessibility. There is no discrimination based on gender or religion. Our counselors are highly qualified, trained individuals who have an immense sense of humanity. They are available on our campuses five days a week during both the morning and the evening sessions.

**Bahria Business Club (BBC)**
Department of Management Science has recently established 'Bahria Business Club' (BBC) at the Islamabad Campus. The club develops student potentials in areas of applied knowledge. It plans activities to prepare young students for various types of professional competitions and test their business skills and ingenuity to solve problems pertaining to business world. It encourages students to compete with their peers in other universities and also polish their leadership abilities.

**Students Resource Center (SRC)**
SRC facilitates students and provides them the opportunity to develop their management, communication, team building, social, and leadership skills. In this globally competitive age, it is imperative to provide the students with opportunities to develop and hone the said skills.

Following 5 clubs are currently working under SRC:

1. Arts and Dramatics
2. Literary and Debates
3. Media
4. Events
5. Music

Each club is managed by the SRC and headed by a chief coordinator, under whom a deputy coordinator and team leaders are nominated according to the requirements. Team leaders report to the deputy coordinator. Under each team leader there are club members who provide assistance in accomplishing the assigned tasks.

**ARTS & DRAMATICS**
This club lets you release your artistic talents
through a series of activities and competitions. These include painting competitions, drama mime, fashion shows, etc.

**LITERARY & DEBATES**
The club is dedicated to bring together debaters for: holding and participating in parliamentary, HEC, inter university, national and international debates competitions. The members of this club have made a name for themselves by participating in the Model United Nation’s, the English Speaking Union and holding regular in house debates.

**MEDIA**
Media club brings together young journalists, publishers, photographers, amateur directors and almost everyone interested in the print and electronic media. It also deals with media coverage inside the university covering events, functions, publishing magazines, movie shows. This club arranges movie nights for the students.

**EVENTS**
The club hosts a variety of informational, entertaining and social activities throughout the semester including seminars, trips, concerts, spring festival, etc.

**MUSIC**
The main objective of the Music Club is to expose and nurture talent of the students representation of the university nationwide, providing a platform for musical experiments and exposure for the existing bands in the university. Music society holds regular jam sessions.

**Bahria University Sports**
The importance of sports in the life of students is invaluable and plays a pivotal role in their overall development.

With this perspective in view, the University provides many opportunities and facilities to its students to participate in international, national and university level sports. In the academic year 2009-10 Bahria University won four inter-university competitions in hockey, table tennis, cricket and basketball.

**GOLF**
In Islamabad, the facility of a new 18-hole Margalla Greens Golf Club, located at base of the Margalla hills, is available for Bahria University officers, personnel, faculty and students. The golf course membership is free for the students, faculty and staff of Bahria University. As an additional attraction the
semicircular club house, which resembles the stern of a ship, offers a wide range of social activities and recreational facilities for its members and their families.

**GYMNASIUM**

A new gymnasium in collaboration with HEC has been constructed at the Islamabad campus. It is a multi-story structure having a wide range of indoor games facilities: courts for basket ball, volleyball and badminton, a fitness room equipped with the latest machines and a cafeteria, built at a cost of over 70 million rupees. The Gymnasium has a wide range of indoor games facilities.

**Sports Achievements**

Bahria University participated in the following sports activities in the years 2009-11:

- Winner of Zone C, Inter University Basketball Championship 2009-10 and 2010-11.
- Winner of Zone C, Inter University Hockey Championship 2009-10 and 2010-11.
- Winner of Zone C, Inter University Table Tennis Championship 2009-10 and Runner-up 2010-11.
- Winner of Zone C, Inter University Cricket Championship 2010-11.
- Winner FJWU Women Sports Week 2009, in Tennis, Badminton held at FJWU, Rawalpindi.
- Runner-up in 50m free style swimming Inter University Championship 2009 held at University of Agriculture Faisalabad.
- Miss Zahra Omer participated in Table
• Tennis for 25th World University Games held at Belgrade, Serbia from 1st to 12th July 2009.
• Winner of Twin City Basketball tournament 2009 held at EME College Rawalpindi.
• Winner of LUMS National Males Badminton Championship 2009 held at LUMS, Lahore.

Besides having own sports facilities, the University also has access to all Pakistan Navy sports facilities at Karachi and Islamabad, free of cost for its students.

Faculty Development Program
The faculty has a major influence on the entire academic spectrum. The continuing development of the faculty and University's physical infrastructure are two concurrent activities which go hand in hand in achieving long term objective of the institute, i.e. attainment of highest standards in teaching, learning and research at par with international standards. The University therefore encourages and supports its faculty to regularly attend workshops/conferences scheduled within the country and abroad. The University through collaborated efforts with HEC has awarded foreign scholarships in Ph D and MS programs to 20 faculty members of Engineering Department amounting to Rs 92.0 million in the year 2008-09. In addition to the above, two faculty members of Management Sciences Department are pursuing Ph D studies in UK fully sponsored by Bahria University. The names of faculty members of Engineering and Management Sciences Departments who are presently pursuing their Ph D at University of Leicester, UK are appended below:

1. Engr Syed Aley Imran Rizvi
2. Engr Farah Naz Lakhani
3. Mr Faisal Aftab
4. Engr Kashif Amjad
5. Miss Shagufta Hinna
6. Engr Imdad Alam
7. Engr Irfan Sairat Mir

Scholarships at Bahria University
While Bahria University is committed to providing quality education, it also has a caring policy towards the students by honoring and supporting them generously through various scholarship schemes. During the Financial year 2011-12, Bahria University provided scholarships to 1154 students through an allocated budget of Rs. 19.4 million. Bahria University has been collaborating with Higher Education Commission to offer various other scholarships such as, “Japanese Need Based Scholarship” and “Provision of Higher Education Opportunities for the students of Baluchistan and FATA”. Moreover in collaboration with MOIT, NICT scholarships are awarded for Students enrolled under ICT Program. The scholarships offered at Bahria University include:

1. Advanced Merit Scholarships
Bahria University encourages the top students of various boards to join its degree programs by providing 100% concessions in tuition fee. All such students who have obtained first position in the Board Examination will be eligible for this scholarship. The scholarship will be for the entire program, provided the awardees maintain a minimum GPA of 3.75 in subsequent semesters.

2. Merit Scholarships
These scholarships encourage the students to
excel and maintain good academic record. Following is the eligibility criteria:

- All the students standing first in the class by achieving semester GPA 4.00 will be awarded Merit Scholarship equal to 50% of tuition fee of the following semester.
- If the semester GPA of top scorer is less than 4.00, but equal to or greater than 3.75, then he/she will be awarded Merit Scholarship equal to 50% of tuition fee of the following semester. If two or more than two students achieve the same GPA (less than 4.00 and great than 3.75), in such cases the student with the highest percentage will be eligible for the Merit Scholarship.
- Students have to obtain minimum 2.5 GPA in the first semester and at least 2.5 CGPA in the remaining semesters. If the students fail to maintain 2.5 CGPA in the remaining semester there Scholarship shall be withheld till such time they improve upon their grades.
- Merit Scholarship is applicable for all programs of Bahria University.

3. Financial Assistance Scholarships

In order to assist those students who have serious financial problems in continuing their studies, Bahria University offers Financial Assistance Scholarships. Fresh entrants may submit their requests for scholarship soon after becoming bonafied students of Bahria University. The already enrolled students are also eligible for this facility. The scholarships once granted remain available to the students for the entire degree program provided their performance does not fall below CGPA 2.50.

Following is the eligibility criteria to apply for Financial Assistance Scholarship program:

- Student shall appear before the Central Selection Committee (CSC) to justify financial support. Procedure for submission of application is given on Bahria University website.
- Students have to obtain minimum GPA 2.50 in the first semester and at least CGPA 2.50 in the remaining semesters.
- If the students fail to maintain CGPA 2.50 in the remaining semesters, his/her financial assistance scholarship will be withheld till such time they improve upon their grades. However, it could be resumed if the students is able to secure CGPA 2.50 in next
• semester.
• For fresh intake, results of their Matric and FA/F Sc will be considered for award of scholarship.
• The Students should have at least 80% attendance.
• Students of all programs are eligible for Financial Assistance Scholarship program except MBA Professionals, MBA Pharma, MBA Maritime & MBA Executive.

4. Indigent Scholarship
Four needy students from each Campus (Islamabad / Karachi) with a minimum GPA/CGPA of 2.0 will be considered for the award of Indigent Scholarship on the recommendation of the Campus DGs / Director.

Bahria University Alumni Association
The Bahria University Alumni Association (BUAA) was registered as an NGO on 4th June 2008 under the Societies Registration Act XXI of 1860. BUAA is a non-profit and non-political organization, set up for the benefit and welfare of the Bahria University alumni, employees and ex-employees in particular and Pakistanis at large. The registered office of the BUAA is situated at DSA office Bahria University, E-8, Naval Complex, Islamabad. Any person who has been awarded a degree/diploma by Bahria University is eligible to acquire membership of the BUAA. Any faculty member/officer who has been a permanent member of Bahria University for a period of two years or more will also be eligible to be a member of BUAA. For registration, URL of website is www.bahria.edu.pk/alumni.php. Rector of Bahria University is the Patron of BUAA and exercises full powers for all organizational, administrative and financial activities of the BUAA. The Bahria University Alumni Association has been formed to fulfill the following objectives:
• To promote interaction among the members of BUAA so as to enable them to enhance social and intellectual relationship among them.
• To provide a conducive environment for the members of BUAA so as to enable them to establish professional networks among them.
• To protect and promote the interest of the
members of BUAA and Bahria University to take measures for their collective good.

- To promote integration of the members into corporate, business, engineering and other sectors.
- To provide a means of involvement by the members of BUAA to support the academic and research programs at Bahria University.
- To provide welfare services for Bahria University alumni, employees and ex-employees through creation of job opportunities, placement services, unemployment bureau, career counseling and services.
- To provide and promote establishment of scholarships, stipends, awards and prizes to the needy, deserving or outstanding students at Bahria University or to the alumni for furtherance of higher studies.
- To distribute free books for studies at Bahria University.
- To find means to support the effected families of deceased alumni, employees and ex-employees.
- To provide medical assistance to alumni, employees and ex-employees in any form required.

Alumni Network and BUAA Election 2012

Bahria University values and nurtures its students not just when they are enrolled in the institution but also after they step out of its gates. The network is further strengthened through an organized body registered as Bahria University Alumni Association (BUAA). The second executive body of BUAA got elected after the election process in which alumni’s of Bahria University Islamabad Campus casted their votes. The body formulated as a result was introduced to the alumni on June 16th, 2012 at Alumni Dinner 2012. The President chalked out the strategy and shared his agenda points with the gathering. “Alumni Information System” is being prepared which will enable the respective alumni’s to update their online profiles, re-connecting with peers and getting updates on various initiatives taken by the University management and BUAA for their welfare. Alumni’s are also encouraged to contribute in the development activities at University, deliver workshops, seminars and guest lectures to the students and assist the faculty in developing the course contents as per the industry requirements. Social gatherings like Annual Dinners, Musical evening, movie nights, sports activities etc. are being organized from time to time enabling the Bahria family to get-together and maintain their ties. The Bahria University Alumni Network provides services and benefits not only to the Bahria University graduates, but also to current degree-seeking students. Registrations can be done in the office of DSA.
STUDENTS SUPPORT FACILITIES

- Academic Advisory
- Student Services
- Career Services
- Talent Enhancing Activities
- Academic Support Services
- Computer/Hardware/Comm/Elect Labs
- Library
- Cafeteria
- Hostel Accommodation
- Health Care
- Partnership Learning
- Internship
- Student Card
- Transport
STUDENTS SUPPORT FACILITIES

Academic Advisory
Bahria University provides academic guidance to students through academic advisors. The student-advisor relationship is viewed as a partnership where both members of the team have responsibilities which if properly fulfilled, enhances the students’ opportunities for academic success. Responsibilities of the academic advisor include guidance in selection of courses, informing and explaining admission procedures, transfer of credits, assistance in general adjustments to university life, serving as a resource person for university information and guiding students to meet their academic requirements.

It is the students’ responsibility to know their degree requirements, to be accountable for university policies, and to obtain course-scheduling information. Students are encouraged to meet with their advisors to discuss problems affecting their academic performance. Students are advised to use their advisor’s expertise in achieving their academic goals.

Student Services
Bahria University provides quality career opportunities, counseling services and support for academic and extra-curricular activities to the students in an organized manner. The Office of Student Affairs has been specifically designed to help the students and market them in the business world. Superior resources and techniques are deployed to help the students accomplish their goals. Our student services are of an extensive range, which may appeal to individuals bracketed in any segment of the University’s affiliation, be they freshmen, graduates, alumni or employees. Among the many initiatives designed to assist the students by the Office of the Students Affairs and Career Services are Career Counseling, resume reviews, mock interview sessions, career development workshops, graduate profiling, on-campus recruitment activities (selection tests, interviews etc.), alumni networking, placement in industry in terms of jobs and internships, mail alerts regarding work opportunities, Career Expo’s, trips to foreign universities and provision of scholarships.

Career Services
Career Office guides and assists all students of Bahria University about their career choices and job opportunities. The Office strives to meet the ever-changing requirements of employers and the students by creating innovative ways of bringing them both together. Our services include job search strategies, career counseling, mock interviews, resume and covering letter writing, online job listings, job placements, internship placements, graduate profiles, alumni tracking, corporate networking events,
career development, workshops, seminars, management trainee programs, on-campus recruitment tests, on-campus interviews, and employment expos/job fairs.

To facilitate the entry of our graduates into the job market, the Career Office has established links with over 200 leading organizations of the country through a process of Company Registration. Through such partnerships the Career Office has been able to successfully place graduates in companies such as A. F. Ferguson, Barclays, British Council, Dawn News, Ericsson, HSBC, IBM, Mobilink, OMV, Schlumberger, Serena Hotels, School of Leadership, Standard Chartered, Telenor, Ufone, Unilever, UBL, Warid, ZTE, etc.

In the past the Office has successfully organized Management Trainee Programs of HSBC, UBL, Unilever, GSK, Telenor, Bank Al-Falah, Crescent Textiles, Coca Cola and Fincon.

With the aim of providing our students with exposure to corporate careers and to better prepare them for what lies ahead, the Office has conducted several Career Development and Planning Workshops. Organizations such as Mobilink, Telenor, School of Leadership, Digi-Dent, Rozee.pk were invited to conduct these workshops at Bahria. In addition, many organizations conducted on-campus recruitment interviews; e.g. Geo TV, Standard Chartered, Digi-Dent, Elixir, and LinkdotNet.

Students can register with the Office to become a beneficiary of our services on the website:

www.career.bahria.edu.pk

Talent Enhancing Activities
Students are encouraged to join different Societies/Clubs such as Marketing Society, IT Society, Entertainment Society, Debating Society and Sports Clubs. Members of these Societies/Clubs work closely with the staff and faculty in coordinating extracurricular activities and providing opportunities for the personal and professional advancement of the students. Some of the activities of the societies include events such as arranging picnics, sponsoring study tours, inviting guest speakers, providing assistance in holding seminars, get togethers/sports events and magazines publishing.

Community Support Services
Community Service articulates the sense of responsibility and active citizenship among the young student minds. Bahria University students are also performing various activities regarding CSP. The University has undertaken a comprehensive program to involve Undergraduate students in the Community Service activities. The students will participate in activities related to their area of specialization. This will help them contribute back to the community.
Pakistan Education and Research Network (PERN)

Higher Education Commission of Pakistan (HEC) has facilitated Bahria University (both campuses) with access to PERN, which connects premiere education and research institutions of the country. PERN provides high speed Internet and Intranet facilities to its user. It focuses by connecting people through the use of Intranet and Internet resources and currently provides the following services.

- Access to International Internet Bandwidth.
- Access to over 11,000 Scientific Journals through Digital Library.
- Four or more public IP addresses for use by the university.
- Broadband link to other universities.
- Infrastructure for point-to-point videoconferencing.
- Sharing of large-size data amongst universities.

Microsoft Portal

In collaboration with HEC, Microsoft has provided MSDNAA (ELMS) Portal facility that contains about more than 150 Microsoft softwares including Windows 7, Windows XP, Visual Studio, Access, Visio, MS Project etc. These softwares are provided free of cost for all faculty, students and staff members of Bahria University to meet the future challenges in the world of Information Technology. The said facility is provided through www.bahria.edu.pk

Academic Support Services

One of Bahria University’s main attractions is its impressive and extensive range of academic support services. These state-of-the-art services include computer laboratories, hardware laboratories, communication and electronics labs, multimedia, internet, e-mail facilities, an auditorium, a Leadership Development Centre, presentation hall, cafeteria and the library.

Computer/Hardware/Communication/Electronics Labs

Computer/Hardware/Communication/Electronics Labs facilities provide resources for instructional and research purposes at all the campuses. The central facilities include open access laboratories equipped with PCs connected to a number of PC servers. Special equipment such as multimedia and scanners are also available. These Labs provide access for students and faculty to support educational activities. Communication and Electronics Labs include instruments such as Spectrum and Logic Analyzers, Digital Storage Oscilloscopes, Advance Trainers for Robotics, Fiber Optics, Micro Processors and Programmable Logic Devices.
Students can also utilize the hardware research laboratories which are equipped with the latest equipment such as Logic design trainer kits, Microprocessor trainer kits and Soldering stations. The University is now a “Hotspot” where students are able to have wireless connectivity with the main server from their 'Laptops'.

Libraries
The Bahria University libraries aim to encourage and support academic and research activities of university researchers, faculty, staff and students. It provides a full range of services that include book loans, online information searching, reference services, photocopying, access to digital resources, CD searching and research support services, i.e. Endnote training and APA style manual etc. The library is managed by qualified and experienced staff, dedicated to provide quality services for its users. Its culture of self servicing, trust, tolerance, and sharing makes it unique among other educational institutions in the country.

Our Islamabad campus library is fully automated to fulfill the academic and research information needs of its users. Library services can be accessed at http://bc.i.edu.pk. The library is equipped with state-of-the-art systems and technologies. Circulation is fully automated with barcode and magnetic security tags. Its international standardized MARC 21 based catalog is also available at the library of congress z3950 gateway http://www.loc.gov/z3950. It’s campus library has a collection of more than 20,472 books, 43 printed journals including IEEE publications, 1278 CDs and latest references and research tools e.g. Encyclopedia Britannica, Encyclopedia Americana, Encyclopedia of Science and Technology and other subject related reference sources.

Bahria University Karachi Campus Library has a collection of more than 23,500 original books, 47 printed journals including IEEE publications, along with the latest reference and research tools. Its catalog can be accessed at http://khi.bahria.edu.pk. The Library is automated and online catalog is available on LAN.

Institute of Professional Psychology (IPP) library at Karachi campus has a collection of more than 3000 books and 08 research journals subscribed annually. The Library is also automated on library software LIMS and its online catalog (OPAC) is available on LAN.

National Center for Maritime Policy Research (NCMPR) library is a small reference library at Karachi campus which has more than 700 books and 6 annually subscribed research journals. The Library is also automated and online catalog (OPAC) is available on LAN.

Bahria University Medical and Dental College (BUM&DC) is a newly established college of the university, located at Karachi campus. Its library has a collection of more than 1000 reference books and 5 annually subscribed journals.

Bahria University is also a member of HEC Digital Library Project through which both campuses’ libraries are connected with online/digital resources related to the subject offered e.g. IEEE, ACM, Cambridge Journals, Blackwell Synergy, Emerald, Springer link, Ebrary, and McGraw-Hill Engineering books online.

Campus Cafeteria
From a quick snack to a substantial meal, our campus cafeteria can bring you good food at affordable prices. The daily selection includes sandwiches, freshly prepared meals for lunch and a variety of fast food items from pizza to kebab rolls, potato chips and vending services for a variety of soft drinks and beverages.

Hostel Accommodation
Currently the University does not have its own hostel accommodation. However, in order to accommodate outstation male students, an arrangement has been made with "The boys
Hostel situated in Islamabad through a Memorandum of Understanding to give priority to the University students. The hostel contact numbers are 0300-8550097 and 0321-8550097. In addition to above, parents/guardians may arrange accommodation on their own in private hostels. Average cost of living with food & transport is around Rs. 10,000/- per person.

Health Care
Health Care facilities have been set up at both campuses of Bahria University. They are manned by Medical Officers and their staff and provide medical assistance, OPD treatment and temporary hospitalization to students in case of need.

Partnership in Learning
It is the University’s endeavor to set out the general principles of the partnership between the University and its students, so that both can work to get the best out of your student life for you. This includes specifying objectives and standards for all University services offered to students and identifying the principles which a student should adopt for the relationship to be mutually beneficial. A summary of the main responsibilities of this “Partnership in Learning” is given below so that you can get a flavor of the kind of commitments and principles that we will follow in order to give you the best student experience that can be achieved.

To this end the University will:
- Ensure that everyone who can benefit has the right to higher education. Students will therefore be treated fairly and on merit, in line with best equal-opportunities practice.
- Provide quality education that will enhance the intellectual ability, practical skills and career prospects of each student. The University will, wherever practicable, provide students with choice within their academic programs.
- Provide accurate and up-to-date information about its courses, methods of assessment, type of teaching and services.
- Supply a detailed statement about the curriculum being followed by its students and will provide a comfortable and well-equipped learning environment.
- Provide suitable support and guidance services which include personal counseling and career advice.
- Involve students in the decision-making process regarding academic matters through a process of evaluation based on feedback received on a regular basis from students.
- Maintain independent and impartial procedures for dealing justly with appeals, complaints and redress.

The students on their part will:
- Take advantage of the educational opportunities available to them, including taking part in seminars, tutorials and group projects.
- Engage other students and teaching staff in intellectual debate and inquiry.
- Respond appropriately to course work deadlines, and other assessment requirements.
- Conduct themselves as per University norms in such a way as to ensure
opportunities for all students to take part in University life, through adherence to the Code of Conduct.

- Contribute via their representatives towards the improvement of courses, syllabi and curriculum.

**Internship (Shadowing Project)**

Internship program helps students to become acquainted with prospective employers. Minimum period of internship is six weeks for Graduating students of Bachelor/Masters programs. The students must meet the following requirements, before they can be recommended by the respective institutes for Internship:

- Bachelor and Master students should have completed at least four and two semesters respectively.
- The CGPA of the students at the end of the above periods should not be below 2.00 for Bachelors and 2.50 for Master students.

The students are expected to work on a project during the internship and submit a report at the end of it. The report is to be submitted to the Institute for evaluation and award of a grade or acceptable/unacceptable status depending on its quality. Reports received without certificate from the organization in which internship was carried out, will not be evaluated. Procedure/duration of Internship at IPP may vary according to Institute's specific requirements.

**Student Code of Conduct**

Integrity and honesty are the prime and foundation ingredients of any institution of higher learning and form the character building blocks of its students. The University strives for the highest standards of academic integrity and discipline prevalent at any reputable institution in the world. A “Student Discipline Committee” and various other measures regularly monitor the activities of the students. The Committee is empowered to take necessary measures for maintenance of standards in the institute pertaining to:

- Unauthorized use of the University’s name or logo that is the property of the University.
- Harassment, sexual or otherwise, or intimidation of any member of the University community while on University premises or during University sponsored events.
- Coming late for classes.
- Improper/inappropriate dress.
- Horseplay, skylarking etc in Cafeteria/Common areas.
- Non-clearance of bills/dues.

**Dress Code**

Bahria University expects its students to be decently dressed at all times.
Following are prohibited:
- Boys entering the University wearing shawls, slippers, shorts and jeans.
- Girls entering the University wearing jeans, tight trousers and blouses, sleeveless and cap sleeve shirts, without dupatta, slippers and flip flops.

Student Card
All Bahria University students are issued Student ID Cards. They are required to have their ID Cards displayed on their dress while in the campus. No student is permitted to enter the campus without a card.

Smoking
Smoking is strictly prohibited within the University premises.

Transport
Bahria University provides its students with transportation so that those living far can reach on time. This facility is available for most of the students on allocated routes at nominal charges.
Programs Overview

Management Sciences
Engineering Sciences
Engineering
Earth & Environmental Sciences
Professional Psychology
Humanities & Social Sciences
Medical Sciences
Legal Studies
Bahria University offers programs in the following disciplines:

**Management Sciences**
Undergraduate and Graduate programs in Management Sciences have been tailored in close consultation with Corporate Sector to prepare our graduates to meet real life challenges on completion of studies. The courses are designed to develop skills and knowledge among the students to help them adjust into business related fields.

**Engineering**
Bachelor and Master level programs in Engineering are designed to produce graduates, postgraduate who are motivated and equipped with necessary knowledge and skills to meet the requirements of their careers in business, industry, or self-employment. Bachelor level programs in Electronics/Telecommunication Engineering produce graduates who are equipped with the latest techniques and theoretical concepts in the diversified fields of Telecommunication and Electronics.

**Graduate Studies & Applied Sciences**
Undergraduate and Graduate programs comprise BS(CS), MS(Electrical Engineering), MS(Software Engineering) and MS(Telecom & Networking). These are designed to cater the requirements of the industry to produce technically sound professionals who are able to work successfully in the challenging environments. The programs impart the technical knowledge and skills to produce professional who are adept with the modern-day technology.

**Earth & Environmental Sciences**
Undergraduate and graduate level programs in Earth and Environmental Sciences, prepare our graduates to work in the field of petroleum and mineral exploration, identification and remediation of environmental hazards and to carry out research on natural phenomena pertaining to planet Earth. The graduates produced are well equipped with the knowledge and skills to undertake the task as an applied and/or research scientist both in government and private sector organizations.

**Professional Psychology**
The program which is spread over various levels of diploma, undergraduate or graduate/postgraduate studies, is tailored to meet the latest curriculum requirements in the field of Psychology. The modules are designed to train students in many fields such as, education, professional or clinical psychology for future careers as practitioners or in other relevant fields.

**Humanities & Social Sciences**
The Social Sciences bachelor degree is a multidisciplinary program of study which is designed to satisfy diverse needs and interests of students. The following four major tracks are available in this program:

a) Anthropology/Sociology;
b) International Relations;
c) Development Studies; and
d) Journalism and Media Studies

The social science program is designed to produce highly motivated graduates who have broad-based knowledge, global awareness, positive attitudes, humanistic outlook, and adequate skills. Graduates with these qualities would be able to make decisions in life and apply their social science knowledge to make this world a better place.

Graduates of the social science program will be prepared for entry-level positions in government organizations, national and international non-government organizations,
print and electronic media, business corporations, management firms, politics, teaching, research organizations, etc. In addition, social science graduates are prepared for higher studies and specialized training which will qualify them for many lucrative advisory and leadership positions in many fields, including management, planning, consultancy, teaching, and research. HSS Department of Islamabad Campus also runs MPhil Anthropology Program.

**Medical Sciences**
Bahria University provides the highest standard of health education/training through its affiliated medical colleges. To produce graduate physicians for the 21st century who abide by the rigor of scientific discipline and are selfless, humane, knowledgeable, skillful and dutiful to their profession and the society at large, Bahria University has set up its own Medical & Dental College at Karachi, to meet the ever growing needs of the health sector.

**Legal Studies**
Bahria University has commenced studies in the legal discipline at bachelors level w.e.f Fall 2010 semester. University is following modern and up to date curriculum duly approved by HEC & PBC.
### MANAGEMENT SCIENCES (Majors: Finance, Marketing, HRM)
(Weekend/Pharmaceutical/Health Management/MIS/Maritime only at Karachi Campus)

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Credit Hrs</th>
<th>Campus</th>
</tr>
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<tbody>
<tr>
<td>BBA (Students with 14 years education)</td>
<td>4 years</td>
<td>138</td>
<td>Islamabad/Karachi</td>
</tr>
<tr>
<td>MBA (Students with 16 years education)</td>
<td>3 1/2 years</td>
<td>96</td>
<td>Islamabad/Karachi</td>
</tr>
<tr>
<td>MBA (For Bahrian BBA 4 years graduates)</td>
<td>2 years</td>
<td>60</td>
<td>Islamabad/Karachi</td>
</tr>
<tr>
<td>MBA (Maritime Management)</td>
<td>1 1/2 years</td>
<td>36</td>
<td>Karachi</td>
</tr>
<tr>
<td>MBA (Maritime Management)</td>
<td>1 1/2 years</td>
<td>36</td>
<td>Karachi</td>
</tr>
<tr>
<td>MBA (Weekend)</td>
<td>3 1/2 years</td>
<td>96</td>
<td>Karachi</td>
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<tr>
<td>MBA (Weekend)</td>
<td>2 years</td>
<td>60</td>
<td>Karachi</td>
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<tr>
<td>MBA (Weekend)</td>
<td>1 1/2 years</td>
<td>36</td>
<td>Karachi</td>
</tr>
<tr>
<td>MBA (Pharma/Health Management/MIS)</td>
<td>3 1/2 years</td>
<td>96</td>
<td>Karachi</td>
</tr>
<tr>
<td>MBA (Pharma/Health Management/MIS)</td>
<td>2 1/2 years</td>
<td>72</td>
<td>Karachi</td>
</tr>
<tr>
<td>Masters in Project Mgmt (Weekend)</td>
<td>1 year</td>
<td>33</td>
<td>Islamabad</td>
</tr>
<tr>
<td>PGD (Pharma)</td>
<td>1 year</td>
<td>27</td>
<td>Karachi</td>
</tr>
<tr>
<td>M Phil</td>
<td>2 years</td>
<td>30</td>
<td>Islamabad/Karachi</td>
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<tr>
<td>Ph D</td>
<td>3 years</td>
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<td>Islamabad/Karachi</td>
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### ELECTRICAL ENGINEERING

(All Engineering programs are accredited by PEC)

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<tr>
<th>Program</th>
<th>Duration</th>
<th>Credit Hrs</th>
<th>Campus</th>
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</thead>
<tbody>
<tr>
<td>Bachelor of Electrical Engineering</td>
<td>4 years</td>
<td>137</td>
<td>Islamabad/Karachi</td>
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<tr>
<td>(Electronics/Telecommunication)</td>
<td></td>
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</tr>
<tr>
<td>MS Electrical Engineering (Automation &amp; control/Computer &amp; Digital System/Power Systems/Telecom Engg Management)</td>
<td>2 years</td>
<td>30</td>
<td>Islamabad/Karachi</td>
</tr>
<tr>
<td>Ph D Electrical Engineering</td>
<td>3 years</td>
<td>54</td>
<td>Islamabad/Karachi</td>
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### COMPUTER & SOFTWARE ENGINEERING

(All Engineering programs are accredited by PEC)

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Credit Hrs</th>
<th>Campus</th>
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<tbody>
<tr>
<td>Bachelor of Software Engineering</td>
<td>4 years</td>
<td>134</td>
<td>Islamabad/Karachi</td>
</tr>
<tr>
<td>Bachelor of Computer Engineering</td>
<td>4 years</td>
<td>137</td>
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<tr>
<td>MS (Software Engineering)</td>
<td>2 years</td>
<td>33</td>
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</tr>
<tr>
<td>Ph D (Software Engineering)</td>
<td>3 years</td>
<td>54</td>
<td>Islamabad/Karachi</td>
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<tr>
<td>Ph D (Computer Engineering)</td>
<td>3 years</td>
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<td>Islamabad/Karachi</td>
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### COMPUTER SCIENCES

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<th>Program</th>
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<th>Credit Hrs</th>
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<tbody>
<tr>
<td>BS (CS)</td>
<td>4 years</td>
<td>139</td>
<td>Islamabad/Karachi</td>
</tr>
<tr>
<td>MS (Telecom &amp; Networking)</td>
<td>2 years</td>
<td>33</td>
<td>Islamabad/Karachi</td>
</tr>
<tr>
<td>Ph D (Computer Sciences)</td>
<td>3 years</td>
<td>54</td>
<td>Islamabad/Karachi</td>
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### EARTH & ENVIRONMENTAL SCIENCES
(Geology, Geophysics & Environmental Sciences)

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<th>Program</th>
<th>Duration</th>
<th>Credit Hrs</th>
<th>Campus</th>
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<tbody>
<tr>
<td>BS (Geology/Environmental Sciences)</td>
<td>4 years</td>
<td>134</td>
<td>Islamabad</td>
</tr>
<tr>
<td>BS (Geophysics)</td>
<td>4 years</td>
<td>134</td>
<td>Islamabad/Karachi</td>
</tr>
<tr>
<td>MS (Environmental Sciences)</td>
<td>2 years</td>
<td>36</td>
<td>Islamabad/Karachi</td>
</tr>
<tr>
<td>MS (Geology/Geophysics)</td>
<td>2 years</td>
<td>36</td>
<td>Islamabad</td>
</tr>
<tr>
<td>MS (Environmental Policy &amp; Management)</td>
<td>2 years</td>
<td>36</td>
<td>Islamabad</td>
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</table>
PROFESSIONAL PSYCHOLOGY
(Clinical, Organizational & Educational Psychology)

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<tr>
<th>Program</th>
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<th>Campus</th>
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</thead>
<tbody>
<tr>
<td>BS</td>
<td>4 years</td>
<td>132</td>
<td>IPP - Karachi</td>
</tr>
<tr>
<td>PMD</td>
<td>1 year</td>
<td>36</td>
<td>IPP - Karachi</td>
</tr>
<tr>
<td>M Phil</td>
<td>1 to 2 years</td>
<td>48</td>
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<tr>
<td>PhD</td>
<td>2 to 3 years</td>
<td>75</td>
<td>IPP - Karachi</td>
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HUMANITIES & SOCIAL SCIENCES
(Anthropology/Sociology, Development Studies, IR, Media Studies)

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Credit Hrs</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSS</td>
<td>4 years</td>
<td>126-131</td>
<td>Islamabad/Karachi</td>
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<tr>
<td>Mphil (Socio-Cultural Anthropology)</td>
<td>2 years</td>
<td>30</td>
<td>Islamabad</td>
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</table>

Note: Minors (BSS) facilitate the students to develop a major other than their own. Minors, however, are not counted as double majors.

MEDICAL & DENTAL SCIENCES

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Credit Hrs</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBBS</td>
<td>5 years</td>
<td>Annual System</td>
<td>Karachi</td>
</tr>
<tr>
<td>BDS</td>
<td>4 years</td>
<td>Annual System</td>
<td>Karachi</td>
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</table>

(Medical Programs are recognized by PM&DC)

LEGAL STUDIES

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLB</td>
<td>5 years</td>
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PROGRAMS TITLE AND DESCRIPTION

<table>
<thead>
<tr>
<th>Program Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>BBA</td>
<td>Bachelor of Business Administration</td>
</tr>
<tr>
<td>MBA</td>
<td>Master of Business Administration</td>
</tr>
<tr>
<td>MBA (Pharma)</td>
<td>MBA (Pharmaceutical Business Management)</td>
</tr>
<tr>
<td>PGD (Pharma)</td>
<td>Post Graduate Diploma (Pharmaceutical Business Management)</td>
</tr>
<tr>
<td>M Phil</td>
<td>Master of Philosophy</td>
</tr>
<tr>
<td>Ph D</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>BS</td>
<td>Bachelor of Science</td>
</tr>
<tr>
<td>M Sc</td>
<td>Master of Science</td>
</tr>
<tr>
<td>MS (EPM)</td>
<td>Master of Science (Environmental Policy &amp; Management)</td>
</tr>
<tr>
<td>BSE</td>
<td>Bachelor of Software Engineering</td>
</tr>
<tr>
<td>BCE</td>
<td>Bachelor of Computer Engineering</td>
</tr>
<tr>
<td>BEE</td>
<td>Bachelor of Electrical Engineering</td>
</tr>
<tr>
<td>BS (CS)</td>
<td>Bachelor of Science (Computer Sciences)</td>
</tr>
<tr>
<td>MS (EE)</td>
<td>Master of Science (Electrical Engineering)</td>
</tr>
<tr>
<td>PMD</td>
<td>Post Magistral Diploma</td>
</tr>
<tr>
<td>BSS</td>
<td>Bachelor of Social Sciences</td>
</tr>
<tr>
<td>MBBS</td>
<td>Bachelor of Medicine and Bachelor of Surgery</td>
</tr>
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</table>

Note: The University reserves the right to change or drop any program/description as and when required.
## Fee Structure

**Graduate Programs**  
**Post-graduate Programs**  
**MBA Programs**

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>First Semester</th>
<th>Second Semester</th>
<th>Third Semester</th>
<th>Fourth Semester</th>
<th>Total</th>
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<tbody>
<tr>
<td>MBA Weekend</td>
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<td>16,500</td>
<td>16,500</td>
<td>16,500</td>
<td>63,000</td>
</tr>
<tr>
<td>MBA for Executive</td>
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<td>18,500</td>
<td>16,500</td>
<td>16,500</td>
<td>16,500</td>
<td>63,000</td>
</tr>
</tbody>
</table>

* Degree Fee Rs. 7,000/- is to be paid with last semester fee.  
* Misc. charges includes Student Club Fee, Registration Fee, Computer Lab Fee, Transcript Fee, Medical Fee.  
* Duration for Executive MBA Program (36 Cr Hrs) - Maritime (33 Cr Hrs)
## Fee Structure for Undergraduate Programs (Local Students)

<table>
<thead>
<tr>
<th>NAME OF PROGRAMS</th>
<th>BBA (4.0 Years)</th>
<th>BCE (4.0 Years)</th>
<th>BEE (4.0 Years)</th>
<th>BSE (4.0 Years)</th>
<th>BS (CS) (4.0 Years)</th>
<th>BS (ETM) (4.0 Years)</th>
<th>LLB (5.0 Years)</th>
<th>BS (Geology, Geophy, ES/BSS) (BSS)</th>
<th>BS (Geophy) (Psychology)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Hours</td>
<td>18</td>
<td>19</td>
<td>17</td>
<td>17</td>
<td>15</td>
<td>20</td>
<td>17</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
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<td>3,740</td>
<td>3,740</td>
<td>3,740</td>
<td>2,750</td>
<td>2,750</td>
<td>2,750</td>
<td>2,145</td>
<td>3,025</td>
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<td>Tuition Fee Per Semester</td>
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<td>71,060</td>
<td>63,580</td>
<td>71,060</td>
<td>41,250</td>
<td>55,000</td>
<td>46,750</td>
<td>49,500</td>
<td>38,510</td>
</tr>
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<td>18,150</td>
<td>18,150</td>
<td>18,150</td>
<td>18,150</td>
<td>18,150</td>
<td>18,150</td>
<td>18,150</td>
<td>7,700</td>
<td>12,100</td>
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<tr>
<td>Caution Money (Refundable)</td>
<td>7,700</td>
<td>7,700</td>
<td>7,700</td>
<td>7,700</td>
<td>7,700</td>
<td>7,700</td>
<td>7,700</td>
<td>5,500</td>
<td>7,700</td>
</tr>
<tr>
<td>Degree Fee (One Time) *</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Misc. Charges **</td>
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<td>5,300</td>
<td>5,300</td>
<td>2,900</td>
<td>2,900</td>
<td>2,900</td>
<td>2,900</td>
<td>7,000</td>
</tr>
<tr>
<td>Total</td>
<td>92,110</td>
<td>102,210</td>
<td>94,730</td>
<td>102,210</td>
<td>69,700</td>
<td>83,450</td>
<td>75,500</td>
<td>77,950</td>
<td>54,710</td>
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<td></td>
<td></td>
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<td>75,075</td>
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</tr>
</tbody>
</table>

**Note:**
* Degree Fee Rs. 7,000/- is to be paid with last Semester Fee. However, One and half Year Program students will pay Degree Fee in 1st Semester.
** Misc. charges includes Student Club Fee, Registration Fee, Library Fee, Computer Lab Fee, Transcript Fee, Medical Coverage and Student Support.

### Semester Wise Detail

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Duration</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>BBA</td>
<td>04 Years</td>
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<td>66,260</td>
<td>66,260</td>
<td>66,260</td>
<td>66,260</td>
<td>55,700</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>BCE</td>
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<td>72,620</td>
<td>72,620</td>
<td>53,920</td>
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<td>-</td>
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<td>76,360</td>
<td>76,360</td>
<td>65,140</td>
<td>68,880</td>
<td>76,360</td>
<td>64,660</td>
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<td>-</td>
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<td>102,210</td>
<td>72,620</td>
<td>68,880</td>
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<td>76,360</td>
<td>72,620</td>
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<td>49,350</td>
<td>49,350</td>
<td>52,100</td>
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<td>-</td>
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<td>45,350</td>
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<tr>
<td>LLB</td>
<td>05 Years</td>
<td>75,500</td>
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<td>52,400</td>
<td>44,150</td>
<td>44,150</td>
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<td>52,400</td>
<td>44,150</td>
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<tr>
<td>BS (Geology, Geophy, ES/BSS)</td>
<td>04 Years</td>
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<td>52,100</td>
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<td>-</td>
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<tr>
<td>BS (Geophy) (Psychology)</td>
<td>04 Years</td>
<td>54,710</td>
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<td>41,510</td>
<td>41,510</td>
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<td>41,510</td>
<td>48,510</td>
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<td>-</td>
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<td>48,275</td>
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**Note:** The University reserves the right to change the Fee structure at any time.
## Fee Structure - MBA (Master of Business Administration) Program (Local Students)

(Amount in Pak Rupees)

<table>
<thead>
<tr>
<th>Name of Programs</th>
<th>MBA 1.5 Years</th>
<th>MBA 2.0 Years</th>
<th>MBA 3.5 Years</th>
<th>MBA Weekend 1.5 Years</th>
<th>MBA Weekend 2.0 Years</th>
<th>MBA Weekend 3.0 Years</th>
<th>MBA Maritime Mgt. 1.5 Years</th>
<th>MBA Maritime Mgt. 2.5 Years</th>
<th>MBA Maritime Mgt. 3.0 Years</th>
<th>MBA Pharma (WK) 2.5 Years</th>
<th>MBA Pharma (WK) 3.0 Years</th>
<th>MBA Health Mgt. (Proj. Mgt.) 2.5 Years</th>
<th>MPM 1.0 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Hours</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>12</td>
<td>12</td>
<td>12</td>
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<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>9</td>
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<tr>
<td>Rate Per Credit Hours Tuition Fee</td>
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<td>3,960</td>
<td>3,960</td>
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<td>3,960</td>
<td>3,960</td>
<td>3,960</td>
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<td>3,960</td>
<td>3,960</td>
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<tr>
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<td>47,520</td>
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<tr>
<td>Admission Fee (One Time)</td>
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<td>18,150</td>
<td>18,150</td>
<td>18,150</td>
<td>18,150</td>
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<td>18,150</td>
<td>18,150</td>
<td>18,150</td>
<td>18,150</td>
</tr>
<tr>
<td>Caution Money (Refundable)</td>
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<td>7,700</td>
<td>7,700</td>
<td>7,700</td>
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<td>7,700</td>
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</tr>
<tr>
<td>Degree Fee (One Time) *</td>
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<td>-</td>
<td>7,000</td>
<td>-</td>
<td>7,000</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
<td>7,000</td>
</tr>
<tr>
<td>Misc. Charges **</td>
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<td>2,900</td>
<td>2,900</td>
<td>2,900</td>
<td>2,900</td>
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<td>76,270</td>
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<td>75,970</td>
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<td>71,170</td>
</tr>
</tbody>
</table>

Note: * Degree Fee Rs. 7,000/- is to be paid with last Semester Fee. However, One and half Year Program students will pay Degree Fee in 1st Semester.

Note: ** Misc. charges includes Student Club Fee, Registration Fee, Library Fee, Computer Lab Fee, Transcript Fee, Medical Coverage and Student Support.

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Duration</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>95,150</td>
<td>58,340</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
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<td>88,150</td>
<td>62,300</td>
<td>62,300</td>
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<td>-</td>
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<td>-</td>
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<td>-</td>
<td>-</td>
<td>163,210</td>
</tr>
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<td>50,120</td>
<td>50,120</td>
<td>50,120</td>
<td>50,120</td>
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<td>-</td>
<td>-</td>
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</tr>
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<td>50,120</td>
<td>50,120</td>
<td>50,120</td>
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<td>50,120</td>
<td>50,120</td>
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<td>33,360</td>
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<td>50,120</td>
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<td>50,120</td>
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<td>50,320</td>
<td>50,320</td>
<td>50,320</td>
<td>50,320</td>
<td>50,320</td>
<td>50,320</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>MBA (Project Management)</td>
<td>1.0 Years</td>
<td>71,350</td>
<td>50,500</td>
<td>50,500</td>
<td>-</td>
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<td>-</td>
<td>-</td>
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<td>172,350</td>
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</table>

Note: The University reserves the right to change the Fee structure at any time.
### Fee Structure for Graduates Program (Local Students)

<table>
<thead>
<tr>
<th>NAME OF PROGRAMS</th>
<th>(Amount in Pak Rupees)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MS (CE, EE, SE, T&amp;N)</td>
</tr>
<tr>
<td></td>
<td>2.0 Years</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>9</td>
</tr>
<tr>
<td>Rate Per Credit Hours Tuition Fee</td>
<td>3,960</td>
</tr>
<tr>
<td>Tuition Fee Per Semester</td>
<td>35,640</td>
</tr>
<tr>
<td>Admission Fee (One Time)</td>
<td>18,150</td>
</tr>
<tr>
<td>Caution Money (Refundable)</td>
<td>7,700</td>
</tr>
<tr>
<td>Degree Fee (One Time) *</td>
<td>-</td>
</tr>
<tr>
<td>Misc. Charges **</td>
<td>3,600</td>
</tr>
<tr>
<td>Total</td>
<td>65,090</td>
</tr>
</tbody>
</table>

**Note:** * Degree Fee Rs. 7,000/- is to be paid with last Semester Fee. However, One and half Year Program students will pay Degree Fee in 1st Semester.

**Note:** ** Misc. charges includes Student Club Fee, Registration Fee, Library Fee, Computer Lab Fee, Transcript Fee, Medical Coverage and Student Support.

---

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Semester Wise Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Duration</td>
</tr>
<tr>
<td>MS (CE, EE, SE, T&amp;N)</td>
<td>02 Years</td>
</tr>
<tr>
<td>MS (E&amp;ES)</td>
<td>02 Years</td>
</tr>
<tr>
<td>M Sc (Psy)</td>
<td>02 Years</td>
</tr>
<tr>
<td>PMD (Psy)</td>
<td>01 Year</td>
</tr>
<tr>
<td>M Phil (Psy)</td>
<td>02 Years</td>
</tr>
<tr>
<td>Ph D (Psy)</td>
<td>02 Years</td>
</tr>
<tr>
<td>M Phil (MS)</td>
<td>02 Years</td>
</tr>
<tr>
<td>Ph D (MS)</td>
<td>03 Years</td>
</tr>
<tr>
<td>M Phil (SS)</td>
<td>02 Years</td>
</tr>
</tbody>
</table>

**Note:** The University reserves the right to change the Fee structure at any time.
## Fee Structure for Graduates Program (Foreign Students)

<table>
<thead>
<tr>
<th>NAME OF PROGRAMS</th>
<th>BBA (4.0 Years)</th>
<th>BCE (4.0 Years)</th>
<th>BEE (4.0 Years)</th>
<th>BSE (4.0 Years)</th>
<th>BS (CS) (4.0 Years)</th>
<th>BS (ETM) (4.0 Years)</th>
<th>LLB (5.0 Years)</th>
<th>BS (Gen/Geophy/ES/BSS)</th>
<th>BS (Geophy)</th>
<th>BS (Psychology)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Hours</td>
<td>18</td>
<td>19</td>
<td>17</td>
<td>19</td>
<td>15</td>
<td>20</td>
<td>17</td>
<td>18</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Rate Per Credit Hours Tuition Fee</td>
<td>5,210</td>
<td>5,610</td>
<td>5,610</td>
<td>5,610</td>
<td>4,125</td>
<td>4,125</td>
<td>4,125</td>
<td>4,125</td>
<td>3,218</td>
<td>4,528</td>
</tr>
<tr>
<td>Tuition Fee Per Semester</td>
<td>95,040</td>
<td>106,590</td>
<td>95,370</td>
<td>106,590</td>
<td>61,875</td>
<td>82,500</td>
<td>70,125</td>
<td>74,250</td>
<td>57,915</td>
<td>68,063</td>
</tr>
<tr>
<td>Admission Fee (One Time)</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>11,550</td>
<td>18,150</td>
</tr>
<tr>
<td>Degree Fee (One Time)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>138,155</td>
<td>153,315</td>
<td>142,095</td>
<td>153,315</td>
<td>104,550</td>
<td>125,175</td>
<td>113,250</td>
<td>116,925</td>
<td>82,065</td>
<td>112,613</td>
</tr>
</tbody>
</table>

Note: * Degree Fee Rs. 10,500/- is to be paid with last Semester Fee. However, One and half Year Program students will pay Degree Fee in 1st Semester.
Note: ** Misc. charges includes Student Club Fee, Registration Fee, Library Fee, Computer Lab Fee, Transcript Fee, Medical Coverage and Student Support.

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Semester Wise Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>BEE</td>
<td>142,095</td>
</tr>
<tr>
<td>BSE</td>
<td>153,315</td>
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<tr>
<td>BS (CS)</td>
<td>104,550</td>
</tr>
<tr>
<td>BS (ETM)</td>
<td>125,175</td>
</tr>
<tr>
<td>LLB</td>
<td>113,250</td>
</tr>
<tr>
<td>BS (Geology, Geophy, ES/BSS)</td>
<td>116,925</td>
</tr>
<tr>
<td>BS (Geophy) (Khi)</td>
<td>82,065</td>
</tr>
<tr>
<td>BS (Psychology) (Khi)</td>
<td>112,613</td>
</tr>
</tbody>
</table>

Note: The University reserves the right to change the Fee structure at any time.
# Fee Structure - MBA (Master of Business Administration) Program (Foreign Students)

<table>
<thead>
<tr>
<th>NAME OF PROGRAMS</th>
<th>MBA 1.5 Years</th>
<th>MBA 2.0 Years</th>
<th>MBA 3.5 Year</th>
<th>MBA Weekend 1.5 Year</th>
<th>MBA Weekend 2.0 Year</th>
<th>MBA Maritime Mgt. 1.5 Years</th>
<th>MBA Maritime Mgt. 2.5 Years</th>
<th>MBA Maritime Mgt. 3.5 Years</th>
<th>MBA Pharma (WK) 2.5 Years</th>
<th>MBA Pharma (WK) 3.0 Years</th>
<th>MBA Health Mgt. 2.5 Years</th>
<th>MPM (Proj. Mgt.) 1.0 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Hours</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Rate Per Credit Hours</td>
<td>5,940</td>
<td>5,940</td>
<td>5,940</td>
<td>5,940</td>
<td>5,940</td>
<td>5,940</td>
<td>5,940</td>
<td>5,940</td>
<td>5,940</td>
<td>5,940</td>
<td>5,940</td>
<td>5,940</td>
</tr>
<tr>
<td>Tuition Fee Per Semester</td>
<td>69,100</td>
<td>89,100</td>
<td>89,100</td>
<td>89,100</td>
<td>89,100</td>
<td>89,100</td>
<td>89,100</td>
<td>89,100</td>
<td>89,100</td>
<td>89,100</td>
<td>89,100</td>
<td>89,100</td>
</tr>
<tr>
<td>Admission Fee (One Time)</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
</tr>
<tr>
<td>Misc. Charges **</td>
<td>4,382</td>
<td>4,382</td>
<td>4,382</td>
<td>4,382</td>
<td>4,382</td>
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<td>4,382</td>
<td>4,382</td>
<td>4,382</td>
<td>4,382</td>
<td>4,382</td>
</tr>
<tr>
<td>Total</td>
<td>142,725</td>
<td>132,225</td>
<td>124,400</td>
<td>124,400</td>
<td>124,400</td>
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<td>124,400</td>
<td>124,400</td>
<td>124,400</td>
<td>124,400</td>
<td>117,025</td>
</tr>
</tbody>
</table>

Note: * Degree Fee Rs. 10,500/- is to be paid with last Semester Fee. However, One and half Year Program students will pay Degree Fee in 1st Semester.

Note: ** Misc. charges includes Student Club Fee, Registration Fee, Library Fee, Computer Lab Fee, Transcript Fee, Medical Coverage and Student Support.

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Semester Wise Detail</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA</td>
<td>1.5 Years</td>
<td>142,725</td>
<td>87,510</td>
<td>45,634</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>276,185</td>
</tr>
<tr>
<td>MBA</td>
<td>2.0 Years</td>
<td>132,225</td>
<td>93,450</td>
<td>93,450</td>
<td>103,950</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>423,075</td>
</tr>
<tr>
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<td>3.5 Years</td>
<td>132,225</td>
<td>93,450</td>
<td>93,450</td>
<td>93,450</td>
<td>93,450</td>
<td>50,490</td>
<td>-</td>
<td>-</td>
<td>649,965</td>
</tr>
<tr>
<td>MBA (Weekend)</td>
<td>1.5 Years</td>
<td>124,905</td>
<td>75,630</td>
<td>51,674</td>
<td>28,119</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>295,515</td>
</tr>
<tr>
<td>MBA (Weekend)</td>
<td>2.0 Years</td>
<td>114,405</td>
<td>75,630</td>
<td>75,630</td>
<td>57,810</td>
<td>32,670</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>431,775</td>
</tr>
<tr>
<td>MBA (Weekend)</td>
<td>3.0 Years</td>
<td>114,405</td>
<td>75,630</td>
<td>75,630</td>
<td>75,630</td>
<td>75,630</td>
<td>39,990</td>
<td>50,490</td>
<td>-</td>
<td>658,665</td>
</tr>
<tr>
<td>MBA (Maritime Management)</td>
<td>1.5 Years</td>
<td>124,905</td>
<td>75,630</td>
<td>75,630</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>276,185</td>
</tr>
<tr>
<td>MBA (Maritime Management)</td>
<td>2.5 Years</td>
<td>114,405</td>
<td>75,630</td>
<td>75,630</td>
<td>75,630</td>
<td>75,630</td>
<td>103,950</td>
<td>-</td>
<td>-</td>
<td>520,875</td>
</tr>
<tr>
<td>MBA (Maritime Management)</td>
<td>3.5 Years</td>
<td>114,405</td>
<td>75,630</td>
<td>75,630</td>
<td>93,450</td>
<td>93,450</td>
<td>86,130</td>
<td>-</td>
<td>-</td>
<td>614,325</td>
</tr>
<tr>
<td>MBA Pharma (Weekend)</td>
<td>2.0 Years</td>
<td>114,405</td>
<td>75,630</td>
<td>75,630</td>
<td>75,630</td>
<td>75,630</td>
<td>39,990</td>
<td>50,490</td>
<td>-</td>
<td>587,405</td>
</tr>
<tr>
<td>MBA Pharma (Weekend)</td>
<td>3.0 Years</td>
<td>114,405</td>
<td>75,630</td>
<td>75,630</td>
<td>75,630</td>
<td>75,630</td>
<td>75,630</td>
<td>39,990</td>
<td>50,490</td>
<td>685,685</td>
</tr>
<tr>
<td>MBA (Health Management)</td>
<td>2.5 Years</td>
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<td>75,630</td>
<td>75,630</td>
<td>86,130</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>427,425</td>
</tr>
<tr>
<td>Master (Project Management)</td>
<td>1.0 Years</td>
<td>107,025</td>
<td>75,750</td>
<td>75,750</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>285,625</td>
</tr>
</tbody>
</table>

Note: The University reserves the right to change the Fee structure at any time.
# Fee Structure for Post Graduates Program (Foreign Students)

(Amount in Pak Rupees)

<table>
<thead>
<tr>
<th>NAME OF PROGRAMS</th>
<th>MS (CE/EE/SE/T&amp;N) 2.0 Years</th>
<th>MS (E&amp;ES) 2.0 Years</th>
<th>MSc. (Psy) 2.0 Years</th>
<th>PMD (Psy) 1.0 Years</th>
<th>M Phil (Psy) 2.0 Years</th>
<th>Ph D (Psy) 3.0 Years</th>
<th>M Phil (MS) 2.0 Years</th>
<th>Ph D (MS) 3.0 Years</th>
<th>M Phil (SS) 2.0 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Hours</td>
<td>9</td>
<td>9</td>
<td>15</td>
<td>18</td>
<td>15</td>
<td>15</td>
<td>9</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Rate Per Credit Hours Tuition Fee</td>
<td>5,940</td>
<td>4,620</td>
<td>4,785</td>
<td>4,125</td>
<td>4,950</td>
<td>4,785</td>
<td>5,940</td>
<td>5,940</td>
<td>5,940</td>
</tr>
<tr>
<td>Tuition Fee Per Semester</td>
<td>53,460</td>
<td>41,580</td>
<td>71,775</td>
<td>74,250</td>
<td>74,250</td>
<td>71,775</td>
<td>53,460</td>
<td>53,460</td>
<td>71,280</td>
</tr>
<tr>
<td>Admission Fee (One Time)</td>
<td>27,225</td>
<td>27,225</td>
<td>16,150</td>
<td>18,150</td>
<td>18,150</td>
<td>18,150</td>
<td>27,225</td>
<td>27,225</td>
<td>27,225</td>
</tr>
<tr>
<td>Degree Fee (One Time) *</td>
<td>-</td>
<td>-</td>
<td>10,500</td>
<td>10,500</td>
<td>10,500</td>
<td>10,500</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Misc. Charges **</td>
<td>5,400</td>
<td>5,400</td>
<td>4,200</td>
<td>4,200</td>
<td>4,200</td>
<td>4,200</td>
<td>5,400</td>
<td>5,400</td>
<td>5,400</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>97,635</td>
<td>85,755</td>
<td>116,175</td>
<td>118,650</td>
<td>118,650</td>
<td>116,175</td>
<td>97,635</td>
<td>97,635</td>
<td>115,455</td>
</tr>
</tbody>
</table>

Note: * Degree Fee Rs. 10500/- is to be paid with last Semester Fee. However, One and half Year Program students will pay Degree Fee in 1st Semester.

Note: ** Misc. charges includes Student Club Fee, Registration Fee, Library Fee, Computer Lab Fee, Transcript Fee, Medical Coverage and Student Support.

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Duration</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS (CE, EE, SE, T&amp;N)</td>
<td>02 Years</td>
<td>97,635</td>
<td>58,860</td>
<td>58,860</td>
<td>51,540</td>
<td>-</td>
<td>-</td>
<td>266,895</td>
</tr>
<tr>
<td>MS (E&amp;ES)</td>
<td>02 Years</td>
<td>85,755</td>
<td>46,980</td>
<td>60,840</td>
<td>43,820</td>
<td>-</td>
<td>-</td>
<td>237,195</td>
</tr>
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<td>M Sc. (Psy)</td>
<td>02 Years</td>
<td>116,175</td>
<td>75,975</td>
<td>75,975</td>
<td>75,975</td>
<td>-</td>
<td>-</td>
<td>344,100</td>
</tr>
<tr>
<td>PMD (Psy)</td>
<td>01 Year</td>
<td>118,650</td>
<td>78,450</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>197,100</td>
</tr>
<tr>
<td>M Phil (Psy)</td>
<td>02 Years</td>
<td>118,650</td>
<td>78,450</td>
<td>63,600</td>
<td>33,900</td>
<td>-</td>
<td>-</td>
<td>294,800</td>
</tr>
<tr>
<td>Ph D (Psy)</td>
<td>02 Years</td>
<td>116,175</td>
<td>76,975</td>
<td>61,620</td>
<td>32,910</td>
<td>-</td>
<td>-</td>
<td>286,680</td>
</tr>
<tr>
<td>M Phil (MS)</td>
<td>02 Years</td>
<td>97,635</td>
<td>58,860</td>
<td>41,040</td>
<td>51,540</td>
<td>-</td>
<td>-</td>
<td>249,075</td>
</tr>
<tr>
<td>Ph D (MS)</td>
<td>03 Years</td>
<td>97,635</td>
<td>58,860</td>
<td>58,860</td>
<td>58,860</td>
<td>69,360</td>
<td>-</td>
<td>402,435</td>
</tr>
<tr>
<td>M Phil (SS)</td>
<td>02 Years</td>
<td>115,455</td>
<td>76,680</td>
<td>58,860</td>
<td>51,540</td>
<td>-</td>
<td>-</td>
<td>302,535</td>
</tr>
</tbody>
</table>

Note: The University reserves the right to change the Fee structure at any time.
Refund of Fee

Fee will be refunded to students who desire to migrate/discontinue studies according to the following rules:

- Admission fee shall not be refundable.
- Full amount of fee (other than admission fee) will be refunded if applied upto 7th day after commencement of classes.
- From 8th to 15th day after commencement of classes, Security fee, degree fee and 50% of the tuition fee and misc. charges will be refunded.
- From 16th day after commencement of classes only Security fee and degree fee will be refunded.
- Students who are given provisional admission when awaiting results of exams, and subsequently if they fail to qualify and do not meet the pre-requisites for admission, will be given refund of the fee they paid, minus admission fee.
- Refund will be made up to a maximum period of six months after the date of leaving.
- No fee shall be refunded to a regular student if he/she drops a course or a semester after commencement of the classes.

Adjustment/Transfer of Tuition fee

Amount of tuition fee so received, will be adjusted/ transferred only in the following cases:

- Will be adjusted/transferred to the semester if a course is cancelled, and an alternate course is not offered.
- Will be adjusted/transferred to the next semester, if a student drops a course or semester, within one week after commencement of classes.
Admissions

Academic Eligibility
Important Information for O/A Levels Students
Admission Procedure
Documents Required
Academic Rules
Instructions for Candidates
1. **Policy Statement**
Bahria University (BU) welcomes all applicants qualified to achieve the University's laid down academic eligibility standards without regard to gender, race, creed, or age. Two percent seats are reserved for disabled persons.

2. **Admission Merit**
Merit for admissions is announced on the basis of the entry test results, academic eligibility qualification marks (Intermediate/equivalent or Bachelor's/equivalent), Admission Test, Interview score or performance in discussion forum (to check verbal skills). Admission Enrollment in any program is limited to the number of students who can be accommodated. University reserves the right to cancel any program advertised due to insufficient number of applicants.

3. **Students Dropped from Bahria University**
Students, once dropped from Bahria University on academic grounds, will not be admitted to Bahria University subsequently in the same program. Those dropped on disciplinary grounds are not eligible for re-admission in any program.

4. **How to Apply?**
Admissions to Bahria University are advertised in the leading national dailies and on Bahria University website www.bahria.edu.pk in the month of Jun/Jul and Nov/Dec every year, except for Engineering programs which are advertised in Jun/Jul for Fall Semester (only one intake per year). Prospective candidates may apply for admissions through "online admission systems" by registering on http://bahria.edu.pk. The admission procedure is described on page 52 for guidance.

5. **Academic Year**
Academic year at Bahria University comprises two regular semesters of 18 weeks each and one summer session of 10 weeks duration:

- **Fall Semester:** 18 weeks (Sep-Jan)
- **Spring Semester:** 18 weeks (Feb-Jun)
- **Summer Session:** 10 weeks (Jun-Aug)

Note: Fall and Spring are regular semesters. Whereas, Summer session is offered for the benefit of those students who may work to improve their grades in any course provided 10 or more students register for the course. Such students will not be eligible for any awards of medals.
# ACADEMIC ELIGIBILITY

**Important for all Candidates**

1. Applicants for admission MUST MEET THE ELIGIBILITY REQUIREMENTS set forth by Bahria University.
2. Candidates are requested to CONFIRM THEIR ELIGIBILITY STATUS prior to the purchase of prospectus.
3. In case of annual system, eligibility will be determined on basis of result in percentages.
4. In case of semester system, eligibility will be determined on basis of CGPA obtained out of 4.00.
5. In case the result is shown both in CGPA and percentage, CGPA will be considered.

The academic eligibility of each program is tabulated as under:

## ELIGIBILITY CRITERIA OF PROGRAMS OFFERED AT BAHRIA UNIVERSITY

### MANAGEMENT SCIENCES

(Weekend/Pharmaceutical/Health Management/MIS/Maritime only at Karachi Campus)

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBA</td>
<td>4 years</td>
<td>50% marks in Intermediate/equivalent</td>
</tr>
<tr>
<td>MBA</td>
<td>3½ years</td>
<td>CGPA 2.5/4.0 or 50% marks in 2 years Bachelors</td>
</tr>
<tr>
<td>MBA</td>
<td>2 years</td>
<td>CGPA 2.5/4.0 or 50% marks in 4 years Bachelors</td>
</tr>
<tr>
<td>MBA (Maritime Management)</td>
<td>3½ years</td>
<td>CGPA 2.5/4.0 or 50% marks in 4 years Bachelors</td>
</tr>
<tr>
<td>MBA (weekend)</td>
<td>3½ years</td>
<td>CGPA 2.5/4.0 or 50% marks in 2 years Bachelors</td>
</tr>
<tr>
<td>MBA (weekend)</td>
<td>2 years</td>
<td>CGPA 2.5/4.0 or 50% marks in 4 years Bachelors</td>
</tr>
<tr>
<td>MBA (weekend)</td>
<td>1½ years</td>
<td>CGPA 2.5/4.0 or 50% marks in 4 years Bachelors</td>
</tr>
<tr>
<td>MBA (Pharma/Health Management/MIS/Maritime)</td>
<td>3½ years</td>
<td>CGPA 2.5/4.0 or 50% marks in 2 years Bachelors</td>
</tr>
<tr>
<td>MBA (Pharma/Health Management/MIS/Maritime)</td>
<td>2½ years</td>
<td>CGPA 2.5/4.0 or 50% marks in 4 years Bachelors</td>
</tr>
<tr>
<td>PGC (Pharma)</td>
<td>1 year</td>
<td>CGPA 2.5/4.0 or 50% marks in Bachelors</td>
</tr>
<tr>
<td>Masters in Project Management (Weekend)</td>
<td>1 year</td>
<td>CGPA 2.5/4.0 (Semester) or 50% marks (Annual) in final degree or GAT.</td>
</tr>
<tr>
<td>M Phil</td>
<td>2 years</td>
<td>CGPA 3.0/4.0 or 60% in last qualification &amp; 16 years of education</td>
</tr>
<tr>
<td>PhD</td>
<td>3 years</td>
<td>CGPA 3.0/4.0 or 60% in last qualification &amp; 18 years of education</td>
</tr>
</tbody>
</table>

### ENGINEERING

(Electrical/Software/Computer Engineering)

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Electrical Engineering (Electronics/ Telecommunication)</td>
<td>4 years</td>
<td>FSc Pre-Egg/Equivalent with 60% marks</td>
</tr>
<tr>
<td>Bachelor of Software Engineering</td>
<td>4 years</td>
<td>FSc Pre-Egg/Equivalent with 60% marks</td>
</tr>
<tr>
<td>Bachelor of Computer Engineering</td>
<td>4 years</td>
<td>FSc Pre-Egg/Equivalent with 60% marks</td>
</tr>
</tbody>
</table>

### ENGINEERING SCIENCES

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS (CS)</td>
<td>4 years</td>
<td>50% marks in Pre-Egg or with Matha, Physics and Computer Sciences or Equivalent</td>
</tr>
<tr>
<td>MS Electrical Engineering</td>
<td>2 years</td>
<td>CGPA 2.5/4.0 or 50% Marks in 4 years Bachelors</td>
</tr>
<tr>
<td>MS Software Engineering</td>
<td>2 years</td>
<td>CGPA 2.5/4.0 or 50% Marks in 4 years Bachelors</td>
</tr>
<tr>
<td>MS (Telecom &amp; Networking)</td>
<td>2 years</td>
<td>CGPA 2.5/4.0 or 50% Marks in 4 years Bachelors</td>
</tr>
<tr>
<td>PhD (EE/SE/CE/CS)</td>
<td>3 years</td>
<td>Minimum 18 years of education in relevant discipline with minimum 60% marks or 3.5/4.0 CGPA (above 60% ranking) or GAT (Subject) with 60% marks</td>
</tr>
</tbody>
</table>
# EARTH & ENVIRONMENTAL SCIENCES
*(Geology, Geophysics & Environmental Sciences)*

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS (Geology/Geophysics/Environmental Sciences)</td>
<td>4 years</td>
<td>FSc (Pre-Engg/Pre-Med)/A-Level or equivalent with 50% Marks</td>
</tr>
<tr>
<td>MS (Geology/Geophysics/Environmental Sciences)</td>
<td>2 years</td>
<td>BS/M Sc Earth Sciences with 3.0 CGPA</td>
</tr>
<tr>
<td>MS (Environmental Policy &amp; Management)</td>
<td>2 years</td>
<td>BS/M Sc in all Sciences with 3.0 CGPA</td>
</tr>
</tbody>
</table>

# PROFESSIONAL PSYCHOLOGY
*(Clinical, Organizational & Educational Psychology)*

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS</td>
<td>4 years</td>
<td>50% marks in Intermediate/Equivalent</td>
</tr>
<tr>
<td>PMD</td>
<td>1 year</td>
<td>CGPA 2.5/4.0 or 50% marks in Masters</td>
</tr>
<tr>
<td>MPhil</td>
<td>1 to 2 years</td>
<td>CGPA 2.5/4.0 or 50% marks in PMD/Masters</td>
</tr>
<tr>
<td>PhD</td>
<td>2 to 3 years</td>
<td>CGPA 2.5/4.0 or 50% marks in PMD/Masters</td>
</tr>
</tbody>
</table>

# HUMANITIES & SOCIAL SCIENCES
*(Anthropology/Sociology, Development Studies, IR, Media Studies)*

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSS</td>
<td>4 years</td>
<td>50% marks in intermediate/Equivalent in any discipline</td>
</tr>
<tr>
<td>M Phil</td>
<td>2 years</td>
<td>Minimum 16 years of education with Anthropology, Sociology, Psychology, IR, Development Studies, Mass Communication with 60% marks or 3.0/4.0 CGPA, GRE/GAT with 60% marks</td>
</tr>
</tbody>
</table>

# MEDICAL & DENTAL SCIENCES

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBBS</td>
<td>5 years</td>
<td>60% marks in FSc (Pre-Medical)/Equivalent</td>
</tr>
<tr>
<td>BDS</td>
<td>4 years</td>
<td>60% marks in FSc (Pre-Medical)/Equivalent</td>
</tr>
</tbody>
</table>

# LEGAL STUDIES

<table>
<thead>
<tr>
<th>Program</th>
<th>Duration</th>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLB</td>
<td>5 years</td>
<td>45% marks in FA/FSc or equivalent</td>
</tr>
</tbody>
</table>
ELIGIBILITY CRITERIA OF PROGRAMS

**BBA (4 years)**
Intermediate or its equivalent with a minimum of 50% marks (excluding NCC) in any discipline.

**MBA (3½ years)**
Two years Bachelor's degree (e.g. BA, B Sc, B Com etc.) with a minimum of 50% marks or CGPA 2.5/4.0 in any discipline.

**MBA (2 years)**
Four years Bachelor's degree with a minimum of 50% marks or CGPA 2.5/4.0 in any discipline.

**MBA (1½ year)**
Four years BBA Degree with a minimum of CGPA 2.5/4.0 from Bahria University.

**MBA (Weekend) (3½ years)**
Two years Bachelor's degree with a minimum of 50% marks or CGPA 2.5/4.0 in any discipline.

**MBA (Weekend) (2 years)**
Four years Bachelor's degree with a minimum of 50% marks or CGPA 2.5/4.0 in any discipline.

**MBA (Weekend) (1½ years)**
For students graduating with 4 years BBA degree from Bahria University and other HEC recognized universities with 50 % marks, CGPA 2.5/4.0 or above.

**MBA Pharmaceutical/Health Management/MIS/Maritime Management (3½ years)**
Two years Bachelor's degree with a minimum of 50% marks or CGPA 2.5/4.0 in any discipline. Relevant experience in pharmaceutical industry is preferred.

**MBA Pharma/Health Management/MIS/Maritime (2½ years)**
Four years Bachelor's degree with a minimum of 50% marks or CGPA 2.5/4.0 in any discipline. Relevant experience in pharmaceutical industry is preferred.

**MBA Maritime (1½ years)**
For students graduating with 4 years BBA degree from Bahria University and other HEC recognized universities with 50 % marks, CGPA 2.5/4.0 or above.

**PGD Pharmaceutical Business Management (1 year)**
Bachelor's degree with a minimum of 50% marks or CGPA 2.5/4.0 in any discipline. Relevant experience in pharmaceutical industry is preferred.

**Masters in Project Management (Weekend)(1 year)**
16 years of education from HEC recognized institutes with a minimum of 50% marks or CGPA 2.5/4.0 in final degree or 50% marks in GAT.

**MPhil (2 years)**
16 years of education, Masters/Bachelors Degree with a minimum of 60% marks or CGPA 3.0/4.0 in relevant discipline. GRE/GAT with 50% marks is mandatory.

**PhD (3 years)**
18 years of education, Masters/Bachelors Degree with a minimum of 60% marks or CGPA 3.0/4.0 in relevant discipline. GRE (subject) / GAT (subject) with 60% marks is mandatory.
BSE and BCE (4 years)
Passed intermediate examination or its equivalent with a minimum of 60% marks (excluding NCC) in Pre-Engineering Group, or with Mathematics, Physics & Computer Studies.

BEE (Electronics / Telecommunication) (4 years)
Passed intermediate examination or its equivalent with a minimum of 60% marks (excluding NCC) in Pre-Engineering Group

ENGINEERING SCIENCES

BS (CS) (4 years)
Passed intermediate examination or its equivalent with a minimum of 50% marks (excluding NCC) in Pre-Engineering Group, or with Mathematics, Physics & Computer Studies.

Students with Intermediate in any discipline can apply in BS (CS) Program, provided their Matric /equivalent is in Science Group.

MS (Software Engineering) and MS (Telecom & Networking) (2 years)
Four year degree as BS/BCE/BSE/BE/B Sc (Hons) in Computer Sciences/Software Engineering/Computer Engineering/Information Technology is required.

A minimum of 130 credit hours in Bachelors and a CGPA of 2.5/4.0 or 50% marks in annual system OR MCS/M Sc (Computer Sciences) with minimum CGPA 2.5/4.0 or 50% marks in annual system OR BCS 3 year degree program with minimum 130 Credit Hours, CGPA 2.5/4.0 or 50% marks in annual system.

Students will be required to complete deficiency in earned credit hours.

MS (Electrical Engineering) (2 years)
BS in Electrical Engineering 4 years program with Minimum CGPA of 2.5 out of 4.0.

EARTH & ENVIRONMENTAL SCIENCES

BS in Geology/Geophysics/Environmental Sciences (4 years)
Passed Intermediate with Pre-Medical/Pre-Engineering subjects or A-level/equivalent with at least 50% marks with English, Physics, Chemistry, Mathematics or Biology.

MS in Geology/Geophysics/Environmental Sciences (2 years)
Passed 4 year BS or MSc (Geology/Geophysics/Environmental Sciences) with a CGPA of 3.0/4.0 or 50% marks.

MS in Environmental Policy & Management (2 years)
Passed 4 years BS in any sciences discipline with a CGPA of 2.5/4.0 or 50% marks.
**BS (Psychology) (4 years)**
Intermediate/A-level/Equivalent with at least 50% marks (excluding NCC).

**PMD (1 year)**
Masters degree with a minimum of 50% marks or CGPA 2.5/4.0 in Psychology/allied fields.

**M Phil (1 year / 2 years)**
For 1 year Program: PMD in relevant field of Psychology
For 2 years Program: Masters Degree with minimum of 50% marks or CGPA 2.5/4.0 in Psychology or allied subjects.

**PhD (2 years / 3 years)**
For 2 years Program: PMD in Professional Psychology
For 3 years Program: Masters in Psychology/allied subjects

**HUMANITIES & SOCIAL SCIENCES**

**BSS (Bachelor in Social Sciences) (4 years)**
Intermediate/Alevel/Equivalent with at least 50% marks (excluding NCC).

**MPhil (Socio - Cultural Anthropology)**
Minimum 16 years of education with Anthropology, Sociology, IR, Development Studies, Mass Communication as the area of specialization or related subject with minimum 60% marks or 3.0/4.0 CGPA. GRE/ GAT with 60% marks.

**Note:** Students applying for M Phil/PhD Programs must have qualified GRE or GAT as applicable.

**MEDICAL & DENTAL SCIENCES**

**MBBS (5 years)**
A minimum of 60% marks in F Sc Pre-Medical or equivalent.

**BDS (4 years)**
A minimum of 60% marks in F Sc Pre-Medical or equivalent

**LEGAL STUDIES**

**LLB (5 years)**
A minimum of 45% marks in FA/F Sc or equivalent.
EQUIVALENCE CERTIFICATE

Applicants, who have studied in non-Pakistani systems (O/A-Levels etc.) abroad must submit the equivalence certificate(s) from Inter Board Committee of Chairmen (IBCC) of Pakistan within one year of admission. Whereas, the candidates who have qualified A-Level in country are to provide IBCC equivalence latest by six weeks after start of semester, otherwise, the provisional admission will be cancelled. However 'O' level equivalence is required at the time of submission of application. For details visit www.ibcc.edu.pk & www.hec.edu.pk

Table of Equivalent Qualifications for IBCC Equivalence Certificate
1. British System
   - GCE
   - GCSE
   - IGCSE
2. International Baccalaureate Diploma
3. American High School System Grade 12 Diploma
4. Scottish Certificate of Education
5. Turkish High School Certificate

Book Fair at Bahria University Islamabad Campus.
IMPORTANT INFORMATION
FOR STUDENTS OF O/A LEVELS

The following information will be helpful for the students of O/A Levels seeking admission in Bahria University:

Number of Subjects Required
1. Complete O-levels with 8 subjects.
2. Complete A-levels with 3 subjects
3. Three complete A level subjects (Physics, Maths, Chemistry or Computers) if applying for Engineering program.

Documents Required (Compulsory)
1. Equivalence Certificate of O-levels from IBCC (Inter Board Committee of Chairmen*)
2. Equivalence Certificate of A-levels from IBCC.
3. If A-levels result is awaited, then have to submit a Statement of Entry of A-levels alongwith other documents.

Rules of Eligibility
1. Students awaiting result of A-levels must apply on basis of O-levels result (IBCC Marks). They are to provide IBCC equivalence certificate without which their admission form will not be processed.
2. Students awaiting A-levels result will be awarded Provisional Status unless they provide A-levels IBCC Equivalence Certificate latest by 6 weeks after start of semester, otherwise, the provisional admission will be canceled.
3. If the student fails to achieve the basic eligibility criteria, his/her admission will be cancelled.

Reminder
1. Students are reminded that for all Pakistan based foreign examinations (A/O-levels), IBCC will not issue equivalence, unless student has cleared Pakistan Studies, Islamic Studies and Urdu.
2. However, for students who attempted overseas exams abroad (both O & A levels) these subjects are not compulsory.
3. Students cannot apply on ASL basis alone.

Final Merit
The admission merit will be based on:
- O/A-level result (IBCC Marks)
- Entry test result
- Performance in interview/discussion forum
ONLINE ADMISSION PROCEDURE

The online admission procedure is described as under:

a. Visit Bahria University website (http://bahria.edu.pk)
b. Click on “Apply for Online Admissions” and sign up (registration).
c. After login read the instructions and complete the application form as follows:
   (1) Personal
   (2) Father / Guardian
   (3) Sponsor
   (4) Academic
d. After completion, submit the application form and on acceptance by the online admission system, fee slip (PDF format) will be generated.
e. Obtain printout of fee slip and deposit fee in any ABL Branch.
f. Re-login following day to obtain the Admit Slip for appearing in the entry test.
g. Appear for the entry test as per promulgated schedule. Candidates are required to bring printed Admit Slips and original CNIC / Form “B” or Passport.

Note: Candidate who intend to apply for more than one program (Involving different entry test) are to repeat the steps from para ‘c(4)’ to ‘f’.

IMPORTANT INFORMATION FOR ADMISSIONS

- Admission will be based on Academic Eligibility Score, Entry Test Score and Interview.
- Students unable to provide complete result of pre-requisite qualification for a certain program should submit the last qualified result as follows:
  a. First year result if HSSC result is not declared for undergraduate program.
  b. O-Level result if A-Level result is not declared for undergraduate program.
  c. HSSC/A-Level result for graduate program if BA/BSc/B.Com result is awaited.
- For non-Pakistani qualifications (O/A-Level etc), student must enter IBCC equivalent marks, HEC Equivalence Certificate marks,
- Students are advised to obtain O-Level IBCC certificate in case A-Level result is awaited. For details visit website www.ibcc.edu.pk
Forms of students awaiting A-Level/Intermediate result will not be accepted, without, either 1st year Marks or O-Level equivalence certificate marks from IBCC.

Students with A's results of GCE are reminded that A's result is considered equivalent to 1st year (Intermediate).

Students with valid ETS* scores have the option, not to take Bahria University Admission Test and submit scores as mentioned below:

<table>
<thead>
<tr>
<th>Test</th>
<th>Code</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT I</td>
<td>4181</td>
<td>Bachelor’s Programs (Non-Engineering)</td>
</tr>
<tr>
<td>SAT II</td>
<td>4181</td>
<td>Bachelor’s Programs (Engineering)</td>
</tr>
<tr>
<td>GMAT</td>
<td>7265</td>
<td>MBA Programs</td>
</tr>
<tr>
<td>GRE</td>
<td>7265</td>
<td>Masters Programs (Other than in Management), M Phil/Ph D Programs</td>
</tr>
</tbody>
</table>

Please bring copies of your score sheet original score sheet at the time of Interview

Appear, in the entry test (where applicable) and for interview discussion session.

It is informed that entrance test in Undergraduate Programs (for Management Sciences & Earth & Environmental Sciences) is based on pattern of SAT-I and (for Engineering Programs) SAT-II (Math, Physics & SAT-I English). Entry test in Management Sciences Post Graduate Programs is based on GMAT format.

MS applicants will appear in admission test on the pattern of GRE General.

Test and Interview

- Applicants must appear in the written test (except those opting for SAT/ETS Scores etc.) on the scheduled dates as advertised in the press.
- After the test, merit list for interviews will be announced and posted at concerned institutes and website www.bahria.edu.pk.
- Original documents are to be produced at the time of interview.

Final Merit list for admission will be posted (based on the results of entry test, academic eligibility examinations marks, interview and score earned in discussion session as applicable) at the concerned institutes and on web www.bahria.edu.pk

New Students Orientation

Orientations are designed to provide fresh students with information regarding University services, policies and procedures, student responsibilities and faculty expectations etc. Orientation will take place prior to start of semester and includes development of learning. All new students have to attend two days orientation session just before commencement of semester.

Student Handbook

All Students are provided "Student Handbook" at the time of Orientation. It is students' responsibility to obtain the handbook and adhere to the stipulated academic rules and University policies.

Provisional Status

Applicants who are waiting for the announcement of the Intermediate Part II or Bachelor’s results may be admitted on Provisional Status, provided they submit Intermediate 1st year marks (UG Program) OR Bachelor’s marks (Graduate Program) meeting minimum eligibility marks %age. However, they have to submit their complete mark sheet latest by 6 weeks after start of semester. If the student fails to achieve the basic eligibility criteria, he/she will stand academically disqualified and his/her admission will be cancelled. It is the responsibility of the student to inform the University in case he/she fails to meet the basic eligibility criteria.
Those students, who apply before the announcement of results, are cautioned that, Supplementary in any subject is considered as failing the examination even if the student has obtained the minimum requirement of percentage. Admission of such students will be cancelled immediately.

**Deferment of Admission**

Student selected for admissions may defer their admission for one semester (in case of Engg. programs for two semesters) after paying the admission fee. The students desiring to do so are required to submit an application to the respective Director Campus for deferment of their admissions within two weeks of commencement of the semester. Fee deposited by such students will be readjusted in the forthcoming semester.

**Admission on Credit Transfer/Advance Placement**

Bahria University accepts course work completed and credits earned at HEC Recognized Institutes/Colleges/Universities of Pakistan and International/Foreign Schools/Colleges/Universities for advance placement, subject to completion of following procedure:

- Apply as per procedure for fresh/new students.
- Indicate about “Credit transfer” YES/NO, while applying through online admission.
- Appear in test or provide ETS/SAT Scores.
- If selected, appear for interview. If admitted, immediately submit application on plain paper to the Head of the Department for transfer of credit hours with following documents:
  - Grading scheme of university from where migrating.
  - Certified copy of transcript.
  - NOC from previous University attach by the student.
  - Copies of detailed course work completed; with course number, title and description; certified and stamped from the Institute/College/University from where credits were earned.

Students are reminded that documents mentioned above must be obtained by them before appearing for interview.

Credit transfer is not allowed in 1-1/2 year programs & students applying must have a CGPA of 2.5/4.0 (as per BU scale) when producing result of credits earned from previous college/university. However, courses will be only transferred if the course work meets the standard by Bahria University and a minimum of C+ grade (equivalent to Bahria University grading scheme) has been obtained.

Student is to pay credit transfer processing fee Rs. 3000/- per course, prior to applying for his/her credit transfer to Bahria University.
DOCUMENTS REQUIRED FOR INTERVIEW

Candidates are to bring following documents in original along with two sets of attested copies of the same:

**Bachelor Programs**
- Attested copy of mark sheet SSC/equivalent.
- Attested copy of mark sheet of HSSC/equivalent.
- Equivalence Certificate from Inter Board Committee of Chairmen (A-Levels and equivalent).
- Attested copy of National Identity Card or B Form if less than 18 years of age.
- Students awaiting A-Level results must submit O-Level Equivalence (IBCC Certificate).
  * Copy of SAT-I/II scores are to be attached where applicable.

**Master Programs**
- Attested copy of mark sheet of SSC/equivalent.
- Attested copy of mark sheet of HSSC/equivalent.
- Attested copy of mark sheet of Bachelors Degree.
- Attested copy of National Identity Card.
- Work experience proof (for MBA for Executives applicants only).
  * Copy of GAT/GMAT/GRE scores are to be attached where applicable.

**PMD Programs**
- Attested copy of mark sheet of SSC/equivalent.
- Attested copy of mark sheet of HSSC/equivalent.
- Attested copy of mark sheet of Bachelors Degree.
- Attested copy of mark sheet of Master Degree.
- Attested copy of National Identity Card.
  * Copy of GAT/GMAT/GRE scores are to be attached where applicable.

**MS/M Phil Programs**
- Attested copy of mark sheet of SSC/equivalent.
- Attested copy of mark sheet of HSSC/equivalent.
- Attested copy of mark sheet of Bachelors Degree.
- Attested copy of mark sheet of PMD or Master Degree.
- Attested copy of National Identity Card.
- Work experience proof (where required)
  * Copy of GAT/GRE scores are to be attached where applicable.
PhD Programs

- Attested copy of mark sheet of SSC/equivalent.
- Attested copy of mark sheet of HSSC/equivalent.
- Attested copy of mark sheet of Bachelors Degree.
- Attested copy of mark sheet of PMD or Master Degree.
- Attested copy of National Identity Card.
- GRE or Equivalent HEC Test Score.
- Work experience proof (where required).
* Copy of GAT/GRE (Subject) scores are to be attached where applicable.

*Submitting incomplete, false, or misleading information is considered as enough grounds for denial of admission and dismissal at any time.

Students awaiting results must ensure that they have secured minimum eligibility marks for the relevant program when submitting results with awaiting results status.

- For example student applying for BBA, submitting 1st year result must have at least 50% marks in 1st year.
- For Engineering Programs, they must have at least 60% marks in 1st year.
- Students, who have appeared in supplementary exams, submitting result under awaiting result status, must also comply with this condition.
- Students who have not appeared in supplementary exams are not eligible to apply.
- Students applying under result-awaited status must have appeared in the relevant papers, before applying for admission and they must provide an undertaking that they will meet the minimum admission criteria of the program they are applying in; otherwise, their admission will be cancelled. It is students’ responsibility to inform about the awaited result as soon as it is declared.
GENERAL ACADEMIC RULES

General
Academic Programs at Bahria University’s constituent units are run on semester system except Medical and Dental College which operates on annual system. Semester system is simply a different management of time during the academic year. Rather than holding the classes for one year with a summer break (as is done under the annual system), the semester system allows for two semesters to be offered in the Fall (Sep to Jan) and Spring (Feb to Jun). The duration of each semester is of 18 weeks, out of which 15 weeks are dedicated to teaching and 3 weeks are reserved for the mid-semester and final examinations. For Engineering Programs, there is only one in-take per year in Fall semester.

Student’s performance in each course is evaluated on a continuous basis throughout the semester. Final grading for each course is based on quizzes, assignments, practical projects, term papers, class participation, mid-semester examination and final-semester examination.

Definitions
Credit Hours
The unit measuring educational credit usually consisting of one weekly period lasting approximately one hour. For practical work, the period duration is twice to that of theory. A course timetable to run three hours each week will therefore usually carry 3 credit hours of theory.

Department
A division of a faculty concerned with specific branch of instruction or study.

Discipline (A Subject Area)
A branch of learning or field of study.

Dual Majors
Students, in all programmes (other than Engineering and Medical), may simultaneously complete two Majors provided both Majors lead to the same degree and are being offered by the University. Dual majors will be allowed to register half-way through the program whence the intention (of taking the second Major) must be indicated positively to the respective HOD through a formal written application. Upon receipt of the application, the HOD shall initiate the registration process, culminating in a formal Letter of Acceptance from the Deputy Director (Academics-I) of the Campus.
Dual Major is allowed half way through the program depending on the duration of each program. After half of the program duration, “Dual Major” will not be allowed to register, and no extra time will be allowed. After “Time Bar” the student will get certificate and not degree. The award will be given as per single Major-i.e. Gold and Silver medals will be decided only on the basis of single Major.

Full Course Load
Full course load is determined as given in respective course catalogue.
GENERAL ACADEMIC RULES

Over Load
More than the required load of credit hours.

Pre-Requisite
A course that a student must complete before being admitted to another.

Probation
A period during which students must maintain a specified academic standing. Failure to do so can result in having to discontinue studies.

Program
A prescribed syllabus of study leading to a degree, certificate, or academic credential.

Semester
Either of the two main periods of instructions into which the academic year is usually divided. The Fall semester begins in September and ends in January, while the Spring semester begins in February and ends in June.

Transcript
An official copy of student’s academic record produced by the examination department.

Course Registration
Students are required to register for courses for each semester. Course registration of the fresh students is done automatically by the respective department. For subsequent semesters, the students have to go through registration process one week prior to commencement of the Semester.

Class Attendance
One credit of theory is equivalent to one contact hour and one credit hour of practical/lab is equivalent to two contact hours. It is mandatory for every student to attend at least 75% of the contact hours, failing which he/she will not be allowed to attempt the final examination.

Schedule Adjustments
The University reserves the right to cancel any course due to less enrollment or non-availability of faculty. The University reserves the right to form new sections and adjust/transfer students to other sections at any stage of the course.
**Grading System**

Bahria University uses the following grading system to evaluate student performance. Total marks obtained in a single course will be rounded to nearest whole number.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Grade Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>87-100</td>
<td>4.00</td>
</tr>
<tr>
<td>B+</td>
<td>80-86</td>
<td>3.50</td>
</tr>
<tr>
<td>B</td>
<td>72-79</td>
<td>3.00</td>
</tr>
<tr>
<td>C+</td>
<td>66-71</td>
<td>2.50</td>
</tr>
<tr>
<td>C</td>
<td>60-65</td>
<td>2.00</td>
</tr>
<tr>
<td>D</td>
<td>50-59</td>
<td>1.50</td>
</tr>
<tr>
<td>F</td>
<td>Below 50</td>
<td>0.00</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Incomplete Course Work</td>
<td></td>
</tr>
</tbody>
</table>

A  An outstanding performance  
B+  Very good performance  
B  Above average performance  
C+  A generally satisfactory and intellectually adequate performance  
C  Barely Acceptable performance  
D  Poor performance  
F  An unacceptable performance  
I  Incomplete Course Work
Minimum CGPA for the Award of Degree
At Bahria University for undergraduate degree program the minimum CGPA is 2.0/4.0 to qualify for the award of degree. For Masters Degree program minimum CGPA is 2.5/4.0 to qualify for the award of degree.

For 4 years undergraduate programs
A maximum of threeprobations and one chance shall be allowed during the entire program. In case the CGPA of a student falls below 1.5/4.0 or the student fails to improve CGPA to 2.0/4.0 or above, after availing threeprobations and one chance, the student shall be dismissed from the program.

For 2 years graduate programs
A maximum of two probations and one chance shall be allowed during the entire program. In case the CGPA of a student falls below 1.5/4.0 or the student fails to improve CGPA to 2.0/4.0 or above, after availing two probations and one chance, the student shall be dismissed from the program.

For 1½ years graduate programs
A maximum of one probation and one chance shall be allowed during the entire program. In case the CGPA of a student falls below 1.5/4.0 or the student fails to improve CGPA to 2.0/4.0 or above, after availing one probation and one chance, the student shall be dismissed from the program.

Honors
Students achieving high academic standards are awarded Honors upon completion of their degree requirements. Honors designations are indicated on the transcript. Medals and Merit Certificates are awarded to the students at the convocation ceremony.

<table>
<thead>
<tr>
<th>Honors</th>
<th>CGPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summa Cum Laude</td>
<td>3.95-4.00</td>
</tr>
<tr>
<td>Magna Cum Laude</td>
<td>3.80-3.94</td>
</tr>
<tr>
<td>Cum Laude</td>
<td>3.60-3.79</td>
</tr>
</tbody>
</table>

Rector’s Honours List
In every semester, the students achieving a CGPA of 3.5 or more will be mentioned in the Rector’s Honours List. The Honours List will be displayed on the University website and the Campus notice boards.

Graduation Time Frame and Degree Requirement
The Duration of a degree programme will commence from the first day of the commencement of first semester classes. Students completing all the requirement as per road map for the award of degree in their respective disciplines will be awarded the degree. Maximum time limit for degree completion is 1.5 times the regular programme duration as per table given below:

<table>
<thead>
<tr>
<th>Programme Duration (Years)</th>
<th>Maximum Duration (Years)</th>
<th>Programme Duration (Years)</th>
<th>Maximum Duration (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>2.25 (27 months)</td>
<td>3.5</td>
<td>5.25 (63 months)</td>
</tr>
<tr>
<td>2.0</td>
<td>3.0 (36 months)</td>
<td>4.0</td>
<td>6.0 (72 months)</td>
</tr>
<tr>
<td>2.5</td>
<td>3.75 (45 months)</td>
<td>4.5</td>
<td>6.75 (81 months)</td>
</tr>
<tr>
<td>3.5</td>
<td>4.5 (54 months)</td>
<td>5.0</td>
<td>7.5 (90 months)</td>
</tr>
</tbody>
</table>
The aforementioned maximum time-limits for a particular degree programme shall include all cases of semester freezing, dropping, rustication, or any other unavoidable contingencies. Any further relaxation beyond the above mentioned time limits shall be referred to the Rector for approval in exceptional cases only. However, no student, exceeding the above mentioned time limits will have any legal claim for further extension or award of degree. The name of the students shall be struck off the roll of BU on completion of the maximum permissible time duration of their respective degree programmes.

**Freezing of Semester**

Students are allowed to freeze their semester due to illness or circumstances beyond their control by giving a written application on prescribed form. Conditions are as follows:

- Student can apply for semester freeze till three weeks before commencement of the final examinations, refund/non-refund of tuition fee shall be governed as follows:
  - Freeze applied for before commencement of semester, tuition fee need not be deposited.
  - Freeze applied for after commencement of semester till three weeks before commencement of final exams, No refund/No adjustment.

- Students can freeze more than one.semesters, either consecutively or staggered, while remaining within the overall degree duration (max 1.5 times the program duration).

- Students, who fail to register in any semester or leave the University without prior approval or without freezing the semesters as per laid down procedure, their admission status will be cancelled. However, such students can resume the same program subject to following conditions:
  - The student can complete his/her studies within permissible time bar limit, his/her original entry.
  - Approval of respective Director Campus.
  - Payment of re-admission fee admissible at the time of re-joining.
  - In all the above cases, time bar duration of the student will be governed through the rules and regulations applicable to the original entry. Their fee structure will be as per the revised rates as applicable to the students of the semester in which he/she is rejoining.
ENTRANCE TEST INSTRUCTIONS FOR CANDIDATES

1. Fill in your personal data very carefully and correctly i.e. application no., name, and program.
2. Write Application No. in four digits e.g. 0001 (Application No. 1).
3. For example if your name is Asif Khan, fill the circles as shown at next page.
4. Use 2B Pencil. DO NOT USE inks, ball points or flat tip pens.
5. Marking answers (on Test Sheet).
   - For every question in the question paper four choices of answers are given.
   - Please mark your choice by filling in the appropriate circle completely, making it a dark circle as shown below.

   ![Example of Circle Marking]

6. Some examples of improper making are shown below:

   ![Example of Improper Circle Marking]

7. The computer will mark improperly filled circles as wrong answers.
8. Do not mark more than a single circle for an answer choice. Multiple answers for a question will be regarded as incorrect.
9. If you need to erase your answer, do so clearly/cleanly using good quality eraser.
10. Do not bend or fold your answer sheet, do not make stray marks and do not mark any area outside provided circles.
11. Use your time efficiently and at a premium. Do not spend too much time on one question, you may run short of time for other questions. Perhaps you can return to your left over questions later on if you have any time left.
12. Write your Question Paper BOOKLET NO on the column given.
13. Do not write elsewhere. RETURN COMPLETE QUESTION BOOKLET AND ANSWER SHEET on completion of exam.
14. You are NOT ALLOWED to take away any part of QUESTION BOOKLET/QUESTION PAPER or note questions elsewhere. Non-compliance will be regarded as cheating, resulting in termination of exam.
15. You are NOT ALLOWED to carry any device which could assist in calculation e.g. Calculator, Tables, Watches, and Mobiles etc.
16. There is no negative marking.
### Sample Only

#### Bahria University (Answer Sheet)

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<table>
<thead>
<tr>
<th>Program: BBA 4 years</th>
<th>Program: Engineering</th>
<th>Program: MS</th>
<th>Program: BS (GEO-ENV)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subject</strong></td>
<td><strong>Questions</strong></td>
<td><strong>Subject</strong></td>
<td><strong>Questions</strong></td>
</tr>
<tr>
<td>Maths</td>
<td>01-40</td>
<td>Maths</td>
<td>01-40</td>
</tr>
<tr>
<td>English</td>
<td>41-100</td>
<td>Physics</td>
<td>41-50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maths</td>
<td>31-45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Verbal</td>
<td>01-30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English</td>
<td>51-100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analytical</td>
<td>46-100</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Subject</td>
<td>Questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physics</td>
<td>01-25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemistry</td>
<td>26-50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>English</td>
<td>51-75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bio (Pre-medical Group)</td>
<td>75-100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maths (Pre-Engg Group)</td>
<td>75-100</td>
</tr>
</tbody>
</table>

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*Subject to change*
QUESTIONNAIRE SAMPLE

Sample Question Paper for Entry Test

MBA

Time Allowed: 90 minutes

PART – I  (General Math)  Marks: 40

Select the correct answer to the following questions, and then mark your choice by filling the appropriate circle in your Answer Sheet.

1. For how many positive numbers 'a', is it true, that \( a \times a \times a = a + a + a \)?
   a. 0
   b. 1
   c. 2
   d. More than 3

2. The maximum value of \( 6 \sin x \cdot \cos x \) is
   a. \( \frac{1}{3} \)
   b. 1
   c. 3
   d. 6

PART – II  (English)  Marks: 60

Sentence Completion  Marks 25

1. The police feel that the ______ shown by the judges to first offenders unfortunately ______ many youngsters to embark on a life of crime.
   a. understanding......... condemns
   b. clemency ................. encourages
   c. harshness ................. predisposes
   d. intolerance ............... induces

Correct Answer

Q. No. 41  Correct Answer  a  b  c  d

Grammatical Structure  Marks 15

2. Being a realist, I could not accept his statement that supernatural beings had caused the disturbance.
   a. Being a realist,
   b. Since I am a realist
   c. Being that I am a realist,
   d. Being as I am a realist,

Correct Answer

Q. No. 42  Correct Answer  a  b  c  d

ANALOGY  Marks 15

3. Choose the option, which exhibits the same relationship as is there in the key words.
   Criterion : Judgement
   a. height : statue
   b. depth : bottom
   c. song : voice
   d. standard : selection

Correct Answer

Q. No. 43  Correct Answer  a  b  c  d

Comprehension  Marks 5

BAHRIA UNIVERSITY
QUESTIONNAIRE SAMPLE

Sample Question Paper for Entry Test
BBA

PATTERN: SAT - I

Total Marks: 100

PART - I
(General Math)

Marks: 50

Select the correct answer to the following questions, and then mark your choice by filling the appropriate circle in your Answer Sheet.

1. If \( a + b - c = d \), if \( a - b + c = e \), then \( a = \)
   a. \( (d + e) / 2 \)
   b. \( (d - e) / 2 \)
   c. \( 2d + e \)
   d. \( d + e \)

2. If \( 3y + 5 = 7x \), then \( 21y - 49x = \)
   a. \(-40\)
   b. \(-35\)
   c. \(-10\)
   d. \(0\)

Part - II
(English)

Marks: 50

Sentence Completion
Marks 25

1. He is much too ------- in his writings: he writes a page when a sentence should suffice.
   a. devious
   b. lucid
   c. pleasant
   d. verbose

Correct Answer
Q. No. 1
a  b  c  d

Grammatical Structure
Marks 10

2. October 15\(^{th}\) will mark the second anniversary of us coming to live in Allentown.
   a. of we arriving to live in Allentown
   b. of us coming to live in Allentown
   c. of our coming to live in Allentown
   d. of us living in Allentown

Correct Answer
Q. No. 2
a  b  c  d

Analogy
Marks 10

Choose the option which exhibits the same relationship as is there in the key words.

3. Words : Writers
a. honor : thief
b. mortar : bricklayer
c. child : teacher
d. batter : baker

Correct Answer
Q. No. 3
a  b  c  d

Comprehension
Marks 5
Sample Question Paper for Entry Test

BSE/BCE/BEE

Sample Question Paper for Entry Test

PATTERN: SAT - II (Maths & Phy)

SAT - I (English)

Total Marks: 100

PART – I (General Math) Marks: 40

Select the correct answer to the following questions, then mark your choice by filling the appropriate circle in your Answer Sheet.

1. How many sides does a polygon have if the measure of each interior angle is eight times the measure of each exterior angle?
   a. 8
   b. 9
   c. 10
   d. 18

   Correct Answers
   Q. No. 1
   a
   b
   c
   d

   Q. No. 2
   a
   b
   c
   d

2. The diagonals of a parallelogram:
   a. Divide each other
   b. Bisect each other
   c. Trisect each other
   d. None of these

   Correct Answers
   Q. No. 45
   a
   b
   c
   d

   Q. No. 48
   a
   b
   c
   d

PART – II (Physics) Marks: 10

1. The time period of an un-damped spring oscillator that is attached with a mass of 250g and the spring constant K = 85N/m is nearly equal to:
   a. 4.3 sec
   b. 0.43 sec
   c. 3.4 sec
   d. 0.34 sec

   Correct Answer
   Q. No. 45
   a
   b
   c
   d

2. Find out the velocity of a projectile at the top of the trajectory of motion when it is projected in the air from the ground with an initial velocity of 160m/sec making an angle 60° with the horizontal direction.
   a. 15m/Sec
   b. 25m/Sec
   c. 50m/Sec
   d. 68.8m/Sec

   Correct Answer
   Q. No. 48
   a
   b
   c
   d

PART – III (English) Marks: 50

Sentence Completion: Marks 20

1. Trade Unions were first organized in the early nineteenth century to represent workers in their struggle against .................. by employers.
   a. indoctrination
   b. injustice
   c. suppression
   d. exploitation

   Correct Answer
   Q. No. 51
   a
   b
   c
   d

ANALOGY Marks 13

1. In each of the following questions select the lettered pair that best expresses a relationship similar to that expressed in the original pair.

   Devotion : Obsession
   a. ability : skill
   b. confidence : conceit
   c. intelligence : capability
   d. surprise : horror

   Correct Answer
   Q. No. 71
   a
   b
   c
   d

Comprehension: Marks 7

Synonyms: Marks 10
Sample Question Paper for Entry Test

BS (Geology/Geophysics / Environmental Sciences)

Allowed Time: 90 minutes

General Math – Pre-Engineering Group Applicants only

Marks: 100

Select the correct answer to the following questions, then mark your choice by filling the appropriate circle in your Answer Sheet.

1. If \( 5(3x - 7) = 20 \), then what is \( 3x - 87 \) equal to?
   a. 4
   b. 3
   c. 2
   d. None

2. 9 is 1/3% of what number?
   a. 0.30
   b. 2700
   c. 3
   d. 300

Physics

Marks: 25

1. An object of mass \( m \) is lifted a vertical distance \( y \) and then carried a horizontal distance \( x \). The total work done (by the person doing the lifting) is:
   a. \( mg(y + x) \)
   b. \( mg \frac{y}{x} \)
   c. \( mg(x - y) \)
   d. \( mgy \)

2. The number \( 5.87 \times 10^5 \) is the same as
   a. 5870
   b. 58700
   c. 587000
   d. 5870000

English

Marks: 25

1. My father ________ me that I should have informed him.
   a. said
   b. told
   c. asked
   d. tell

2. There is no incentive for America to sign the treaty since there is every reason to ________ no other nation intends to honour its provisions.
   a. regret
   b. inform
   c. believe
   d. occupy

Chemistry

Marks: 25

1. In the periodic classification, the elements are arranged:
   a. As covalent and electrovalent
   b. As metals and non-metals
   c. According to their atomic weights
   d. According to their atomic numbers
EIGHTH
CONVOCATION
BAHRIA UNIVERSITY ISLAMABAD

The 8th convocation ceremony of Bahria University, Islamabad, was held at the Jinnah Convention Centre. Chief of the Naval Staff, Admiral Mohammad Asif Sandila was the chief guest on the occasion. He conferred degrees on 793 graduating students in various disciplines, including BBA, BSE, BCE, BS, MS, MSC and BA. Seventeen gold medals and 15 silver medals were also awarded to the outstanding students in recognition of their remarkable achievements in their respective academic programmes.

Felicitating the graduating students, Admiral Asif Sandila expressed his deep admiration for the strenuous hard work put in by them, to stand successful today, which has not only brought laurels for their university, but also pride for their parents. He appreciated the university’s role and efforts in seeking links and collaboration with foreign universities to bring about needed improvements in teaching and learning standards.

Vice Admiral (R) Muhammad Haroon, Rector Bahria University, in his speech gave a brief account of various measures, the university has taken for its expansion to include commencement of law classes, introduction of MS-MPhil and PhD programmes, establishing links with foreign universities of China, Turkey, Australia, up-gradation of computer labs, multi-media facilities for all classrooms, foreign study tours by students to allow them international exposure and award of merit and need-based scholarships.

The Rector felt satisfaction over awarding of the highest ‘W’ category to Bahria University by the HEC. The university, he stated, having attained desired standards, now eagerly awaits its inclusion in the prestigious list of QS World University Ranking.

MESSAGE BY THE DIRECTOR
I would like to welcome the students of the Spring 2012 session to Bahria University Islamabad. Through our degree programs, we are working to train the next generation of leaders to play a vital role in academia, private practice, government, and business organizations worldwide.

May you add to the true Bahrian spirit on campus.

Director Campus,
Bahria University Islamabad
H.E. ZAMIR AHMED KHAN VISITS BAHRIA

Bahria University (BU) arranged a special consultative session at its Islamabad campus, under the aegis of its International Relations Department. His Excellency, Zamir Ahmed Khan, Pakistan’s permanent representative in the UN mission in Geneva, Switzerland, on special invitation of the Rector addressed the young audience for more than ninety minutes, on highly specialized issues like disarmament, non-proliferation and security strategies. Opening his discourse, the seasoned career diplomat, traced back the tragic colossal destruction caused to human life and property in the Second World War, when Hiroshima and Nagasaki in Japan, were rained with atomic bombs. On disarmament he explained that nations who had no nuclear capability; or power of destruction, mainly pushed for its application and adoption. BU Rector, Vice Admiral (r) Muhammad Haroon while winding up the discussion, appreciated the guest speaker’s enlightened talk covering the entire gamut of the various subjects the ambassador had so proficiently covered. He advised the young audience to start a thinking process, by deeply studying each of the documents and papers, relating to the several important international treaties, to build up their minds on independent lines in finding solutions to worlds many problems.

MEDIA LAB INAUGURATED AT BAHRIA UNIVERSITY ISLAMABAD

The department of Humanities and Social Sciences held the inauguration of the Media Lab at the X-Campus on 3rd January. The curtains were raised from the plaque by the honorable Chief Guest Vice Admiral (r) Muhammad Haroon, Rector Bahria University. The programme for the inauguration took place in Lecture Theater II, New Campus, where the Media Committee received shields from the chief guest for its diligent efforts in construction of the media lab.

The Media Committee constituted Dr. Huma Haque, Head of Department Humanities and Social Sciences, Dr. Zafar Iqbal, Head of Media and Communication Studies department in Islamic International University and a visiting faculty in the H&SS department, Mr. Shafique Sultan, visiting faculty in H&SS department, Mr. Kaleem Ehsan and Mr. Shabbir Hussain, both permanent faculty for Media Studies in the department of H&SS. The Chief Guest also distributed certificates amongst students who successfully completed a two-month course in Documentary Making and News Anchoring and Reporting. Dr. Haque in her address to the audience thanked the honorable Rector Vice Admiral Muhammad Haroon for his futuristic vision and unstinting support in the process that translated her dream into reality. The H&SS department wished to provide its Media students a platform where they could practically apply their theoretical knowledge, doing camera work, working with sound boards and lights and learning the skills of radio communication and videography. All these wishes said Dr. Haque could now be materialized through the Media Lab.

Sharing the future goals with the audience the Head of Department Dr. Huma Haque said that the Media Lab will soon have its own radio service, weekly magazine and media products for media industry as decided in the Academic Council.
BAHRIA UNIVERSITY STUDENT WINS HEC ESSAY WRITING COMPETITION

Zahra Abidi, from the institute of Professional Psychology, Bahria University secured the first position in the Higher Education Commission (HEC) National Essay Writing Competitions for the regular university students in the 15 -25 age bracket.

The essay competitions were organized across the country in collaboration with the Centre for Civic Education Pakistan (CCEP) under the topic ‘What does federalism mean to me?’ An official of the CCEP said the competitions were aimed to promote writing, descriptive and creative skills with a futuristic approach among university students along with encouraging research and analysis on the important theme.

62 students from 35 public and private universities and postgraduate colleges participated in the competition. A panel of judges comprising senior faculty members from Quaid-e-Azam University, National University of Modern Languages and experts reviewed the essays.

BAHRIA UNIVERSITY WINS STUDENT RESEARCH PAPER CONTEST 2011

A student research paper contest was organized by the Annual Technical Conference in Serena Hotel Islamabad on the 22nd and 23rd of November, 2011. In the hotly contested competition which had representation from all leading universities of Pakistan, the first and third positions were bagged by two talented students from Bahria University’s Earth and Environmental Sciences Department, namely, Mr. Muhammad Usman and Mr. Ali Wahid.

INTRA-BAHRIA SOFTPRO COMPETITION ORGANIZED

ACM, the Association for Computing Machinery is the world’s largest educational and scientific computing society. The ACM Student Chapter at Bahria University has been recently re-initiated and as part of their activities, a 2-day event titled “Intra-Bahria Softpro Competition 2011” was organized on December 28th – 29th 2011. It was aimed at bolstering the creative and analytical skills of students from various engineering and management departments of Bahria University. The event was divided into two parts, spread over the two days. It contained a number of exciting and creative modules including; speed wiring, micro-controller programming, Windows Phone 7 app development competition, animation competition, poster design, quiz competition and scavenger hunt. The event concluded with an evening of entertainment marked by a concert by ‘The Rap Engineers’.

FINAL EXAMS - FALL SEMESTER

The Fall 2011 semester drew to a close as the students at Bahria University Islamabad finally underwent the dreaded final exams, which were scheduled from 9 -17 January. The air was heavy and the weather extremely cold as students dotted the campus in groups trying to memorize formulas and theories before rushing to their respective halls for the exams. The final results for the semester are slated to be released by the end of January.

FOR MORE NEWS AND UPDATES VISIT ‘WWW.SRCBUI.COM’
BAHRIA UNIVERSITY WINS HEC ZONE (C) BASKETBALL CHAMPIONSHIP

The Bahria University basketball team comfortably won the HEC Zone (C) Championship title for the third consecutive time, by defeating NUST by a margin of 44 – 24 points in the final game played on 23rd December 2011. The event was hosted at the NUST, H-12 Campus courts.

The Bahrian squad led by Taha Ashraf made quick work of the NUST team in the final to secure victory once again. Uzair Ahmed top-scored with 26 points and Ammad Raja also chipped in with 10 points. Earlier, Bahria University defeated Quaid-e-Azam University, while NUST overcame Air University in the semi-finals.

BAHRIA UNIVERSITY GYMNASIUM INAUGURATED

Bahria University, Islamabad Campus recently inaugurated its new custom-built multipurpose Gymnasium. Rector Bahria University, Vice-Admiral (r) Mohammad Haroon was the chief guest on the occasion and was accompanied by the university’s respective directors for the inauguration ceremony. The Rector later attended a volleyball game between the BU volleyball team and the University of Arid Agriculture, Rawalpindi and thoroughly enjoyed the game.

The gymnasium houses indoor sports facilities for Basketball, Volleyball, Badminton and Table Tennis as well as fitness centres for both male and female students and faculty members.

BAHIANS VICTORIOUS AT PRESTON FALL - FEST 2011

A contingent of athletes from Bahria University recently participated in the 2011 version of the annual Preston Fall-Fest. The Bahrian team participated in a variety of events including Table-tennis, Badminton and Football. The university’s athletes put up an inspiring performance as the table-tennis team effortlessly brushed aside Preston University 3 - 1 in the final match-up to clinch the event and the silverware. The football team also fared well in their event, but fell a step short of the goal as they were handed a 1 -3 defeat by Preston University in the final game.
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Board of Governors Meeting held on 16th May 2012

The 24th meeting of the Board of Governors of BU was held on 16th May, 2012, in the conference room at BUHQ. The meeting was chaired by Admiral Mohammad Asif Sandila NI(M), Chief of the Naval Staff/Pro-Chancellor/Chairman Board of Governors. The Board lauded the rapid growth of the university both in terms of facilities and the quality standards.

Bahria University signs MoU with Damghan University, Iran

BU enhanced the circle of its international academic collaboration by signing an MoU with the Damghan University, Iran. The MoU incorporates intention to collaborate in activities pertaining to students/faculty exchange, joint research, conferences, credit transfers, resource sharing, etc

Visit by delegation from ACU

A delegation from the Association of Commonwealth Universities (ACU) visited BU on 13th Jun 2012. The delegation comprised of Director of Professional Networks & Director External Engagement. BU has been the member of this network since 2008. The delegation met the Rector BU to discuss various ongoing projects of ACU. The Rector BU thanked the delegation for sparing time for the visit and invited any possible guidance from the ACU to help BU further improve its processes.

Yasar University delegation visits BU

A senior delegation from Yasar University (YU), Turkey, headed by Mrs. Pat Turk Menoglu, Director International Office, visited BU on 2nd March 2012. Both BU and YU signed an MoU for academic collaboration in year 2011. This visit was the first by any staff member from YU. As a result of MoU, first group of BU students is already at yasar on exchange programme while the faculty members are about to follow.

Anti-plagiarism Workshop at BUKC

QA Directorate of BU organized a 1 day Workshop on Anti-Plagiarism Measures on 13 July 2012 at BU Karachi Campus, in collaboration with HEC. About 60 faculty members of BU, PAF KIET, ICMAP, Iqra University, Newport Institutes and PN School of Logistics & Management, attended and benefitted from the workshop.

The Institute of Bankers Pakistan (IBP) briefing session to Finance graduates of BU Islamabad Campus

A team from IBP visited the BU Islamabad Campus on 22nd Feb 2012 to brief MBA (finance) graduates on IBP's Superior Qualification (ISQ). ISQ is the only professional qualification offered for bankers in Pakistan.
MoU signing between Bahria University and TIE Islamabad Chapter

An MoU was signed between BU and TIE (The Indus Entrepreneurs). The MoU will help in bridging the gap between industry and academia as TIE will provide mentoring sessions, workshops along with other work opportunities to the Bahrian graduates.

Guest Lecture by Mr Yioryos from QMUL, UK

Mr. Yioryos Georgios Makendonis, senior lecturer from the Queen Mary University London (QMUL), UK, delivered a lecture to BBA and MBA students BU Islamabad Campus on 21st Feb 2012. The topic of the lecture was "Financial/Economic crisis and its repercussions on the Pakistani business, banking sector and government income". The lecture was well attended and went on into a prolonged QA session.

Guest lecture by Prof. Garvey, UK

Prof. Bob Garvey from York St. John University (YSJU), UK, delivered a lecture to the students of Management Sciences of BU Islamabad Campus, on 20th March 2012. The topic of the lecture was "Role of Personality in Organizations". The lecture was delivered online through video conferencing.

On-Campus recruitment interviews

* Amson Vaccines and Pharma held their recruitment interview session for the MBA Graduates in Human Resources, on 8th Feb 2012. Nine candidates appeared in the interview, out of which two were shortlisted for the final selection.

* Standard Chartered Bank, held their recruitment interviews for the Personal Financial Consultants and Floor Relationship Managers in the Northern region on 29th Feb 2012. Thirty five candidates appeared in the interviews.

* SNL Financial, a leading financial analysis company, conducted interviews for various positions. Thirty five graduates appeared in the interview, out of which 17 have been appointed as full time employees and 2 as internees.

* Ufone recruitment team visited BU on 31st May, 2012, to conduct the initial interviews for their Summer Internship Program 2012. Thirty five candidates appeared in the interviews out of which 19 were shortlisted by the company.
Shell TIDE Training Session
Shell Pakistan conducted its TIDE program at BU Islamabad to promote social enterprise development, bridge the gap between industry and academia and to equip the students with the skills essential to professional excellence and leadership. The session was jointly attended by 28 students from NUST, LUMS and BU Islamabad.

Capacity building training for ORIC personnel at universities by HEC
HEC, in collaboration with British Council and NUST, organized a “Capacity Building Training Program” for the Office of Research Innovation & Commercialization (ORIC) Personnel. The training was held at NUST, Islamabad from 23rd to 27th Jan 2012. Dr. Shabnam Bahar Malik, Director R&D / ORIC, attended this session on behalf of BU.

Career EXPO 2012  BU Islamabad Campus
BU Islamabad Campus had its Career Expo on 11th April 2012. Thirty companies participated in the expo and more than a thousand students benefited from this session.

Alumni Association elections
Second Alumni Association body of BU Islamabad Campus took oath. The body was elected after online elections in which the alumni of BU Islamabad Campus casted their votes. Voting lines remained open from 5th to 12th Jun 2012 at BU’s official website. Twenty three candidates contested against five positions. The results were as follows: President: Mr. Omair Mehmood; Vice-President: Mr. Rehan Farooq Haider; General Secretary: Mr. Nasir Abdullah; Events Manager: Mr. Waqar Sajid and Marketing Manager: Ms. Uzma Tahir. The results were announced at the Alumni dinner on 16th Jun, 2012, where the President shared his aims and agenda points for the next year with the gathering.

Alumni Dinner 2012
The BU Alumni Dinner 2012 was held on Saturday 16th Jun 2012 at the BU Islamabad Campus, attended by over a thousand alumni. The Rector BU, Vice Admiral (R) Shahid Iqbal HI(M), graced the occasion as the Chief Guest. Through this event the alumni were provided with a excellent opportunity through this event to network with one another. The event was marked as a grand reunion, where the former graduates reunited with their class fellows and Professors. Member Operations HEC, Dr. Nasir Ali Khan, also attended the event and appreciated BU’s efforts in engaging its alumni.

Prime Minister’s National ICT (R&D Fund) Scholarship Program
Six students of BU have been selected for Prime Minister's National ICT Scholarship Program (PMNICTSP). National ICT R&D Fund is offering scholarships to talented students from the rural/non-metropolitan areas of Pakistan, with the objective of developing human resource capacity in the fields of Information and Communication Technologies (ICT). It provides fully funded 4-years undergraduate degree scholarships in ICT related disciplines in the leading ICT universities of Pakistan.
IBM Career counseling session
IBM SpA Italia held a career counseling session for the students of the departments of Computer Sciences, EE and Graduate and Applied Sciences. The team briefed the students about the career opportunities at IBM and provided them guidance on selection of topics for the final year projects that can be helpful for both the industry and the students. More than a hundred students of BU Islamabad Campus, along with the faculty members and HODs, attended the two hour long session.

Bahria University Scholarships
During the Fiscal Year 2011-12, BU disbursed funds of amount 18.472 million for scholarships. Out of this amount Rs.11.98 million were disbursed to 795 students under the Financial Assistance scholarship head. Rs.6.078 million were awarded to 343 brilliant students on account of the Merit scholarship. Rs.0.417 million were awarded to 16 students under the Indigent scholarship head.

Harvard National Model UN Conference 2012
A delegation of sixteen students and one faculty member from BU attended the 58th Harvard National Model United Nations (HNMUN) Conference at Boston, USA, from 16th to 19th Feb 2012. The conference offered the students a unique opportunity to experience the challenges of international negotiations and diplomacy. Confronted with the task of representing Spain, students gained a thorough insight into the workings of the United Nations and resolution of important global issues.

Workshop on Library Information Sources
The R&D/ORIC office organized a workshop on the “Implications of Library Information Sources (LIS) in Research” on 19th Apr 2012. The resource person of the workshop was Mr. Sher Afzal, BU Library Officer. The aim of the workshop was to highlight the role of Library Information Sources in research.

ICRC donates books on International Humanitarian Law to BU’s Cornelius Law Library
A team of officials from International Committee of Red Cross (ICRC), Islamabad Office, visited Cornelius Law Library on June 6, 2012. Warmly welcomed by Prof. Ahmad Ali Khan, head of the Law department, and other faculty members, the officials presented books for the library donated by ICRC.

Students of BSS media attended a panel

Dr Huma at the panel discussion at HEC
The panel at HEC

HOD H&SS, POSRC and students of BSS from Humanities and Social Sciences department of Bahria University Islamabad attended a panel discussion at the Higher Education Commission with the wife of US Ambassador and Ms. Sharmin Obaid Chinoy on acid attacks and other violence against women.

Rector BU speaks on Maritime Piracy “Reasons, Dangers and Solutions”

Rector BU speaks to H&SS Faculty and Students
The department of Humanities and Social Sciences organized a Pro-Seminar on “Maritime Piracy: Reasons, Dangers and Solutions” on Friday 25th May 2012. Rector Bahria University, Vice Admiral Shahid Iqbal, was the keynote speaker.
"Siachen tragedy: Nature's wake up call for us"
Article in the Economic Affairs

An article on “Siachen Tragedy: Nature’s wake up call for us” by Assistant Professor Mr. Asif Javed faculty of Earth and Environment Science department at Bahria University, was published in the Economic Affairs.

Bahria University’s 3rd Open House 2012
The 3rd Bahria University Open House was held on 22nd May 2012 collectively organized by the Electrical Engineering (EE), Computer & Software Engineering (CSE), Graduate Studies & Applied Sciences (GS&AS) departments. The degree projects of around 200 students were displayed. The open house was inaugurated by the Pro-Rector. On-campus interviews and tests were also conducted by various companies. ICT funded around Rs 236,000 for five different projects of Bahria University Islamabad. The Chief Guest at conclusion of the exhibition was Mr. Yassar Sakh Butt, President Islamabad Chamber of Commerce & Industries. The Rector Bahria University, Vice Admiral Shahid Iqbal lauded the students on their efforts and later presented a shield to the chief guest. Top projects were honored at the ceremony.

On 2nd June, 2012, The department of Management Sciences (Graduate Studies) organized a musical evening, followed by dinner. Mr. Shahid Mehmood, CEO of Interactive Communications (Pvt) Ltd and also a prominent member of the business community was the Chief Guest on the occasion. The event proved to be an enormous success in providing the faculty members and the students with a much needed end of the term break.

Workshops on Faculty Development

The Rector BU with chief guest, giving shield to a winning team
Workshop was held from 18th to 29th Jun 2012. The Resource person of these workshops were Mr. Jahanzeb Ali Malghani, (Superintendent, Learning Innovation Division, HEC) and Dr. Hamid Rafiq Khattak, the CEO of MANTECH & ARC, who spoke on communication and interpersonal skills in a two day session.

**Workshop on End to End Solution**

A two day workshop on “End to End Solution for Telecom & Network” was held on 22 May 2012 at Bahria University Islamabad Campus. The faculty members and students from GS&AS attended the workshop.

**Guest Speaker Syed Ahsan Hussain**

Mr Fazal Wahab presenting shield to guest speaker in workshop on “Software Testing Automation”

**Anti-Plagiarism Committee**

An anti-plagiarism committee has been established at the BU Islamabad campus to look after the quality of research writing, in the light of plagiarism rules. The committee has been provided access to plagiarism software. Forty CDs have been distributed among the HODs of the campus. In this context Dr. Najam ul Islam attended the training on “Turnitin” plagiarism software at Bangkok.

**BAHRIA UNIVERSITY excels at LUMS Olympiad**

Bahria University attended LUMS Olympiad 2012. It was a proud moment for Bahrians when with just 22 participants, Bahria managed to grab the runners up trophy as opposed to the winners who had 150 participants. Even the host team of LUMS appreciated BU squad competitive spirit. Bahria University participated in 11 categories, out of which BU won in six prizes.
LUMS Synergies 2012

The fifth annual Synergies ’12 were hosted by the Global Management Club at LUMS. It was a three day event which was held from 13th to 15th April, 2012. Bahria stood 1st in the business simulation game competition and was 3rd in case study completion. The “Bahrians” winning team of business games (Abubakr Inayat, Hammad Hassan, Abdul Manan, M. Adil Ejaz and Muneed Ahmed) was awarded a trophy and cash prize of Rs. 30,000.

BU Media club organized a two-day Media Festival on 17th and 18th of April. The event also included a photography and short film competition. The first day of the event was inaugurated with a photography workshop, conducted by Pakistan’s number 1 photographer Azher Hafeez. On second day, a workshop on film making was conducted by Mr. Mudassir and was attended by 50 students. After the workshop, a prize distribution ceremony took place where winners of photography competition and short film competition received prizes from the Pro-Rector. The winning students were given a shield. The movie ‘Mission Impossible 2’ was also screened on the 2nd day.

BU Media Fest’ 12

Students attending photography workshop at BU-Media Fest

BUI wins All Pakistan Bilingual Declamation Contest

The 13th All Pakistan Bilingual Declamation Contest 2012, held at King Edward Medical University Lahore on 3rd May 2012, was won by English Debater Asad Munir of Bahria University after competing in the 34 renowned universities of the country. Asad Munir is also the President of Literary and Debates Club for the fall 2012 semester.
BizIgnition ’2012 by Bahria Business Club
Bahria Business Club (BBC), a student body of Management Sciences, Bahria University Islamabad held two days of competitions under BizIgnition’12 on May 25 and 26. The event organized with TiE (The Indus Entrepreneurs), as supporting partners comprised of four competitions; Biz-Plan (Business plan competition), Case Crack (Case study competition), Biz-Game (Brand re-launch campaign competition), Encyclomind (Business quiz competition) and presentations by corporate representatives and entrepreneurs. Some 45 teams from fifteen universities and professional institutes participated in the competition. The winning teams were awarded cash prizes of Rs. 15,000 each and runner-up Rs. 7500.

Faculty BBC with host team

Bahria University MUN Conference 2012
BU's first ever model united nation conference, BUMUN 2012 was held a befitting ceremony from 21st to 24th June. The four-day intense debate, discussions and social extravaganza.

Rector BU with Rector NUST at the opening ceremony BUMUN 2012

The conference included a General Assembly mock session and a Pakistan National Assembly session for the first time in any MUN in Pakistan. Teams from all over Pakistan attended this session. The closing ceremony included speeches by the Secretariat of the BUMUN 2012 and closing remarks by the Rector Bahria University followed by an enlightening speech by famous writer Mr. Chaudhry Ziauddin.

Rector BU and UNDP country head at BUMUN 2012

Committee Sessions

Gymnasium comes to Bahria University Islamabad
In collaboration with HEC, a new gymnasium has been constructed at the Islamabad campus. It is a multi-storey building. The gymnasium has a wide range of indoor games facilities: courts for basketball, volleyball and badminton, fitness rooms (male & female)
equipped with the latest machines and a cafeteria. Alumni of Bahria University are also allowed to use the gym facility. The H.E.C All-Pakistan Inter University Women Basketball Tournament was played at the Bahria University Gymnasium. It also hosted the semi-finals and finals of the 16th National Women Basketball Championship in April, 2012. The games were aired live on PTV Sports. Bahria University gymnasium was also the venue of a two-week training camp organized for the H.E.C women basketball team.

Bahria University wins Annual Sports Meet the EME College

Bahrians won 10 out of the 14 events to capture the overall fixture’s trophy of the Annual Sports Meet at the E&ME College of NUST. Bahria’s sportsmen clinched the title in seven of the nine events while it’s sportswomen won all the three events they participated in.

New Appointments at Bahria University Islamabad Campus

Mr. Fazal Wahab took charge as the Head of Department of Computer Sciences.

Dr. M Najam-ul-Islam took charge as the Head of Department of Electrical Engineering.

Commander (Retd) Frasat Ali joined as Deputy Director (Academics).

Bahrian students with the winning shield
Commander Imran Rafique joined as Deputy Director (Admin & Co-ordination)

Mr. Khalid Mumtaz appointed as Head of Department of Management Sciences (Undergraduate Studies)

Mr. Shaftab Ahmed appointed as Head of Department of Computer and Software Engineering

Bahria badminton team shines at Preston
Spring Splash 2012
The Badminton Championship at the Spring Splash 2012 organized by Preston University, Islamabad, was won by Bahria University Islamabad.

BASANT 2012: Bahria University Karachi Campus
To welcome the arrival of spring, Bahria University Karachi Campus organized Basant, which was heavily attended. It was a joint effort of various departments of the University. The University Campus was full of yellow clothes and kites.

Bahria Sports Week 2012. Bahria University, Karachi Campus
Bahria University, Karachi campus organizes Sports Week in every semester through the Student Resource Centre. Around 700 students from various departments participated in the event.
THE INSTITUTE OF PROFESSIONAL PSYCHOLOGY

* A visit to Dar-ul-Sukun for the students of BS 4th semester was organized by Ms. Gul-Zehra Abbas.

* Special Issues Awareness Camp for parents and children was organized by Ms. Midhat Khan and the students of BS at Karsaz Special School.

* Workshops on “Stress Management” were conducted by Dr. Zainab F. Zadeh, Ms. Sonia Mairaj Malik and Ms. Kiran Bashir Ahmad at PNS Dilawar and Bahria University Medical and Dental College.

* A workshop on “Anger Management” for the inpatients of PNS Shifa Hospital, and day care patients of Karwan e Hayat, Psychiatric Care and Rehabilitation Center was organized and conducted by PMD candidates of IPP.

* Ms. Sonia Mairaj and Ms. Sidra Nayyer, presented a paper titled “Influence of Classical Music on Working Memory and Processing Speed” at a conference held at the Institute of Business Management (IBM)

* Ms. Kiran Bashir Ahmad and Ms. Sunia Khalid, presented a paper titled “Application of Contingent Reinforcement Procedures on Disruptive Classroom Behavior” at the Social Intervention Conference held at the University of Karachi.

* A research paper, “Differences of Coping Responses between Genders” was published in the Pakistan Journal of Clinical Psychology, University of Karachi by Dr. Zainab Hussain Bhuuto and Ms. Sadia Imtiaz.

* A research paper, “The Emerging Status of Organizational Psychology in Pakistan” was published in the International Journal of Business and Social Science by Dr. Zainab F. Zadeh and Ms. Halima Ghani.

* A research paper, titled “Mental Health Issues of Women Prisoners” by Dr. Zainab F. Zadeh and Ms. Kiran Bashir Ahmad was published in the International Journal of Humanities & Social Sciences.

Student of BUI attends Benjamin Franklin Summer Program

Faran Ali student of Bachelor of Computer Engineering at Bahria University Islamabad was selected as one of the seven students from all over Pakistan for the Benjamin Franklin Summer Institute USA. The program was sponsored by U.S Department of State. It was a four-weeks program. The 40 Fellows were from India, Pakistan, Tajikistan, Turkmenistan, Uzbekistan and the United States. During the program, the participants enjoyed a supportive learning environment where experienced faculty, trainers and mentors facilitated them. The trainers used various methods such as role-plays and simulations, leadership and team building activities etc. The students were taken to field trips to museums, government and non-government agencies, cultural and historical sites in Washington D.C., Philadelphia and New York City. U.S Capitol, United Nations Headquarters, U.S Institute of Peace, U.S Department of State and many other Departments.
During which they were engaged in meetings and dialogues with local officials. On the following subjects:

* Culture, Conflict and Cooperation
* Democracy and Governance
* International Relations and Diplomacy
* Sustainable Development
* Mass Communications and Media

Cover Story
Celebrating BAHRIA
(All Rouders at BUI)

Sana Mahmud
(Department of Social Sciences)

Sana Mahmud is a brilliant and multi-talented student in the BSS program at BUI. With a smiling exterior and a dogged determination, Sana is a gifted sportswoman, having served as captain of the Pakistan National Women football team. Sana was picked to lead the YRS Football club team to Washington D.C in 2009 to attend the Sports Envoy Program as a guest of the U.S Department of State's Bureau of Educational and Cultural affairs. An active member of the Bahria University Music Club, having performed at various gigs, Sana has also served as a Junior Editor for the BU Newsletter. Sana is a pioneer, founder and captain of the BU Women's Basketball Team, having led them to countless victories. Apart from her outstanding extracurricular aspects, Sana is also blessed intellectually; she is a perpetual feature on the Rector's Honor Roll and a constant recipient of a Merit Scholarship.

“Looking back, I think, everything happens for a reason. Today I can think of number of reasons why coming to Bahria was a good choice. Bahria has allowed me to avail certain opportunities that I won’t think I would have been able to get if I were studying in another institution” (Sana Mahmud)

Hammad Dar
(Department of Computer Sciences, 2008)

Hammad is an excellent blogger and has been very enthusiastic about digital media. He has created and is managing various blogs with a cumulative readership of over a million each day. Some of his blogs have also been awarded in the Pakistan Blog Awards. As for academic achievements, he has attained the top position in his batch of Computer Science students at Bahria.

“Bahria has been a fun learning experience. Every university prepares engineers and managers each year, but at Bahria you will also get to know your creative side. It’s high time Bahria starts pitching its marketing edge, ‘the non-academics’ in this university, as the reason for a lot of success stories.” (Hammad Dar)

Talha Dar
(Department of Management Sciences, 2009)

Talha Dar is an all-around sportsman at Bahria University. He has led the Bahria University Sports contingent to victory in various home and away fixtures. Talha being highly talented also participated in an International under 18 tennis tournament and won all Pakistan Inter Boards Tennis Championship. He is also winner of all Pakistan HEC Inter University Tennis Championship and has represented Islamabad at the 31st National Games.

“The best thing I like about Bahria is that, unlike most of the other Universities in the twin cities, its students are encouraged to participate in sports. They polish your skills, groom your personality and give you confidence, thus refining your skills” (Talha Dar)
Durreeshewar  
(Department of Earth and Environment Sciences, 2008)

Durreshawar Mahmood, a Bahrian with a CGPA of 3.92, has been part of the Rector's Honor Roll since her first semester. Selected for 'Global-UGRAD Pakistan' program in 2011, she represented Pakistan as a cultural ambassador in the USA. Durreshewar received a 100% scholarship by the US-State Department, under which she studied for a semester at the State University of New York (SUNY). Her research papers were published twice in the local and university newspapers during her stay in the US. Currently she is leading a project called E-village Pakistan which is aimed at educating children of rural Pakistan through the use of electronic media with the State-Alumni Network Punjab.

“Bahrain has polished my skills and has given me the courage to be myself. It has given me an identity where I could compete on any front.” (Durresshawar)

Umar Tariq  
(Department of Management Sciences, 2006)

Umar Tariq, a.k.a. U.T, is a already accomplished film maker and source of pride for Bahria University. He has received two international awards, including a gold medal from the Italian Senate for documentary and short film competitions in which 200 countries participated. Umar Tariq is the co-founder of Mindworks Media which is a production company behind Pakistan's most anticipated feature film "Waar". U.T has had his animated short film called “Machinima” voted on by gamers and termed the best, and has produced a documentary for Pakistan’s first international conference, he also represented Pakistan at the Donor’s Conference in Japan in 2009.

“Bahria University is a great platform to self-discovery, their academic, non-academic program and student support is the best in the country.” (Umar Tariq)

Tahir Naeem  
(Department of Earth and Environmental Sciences, 2011)

Tahir Naeem, lead vocalist of 'Slate' band, was the winner of a competition arranged by MTV Pakistan called 'Sangeet Icon'. His powerful vocals enthralled the judges as Tahir secured the national title of ‘Sangeet Icon’. Tahir is also President of Bahria University’s thriving Music club. He has completed his MS in Geophysics.

“Music and Bahria go a long way. It is the only university that encourages student talents and provides them opportunities that no other institution in Pakistan does. Bahria is where I and so many more began their musical journey.” (Tahir Naeem)

MahamAli  
(Department of Humanities and Social Sciences, 2008)

Maham Ali, a seventh semester student of BSS, has been actively engaged in community service for the last seven years. One of her outstanding achievements is garnering the support of Pakistani philanthropists and raising funds for the benefit of the less privileged.

Maham is also one of the founding members of Shajar-e-Ilm (Tree of Knowledge), a group of young students who came together to provide emotional relief to the female students affected in Swat.

“ The Social Science department of Bahria university encourages students to enhance their critical thinking skills, something that is very important in learning.” (Maham Ali)
Saad Hamid  
(Department of Computer Sciences, 2006)

Saad Hamid, digital media professional, trainer and 'Best Technology Blogger' award winner by BlogAwards.pk along with vast expertise in new media and online business development, blogging, social media analysis/reporting and social events management. Currently he is working with a telecom company at a position specially created for him and has also been mentioned in the list of 140 most influential people in new media from Pakistan, by Express Tribune.

"Bahria University is a place where I discovered myself and found opportunities stood up experimented and helped others in discovering the power of open dialogue. It was and will always be my first knowledge home." (Saad Hamid)

Kashif Majeed  
(Department of Management Sciences)

Kashif Majeed is a polished DJ at Radio Pakistan who has been engaged in entertaining through radio shows for the last 8 years. He is a talented athlete who plays badminton, cricket and hockey at the professional level. He is the first president of the new BUI sports club. Kashif is also the proud recipient of an award and a Certificate of Honor for the President of Pakistan International Badminton tournament held in Islamabad. Kashif is an international caliber badminton player, having served as a member of the Pakistan badminton team for the World Universities Games 2007 held in Bangkok, Thailand. In addition to his international exploits, Kashif is a back to back champion of the Inter-District Badminton Tournaments held in Islamabad / Rawalpindi (Margalla festivals organized by CDA).

Arsalan Mehmoon  
(Department of Graduate Studies & Applied Sciences, 2009)

Arsalan Mahmood a.k.a. DEXTER is a talented director, cinematographer, editor and writer with sizable awards under his belt. Arslan's career began when he joined the BU media club. He stumbled upon his natural gift of movie direction after participating and winning various film making competitions and his team was the runner-up at the NUST (2010) speed filming contest, 1st at the EME (2011) speed filming competition, 1st at the LUMS Olympiad (2012) speed filming contest and also won the LUMS Olympiad (2012) music video contest. He is self-employed and the founder of UHI Productions, having recently directed a music video title 'Za pukhtoon yam'.

"For me Bahria is home because this is one place I know the doors on creativity, talent and out of the box thinking will never be closed" (Arslan Mehmoon)

Naseer Afzal Afridi  
(Department of Humanities and Social Sciences, 2010)

Naseer Afridi, a student of BSS fourth semester, is a remarkable Musician (Vocalist, lyricist and composser at 'Naseer & Shahab'), a notable actor (freelance) and ex-president of the Bahria University Music society. His track 'Za pukhtoon yam' was the Pashto Rock in Pakistan.

"Bahria University has taught me never to look back on your life and always work ahead for the dream that you have. It has taught me to value yourself and your ambitions no matter how many brutal odds you are facing in your life." (Naseer Afridi)
Kashif Ali
(Department of Social Sciences, 2010)

Kashif Ali is an International Relations major. He is a gifted sportsman, an able film maker and a brilliant student. He has played under-19 and departmental cricket at the national level. Kashif is a gifted photographer and a documentary maker.

"Beyond books and classrooms, my enthralling journey with Bahria has been one of self-discovery. At Bahria University you are not part of an institution, you are part of experience not to be missed." (Kashif Ali)

Uzair Ahmed
(Department of Management Sciences, 2008)

Uzair’s a.k.a JERRY leadership qualities and an inherent drive to be the best at whatever he does has led the Bahria University Basketball Team to three consecutive HEC Zone C Championships. Besides an active sports career, Uzair has been the Chief graphic designer of the University for University Newsletter from issue 6 to 9.

"Bahria University is a hotbed for multifaceted individuals. It provides students with avenues to grow and expand their horizons, with its variety of co-circular opportunities. Bahria University allowed me to establish an identity and pursue my dreams." (Uzair Ahmed)

BUMDC Second Scientific Symposium 2012

Bahria University Medical & Dental College, Karachi organized 2nd scientific symposium on 11-12th May, 2012. The theme of the symposium was “Research Oriented Education & Training”. Two plenary lectures were also arranged in the inauguration session and those were delivered by renowned educationists and researchers, Prof Dr Waseem Jafri, Aga Khan University, Karachi and Prof Dr Huma Qureshi, Executive Director Pakistan Medical Research Council, Islamabad.

A Poster Presentation Competition was held in the later half of the day amongst various Medical Colleges and Universities. The organization of this symposium reflects the direction of the college to promote research activities among faculty as well as students.

A National Level Contest on Concept Map Construction organized at BUMDC

A Concept Map Competition among students of all Medical colleges of Pakistan was organized by the Department of Biochemistry, Bahria University Medical and Dental College Karachi, and prize distribution ceremony was held in January 2012.

At the prize distribution ceremony, Prof. Dr Syed Tipu Sultan, Principal, Bahria Medical and Dental College, while addressing the audience highlighted the importance of construction of concept maps. He said Concept maps are a way to develop logical thinking and study skills. He also affirmed that it provides a virtual space where learners may explore what they know and express it through relationships among various processes. He appreciated the efforts of Prof Dr
Mukhtiar Baig, the head of the Biochemistry Department, for organizing such a competition at the national level.

**Bahria remembers you**

Kashif Tassaduq Cheema an MBA from Bahria, was one of the most talented sportsmen. He was an outstanding Hockey player; he played for Islamabad at the national level, he met with a fatal accident when on rout to Gujrat to meet his in-laws with his family. Though Kashif has left us, his spirit and achievements will always be remembered.

**Hamza Rathore**, A graduate of Bahria University Islamabad, in Spring 2012, Hamza passed away in a tragic car accident in Saudi Arabia on 22nd of August 2012. His sudden demise had a sad impact on his family and friends. He was a very talented and creative person. He was the President of Media Club. He will be remembered for his friendship, kindness and his creativity.

**Students' of BUMDC stood first & second in Oral Paper Presentation Competition at LNH Symposium**

Faisal Hashmi and Saba Dawood, students’ of fourth year MBBS participated in 7th Liaquat National Hospital and Medical College Symposium on 24th February 2012. They secured first and second position in students’ research paper presentation competition. In this event, students of many medical colleges participated like AKU, DUHS, SMC, LNMC etc. They completed their research work under the supervision of department of community medicine.
Rector’s Message

Welcome to Bahria University

Selecting a career path and where to launch it from are two crucial decisions that you have to make at this stage of your life. At Bahria University, it is our endeavors to help you make these decisions, with conviction and correctness.

Bahria is a multi-discipline, state-of-the-art university which has made remarkable progress in all fields over a short period of time. Our graduates have competed with the best and have shown their mettle in all fields, both in Pakistan and abroad. It is my vision to make Bahria one of the best educational institution for higher education in the country. Our faculty leaves no stone unturned to give you the best in education, leadership and discipline, at the same time fostering an interactive learning environment that will channel your minds towards creativity and originality.

Vice Admiral (R) Shahid Iqbal HI(M)
Rector Bahria University
Bahria Explores New Areas of Collaboration with Partner Universities in UK

A senior level delegation of Bahria University headed by the Rector, Vice Admiral (R) Shahid Iqbal, visited Bahria University's partner educational institutes in UK with the objective of exploring new areas of collaboration including split PhD, students exchange, external thesis evaluation of BU PhD students, assistance in the initiation of new postgraduate level programmes in the field of Management Sciences, joint conferences, etc. The Universities, which were visited, included University of Greenwich (London), University of Bedfordshire (Luton), University of Leicester (Leicester) and York St. John University (York). The universities were very forthcoming to the new proposed areas of collaboration and agreed in principle with intentions to work out detailed modalities in light of academic and financial interests of each institute. At University of Leicester, a letter of intention was signed between the Rector Bahria University and the Vice Chancellor, University of Leicester.

11th Meeting of Higher Education & Research Committee (HERC)

The Office of R&D/ORIC successfully conducted the 11th Meeting of Higher Education Research Committee (HERC) on 24th October, 2012 at Bahria University Headquarters Islamabad. The Honorable Rector (BU) and Chairperson HERC, V/Admiral Shahid Iqbal HI (M) (Rtd) chaired the meeting. Director R&D/ORIC and Secretary HERC, Dr. Shabnam Bahar convened the meeting. HERC members from both campuses of Bahria University and IPP attended the meeting and gave their views on different agenda items regarding the promotion of research and development activities at Bahria University.

Visit by Prof. Douglas Tallack at Bahria University

Professor Douglas Tallack, Pro-Vice Chancellor of University of Leicester, UK, visited Bahria University on 15 November 2012. During his visit he delivered a guest lecture on the topic of 'Internationalization of Higher Education' through e-learning and off-campus tutorials, partnerships, distance learning and branch campuses to the Rector BU, Pro-Rector BU, Directors, HODs, Faculty and students of Bahria University. Prof. Tallack also met the senior management of the University to discuss new avenues of academic collaboration between Bahria University and University of Leicester including Split PhD, Students Exchange Program (Study abroad), short term trainings for BU staff and faculty.
Regulations Cell at Bahria University Headquarters Established

"Regulations Cell" has been set up at Bahria University Headquarters to update, harmonise and publish statutory documents of the university." All decisions of the statutory bodies, requiring incorporation in the statutory documents, shall be routed by the secretaries of the statutory bodies concerned to the Regulations Cell. During processing of these decisions, AD Regs shall be kept in the loop. Regulations Cell shall be the source of all changes to the Statutory Documents in future.

Annual Book Fair 2012 at Bahria University

Bahria University organized two days `Annual Book Fair` on 11 to 12 December, 2012 at university premises. The event was inaugurated by the Honorable Rector of Bahria University, Vice Admiral (R) Shahid Iqbal HI(M). This event was one of the biggest book fairs ever organized by the university with around fourteen renowned book vendors and publishers. The Book Fair covered a large variety of books including all major disciplines like Social Sciences, Media Studies, Computer Sciences, Management Sciences, Human Resources and Development Studies and received overwhelming response from the staff and students. Pro-Rector, Registrar, all Directors of Bahria University, were also present on this occasion.

Bahria University Awarded Scholarships

Bahria University awards scholarships from its own resources, to the Merit holders and Financial Assistance applicants. Scholarships awarded under Financial Assistance and Indigent category, to the existing 148 scholarship holders: PKR 2,223,584/-. Fresh Scholarships awarded:

<table>
<thead>
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<th>Financial Assistance Rs.</th>
<th>Indigent Rs.</th>
<th>Merit (Top position holders) Rs.</th>
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Bahria University Signs MOU with SAFE (South Asian Federation of Exchanges)

Bahria University which has one of the best business studies program in the country offering BBA and MBA has recently signed an MOU with SAFE (South Asian Federation of Exchanges). SAFE has been jointly established by the Stock Exchanges of the member countries in the SAARC and in collaboration with the Lahore Stock Exchange (LSE). It has started a very important initiative of spreading financial literacy in the country and especially among the students.

The main focus of the Campus Outreach Program (COP) is the Financial Literacy Initiative (FLI). The second objective is that financial management needs to start from an early age otherwise it gets too late to plan for the later part of life therefore the particular emphasis on the university students. It is expected that the signing of the MOU which envisages various programs to be conducted by SAFE will help the students benefit from experience and knowledge of the professionals in the field.
Research Papers by Bahria University Islamabad Campus Faculty

Ms. Freeha Azmat is Senior Lecturer (C&SE) at Bahria University. Her focal research area is Wireless Communication Protocols/standards and Embedded Systems. Her five research papers were published in year 2012 in four different prestigious International Conferences which took place in Canada, Indonesia and Phuket (Thailand). She has been awarded Chancellor’s International Scholarship for her PhD in Engineering by University of Warwick (UK) and International Macquarie University Research Excellence Scholarship by Macquarie University in Sydney (Australia). She has chosen Warwick that is consistently ranked amongst the top ten in British university rankings and ranked 50th overall in the 2011 QS World University Rankings. She was considered as one of the finest PhD applicant among 1700 international PhD candidates for Chancellor’s International Scholarship at University of Warwick.

Dr. Muaz A. Niazi, Professor at the C&SE Department, Bahria University Islamabad, has been invited to serve as an Editor-in-Chief of the American publisher IGI Global for their new journal “International Journal of Privacy and Health Information Management”. In addition, he has also been accepted as an Editor-in-Chief of a new open access Journal “Complex Adaptive Systems Modeling” with Springer, which is considered by researchers as one of the top International academic publishers. He is currently a guest editor for a special issue for an impact factor journal Sage Simulation: Transactions in the area of “Agent-based Modeling of Complex Adaptive Communication Networks and Environments”. Recently Simio Corporation, USA has awarded a grant to Dr. Niazi for 50 licenses (each worth 12,000 USD) for their Simio Enterprise Simulation Software, which he hopes to use in his teaching and also for conducting research at Bahria.

Engr. Dr. M. Usman Akram is senior lecturer in department of Computer & Software Engineering, Bahria University Islamabad. He is currently pursuing his PhD from NUST and his PhD defense is expected till end of this year. He has more than 40 international research publications including 8 Journals and 4 book chapters. He was part of a team who worked on initial algorithms and proposal writing for massively fingerprint recognition system which got a funding of 14.94M from ICT R&D. Currently he is working on retinal image analysis and his proposal on telemedicine system for retinal diseases of 15M is currently under evaluation in ICT R&D.

Ms. Ayesha Yameen permanent faculty member (H & SS) recently presented her paper titled ‘Time as a theme in The Sound and The Fury’ in Technology, Science, Social Science and Humanities International Conference 2012, Malaysia.

Achievements / Activities

NEW APPOINTMENT

Ms. Mehwish Kamran has been appointed as a Public Relation Officer (PRO) at Bahria University Headquarters, Islamabad on 06 November, 2012.
National Accountability Bureau Seminar on International Anti-Corruption Day

A Seminar on the “Role of Media in Combating Corruption” was organized by National Accountability Bureau (NAB) at Bahria University Islamabad, on 05 December 2012. Brig (Retd) Mussadiq Abbasi, DG (Awareness & Prevention) NAB gave his opening remarks, Mr. Moid Pirzada (Director News PTV), Mr. Javed Jabbar, Dr. Yasmeen Ali (Professor Beaconhouse National university), Mr. Pervez Shaukat (President PFUJ), Justice (R) Raza Khan (Former Chief Justice Peshawar High Court), also shed light on media’s role in promoting awareness and fighting corruption.

The Chief Guest of the event was Senator, Mian Raza Rabbani, Chairman Parliamentary Committee on National Security. He distributed Merit Certificates to Best Investigation Officers and Best Prosecutors of Regional NAB (Punjab, Sindh, KPK, Balochistan and Rawalpindi). Chairman NAB Admiral (Retd) Fasih Bokhari presented shields to the Chief Guest, guest speakers and gave his closing remarks.

Business Idea Competition

On 29th November 2012, Bahria Business Club held a Business Idea Competition at Bahria University, Islamabad Campus. All departments took part in the competition and put forward their business ideas. The purpose of the event was to encourage students to participate in brainstorming sessions and present their inspirational ideas. Judges invited for the event were from Riphah University, Microsoft Pakistan and SNL Pakistan.

Bahria University Club

Bahria Business Club is a student body of Bahria University. It was established in 2010. In the beginning it was only for Management Sciences but now it works for the benefits of all departments. It provides a huge platform for the students to represent their skills in front of industrialists and professionals who help students to flourish their skills in the market as per requirement. Students of organizing body worked whole heartedly for the events. They screened the English feature film “Skyfall”, erected a registration desk in front of New Cafe and distributed event pamphlets.
Lipton Talent Hunt 2012

The Team from Unilever Pakistan visited Bahria University Islamabad Campus to give orientation session to students on the “Lipton Talent Hunt 2012” on 17 September 2012. A total of 35 students from Management Sciences Department attended the session and showed interest in participating in this challenging event which leads to employment opportunity for the graduates on successful completion of competition. Four (04) teams participated in the competition from BU ISB Campus.

Three Bahrians got Permanent Appointment at Telenor

Telenor Pakistan organized the Internee’s Graduation ceremony on 10 October 2012. Out of 62 graduate internees, six (06) were Bahrians who completed the summer internship at Telenor and three (03) graduates got permanent employment on the basis of their out-standing performance during the internship program. Pro-Rector Bahria University congratulated the graduates on this achievement.

“SHABASH PAKISTAN” at Bahria University

“Shabash Pakistan” a youth motivational event, organized by School Of Leadership in collaboration with Bahria University Islamabad was held on 07 December 2012 at Bahria University Islamabad. 'Shabash Pakistan' as a movement which aims to rekindle the “Pakistaniyat”, and a sense of ownership in the youth of Pakistan. It will help them strategize to create a positive image of Pakistan in the international arena. On this occasion, Mr. Umair Jaliawala (C.E.O, SOL), made impetus on Bahria University youth with believe for “Kiun kay acha hai Pakistan”. He motivated Bahria University students to develop a sense of pride in “Pakistaniyat” and compel them with this inspirational talk to realize their responsibility towards Pakistan. While talking to the audience, he encouraged students to launch Social Action Projects to create a positive image of Pakistan on social media and strengthening our youth with patriotism.

Movie Night

Bahria University Media Club organized Movie Night on the 11th November, 2012. Movie screened was “Dark Knight Rises” on popular demand. Over 500 Bahria University students attended the movie show.
Institute of Professional Psychology

Guest Speaker Session Organized by IPP

A Guest Speaker Session was arranged by Ms. Gul-E-Zehra Abbas, Assistant Professor, IPP and was conducted by Mr. Muhammad Zohaib Sheikh on “Something out of nothing: The Art of Creative Writing” on 18 September 2012. The purpose was to enlighten the students about various aspects of creativity and to make them explore various genres of writing.

World Mental Health Day

IPP organized “World Mental Health Day” on 03 October 2012 to create awareness about Psychology. Free camp related to career guidance was arranged. It was attended by the Staff, faculty members and the students from all the departments of BUKC.

IPP participated in THAAP Conference 2012

Ms. Kiran Bashir Ahmad, Senior Lecturer, IPP presented a paper on "Urban Residents' Life Satisfaction after Migration to a Metropolitan City: A Comparison of the Factors Influencing Life Satisfaction in Karachi and Delhi", on 09 to 12 November 2012 in the International THAAP (Trust for History Art and Architecture of Pakistan) conference 2012 in collaboration with HEC and the University of Gujrat on "Life in Small Towns".

Other Activities of IPP:

- A Guest Speaker Session was arranged by Ms. Sonia Mairaj, Senior Lecturer, IPP, and was conducted by Mr. Adnan Mairaj Malik, on “Training & Development” on 17 September 2012. The session would help the students in their final project of training in various organizations.

- A Guest Speaker Session was arranged by Ms. Kiran Bashir Ahmad, Senior Lecturer, IPP on “General Culture and Etiquettes" on 25 October 2012. The session was conducted by Ms. Yasmin Riaz Shiekh as part of the course requirement of “Issues in Cross Cultural Psychology”

- Ms. Gul-E-Zehra Abbas, Assistant Professor, IPP, was invited as a guest speaker at Pakistan Air force Karachi Institute of Economics and Technology (PAF KIET) to conduct a session on the “Importance of Oral communication Skills for HR Professionals” on 18 November 2012.

- Ms. Gul-E-Zehra Abbas also conducted an in-house workshop on "Customer Service" for Iberotel Miramar Al Aqah Beach Resort, Fujairah, UAE on 26 July 2012. She trained the participants from 11 different countries.
Earth and Environmental Sciences Khewra Salt Range Field Trip

The department of Earth and Environmental Sciences arranged a field trip to Salt Range, Tarbela and oil Industry in Islamabad. The group of 46 students of Geophysics lead by two faculty members Dr. Mubarik Ali (HoD, E&ES) and Lecturer M. Jahangir Khan. It was really wonderful, exciting and research oriented trip for the students. Geophysics students got a lucky chance to study the Geology of oldest rocks of the world.

World Oral Health Day Celebrated at Bahria University Medical & Dental College

The "World Oral Health Day" was celebrated on 12th September 2012 at Bahria University, Karachi campus. To mark this occasion, a free dental camp was organized at Bahria University Dental Hospital. It was also visited by DG Karachi Vice Admiral Khalid Amin HI(M) together with DG NCMPR Vice Admiral Retd. Asaf Humayun HI(M) who extended their congratulations to the dental faculty for their fruitful efforts. All dental faculty members actively participated in promoting oral health awareness program. This event was organized with the collaborative efforts of Shield Corporation and Dental News. Oral examination was followed by educational videos on tooth brushing techniques and the use of dental floss. A total of 187 patients underwent oral examination in the Dental OPD. They were also given gifts of tooth pastes & tooth brushes. Another interesting session of the event was the "Smile Contest". Certificates were distributed among the winners.

The prime objective of this day was to:
- Increase awareness of oral health and to emphasize its impact on general health.
- To diagnose oral and dental diseases.
- To discuss the management strategies of the diagnosed dental problem with the patients.

These objectives were achieved by the Bahria University Dental College faculty and they are heartily congratulated on their success.

Career Counseling (SRC Karachi Campus)

The Student Resource Centre has started offering individual professional career counseling services to students of Bahria University, Karachi Campus and Alumni. These services are personally conducted by Assistant Director, SRC; Mr. Raza Abbas a Career Specialist who is trained in Career Counseling from The University of Arizona, USA and has had the honor of consistently representing Pakistan at premier international career conferences. The following services are offered to students:
- Career Counseling
- Corporate Grooming
- CV Writing
- Mock Interviews
- Overseas Advice
- Job Advice

To schedule an appointment: Kindly email your name, degree you are pursuing to Mr. Raza Abbas: raza.abbas@bimcs.edu.pk
Freedom Wall Competition

Freedom Wall a new concept was initiated by Assistant Director- Student Resource Center. A plain panaflex wall was placed outside the main foyer building in which students, faculty and staff members expressed their positive ideas on the wall by suggesting ways to make Pakistan a better place to live. The event was executed by passionate MBA students club 'Studio We' of Bahria University, Karachi Campus.

“Freedom Wall Competition” winners were awarded with prizes on Monday, 26 November 2012. The winners included three students, one faculty member and one staff member. Director and Assistant Director-Student Affairs were presented with souvenirs for their cooperation during the event. Winners wrote the following statement on the wall.

Atif Awan: “Iraday jin kay phukhta hon, nazar jin ki khuda pe ho,talatum tez mojon se wo ghabraya nahi kartay”

Sarib bin Saeed: “Stop Talking. Start Doing”

Faculty Winner-Mr. Khalid Khawar: “If everyone keeps an eye on his/her shortcomings, then he will remain busy in his corrections and he will not find time to look for others shortcomings”.

Pakistan-Australia Match Screening

T-20 matches of Pakistan are always exciting for all Pakistani cricket lovers. When the cricket lovers of Bahria University, Karachi Campus were given a chance to express their love for cricket during the screening of Pakistan vs. Australia match on 02 October 2012, every cricket lover at Bahria showed up. The university auditorium was ringing with the cheers of the students for their team. The pictures from the event say it all.

Teacher's Day Declamation Contest

For all the efforts that teachers put in to make the lives of their students, world celebrates teacher’s day to pay regards to these mentors, these guides and these great people who contribute to every student's life, on October 05 every year. To show their love for the teachers at Bahria University, Karachi Campus, students, along with SRC, arranged for a declamation contest followed by a “Cake cutting ceremony” by the Director, Karachi Campus. Students were awarded trophies for the best English and Urdu speakers, whereas the teachers enjoyed not only the program but also the celebration in their honor.
Sports Week Opening Ceremony

Sports help not only in building personalities of students but also encourage teamwork. Sports are an integral part of Bahria University, Karachi Campus. Sports Week opened in Karachi Campus on Monday, 26 November 2012. 1500 students from all departments of the campus participated in the event in different sporting events like Basketball, Cricket, Volleyball, Soccer, Futsal and Badminton. The event was inaugurated by Director, Karachi Campus.

Your Superstar Pet

Relationships between men and pets have existed for ages. According to a French study, more than sixty percent of people interviewed, believed that presence of a pet at home favored communication between family members. Bahria University decided to celebrate this beautiful relationship between the students and their pets. Student Resource Centre, along with students of Bahria University Karachi Campus organized “Your Superstar Pet” on 16 December 2012. 72 pets were registered for the event and hundreds of audience attended the event. The event was judged by professionals from veterinary field and was graced by DG and Director Bahria University Karachi Campus.

All pet owners walked the “Red Carpet” with their pets from four main categories, Dogs, Cats, Birds and Reptiles. The event was followed by a “petrography” Competition. Winners of the events were awarded with shields, gift hampers and cash prizes.

Design the T-Shirt Competition

Faraz Saleem Qureshi, Bachelor of Business Administration (BBA) student of Bahria University, Karachi Campus won the 1st Prize of Rs. 20,000 in “Design the T-Shirt Competition”. Picture of BUKC building’s illustrated image was printed on T-Shirt. The competition was held online by Daraz.com.
Alumni Interview

We asked the following questions from BUKC alumni, who are currently successful in their field, they spoke their heart out.

Q1. What are you currently doing?
Q2. How do you think Bahria helped you achieve what you've today?
Q3. What makes you a proud Bahrian?
Q4. What do you miss the most about being in Bahria?
Q5. Any message for university or students?

Bushra Mehmood (Entrepreneur)

1) I am running my own business of footwear and care named as B, by Bushra. I design footwear and offer customization. My focus is on providing people with handwork, exclusivity and in modernizing our traditional footwear. You can see my work at www.facebook.com/bbybushra.

2) Well, I have done my Masters in marketing from Bahria. Experience at Bahria gave me confidence in myself that I can do something. There are different phases we face in the way up to doing Masters. I can say I learnt to speak, communicate, think broad and innovate during my journey in Bahria.

3) People usually call me B now. There are many fans who I meet at market place and they treat me like a designer. I love the fame and it makes me proud to take the name of Bahria when they question my qualification.

4) There is a lot I miss from Bahria. Learning at Bahria has been a fun thing. I miss my friends and the insane youth time everybody has at university level. But I miss my teachers a lot at times. I feel like going to my entrepreneur and other business related teachers and to give them credit for what I have today.

5) Just follow your passion. Be it an office job or running a business, you need to be somewhere, where you are open and happy. Because if you do not love the work you are doing you cannot be a healthy thinker. Love counts a lot. Even a profitable business can stroll down on creativity chart and become boring if you do not like the work you do. So just follow your passion and live your dreams.
Behzad Shami (Public Sector)

1) I am currently working with Civil Aviation Authority as an Air Traffic Controller. It is one of the most respected jobs in CAA but at the same time it’s a very demanding and challenging job, that requires a lot of concentration and dedication.

2) I have come a long way from Balochistan, where the facilities of life are not so easy to get. And then coming to Bahria, it gave me a lot. Especially in terms of confidence in myself and also in terms of opportunities. Getting such a job, and that totally on merit, was not very easy because of a very tough competition but I thank Allah every moment for what He has given me and Bahria has definitely contributed a lot to it.

3) I deal with a lot of people daily. They are from all parts of Pakistan and then there are a lot of foreigners I deal with. When I compare myself with others from different universities, I feel proud that Bahria has given me the maturity that is required for my job. I am the only one from my batch who has been recommended to give presentations about my specialization to my colleagues and subordinates and I really feel honored when everyone appreciates me and asks about my educational background and I mention Bahria’s name.

4) I miss hanging out with friends near the Vending Machine outside the foyer area. I also miss playing soccer for the university team and representing Bahria in different competitions.

5) Nothing in the world is easy to get, be it for any Bahrian or for anyone from any other university, but be determined because hard work never goes waste. And today when everyone is running after getting jobs in Multinationals, I would suggest everyone to consider the public sector because job security in today’s world is very important and public sector is definitely a very good option.

Syed Moiz (Studying in Australia)

1) I am currently doing masters in information technology with plans to pursue my career in data analytics. Also I have joined the second largest telecommunication company of Australia named Optus.

2) Studying from Bahria helped me explore my area of interest and polished my basic know how of the field I’m working in now. Bahria has contributed in providing me exposure and good career development plans.

3) The exposure and knowledge I have regarding different career paths and fields, the industries of different countries, I learnt in Bahria. The basic approach to career building in me, I feel, is very strong, Alhamdulillah. I don’t really feel proud, rather honored to be an ex-Bahrian.

4) I miss my friend circle a lot. Also the events we used to volunteer for, used to be great fun.

5) To girls, I would like to say that there are great opportunities and innovative things to do out there. So they should take a step forward and be independent in their own ways. To boys I would like to say, be prepared for the world outside. Competition is at its peak. Plan your careers smartly.
Workshop on Sustainable Management of Marine Fisheries

Managing fisheries for sustainable development is a multi-dimensional and multi-level activity. In this regard National Centre for Maritime Policy Research (NCMPR) joined fishing communities around the globe in the yearly observance of World Fisheries Day. A workshop on the topic of “Sustainable Management of Marine Fisheries” was conducted on 29th November 2012 at NCMPR, Bahria University Karachi Campus. Ms. Humaira Alwani MPA was the Chief Guest on the occasion.

Aim:

Aim of the workshop was to provide a platform for all stakeholders to highlight and analyse the issues and come up with recommendations for the formulation of strategy towards sustainable resource development and management of Marine Fisheries sector of Pakistan.

World Maritime Day at PNS Jauhar 19 October 2012

International Maritime Organization (IMO) celebrates the World Maritime Day every year. Theme for the year 2012 is “100 Years after Titanic; Safety of Life at Sea”. To highlight the importance of the day, Pakistan Navy decided to organize the World Maritime Day in Pakistan Navy Engineering College in Collaboration with National Centre for Maritime Policy Research (NCMPR) on 19 October 2012 at PNS JAUHAR auditorium.

The aim of the event was to highlight the significance of the day with respect to the safety of life at sea. Director General NCMPR, Vice Admiral Asaf Humayun HI(M) was the Chief Guest at the event. Naval Officers, PNEC students, faculty members and staff attended the lecture.

Director NCMPR Cdr M Bashir and Staff Officer (Research), Ms. Naghmana Zafar jointly delivered a presentation to apprise the young officers about safety culture onboard. With the background of the theme, topic of the lecture was “IMO – Hundred Years after Titanic”. The speakers highlighted the scientific advancement and development of regulatory framework / regimes since the incident of RMS Titanic till to date. The participants were briefed about the IMO’s work on issues of safety of life at sea. Director General NCMPR, shared his memories and experiences with audience about safety issues at sea. After the event, Commandant presented souvenirs to the speakers and also conveyed a vote of thanks for educating officers about the regulatory framework of IMO.
Tragic Ending of Bahrian Gem

Asif Gul, a student of 8th semester-Management Sciences department, closed his eyes forever on Saturday 01 December 2012. Asif had met a tragic road accident on his way home on Thursday 29 November 2012 and after spending his last two days in the ICU, he departed from this world. The news brought tears to everyone's eyes in Karachi Campus. On Friday, 07 December 2012, the whole campus gathered to offer "Fateha" and prayers for Asif and to show their love and support to his family.

Asif was a gentle and a humble young man with a very pleasant personality. Every classmate of his attended the Fateha prayer for him with a very heavy heart and as said by one of his classmates, he was that one person in their class who was always there to help all others. BU is also grateful for his efforts for the campus. Asif had designed many banners for major university events and was currently working on Karachi Campus's convocation backdrop. While the campus waited for his latest creation on paper, the bad news struck the campus. Everyone in Karachi Campus extends a loving hand to his family and will remember Asif in their prayers forever.

Editor's Note

For media professionals, communication is what it's all about — clear, concise and sometimes clever messaging is essential. Being part of Electronic Media I have been doing it for almost last eight years but presenting the same in the form of Bugle was a challenging task for me.

While working on this, I not only came across lot many interesting things about Bahria University but it has also proved to be an opportunity for me to explore my strength in print media.

I do hope you all find this edition of the Bugle as much fun and enriching as the previous ones. I invite all enthusiasts to be a part of the Bugle team. I also invite BU faculty to actively participate through suggestions and share your own insights. Finally, I would like to thank Honorable Rector for his valuable support and encouragement.

For suggestions and input feel free to email at gullmuniba@gmail.com, muniba.gull@bimcs.edu.pk.

Wishing all of you a bright and rewarding year ahead. Happy 2013.

Muniba Gull
RESEARCH PUBLICATIONS OF BAHRIA UNIVERSITY
2012

BAHRIA UNIVERSITY ISLAMABAD
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This Catalogue is prepared by the Office of Research & Development/ORIC with utmost care, based on the data received from the faculty members of all the departments of both the Campuses and Constituent Units of Bahria University till December 31, 2012.

If any faculty member has any concern, he/she may directly contact/inform the Office of Research & Development/ORIC, Bahria University Headquarters, Islamabad.

Contact:

Office of Research & Development/ORIC
Bahria University Headquarters
Shangrilla Road, E-8, Islamabad.

Tel: 051-9260002, Ext. 322, 051-9263419
Email: research.development@bahria.edu.pk
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Journal Publications:


Conference Paper:


DEPARTMENT OF QA

Conference Paper:

BAHRIA UNIVERSITY ISLAMABAD CAMPUS

DEPARTMENT OF MANAGEMENT SCIENCES

Journal Publications:


Conference Paper:

Books Published:


**DEPARTMENT OF COMPUTER & SOFTWARE ENGINEERING**

Journal Publications:


**Conference Papers:**


**Book Published:**

Book Chapter Published:


**DEPARTMENT OF COMPUTER SCIENCES**

Journal Publications:


**Conference Papers:**


Book Chapters Published:


DEPARTMENT OF EARTH & ENVIRONMENTAL SCIENCES

Journal Publications:


**Conference Papers:**


**Book Chapter Published:**


**DEPARTMENT OF ELECTRICAL ENGINEERING**

**Journal Publication:**

Conference Papers:


Book Published:


**DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES**

Journal Publications:


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Book Published:


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DEPARTMENT OF COMPUTER SCIENCES

Book Published:


DEPARTMENT OF EARTH & ENVIRONMENTAL SCIENCES

Journal Publication

INSTITUTE OF PROFESSIONAL PSYCHOLOGY (IPP), KARACHI

Journal Publications:


Conference Papers:


Newspaper Article:

NATIONAL CENTRE FOR MARITIME POLICY RESEARCH (NCMPR), KARACHI

Newspaper Articles:


Conference Paper:


Symposium Paper:

BAHRIA UNIVERSITY MEDICAL & DENTAL COLLEGE (BUM&DC),
KARACHI

Journal Publications:


**Conference Papers:**


**Books Published:**


**Newspaper Article:**


**Symposium Paper:**


**Poster Presentation:**

Huda, N., & Rubab, Z. (2012). Pakistan Medical Colleges: Responsive towards professional competencies for primary health care settings?. Poster in 1st Qatar Medical Education Confernce on Improving Quality of Care throgh Medi cal Education.
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### DEPARTMENT WISE OVERVIEW OF RESEARCH OUTPUT OF BAHRIA UNIVERSITY - 2012

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Office of Research & Development/ORIC  
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LIST OF ISI-INDEXED JOURNAL PUBLICATIONS - 2012


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OVERVIEW OF RESEARCH OUTPUT OF BAHRIA UNIVERSITY

OVERVIEW OF RESEARCH OUTPUT OF BAHRIA UNIVERSITY

TOTAL RESEARCH PAPERS ENTERED IN R&D DATABASE TILL DECEMBER, 2012: 1090

OVERVIEW OF RESEARCH OUTPUT OF BAHRIA UNIVERSITY IN 2012

TOTAL RESEARCH PAPERS BY THE FACULTY OF BAHRIA UNIVERSITY IN 2012: 181
RESEARCH PAPERS OF THE FACULTY OF BAHRIA UNIVERSITY

Total Research Papers of the Faculty of Bahria University and its Constituent Units for 2012

- BU HQs: 4
- Islamabad Campus: 92
- Karachi Campus: 36
- BUM&DC: 30
- IPP: 14
- NCMPR: 5

Journal Publications and Conference Papers of the Faculty of Bahria University and its Constituent Units for 2012

- BU HQs: 2 Journal Publications, 2 Conference Papers
- Islamabad Campus: 49 Journal Publications, 33 Conference Papers
- Karachi Campus: 15 Journal Publications, 16 Conference Papers
- BUM&DC: 6 Journal Publications, 7 Conference Papers
- IPP: 3 Journal Publications, 6 Conference Papers
- NCMPR: 0 Journal Publications, 1 Conference Paper
JOURNAL PUBLICATIONS AND CONFERENCE PAPERS OF THE FACULTY OF BAHRIA UNIVERSITY ISLAMABAD AND KARACHI CAMPUSES

![Graphs showing journal publications and conference papers per department for Islamabad and Karachi campuses for 2012.](image-url)
CONTACT DETAILS

OFFICE OF RESEARCH & DEVELOPMENT/ORIC
BAHRIA UNIVERSITY HEADQUARTERS
SHANGRILLA ROAD, E-8, ISLAMABAD – PAKISTAN
PH: +92-51-9260002, EXT. 322 EMAIL: RESEARCH.DEVELOPMENT@BAHRIA.EDU.PK
URL: WWW.RND.BAHRIA.EDU.PK
Bahria University
Islamabad Campus
www.bahria.edu.pk

OPEN HOUSE 2012

Department of Electrical Engineering
Department of Computer & Software Engineering
Department of Graduate Studies & Applied Sciences
Bahria University
Open House 2012
It gives me great pleasure to welcome all of you to the third Bahria University Open House. The Open house has projects from Electrical, computer and software engineering in addition to computer sciences and Electronics and Telecom Management.

The department of electrical engineering at Bahria aims to produce graduates for the telecom and electronics industry who have the skills and knowledge to meet tough industry challenges. Engineering being an applied field requires graduates who can apply their engineering knowledge to solve industry problems. Final year projects give an opportunity to the students to develop solutions to solve problems using the knowledge they have acquired over four years. It provides valuable experience in design and fabrication of electronics and telecom systems.

I hope that you will be happy to see the hard work of our students and appreciate the effort that they have put in their final year projects. The exhibition will also give you an idea of the skills and potential of our graduates. As an employer you will find our graduates knowledgeable, dedicated and highly motivated.
Final Year Project is an important part of student learning at the undergraduate level. It allows students to integrate various knowledge areas into one single application. It also challenges students to come up with something genuine and sparks the innovative thinking process. Students are challenged to bring up new ideas for their final year projects. Moreover, they also learn to work in teams and develop project management skills. I am sure, by taking these knowledge and skills with them, the students will contribute positively to the development and growth of the organization they will work for.

I thank the Bahria University’s management for their continuous support for the final year projects. I also thank project supervisors and the project coordinator for their continuous guidance to the students. They have pushed the students to get the best out of them. Without them, these projects cannot happen.

I congratulate students for completing their final year projects and wish them the best for future endeavors.
Welcome to the department of Graduate Studies & Applied Sciences, Bahria University Islamabad Campus. The department offers BS, MS and PhD degree programs in Computer Sciences, Software Engineering, Electronic Telecommunications and Management, and Telecommunications and Networking. The curriculum being taught in the department has been developed as per guidelines of Higher Education Commission (HEC) of Pakistan and as per need of the industry and society. We produce high quality graduates with balanced personality, able to contribute in an excellent way for the progress of this world and the mankind. We embed the learning objectives in the students through highly qualified faculty, well equipped laboratories and excellent learning environment. We believe that through a nice blend of course work and project work, students become able to apply the knowledge of the subjects which are taught to them in their roadmap. During the project work, students show their abilities by picking up the different bits of the knowledge and to combine them to a meaningful and useful output. We always try to arrange state of the art projects for the students that help them in getting job. To smooth line the processes and procedures of the student projects, a project coordinator has been appointed. This appointment has turned into fruitful results and credit goes to the project coordinator. I as Head of Department appreciate the efforts of the Project Coordinator and wish him all the best for Bahria University Open House 2012. I take this opportunity to congratulate all students who have completed their projects and have met the deadline given to them. I wish all the best to the students who are participating in Bahria University Open House 2012.
Project Coordinator Message

Mr. Junaid Imtiaz  
Project Coordinator  
Email: junaid@bahria.edu.pk

It gives me a great pleasure to welcome you all at the Bahria University Open House 2012 arranged by the departments namely Electrical Engineering(EE), Computer & Software Engineering(CSE), Graduate Studies & Applied Sciences(GS&AS). As the project coordinator, I am extremely thrilled in inviting you to the technological show-piece of the students of Bahria University.

The splendid and the state-of-the art ideas as reflected in the final year projects of the students is a testimony of Bahria University fast progress in the field of emerging sciences and technology. I personally like to appreciate the efforts of the final year students in completing their projects in the stipulated period of time. I would also like to give my special gratitude to the supervisors; it was due to their endless efforts and guidance which help the students to complete their final year projects on time.

Open House 2012 will not only provide an opportunity to the students to demonstrate their skills before the market professionals and academician but will also help in bridging the gap between the industry and academics.

I would like to request Market Professionals, Academicians and Parents to find time, out of their busy schedule to come and attend the Bahria University Open House 2012 which is certainly a source of great encouragement for our students.
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1. Bionic Prosthetic (Lower elbow) arm (using EMG)

EMG mechanism is essential for efficient recording and analyzing the muscles activity, so the issue is addressed by implementing it in the field of autonomous prosthetic limbs. EMG based robotic arm is constructed and EMG electrodes are continuously recording the signals. The project covers the designing and construction of mechanical structure together along with its allied electronic circuit. Servo motors are used in the design and construction of arm structure. The obtained result shows that the EMG signals are used to convert the MyoElectrical signals to mechanical energy and hence the desired objective of the project is achieved.

**Supervisor:** Mr. Haroon Rasheed  
Assistant Professor, Department of Electrical Engineering

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2. Monitoring and Controlling Of Forestorial and Agricultural Farms via GSM.

The system is comprised of a rectangular shaped experimented area, which is surrounded by a laser fence to control the security breach. The time, when the security is breached, a message is received on mobile and using Interactive Voice Response (IVR) various operations can be performed to cater and control this security breach. To make the experimented area more appropriate, water level monitoring is introduced for the regular supply of water. Humidity is also monitored to control the dryness in the fields that may also affect the yield. A solar energy based uninterrupted supply of power to the sensors is also provided, as, the area is considered to be a remote site where load shedding and other power failures are uncertain.

**Supervisor:** Mr. Imtiaz Ali Khan  
Assistant Professor, Department of Graduate Studies & Applied Sciences

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3. Dissemination of Hydrogen Energy in Mobile charging

Hydrogen fuelled electricity generation is an emerging option to encounter the contemporary requirement of electricity. European Union parliament has passed a law that the transport system has to be transformed on to hydrogen based fuel by 2030. Aimed at generation of electricity from hydrogen is a clean, high-efficiency, electro-chemical process with no combustion or emissions. The methodology for generation of hydrogen is Proton Exchange Membrane electrolyzer and solar panels used for the primary input voltage for electrolyzer. As a consequence input power requirement for the hydrogen fuel cell is based on renewable energies.

Supervisor: Mr. Imtiaz Ali Khan
Assistant Professor, Department of Graduate & Studies Applied Sciences

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4. Design, Fabrication & Control System of Wind Turbine

Our wind turbine has efficient design, it consists of blades, gear box, generator, anemometer, wind vane, yaw drive and control system (Microcontroller base). Wind blowing over the blades causes the blades to lift and rotate. Gear box is used to increase rotational speed from about 30 to 60 rpm to 1000 to 1800 rpm which is required to produce electricity. The generators are used to produce electricity and run at high rotational speed. A rotational anemometer with optical sensor is used to measure wind speed. Wind vane measure wind direction and communicate with the yaw drive to orient the turbine properly across wind direction to extract more energy from wind. The control system consists of microcontrollers that control the yaw drive, motor speed and its rotation according to the inputs of wind vane and anemometer.

Supervisor: Mr. Muneeb Yaqoob
Senior Lecturer, Department of Electrical Engineering

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5. Unlicensed Radio Station Monitoring System

The end product of this project is a device which scans and then identifies illegal FM radio stations broadcasting in the vicinity while pinpointing the direction of origination. Frequencies of unlicensed stations are identified and jammed. At the input RF receiver gathers the signals, identifies the radio frequency and converts it into digital form. This digital number is compared with a database of existing licensed stations and if not found displays the illegal station information on an LCD while initiating jamming.

**Supervisor:** Ms. Madeeha Basharat  
Assistant Professor, Department of Electrical Engineering

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6. Programmable Matter

The purpose is to design such a digitized material; a basic building block which can perform computation, sensing, actuation, orientation, communication and displaying graphics at ultra low power as continuous abilities over its whole content. Programmable matter have many exciting application, like prototyping, shape shifting robots even houses and buildings; if developed could change their shape without having to demolish the whole material. Composition of programmable matter is to include centimeter scale autonomous micro system particles, without internal moving parts bounded by magnetic field. This project is divided into two categories, the control system and the response system. The control system is a master computer that would tell the response system which task to perform depending upon the current state of the block. The project touches various important fields of engineering, providing a comprehensive design for the project’s realization.

**Supervisor:** Mr. Waqar Ahmed  
Senior Lecturer, Department of Computer & Software Engineering

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7. Design and Implementation of real-time Feasible Flyable Path planning for Uninhabited Aerial Vehicle (UAV)

The Uninhabited Aerial Vehicle (UAV) is used in the surveillance, Agricultural industry, military applications, Search and rescue, Pollution monitoring, pipeline monitoring & oil gas security. The effective path planning for UAV is design and implemented to achieve a collision free path. The goal is to achieved smooth flyable path which is done by implementing Bezier and clothoid curve techniques; lately a comparison has been made between the two techniques, which are done by using MATLAB.

**Supervisor:** Ms. Soyiba Jawed
Senior Lecturer, Department of Electrical Engineering

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8. 8-Bit 8051 Microcontroller Design using FPGA

The project is to design and implement 8-bit 8051 Microcontroller using FPGA. The design parameter includes ALU (Arithmetic Logic Unit), Memories, Instruction register (IR) and Program counter (PC) and control Finite State Machine (FSM). The controller is implemented onto a Xilinx Spartan 3 FPGA device. The goals of the projects are to reduce area, increase efficiency and speed. Seven segment displays (SSDs) are used to display the values of the registers. The entire design is written in Verilog HDL, which is a hardware description language and is synthesized using Xilinx ISE.

**Supervisor:** Mr. Mansoor Naseer
Assistant Professor, Department of Electrical Engineering

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9. Electricity Generation by using waste water

This project entitles to generate electricity from waste water. Electricity generation by using waste water is an idea emerged from the fact that hundreds of gallons of water wasted through our household appliances eg. toilets, sinks and showers on daily basis. The main objective of the project is to give new alternative renewable energy source for electric power generation. Various types of turbine-generator sets for different heads and flow rate have been considered and one with maximum efficiency has been adopted. The system works on basic principle of hydropower electricity generation in which turbine is rotated by water flow which causes the generator to produce electricity.

**Supervisor:** Mr. Junaid Imtiaz
Project Coordinator, Department of Electrical Engineering

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10. Comparison of performance analysis of modulation techniques for MIMO system

The basic purpose is to implement 2*2 MIMO on labview to analyze and compare the performance of modulation schemes and channels. The modulation schemes that would be employed for the comparison are DPSK (Differential phase shift keying), QPSK (Quadrature Phase Shift Keying), BPSK(Binary Phase Shift Keying), 16/64 QAM (Quadrature amplitude modulation). The communication channels that we will simulate are Rician Channel, Raleigh Channel, AWGN(Additive White Gaussian Noise).The goal is to simply check the results of the simulations which are carried out and interpret the results to after analyzing the schemes for various probability of error(ØB), Signal to Noise Ratio(SNR) and Bit Error Rate(BER).

**Supervisor:** Mr. Umair Sajid Hashmi
Senior Lecturer, Department of Electrical Engineering

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11. EEG Data Acquisition

EEG (Electroencephalography) is a technique to acquire the signals on the brain scalp. The project uses the same EEG Data Acquisition techniques to pass the set of signals from the brain scalp through the EMBEDDED SYSTEM to the computer in MATLAB. This Embedded System comprises of a Signal Conditioner, Amplifiers, Analog to digital Conversion and Serial Transmission. In the future scope of this project it will be able to help the disables (Who can’t speak) to generate some basic instructions that can create output at the speaker of what he want to speak.

**Supervisor:** Mr. Shaftab Ahmed  
Assistant Professor, Department of Computer & Software Engineering

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12. STEGANOGRAPHY

The intensification of applications used in World Wide Web has triggered the urge to increase the security of data communication over the unsecured internet. Steganography is one of best fit techniques to secure the open environment of internet. It is a technique of hiding information within every medium that can be expressed in digital form (images, video and audio). This project has implemented F5 algorithm using Matlab. F5 algorithm scatters the entire message throughout the carrier and use permutation to equalize the spread of embedded data. It is resistance to both visual and statistical attacks yet it still offers a large steganographic capacity.

**Supervisor:** Mr. Waqar Ahmed  
Senior Lecturer, Department of Computer & Software Engineering

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13. Electric Bicycle

Ambition of this project is to bestow the description of cognitive operation of planning, designing and testing an Electric bicycle that makes common people independent of expensive fuels, fuel shortage that have been a major concern for people of Pakistan in recent times and people are looking for other means of transport and will enhance their confidence to live a bit easier life. For this purpose a DC brushless motor is used which provides main power to electric bicycle. Battery provides 36 Volts to motor for its running operation. Motor’s back electromotive force is controlled through a circuit. Limiting switch is designed to control the excess current that may cause in burning of motor. Efficient charger is designed that is used to charge the battery within 2 hours and maintain the utmost level of efficiency for long period of time. PIC is responsible to control motor’s operation.

**Supervisor:**  Mr. Ahsan Sohail  
Assistant Professor, Department of Computer & Software Engineering

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14. Poor Man’s BMW (Electric Bicycle)

The objective is to design an electric bicycle beneficial for the common people by providing an efficient and cheaper mode of transportation. It covers a distance of 40 km on fully charged battery attaining maximum speed of 20km/h approximately. The charging time is four to six hours with two speed levels (low and high) operated by a 36 volt battery with a current capability of 10-20 ampere hours serving as major power source. A motor connected to the pedals of bicycle controls its speed while the speed of motor is controlled by using PIC microcontroller serving as the brain of entire project. This project is a cost effective solution to the problem of expensive transportation.

**Supervisor:**  Mr. Haroon Rashid  
Assistant Professor, Department of Electrical Engineering

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</table>
15. Intelligent Cash Depositing System

Automated self-service has undoubtedly helped banks stand out from the competition, by diverting routine tasks from employees, so they can concentrate on serving customers better. Banks in Pakistan mostly provide automated cash withdrawal services only. The deposition service is still handled by human tellers. This inspired us to work on an efficient and reliable way to make the cash deposition system automated. The Intelligent Cash Depositing System saves time, human effort and with its counterfeit checking feature, is much more reliable. The basic working principle of the system is that cash moves into the machine where it is checked for counterfeit money and denomination using image processing techniques. Finally each bill is moved in or out of the machine depending on the counterfeit and denomination result.

**Supervisor:** Mr. Imran Fareed Nizami  
Assistant Professor, Department of Electrical Engineering,

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16. Industrial Auto Picking Dropping and Stamping System

This project is the application of dropping & stamping mechanism. It consists of three modules robotic arm, conveyor belt and stamping machine. It covers various aspects of current industrial applications. When system energize robotic arm place boxes on conveyor belt using servo motors of different torques and voltages, conveyor belt move the boxes in forward direction and reaching at middle position the belt stops and the automatic stamper stamps the boxes. This System is helpful in various stamping applications such as tetra packing, food items packing etc. The project design provides a user friendly interface and a cost effective “Industrial auto picking dropping and stamping system.

**Supervisor:** Mr. Shaftab Ahmed  
Assistant Professor, Department of Computer & Software Engineering

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</table>
17. Finding RCS of an object and reducing it

Radar Cross Section of an object is the measure of its size seen by a radar and is expressed as $m^2$. RCS depends upon the relative size of the object. An aircraft is modeled in 3D system using different materials and then its RCS has been calculated by assuming different impedance boundary conditions using the RF module of COMSOL Multi-physics 4.0. Results of the far field radiation pattern, the polar plot of RCS as a function of incidence angle and the figures showing total field norm for a certain degree of angle of incidence and zero phase have been simulated. An attempt has also been made to reduce the RCS of this aircraft by considering different parameters like active cancellation, purpose shaping and diverse material properties.

**Supervisor:** Mr. Khawaja Qasim Maqbool
Senior Lecturer, Department of Electrical Engineering

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18. Speed Control of Three Phase AC Induction Motor

In today’s industrial world three phase AC induction motor is the leading horse of the industry, many applications require variable speed and torque implementation. AC motor-driven applications that do not require full speed can save energy by controlling the motor with a variable speed drive. By controlling the frequency of electric power supplied to the motor through VF control method variable frequency drive is designed and implemented. Graphical user interface (GUI) is designed using LABVIEW.

**Supervisor:** Mr. Mansoor Naseer
Assistant Professor, Department of Electrical Engineering

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</table>
19. Autopilot Navigation system for Airborne Systems

Autopilot enables an airplane to fly autonomously. This project is an inspiration from UAV drone. The project has two phases. One phase for construction of airplane and second phase of development of autopilot system and its application in the plane. An autopilot development board, including Gyros, Accelerometers, dsPIC µcontroller and output pins for Servomotors is used. Wise programming of the µcontroller by calculating the values from sensors allows the user to operate the plane in autopilot mode. Microcontroller sends signals to servo motors which control stability of the plane by moving ailerons, rudder and elevator accordingly. The system can be used for different purposes such as surveillance. In this project an airplane prototype has been designed. Avionics has been integrated to enable manual flight mode.

**Supervisor:** Mr. Mansoor Naseer  
Assistant Professor, Department of Electrical Engineering

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20. Concentrated Solar Cell Power Generation

The Concentrated Solar Cell Power Generation is a mechanism which enables the user to enhance the efficiency of a solar panel. By using reflective mirrors, we have enhanced the efficiency of the solar panels by allowing sunlight to be reflected from the mirrors onto the panel. The reflected rays are concentrated to an area on the panel leading to an increase in the current and eventually leading to an increase in the output power, thereby increasing the efficiency. The mechanism consists of a mechanical structure which holds and carries the weight of the solar panel and the mirrors. Three mirrors have been used. The movable mechanical structure acts like a solar tracker. The rotation of the structure is achieved by using a servo motor. An inverter is used in this mechanism as well, which converts direct current (DC) from a single solar panel to an alternating current (AC). The data logger has sufficient memory to store different readings for the current, voltage, temperature, angle and time periodically. These readings will be serially transmitted to an external memory.

**Supervisor:** Mr. Jehanzeb Ahmed  
Head of Department, Electrical Engineering

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The project is about design and implementation of input/output module for 8051 microcontroller on FPGA. There are 4 input/output ports of 8051 microcontroller. The aim of project is to implement SPI, UART, and I2C protocols on FPGA. FPGAs are programmable silicon chips which can be configured to implement hardware functionality. I/O ports increase capabilities of traditional 8051 microcontroller and allow microcontroller to connect to a custom peripheral set or to other FPGA logic, giving high speed applications and cost effective solution. This is designed this using Verilog HDL which is a hardware description language. We have used Xilinx ISE as a synthesis tool and ModelSIM for testing.

Supervisor: Mr. Mansoor Naseer
Assistant Professor, Department of Electrical Engineering

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22. WI-MAX based Self Navigating UGV with Optimal Path Planning

The main objective is to make WIMAX based surveillance UGV with optimal path planning using Point-Bug Algorithm. GPS module is guiding for current and target locations, ultrasonic sensors detect the sudden points and digital compass is used to determine angle at which UGV is supposed to turn. For online surveillance, a website is designed where the user could view the surroundings of the UGV through a camera attached to a PCB with WIMAX connectivity. User may control UGV manually by logging in password to graphic console panel which controls motion of UGV as well as automatically by only giving target location to UGV through GPS. The project has various practical applications including military, household, nuclear power reactors, mine detection, in hospitals to maintain sterile environment, industrial automated equipment carriers, Automobiles etc.

Supervisor: Mr. Umair Sajid Hashmi
Senior Lecturer, Department of Electrical Engineering

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23. Solar Radiation Automatic Tracker

Solar panels work up to the mark when maximum sunlight falls on the panel so that photons from sunlight knock electrons into a higher state of energy. To achieve this, solar panel is continuously tracking the direction of sun. The project included the design and construction of PID controller based solar tracking system. It covers the designing and construction of solar tracking mechanical structure together with the associated electronic circuit. Servo motors are used in the design and construction of solar tracking structure. The obtained result shows that the solar panel is utilized to its maximum conversion plus maximum solar energy is converted to electrical energy. Hence the desired objective of the project is achieved.

Supervisor: Ms Soyiba Jawed
Senior Lecturer, Department of Electrical Engineering

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24. Smart Digital Energy Meter

The project is entitled to replace conventional energy meters with digital meters. DMs are more accurate and can be enhanced according to technology up gradations. The technological up gradations enhance conventional energy meter to Smart Digital Energy Meter (SDEM). The project includes a control unit for continuous observation of security features and data logging. A GSM kit interfaces with data logger for sending information of units (KWH) to concern authority. The project design also includes various security features such as avoidance of electricity theft and to secure outer structure of a meter.

Supervisor: Mr. Muneeb Yaqoob
Senior Lecturer, Department of Electrical Engineering

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25. Design, Simulation & Fabrication of Rectangular Patch Antenna at 2.4 GHz for ISM band Applications

ISM is a part of the radio spectrum that can be used without a license. High performance Microstrip Rectangular Patch Antenna is designed in view of all its advantages and multiple applications for the 2.4 GHz ISM band. Rectangular Patch Antennas have its own advantage of being light weight, mechanically rugged and inexpensive to manufacture. The antenna is designed according to our requirements for gain, directivity, impedance, polarization, bandwidth and beam width. The antenna is modeled and simulated in HFSS; from where the solution and radiation pattern are obtained. The antenna is fabricated on PCB and the results of $S_{11}$ parameters are in accordance with the simulation results.

**Supervisor:** Mr. Khawaja Qasim Maqbool
Senior Lecturer, Department of Electrical Engineering

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26. Distributed Control System

From the very beginning of industrial revolution, efforts are being made for a safe and efficient control system for precision and accuracy of finished product. A Distributed Control System (DCS) is a system which controls the parameters of the same process or different process with the help of valves, sensors or actuators etc. The controlling algorithm is designed using LabVIEW, which gathers the data through AVR (acting as DAQ). All the process values can be seen on GUI made with the help of LabVIEW. After processing the data LabVIEW takes the steps to maintain and control the parameters.

**Supervisor:** Mr. Muhammad Fazal Murtaza
Assistant Professor, Department of Electrical Engineering

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27. Accelerometer Glove as an Input Device for Personal Computer

This project presents the implementation of new hardware for human computer interface (HCI) i.e. mouse and keyboard. We implemented mouse and keyboard in air with the help of accelerometer ADXL 335. The method performs analogue to digital conversion and then it sends the coordinates through serial port. This method is implemented on two separate hardware’s for mouse and keyboard respectively. Complete hardware of mouse and keyboard is implemented on body sensor node (BSN) which consist of three parts sensor, controller, and communication. The reduce size of the keyboard and mouse and free hand movement make it an easy, efficient, and user friendly device the results shows that this device is more compatible with racing and first person shooting games.

**Supervisor:** Mr. Usman Akram  
Senior Lecturer, Department of Computer & Software Engineering

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28. Rescue Robotic Boat

The main purpose of this project is to save water-based victims/things. There are two methods to save water-based victims/things i.e. through helicopters/sea planes or through boats. Air-borne vehicle is too expensive to perform rescue operations in the developing countries. Therefore, marine vessel/river-craft shows better efficacy in terms of economy in such countries. The idea of this project of Robotic Boat will make us able to control and rescue victims/things in the most disastrous conditions without risking any human lives. The Robotic Boat consists of underwater sensors, GPS, GSM and a simple circuit, which makes this technology reasonable and responsive. This boat can be used for rescue purpose as well as search purpose.

**Supervisor:** Ms Munazza Younas  
Senior Lecturer, Department of Electrical Engineering

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29. Ultrasonic Collision Avoidance System for Vehicles

Ultrasonic collision avoidance system has been proposed for minimizing the chance of accidents due to various technical reasons like smoke or fog etc. In addition to it the careless driving is also a major factor of accidents. The proposed system automatically generate an alarm whenever any obstacle reach a close range (2m) to the driving car. The alarm is due to an ultrasonic signal that is continuously generated by a function generator installed in the driving car. Whenever there is an obstacle in the close range the signal reflect back and it is sensed by the microcontroller. Thus microcontroller immediately operate the alarm. So the collision or any sort of accident could be avoided.

**Supervisor:** Mr. Imtiaz Ali Khan
Assistant Professor, Department of Graduate Studies & Applied Sciences

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30. Design and Implementation of OFDM transceiver on FPGA

With the technological advances in smart phones and laptops, higher data rates have become a necessity of the present wireless digital communication systems. Orthogonal Frequency Division Multiplexing (OFDM) is a very popular wireless technique for wideband digital communication which provide high data rates and is used in applications such as digital television, audio broadcasting and broadband internet access. The primary advantage of OFDM over single-carrier schemes is its ability to cope with severe channel conditions e.g. attenuation of high frequencies in a long copper wire, narrowband interference and frequency-selective fading due to multipath without complex equalization filters. In this project, an OFDM transceiver is designed using Verilog language and implemented in Spartan3 FPGA device. Simulation and implementation results are generated using Xilinx ISE.

**Supervisor:** Miss Freeha Azmat
Senior Lecturer, Department of Computer & Software Engineering

**Group Member Detail:**

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31. Auto Car Parking System

Parallel parking of a car something that many drivers struggle with yet there are few tools available to help with parking a car. In this project, we present remote control (RC) car that can identify a parking space in a parking plot and parallel park by itself. The RC Car drives down a street searching for a parking space in a parking plot using a distance sensor attached on its front, back and left right sides. Our project is broken down into two major parts or subprograms that we have burn on a controller (1) the control system and the (2) move car algorithm. The move car algorithm directs the car and the control system implements the directions of the move car algorithm. The control system consists of the hardware and software associated with it that controls the movement of the car. Move car algorithm detect parking space and execute parallel parking algorithms. The parking plot/space and parking algorithm use information from distance sensors that are placed on the car.

**Supervisor:** Dr. Najam Ul Islam
Associate Professor, Department of Electrical Engineering

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32. Three Phase Automatic Generator interface with GSM System

Due to frequent load shedding in Pakistan, the use of diesel generating sets has increased tremendously. The cost of automatic generators is very high. In this project an automated system has been developed which turns on the generator on power failure and turns it on after power returns. In addition to make it convenient for the end user, a GSM interface has been built in the project. The user can turn on or off the generator using his mobile phone. The level of voltage, current, frequency and status of the generator is also indicated via GSM. The system has been designed for single phase but is extendable for three phase as well. Appropriate delays have been added as per industry practice.

**Supervisor:** Mr. Jehanzeb Ahmed
Head of Department, Electrical Engineering

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33. Electronic Voting Machine

Electronic voting machine is created which is integrated Visual Studio 6 software is using with finger print recognition. The fingerprint biometric machine uses image processing for voter identification. After completing voter identification the voter is allowed to cast his vote using LCD and keypad interface. Casted vote will immediately be updated, making the system fast, fraud free and efficient. Software design in visual Studio is divided in 3 sections. In first section there is a main frame in which admin controls the whole process, they are able to enter the new candidate name with his picture and selection symbol. In second section, voter is able to use the software with the help of thumb impression password and select the appreciate candidate. In third section the software interface with finger print machine in which Keypad is used as the input and LCD is used for displaying the output.

Supervisor: Ms. Munazza Younus
Senior Lecturer, Department of Electrical Engineering

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34. Automatic Paper Sorting, Stapling and Counting Machine

The project is entitled to overcome the problems faced by the examination department at our university. The major constraint faced by the examination department during exam session are sorting, stapling and counting the question papers. The project design is capable to count the input papers, arrange the paper in desired sequence, staples the arranged paper and transfer these paper to the output racks according to the examination department’s data base. The major focus of the project is to design an efficient and speedy system, to reduce the manpower and to automate the examination department of the university.

Supervisor: Mr. Junaid Imtiaz
Project Coordinator, Department of Electrical Engineering

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<td>0321-6918226</td>
</tr>
</tbody>
</table>
35. GSM based Car Automation and Security System

The motivation behind GSM based car automation is extreme temperature conditions and unsecure environment. This system provides two functionalities i.e. automation and security. The automation part of the system deals with a person starting a car and turning on the air conditioner or heater remotely so that when he enters the car the temperature of the car is pleasant. The security part protected against carjacking by using a password based technique. If the password entered is incorrect then microcontroller breaks the circuit supply of engine at number of points to ensure safety.

**Supervisor:** Mr. Imran Fareed Nizami  
Assistant Professor, Department of Electrical Engineering

**Group Members Detail:**

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36. A system for Classification of Diabetic Retinopathy

Medical image analysis is very popular research area these days in which digital images are analyzed for the diagnosis and screening of different medical problems. Diabetic retinopathy (DR) is an eye disease caused by the increase of insulin in blood and may cause blindness. An automated system for early detection of DR can save patient’s vision and can also help the ophthalmologists in screening of DR. In this project, we develop algorithms for detection of DR and its different lesions such as Microaneurysms (MAs), Haemorrhage (H), Hard Exudates (HE) and Cotton wool spots (CWS). The project consists of three stages i.e. preprocessing, feature extraction and finally the classification.

**Supervisor:** Mr. M. Usman Akram  
Senior Lecturer, Department of Computer & Software Engineering

**Group Members Detail:**

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</table>
37. Prototype of Magnetic Levitation Train

The goal of the project is to design a train system which is levitated in air by the phenomenon of Electromagnetic suspension (EMS) and is balanced by a controlled system of cross balancing magnetic force using line detection techniques to obtain the parameters of position of train. This arrangement eliminates the friction present in traditional train system having mechanical parts so it will help to achieve faster speed for traveling with low pollution.

**Supervisor:** Mr. Umair Sajid Hashmi

Senior Lecturer, Department of Electrical Engineering

**Group Members Detail:**

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DEPARTMENT OF
COMPUTER & SOFTWARE ENGINEERING
38. Design and Implementation of Ethernet Encryptor on FPGA
The usage of computer and internet is becoming unavoidable as its importance in the various fields of life including education sector, banks, government sector, armed forces, and business sector is increasing. Some of these sectors like armed forces and government departments exchange confidential data over those mediums. In order to maintain confidentiality between two entities, end-end encryption is introduced. In this project, a cryptographic processor is designed by implementing Advanced Encryption Standard (AES) as the algorithm for encryption/decryption in Field Programmable Gate Arrays (FPGAs) which will ensure the secure transmission of the Ethernet data. The cryptographic processor has got the ability to encrypt/decrypt in three different modes of operation and using key size of varying length.

Supervisor: Miss. Freeha Azmat
Senior Lecturer, Department of Computer & Software Engineering

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39. Employee’s Monitoring System through Infrared Identification
Until now in industries, large organizations, hospitals, offices have monitoring systems on their entrances like biometric and cameras. The operator in monitor room has the tedious task of monitoring more than 30-40 camera feeds. Instead, by using IR identification, employee tracking solutions for personnel monitoring provides visibility to individuals entering and exiting restricted areas, their location within controlled zones, and their location history. It is a complete package for detecting and tracking employees, third parties, and customers. We added security for people and assets easily, and set up security zones for automated tracking. The project has number of phases, such as implementation of IR transmitter, decoder, microcontroller, LCD interface and finally an interface with computer for simulation and tracking.

Supervisor: Mr. Arslan Qamar
Senior Lecturer, Department of Computer & Software Engineering

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</table>
**40. Automated Self Parking**

The aim is to develop a system in a car that helps a driver to park the car accurately in the available space, as parking is a real test of driver’s skills during which most of them stumbled upon while maneuvering car back and forth. This results in car parked in worst manner that usually takes more space than required that reduces the overall available space for other cars and makes it difficult to accommodate the number of spaces allocated for other cars. Recently there are many systems using different logics, coding, controllers, and sensors in additions to those. We are introducing a system based on ultrasonic proximity sensors to alert whether the space is available or not. The purpose of these sensors is to inform the system whether there is an obstacle or not. The output of the sensors is send to the controller which decides to move the car and in what direction according to the code logic. The result is a safe, secure and economic use of the space in parking lot, as today faster, accurate and economic results are needed and welcomed.

**Supervisor:**  Mr. Ahsan Sohail  
Senior Lecturer, Department of Computer & Software Engineering

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**41. Plagiarism Detection Tool**

Plagiarism detection tool is software which can determine the amount of data that has been copied in a particular document from the internet. To detect plagiarism Rabin-Carp algorithm is implemented. It is a string matching algorithm that is used to find a set of pattern string in a text using hashing. It can rapidly search through a paper for instances of sentences from the source material, ignoring details such as case and punctuation and as there is the abundance of sought strings, single string algorithms are impractical. The key to Rabin-Carp performance is the efficient computation of hash values of the successive substrings of the text. One popular and effective rolling hash function treats every substring as a number in some base, the base usually being a large prime.

**Supervisor:**  Mr. Rashid Kareem Siddiqui  
Assistant Professor, Department of Graduate Studies & Applied Sciences

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42. University Management System

University Management System (UMS) is a complete integrated, automated, powerful Internet and Intranet based application, which is designed to automate the daily tasks performed by faculty, students and alumni. Motive behind developing such a system is that currently all the students, faculty and alumni records are maintained manually. There is no effective way of communication between the students, faculty and alumni members. UMS consists of fully independent functional modules having major features like Send SMS, Send Application and student and faculty profiles, designed to provide efficient and an effective way of communication between students, faculty and alumni. The outcome of the system is automating the daily tasks performed by the faculty, students and the alumni.

Supervisor: Mr. Fazal Wahab
Associate Professor, Department of Graduate Studies & Applied Sciences

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<td>Shoaib Shafiq</td>
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43. Automatic Pralka

Pralka is a Polish language word means washing machine. This machine makes the washing process easier because of its embedded system which makes the machine fully automatic. Core of this embedded system is microcontroller. Machine supports three basic processes wash, rinse and spin. Some extra useful functionality involved in this machine are ability of water temperature sensing, water level sensing and memory backup for power failure and detergent box which operated according to the water level. A LCD displays the parameters output and dynamic state.

Supervisor: Mr. Shaftab Ahmed
Assistant Professor, Department of Computer & Software Engineering

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<td>Sajawal Ali</td>
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<td>Naeem Tariq</td>
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44. Obstacle Detection and Guidance System Using RFID

The term RFID describes the use of radio frequency signals to provide automatic identification of devices. The overall goal is to produce RFID reader that is capable of receiving more than one bit of information from the RFID Tag and to also design an oscillator to modulate the signal on the receiving side. The Audio Guidance System allows visually impaired users to simply press a button, speak the desired destination and reach there using audio instructions inside the building area. This system also provides a portable unit that can easily be carried and operated by a visually impaired person. Besides it, an obstacle detector that detects the obstacles from the surface and triggers the buzzer or produces vibration when it gets any hurdle to avoid sudden accident.

Supervisor: Ms. Munazza Younus
Senior Lecturer, Department of Electrical Engineering

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45. Visual Webpage Editor

The aim of this project is to design a Visual Webpage Editor, which is a web-based application that allows the non-technical users to design their websites by using a highly interactive drag and drop interface. This application would not require any prior knowledge of a markup language like Html. Visual Webpage Editor provides the web developers certain advantages as well. This application would help the web developers to design templates for their projects without any need of writing code. This not only saves time but also minify the effort of writing the code. The application would also automatically generate code corresponding to any design template so that the code can be saved for future customization.

Supervisor: Mohammad Danyal
Software Developer, Hosting Controller Inc

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</table>
46. SaaS Based Live Update System

HC8 is a complete web hosting automation control panel which is designed for web hosts to experience infinite hosting possibilities in cluster environment. It enables web hosting companies to manage all their servers both Windows & Linux through centralized interface. The whole HC8 package is about 135MB and each time clients have to check manually for the product updates from the website, and then download and reinstall the whole HC8 package in case of availability. This wastes time and bandwidth, and clients really have to wait for months in order to obtain the next build which would fix their bugs. The idea is to develop a generic update system for HC8 so that its clients don’t have to update manually. A service running on the client’s server will automatically check for the updates and will download and install them on client’s demand. The user interface on the HC server would allow the HC administrator to set updates for specific clients while proscribing the rest from downloading them. The newly designed system would highly improve services of HC8 and clients would be able to receive client specific updates as well.

**Supervisor:** Mr. Haider Ali  
VP Technical, Hosting Controller Inc

**Group Members Detail:**

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47. Electronic Resource Management System

Electronic resource management and administration is common to almost all organizations. Every organization needs to have an efficient and effective management system to keep track of the management activities, their employee’s data and their payroll activities etc. In the present era internet has revolutionized the software industry and with the rapid growth of internet-based resources, web-based systems are highly demanded. Our Electronic Resource Management System helps the organization to organize and manage human resource data over the web. Hence this system brings an IT solution to the organizations to have an updated and secure system with modern technologies and strategies.

**Supervisor:** Mr. Rizwan Aamir  
Senior Lecturer, Department of Management Info System

**Group Members Detail:**

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| Shahbaz Idrees | idrees.shahbaz@hotmail.com | 0344-7699503 |
48. Power Data Lodger

The project aims to design and fabricate an instrument to facilitate the user for determining his energy consumption parameters for instance peak load, average load etc. The instrument will consist of an interface which will learn the power flow and put the same data in computer based database as per the user’s defined intervals. The data base shall be analyzed by a specially designed software tool to calculate as well as graphically represent the desired parameters to the user. As soon as this project will be completed the resulted product will be introduced in market which will be compatible at all levels whether it industrial, corporate or domestic and the sponsors of this project (Akhter solar) will recommend their costumers which I recon will increase the scope and application of this system and thus I’ll be able to exploit the product application to a new level by bringing new features to it

Supervisor: Ms. Madeeha Basharat
Assistant Professor, Department of Electrical Engineering

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49. Virtual Guide

"A picture is worth a thousand words"

Virtual guide is an android application based on the concept of information retrieval using images. The application makes use of a back-end database which is used to store technical information about images to be displayed once an image has been matched. In order to come up with an algorithm for matching images, a comparative study of image matching/recognition algorithms is carried out and a hybrid algorithm is proposed. The algorithm utilizes more than one recognition techniques for getting more accuracy in results and we maintain priorities by defining a scoring mechanism for each technique according to the results they produce. The final product is able to provide information/guidance to people at run-time and can be further extended to provide location-based services.

Supervisor: Mr. Raja M. Suleman
Senior Lecturer, Department Computer & Software Engineering

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50. Web Based Bug Tracking System

Bug trackers are used to manage bugs efficiently and effectively and to know overall performance, stability of software projects. Traditional web based bug trackers are not easy to setup and use. They follow monolithic design which can affect their overall usability. In order to make this process easier for PM the project intends to deliver a visually enhanced interface that would allow to users to have bird’s eye view of complete project. Our aim is to design a Web-based bug tracking system is highly interactive and user friendly. This will provide easy ways for a project manager to assign tasks more efficiently. PMs will be able to assign tasks/bugs to by using a drag and drop interface based on AJAX/JQuery client-side scripting languages. That will also allow PMs to monitor work progress of developers using info-graphs & PCharts.

**Supervisor:** Mr. Raja M. Suleman  
Senior Lecturer, Department Computer & Software Engineering

**Group Member Details:**

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51. Mobile User Interface for Web Based Application HC (Mobile HC)

Most of the currently available mobile based web application has complicated User Interface (UI). Mobile users require precise data to avoid time and bandwidth wastage. This project is about design and development of mobile UI for web based application called HC-8. It is a Web Hosting Solution Provider which is a control panel for managing servers. Mobile HC provides the ease of mobility and portability. Mobile HC is platform independent it has simple UI with minimum amount of pictures and minimum precise text on display with maximum output. The project is divided into three main modules and is then divided into sub-modules, namely Web Hosting (which includes Shared Hosting), Enterprise Hosting (which includes MS Exchange, SharePoint, BlackBerry, OCS, and Dynamic CRM) and Virtualization Hosting (which includes Hyper-V for Windows and Xen for Linux).

**Supervisor:** Mr. Haider Ali  
VP Technical, Hosting Controller Inc.

**Group Members Detail:**

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52. Web Enabled Estate Advisor

Web Enabled Estate Advisor is a web based eMarketing application. The application has a database that is used to store the users and property information in a systematic fashion to entertain numerous user requests according to their requirements. It can rapidly search through the database and displays all the portfolios available in accordance with the user’s request/criteria. The key to performance of this website is that it presents a profusion of plots, houses and offices for sale or rent in both residential and commercial areas and the user can avail this massive assortment to pick out the most excellent ones in no time.

Supervisor:  Mr. Rizwan Aamir  
Assistant Professor, Department of Management Info System

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53. Website Grader

Website Grader is a web based tool to facilitate Search Engine Optimization (SEO). It can be used to measure the marketing effectiveness of a website. To grade a website it looks up for all the main parameters that a website should be comprised of. It provides a score that incorporates things like website traffic, social popularity, website analytics and other technical factors. It renders the information about the improvement of a website through marketing perspective. This tool helps user to check the weaknesses or strengths of their website. In other words, Website Grader performs Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis of their website.

Supervisor:  Mr. Abdul Qudoos Azhar  
Founder and CEO, BizExcel.net

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54. Auto-Summarization Tool

Auto-Summarization Tool is a computer software tool which enables the user to generate summary of huge documents so that the important points are highlighted without affecting the meaning. Proper algorithm has been designed to generate the summary. This algorithm works sequentially on the sentences. It goes from one sentence to last one. We have tested the algo on different paragraphs and formed to be working so far. It picks a single word and collects sentences containing words in that array. It scans array and picks one sentence from each array. Then it arranges the sentences in ascending order so that the actual meaning of the paragraph is not changed.

**Supervisor:**  Mr. Rashid Karim  
Assistant Professor, Department of Graduate Studies & Applied Sciences

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55. Green-Tech Enterprise Resource Planning

Human Resource Management (HRM) is a strategic and comprehensive approach for managing people and the workplace culture and environment. Green Tech’s ERP system will encompass almost all the features of HRM. Green Tech’s ERP will enable the organization to add value to the strategic utilization of employees and maintain the employee impact on the business e.g. the metrics and measurements of the organization in a more effective way. The application is very user friendly and is flexible enough to cater the growing needs of clients, and modification/addition of new or existing modules. Green Tech’s ERP system is an application based on PHP, AJAX, JAVASCRIPT, CSS and is supported by MySQL database.

**Supervisor:**  Ms Irum Jamshaid  
Assistant Professor, Department of Graduate Studies & Applied Sciences

**Group Members:**

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56. Camera Based Touchless Interface for PC
Human-machine interaction has evolved significantly over the past decade through enhancements in user interfaces and smart design. Traditionally infrared proximity sensing systems have incorporated legacy photo-detectors and photo-interrupters, which trigger based on motion or interruption respectively. The infrared systems had limitations in detecting the exact location of a moving object and power consumption in operating such systems. Previous touchless systems limitations can be reduced to a minimum by designing a camera based input system. In such systems exact location of an object can be calculated from processing of an image and data extraction methods. The input can be used for multi purposes depending on user interaction with a system.

Supervisor: Mr. Usman Akram
Senior Lecturer, Department of Computer & Software Engineering

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57. Telemed Web portal for Gynecologist
Telemed is web portal specifically developed and designed for a gynecologist and their designated patients where they can interact with each other frequently providing satisfactory care to the patients in their pregnancy period. The portal keeps record of the users by maintaining user accounts and providing user access to services after security verification (login). The portal also ensures that users will only use the services which they are authorized to use. It provides registration services for the patients and store their credential and relative information. Furthermore they can book appointments from the doctors according to the terms and conditions.

Supervisor: Mr. Shaftab Ahmed
Assistant Professor, Department of Computer & Software Engineering

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58. Implementation of W-CDMA Protocol on FPGA
As the demand for capacity, which is required by new and faster data based mobile services are increasing day by day, so a new technology is required which can fulfill the user needs by providing satisfactory data rates. Wideband Code Division Multiple Access (WCDMA) is one of the main technologies for the implementation of third-generation (3G) cellular systems. WCDMA increases data transmission rates in GSM systems by using the CDMA air interface instead of TDMA. In this project a transceiver is implemented for WCDMA air interface in Field Programmable Gate Arrays (FPGAs) using verilog. Simulation and implementation results are generated using Xilinx ISE.
Supervisor: Ms Freeha Azmat
Senior Lecturer, Department of Computer & Software Engineering

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Digital image processing is the use of computer algorithm to perform image processing on digital images. Image processing find in surveillance systems, fabric defect detection, Automobile recognition, unmanned vehicles and auto driver for vehicle. Image processing is widely used in medical fields such as in ultrasound, magnetic resonance imaging (MRI) and nuclear medicine. This project is based on automation of a toll plaza. The aim of the project is to design such a unit which works without human interference. System identify the type of vehicle approaching the toll plaza, determine and display the toll for the vehicle, collect the toll, provide the change money. The project helps to reduce expenses and man power.
Supervisor: Mr. Imran Fareed Nizami
Assistant Professor, Department of Electrical Engineering

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60. Vision Based Ball Collecting Robot

We find many machines which are intelligent and make our life very easy. So are the vision based machines. In modern manufacturing plants we can see them working and checking the proper filling of bottles. Also they are used to inspect wings of Boeing aircraft during its manufacturing process in order to find cracks in it if there are any. The Robo-Cup is also a world famous tournament in which robot teams from all over the world take part and the football is played solely by robots using vision. Hence there is very wide application of vision based robots in all the fields of life. My robot uses a camera mounted on its top which captures the real time video. The balls to be recognized are of red color. The video is fed via USB connection to the computer and the video is processed using the Mathworks Matlab. By image processing we filter out the red ball from the rest of the environment, then the control signals are sent back to the robot using serial communication, which makes its movement to the ball and collects it. If there is no ball in the vision then robot makes a scan movement in a circle in order to get any required ball into the vision. Then there is embedded system installed on the robot as well which controls all the movements of robot and driving different motors used in the robot. Two 12 volts DC motors fitted with gears, which generates the speed of 75 RPM along with significant amount of torque, used to drive the robot. The collection mechanism of the robot consists of servo motor. This motor is able to rotate to certain fixed degrees, normally 0, 90 and 180 degrees. So it helps to close and open the door which collects the required ball. The ball when approaches significantly into the vicinity of collection door, it is sensed using an Infra-Red sensor.

**Supervisor:** Mr. Bilal Ashraf Awan
Head of Department, Computer & Software Engineering

**Group Members Detail:**

| Muhammad Zohaib Aziz Khan | oh_zohaib@hotmail.com | 0300-5130260 |

61. AC Mock up System

Mockup is called a prototype if it provides at least part of the functionality of a system and enables testing of a design. A window air conditioner unit implements a complete air conditioner in a small space. The units are made small enough to fit into a standard window frame. We close the window down on the unit, plug it in and turn it on to get cool air. The goals are to achieve in this project is to reduce time to market by identifying potential issues earlier in the design process and also to reduce the product development costs by minimizing the number of physical prototypes that needs to be built. Basically the target is to achieve product quality by allowing a greater number of design alternatives to be investigated before a final one is chosen.

**Supervisor:** Mr. Shaftab Ahmad.
Assistant Professor, Department of Computer & Software Engineering

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62. Real Time Video Streaming Through Bluetooth

This software application is based on wireless communication between two computers. We have developed an application for video streaming through Bluetooth. Video is the sequence of frames and streaming is the continuous sending of frames. The technology which we are using for streaming video is Bluetooth 2.0+Edr (enhance data rate). The project investigates the best possible way for real time streaming using Bluetooth. Video streaming is not like data streaming due to involvement of inherent delay constraints because if the packets are arriving late then it creates some problem in displaying the video. We create this application based on client and server. We have used timers for the rate of frame control which are transmitted and received on both sides of the application. It provides a very robust and powerful technology within a short range wireless communication.

Supervisor: Mr. Adeel M. Syed
Senior Lecturer, Department of Electrical Engineering

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<tr>
<td>Rasheed Ullah</td>
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<td>Rana Swera Hussain</td>
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63. Simulation and Implementation of Spectrum Sensing Techniques of Cognitive Radio

With the rapid deployment of new wireless devices and applications, the last decade has witnessed a growing demand for wireless radio spectrum. However, the fixed spectrum assignment policy becomes a bottleneck for more efficient spectrum utilization, under which a great portion of the licensed spectrum is severely under-utilized. Cognitive radio is an innovative communication technology that can exploit the wireless spectrum in a more intelligent and flexible way. It has capability to optimally adapt its operating parameters according to the interactions with the surrounding radio environment. The adaptation with environment is performed with the help of Spectrum Sensing Techniques. In this project, the implementation of three spectrum sensing techniques of Cognitive Radio is performed on MATLAB. Moreover, a prototype for the calculation of Interference Temperature is also presented on Spartan 3 FPGAs using Verilog.

Supervisor: Mr. Junaid Imtiaz
Project Coordinator, Department of Electrical Engineering

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<td>Ithisham Ul Haq</td>
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DEPARTMENT OF
GRADUATE STUDIES & APPLIED SCIENCES
64. Wireless ECG Monitoring

We have designed a system that reliably measures the electrical activity around the heart and transmits the data wirelessly to a receiver connected to a PC. We displayed the data on PC in accordance to the conventional method. The conventional (wired) method of monitoring a patient’s heart is very restricting. The leads are constantly being dislodged from the patient by the nurses, doctors, and even the patient themselves which causes complications. Another problem with the conventional method is that the mobility of the care givers is limited. Our system is a solution to these problems.

**Supervisor:** Mr Ahsan Sohail  
Senior Lecturer, Department of Computer & Software Engineering

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65. Energy Ramp

The aim of the project is to develop a ramp which produces energy when it is compressed by weight. The mechanics of ramp are unique in the sense that it does not require a natural fuel to produce electricity, the Ramp just requires the flow of road traffic (vehicles). The major problem which we are faced with, is the movement of the vertical bar and adjustment of helical gear to produce sufficient output. The energy ramp also power a camera which has been installed under the movable bar. On every push the camera takes a picture of desired focused object. All the design has been done using geometric similarity principle and modeling has been performed on Pro-Engineer Wild-fire 4.

**Supervisor:** Mr. Usman Akram  
Senior Lecturer, Department of Computer & Software Engineering

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66. Laser Audio & Video transmitter and receiver
The objective is to design audio and video transceiver for fast and secure communication with laser as a medium of communication. The laser carries audio and video and is received with the help phototransistor. LM386 audio amplifier IC is used to filter the audio signal and an error free audio is available. The video is received and an LCD is used to display video. To minimize cost laser is used to transmit signals via line of sight instead of fiber optic. Our project design is cost effective.

Supervisor: Ms. Madeeha Basharat  
Assistant Professor, Department of Electrical Engineering

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67. Modeling and simulation of Computer Network in NC-Campus Bahria University using OPNET
OPNET is a simulation software tool with rich and complex set of libraries to model, configure and simulate the entire heterogeneous network. NC-Campus computer network consists of access points, switches, routers, servers etc. The model on OPNET is configured and simulated to analyze traffic load, delay, data rate, LAN and WLAN characteristics, ping reports and network efficiency. The project results in best settings for our network and can predict the cost, traffic behaviors, throughput and efficiency of the network beforehand.

Supervisor: Mr. Waqar Ahmed  
Senior Lecturer, Department of Computer & Software Engineering

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68. Radar Cross Section

RCS is a measure of how detectable an object is with radar. The project is based on aircraft hit by a radar wave; our model demonstrates the use of a background field in an electromagnetic scattering problem. Besides setting up the background field and sweeping it over a range of angles of incidence, the model computes the far-field and the radar cross section. The modeling procedure is similar in 3D, our model is in 2D to quickly set up and solve, and the geometry is intentionally kept simple. Simulation results have done on COMSOL software.

**Supervisor:** Mr. Khawaja Qasim Maqbool  
Senior Lecturer, Department of Electrical Engineering

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69. Face Recognition System

This project is based on image processing techniques. The aim of the project is to automate the security of the entrance of a workplace. The system uses a camera to take the image of the approaching user. Users enroll into the system with a push button and if the maximum number of users is not exceeded he can login. During login the user’s face image is captured and stored in memory temporarily for recognition using supervised learning from the training database. The system uses Principle Component Analysis technique for feature extraction. The effectiveness of the system is to demonstrate the baseline classifier such as NN for calculating true positive recognition rates.

**Supervisor:** Ms Amina Jameel  
Assistant Professor, Department of Computer & Software Engineering

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</table>
70. Management Info System

In the age of information technology, people do not have time to stir all the places. They want to get their work done by using mobile or internet. Everyone whether students or teachers pursuing simplicity in life. This system consist of features like email notifications, addition of a new facility to the system, report generators etc. in this system. This system can be used to automate the workflow of service requests for the various facilities in the campus. This system can also be used to fill admission forms online and hence dropping the mental work and saves time. The system provides a facility to get their admit card for the entry test without visiting the campus. This system is based on HTML, PHP and MySQL.

**Supervisor:** Mr. Syed Suroor Mehdi Zaidi  
Assistant Professor, Department Management Info System

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71. Human Resource Management System

Our project emerged in line with the new generation of customized HR systems; it assists in managing the company’s most important asset – “Human Resource”. The system is applicable to diverse business industries, a perfect platform for re-engineering your HR processes and redefining the operations of HR professionals, paving a landscape to the new avenues of HR Management. It provides a rational assurance that the organization will fulfill its objectives and help it to counter risks by maintaining the excellence of reporting. Assisting “Performance Appraisal” and monitoring conduct in the company are its key attributes. Since the more effective check and balance system in the organization, workers will give more efficient services which ultimately lead to the higher level of customer satisfaction, finally resulting into the completion of organization’s goals.

**Supervisor:** Mr. Adeel Nasir  
Visiting Faculty, Department of Graduate Studies & Applied Sciences

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72. Fire Fighting Robot System
This project demonstrates the requirements and specifications of Fire Fighting Robot. The motivation behind this is due to progression of robotic technology in the world. The aim is to make a prototype of a robot which can put out fires on a small scale. The robot is based on wheel driven by unipolar stepper motors. The robot is operated by a battery source. The firefighting robot has a small water pump added to it by attaching a small water pump to robot, which helps to extinguish the fire. Smoke sensors are used to detect the smoke be caused by fire or burning. Micro-controller is use for handle the main task. Heat sensors are also use to detect the heat. The aim is to design a prototype which detect the heat, track and put out fire in domestic houses as well as commercial building.

**Supervisor:** Mr. Imran Fareed  
Assistant Professor, Department of Electrical Engineering

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73. Blood Donors Database Website
Blood donor’s database website is designed to facilitate blood donors and receivers. Google maps technology and SMS generation API is utilized to make website efficient in finding nearest donor for user requesting blood. Database system has information of donors who voluntarily wants to donate blood. Blood donor’s website has a separate registration facility for donors, so that finding them in case of emergencies would be easy. Fully automated system finds desired blood group donor by searching the online donor’s database and contacts the donor through a default text message asking whether he/she is willing to donate blood.

**Supervisor:** Mr. Adeel Nasir  
Visiting Faculty, Department of Graduate Studies & Applied Sciences

**Group Members Detail:**

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74. Interactive voting System
Project was motivated by the need to increase student’s interest in events happening around them. To developed interactive voting system we divided it in three different parts. First part included graphical front-end, second user interaction with mobile phone, and third the development of a web-based administration tool. The purpose to developed an interesting voting system with which user can interact through their phone. Database back-end and web-based administration tool is powered by MySQL and stored remotely on an Apache server, sorting the database remotely allowed it to be updated online via a web based interface. The web-based administration tool is written in PHP and provided simple manipulation of the database to add, edit or delete questions.

**Supervisor:** Mr. Rashid Karim  
Assistant Professor, Department of Graduate Studies & Applied Sciences

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75. Online Lease and Maintenance System
Online Leasing and Maintenance System (OLMS)” is the industrial project which automates the process of leasing of different type of vehicles through dealer companies. Customer can be able to get online information of different type of vehicle on lease. Using OLMS, customer will be facilitated to keep online records of the monthly installments and get online messages on computer and internet. A unique ID and password will be allocated to the customer to communicate with OLMS.OLMS provide the satisfaction of mind to the customer. This project is based on HTML, PHP and MySQL database.

**Supervisor:** Mr. Syed Saroor Mehdi Zaidi  
Assistant Professor, Department Management Info System

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76. Ambulatory Medical Services over the Wireless Network

Our aim is to save time for the doctors, while transferring patient to the hospital doctors have to check all the basic parameters to diagnose the condition which takes a lot of time resulting death in most of the cases. Our project is a working model which incorporates sensors to measure parameters like ECG, heart beat rate/pulse rate and body temperature of the patient in the ambulance and transfer it to the computer in the hospital using wireless modules so that the patient’s condition can be analyzed by doctors before reaching the hospital and the concerned doctor gets prepared for the treatment. Thus, it reduces the doctor’s workload and also saves time when the patient is shifted to the hospital. In the mean while all the process parameters are recorded online and updated till the patient reaches hospital.

Supervisor: Ms. Munazza Younus
Senior Lecturer, Department of Electrical Engineering

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77. Robotic arm based Industrial Automation System

The idea of automation always gets importance in the market in terms of its value and use. It is a Robotic arm based system which holds the concept of image processing and automation. Basically an interface has been created between robotic arm and compact camera vision. The famous and most important engineering tool from National instruments LabVIEW is used for this purpose. Whole system is consists of three parts. The parts are Robotic Arm, Compact camera vision and conveyor belt. The project has a scope in industry as security system used in airport or any other industrial mechanism like manufacturing plants etc.

Supervisor: Mr. Muneeb Yaqoob
Senior Lecturer, Department of Electrical Engineering

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</table>
78. Channel Positioned TV Antenna Based on PIC Microcontroller (µC)

Conventional ‘rabbit ear’ antenna has its limitations which results in loss of quality of picture and sound; therefore, a device called ‘Channel Positioned TV Antenna based on PIC µC’ is designed and developed for people using the conventional antenna but this device consists of a ‘Yagi – uda’ antenna mounted on a stepper motor which is being controlled with a 4 x 4 keypad that can be replaced with the remote of the television. The antenna will rotate with the help of keypad due to which the viewer won’t need to rotate the antenna manually. The channels will be saved and viewed with the help of keypad. This project is also useful for elderly people who cannot rotate the antenna manually. So the basic concept of this device is to rotate an antenna in the desired position so that the viewer can watch channels with a better reception.

**Supervisor:** Mr. Khawaja Qasim Maqbool
Senior Lecturer, Department of Electrical Engineering

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79. Library & Cafeteria Management for Campus Management System

The project aims at developing a Campus Management System (CMS) such that CMS processes are segregated into smaller and more manageable sub processes. Complete Library Management System and Cafeteria Management System will be developed. Technologies used will be RFID card reader, HTML, PHP and C# for hardware interactions. The RFID card reader in Cafeteria Management System will be helpful to manage all students’ accounts for purchasing items from Cafeteria, and in Library Management System RFID card reader involvement will be helpful for issuing and returning books efficiently.

**Supervisor:** Mrs. Irum Jamshaid.
Assistant Professor, Department of Graduate Studies & Applied Sciences

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</table>
80. GSM Based Vehicular Tracking System

The objective is to develop a GSM based tracking system that would serve the need of the management of registered car companies with such plainness of operation that makes the whole system extremely easy to troubleshoot and provide security. The system permits localization of the automobile and transmits the position and other services to the owner on mobile phone via Short Message Service (SMS). A behavioral history of the vehicle is retrieved on the computer in the form of a database that can be analyzed by the authorized users. The designed system streamlines and eases the process of managing company vehicles.

**Supervisor:** Mr. Umair Sajid Hashmi  
Senior Lecturer, Department of Electrical Engineering

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81. Microcontroller Based Wheel Chair

A wheel chair is an automated tool for special people. People are able to control the wheel chair through a joystick and a voice support system. A joystick is connected to the microcontroller that help’s in moving the chair in the desired locations. Voice data is stored in the memory so whenever a voice signal is sent by the user is decoded into digits and matched with the memory to operate the proper function. “Forward” “reverse” “left” “right” “stop”; these words are stored in the memory and using these words the person move’s the chair accordingly.

**Supervisor:** Mr. Arslan Qamar  
Senior Lecturer Department of Computer & Software Engineering

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82. E-Learning with Augmented Reality

Augmented Reality is an overlay of virtual reality over actual reality. Using this idea, this project will make use of Computer Generated 3D models which would appear on screen of a user device when a marker is viewed from a camera. Every marker will hold a 3D Model that would appear when brought into camera’s view and the computer software will then provide an information window that will hold all the information related to the object under observation; the information would be 3D Collada Models or Textual. This project provides an interactive learning platform for all ages and enhances the learning experience.

**Supervisor:** Mr. Rizwan Aamir  
Assistant Professor, Department of Management Info System

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83. Car Security and Management System

We designed an efficient, fool proof security and tracking system for an Engine Control Unit (ECU) based automobile. Successful clearance of the security checks activates the ECU, thus allowing the engine to start. Upon three failed attempts at verifying authorization, an SMS is dispatched to the owner, informing him/her of this activity – for which, we integrated a GSM module. The owner has the facility to activate/deactivate the ECU by sending a specified text message to the GSM Module. Geo-fencing techniques are used for enhanced security and tracking of the vehicle. GPS module is integrated into our system for implementing the Geo-fence.

**Supervisor:** Mr. Aamir Iqbal Bhatti.  
Visiting faculty, Department of Graduate Studies & Applied Sciences

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84. Designing Angular Controller of DC Motor using H-infinity Technique in Real time

The project is to design and implement the angular controller to increase the efficiency of the DC motor using H-infinity technique. The efficiency of the controller design is increased by working on some variables like robustness, gain margin, maximum time overshoot and changing the time. This is achieved by finding bode codes using MATLAB and algorithms are found on C++. These codes are interfaced with the DSP kit for implementation in real time.

**Supervisor:** Ms. Soyiba Jawad  
Senior Lecturer, Department of Electrical Engineering

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85. 3D Cross Plot - Abstract

The idea of 3D Cross Plot emerged when scientists needed to visually analyze the different aspects of data in multiple types of visualizations. This software uses the data files obtained from geological experiments and enables the user to create multiple visualizations of data and analyze the results of repeated surveys/experiments. The 3D engine allows the users to interact with the currently running visualizations and also provides the transparency to minimize the overlay of data. It also provides the user more properties to customize the visualizations. The 3D engine uses the DirectX implementation to draw the visualizations according to selected properties.

**Supervisor:** Mr. Rizwan Aamir  
Assistant Professor/Manager, Department of Management Info System

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86. Simulation and Assessment of Network Security

Intrusion attacks particularly DDOS has recently become one of the greatest threats to the network security. DDOS attacks are designed to paralyze the network by flooding it with large amount of malicious traffic that the server is unable to handle resulting in high response times and unavailability of network resources i.e a Denial of Service. The data residing on servers is of no use if their availability cannot be ensured. This research is aimed to assess the network security of Bahria University NC network by simulating DDOS attack on the network model using OPNET. On the basis of obtained graphical results, loop holes and bottlenecks in the network are identified and the survivability of the system is improved.

**Supervisor:** Mr. Waqar Ahmed.
Assistant Professor, Department of Computer & Software Engineering

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87. News Portal

News portal is an application to show news received from different sources using RSS feeds i.e. BBC, GEO, and CNN. This application provides a web interface to end users for sharing their views by commenting on particular news. It provides an option to its viewers to register themselves. News Portal has two options presented to its user, first is the National News and second is International News. Both types of news can be viewed by clicking on respective link which direct the user to the corresponding news page. The news sported in list view with a citation to its source. News Portal also bestows search query facility to its users to find any kind of news from news archives. This portal also provides geographical location of the particular local news. Benefit of this portal to facilitate news analyst for presenting their analysis in talk shows.

**Supervisor:** Mr. Fazal Wahab
Assistant Professor, Department of Graduate Studies & Applied Sciences

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88. Air Traffic Control Simulation

This project attempts to realistically simulate the air traffic control radar system. The user of the simulator will be able to mimic a real approach control. The user will have to ensure that arriving and departing air traffic from an airport maintain a minimum lateral and vertical separation. In addition all arriving air traffic will have to be properly sequenced and aligned with the Instrument Landing System (ILS). The software will use voice recognition to take instruction for the aircraft. Development is done in Microsoft Windows Presentation Foundation using C#, XAML and XML.

**Supervisor:** Mr. Adeel M. Syed
Lecturer, Department of Computer & Software Engineering

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89. Quality Management System (Process and Procedure Automation)

Idea was to develop such a Quality Management System which ensures Process and Procedure Automation. Process Monitoring System, Faculty Management and Monitoring, Institutional Facilities monitoring System, institutional Support Monitoring System are the main features of this Quality management System (Process and Procedure Automation).

**Supervisor:** Mr. Fazal Wahab
Assistant Professor, Department of Graduate Studies & Applied Sciences

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90. Designing of Acoustic Sensor

Acoustic sensor has wide variety in every field. Basic purposes of acoustic sensors are to serve limitations. In telecommunication, these types of sensors are in use to send and receive messages, underwater acoustic communication and acoustic wave technology being the prominent. In communication, EM waves have limitation due to uneven terrain and it eventually limits the capability of object detection like radar to perform efficiently. The main contribution of this paper is to work across limitations to cope with the uneven terrain features and detect penetratable objects with their sounds. This project combines steps of commonly used technologies to provide the solution using acoustic sensor.

**Supervisor:** Mr. Arslan Qamar  
Senior Lecturer, Department of Computer & Software Engineering

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91. Indoor Positioning System using Wi-Fi routers and RFID active tags

Indoor positioning system is very useful and important system in today’s world for the purpose of security, maintenance, and observation. A trilateration technique is use to determine the distance and location it is done with the combination of WIFI router and the WIFI active RFID tags. RFID active tags are being extensively used to identify and track the objects providing a more convenient way to keep track of valuable objects. Location tracking and positioning systems is classified by the measurement techniques they employ to determine mobile device location. By using the RFID active tags that broadcast its identification information continuously, the wireless access points take the measurements for time of arrival for a signal from any tag and using the trilateration technique with TDoA (Time Difference of Arrival), the object can be precisely positioned.

**Supervisor:** Mr. Ahsan Sohail  
Senior Lecturer, Department of Computer & Software Engineering

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92. GSM jamming controlled with prescheduled Time Duration

GSM (Global system for mobile communication) is a communication system in which different frequencies operate for communication. It operates at GSM 900MHz & GSM 1800MHz frequency band. In Pakistan PTA (Pakistan Telecommunication Authority) controls different companies for GSM Band. In our project we have designed to block these communications during prescheduled time duration. We are going to make more efficient jamming device that disable communication of GSM from 5m to 8m. And this device automatically ON and OFF after match the time.

**Supervisor:** Mr Ahsan Sohail  
Senior Lecturer, Department of Computer & Software Engineering

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93. Music Discovery and Suggestions Network (Muzoid)

Muzoid is a web and android based app that lets the users discover music by dynamically generating playlists each time the user tries to access music by a particular artist. A query is generated to fetch dynamic list of songs from around the web. As the music is played in the discovery mode, the app senses the users’ taste of music by maintaining logs and tracking user activity for the number of playbacks for each song. Recommendation engine of the app populates a list of music that the user may find interesting by using various “social” variables such as user activity, user feedback, activity of similar users and meta information.

**Supervisor:** Mr. Aamir Iqbal Bhatti  
Visiting Facility, Department of Graduate Studies & Applied Sciences

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94. Online Patient Care System

With the advancement of technology people are getting rid off from the paper work. We have designed the online patient care system with the idea to facilitate patients and doctors. The basic function of this system is that patient can get his appointment date and time online without visiting hospital personally. This will save his time and money and he can check his own records online from anywhere so that he doesn’t have to worry about hardcopy of prescription. Doctors can also check their patient’s record. Diagnosis reports can be accessed by both doctors and patients. For facilitation of visitors who wants to visit the patient can easily know the location of the patient by simply entering his/her name.

**Supervisor:** Mr. Adeel M. Syed
Lecturer, Department of Computer & Software Engineering

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95. PBX Implementation using Asterisk

Asterisk is software which turns ordinary computer into a communications server. The aim of the project is to install, configure and test Asterisk as an IP PBX system. It is implemented using Ubuntu as a platform and provides different services over the network such as call forwarding, voice mail and message delivery into inbox if user is not responding. This is a cost effective way to set up an exchange in a small firm without having to involve costly hardware.

**Supervisor:** Ms. Madeeha Basharat
Assistant Professor, Department of Electrical Engineering

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96. Quality Management System (Monitory and Evaluation System)
These days almost every institute has set up Quality management Systems in order to improve the quality of education. We were assigned a task to develop such a quality management system which monitor and evaluate administrative tasks. To set up program objectives, mission and outcomes of monitoring. System that designs curriculum and perform assessments, lab management and Student guide system are the features of this Quality management System (Monitory and Evaluation System).

**Supervisor:** Mr. Fazal Wahab  
Assistant Professor, Department of Graduate Studies & Applied Sciences

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97. Electronic Railway Terminal Management
Railway gate is controlled electronically in order to predict traffic. The railway gate is closed when a train is passing by the way and the red traffic light indicates that train is passing and gate is closed. The entry and exit control circuit via LCD (7 segment display) microcontroller based. This procedure involves Infra-red control circuit, relay switching circuits along with open and close sensors. Opening and closing of the gate is done using stepper motors, actuator track changing and mechanical pulley. The track switching is controlled electronically through software commands which manage the arrival and departure of the train and position of the railway gate. A GUI has been made using Visual Basic.

**Supervisor:** Mr. Ahsan Sohail  
Senior Lecturer, Department of Computer & Software Engineering.

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Glimpses of Open House 2011
Director Islamabad Campus inaugurating the Bahria University Open House 2011

Director Islamabad Campus visits a Project at Bahria University Open House 2011
Chief guest Honorable Rector Bahria University awarding prize to final year student for Best brochure design

Chief guest Honorable Rector Bahria University awarding prize to final year student for Best penaflex design
Chief guest Honorable Rector Bahria University awarding prize to final year student for Best Software project

Chief guest Honorable Rector Bahria University awarding prize to final year student for Best Hardware project
**Group Photo:** Final year student of Department of Engineering and Department of Graduate Studies & Applied Sciences with project coordinator at Bahria University OH-2011

**Group Photo:** Management team of BU-OH 2011 with Project Coordinator
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