



**COMSATS Institute of Information Technology**

# GRADUATE PROSPECTUS 2014-15





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A photograph of two men in a classroom or office setting. The man on the left is wearing a dark shirt with a red and white striped scarf. The man on the right is wearing a light-colored button-down shirt. They are both looking down and to the left. The background shows a wall with a poster and a fan. A semi-transparent red banner is overlaid at the top of the image.

# GRADUATE Prospectus 2014-15



# Rector's Message

I am delighted to share with you the COMSATS Institute of Information Technology (CIIT) prospectus for academic year 2014-15. CIIT is undoubtedly one of the top institutions of higher learning and well recognized, both nationally and internationally, for its commitment to quality education and innovative research. CIIT chartered in 2000 today stands at an enviable position, with seven fully functional campuses along with a virtual campus, 06 Faculties, 18 Departments and around 100 degree programs for its prospective students.

The Institute's aim is to provide you state of the art knowledge, develop your skills and create in you an enthusiasm that will propel you to meet the challenges that lie ahead, and enable you to effectively contribute towards progress and future development of the country in particular and the world in general.

CIIT has emerged as a leading research based institution, recognized nationally and internationally for its teaching standards and research output. Consistently ranking highly, presently, it stands at No. 03 among all universities of the country in terms of research productivity. Moreover, the international ranking agency, Quacquarelli Symonds (QS) Organization has awarded CIIT three stars out of a total of five in 2013 and a score of five out of five in categories of teaching, facilities, and engagement. The Institute was also awarded with 1<sup>st</sup> Federation of Pakistan Chambers of Commerce and Industry Achievement Award for outstanding services in Education and Training Category for the year 2012.

CIIT offers a unique blend of wide range of graduate programs, where the research activities result not only in the publishing of research papers in international journals

of high impact factor but also include publication of books and patents registration. Graduate programs offered by the Institute are an amalgamation of theory and practical knowledge in emerging technologies in a way that provides impetus to technical excellence, originality and a broad vision sharpened by transferable skills such as team work, strong communication and leadership for future careers. We achieve this courtesy through our world class faculty, which is drawn largely from academia as well as industry to ensure that the links with the academia and commercial worlds are robust and the students are able to work on real world problems. This provides an excellent opportunity for career progression of our students.

CIIT is proud of its uncompromising standards of higher education and research, which prepare well for professional life and personal development of graduate students. Our

students are dedicated and active in both academic and research pursuits. This helps us ensure a mature and focused environment conducive to learning and quality research.

The Institute is committed to continuously strive for academic excellence and maintaining a high standard of research. I am sure that you will have an exciting, successful and highly rewarding experience during your stay at CIIT.

We look forward to welcome you at one of our beautiful, clean and green Campus.

Dr. S. M. Junaid Zaidi, S.I.  
**Rector**

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# Introduction





## CHAPTER 1

### Why Choose CIIT?

COMSATS Institute of Information Technology (CIIT), a leading Degree Awarding Institution of higher education in Pakistan, is among the Centers of Excellence of Commission on Science and Technology for Sustainable Development in the South (COMSATS) [www.comsats.org](http://www.comsats.org).

Established in 1998, CIIT is one of the fast growing research - based institutions in Pakistan, with a wide range of academic programs (ranging from basic sciences to cutting edge emerging technologies) and a network of interdisciplinary research centers making it an ideal place for higher studies leading to MS and PhD degrees.

Since its establishment, CIIT has made multi-faceted growth in terms of campuses (currently it has eight fully functional campuses), number of students, faculty members, academic programs, research output, and public outreach, to accomplish its three-fold stated mission, i.e., Research and Discovery, Teaching and Learning, and Outreach and Public Service, which makes it a popular choice for undergraduate as well as graduate programs.

### Quality of Research at CIIT

The Institute has an excellent reputation for the quality of its research degree programs with 2,524 qualified faculty members, mostly with foreign qualifications to their credit. CIIT faculty is committed to ensure that graduate students receive appropriate training and guidance to nurture their drive for innovation, creativity and skills to explore new horizons in their respective fields. The research activity within the Institute is vast and extends across the Faculties and Departments, often crossing traditional subject boundaries. Research activities cover both theoretical and applied research, as well as specific or contract research projects undertaken on behalf of outside bodies such as government, industry and research funding agencies.

To enhance research culture among the faculty, the Research and Development (R&D) Division was established at CIIT in January 2005, realizing the acute shortage of highly qualified researchers and scientists. Since its inception, the R&D Division under the dynamic and visionary leadership of the Rector CIIT, is playing an active role to enhance and encourage the faculty to contribute and share in promoting the research activities by means of research papers, proposals, projects, etc. in all market-driven disciplines.

In March 2011, R&D Division was transformed into the Office of Research, Innovation and Commercialization (ORIC), to transmute pure knowledge into products and production processes with ultimate goal to uplift the research spectrum with more vibrant and strong stature. The mission of the ORIC, is to establish a strong research culture, commercialization and innovation within a dynamic, efficient and effective team of scientists and researchers and to motivate them to play an active role to plan, strategize and to materialize the vision and mission of the CIIT. Moreover, the ORIC welcomes and creates good working relationship with other higher learning institutions, industries and donor agencies especially HEC, PSF, British Council and ICT R&D Funds etc., to enhance initiatives regarding entrepreneurship, academic and research excellence. It also focuses towards achieving technological competitive edge and a world class status for the Institute.

To encourage and appreciate the graduate students for undertaking research, an incentive in term of “Cash Award” is offered for each publication. The incentive of doing research is particularly important for young emerging faculty. To encourage the research graduates and young faculty, the CIIT has established “CIIT Research Grant Program” under which research grants up to Rs.500,000/- are available for research projects of short duration.

CIIT’s faculty members are active in research in their respective fields and the total number of 3,541 research articles have been published by CIIT faculty members till 2013. The year-wise detail of research publications is as under:

Research Output	
Year	Research Papers
2005-06	178
2007	202
2008	195
2009	373
2010	327
2011	703
2012	611
2013	952
<b>Total</b>	<b>3,541</b>

CIIT faculty has published a number of books, summary of which is given below:

Year	No. of Books
1999	1
2002	2
2003	2
2005	3
2006	1
2009	5
2010	15
2011	12
2012	3
2013	4
<b>Total</b>	<b>48</b>



Summary of patent applications filed by the CIIT faculty is as below:

Sr #	Patent Application Number and Filing Date	Inventors	Applicant/ Assignee	Title	Granted Country
1	13/049,843 March 16, 2011	<b>Dr. Robina Farooq</b> <b>Dr. Saleem Farooq Shoukat</b>	CIIT	Recovery of nickel from industrial pickling acid solutions	USPTO
2	US 13/121,372 with priority of PCT/DE2009/075054	<b>Dr. Shahid Khattak</b>	Vodafone	Decentralized and Cooperative Reception of Data by Base Stations	Granted in US (US8537711 B2)
3	US2010323706(A1) with priority of PCT/DE2008/001524	Patrick Marsch, Peter Rost, <b>Dr. Shahid Khattak</b>	Vodafone	Method for Base Stations for overall Cell Signal Decoding	Granted in Europe (DE1120080 03127)
4	EP20090168472 April 7, 2010	<b>Dr. Shahid Khattak &amp;</b> Prof. Dr. Fettweis Gerhard	Vodafone	Process for Mitigation of Interference in a Mobile Cellular Network and Base Station of a Mobile Cellular Network	Granted in Europe EP2114023 B1
5	US 2009/0145774 A1 Dec 8, 20107	<b>Dr. Robina Farooq</b> <b>Dr. Salem Farooq Shaukat, Asim Yaqoob</b> <b>Dr. Umer Farooq</b>	CIIT	Novel Sonoelectrolysis for Metal Removal	In review USPTO
6	14/014,978 with priority of 262/2013 at Patent Office, KHI Sept. 30, 2103	<b>Dr. Muhammad Yar</b>	CIIT	Dihydro 1,4-benzoxazines using sulphonium salts	In review
7	262/2013 April 29, 2013	<b>Dr. Muhammad Yar</b>	CIIT	A novel and efficient synthesis of dihydro 1,4-benzoxazines using sulphonium salts	In review
8	14/098,067 December 5, 2013	<b>Dr. Shahid Khattak</b> <b>Muhammad Sheraz Ahmad and Dr. Khurram Aziz</b>	CIIT	Heart Murmur Extraction and Heart Impairment Identification using Fuzzy Controller	In review
9	13/918,407 June 14, 2013	<b>Muhammad Yasir Qadri, Nadia Nawaz Qadri,</b> Klaus Dieter McDonald-Maier	Muhammad Yasir Qadri, Nadia Nawaz Qadri, Klaus Dieter McDonald- Maier	Software controlled data prefetch buffering	In review

## Research Centers

For institutions of higher learning, the centers of excellence are symbol of pride and recognition. The centers represent the underlying strength in various disciplines to carry out world class research and development. The CIIT has established following research centers and a few are in the developing stage:

- Center for Advanced Studies in Telecommunication (CAST)
- Interdisciplinary Research Center in Biomedical Materials (IRCBM)
- Center for Research in Management Sciences
- Center for Professional Development (CPD)
- China Study Center (CSC)
- Center for Policy Studies (CPS)
- Business Incubation Center (BIC)
- Center for Climate Research and Development (CCRD)
- COMSATS Center for Executive Development (CCED)
- Center of Advance Drug Research (CADR)

### Center for Advanced Studies in Telecommunication

The Center for Advanced Studies in Telecommunication (CAST) was established in December 2007, as an autonomous research cost center to produce quality research in the area of telecommunication. Initially, the establishment of CAST was funded by Higher Education Commission and CIIT's own resources. The existence of CAST has ensured long-term continuity of quality and industry related research activities. The mission of CAST is to provide service to the society through quality research in telecommunication by virtue of its highly competent faculty and staff, state-of-the-art research facilities, synergistic relationships with regional industry and by providing an intellectually stimulating environment for problem-based research.

Since there was an absence of any meaningful dialogue and collaboration between regional industry and universities, CAST was established with an objective to act as an interface between the Institute and regional telecom industry (government and community groups) for research based telecommunications activities. CAST from its inception has been focused on developing strong industry linkages, with special focus on practical implementation and realization of telecommunication technologies. In this regard, CAST has created a

marketing department for establishing and maintaining mutually beneficial commercial collaboration with local telecom industry.

### Interdisciplinary Research Center in Biomedical Materials

The interdisciplinary Research Center in Biomedical Materials (IRCBM) was setup in 2008 at CIIT, Lahore Campus as a center of excellence with multi-disciplinary approach to Biomaterials. The center works beyond the subject boundaries with the aim of transforming fundamental research to clinical care.

The scientists at IRCBM are carrying out research in the field of Bio-ceramics, Polymer Chemistry, Nanotechnology and Tissue Engineering. They are looking for new ways of synthesizing novel bone fixation and bone replacement materials in order to improve the biological properties. Bio-performance is determined via in-vivo and in-vitro biological testing and some of Pakistan's leading surgeons are associated with the center.

### Center for Research in Management Sciences

The Center for Research in Management Sciences was established in 2010 at CIIT Islamabad. The center has a number of active researchers from across the Finance and Accounting, Economics, Management, Project

Management, Energy Management, Marketing, and Information Technology areas. It is established with an objective to promote research activities that lead to high quality research output. Another aim of the center is to promote meaningful exchange of ideas and collaboration between regional industry and academia. A few objectives of the Center are as follows:

- To Support high quality research within the department of Management Sciences, for promoting a research culture among staff and students through establishing and maintaining high quality research databases.
- To encourage and promote linkages with the academic and industry in respective disciplines.
- To offer quality information and training programs to commercial clients.

### Center for Professional Development

An intensive interaction with the local industry revealed that the industry is facing a shortage of skilled manpower/ engineers in various fields including industrial control and automation, instrumentation, mobile communication, spectrum planning and monitoring, energy conservation and power factor improvement. Keeping in view the fore-mentioned facts, interactions with the concerned authorities of Siemens

Pakistan, AH Automations, Frequency Allocation Board, Alcatel-Lucent, Ufone and a few others were made. All of these organizations agreed to cooperate with CIIT to enrich professional development initiatives. For this motive, Center for Professional Development (CPD) was established in 2010, under the Department of Electrical Engineering at CIIT Islamabad. The main focus of CPD is on the following:

- Technology-driven trainings for Faculty / Student.
- Trainings for personal and professional development.
- Organize Exhibitions, Seminars and Workshops on different fields of study.
- Building strong collaboration with industry

### China Study Center

The vision of this center is to promote China as the most significant geopolitical and economic partner of Pakistan. The mission of the center is to develop an understanding and appreciation of socio-cultural and economic intricacies pertaining to the peoples of Republic of China. The China Study Center at CIIT seeks to promote Pak - China friendship; promote cooperation in scientific, economic, cultural, educational, and other related fields. The major activities of China Study Center are:

- To provide a critical interface for the University's relations with business, government and non - governmental institutions involved with China.
- To carry out and coordinate China related research projects within and outside the center.
- To arrange conferences, public lectures and workshops, develop media promotional strategies and work with various stakeholders to promote Chinese language and culture in Pakistan and collaborative initiatives in the scientific and economic fields.
- To provide customized consultancy services and training programs.
- To promote understanding through exchange programs of students, researchers and faculty.

### Center for Policy Studies

CIIT has recently established a Center for Policy Studies (CPS) to offer academic programs and research studies in policy areas which could benefit the government and society at large. The center intends to synchronize the expertise of the policy makers and practitioners with the academics and researchers. The center aims to play a supportive and advisory role for the policy makers by offering timely recommendations and policy



alternatives duly supported by sound theoretical research and empirical surveys.

CPS plans to frame and offer timely, coherent and practicable responses on issues of public interest for policy makers through empirical research, in-depth analysis and consultative process with relevant stakeholders. It aims to bridge the gap between academia, Government, industry and civil society on various contemporary issues through a multi-disciplinary approach. Moreover, it will undertake short-term and medium-term training modules for capacity building programs in public and private sectors. The prime objectives of CPS are:

- To provide rigorous and multi-disciplinary research and policy prescriptions
- To offer education for aspiring and practicing public policy professionals and citizens

- To offer high-quality scholarly research for promoting public understanding of contemporary public policy issues like energy crisis, terrorism, governance issues, low technology based production and export profile, low tax to GDP ratio, low agricultural productivity, water and food security, climate issues, other natural and man-made disasters preparedness etc.
- To create awareness about dynamics issues in Pakistan's neighborhood that impinges upon its security

The CPS has already started functioning apart from launching Research Studies in a few important areas including climate change, impact of cellular phones on Pakistan's economy, policy formulation and implementation mapping in Pakistan, human and natural design systems, and strategic issues

in post US exit from Afghanistan etc. Other activities of the center including executive training programs, seminars and conferences and partnerships with renowned research centers are also underway.

Besides these initiatives, there are few other units functioning at different campuses of CIIT including Engineering Resource Center (ERC), Life Sciences Services Center ( LiSCENT) , COMSATS Community Development Unit (CCDU), Information Technology (IT) Center, CISCO Regional Academy, and Center for Micro and Nano Devices, etc

### **Charter of Degree Awarding Institute (DAI)**

The CIIT was awarded the Charter of Degree Awarding Institute (DAI) in the public sector by the Federal Government of Pakistan on August 12, 2000. The President of Islamic Republic of Pakistan is the Patron of CIIT and the Federal Minister for Science and Technology is the Chancellor of CIIT. The CIIT functions under the guidance of the Board of Governors (BoG) headed by the Executive Director COMSATS. The principal academic and administrative officer of the Institute is the Rector, who performs his functions in accordance with the general policy guidelines laid down by the Board of Governors. The membership of the Board of Governors is as under:

## Board of Governors

Member	Membership Type
Executive Director, Commission on Science and Technology for Sustainable Development in the South (COMSATS)	Chairman
Secretary, Ministry of Science and Technology, Islamabad	Member
Secretary, Ministry of Education, Trainings and Standards in Higher Education, Islamabad or his nominee	Member
Chairman, Higher Education Commission, Islamabad or his nominee	Member
Nominee of Educational NGOs	Member
3 Persons of Outstanding Merit nominated by the Managing Committee of the COMSATS	Member(s)
Rector, COMSATS Institute of Information Technology	Member
Campus Directors, COMSATS Institute of Information Technology	Member(s)
2 Deans of Faculties of COMSATS Institute of Information Technology nominated by the Managing Committee of the COMSATS	Member(s)
Registrar, COMSATS Institute of Information Technology	Member/Secretary



## Historical Perspective

The CIIT was established in 1998, as a project of the Commission on Science and Technology for Sustainable Development in the South (COMSATS), which is an inter governmental organization with 21 member states in three continents; Asia, Africa and Latin America. Currently, CIIT has the status of a public sector degree awarding higher education institution.

COMSATS itself came into being in 1994 as an organization, dedicated to highlight the role of S&T in the development plans of the South and the facilitation of South-South and North-South cooperation for capacity building in S&T. An excellent arrangement for S&T cooperation is provided through a network of 16 Centers of Excellence affiliated with COMSATS in various member countries including the CIIT in Pakistan.

## COMSATS Member Countries

■ Bangladesh	■ Jordan
■ Sri Lanka	■ China
■ Kazakhstan	■ Sudan
■ Colombia	■ Korea (DPR)
■ Syria	■ Egypt
■ Nigeria	■ Tanzania
■ Ghana	■ Pakistan
■ Tunisia	■ Iran
■ Philippines	■ Uganda
■ Jamaica	■ Senegal
■ Zimbabwe	

## Vision

CIIT aspires to be both one of the top research institutions and one of the best higher education providers in the country. It envisages to become a university by the name of “COMSATS University”, for which the legal documentation is under process with the Government of Pakistan. The vision being pursued by the CIIT is to become one of the top 100 universities in the developing world. The CIIT further intends to earn a place among the top 500 universities of the world by the year 2020.

## Mission

The CIIT is dedicated to the search for truth through advancement of learning and extending the frontiers of knowledge; to the sharing of knowledge through education in academically diverse disciplines and the application of this knowledge for the benefit of the people of Pakistan in particular, and the Muslim Ummah and the world, in general. The Institute’s mission is threefold:

### i) Research and Discovery

Generate and preserve knowledge, understanding and creativity by instigating enquiry, conducting high-quality research and promoting scholarship, that benefit students, scholars and communities across the country, the Muslim Ummah and the World, at large

### ii) Teaching and Learning

Share the knowledge, understanding and creativity by providing a broad range of educational programs among a diverse community of learners and teachers and prepare graduate, professional and undergraduate students as well as non-degree seeking students interested in continuing education and lifelong learning for active roles in competitive and culturally diverse environments.

### iii) Outreach and Public Service

Extend, apply and exchange knowledge between the institute and society by applying scholarly expertise to intellectual, social and technological problems, by helping organizations and individuals respond to their changing environments, and by making the knowledge and resources created and preserved at the institute accessible to the citizens. Using the resources of its multiple campuses in an integrated fashion, the Institute vies to strengthen the services to the state through the education of a modern work force, research and development, technology commercialization and partnership with business, government and community groups

## Rankings

Since its inception, independent entities have evaluated COMSATS Institute of Information Technology (CIIT) and the quality of its programs, such as the Higher Education Commission (HEC), Pakistan Engineering Council (PEC), National Computing Education Accreditation Council (NCEAC), Pakistan Pharmacy Council (PPC), and the Institute of Scientific Information (ISI) Web of Knowledge. It is a matter of pride for the CIIT that it has been able to record remarkable achievements in terms of ranking of its Engineering degree programs as well as research productivity of the faculty members.

In 2012, CIIT was ranked as number one (1) university of Pakistan in Computer Science and IT besides being ranked at number 9 among all 132 universities of Pakistan. This ranking was announced by HEC based on QS ranking format and for enhancing Quality and Research based Rankings of Pakistani Higher Education Institutes. In 2012, CIIT was ranked at number 03, on account of research output by its qualified faculty by Higher Education Commission (HEC).

It was a moment of celebration for CIIT when HEC ranked it at number 4 in Pakistan in General Universities (Large) category in 2013. This success is a manifestation of its undeterred commitment and has led to an unprecedented number of applicants

for securing admission in CIIT every year. Moreover, an international ranking agency, QS Organization, which carries out world universities ranking, carried out an independent analysis of various aspect of activities of CIIT and awarded three stars (out of a total of five) and out of a total, about 8-9 categories earned a perfect score of five out of five in as many as three categories of teaching, facilities; and engagement. The award was announced during a QS conference held in Seoul, South Korea in 2013.

## Campuses

Besides its principal campus at Islamabad, the CIIT has six other fully functional campuses at Lahore, Abbottabad, Wah, Attock, Sahiwal, and Vehari, while few more campuses are in the pipeline, particularly in the province of Sindh and Balochistan. To

increase the approach and availability of top quality benchmark education and teaching experience in country, CIIT has taken a step forward by establishing its Virtual Campus in 2012, for distance learning programs.

## Friendly Campus Environment

The institutions of higher learning are the places to generate and create new knowledge through a friendly, free environment conducive for freedom of thought, expression and reasoning. The CIIT is promoting these virtues and culture by providing a friendly atmosphere to interact with the students of diverse backgrounds due to which a great sense of fraternity and cultural mixing is seen on the campus. The CIIT is providing confidence and trust among the students by providing friendly and



fearless environment. Our graduates have great confidence and trust on their abilities and a great desire to deliver in their future career as they are wiser and more knowledgeable.

## Diverse Community

CIIT is an equal opportunity institution for the students, so it always welcomes students from all the corners of Pakistan and around the globe. This brings in the diverse community together, which generates great qualities of consideration, tolerance, understanding and fellow feeling among the graduates. The graduates of CIIT are overwhelmed with research, teaching and a spirit of serving across the country and the globe.

## International Linkages

Realizing that Research and Development activities in this era of tough competition and globalization cannot take place in isolation, the CIIT has established linkages with reputed national and international organizations. The CIIT in its brief history has made land mark achievements by signing 191 Memoranda of Understanding (MoUs) with national and the world's renowned educational institutions. The nucleus rationale of getting into linkages is to encourage exchange of students and faculty to pursue higher education, to organize joint conferences, workshops and seminars, to arrange joint research activities, to work out on staff development programs, and other

academic related activities.

## Faculties, Departments, Research Centers and Graduate Programs

The CIIT at present comprises the 06 Faculties, 18 Departments and 09 Research Centers. Presently more than 96 undergraduate and graduate degree programs are on offer.

Faculty Distinction: More than 700 faculty members and academic managers holding PhD qualification are currently serving the CIIT. The remaining has MS / M.Phil in relevant fields.

## Graduate Output

CIIT has proudly produced more than 26,303 graduates since its inception in 2000. So far, 62 convocations have been organized in its campuses

## Students

<b>Total:</b>	<b>29,358</b>
Undergraduate:	21,509
Master:	3,122
Graduate:	4,727

## Faculty

<b>Total:</b>	<b>2,524</b>
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## Faculty Development

More than 470 faculty members are undergoing advanced education / training leading to MS and PhD degrees and post doctoral research in USA, UK, China, France, Sweden, Australia, Austria, Germany, Canada, Malaysia, Finland, Korea, Netherlands, etc. The funding for advanced education has come from CIIT Scholarships, HEC Scholarships and a few from self sponsorships.

## Services

- Academic Faculties
- Teaching Departments
- Specialized Research Laboratories
- Students Counseling Centers
- Career Development Cells
- COMSATS Technologies
- Edward De Bono Foundation
- Inter - Islamic Network on Information Technology (INIT)
- CISCO Academy
- National Testing Service (NTS)
- Center of Excellence in Information and Communication Technologies
- Faculty Development Academy



# Graduate PROGRAMS 2014-15

## ISLAMABAD CAMPUS

### *Department of Computer Science*

- MS in Computer Science
- MS in Software Engineering
- MS in Information Security
- PhD in Computer Science

### *Health Informatics Unit*

- MS in Health Informatics

### *Department of Electrical Engineering*

- MS in Electrical Engineering
- MS in Computer Engineering
- MS in Mechatronics Engineering
- MS in Renewable Energy Engineering
- PhD in Electrical Engineering
- PhD in Computer Engineering

### *Department of Management Sciences*

- MS in Management Sciences
- MS in Project Management
- MS in Economics
- MS in Energy Management
- MS in Banking and Finance
- PhD in Management Sciences
- MBA (2.5 Years)
- MBA (1.5 Years)

### *Department of Humanities*

- MS in English (Linguistics and Literature)
- MS in International Relations

### *Department of Mathematics*

- MS in Mathematics
- PhD in Mathematics

### *Department of Biosciences*

- MS in Biosciences
- MS in Bioinformatics
- MS in Biochemistry and Molecular Biology
- MS in Molecular Genetics
- MS in Microbiology and Immunology
- MS in Molecular Virology
- PhD in Biosciences
- PhD in Biochemistry and Molecular Biology
- PhD in Molecular Genetics
- PhD in Microbiology and Immunology

### *Department of Meteorology*

- MS in Meteorology
- MS in Remote Sensing and GIS
- PhD in Meteorology

### *Department of Physics*

- MS in Physics
- MS in Nanotechnology
- PhD in Physics

## Abbottabad Campus

### *Department of Computer Science*

- MS in Computer Science
- PhD in Computer Science

### *Department of Electrical Engineering*

- MS in Electrical Engineering
- PhD in Electrical Engineering

### *Department of Civil Engineering*

- MS in Environmental Engineering

### *Department of Management Sciences*

- MS in Management Sciences
- MS in Project Management
- MS in Economics
- MS in Banking and Finance
- MBA (1.5 years)

### *Department of Development Studies*

- MS in Development Studies
- MS in Conflict, Peace and Development
- PhD in Development Studies

### *Department of Environmental Sciences*

- MS in Biotechnology
- MS in Environmental Sciences
- MS in Sustainable Water Sanitation Health and Development
- PhD in Biotechnology
- PhD in Environmental Sciences

### *Department of Mathematics*

- MS in Mathematics

### *Department of Chemistry*

- MS in Chemistry
- PhD in Chemistry

### *Department of Pharmacy*

- MS in Pharmacy
- PhD in Pharmacy

### *Department of Earth Sciences*

- MS in Earth Sciences (Geology / Applied Geophysics)

## Wah Campus

### *Department of Computer Science*

- MS in Computer Science
- PhD in Computer Science

### *Department of Electrical Engineering*

- MS in Electrical Engineering
- PhD in Electrical Engineering

### *Department of Management Sciences*

- MS in Management Sciences
- MS in Banking and Finance
- MBA (1.5 years)

### *Department of Mathematics*

- MS in Mathematics

## Lahore Campus

### *Department of Computer Science*

- MS in Computer Science
- PhD in Computer Science

### *Department of Electrical Engineering*

- MS in Electrical Engineering
- PhD in Electrical Engineering

### ***Department of Chemical Engineering***

- MS in Chemical Engineering
- PhD in Chemical Engineering

### ***Department of Management Sciences***

- MS in Management Sciences
- MS in Project Management
- MS in Economics
- MS in Strategic Marketing
- PhD in Management Sciences
- MBA(2.5 years)
- MBA (1.5 years)

### ***Department of Humanities***

- MS in English (Linguistics and Literature)

### ***Department of Mathematics***

- MS in Mathematics
- PhD in Mathematics

### ***Department of Statistics***

- MS in Statistics
- PhD in Statistics

### ***Department of Physics***

- MS in Physics
- PhD in Physics

## **Attock Campus**

### ***Department of Computer Science***

- MS in Computer Science

### ***Department of Electrical Engineering***

- MS in Electrical Engineering

### ***Department of Management Sciences***

- MS in Management Sciences
- MS in Project Management
- MBA (1.5 years)

### ***Department of Mathematics***

- MS in Mathematics

## **Sahiwal Campus**

### ***Department of Computer Science***

- MS in Computer Science

### ***Department of Management Sciences***

- MS in Management Sciences
- MBA (1.5 years)

### ***Department of Biosciences***

- MS in Biosciences

## **Vehari Campus**

### ***Department of Environmental Sciences***

- MS in Environmental Sciences

### ***Department of Management Sciences***

- MS in Management Sciences

## **Virtual Campus**

### ***Department of Management Sciences***

- MBA (1.5 years)
- MS in Project Management
- MS in Banking and Finance

# Campuses



## CIIT Campuses

The CIIT is a multi-campus center of higher learning. Currently, it has eight fully functional campuses, along with Virtual Campus, at the following places:

1. Islamabad
2. Abbottabad
3. Wah
4. Lahore
5. Attock
6. Sahiwal
7. Vehari

A few more campuses are in advance stages of establishment. Presently the student strength of CIIT is 29,358 full time students with faculty strength of 2,524. Specifically, the strength of MS students is about 4,183 and that of PhD is 544.

## Islamabad Campus

### Welcome to Islamabad

Situated at the edge of Pothohar Plateau in the footsteps of Margalla hills, Islamabad the capital city of Pakistan is a great place to study and best place to live. The city experiences all the four weathers in a calendar year with hot summers during May and June

followed by monsoon rains during July and August. Winters are cold, with temperatures occasionally falling down below zero during December to February and a pleasant spring during March and April.

Islamabad is known for its multi-ethnic environment and a hub of cultural and business activities and a great place for national and international cuisines. Among the places of interest in and around Islamabad, Sharkarparian Hill, Daman-e-koh and Pir Sohawa offer a bird's eye view of the city, whereas Rawal Lake is favorite recreational spot for those who love blue waters and sunny skies. The Faisal Mosque located in Islamabad, named after the King Faisal of Saudi Arabia, is one of the largest mosque in the world. Islamabad is linked by road to nearby hill stations of Murree, Nathigali and Ayubia which are popular tourist resorts to beat the scorching heat in summer and to see snow fall in winter.

Rawalpindi considered to be twin city of Islamabad due to its proximity which has grown in recent years from a small garrison town to a vital commercial center. The CIIT Islamabad campus is situated at a suitable place that is approachable from Islamabad as well as Rawalpindi. Islamabad being the Capital of Pakistan is accessible through direct and indirect international flights for all around the world.



## Campus

CIIT Islamabad was established in 1998 to promote Information Technology and to reduce the ever-growing gap between the developed and developing world through useful applications of science and technology. During the first year of its establishment, the Institute offered only a few certificate courses and a postgraduate diploma in computer studies with a single class room and limited resources. Islamabad Campus of CIIT is situated at Chak Shahazad, Islamabad. Currently more than 7,360 students are enrolled in various degree programs at this Campus.

Islamabad Campus provides what a discerning student is looking for in a learning environment, academic excellence, quality teaching, and constructive leisure activities. We appreciate that it is crucial for today's student to work in a physical environment conducive to study. Here the faculty not only teaches but mentors the young and impressionable minds. The newly built campus is fully equipped with facilities of international standards. It is a marvel of modern architecture surrounded by a lush green environment and peaceful surroundings.



## Graduate Programs at Islamabad Campus

### Department of Computer Science

- MS in Computer Science
- MS in Software Engineering
- MS in Information Security
- PhD in Computer Science

### Health Informatics Unit

- MS in Health Informatics

### Department of Electrical Engineering

- MS in Electrical Engineering
- MS in Computer Engineering
- MS in Mechatronics Engineering
- MS in Renewable Energy Engineering
- PhD in Electrical Engineering
- PhD in Computer Engineering

### Department of Management Sciences

- MS in Management Sciences
- MS in Project Management
- MS in Economics
- MS in Energy Management
- MS in Banking and Finance
- PhD in Management Sciences
- MBA (2.5 years)
- MBA (1.5 years)

### Department of Humanities

- MS in English (Linguistics and Literature)
- MS in International Relations

## Department of Mathematics

- MS in Mathematics
- PhD in Mathematics

## Department of Biosciences

- MS in Biosciences
- MS in Bioinformatics
- MS in Biochemistry and Molecular Biology
- MS in Molecular Genetics
- MS in Microbiology and Immunology
- MS in Molecular Virology
- PhD in Biosciences
- PhD in Biochemistry and Molecular Biology
- PhD in Molecular Genetics
- PhD in Microbiology and Immunology

## Department of Meteorology

- MS in Meteorology
- MS in Remote Sensing and GIS
- PhD in Meteorology

## Department of Physics

- MS in Physics
- MS in Nanotechnology
- PhD in Physics

## Facilities

The campus is spread over 43 acres with a total covered area of 471, 846 sq ft. The campus comprises of 59 classrooms, 48 laboratories and the Central Library with a covered area of 52,051 sq ft.

### Lecture Rooms

CIIT Islamabad has 59 spacious lecture theatres, with a total covered area of 40,131sq ft. Each theatre has a capacity for 100-120 students. All lecture theatres are IT enabled, air-conditioned, well furnished, and well maintained.

### Laboratories

The Campus has deployed state-of-the-art IT infrastructure with a total number of 48 computer Laboratories with a total covered area of 37,819 sq ft. Around 1,100 computers at Islamabad Campus is a prime example of CIIT's commitment to providing its students with optimum learning facilities. All workstations are networked to CIIT's LAN and a high bandwidth connection provides connectivity to internet round the clock. Major Laboratories are Electronics, Microprocessor, VLSI and DSP and Biosciences laboratories.

### Library

The library supports the academic programs of CIIT through collections, technology and services, which



enables students and faculty to access digitized knowledge and information resources. This support empowers our students to develop the information and technological competencies necessary to achieve their educational, research and professional goals. This facility also enables them to succeed in the workforce, apply lifelong learning skills and participate productively in society.

The library is spacious, well planned, and offers tranquil environment. It is fast developing into one of the richest information resource centers in Islamabad. The library subscribes to a large number of periodicals and journals, which have educational value for students. In addition, it also offers its users a rich learning environment complemented with electronic information access and services. The library has circulation, 'reserve' and reference sections. Internet facilities in the library connect users to libraries around the world for reference, assistance and consultation. The stock consists of about 45,000 latest books on a variety of disciplines like Electrical Engineering, Mathematics, Physics, Biosciences, Computer Science, Business and Management, Design and Architecture, English Language and Literature. Our target of books is about 750,000 for the faculty and students.

Library is equipped with most modern technologies like RFID System and Library Management System and is

providing users facilities like, self check in and check out for borrowing and returning of library material, drop box for returning of borrowed library material, Online Public Access Catalogue (OPAC) of library resources, online booking and reservation of library material, digital library, electronic journals and databases, audio/visual facilities, dedicated computer systems for research and use for digital and electronic resources, wireless internet connection. Video conferencing room is another unique feature of this library. Equipped with latest audio/video equipment and with a capacity of accommodating around 100 people, this facility provides excellent opportunity of remotely organizing and participating in lectures, workshops, seminars, discussions and meetings.

The library is also providing complete access to more than 33,000 high quality, peer-reviewed journals, conferencing proceedings and articles through 27 different online databases under the HEC's National Digital Library Program. Students and faculty can access these resources from inside and outside the campus through IP address and VPN respectively. At present, access through Virtual Private Network (VPN) is only available to senior faculty. Later on this facility could also be offered for the use of students as per the policy of CIIT. Library is also giving access to around 80,000 online books through 13 different databases that

have also been made available through the HEC's National Digital Library Program. The e-books support program will allow researchers to access most of the important text and reference books electronically in a variety of subject areas. More than 15,000 e-books on different subject areas are currently available on the CIIT E-Library which is in ever-growing/developing stage and will become more and more exemplary/perfect with the passage of time.

## Reference Services

CIIT library has dedicated staff to provide efficient and reliable reference services and users can make queries by filling "Research Inquiry Form" and submitting it to Services Department of library.

## Bibliographic and Book Information Services

Library compiles bibliographies for users on request and provides information about national and international publishers and book traders.

## Interlibrary Loan and Searching Facility

An inter-library searching option is also available in the library. Users can search material available in the libraries of different campuses of CIIT, through Union Catalogue, and can request for desired literature from them. Users can request library staff to help them

in getting their required literature from other libraries through inter-library loan.

### **International Library Loan and Photocopying Service**

Library provides facility for international lending and photocopying service through British Library Document Supply Center in UK and Library of Congress in USA. This service provides users an opportunity to access books, journals and information resources which are not available locally. Library also provides facility of photocopying for those items which are within the provisions of the Copyright Act.

### **Discussion Rooms**

Specially designed discussion rooms are one of many facilities being provided by CIIT library. Users can reserve discussion room by filling out a form and submitting it to staff at circulation counter.

### **Research Cubicles**

Specially designed for research, these cubicles are available only to PhD scholars and faculty members. Situated at the second floor of library, these research cubicles can be reserved by contacting the library staff at second floor.

### **Hostels**

Although Islamabad Campus does not

have dormitories on Campus; it has arranged rented hostel accommodation for 270 male and 120 female students. Further information on residential facilities is available from the Provost Office at the Islamabad Campus.

### **Common Room for Girls**

To facilitate our female students, the Campus has established spacious and comfortable common rooms. This space has been designed to give female students a place to relax, offer prayers, study, have informal discussions in free time available. Daily newspapers, magazines, periodical and journals are available for leisure reading. Female students appreciate this facility a great deal.

### **Cafeteria**

A food-street style catering service consisting of shops and kiosks having a wide range of quality snacks and meals, at modest prices, is available throughout the day on the Campus. Students can relax and enjoy their breaks over a cup of coffee or tea. For faculty members and visitors, a state-of-the-art food hall has been established, where a variety of hot meals are available on 'self-service' basis in a clean and relaxing environment on subsidized rates.

### **Mosque**

Regular prayers are held on the campus mosque. At one time almost 1500 persons can pray inside the mosque.





▲ Delegates during 3<sup>rd</sup> Pak-China Business Forum 2014

Now a land mark mosque on Islamabad Campus is available to accommodate more than 3,000 people, with separate facility for females and people with special needs.

### **Photocopying Facility**

Presently, 6 machines are working and over 10,000 pages are photocopied every day. The photocopy center is working on subsidized rates. The photocopy center has also the facility of spiral binding, stapler binding and hard binding.

### **Extra Curricular Activities**

Extensive extra-curricular activities are a way to soften tough and grilling academic rigor. It also provides opportunities to make new friends. Islamabad campus is very active in extra-curricular activities, as would be clear in the following paragraphs.

#### **Adventure Club**

The Adventure Club organizes adventurous activities for students. The activities include excursions, hiking and trekking, visits to historical places, hill stations and geological sites. The Adventure Club currently has more than 250 student members. Here the adventurous will find good company to give vent to their unbridled spirits.

#### **Bazm-e-Adab**

Public speaking is a rewarding art that one acquires through sheer practice. The objective of having the Bazm-e-Adab is to create interest in public speaking in the students by instilling in them confidence, self assuredness and enhancing presentation skills. Each semester, members take part in intramural and external competitions and events.

#### **Computer Science Society (CSS)**

Computer Science Society was established to provide a platform for CIIT students to keep themselves updated with developments in the computing industry. For this purpose, software competitions and seminars are organized regularly. Our students are encouraged to acquire new skills by attending workshops and short courses in contemporary computing areas. Members have brought back several prizes won at competitions, held in other institutions.

#### **Dramatics Club**

An exciting variety of musical programs, exhibitions and dramas are organized by Dramatics Club, throughout the year. This provides fun time for students.

#### **Electronics Society**

Electronic Society provides opportu-

nities to students to take part in internal, regional and national activities. It aims to develop the concepts of our students by linking theoretical knowledge to practical experience by executing many activities that are part of the Society's function. This greatly helps our students to carve a niche for themselves in the market as professionals. The Electronics Society also organizes industrial visits as well as exhibitions to display electronics projects of the students.

#### **English Literary Society**

Effective speaking skills combined with sound knowledge are key ingredients to professional success. Providing assistance to students in developing English Language skills is the main objective of our English Literary Society, which is very active in various English language and literary activities on campus.

#### **Fine Arts and Photographic Club**

The Fine Arts and Photographic Club was formed in 2001 to enhance the creative skills of students and develop their aesthetic sense. The Club focuses on sketching, poster painting, portraits, landscapes and photography.

#### **Sports Club**

Sports Club arranges all sorts of sports competitions to channel boundless energies of our students. It provides



opportunities for sports enthusiasts to share their interests and participate in events. Sports Club organizes tournaments in Cricket, Football, Badminton, Table Tennis, Hockey and Athletics, etc. Besides regular sports activities in each semester, the club also organizes friendly, inter-campus matches from time to time.

### Telecom Society

Telecom Society has been established to provide a platform to the students to pursue their interest in the field of telecommunication beyond academics. Through various activities this society aims to increase in its members. The understanding on dynamic developments taking place in the

telecommunication industry and also understanding of ways and means to benefit from it. Core activity areas are participation and organization of seminars and exhibitions, establishment of career advisory center for students and arrangements for jobs and internships.

### Career Development Center

Wherever you are in your academic career, freshmen through PhD, we are here to help you navigate your career during your years at CIIT, from choosing a major, to exploring different career options, to finding internships, to looking for part-time and full-time employment through Career Development Center. COMSATS Institute of Information Technology,

through Career Development Center, aspires to cater the personal, academic and professional needs of its students. The principal pivot around which the core dogma of CDC revolves is the veracity and actuality that careers are not established by mere degrees and diplomas. It is much more than that, much broader in spectrum and much holistic in disposition. At CIIT's CDC, we tend to channel our vigor, energy and efforts for the career development of student in a way that they shine out to be an employee of an employer choice. For the said, we aim to initiate career development processes for students which embrace objects like career awareness, career exploration, career preparation, and work experience. Our purpose is to expose the students to the options that best fit their individual career needs. To that end, our services include:

- a) Personal, academic and professional help
- b) Part-time and full-time job listings
- c) Internships and placement
- d) Personality development
- e) Job fairs
- f) Etiquette workshops
- g) Résumé and interview preparation
- h) In-house trainings
- i) Campus interviews and employer contacts

## Student Center

A new facility, with the name of Student Centre has been provided on the ground floor of Faculty Block II, where student's queries are answered under one roof. The Student Centre is being managed by the department of Students Affairs and Career Development Centre. Student Financial Assistance office is also part of the Student Centre and deals with any financial support requests of students. State of the art equipment and computer applications are available not only to assist students but also the working staff. All queries of student are dealt here with the slogan of one window operation. The Student Centre works as a bridge between students and other departments. Students submit their requests within friendly atmosphere of the Student Centre and a ticket is issued in response to their query for future reference. The staff at the Student Centre not only provides appropriate guidance to students but also forwards their requests to the concerned departments. In case requests are dealt with by other departments, the outcome is communicated to the students and usually the entire cycle of application processing completes within forty eight hours.

## Abbottabad Campus

### Welcome to Abbottabad

Located north of Islamabad, Abbottabad is a town surrounded by lofty peaks and pine scented air. Among Pakistani cities, Abbottabad a small, neat and clean city located in the spacious valley is a rarity. In spite, of being separated from Mansehra and Haripur Districts, Abbottabad is at a moderate distance from both the cities; giving an opportunity to the students of both these localities to enjoy the facility provided in the valley.

Apart from serving as the educational hub for the locality, Abbottabad also serves as a gateway to some most stunning sites in Northern Pakistan.

With the very pleasant climate all around the year, the scenic beauty of this town provides mind stimulating environment and vast turfs for all kinds of sports, including polo, football, hockey and golf.

### Campus

The Abbottabad Campus became functional in July 2001, and the first academic session started in September 2001. This campus is ideally situated and built on 308 Kanals of land. The natural climatically advantages of Abbottabad city, large land area, sports and recreational facilities and above all, a secure and friendly environment have all combined to make the Abbottabad campus more of a resort.



The campus is an ideal place to study, live and work. The majority of the campus area encompasses parks, orchards, lush green grounds, blossoming flower beds and trees. Set in these environs with panoramic background view of Thandiani and Galiat mountains makes CIIT Campus at Abbottabad, an awe inspiring modern day place of learning.

The first academic session started with student strength of 121 and only three undergraduate programs. Soon CIIT Abbottabad emerged as a leading institute of the region. Today it has 11 departments, 5,589 students, 17 undergraduate and 25 graduate programs, qualified faculty strength of 580 including 170 PhDs and 65 modern laboratories. Our physical infrastructure emulates the best educational institutions of the country. The campus area also encompasses parks, orchards and grounds, the lush green grounds, blooming flowerbeds and trees.

The academic culture and environment are both challenging and exciting and since its inception, the Campus has maintained a fast pace of development and is now an ideal place for learning, research, and recreation. It has truly emerged as a regional leader in hands-on learning and innovation in many areas of science and technology.

## Graduate Programs at Abbottabad Campus

### Department of Computer Science

- MS in Computer Science
- PhD in Computer Science

### Department of Electrical Engineering

- MS in Electrical Engineering
- PhD in Electrical Engineering

### Department of Civil Engineering

- MS in Environmental  
Engineering

### Department of Management Sciences

- MS in Management Sciences
- MS in Project Management
- MS in Economics
- MS in Banking and Finance
- MBA (1.5 years)

### Department of Development Studies

- MS in Development Studies
- MS in Conflict, Peace and  
Development
- PhD in Development Studies

### Department of Environmental Sciences

- MS in Biotechnology
- MS in Environmental Sciences
- MS in Sustainable Water  
Sanitation Health and  
Development
- PhD in Biotechnology
- PhD in Environmental Sciences

### Department of Mathematics

- MS in Mathematics

### Department of Chemistry

- MS in Chemistry
- PhD in Chemistry

### Department of Pharmacy

- MS in Pharmacy
- PhD in Pharmacy

### Department of Earth Science

- MS in Earth Sciences (Geology  
/ Applied Geophysics)

## Facilities

### Hostels

There are four on-campus hostel buildings to accommodate approximately 676 male and 180 female students. Our hostels have been established on international standards and contain central heating and cooling system, a mess, a gym, recreation rooms and round-the-clock security. Also, hostel rooms are spacious and made for comfortable living. Boarders have access to a 24-hour campus store and a mosque. CIIT hostels are managed by wardens who also look after the safety and security of students. Cultural and traditional norms are strictly followed in the hostels. A separate hostel for the faculty is also under construction.

### COMSATS Community Development Unit (CCDU)

COMSATS Community Development Unit (CCDU) is an integral part of Abbottabad Campus. CCDU is engaged in the provision of quality consultancy services to different organizations in the specialized fields of management, organizational development, finance, re-structuring, information technology, software-development, assistance in the planning and implementation, monitoring and evaluation of organizational activities, and, importantly, in-house capacity building through the provision of specifically tailored training workshops.

### COMSATS Information Technology Center (CITC)

CITC is a well-sized technology concern having a large number of skilled professionals. CITC has a successful history of projects and a long list of satisfied clients. CITC promotes, develops, delivers and facilitates the use of information technology services and resources, including application and web development, data warehousing, network design and configuration, inter access, corporate trainings.

### Laboratories and Electronics/Computer Engineering Facilities

CIIT Abbottabad is maintaining 65 major state-of-the-art laboratories to facilitate students and keep them up with the latest technologies in the

sector of electronics, engineering and IT and Sciences. Major laboratories are CISCO, Electronics, Power System, EMI and Instrumentation, VLSI, Telecommunication/DSP, DLD and Microprocessor, Microbiology, Industrial/Pharmaceutical, Mineralogy, Soil Mechanics, Fluid Mechanics and Hydraulics Laboratory.

### Library

Library is the most important facility at any educational institution. CIIT Abbottabad has provided its students with comfortable, spacious and peaceful environment in its library. It spreads over an area of 10,000 sq ft, contains over 32,000 books and is growing rapidly. It subscribes to more than 30 research journals and magazines. Computers have been provided for browsing the web and the digital library. Photocopy





and bookshop facilities are also present at the library. The library remains open for students from morning till midnight.

CIIT library provides a wide range of up to date information using the latest reference and information techniques, as well as books and periodicals in relevant subject and interest areas. Library services include reference and information services, current awareness services, periodicals and newspapers, photocopying facilities, access to CD-ROMs, bookshop for students, cyber



station (Internet), HEC digital library, etc.

The library is also providing complete access to more than 33,000 high quality, peer-reviewed journals, conferencing proceedings and articles through 27 different online databases under the HEC's National Digital Library Program. Students and faculty can access these resources from inside and outside the campus through IP address and VPN respectively. At present access through Virtual Private Network (VPN) is only available to senior faculty and Students enrolled in MS and PhD Programs. Later on this facility could also be offered for the use of undergraduate students as per the policy of CIIT. Library is also giving access to around 80,000 online books through 13 different databases that have also been made available through the HEC's National Digital Library Program. The e-books support program will allow researchers to access most of the important text and reference books electronically in a variety of subject areas. More than 15,000 e-books on different subject areas are currently available on the CIIT E-Library which is in ever-growing/developing stage and will become more and more exemplary/perfect with the passage of time.

### **Cafeteria**

The cafeteria remains open for students and faculty the whole day, seven days a week. To ensure quality and hygienic food, a student's mess committee is

formed which monitors menu selection and ensures quality of service.

### **Common Room for Girls**

This space has been designed to give female students a place to relax, offer prayers, study, have informal discussions in free time available. Daily newspapers, magazines and periodical journals are available for reading. Female students appreciate this comfortable facility a great deal.

### **Career Development Center**

The aim of Career Development Center is to support students in optimizing the value of their academic experience and in achieving successful transitions to the workforce and further educational endeavors. This center provides quality career development programs and employment-related services in order to empower students to actively engage in the integration and implementation of their academic and employment choices. This center develops positive faculty, staff and employer relations that result in access to career information and career opportunities for the students. The long-term objective is to achieve a high status among our competitors.

### **Extra Curricular Activities**

Extra Curricular Activities are a vital part of any educational process. Sports, drama, creative writing, etc, all

help individuals to develop balanced personalities by taking healthy breaks from academic rigors. Teamwork and competition also help in building character. Students' week is held annually at the campus. This student week is dedicated to competitions and tournaments held among different classes and departmental teams. As a tradition, faculty and the student body enthusiastically participate in this weeklong event.

### Clubs and Societies

Clubs and societies are very important for creative activities on campus. A large number of clubs and societies are active at the Abbottabad Campus. These societies are involved in literary, dramatic, scientific, software and photographic activities. The societies regularly organize poetry reading competitions, debates, quiz shows, concerts, Naat and Qirat competition, photographic competitions and scientific gatherings. Presently, Software Development Society, IT Society, Dramatics Society named as 'Funkada', COMSATS Literary Society, Bazm-e-Adab, Art and Painting Society, Photography Society, Qirat and Naat Society, Eco-Adventure Club, Cricket Club, Football Club, Athletics Club, Badminton Club, Table Tennis Club, Girls Sports Club, Volleyball Club, Green Thumb Society, Entrepreneurial Society are quite popular among students.

## Wah Campus

### Welcome to Wah

The population of Wah is estimated to be over 500,000. Amenities include a garden said to have been built by the Mughal emperor Akbar in the 16th century. Legend states that one of the Mughal Emperors; probably Akbar was on a journey to Kashmir. On the way, his caravan stopped at a spring in Punjab to quench their thirst. Remarking at the quality and purity of the water, Akbar said Wah! Which has a similar meaning to the English word "wow". That spring became known as Wah and the city gets its name from this event.

It is connected by road with Peshawar, Islamabad and Rawalpindi and is a

growing industrial center. Industries in Wah include one of the largest cement factories in South Asia, other than ordnance and tractor plants, and agricultural implements and spare-parts manufacturing. Nearby is Wah Cantonment.

### Campus

The opening of COMSATS Institute of Information Technology (CIIT) in the historical and industrial town of Wah was a joint effort of the CIIT and Pakistan Ordnance Factories (POFs) Wah Cantt. CIIT started its campus at Wah in a record period of 70 days. The then Minister for Science and Technology/Chancellor CIIT formally inaugurated the Institute on September 14, 2001. Initially CIIT Wah started its operation

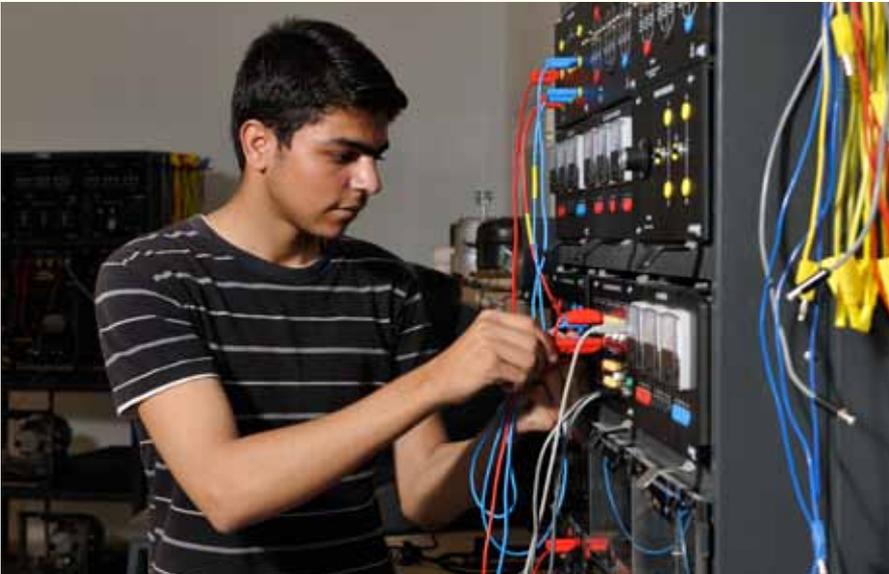


in small guest house of POFs. In 2003 two purpose built academic blocks were handed over to CIIT on long term lease period by POFs. CIIT Wah extended its academic facilities by purchasing land contiguous to existing campus in 2012. The campus has also acquired 20 Acres of land near Brahma Bahtar Interchange on Motorway (M-1) to meet its future academic requirements. The campus is ideally suited for students who wish to seek education in a conducive environment.

The Campus is situated at G. T. Road, Wah Cantt. Due to its location, it is easily accessible to the students coming from Wah, Taxila, Rawalpindi, Hassanabdul and other surrounding areas. Wah Cantt is considered as the hub of industrial activity in the region. It is a place

having high potential for the utilization of Technology and its incorporation in the industry. POF itself is a market with very high potential. CIIT being a world class institute in the region has paved the way for knowledge and learning, thus proving its worth and adding value to the region and to the country as a whole.

The campus is the first of its kind in Wah Cantt since the time of its establishment. It has a modern infrastructure and highly professional faculty members. CIIT Wah is fully equipped to handle the dynamics of the fast paced IT and engineering industry and to meet the challenges of the future. Here the dedicated Faculty ensures students to succeed and encourages them to benefit from the innovative education.



## Graduate Programs at Wah Campus

### Department of Computer Science

- MS in Computer Science
- PhD in Computer Science

### Department of Electrical Engineering

- MS in Electrical Engineering
- PhD in Electrical Engineering

### Department of Management Sciences

- MS in Management Sciences
- MS in Banking and Finance
- MBA (1.5 years)

### Department of Mathematics

- MS in Mathematics

## Facilities

### Lecture Rooms

CIIT Wah has spacious Lecture Halls which are fully furnished, air-conditioned and well maintained. Teaching aids such as multimedia and sound systems facilities are available in every Lecture Hall.

## Laboratories

Keeping in view the importance of practical training, Wah Campus has established the following departmental modern Laboratories which have around 320 state-of-the-art Computers and Laptop connected through LAN,WAN and PERN:

### (a) **Computer Science Department**

Seven Computer Laboratories are being used by the students specifically for Research and Final Year Project Laboratories (FYP).

### (b) **Electrical Engineering Department**

Communication, Control System, Microprocessor, Electric Machine and Power System, Electronics, Digital Signal Processing, Digital System Design, Advanced Electronics, Project, Electronics Devices and Physics, Basic Circuits and Transformer, Basic Power and Power Electronics and Modern Electrical Insulation Aging Test Laboratories.

### (c) **Research/Post Graduate Laboratory**

A Research/Post Graduate Laboratory has been established in collaboration with ZONG (CMPAK) and CIIT Wah.

## Library

The library at Wah campus provides a wide range of up-to-date information using the latest reference and information, as well as books and periodicals in different subject areas. There are over 18,000 hard copies of books and almost 5,500 in soft form. A Book Bank is also available in the library to facilitate the students in providing text books.

The library is also providing digital and e-library facilities by making available the access to 33,000 high quality, peer-reviewed journals, conferencing proceedings and articles through 27 different online databases under the HEC's National Digital Library

Program. Students and faculty can access these resources from inside and outside the campus through VPN. The Library is also giving access to around 80,000 online books through 13 different databases that have also been made available through the HEC's National Digital Library Program. The e-books support program will allow researchers to access most of the important text and reference books electronically in a variety of subject areas. More than 15,000 e-books on different subject areas are also currently available on the CIIT E-Library which is in ever-growing/developing stage and will become more and more exemplary/perfect with the passage of time.



## Campus Management Solution

CU Online is the Web-based campus management system of CIIT Wah. It provides complete academic solution including registration, examination, fee, attendance, class management, course portal and more. It maintains extensive information about the students studying at CIIT Wah. Students get their marks, attendance and other information through their console. They do online course registration and course evaluation. The faculty members enter the attendance and marks and upload the reading material for students, fee vouchers, result cards and progress reports are generated by CUOnline. The system provides a wide range of reports and online query facilities.

## Pakistan Education Research Network (PERN)

CIIT Wah Campus is availing bandwidth facility from Higher Education Commission under PERN Project.

## Video Conferencing Facilities

The video conferencing facility is available at Campus Auditorium for about 200 persons.

## Book/Photo Copying Shop

In any Institute, latest and updated editions of the subject books are a necessity. A formal bookshop is therefore present on the premises of the Campus where up-to-date books are available at reasonable prices. The

facilities of photocopying, scanning, printing and book binding including stationary items on reliable rates are also available on shop.

## Extra Curricular Activities

CIIT Wah provides an excellent academic atmosphere to its students together with a lot of opportunities for extra-curricular activities. The faculty puts in maximum efforts to groom and nourish young scholars placed under their care. We at Wah try our best to contribute significantly to build healthy minds in healthy bodies. Many events are organized to involve young minds ensuring full participation in character building activities and personality development. In order to broaden the vision of students, the institute arranges the industrial trips for students.

## Student Week

Considering the importance of sports in an academic institution, there are a number of activities organized at Wah. Every semester, a Student Week is organized where competitions in volleyball, football, basketball, badminton, table tennis, cricket, squash, athletics, Naat, Qirat, and Urdu/English Debates are arranged. The Institute also actively participates at national level mega events and has earned many laurels.



## Adventure Club

Adventure club has been established at CIIT Wah that arranges a variety of outdoor activities. Different clubs have been created under adventure club such as hiking, trekking, photography, shooting, camping and rowing, etc.

## Visio Spark

The Computer Science Department of this institute conducts its annual national level mega event titled 'Visio Spark'. The students from various national educational universities/institutions participate. The aim of conduct of event is to provide opportunity to students to upgrade, polish, discuss and enhance their intellectual and research skills. Visio Spark also provides a platform to students where they share their research work, ideas and views. CIIT Wah Campus is a centre of excellence in computing where rigorous software development activities are part of daily routine. This mega event is a step towards enforcing the commitment of CIIT Wah Campus for the development of information Technology and other Computer Science related fields in Pakistan.

## Lahore Campus

### Welcome to Lahore

The Lahore Campus is located on Defense Road, Off Raiwind Road and is 30 minutes drive from the main city. This campus was established in January 2002. The sprawling campus is purpose built and is spread over an area of 185 acres, with a constructed area of 436,729 sq ft.

The campus is equipped with state-of-the-art computers and electronic Laboratories. During a short span of time, the continuous efforts of the dedicated faculty and staff have made CIIT Lahore synonymous with academic excellence, which forms strong foundations for a bright career for its alumni. Here the

young minds can really create a bright future for themselves.

The environment at the campus is vibrant, creative and challenging, for both teachers and students. The campus intends to excel in its research capability, which will open new frontiers of knowledge in Information Technology. In a city of learning as Lahore, the campus caters for the ever-increasing demands of students in the fields of Computer Science, Telecommunication Engineering, Computer Engineering, Chemical Engineering, Management Sciences, Physics, Architecture and Bio-Medical Material Sciences.

### Campus

The campus consists of one





administration block, five academic blocks, five workshops, a big mosque, hostels for boys and girls and a number of residential units for the employees. The location of the campus is strategically chosen to provide the students with an ideal environment, which is not only conducive for their educational pursuits but would also

ensure that the students are well abreast of the latest developments in the IT sector. Currently, 5,305 students are enrolled in different degree programs.

The campus offers 30% seats to the children of industrial workers free of cost (not applicable for DDP students), besides a number of other scholarships.

## Graduate Programs at Lahore Campus

### Department of Computer Science

- MS in Computer Science
- PhD in Computer Science

### Department of Electrical Engineering

- MS in Electrical Engineering
- PhD in Electrical Engineering

### Department of Chemical Engineering

- MS in Chemical Engineering
- PhD in Chemical Engineering

### Department of Management Sciences

- MS in Management Sciences
- MS in Project Management
- MS in Economics

- MS in Strategic Marketing
- PhD in Management Sciences
- MBA(2.5 years)
- MBA (1.5 years)

### Department of Humanities

MS in English (Linguistics and Literature)

### Department of Mathematics

- MS in Mathematics
- PhD in Mathematics

### Department of Statistics

- MS in Statistics
- PhD in Statistics

### Department of Physics

- MS in Physics
- PhD in Physics



## CIIT – Lancaster University Dual Degree Program (DDP)

In addition to its own degree programs, CIIT in collaboration with Lancaster University (LU), UK is also offering the Dual Degree Program (DDP) at Lahore Campus. The DDP provides an alternate path to a highly regarded foreign degree at highly reduced cost and without physical displacement. Students enrolled in DDP at Lahore Campus are considered as the “external students” of LU with full access to all online academic facilities available to the other regular students at Lancaster University.

It is pertinent to mention that CIIT-LU Dual Degree Program has been

launched in line with the commitment of Government of Pakistan to establish professional linkages with prestigious international universities and research and development institutions. Further, DDP has been the part of the strategic direction set by the Prime Minister of Pakistan in March 2009 to emphasize the need for CIIT to develop into a high ranking university of Pakistan, having international standards and competing globally.

At present, seven undergraduate programs are on the offer, i.e. Business Administration, Software Engineering, Chemical Engineering, Electrical (Electronics) Engineering, Computer Science, Electrical (Telecommunication) Engineering and Electrical (Computer

Engineering). On successful completion of all degree requirements, students shall be offered 02 degrees; one from CIIT and the other from Lancaster University, UK. The complete details of Dual Degree Program and its requirements are available in Section II of Chapter 03.

## Facilities

### Hostels

The campus provides hostel facilities for both male and female students. The facility is available on first-come-first-serve basis and accommodates around 640 male and 400 female students. All information in this regard is made available at Warden Office at Campus.

### Transport

CIIT Lahore Campus provides pick and drop services to facilitate the students and employees of the campus. Thirteen buses, eight coaches and two hiace vans have been arranged to provide this service on subsidized rates.

### Lecture Rooms

The campus has 58 spacious and furnished lecture rooms, majority of which are fitted with multimedia facility. Each has a capacity of more than 50 students and is properly maintained.



## Computing, Networking Services and Laboratories

Network Operation Centre and Information Technology Centre of COMSATS Lahore offer state-of-the-art computing services on campus. There are 20 computer Laboratories, each equipped with latest computer systems, Data Centre as per international standards, backbone connectivity with fibre optics, high speed internet connectivity, availability of the network hotspots all over the campus including lawns, canteens, hostels and common rooms, access of digital library on campus and from home, fully equipped multimedia class rooms, and video conference facility for online lectures and seminars. Moreover through Online Student Information System, the student can check information like Personal Details, Contact Information, Quota, Academic Status, Registration, Courses (Studies, Dropped, Left Over), Teachers (by whom taught), Class Attendances, Class Proceedings (Quizzes, Assignments, Presentations), Sessional Exams, Final Exams, Projects, Thesis, Results and Marks, Result Cards, Final Transcripts, CGPA Calculation, Scholastic Statuses and Scholarship Statuses.

## Library

The library functions as an information resource centre for the campus. Students are encouraged to make full use of it. The

library houses an open shelf collection that includes books, films, CDs, journals and newspapers. The library staff provides one-on-one training and group instruction. If students need help in finding books, identifying authors or titles, the library staff is always available to assist. The library is open from morning till evening six days a week. Collections of around 22,000 books, 43 journals and magazines have been provided for the students.

The library also provides complete access to more than 80,000 online book and 32,000 high quality, peer-reviewed journals, conference proceedings and articles through 27 different online databases under the HEC's National Digital Library Program. Students and faculty can access these resources from

inside and outside the campus through VPN.

The e-books support program allows researchers to access most of the important text and reference books electronically in a variety of subject areas. Apart from this more than 15,000 e-books and video lectures on different subject areas are currently available on the CIIT E-Library which is in an ever-growing/developing stage and will become more and more exemplary/perfect with the passage of time.

This is the first library of Pakistan which developed LIBGUIDES portal for its users. Well trained library professionals provide specialized reference services to library users particular researchers of CIIT Lahore.



For details about library resources and services, the link [library.ciitlahore.edu.pk](http://library.ciitlahore.edu.pk) may be accessed.

## Students Services Center (SSC) and Job Placement Cell (JPC)

Students Services Center has been established at CIIT Lahore Campus to provide students with a range of services designed to help and assist in adjusting with university life and to achieve potential in terms of their personal, educational, social and professional goals. Highly skilled staff is specialized in providing students with comprehensive solutions to their everyday problems, including their adjustment to university environment, handling of academic as well as peer pressure etc. SSC achieves these goals through implementation of

many programs, both within and outside the campus. SSC arranges many co-curricular and extra-curricular activities in order to bring the best out of students and prepare them for the rigors of competition and fair play.

The mission of the Job Placement Cell (JPC) is to facilitate students in finding employment through a variety of services and also assisting them in locating employment opportunities. JPC offers students grooming session for developing job hunting skills, job data bank, resume development, interview sessions and students profile directory.

## Common Room for Girls

A comfortable and spacious common room has been established near the

Academic Block. This space has been designed to give female students a place to relax, offer prayers, study and have informal discussions in the free time available. Daily newspapers, magazines and periodical journals are available for reading.

## Cafeteria

The cafeteria is responsible for catering meals, snacks and beverages for the faculty, staff and students at controlled rates. It has two portions, one for faculty and staff and the other for students.

## Health Centre

To provide first aid and medical facilities to students and faculty members, a Health Center has been established near the academic block under the supervision of a qualified Resident Medical Officer.

## Mosque

A central mosque located between academic building and boys' hostel provides a serene facility for prayers, including Juma congregation.

## Extra-Curricular Activities

### CIIT Lahore Debating Society

CIIT Lahore Debating Society is a student run society that aims to promote communication, analytical and team



working skills important for the future career growth of the students. It aims to include members from all disciplines and to create a more diverse population of students participating in the rational exchange of ideas, representing CIIT Lahore at various inter-university debating formats.

### **Attrayant Community**

The aim of the society is to organize all sorts of social services and co-curricular activities. Among the social services Attrayant Community facilitates charity collection, fund collection and helping the students. With its motive of “*Together We Can*” Attrayant society believes in helping and promoting new talent. Co-curricular activities encompass different sports and quiz competitions, debates and seminars.

### **Islamic Cultural Society**

The purpose of the society is to promote our religious culture through Islamic events such as naat and qirat competitions, Islamic seminars, millad etc. The society looks forward to enlighten the young minds and souls of the students.

### **CIIT Lahore Music Society**

CIIT Lahore Music Society is a platform providing an opportunity to the rising talents in the field of music. Every semester the society organizes talent hunts to explore the upcoming vocalists,

musicians, bands, and performers.

### **CIIT Lahore IT Society**

The idea behind CIIT Lahore IT Society is to teach and bringing awareness to students about the latest technologies, to improve their IT knowledge polishing their skills and conducting workshops, seminars and competitions inviting IT professionals.

### **COMSATS Lancaster Event Management Society**

COMSATS Lancaster Event Management society is always ahead in providing entertainment, thrill, and fun all at a single place. CLEMS has always worked hard to provide full package entertainment to the students during the student week by organizing exciting events, concerts, and different game shows.

### **Sports Society**

The Sports Society organizes competitions in cricket, football, table tennis, badminton, basketball, chess and athletics. The Society facilitates both male and female students’ participation in the sports events.

### **COMSMAG**

An annual magazine reflecting the whole academic year activities in a nutshell is a newest addition. The pages of the magazine depict the essence of

artistic and academic abilities harboured by the students of Lahore. Newsletter is a semester wise output that focuses on day-to-day milestones reached during each semester. It also highlights various events related to academic and extra-curricular activities.

### **Seminars**

One of the key features of education at CIIT is a visionary approach of constantly providing practical exposure to the students regarding the course contents. To achieve this objective, guest speakers from corporate and industrial sectors are regularly invited to the campus in order to share their practical wisdom and experiences with the students.



# Attock Campus

## Welcome to Attock

The city of Attock is the administrative center and district capital of Attock District. The District's climate is characterized by very hot summers and very cold winters. The maximum temperature reaches 40°C. The northern part is more humid, with a relatively moderate climate as compared to the southern part.

The river Indus flows on the western and northern sides of the district; the Haro River comes from Haripur and passes through the Attock on the north of the Kala Chitta Mountain Range. The land consists mainly of hills, plateaus, and dissected plains. The area north of the Haro River is a flood plain with fertile soil.

Attock District is located in the northwest of the Punjab province of Pakistan. The district was created in 1904 by the merger of Talagang tehsil from the Jhelum District and the Pindigheb, Fatehjang and Attock tehsils from Rawalpindi District of British Raj. The original name was Campbellpore district after Sir Campbell who founded the city of Campbellpore to the southeast of Attock Town. The name of the district was changed to Attock in 1978.

## Campus

April 04, 2004 was a historic day for the residents of Attock city when a new Campus of the CIIT was launched, to make it possible for the students of the far flung and under developed areas to take advantage of the opportunities of state-of-the-art education. The event was important for both CIIT and

Attock city because the dream of an IT institute was a distant dream come true. CIIT's presence in Attock has ensured the availability of professional academic skills not only to the locals of Punjab but also the adjoining areas of Khyber Pukhtoonkhawa. It throws open an opportunity to the city of Attock becoming a hub of burgeoning jobs and business ventures entirely on its own strength in the near future.

The Attock Campus has gained a commendable reputation in a short time. Attock's good teaching reputation ensures that brilliant academicians are attracted to work here. This subsequently enables our academic departments to offer innovative and exciting teaching environment, led by experts at the cutting edge of their varied specializations.



## Graduate Programs at Attock Campus

### Department of Computer Science

- MS in Computer Science

### Department of Electrical Engineering

- MS in Electrical Engineering

### Department of Management Sciences

- MS in Management Sciences
- MS in Project Management
- MBA (1.5 years)

### Department of Mathematics

- MS in Mathematics

## Facilities

Higher education in emerging fields requires huge investment in infrastructure and facilities that are made available to achieve the international standards of education. Despite its young age, the campus has arranged adequate resources to facilitate the students, teachers and staff members. The campus is in a continuous process of progress and is making addition to its existing resources. The detail of the resources is given as follows:

## Lecture Rooms

All 28 lecture rooms are fully furnished, well equipped and well maintained. All modern teaching and learning aids are provided, with seating capacity in sufficient numbers to accommodate all students.

## Laboratories and Network Department

An electronics Laboratory equipped with latest test and measuring instruments/equipment has also been established at CIIT Attock. The LAN of CIIT provides high - speed Internet connectivity, printing and data storage facility. There are four general purpose computer Laboratories, one project Laboratory and three Electrical Engineering laboratories for the students. The Laboratories are fully equipped with latest computers and with all the necessary facilities. All the Laboratories are available throughout the week. Student Help Desk is always ready to provide friendly and expert guidance/assistance, so the students can make good use of most of the resources.

The Network Department is providing campus wide information and communication technology service, including but not limited to the Internet access. The Network Department is also providing corporate level technical consultancy to banks and various government department of district Attock. The Attock Campus was



declared as a Cisco Local Academy in 2007. As a Cisco Local Academy, the CIIT Attock is offering Cisco Certified Network Associates (CCNA) certification to its students. The program on the whole has presented a unique blend of advanced theoretical as well as practical sessions via latest interactive course curriculum.

Along with computer laboratories CIIT Attock Campus has also established state of art Electrical Engineering Laboratories like Electric Machine Laboratory, Electric Measurement and Instrumentation Laboratory, DLD/MP Laboratory, Electronics Laboratory, Power Electronics Laboratory, Control Laboratory, Communication Laboratory VLSI, DSP Laboratory and Power Transmission Laboratory.

## Library

The library is airy, well lighted and provides an ideal place for quiet study and has around 6,500 books. Networked PCs provide access to a wide range of online journals, databases, CDs and library catalogues. The library's holdings are chosen mainly to support teaching and research on the Campus, but they also include some general books for leisure reading.

The library is also providing complete access to more than 33,000 high quality, peer-reviewed journals, conferencing proceedings and articles through 27 different online databases under the HEC's National Digital Library Program. Students and faculty can access these resources from inside and

outside the campus through IP address and VPN respectively. At present access through Virtual Private Network (VPN) is only available to senior faculty. Later on this facility could also be offered for the use of students as per the policy of CIIT. The Library is also giving access to around 80,000 online books through 13 different databases that have also been made available through the HEC's National Digital Library Program. The e-books support program will allow researchers to access most of the important text and reference books electronically in a variety of subject areas. More than 15,000 e-books on different subject areas are currently available on the CIIT E-Library which is in ever-growing/developing stage and will become more and more exemplary/perfect with the passage of time.

## Computing Network

On campus, every student is assigned a computer account and work space, allowing access to central computing facilities. The open access computers are connected to the campus network and to the internet. Computing, printing and technical assistance are available throughout the week. The computing service web page also provides useful information to make good use of computing facilities.

## Mosque

Prayers are held at our campus Mosque



regularly. The sound of the 'Azan' adds a sobriety to our Campus atmosphere.

### **Cafeteria**

A proper cafeteria has been set up where quality eatables are provided to faculty, staff and students at reasonable rates throughout the day.

### **Transport**

CIIT Attock provides pick and drop services to facilitate the students and employees. Six vehicles have been arranged to provide this service between campus and surrounding area/inner city on subsidized rates.

### **Hostels**

The campus provides hostel facility for both male and female students separately and accommodates 350 males and 50 females. The accommodation is available on first-cum-first-serve basis.

### **Common Room for Girls**

A comfortable and spacious common room has been made available in the Academic Block. This space has been designed to give female students a place to relax, offer prayers, study and have informal discussions in free time available. Daily newspapers, magazines and periodical journals are available for reading.

## **Extra Curricular Activities**

### **Outdoor Sports Facilities**

Among all its campuses only Attock Campus has Cricket Ground of international standard and Attock Campus has an honor to organize 1st Inter campuses T-20 Cricket Tournament in March 2012. In 2013 Attock Campus extended its outdoor sports facilities by establishing foot ground, multipurpose court for Volley Ball and Tennis.

### **Indoor Sports Facilities**

An indoor gym has been established for the faculty and students of CIIT Attock Campus which is equipped with state

of art exercise machines. There is also facility of playing table tennis indoor.

### **Seminars**

Organization of seminars is a regular feature at Attock Campus. Seminars' content is mostly related to academic subject matters. These forums have always provided a good opportunity for healthy debates and discussions.

### **Funfairs**

Funfairs at the campus are organized annually. Students as well as outside vendors set up stalls to display food items, handicrafts, etc., which students set up semester projects. Sports activities and drama club events are also an integral part of these funfairs.



# Sahiwal Campus

## Welcome to Sahiwal

Sahiwal is a city in Punjab, Pakistan. This city was a small village on the Karachi-Lahore railway line in 1865 when it was named Montgomery after Sir Robert Montgomery, then Lieutenant-Governor of Punjab. It took its current name in 1966. It is the administrative center of Sahiwal District and Division. The districts of Okara and Pakpattan are under Sahiwal division. Sahiwal lies approximately 180 km from the major city of Lahore and it is the biggest city between Lahore and Multan. The climate of Sahiwal district is extreme, reaching 52 °C in summer and down to 5°C in winter. The soil of

the district is very fertile. The average rainfall is about 2000 mm.

The city lies in the densely populated region between the Sutlej and Ravi rivers. Irrigation in the region is provided by the Bari Doab Canal system. The principal crops are wheat, cotton, tobacco, legumes, and oil seeds. Cotton goods and lacquered woodwork are manufactured. About 18 miles Southwest of Sahiwal is Harappa, an ancient city of the world, oldest urban center of Harappan or Indus civilization in South Asia. About 28 miles (45 km) west of Sahiwal, at Kamalia, is the site of a Malli city captured by Alexander the Great in 325 BC. The people of Sahiwal are known as Sahiwalians. This city got his name from the first inhabitants of this city 'the Sahis' (a jutt sub-tribe).

## Campus

The establishment of CIIT Campus in September 2007 at Sahiwal besides providing higher education facilities in the highly demanded market oriented disciplines also provided state-of-the-art facility for research and development activities. Sahiwal campus intends to augment the academic and socio-economic role in imparting quality education with the help of cutting-edge technology and contemporary managerial practices.

Sahiwal Campus has surfaced as the most vibrant educational institution in Sahiwal. It has been able to fetch the record high intake ever witnessed at any CIIT Campus for its pioneer batch. It started with the enrolment of 100 students with quite an attractive 30 percent ratio of female students. Currently, the campus has a total enrolment of more than 2,700 students.



## Graduate Programs at Sahiwal Campus

### Department of Computer Science

- MS in Computer Science

### Department of Management Sciences

- MS in Management Sciences
- MBA (1.5 years)

### Department of Biosciences

- MS in Biosciences

## Facilities

The purpose built campus is being constructed on 36 acres of land with a consented area of 73,745 sq ft. currently, there are 22 spacious lecture rooms equipped with all the modern facilities like multimedia, air conditioners and modern teaching aids.

## Library

CIIT Sahiwal hosts a reference library with a more than 8,400 books, 12 journals and a number of CDs. It has a rich collection of latest publications on all the business related subjects. It is equipped with all the latest titles and issues, covering broad range of subjects. The library subscribes to both local and foreign newspapers and national and international periodicals, journals and magazines. In addition to latest issues of newspapers, the back dated issues of newspapers and magazines are also available on request. Library has a wide and diversified range of helping material for faculty members and students.

The library is also providing complete access to more than 32,000 high quality, peer-reviewed journals, conferencing proceedings and articles through 27 different online databases under the HEC's National Digital Library Program. Students and faculty can access these resources from inside and outside the campus through IP address and VPN respectively. At present access

through Virtual Private Network (VPN) is only available to senior faculty. Later on this facility could also be offered for the use of students as per the policy of CIIT. The Library is also giving access to around 45,000 online books through 13 different databases that have also been made available through the HEC's National Digital Library Program. The e-books support program will allow researchers to access most of the important text and reference books electronically in a variety of subject areas. More than 15,000 e-books on different subject areas are currently available on the CIIT E-Library which is in ever-growing/developing stage and will become more and more exemplary/perfect with the passage of time.

## Computer Laboratories

Sahiwal Campus offers the most modern computing facilities with the latest operating systems and software packages. Two states - of - the - art computer Laboratories have been established. Broadband Internet connectivity plays an important role in facilitating the faculty and students for academic as well as research and development activities. Students are provided with facility of free internet access. Computer Laboratory is equipped with latest multimedia facilities like multimedia projectors, scanner, CD writers and printers.





## Hostels

CIIT Sahiwal has provided furnished hostel to 200 male and 120 female students where their stay is made quite comfortable. It caters for all those facilities that a student needs for a decent living. Keeping the safety, security and comfort of students in view, an effort has been made to allow students to fully concentrate on their studies on the one hand and ensure peace of mind for their parents living far away from them, on the other hand. Facilities provided at the hostel include clean and spacious rooms on sharing basis by two/three students, a dining hall equipped with requisite facilities, a recreation room equipped with TV, newspapers and internet, games facilities like carom-board, table tennis and badminton, adequate security facility, study room facility for fully concentrating on studies with conducive environment.

## Extra-curricular Activities

CIIT Sahiwal provides numerous opportunities to its students for grooming them mentally and physically these facilities include formation of clubs/societies which organize a wide range of different extra-curricular activities like adventure club, sports club, magazine committee, debating society, and many more.

## Vehari Campus

### Welcome to Vehari

Located in the heart of the country's biggest province Punjab, and famous for its fertile lands, Vehari is the center piece of diverse socio-economic life in the region. Vehari District was established in 1976. It has an area of 26,574 sq.ft and an estimated population of 3.5 million. The district shares its boundaries with Bahawalnagar and Bahawalpur districts on the Southern side, Pakpattan district on the Eastern, Lodhran district on the Western and Sahiwal and Khanewal districts on the Northern side.

### Campus

Established in 2008, Vehari campus is

one of the fast growing campuses of the COMSATS Institute of Information Technology. Vehari campus started with 45 students enrolled in one program and now it has more than 900 students, 100 Faculty Members, 12 degree program and three functional academic blocks. Stretched over an area of 52 acres, the campus is an excellent avenue to provide quality education to the students. CIIT Vehari is constantly making efforts to provide students the quality education and personality development to transform its students into capable professionals, sensible intellectual and responsible citizens. CIIT Vehari aims to instill a research culture for economic human Resource Development in this region driven by market forces, technological revolution and globalization.

## Graduate Programs at Vehari Campus

### Department of Environmental Sciences

- MS in Environmental Sciences

### Department of Management Sciences

- MS in Management Sciences



## Facilities

### Computer Laboratories

Vehari Campus is equipped with four state-of-the-art three general purpose computer Laboratories with most updated computer systems and operating environment. Our computer networks connect internally at LAN and WAN connectivity with extended broadband width of 20 Mbps for students and faculty members.

Modern computer accessories like color printers, scanners, DVD writers, multimedia projectors, digital camera are also available for the students. To enhance the efficiency of staff, computer note books are also provided.

To maintain an uninterrupted working environment, network is backed with high-tech UPS, and generator. The Vehari campus is about to switch its data storage to CU-Online, which is an in-house developed version of COMSIS, to automate the institutional functionality.

### Library

Library is expected to be the treasure-house of knowledge. The campus has procured more than 5,000 books and CDs on various disciplines and contemporary issues. It subscribes to both top national and international newspapers. Library has diverse range of reference material available for both faculty and students.

### Digital and E Library

The library is providing complete access to more than 33,000 high quality, peer-reviewed journals, conferencing proceedings and articles through 27 different online databases under the HEC's National Digital Library Program. Students and faculty can access these resources from inside and outside the campus through IP address and VPN respectively. At present access through Virtual Private Network (VPN) is only available to senior faculty. Later on this facility could also be offered for the use of students as per the policy of CIIT. The Library is also giving access to around 80,000 online books through 13 different databases that have also been made available through the HEC's National Digital Library Program. The e-books support program will allow researchers to access most of the important text and reference books electronically in a variety of subject areas. More than 15,000 e-books on different subject areas are currently available on the CIIT E-Library which is in ever-growing/developing stage and will become more and more exemplary/perfect with the passage of time.

### Hostels

Vehari Campus has provided hostel facility to 72 male and 25 female students with furnished hostels that cater for all those facilities that a student needs. With an accessible location of



less than one kilometer from the campus and in a safe residential area near the city main market, the hostel provides male students an ideal living and study place. Hostel is furnished with dining hall, refrigerator, microwave oven, TV, newspaper and internet points to help students augment their research capabilities and meet their assignment deadlines on time. Water coolers and water purifiers have also been installed in the hostels to provide safe drinking water to hostel residents. Mess and procurements are also managed by the students themselves under the supervision of wardens, on purely no profit, no loss basis. A healthy mind resides in a healthy body. Keeping this in context, hostel provides ample facilities for various games and sports. Indoor games like carom board and table tennis are provided in common rooms. Adequate security arrangements are also available for hostel residents. Other hostel facilities include UPS and generator as power backup for power load shedding.

## Extra Curricular Activities

Vehari Campus offers each student a future of significance - not only education of sheer prestige but also provides opportunities to its students for sprucing them mentally and physically. For this purpose, guilds are made for organizing different extra-curricular activities, like sports club, adventure

club, the debating society and magazine committee. Thus, student's time at CIIT can never be dull. On the contrary, it is difficult to choose which activity to join. Whatever their level of expertise, they can become involved in any club or society that interests them. In addition, industrial tours are arranged for the students so they may learn how commercial and industrial undertaking works.

## Career Development Cell

All employers hire people who are well-qualified, passionate and interested to work in a challenging environment, who want to achieve targets and take

full responsibility. This applies across the board, from large multinational corporations to small NGOs. Studying at Vehari Campus will equip students to demonstrate passion, interest, achievement and responsibility. The specific subject they study should be one they are passionate about and want to enhance that passion in their practical lives. Vehari Campus establishes a Job Development Cell (JDC) to assist students for internship and jobs in leading public and private organizations in the country.



## Virtual Campus

The coverage of higher education in Pakistan is extremely low as compared to other countries. Consequently, a huge gap exists between the number of students who have passed higher secondary school and the number of students who get enrolled in universities. Further to this studies conducted by Higher Education Commission of Pakistan suggest that a huge number of candidates are registered with universities as private candidates. Due to the lack of governing mechanism in learning process, it has been observed generally that knowledge and skill wise quality of these students is not as good as those of regular students of universities. The globally practiced and

best possible way to improve the quality and coverage of higher education is to provide better learning facilities through distance education.

To increase the approach and availability of top quality benchmark education and teaching experience in country CIIT has taken a step forward by establishing its Virtual Campus (VC). CIIT Virtual Campus aims to enhance the coverage of quality higher education in the country by providing opportunities to those who could not attend universities because of inflexible timings, cost, or cultural barriers. The Virtual Campus is delivering online courses to distance learning students.

The CIIT Virtual Campus (VC) runs

web-based student's management and Learning Management System (LMS), accessible anywhere anytime, to deal with administrative and academic tasks of campus. LMS supports a live collaborative platform which adds value to remote learning, through interactive virtual class rooms and meeting sessions. Therefore CIIT is going a step ahead from conventional asynchronous distance learning modes, currently employed at the universities of Pakistan. CIIT is producing quality courseware using blended learning approach by combining teacher and their workspace (desktop/interactive board/presentation). Best of CIIT's senior (mostly PhD) faculty is designated to develop high-definition video contents in our purpose-built studios.

CIIT's Virtual Campus establishment is endorsed by HEC and as a proof of its active role in establishment of ICT facilities for e-learning; CIIT Virtual Campus is given a task to setup Learning Management System (LMS) portals of DDE project partner universities.

### History

CIIT has always been very proactive in adapting new technologies and use of IT tools in its teaching and administrative affairs. CIIT Virtual Campus was established in July 2008. After thorough planning by various administrative, academic and technical bodies of CIIT, Virtual Campus started its regular function in January 2012. The Campus





▲ Delegates during 2<sup>nd</sup> Vice Chancellors' Forum 2013

was established in offices, Laboratories and studios located in Islamabad having approximately 20,000 sq. ft. covered area. State-of-the-art servers, dedicated PERN bandwidth, latest audio visual equipment was acquired to setup Laboratories, studios and data center. Virtual campus started its first academic session in Fall 2012 offering four undergraduate level degree programs in computer science and management science subjects.

## Delivery Mechanism

CIIT Virtual Campus's mission is to be the institution of choice for distant and online education for all. The CIIT Virtual Campus intends to get there by providing exceptional services to the learners, through modern teaching techniques. Courseware based on scheme of studies of CIIT approved programs is developed by subject specialists in digital format. The digital learning contents are then presented to students via an online web based learning management system moderated by dedicated subject tutors working full time at CIIT virtual campus. Students enrolling in CIIT Virtual Campus are facilitated with study centers situated nationwide. These study centers have computer Laboratories equipped with the facilities of video conferencing, broadband internet and printing etc. Proctored mid-terms and terminal examinations are conducted at selected locations using the well-established

National Testing Service (NTS) infrastructure.

## Graduate Programs

CIIT VC's academic fundamentals are based on standard CIIT rules. Programs offered at VC follows similar nomenclature as of programs offered at regular campuses. The admission and assessment policies are also aligned with directives of CIIT Principal Seat, similar to that of regular programs. Admissions in virtual campus are offered twice a year in Spring and Fall sessions. Applications for offered programs are invited through a central online admission system. NTS admission test in respective category is conducted at selected study centers.

## Graduate Programs being offered for 2014-2015

- MBA (1.5 years)
- MS in Project Management
- MS in Banking and Finance

## Lectures

CIIT VC offers online courses via asynchronous learning sessions in which students access and study course material at their convenience at home or wherever they choose reading, watching or listening to material supplied. Classes are recorded for later replay. Students communicate with the instructor and classmates via email and discussion boards.

Experienced and well qualified faculty from CIIT is selected through academic selection committees for development of coursework. Faculty is required to record required lectures, develop Laboratory sessions, and assessment material for each course. This developed learning content is made available to students through LMS at the start of each semester.

In CIIT Virtual Campus students will login to LMS to view or download the digitally recorded lectures. Same will also be available at official channel of Virtual Campus at YouTube. You Tube in Pakistan is temporarily blocked, an alternate CIIT video library is available at <http://lib.vcomsats.edu.pk/library>. Another facility is the provision or digitally recorded lectures in the form of Video DVDs and USB drive which is mailed to the students at the start of semester. These video lectures provide the next best thing from actually being present in the lecture. The video screen consists of the topic, lecture contents, and lecture slides. Students will also have access to an online forum, where their queries will be answered by teaching staff at VC.

In addition to asynchronous mode of learning and content delivery, students will also have minimum of 5 scheduled synchronized virtual meeting sessions with course tutor via video conferencing system. Students can take part in this activity from home or can use study

centers for this purpose. This activity at times is coupled with sessional exams and quizzes. This will improve the quality of learning and assessment through synchronous element of student teacher interaction.

## Learning Management System

Online courses are based around the Learning Management System (LMS), which is the software system for the e-learning. VC LMS provides the student course website where student can view course information like course overview, FAQs, glossary, web links, related downloads, scheme of study, video lectures, schedule live sessions and course contents. Students take their quizzes, submit assignments and participate in discussion boards with tutor or students from LMS.

### LMS system has following strengths

- Easy access to LMS 24 hours a day, 7 days a week, 365 days a year
- Study at a time and place that is convenient to you
- Expertise of renowned faculty, accessible nationwide
- World class statue of the art lectures in high definition audio and video
- Top quality courseware using blended learning approach

- Collaborative platform for peer and tutor moderated learning activity

- Student profiling, feedback and access to quick and reliable reporting

## Tutors

CIIT VC facilitates its students by assigning each course offered in every program to a subject tutor. Tutor is responsible to answer all academic queries of student. These tutors work in close coordination with content developer subject specialist. Tutors are responsible for managing online Laboratory sessions; monitor the progress of student, initiating moderated subject discussions, marking of quizzes, assignment and terminal exams.

## Study Centers

Study Center means a center maintained or recognized by the CIIT VC for the purpose of advising, counseling or for rendering any other assistance required by the students in context of distance education. In the Online Distance Learning System, Study Centers play an important role since they act as focal contact points for distance learners.

CIIT Virtual Campus Study Center is envisioned to be a state of the art learning facility with an established ICT infrastructure and strong support system. A study center will facilitate

CIIT's academic and administrative outreach and represent Virtual Campus in the targeted area. At present approximately 150 CIIT VC affiliated study centers are working in all major districts of Pakistan having presence in all provinces of country. Details of centers are available on <http://www.vcomsats.edu.pk/studycenters>.

## Online Helpdesk

COMSATS Virtual Campus recognizes that an effective complaints management system will not only improve student service but will also assist in the identification of systemic and re-occurring administrative problems. We welcome all forms of feedback, including complaints, on its services.

Online Helpdesk is developed to assist the student to improvise their complaints, inquiries and suggestion to the right section at the right time and get instant response. The link is: <http://helpdesk.vcomsats.edu.pk/>

## Student Call Centre

The Student Call Centre will help student on queries such as:

- Admission Process
- Career Opportunities
- Academic Programs Being Offered
- Registration
- Student Orientation
- LMS Training

# Admissions and Academics



# ADMISSIONS

Admissions in graduate programs are offered on merit at CIIT. The merit is determined on the basis of the academic record, GRE/NTS-GAT score and interview.

## General Eligibility Criteria

### Pre-requisites

#### MS Programs

- A 16 years degree in the relevant field from an accredited educational institution, with minimum First division (annual system) or CGPA 2.5/4.0 (semester system) and no third division (annual system) or 'D' grade (semester system) throughout the academic career.
- NTS GAT (General) with minimum score of 50.

#### PhD Programs

- An MS/M.Phil degree with Thesis of 06 credit hours or its equivalent degree with Thesis of 06 credit hours, in the relevant field from an accredited educational institution, with minimum CGPA of 3.0/4.0 (semester system) or 70% marks (annual system), and no third division (annual system)

or 'D' grade (semester system) throughout the academic career.

- GRE (subject) as per HEC policy or NTS GAT (subject) with minimum score of 60.

### Program Duration

#### MS Programs

The duration of studies for MS degree shall normally be, not less than two years and not more than four years.

#### PhD Programs

The duration of studies for PhD degree shall normally be, not less than three years and not more than five years.

### Course Work

#### MS Programs

An MS scholar will have to complete minimum of 30 credit hours by undertaking 24 credit hours course work from approved Scheme of Studies and 6 credit hours of MS Thesis.

#### PhD Programs

- A PhD scholar shall have to complete 18 credit hours of graduate level course work from approved Scheme of Studies and minimum 9 credit hours of PhD Thesis.



## CHAPTER 3

- The registration of PhD Thesis of 09 credit hours shall be allowed after the completion of course work for PhD degree.
- If the scheme of courses completed by candidates for their last degree in the relevant field does not provide adequate background for the PhD program into which they are seeking

admissions, they may be required to rectify the deficiency by taking one or more additional courses proposed by the departmental Advisory Committee.

## How to Apply

Applications are made in response to the admission notices in the press. Admissions are conducted according

to an admission schedule, which is prominently displayed in these admissions notices. The procedure consists of following steps:

### 1) Online Admission Application

- Candidates are required to apply on CIIT Online Admission System by following the link <http://admissions.comsats.edu.pk>.



- Note: For Virtual Campus, please visit <http://admissions.comsats.edu.pk/vc>
- After submitting the online application, the printed copy of the same along with the required documents, as mentioned in Online Admission Portal, must be submitted at the concerned Campus either by hand or mail with in due date of admissions.
- Note: Applicants seeking admission in Virtual Campus can submit their documents in selected study centers or can post the document to Virtual Campus secretariat in Islamabad.
- All admissions at CIIT will be offered provisionally and will be confirmed once all the desired formalities are met and all the required documents are submitted by the student.
- Admission applications must be submitted within due date advertised at the time of admission. Late submission shall not be entertained.
- Candidates must check the eligibility criteria before submitting their online application forms to confirm that they are academically eligible for admission into the program of their choice.

## 2) Entrance Test

Applicants are needed to have valid relevant NTS Test score (GAT General/ Subject) at the time of application. However, after the last date of submission of Admission Forms, entrance test will be conducted by NTS according to the admission schedule OR on a given date as notified by NTS through their website [www.nts.org.pk](http://www.nts.org.pk) as well as in the admission advertisements.

## 3) Interview and Preliminary Selection

List of applicants selected for interview is displayed on specified dates on the campus notice boards as well as on the CIIT website. The overall merit list is prepared by combining the weighted marks obtained in the previous public examinations with the marks obtained in the relevant NTS test and interview.

The candidates are required to appear before the Departmental Graduate Admission Committee for interview and preliminary selection as per specified schedule. The applicants are asked to bring original academic certificates/ degrees at the time of interview for verification.

## 4) Display of Merit List and Provisional Admission Offer Letter

The recommendations of the Departmental Graduate Admission

Committees are scrutinized by the Campus Graduate Admission Committee, which finally approves the provisional admissions. The final merit list is displayed on the departmental notice boards as well as on CIIT website and selected applicants shall be issued “Provisional Admission Offer Letter” along with a Bank Challan Form for payment of dues.

## 5) Acceptance of Provisional Admission Offer

Selected candidates are required to accept their Provisional Admission Offer by submitting the signed letter in this regard together with paying the non-refundable admission and tuition fee within the specified dates. Provisional admission will only be confirmed, through a letter, once the payment of fee is confirmed, all the desired documents have been submitted by the student, verified by concerned Campus that candidate has been found eligible for admission and approved by BASAR. If candidates fail to confirm enrolment by the given deadline, selection will stand cancelled and the seat will be offered to the next candidate on the waiting list.

## Financial Support

CIIT is providing various opportunities for winning fully funded scholarships and financial support to its students, admitted in the degree programs on purely merit basis. Financial Support Programs (FSPs) at CIIT support

various categories of students in the form of scholarships, stipends, financial support, Qarz-e-Hasna etc. The Institute takes special care of its students and plays vital role to resolve the financial problems of its students. Financial Assistance is available to all students who prove to be needy regardless of race, religion, color, national origin, age or sex. The various types of Financial Assistance Programs being provided at CIIT, for its students, are as follows:

### 1. Need Based Financial Support Program (NBFSP)

- French Need-Based Scholarships

- German Need-Based Scholarships
- Pak-USAID Merit Need-Based Scholarships

### 2. Financial Assistance Program

- Punjab Education Endowment Fund (PEEF) Scholarship
- 30% seats reserved in each discipline for the children of Punjab Workers Welfare Board at Lahore campus (Except Dual Degree Program).
- For walk in needy Students

- Prime Minister Initiative for Tuition Fee Reimbursement for Students of Less Developed Area

### 3. CIIT Financial Support Program: Qarz-e-Hasna

The needy students may also apply for Qarz-e-Hasna which is implemented under CIIT Qarz-e-Hasna Rules, 2013. A student granted admission on merit, is not an employee anywhere, and unable to pay the fees due to financial constraints can benefit under this financial support. The maximum period for complete repayment of the Qarz-Hasna is Ten years from the day of disbursement of first instalment. Further details and pre-requisites may be obtained from campus admission offices.

### 4. CIIT Pecuniary Program (CPP): Kinship / Siblings Pecuniary

When two or more siblings are concurrently students of CIIT, the siblings will be financially supported. A financial support of upto Rs. 8,000/- per semester will be provided to all the siblings provided the parents cannot afford to pay the fee and the students show good academic performance. Such cases will be decided by the Financial Support Program Committee (FSPC) at respective Campus.

**Note:** Please contact campus admission offices for more campus-specific details of financial support programs.



## International Students

CIIT welcomes international students from all over the world. In order to provide opportunities to get quality higher education to the international students, CIIT offers scholarships to various foreign governments and organizations to enable their nominees to study at CIIT. To facilities admissions to international applicants, Office of International Students Affairs (OISA), setup in CIIT system, provides all possible assistance before and during their studies at CIIT.

International students are enrolled in different graduate and undergraduate degree programs. Currently, majority of international students enrolled at CIIT are from Nigeria, Sudan, Jordan, Iran, Afghanistan, Palestine, Mauritius, and Somalia.

**Scholarship Opportunities:** CIIT offers scholarships to International Students for the Master's programs at CIIT Islamabad campus. The salient features of these scholarships are:

- 60-80% wavier on one time fee (admission and graduation fee)
- 100% tuition fee wavier
- 50% wavier on boarding / lodging / transport and food charges

Scholarship for countries and organizations		
1	OIC (Organization of the Islamic Conference)	50
2	COMSATS Headquarters	100
3	ISESCO (Islamic Educational, Scientific & Cultural Organization)	50
4	Consortium of Afghanistan Universities	10
5	Government of Mauritius	10
6	Government of Bhutan	10
7	Government of Maldives	10
8	Government of Nepal	10
9	Government of Sri Lanka	10

For Admission and application procedure please visit [www.comsats.edu.pk](http://www.comsats.edu.pk) and select International Students tab .OR. <http://ww3.comsats.edu.pk/internationalstudents/>

### Eligibility Criteria for Degree Programs

- **PhD programs:** 18 years Master's degree in the relevant field from accredited National/ International University with minimum score CGPA 3.00 out of 4.00 in semester system or possess marks more than 70%

secured in annual examination system with good academic standing plus International subject GRE with minimum score of 1100 or NTS subject (minimum score 60%).

- **Master of Science programs:** 16 years Bachelor's degree in the relevant field from accredited International University with CGPA 2.5/4.0 (semester system) or not less than 60% in annual system with good academic standing plus NTS General (minimum score 50%).

**Submission of Application Form and Documents:** The prospective students should submit scanned copies of their documents along with all requisite credentials at [int.admissions@comsats.edu.pk](mailto:int.admissions@comsats.edu.pk) latest by application submission date. The CIIT shall process the admission requests within stipulated time frame and issue provisional admission offer (if found suitable), which will be confirmed on student's arrival for registration, payment of required dues and charges and on submission of required documents.

**Visa Requirement:** International students need a Student Visa before traveling to Pakistan. Once a provisional offer letter has been issued to study at CIIT, Islamabad (Pakistan), he/she should immediately apply for his/her student visa for Pakistan by sending copies of admission offer letter, passport and other relevant documents to the

nearest Pakistani Embassy or Consulate General for visa issuance. Further information is available at web link of Higher Education Commission; <http://www.hec.gov.pk/insideHEC/divisions/AECA>

**English Language Test Requirements:** CIIT Pakistan accepts the following credentials of international students to satisfy the minimum English Language requirements for entry to a degree program:

- TOEFL minimum score of 500 (PBT) or 177 (CBT) or 60 (iBT) OR

- IELTS minimum 5.0 band (Academic Module) OR
- English Proficiency Certificate from the Last attended Institution

Only original and valid TOEFL or IELTS (Academics) certificates (not more than two years old) from last date of application submission would be accepted.

**Visiting Scholars:** CIIT provides excellent facilities and research opportunities to International Scholars from accredited international universities and institutions of higher education, who want to spend 1-2

semesters at CIIT for study or research. Application form and detail information is available at <http://ww3.comsats.edu.pk/internationalstudents/>

**Accommodation:** CIIT is committed to facilitate international students through provision of comfortable accommodation, which includes all basic amenities, and an opportunity to interact, live and study with students from different backgrounds. The student accommodation would be ensure a quieter living and study environment.



## Faculty of Science

### DEAN'S MESSAGE



Welcome to the Faculty of Science at COMSATS Institute of Information Technology (CIIT). The Faculty of Science at CIIT consists of the Departments of Mathematics, Biosciences, Chemistry, Physics, Meteorology, Environmental Sciences, Pharmacy, Statistics and Earth Sciences. The disciplines have been designed with the express aim to impart a clear insight into basic sciences and to develop strong experimental and technological skills. Each program provides a firm foundation for employment

in industry and R&D organizations, as well as opportunities to pursue academic and research oriented careers.

This is a well-established faculty in terms of the programs offered, faculty strength and research productivity. The faculty is of international repute which is providing research facilities in diversified fields and a dynamic and vibrant environment to undergo a transformation in research and development. The faculty of science is providing different programs, advanced infrastructure, and experience and dedicated faculty. The strength of graduate students is increasing tremendously as a feedback of excellent research facilities available at CIIT. The faculty provides the best facilities, environment and research culture comparable with the top universities of the world.

I hope this prospectus will encourage you to join this association of knowledge seekers.

**Prof. Dr. Arshad Saleem Bhatti, T.I.**

## Department of Biosciences

The field of Biosciences has gained immense importance with the development of the Human Genome Project and modern technologies and many developing countries are rapidly expanding their Biosciences base. There is an acute requirement of continuous training of the scientists and researchers in the rapidly evolving disciplines of Microbiology / Immunology, Molecular Biology / Biochemistry, Molecular Genetics, and Developmental Biology and Bioinformatics. In view of this, CIIT took the initiative by establishing the Biosciences department in 2003, and introducing a 4 year degree program in Bioinformatics at Islamabad, and added another undergraduate degree in Biosciences from 2007. CIIT in this regard was the first institution to offer such programs in and around Islamabad.

The Department of Biosciences has congregated different interdisciplinary/ inter-departmental groups comprising life scientists, computer scientists and mathematicians, who collectively take part in the teaching and training programs leading to the degrees in Bioinformatics and Biosciences.

### Graduate Programs

Currently the following graduate programs are being offered and pursued as per latest trends in the professional dynamic market.



## Master of Science in Biosciences

Master of Science in Biosciences aims to produce professionals who have thorough knowledge and skills to develop a career in Biosciences. The department is committed to provide the fresh graduates with an environment conducive for learning, critical thinking in different aspects of bioscience. The department offer opportunities to the students for learning of tools and techniques in various fields of life sciences such as Botany, Zoology, Microbiology, Biochemistry, Molecular, Biology, Bioinformatics and Biotechnology, etc. A degree in Biosciences discipline will prepare students for a promising career in the field of teaching, clinical and research institutes, pharmaceutical companies, biotechnology industries, etc.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campuses

- Islamabad, Sahiwal

## Doctor of Philosophy in Biosciences

The Doctor of Philosophy in Biosciences aims to explore the principles of biology and organism diversity so that the students develop

their critical thinking skills which are essential to assimilate, interpret and impart knowledge. The department is keen to provide all possible resources to the students so that they gain maximum knowledge and practical skills needed to be highly competitive to avail the best opportunities in their professional careers. Students are encouraged to conceive a research project related to some burning biological and health issues and to perform research as an integral part of their degree program. The program offers research in different dimensions of Bio Science, which includes Bioinformatics, Molecular Biology, Virology, Microbiology, Immunology, Cancer Genetics and Cell Biology. It also encourages the students to come up with new innovative ideas and try new things to achieve new heights of success in the field. The PhD graduates develop tools, techniques and diagnostic solutions various problems in the field of teaching, clinical and research institutes, pharmaceutical companies, biotechnology industries, etc. for different sectors of Pakistan.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campus

- Islamabad

## Master of Science in Biochemistry and Molecular Biology

Biochemistry and Molecular Biology are quite diverse fields and MS degree enables the students to get entry into equally diverse areas such as biotechnology, cell biology and pharmaceutical health professions. Students will explore how life works from a biochemical, cellular and molecular perspective through a combination of lectures, Laboratories, seminars and hands-on research experience. The career potential of a Biochemist/ Molecular biologist is very broad. Graduates are prepared to play their roles in many aspects of scientific research, teaching and industry. Contributing towards basic or applied research, graduates may get involved as researchers in various research organizations.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campus

- Islamabad

## Doctor of Philosophy in Biochemistry and Molecular Biology

The central mission of the Doctor of Philosophy in Biochemistry and

Molecular Biology program is to apply rigorous scientific principles to understand the underlying biochemical and molecular mechanisms of life. Biochemistry and molecular Biology are the knowledge hubs for all other disciplines. The graduates will be able to review, synthesize, critique and integrate relevant concepts, discoveries and applications in Biochemistry or molecular biology and related fields. The curriculum is designed to provide a broad background in protein biochemistry, biotechnology and molecular genetics, in addition to an appropriate depth of knowledge in the field selected for the Ph.D thesis research.

Another main objective is to strengthen candidates' knowledge and technical proficiency, preparing them for collaborative, multidisciplinary assignments in several fields and to provide training in the preparation of scientists who are professional leaders, and a source of benefit to the society. The career potential of a Biochemist/ Molecular biologist is very broad. Contributing towards basic or applied research graduates may get involved as researchers at various research organizations. Graduates may seek jobs in various laboratories housed in Universities, Medical centers or industrial laboratories. Attain leadership positions in universities, R&D institutes and especially different industries (Medical, Pathology and Diagnostics Laboratories, Forensics, Dairy, Food,

Agriculture, Pharmaceutical, Chemical and Cosmetics industries). Business opportunities do exist as the graduates could get positions in the Biotechnology industry and regulatory agencies.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campus

- Islamabad

### Master of Science in Molecular Genetics

Master of Science in Molecular Genetics program is designed to provide a broad background in major fields of genetics, providing an understanding of concepts that are essential to modern biologists. A working knowledge of genetics will be imparted in important disciplines ranging from ecology to medicine. The student should be able to apply knowledge of genetics to ecological, environment and clinical research after successful completion of this degree. This program will help the student to perform techniques of molecular genetics and interpret genetic data towards applied research. In addition to an appropriate depth of knowledge, the students will be prepared to pursue further research in the field selected for the PhD thesis. The degree will prepare the students for suitable careers in the research, clinical institutes, pharmaceutical companies,

biotechnology industries, etc.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campus

- Islamabad

### Doctor of Philosophy in Molecular Genetics

The science of Molecular Genetics has been transformed in the last decade. A wealth of genetic resources is now available to researchers regarding many species that directly or indirectly influence human health, biotech industry, food safety, and agriculture sector. The technical approach of molecular genetics will shed light on molecular pathology of many dominating diseases in Pakistan that are poorly understood at present, eventually paving the way for economically suitable treatment and prevention strategies. Bearing this in mind, molecular genetics will soon underpin much of recent national and international issues ranging from ecology to medicine. Upon successful completion of this course; graduates should be able to apply knowledge of genetics to ecological, environment and clinical research using genetic data in an applied context.

Admission requirements, program duration, course work and thesis/

research project details are given at page number 59.

### Offering Campus

- Islamabad

### Master of Science in Microbiology and Immunology

The Microbiology and Immunology program will cover a range of fields, from more applied disciplines such as medical, public health, industrial, and food microbiology, to basic fields of immunology, microbial ecology, physiology and genetics of microbes. This major will help to understand the disease-causing potential of bacteria, fungi and viruses, and the responses of the immune system. These studies will teach the students that how microbiology and immunology can be applied and will prepare them for suitable careers in areas as diverse as medicine, brewing, food spoilage, control of environmental pollution, biotechnology and space science.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Islamabad

### Doctor of Philosophy in Microbiology and Immunology

The Doctor of Philosophy in Microbiology and Immunology program at CIIT is a diverse science that emphasizes the areas of molecular genetics, cell biology, immunology, cell and virus structure and morphogenesis, animal virology, general bacteriology and physiology, host/parasite relationships, medical microbiology, microbial genetics, and recombinant DNA research. Students are prepared for creative research careers in all such fields. The main objective is to provide scope in microbiology, immunology, and molecular genetics as well as depth and training in independent study and research for graduate students. The science has its roots in the fundamental human needs of health, nutrition, and environmental control, and it provides opportunities for study in the basic biological fields of genetics and cellular and molecular biology. The graduates will be to find suitable careers in biomedical research, medicine, dentistry, or other health professions, biotechnology and genetic engineering, industrial microbiology, agricultural or environmental sciences, public health, and law or bioethics, among others.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Islamabad

### Master of Science in Molecular Virology

The Master of Science in Molecular Virology program aims to produce graduates with focused and unique understanding as well as expertise in techniques of virology. Graduates will develop an understanding of the scientific basis of established and novel virology concepts, as well as the specialist knowledge, practical skills and critical awareness required to enable graduates to pursue a career in academic, clinical or industrial virology. Upon successful completion of this course, the graduates should be able to apply knowledge of virology for environment and clinical research in an applied context. The degree will prepare students for suitable careers in the field of teaching, clinical and research institutes, pharmaceutical companies, biotechnology industries, etc.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Islamabad

## Master of Science in Bioinformatics

Over the past two decades, explosive epidemics of unidentified and re-emerging diseases have given the world a few close calls. Some have affected international trade and tourism; others have led to the mass slaughter of poultry and farm animals. These epidemics have resulted in overwhelming the health services and diversion of essential resources from elsewhere. Almost all these diseases have caused fear and panic. The availability of complete genome sequences for several human pathogens coupled with bioinformatics will lead to significant advances in understanding completely the biological processes underlying the normal physiology of both hosts and pathogens. The medical developments arising from genome projects are required to be exploited to monitor the disease susceptibility and spectrum of disease in our indigenous populations, which we hypothesize, would be different from rest of the world and also within the country.



The insights, products and a variety of biomedical and biotechnological applications emerging from the field of genomics are widely considered as transformation engines for medicine and biology in the coming years. An equitable contribution of developing countries, such as Pakistan, in this whole process, is not only vital for the economic growth of the country but also of global importance to best reap the profits of human resource world-wide. We believe that our graduates with broad based knowledge will fill this vacuum. A career in Bioinformatics will prepare the students for suitable careers in the field of teaching, clinical and research institutes, pharmaceutical companies, software warehouses, biotechnology industries, computer sciences field, etc.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Islamabad

## FACULTY MEMBERS DEPARTMENT OF BIOSCIENCES

### Islamabad Campus

#### Professors

- **Dr. Raheel Qamar**, T.I. , Dean, Research, Innovation and Commercialization (RIC), PhD University of North Texas, USA
- **Dr. Mahmood A. Kayani**, PhD University of Wales, Swansea, UK
- **Dr. Syed Habib Bokhari**, PhD, University of Glasgow, UK

#### Advisors

- **Dr. Fauzia Yusuf Hafeez**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Asrar Muhammad Khan**, PhD, University of Sydney, Australia

#### Associate Professors

- **Dr. Mustafa Nawaz Shafqat**, PhD, Kansas State University, USA

#### Assistant Professors

- **Dr. Tayyaba Yasmin**, PhD, PMAS Arid Agriculture University, Rawalpindi, Pakistan
- **Dr. Muhammad Zeeshan Hyder**, PhD, PMAS Arid Agriculture University, Rawalpindi, Pakistan
- **Dr. Qaiser Fatmi**, PhD, University of Innsbruck, Austria
- **Dr. Muhammad Saeed**, PhD, Innsbruck University, Austria

- **Dr. Muhammad Jamil**, PhD, Wageningen University, Netherlands
- **Dr. Sumaira Farrakh**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Syed Musstjab Akber Saha**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Irfan Sadiq**, PhD, Pisa University, Italy
- **Dr. Abdul Rauf Siddiqi**, PhD, Paris Descartes University, France
- **Dr. Saadia Naseem**, PhD, University of Hanover, Germany
- **Dr. Nazish Bostan**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Muhammad Imran**, PhD, INPL - ENSAIA - LIBio, Nancy, France
- **Dr. Kiran Munir**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Aisha Naeem**, PhD, University of Illinois at Urbana Champaign (UIUC), USA
- **Dr. Zahid Ali**, PhD, University of Hanover, Germany
- **Dr. Zertashia Akram**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Mustafa Nawaz Shafiqat**, PhD, Kansas State University, USA
- **Dr. Muhammad Nadeem Hassan**, PhD, Quaid e Azam University, Islamabad, Pakistan

- **Dr. Amira Tariq PhD**, University of Vienna, Austria
- **Dr. Abid Ali Khan**, PhD, University of Basque Country, Spain
- **Dr. Ramla Shahid**, PhD, Cambridge University, UK
- **Dr. Saleem Ahmed Bokhari**, PhD, Tsinghua University, China
- **Dr. Nazia Bibi**, PhD, University College London, UK
- **Dr. Saima Feroz**, PhD, University of Vienna, Austria
- **Dr. Faraz Arshad Malik**, PhD, CIIT, Islamabad, Pakistan
- **Dr. Zahid ur Rehman**, PhD, Massey University, New Zealand
- **Dr. Syed Tahir Abbas**, PhD, University of Illinois at Urbana Champaign, USA
- **Dr. Alamdar Hussain**, PhD, Karolinsk Institute, Sweden
- **Dr. Jawad Khan**, PhD, University of Illinois at Urbana Champaign, USA
- **Dr. M. Umer**, PhD, Imperial College London, UK

Besides, 09 Lecturers and Research Associates are also part of this department.

## Sahiwal Campus

### Associate Professors

- **Dr. Ahmad Ali**, PhD, University of Bristol, UK

### Assistant Professors

- **Dr. Shazia Mannan**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Muhammad Shafiq Shahid**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Awais Ihsan**, PhD, Huazhong Agriculture University, China
- **Dr. Awais Zulfiqar**, PhD, Zhejiang University, China
- **Dr. Sumaira Kanwal**, PhD, Kongju National University, Korea
- **Dr. Ibrar Hussain**, PhD, Swedish University of Agricultural Sciences, Sweden
- **Dr. Muhammad Ibrahim**, PhD, Zhejiang University, Hangzhou, China

Besides, 03 Lecturers are also associated with the department.



## Department of Chemistry

The Department of Chemistry at CIIT Abbottabad is endeavoring to attain a position among world leading centers through excellence in education and cutting edge research and innovation. The mission of this department is to produce world class contributors in chemical science for the betterment of humanity.

This department is committed to equip the students with updated knowledge by inculcating research expertise that are necessary for understanding advancements in chemical sciences of the modern world. Students are provided opportunities to work in different research areas such as:

- Natural Product Chemistry
- Material Chemistry
- Organic and Biological Chemistry
- Physical and Theoretical Chemistry
- Applied and Analytical Chemistry

Further details of the research and research groups can be found by accessing the department webpage or through the link; <http://ciit-atd.edu.pk/departments/chemistry.aspx>

Chemistry students get hands on experience through formal and informal interactions with the faculty in research

Laboratory, seminars, workshops and conferences. Faculty, on average, mentors two to three graduates every year. Since inception of the department in 2008, a considerable number of graduates have been produced, who are serving in national and international prestigious institutions including academia, industry, research, public and private sector organizations.

The department currently consists of 28 full time faculty holding doctoral degree from distinguished universities of the globe. The faculty is dedicated to impart training to students in their respective areas of expertise and make them capable team members in the relevant research group. In addition to imparting knowledge to students, the faculty is also actively publishing their research work in high impact international journals including Nature Materials, Advanced Materials, Angewandte Chemie - Int. Ed., Journal of the American Chemical Society, Chemical Science, Chemistry A- European Journal, Journal of Chromatography A, Journal of Power Sources, Journal of Membrane Science, Tetrahedron, Organic and Biomolecular Chemistry, etc. Moreover, number of books, book chapters, posters and presentations are also on their credit.

Faculty of this department have a large number of research projects sponsored by different funding agencies like; Higher Education Commission of Pakistan (HEC), Pakistan Science Foundation

(PSF), Third World Academy of Science (TWAS), Commission on Science and Technology (COMSTECH), International Foundation for Science Sweden (IFS), UNICEF and CIIT research grants. All these grants involve students to conduct novel and cutting edge research. A large number of students are getting benefit from these projects in the form of financial support. Current projects involve synthesis of new anti-cancer agents; establishing new bioassays for biomolecules, encapsulated drug delivery systems; advanced food preservation methods; green chemistry methodologies; synthesis and characterization of nano-materials, advanced Polymers, composite materials, sensors and liquid crystal; drinking water and waste water sustainable treatment; isolation of natural products, computational studies of challenging molecules etc.

The graduates can get access to the following major expertise from their research:

- Modern and comprehensive knowledge in the specialized field
- In depth knowledge to interpret sophisticated analytical data from instruments such as NMR, FT-IR, UV/Visible, GC-MS, HPLC, XRD, SEM, TEM, etc.
- Ability to understand and optimize the new research methodologies



- Understanding of ethical and professional responsibilities as a scientist as well as awareness of contemporary global issues

### Master of Science in Chemistry

Master of Science (MS) in Chemistry is designed to prepare graduates for higher studies, professional trainings, or immediate employment in academia, Govt. and non-Govt. organization, industry etc.

The program accommodates individuals with background of chemistry and allied sciences to pursue advanced research work. Chemistry has seen enormous growth in past few decades with many new applications in medicine, biotechnology, nanotechnology, advanced materials, environmental health, alternative energy sources, forensic sciences, molecular modeling and many more. New developments in chemistry are rapidly transforming from laboratory research to practical applications.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campus

- Abbottabad

### Doctor of Philosophy in Chemistry

Doctor of Philosophy in Chemistry will equip students with appropriate qualification for jobs in the relevant field. Chemistry has a wide range of important applications that it creates constant demand for well-trained chemists in many fields. There is large number of job opportunities for chemistry graduates in various national and international organizations e.g., NIBGE, PCSIR, PAEC, KRL, NDC, AWC, POF, health departments, mineralogy departments, ministry of environment, pharmacy, agriculture and academic institutes, textile and pharma Industry etc. In order to fulfill the enormous demands of chemists, the PhD program enables an individual to compete and secure a respectable position in the relevant field.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campus

- Abbottabad

# FACULTY MEMBERS

## DEPARTMENT OF CHEMISTRY

### Abbottabad Campus

#### Professors

- **Dr. Abdur Rahman Khan**, PhD, University of Birmingham, UK

#### Advisors

- **Dr. Rehana Rashid**, PhD, Martin-Luther University Halle, Germany

#### Associate Professors

- **Dr. Zakir Hussain**, PhD, Institute fur Organische Chemie, TU Braunschweig, Germany
- **Dr. Umar Farooq**, PhD, HEJ Research Institute of Chemistry, University of Karachi, Pakistan

#### Assistant Professors

- **Dr. Abida Kalsoom Khan**, PhD, Quaid-e-Azam University, Islamabad, Pakistan
- **Dr. Afsar Khan**, PhD, H.E.J Research Institute of Chemistry, University of Karachi, Pakistan
- **Dr. Syed Tauqir Ali Sherazi**, PhD, GC University, Lahore, Pakistan
- **Dr. Muhammad Arfan**, PhD, Quaid-e-Azam University, Islamabad, Pakistan

- **Dr. Khurshid Ayub**, PhD, University of Victoria, Canada
- **Dr. Amara Mumtaz**, PhD, Quaid-e-Azam University, Islamabad, Pakistan
- **Dr. Muhammad Hanif**, PhD, University of Vienna, Austria
- **Dr. Tariq Mahmood**, PhD, HEJ Research Institute of Chemistry, University of Karachi, Pakistan
- **Dr. Usman Latif**, PhD, University of Vienna, Austria
- **Dr. Guhlan Abbass**, PhD, HEJ Research Institute of Chemistry, University of Karachi, Pakistan
- **Dr. Khizar Hayat**, PhD, Jiangnan University, China
- **Dr. Muhammad Arshad**, PhD, University of Bristol, UK
- **Dr. Sohail Anjum Shahzad**, PhD, Cardiff University, UK
- **Dr. Adeem Mahmood**, PhD, University of Bristol, UK
- **Dr. Sadullah Mir**, PhD, Quaid-e-Azam University, Islamabad, Pakistan
- **Dr. Farhan Ahmed Khan**, PhD, Technical University of Vienna, Austria

- **Dr. Imran Malik**, PhD, University of Rostock, Germany
- **Dr. Aneela Maalik**, PhD, University of Rostock, Germany
- **Dr. Zafar Iqbal**, PhD, Eberhard-Karls University, Tuebingen, Germany
- **Dr. Bushra Ismail**, PhD, Quaid-e-Azam University, Islamabad, Pakistan
- **Dr. Muhammad Sharif**, PhD, University of Rostock, Germany
- **Dr. Ahson Jabbar Shaikh**, PhD, University of Groningen, the Netherlands
- **Dr. Asad Muhammad Khan**, PhD, Quaid-e-Azam University, Islamabad, Pakistan
- **Dr. Razaqat Ali Khan**, PhD, Quaid-e-Azam University, Islamabad, Pakistan



## Department of Earth Sciences

The Earth Sciences program was initiated in Fall 2008, followed by the establishment of the Department of Earth Sciences in 2011. CIIT Abbottabad campus being at special geographic location with proximity of the Himalayas, Karakoram, and Hindukush, it provides students an opportunity to learn about the Earth and the geological processes in a real-time mountainous setting and also provides students the opportunity for outdoor academic learning and research that combines field work and laboratory techniques with a focus on applied Geology and applied Geophysics (Petroleum Geology, Engineering Geology, Environmental Geology, Hydrogeology, Structural Geology/Tectonics, Economic Geology and Sedimentology).

The unique location of campus provides easy access in close to proximity most diversified set of geological features which include igneous, metamorphic, and sedimentary rocks ranging in age from Precambrian (800 million years) to recent, seismically active faults and their offshoots, a variety of mineral and gemstone deposits, and geomorphologic features.

### Master of Science in Earth Sciences: MS (ERS)

The Master of Science (MS) in Earth Sciences with specialization in Applied Geology and Applied Geophysics is designed to prepare graduate students for continuation to the PhD level, other professional trainings, or for immediate employment in advanced positions in government, industry, education, and abroad mainly in the Middle East. The program accommodates individual

career objectives for those with degrees in Geology, Geophysics and allied fields/relevant subjects to pursue advanced research work and placement in the field. The Earth Sciences has seen enormous growth in past few decades with many new applications in Petroleum Geosciences, Engineering Geology, Economic Geology, Environmental Geology, Earthquake Geology and Geohazard Assessment and computational research. New information is being rapidly transferred from Industry to Academia for practical application.

Detail regarding admission requirements, the program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Abbottabad

## FACULTY MEMBERS

### Abbottabad Campus

#### Professors

- **Dr. Ishtiaq Ahmed Khan Jadoon**, PhD, Oregon State University, USA
- **Dr. Mohammad Arif**, PhD, Leicester University, United Kingdom

#### Advisors

- **Dr. Abdul Matin**, PhD, University of Punjab, Lahore, Pakistan.

- **Dr. Allah Bukhsh Kausar**, PhD, Universite Joseph Fourier, Grenoble, France

#### Principal Scientific Officer

- **Dr. Muhammad Tariq**, PhD, State Technical University of Oil and Gas, Ivano-Frankivsk, Ukraine

#### Associate Professors

- **Dr. Muhammad Amjad Sabir**, Ph.D, University of Peshawar, Pakistan
- **Dr. Muhammad Umar**, PhD, Baluchistan University, Pakistan

- **Dr. Faridullah**, PhD, Tottori University, Japan

#### Assistant Professors

- **Dr. Muhammad Farooq**, PhD, Chonbuk National University, Jeonju, South Korea
- **Dr. Said Mohammad**, PhD, University of Peshawar, Pakistan

Besides, 01 Assistant Professor, 14 Lecturers and 04 Reaserach Associates are also associated with the department.



## Department of Environmental Sciences

Department of Environmental Sciences at CIIT was established in 2004 and has now become a hub for interdisciplinary undergraduate studies, innovative research development, graduate studies and advocacy on environmental issues. The Department has highly qualified faculty with major focus areas of research and development including environmental technologies, climate change and ecosystem, renewable energy, sustainable agriculture and natural resources, sanitation and public health.

The Department of Environmental Sciences at CIIT is playing an important role to inspire a lifelong commitment to the earth for environmental responsibilities through research and education that is essential to understand and improve the environment at local, regional and global level.

### Graduate Programs

Currently the following graduate programs are being offered and pursued as per latest trends in the professional dynamic market.

### Master of Science in Environmental Sciences

Master of Science (MS) in Environmental Sciences program was started in 2005. The aim of the program is to provide students with an opportunity to pursue their ambitions in this broad and multidisciplinary field and to become efficient advocates of environment. The program offers a range of research areas to choose from a wide range of career opportunities. The research oriented program is designed to prepare the graduates for career in environmental consultancy, regulatory agencies, manufacturing and service industry, wildlife management organizations, environment related national and international organizations and academic institutions.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

#### Offering Campuses

- Abbottabad, Vehari

### Doctor of Philosophy in Environmental Sciences

The PhD program in environmental sciences acquaint the scholars with critical analysis of the present and future development activities in the light of its ultimate environmental impacts on climate change, water resources and

quality, public health and food security and how such influences can be managed at local, regional and national level.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

#### Offering Campus

- Abbottabad

### Master of Science in Biotechnology

Master of Science (MS) in Biotechnology program was started in Fall 2009. The program broadly aims at preparing human resource in this emerging area of science of the 21st century with the realization of meeting local, regional and global demands of qualified and well – trained professionals. The specific objectives are to impart and integrate high quality education and research in the discipline of biotechnology and developing human resource with independent, creative and critical thinking and high moral values.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

#### Offering Campus

- Abbottabad

## Doctor of Philosophy in Biotechnology

The program offered enormous research exposure with major focused areas of research include improving agricultural crops and livestock against biotic and abiotic stresses, higher yield, energy potential and production; improving health through drug designing, vaccines production, diagnostics, and DNA fingerprinting; bioremediation of contaminated soils and water and improving industrial processes.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Abbottabad

## Master of Science in Sustainable Water Sanitation Health and Development

Master of Science in Sustainable Water Sanitation Health and Development (SWSHD) was launched in Fall 2008 at Abbottabad campus. This is an international program funded by the Norwegian Government and is operating simultaneously at COMSATS Institute of Information Technology, Pakistan, Tri-Bhuvan University, Nepal, and the University of Life Sciences, Norway. This program gives a broad introduction to water sanitation and associated health

issues. This would build the required capacity to tailor solutions to local needs related to the UN Millennium Goals for water and sanitation. The students acquire skills to plan, design, implement, manage and communicate appropriate technical solutions suitable to both urban and rural contexts. The diversified teaching and training during the MS program enable the students for careers in environmental consulting, regulatory agencies, manufacturing and service industry, water and sanitation agencies, environment related national, international and multinational organizations, academic institutions and many others.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Abbottabad

## FACULTY MEMBERS ENVIRONMENTAL SCIENCES

### Abbottabad Campus

#### Professors

- **Dr. Mohammad Maroof Shah**, PhD, University of Nebraska-Lincoln, USA
- **Dr. Arshid Pervez**, PhD, Bradford University, UK
- **Dr. Mohammad Irshad**, PhD Tottori University, Japan

#### Advisors

- **Dr. Kiramat Khan**, PhD, University of Nebraska, Lincoln, USA
- **Dr. Iftikhar A. Raja**, PhD, University of Strathclyde, Glasgow, UK

#### Associate Professors

- **Dr. Qaisar Mahmood**, PhD, Zhejiang University, China
- **Dr. Amjad Hassan**, PhD, Niigata University, Japan

#### Assistant Professors

- **Dr. Raza Ahmad**, PhD, KAIST, Dajon, South Korea
- **Dr. Romana Khan**, PhD, Kyungpook National University, Taegu, South Korea
- **Dr. Jamshaid Hussain**, PhD, University of Verona, Italy
- **Dr. Faridullah**, PhD, Tottori University, Japan
- **Dr. Mohammad Bilal**, PhD, Agrocampus Ouest, Rennes, France

- **Dr. Adnan Ahmad Tahir**, PhD, Universite Montpellier 2, France
- **Dr. Syed Tatheer Alam Naqvi**, PhD, Quaid-e-Azam University, Islamabad, Pakistan
- **Dr. Touqeer Ahmad**, PhD, Quaid-e-Azam University, Islamabad, Pakistan
- **Dr. Usman Irshad**, PhD, Sup Agro, Montpellier, France
- **Dr. Sarfraz Shafiq**, PhD, University of Strastbourg, France
- **Dr. Rafiq Ahmad**, PhD, University of Paris-Est, France
- **Dr. Sabaz Ali Khan**, PhD, Wageningen University, The Netherlands
- **Dr. Saeed Ahmad Asad**, PhD, University of Nottingham, UK
- **Dr. Zulfiqar Ahmed Bhatti**, PhD, CIIT, Abbottabad, Pakistan
- **Dr. Maria Siddique**, PhD, CIIT, Abbottabad, Pakistan
- **Dr. Bilal Ahmad Zafar Amin**, PhD, University of Reims, France
- **Dr. Farhan Hafeez**, PhD, University of Dijon, France
- **Dr. Muhammad Shahzad**, PhD, University of Kiel, Germany, Germany
- **Dr. Muhammad Tahir Amin**, PhD, Seoul National University, Korea
- **Dr. Rashid Nazir**, PhD, University of Groningen, Netherlands

- **Dr. Irum shahzadi**, PhD, CIIT, Abbottabad, Pakistan
- **Dr. Nosheen Mirzam**, PhD, CIIT, Abbottabad, Pakistan
- **Dr. Tiayyba Riaz**, PhD, France
- **Dr. Arshad Mahmood Abbasi**, PhD, Quid-e-Azam University, Islamabad, Pakistan
- **Dr. Naim Rashid**, PhD, KAIST, Korea
- **Dr. Arshad Mehmood Abbasi**, PhD, Quaid-e-Azam University, Islamabad, Pakistan
- **Dr. Javaid Iqbal**, PhD, University of Agriculture Faisalabad Pakistan
- **Dr. Tahir Hayat**, PhD, Zhejiang university P.R China
- **Dr. Fazli Wahid**, PhD, Korea
- **Dr. Muhammadi**, PhD, University of Karachi Pakistan
- **Dr. Wajiha Khan**, PhD, Quaid-e-Azam University, Islamabad, Pakistan
- **Dr. Akhtar Iqbal**, PhD, University of Reims, France
- **Dr. Abdul Nazeer**, PhD, Quaid-e-Azam University, Islamabad, Pakistan

Besides, 02 Assistant Professors, 11 Lecturers and 07 Research Associates are also associated with this department.

## Vehari Campus

### Advisors

- **Dr. Muhammad Aslam**, PhD, Kansas State University, Manhattan, Kansas, USA

### Assistant Professors

- **Dr. Muhammad Shahid**, PhD, INP-Ensats, Poulouse, France
- **Dr. Wajid Nasim**, PhD, University of Agriculture, Faisalabad, Pakistan
- **Dr. Muhammad Nadeem**, PhD, University of Bordeaux 1, France
- **Dr. Nasir Masood**, PhD, University of Agriculture, Faisalabad, Pakistan
- **Dr. Ghulam Mustafa Shah**, PhD, Wageningen University, Wageningen, The Netherlands
- **Dr. Hafiz Faiq Siddique**, PhD, Justus Liebig University Giessen, Germany
- **Dr. Muhammad Imtiaz Rashid**, PhD, Wageningen University, Wageningen, The Netherlands



## Department of Mathematics

The Department of Mathematics in CIIT was established in 2001 at its Islamabad and Abbottabad Campuses and has been teaching courses of Mathematics in different degree programs. Later, the departments were also established at Lahore, Wah, Attock and Sahiwal Campuses. The advent of computers and data acquisition facilities has stretched the limits of what is possible in Mathematics to all branches of human endeavor. This program has given rise to new IT based techniques of mathematical study and has created new computational methodologies.

Mathematics is one of the most mature and well-developed disciplines of basic sciences. The study of Mathematics is not only exciting, but also important. Mathematicians have an opportunity to make a lasting contribution to society by helping to solve problems in diverse fields such as medicine, management, economics, governance, computer sciences, physics, psychology, engineering and social sciences. Thus, it is a subject that can never lose its academic utility or professional value.

Mathematics has such a wide variety of important applications which creates continuously increasing demand for well-trained mathematicians in many fields. It has relevance to fields of

aerospace, oil exploration, electronics, weather prediction, management positions, teaching and research, accounting and financial analysis and defence related disciplines.

The Department of Mathematics at CIIT aims to pursue excellence in Mathematics through teaching and research by developing appropriate curricula and teaching practices, acquiring talented faculty members, and providing an environment conducive to teaching and learning of quantitative skills.

### Master of Science in Mathematics

Master of Science (MS) in Mathematics program aims to provide suitable career in many research organizations/ laboratories, both government and private, maintain independent research staffs which include mathematicians. Their work often deals with the development of new technology, including research in basic physics and software development, as well as applied mathematics. Numerical simulation, such as weather and climate forecasting, depends heavily on the use of supercomputers. At the MS level, graduate would be able to acquire skills for solving problems suggested either by mathematics or by real world questions. Foremost is the ability to break complex issues into smaller, more manageable problems, until a model is reached

which can be thoroughly studied and understood.

Admission requirements, program duration, course work and thesis details are given at page number 59.

### Offering Campuses

- Islamabad, Abbottabad, Lahore, Wah, Attock

### Doctor of Philosophy in Mathematics

In this degree program, students are prepared for advance research activities along with many jobs in government, business, and industry. Many PhD Mathematicians join the faculty of a university or four-year college, where they not only teach but also conduct research and publish their results in scholarly journals and books. Others take post-doctoral positions at various laboratories around the world, where work of interest to them is being done. Still others pursue careers in corporate research and management. A PhD degree in Mathematics will prepare students with suitable qualifications for jobs and an exciting research career in their relevant field.

Admission requirements, program duration, course work and thesis details are given at page number 59.

### Offering Campuses

- Islamabad, Lahore

## Islamabad Campus

### Professors

- **Dr. Tahira Haroon**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Saleem Asghar**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Muhammad Aslam Noor**, PhD, Brunel University London, UK
- **Dr. Khalida Inayat Noor**, PhD, University of Wales, Swansea, UK
- **Dr. Aftab Khan**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Akbar Azam**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Moiz-ud-Din Khan**, PhD, Bahauddin Zakariya University, Multan, Pakistan

### Advisors

- **Dr. Akhtar Hussain**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Noor Muhammad Larik**, PhD, Southampton University, UK

### Associate Professors

- **Dr. Shamsul Qamar**, PhD, Otto-von-Guericke University Magdeburg, Germany
- **Dr. Abdullah Shah**, PhD, Graduate School of Chinese Academy of Sciences (GSCAS), Beijing, China

- **Dr. Ishtiaq Ali**, PhD, Graduate School of Chinese Academy of Sciences (GSCAS), Beijing, China

### Assistant Professors

- **Dr. Mahmood ul Hassan**, PhD, Brunel University London, UK
- **Dr. Muhammad Mushtaq**, PhD, CIIT, Islamabad
- **Dr. Sobia Sultana**, PhD, Government College University, Lahore, Pakistan
- **Dr. Shams-ul-Islam**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China
- **Dr. Farkhanda Ikhtlaq Chohan**, PhD, Kagoshima University, Japan.
- **Dr. Tanvir Akbar Kiani**, PhD, University of Strasbourg, France
- **Dr. Masood Anwar**, PhD, NCBA&E, Pakistan
- **Dr. Tazeen Athar**, PhD, University of Saarland, Saarbruecken, Germany
- **Dr. Muhammad Saeed Akram**, PhD, Government College University, Lahore, Pakistan
- **Dr. Muhammad Zaighum Zia**, PhD, University of Goettingen, Germany
- **Dr. Muhammad Qasim**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Saleem Ahmed**, PhD, State University of New York, USA

- **Dr. Baber Ahmad**, PhD, Government College University, Lahore, Pakistan
- **Dr. Imran Rashid**, PhD, Hradec Kralove University, Czech Republic
- **Dr. Muhammad Fazeel Anwar**, PhD, University of York, UK
- **Dr. Sohail Iqbal**, PhD, Warwick University, UK
- **Dr. Tahira Jamil**, PhD, Wageningen University, Netherlands
- **Dr. Manshoor Ahmed**, PhD, CIIT, Islamabad, Pakistan
- **Dr. Shahida Nargis**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Bushra Malik**, PhD, CIIT, Islamabad, Pakistan
- **Dr. Sardar Mohib Ali Khan**, PhD, Government College University, Lahore, Pakistan
- **Dr. Salman Amin Malik**, PhD, University of Rochelle, La Rochelle, France
- **Dr. Muhammad Yousaf**, PhD, CIIT, Islamabad, Pakistan
- **Dr. Saima Noreen**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Adeel Ahmad**, PhD, CIIT, Islamabad, Pakistan
- **Dr. Shumaila Javeed**, PhD, Max Planck Institute, Germany

Besides, 39 Lecturers and 08 Research Associates are also associated with this department.

## Lahore Campus

### Associate Professors

- **Dr. Shahadat Ali Taj**, PhD, Brunel University London, UK

### Assistant Professors

- **Dr. Imran Anwar**, PhD, GC University, Lahore, Pakistan
- **Dr. Sarfraz Ahmad**, PhD, GC University, Lahore, Pakistan
- **Dr. Hani Shaker**, PhD, GC University, Lahore, Pakistan
- **Dr. Imran Ahmad**, PhD, GC University, Lahore, Pakistan
- **Dr. Muhammad Hussain**, PhD, GC University, Lahore, Pakistan
- **Dr. Kashif Ali**, PhD, GC University, Lahore, Pakistan
- **Dr. Tariq Javed Zia**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China
- **Dr. Hafiz Abdul Wajid**, PhD, University of Strathclyde, Glasgow, UK
- **Dr. Amir Mahmood**, PhD, GC University, Lahore, Pakistan

- **Dr. Samina Mazhar**, PhD, LUMS, Lahore, Pakistan
- **Dr. Muhammad Younas**, PhD, University of Groningen, The Netherlands
- **Dr. Adeel Farooq**, PhD, Queen Mary University of London
- **Dr. Ayesha Sohail**, PhD, University of Sheffield, UK
- **Dr. Muhammad Yousaf Bhatti**, PhD, Norwegian University of Life sciences, Norway
- **Dr. Sadia Ashraf**, PhD, GC University, Lahore, Pakistan
- **Dr. Sana Javed**, PhD, GC University, Lahore, Pakistan
- **Dr. Sarfraz Nawaz Malik**, PhD, CIIT Islamabad., Pakistan

Besides, 02 Assistant Professors, 06 lecturers are also associated with this department.

## Abbottabad Campus

### Advisors

- **Dr. Mir Asadullah**, PhD, Essex University, UK
- **Dr. Dost Muhammad**, PhD, Michigan University, USA

## Assistant Professors

- **Dr. Madad Khan**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Saima Anis**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Muhammad Ayub**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Abdul Sami Awan**, PhD, Government College University, Lahore, Pakistan
- **Dr. Saqib Hussain**, PhD, CIIT, Islamabad, Pakistan
- **Dr. Sultan Hussain**, PhD, Government College University, Lahore, Pakistan
- **Dr. Usman Ashraf**, PhD, GC University Lahore, Pakistan
- **Dr. Zahid Ahmad**, PhD, University of Punjab, Lahore, Pakistan
- **Dr. Naheed Azhar**, PhD, ENSTA-BRETAGNE University, France
- **Dr. Saima Noor**, PhD, CIIT, Islamabad Pakistan
- **Dr. Talat Nazir**, PhD, LUMS Lahore, Pakistan
- **Dr. Zakir Hussain**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China

Besides, 06 Assistant Professors, 11 Lecturers are also associated with this department.

## **Wah Campus**

### **Advisors**

- **Dr. Munir Akhtar**, PhD, University of Southampton, UK

### **Assistant Professors**

- **Dr. Akmal Javaid**, PhD, Graduate University of Chinese Academy of Sciences, Beijing, China
- **Dr. Muhammad Kamran**, PhD, Government College University, Lahore, Pakistan
- **Dr. Amer Rasheed**, PhD, European University of Bretagne, France
- **Dr. Abdul Wahab**, PhD, EcolePolytechnique of Paris, France
- **Dr. Shabieh Farwa**, PhD, University of Sheffield, UK
- **Dr. Muhammad Rafiq**, PhD, CIIT Islamabad, Pakistan
- **Dr. Shabbir Ahmad**, PhD, Zhejiang University, Hangzhou, China
- **Dr. Rab Nawaz**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Ms. Syedah Maedh Kazmi**, M.Phil, Quaid-i-Azam University, Islamabad, Pakistan

Besides, 01 Assistant Professor and 07 Lecturers are also associated with this department.

## **Attock Campus**

### **Advisors**

- **Dr. Zafar Mehmud**, PhD, Bahauddin Zakariya University, Multan, Pakistan

### **Assistant Professors**

- **Dr. Saima Noreen**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Imran Faisal**, PhD, Universiti Kebangsaan Malaysia
- **Dr. Farooq Ahmad Shah**, PhD, CIIT, Islamabad, Pakistan
- **Dr. Abdul Qadir Baig**, PhD, Government College University, Lahore, Pakistan
- **Dr. Shafique Rehman**, PhD, Government College University Faisalabad, Pakistan
- **Dr. Muhammad Awais**, PhD, Quaid-i-Azam University, Islamabad, Pakistan
- **Dr. Sadia Siddiq**, PhD, CIIT, Islamabad, Pakistan

Besides, 4 Lecturers and 1 Research Associate are also working in this department.

## **Sahiwal Campus**

### **Assistant Professors**

- **Dr. Muhammad Naeem**, PhD, Government College University, Lahore, Pakistan
- **Dr. Muhammad Asad Meraj**, PhD, Karl-Franzens Universitat, Graz Austria
- **Dr. Muhammad Raza**, PhD, Bahauddin Zakariya University, Multan, Pakistan
- **Dr. Muhammad Sadiq**, PhD, Islamia University, Bahawalpur, Pakistan
- **Dr. Muhammad Waseem**, PhD, CIIT, Islamabad, Pakistan
- **Dr. Manzoor Ahmad Zahid**, PhD, Tilburg University, Tilburg, Netherlands
- **Dr. Ghulam Abbas**, PhD, University of the Punjab, Pakistan

Besides, 01 Assistant Professor and 05 Lecturers are also associated with the department.



## Department of Meteorology

Department of Meteorology was established in 2005 and COMSATS Institute of Information Technology is the only institute in the country offering degree in Meteorology. In 2005 MS Meteorology program was launched with three specializations including Meteorology, Seismology and Remote Sensing and GIS. Later on, in 2010, specializations of Remote Sensing and GIS and Meteorology at Master level were introduced as separate disciplines. PhD in Meteorology with specializations in Meteorology and Remote Sensing and GIS is intact in our department since 2010. We are the sole Institute in County to offer PhD in Meteorology. The program aims to provide consultancy,

solutions and future trends in the areas of Climate Change, Numerical Weather Prediction, Hydrology and Water Resources, Snow and Ice, Agriculture and Food Security, Oceanography, Land use and Land cover and a range of relevant state-of-the-art technologies. Department of Meteorology was launched to focus attention on these multidisciplinary fields and their significance in Pakistan, and to make sincere and serious efforts for the growth and advancement of education and research in these fields.

Remote Sensing and GIS Laboratory is well equipped with the state of the art hardware and software. GPS, Arc GIS, Arc View, Map Info, Arc Info and ERDAS IMAGINE-image processing software have been installed on the latest machines. The Laboratory is

fully equipped with state of the art HP plotter and Scanner. In addition, the Remote Sensing and GIS Laboratory hosts a huge data bank of satellite data purchased and archived from satellite ground stations. The data bank includes SPOT, Landsat, IKONOS, NOAA-AVHRR, MODIS and ASTER data of various years. The Laboratory offers a peaceful environment where students can carry out their research in an innovative way.

The Department of Meteorology maintains an automatic 'MEADE 8 inch LX200-ACF' telescope and 'DSI PRO II' monochrome CCD Camera to monitor astronomical events and night time observations. These instruments offer a range of applications for researchers and amateur astronomers. There have been arranged moon sighting events at CIIT campus for the students and public in the past and would be in the future as well.

The department has established its own meteorological research laboratory equipped with the most advanced equipment and computers vital for performing the experiments and quite capable to impart basic training to the students. Automatic Weather Station offers high performance in a very compact design, robust and lightweight, easy to install, field-proven reliability and accuracy, low power consumption, wide selection of sensors, extensive calculation and data logging capacity,



user-friendly set-up and graphical display software. The basic sensors suite measures wind speed/direction, pressure, temperature, relative humidity and precipitation. AWS systems are widely used in:

- Climatological measurements
- Hydrological networks
- Energy production and Management
- Building automation
- Environmental research
- Sport and recreational activities

CIIT is developing linkages with research and development organizations and industries for the development of quality human resources in the vital field of Meteorology, Atmospheric Science, Remote Sensing and GIS, Climatology, Seismology and Global Warming etc. Furthermore, these facilities can also be utilized to train private and public sector organization professionals by offering, short and long term professional academic and practical courses to the executives and technicians, for the enhancement of their expertise. In this connection, CIIT has signed memorandum of understanding (MOU) with some research and development organizations like Pakistan Meteorological Department (PMD). Recently, Department of Meteorology, CIIT has signed MOUs with Institute of Space Technology (IST) and

Pakistan Space and Upper Atmosphere Research Commission (SUPARCO). Thus, department of Meteorology will collaborate with organizations like Pakistan Meteorological Department (PMD), WAPDA, NESCOM, SUPARCO etc. to work on problems of applied nature in the field of Atmospheric Science, Climatology, Remote Sensing and GIS, Seismology and many others. The MOUs signed between CIIT and University of Illinois Urbana Champaign (UIUC) is of great importance for the research activities carried out in the department. With this MOU the department sends some of its most suitable MS student every year for a period of four months to conduct research activities during the last semester of their study.

### Graduate Programs

Currently the following graduate programs are being offered and pursued as per latest trends in the professional dynamic market.

#### Master of Science in Meteorology

The Master of Science in Meteorology is a versatile program. Many advances in Meteorology can be attributed to breakthroughs in related areas of mathematics, physics, engineering, and technology. Because of the collection and analysis of a vast amount of data from around the world and the numerical simulation of meteorological

and climatological processes, supercomputers and the latest advanced mathematical techniques are integral part of the atmosphere.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Islamabad

#### Master of Science in Remote Sensing and GIS

The Master of Science in Remote Sensing and GIS program is focusing on art of acquiring information about objects, area or phenomenon without physical contact. Geographic Information System (GIS) is a computer based information system used to digitally represent and analyze the geographic features present on the earth's surface and the events that are taking place on it. GIS has been an effective tool for implementation and monitoring of different infrastructures. Department of Meteorology started MS in Remote Sensing and GIS program in 2010. The program aims to provide consultancy, solutions and future trends in the areas of Climate Change, Hydrology, Snow and Ice, Agriculture and Forest, Oceanography, Land use and Land cover and a range of relevant state-of-the-art technologies.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Islamabad

### Doctor of Philosophy in Meteorology

Currently Department of Meteorology is offering Doctor of Philosophy in Meteorology, which has been started in 2010 with two modules including Module A (Meteorology) and Module B (Remote Sensing and GIS). The duration of studies for PhD shall normally not be less than three years and not more than 5 years. They have to complete 18 credit hours of Graduate Level course work in addition to the MS course work and then appear in a comprehensive examination. CIIT provides the students with a broad - based theoretical knowledge as well as enhanced experimental research and computational skills to enable them to handle challenging research problems independently and innovatively.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Islamabad

## FACULTY MEMBERS

### DEPARTMENT OF METEOROLOGY

#### Islamabad Campus

##### Professors

- **Dr. Mohsin Jamil**, PhD, University of London, UK
- **Dr. Athar Hussain**, PhD, University of Missouri, USA and Quaid-e-Azam University, Pakistan

##### Advisors

- **Dr. Gul Muhammad**, PhD, University of London, UK
- **Dr. Shahid Nadeem Qureshi**, PhD, University of Hamburg Germany
- **Dr. Amir Haider Malik**, PhD, Technical University (TU), Berlin, Germany

##### Associate Professors

- **Dr. Shaina Tariq**, PhD, University of Peshawar, Pakistan

#### Principal Scientific Officer

- **Dr. Aqeel Ahmed Kidwai**, PhD, ITC, University of Ghent, Belgium

#### Assistant Professors

- **Dr. Rashed Mahmood**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China
- **Dr. KalimUllah**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China
- **Dr. Abdul Ghaffar**, PhD, University of Punjab, Lahore, Pakistan
- **Dr. Sonia Zulfiqar**, PhD, Quaid-i-Azam University / Max Planck Institute for Polymer Research, Germany
- **Dr. Syed Faisal Saeed**, PhD, Stockholm University, Sweden
- **Dr. Dambaru Ballab Kattel**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China



## Department of Physics

Department of Physics at CIIT is one of the best departments with excellent facilities, state of the art laboratories and internationally recognized faculty. It was established in 2002 at Islamabad and started its programs for the first time in Fall 2003 with a four-year BS degree program in Electronics. The Department is rapidly expanding and aspires to excel in the formal instruction of Physics internationally. The department of Physics at Lahore campus was established in 2007. The Department of Physics offers competitive degrees in rapidly expanding areas of study. Our strong faculty and excellent facilities ensure that students have a solid technical grasp on their subjects to apply this knowledge in practical work settings. Our invaluable linkages with national and international universities and organizations help us keep up-to-date with new policy trends and job market facilitation incentives being unrolled by the government and private sectors.

### Department of Physics at Islamabad Campus

The Department of Physics has highly qualified faculty with diverse research interests in both theoretical and experimental physics, materials science, and electronics. In Pakistan, a major problem for scientists aspiring to explore events at the cutting edge of science has

been the inaccessibility of experimental facilities including modern fabrication, growth, and characterization facilities. With the increasing importance of nano-scale materials and devices in the technologies of the future, this need has become even more urgent. The Department of Physics has, under some approved mega - projects, developed state-of-the-art laboratories for research in the above mentioned field. These laboratories are unique in Pakistan in terms of the experimental facilities and expertise they offer, as listed below:

- Design and Fabrication of Micro- and Nanoelectronic Devices for Applications
- Design Tool: TCAD Simulation and Modeling Package
- Environment: Class (1000) Clean room

### Research Facilities

State of the art research facilities are provided at the Department along with advanced tools and equipment like, RF and DC Magnetron Sputtering, Plasma Enhanced Chemical Vapor Deposition (PECVD), Electron Beam Evaporator, Photolithography, Reactive Ion Etching, Furnaces, Spin coater, Wet etching benches, Optical microscope and Spectroscopic Ellipsometer.

- General User Facilities for Characterization

- Scanning Probe Microscopy (SPM)
- Dynamic Temperature X-Ray Diffraction (DTXD)
- X-Ray Fluorescence Spectroscopy (XRFS),
- MDC CV system for I-V/C-V/ G-V characterization and CVBT analysis Hall Effect System (0.37 T, 0.55 T and 1T)
- Semiconductor Characterization System (fully integrated)
- Differential Hall Measurement set up with transient Ion Drift Measurement (TIDM)
- Microwave Annealing System connected with in-situ metrology unit Cryogenic Probe System, Thermo Electronic Measurement System

### Laboratories

#### Optics Laboratory

The laboratory has discrete laser sources and optical components to conduct experiments related to light and optical fibers. It has complete sets of equipment to study different optical phenomena, characterization of optical fibers, and optical amplification. In addition, fully equipped laser and vacuum laboratories are also being established.



## Graduate Teaching Laboratory

This laboratory is equipped with modern equipment for sample synthesis and characterization, such as X-ray diffraction, scanning electron microscope, spectrometers, and vibrating sample magnetometer, etc.

## Research Groups

### 1. High Energy Physics Group

#### Research interests

Quark gluon plasma, finite temperature field theories, study and analysis of heavy particle decays in Standard Model and Minimal Super symmetric Standard Model, applications to cosmology and early universe.

#### Research facilities

A regular node in the ALICE, LHC (CERN) grid is established.

### 2. Radiation Physics Group

#### Research interests

Heavy Ion Interaction Studies, Environmental Radiation Dosimeter, Track Detection Methodology and Applications, Radiation Effects in Various Materials, Geological Studies, Neutron Activation Analysis and Applications.

## Research Facilities

HP (Ge) Gamma Ray Spectrometer, NaI (TI) Gamma Ray Spectrometer, Alpha Particle Spectrometer, Radon Gas Detection System, Automatic Scanning System to Measure Radiation Tracks in Solids, Optical Microscopes, Annealing Furnaces, Radiation Sources and Survey Monitors, G.M. BF-3 Neutron Detector and Surface Barrier Detectors.

### 3. Applied Thermal Physics Group

#### Research interests

Preparation and Characterizations of superconductors, thermal insulators, composites, ferrites, and nanoparticles.

#### Quantum Optics

Currently the group is working in the field of theoretical quantum optics and his main area of research includes; sub-wavelength atom localization, quantum state measurement of the radiation field, spontaneous emission spectrum, coherent control of the GH-shift, propagation effects experienced by light pulses in atomic media, electromagnetically induced transparency, slow fast and backward propagating light, non-adiabatic optical transitions, wave shaping, control of optical response, decay rate of excited atoms in dielectric media, engineering entanglements in cavity QED systems, entanglement dynamics, quantum teleportation and quantum entanglement.

## Plasma Physics Group

### Groups Detail

Plasma Physics Laboratory (PPL) works to advance understanding of the non-thermal Plasmas by developing and responding to major contemporary issues within low temperature plasma physics and atomic and molecular physics. Low-temperature plasmas have a huge range of technological and medical applications. These include plasma etching for semiconductor chip manufacture, plasma deposition (e.g. for solar cells or protective coatings), plasma TVs and new medical applications (e.g. sterilization, biocompatible materials).

Our research interest is in conventional, low pressure plasma systems, and the relatively recent discovery of atmospheric pressure plasmas. Research focuses on experiments and modeling to improve understanding of the plasma processes and thereby optimize applications and develop new ones

#### Research facilities

Thin film coating unit, Measurements of DC electrical resistive and thermal transport properties.

### 4. Magnetic Materials Group

#### Research interests

Study and applications of magnetic interactions in nanoparticles, thin

films, multi layers and magnetic semiconductors.

### Research facilities

Nano particle synthesis via wet chemistry and solgel routes, vibrating sample magnetometer (3 Tesla, 50 – 400 K).

## 5. Nano materials Synthesis Group

### Research interests

Synthesis and applications of semiconductor oxide nanostructures and nano materials.

### Research facilities

Planetary ball mill, Uniaxial press UV-VIS spectroscopy, Hydro-thermal cells and complete wet chemical synthesis Technology.

## 6. Nanomaterials Applications

### Research interests

Nanostructure growth phenomena, waveguide, biosensors, magnetic nano structures, semiconductor nanostructures, Fuel cells, solar cells incorporating nano particles.

### Research facilities

UHV growth system, room temperature and low temperature growth.

## 7. Advanced Electronics Group

### Research interests

Classical and Quantum Optics Engineering, Quantum Computing, Computer Generated Holography and Associative Memory and Fiber Optical Sensors Development.

### Research facilities

Photon Counting/Detecting System, Photo multiplier tubes, Dual Channel 8 GHz Acquisition Board, Lock-in-amplifier, Oscilloscope 40 GHz, Wave Function Generator, Power Meter.

## 8. Thin Films Technology Group

### Research Group

TFT research group covers the fabrication of II-VI semiconductor compound materials thin films and characterization including structural, optical and electrical measurements. The research interests also includes solar cell fabrication and IR detectors.

### Research Facilities

High vacuum coating unit, close spaced sublimation technique, laser coating vacuum system, high temperature receptivity measurements system, IV characterization unit, annealing unit, UV - VIS - NIR spectrophotometer.

## 9. Lasers and Applied Photonics Group

### Research interests

Atomic and Molecular Spectroscopy, Technological applications of Fixed Frequency and Tunable Lasers, Laser Deposited Thin Films, Ultrafast Optics, Low - Pressure Glow Discharges.

Different Laser Systems Vacuum Systems, Spectrometers, Detection Electronics and Characterization Equipment, High Voltage Power Supplies, and other related Specialized Equipment are being acquired.

### International Research Collaborations

- University of Albany, NY,USA
- University of Lancaster, UK
- ALICE experiment in LHC (CERN), Geneva, Switzerland
- A and MTexas, Austin, TX,USA
- University of Illinois at Urbana Champaign, USA
- Queen Mary College University of London, UK
- University of Bologna, Italy
- Technical University, Darmstadt, Germany
- Tsinghua University, Beijing, China
- Institute of Physics, Belgrade, Serbia

- JINR, Dubna, Moscow Region, Russia
- Technical University of Berlin, Germany
- University of Geneva, Switzerland
- University of Calgary, Canada

## Areas of Research at CIIT Lahore Campus

Material Science is an interdisciplinary field of research which involves the properties of matter and how they are applied in science and engineering. The study of materials at nano scale has formed a new branch of physics known as nanoscience or nanotechnology which is at the forefront of the world wide universities and research institutes. Material Science is contributing in many areas of biotechnology, computer industry, optical communication, etc.

The Department has PhD faculty members which have a research background in the fields of materials and nanoscience. They are in the phase of developing their own Laboratories. Currently they have collaboration with other universities to utilize their Laboratory facilities for material development characterization.

Plasma Physics is a study of matter in its plasma state and its interaction with other materials. It is a sound field of theoretical and experimental research which later finds its applications in

Astrophysics, energy resources, food processing industry, and medical science. A physicist with a strong research background in plasma physics can enter into world renowned research centers and universities for pursuing higher studies and a good career. One of the senior faculty members is conducting active research in the field of Plasma Physics and has been listed in American journal “who is who” as a renowned scientist contributing to the field of science.

As everyone is acquainted with the significance of Lasers and fiber Optics communication in the present world.

These are one of the most dynamic and applied fields in all branches of science and telecommunication. Opportunities are available in the Department not only to conduct research under the guidance of our competent faculty members but also to send the students to other countries on Scholarships or making available other sources of funding to elevate your career as a professional.

Combining Physics, Mathematics and Computer Science, Quantum Computing is developed as a fascinating area of research which involves study of atoms and how they can be used to perform memory and processing tasks. One of the senior faculty members is providing guidance to those who opt to go in this dynamic field of research which can provide an enormous improving in the

processing speed of existing computers.

## Graduate Programs

Currently the following graduate programs are being offered and pursued as per latest trends in the professional dynamic market.

### Master of Science in Physics

The Master of Science in Physics is a thesis based program and offered in a variety of experimental and theoretical research areas which include; material science, high energy physics, laser and photonics, condensed matter, plasma physics, radiation physics, quantum optics, etc. The Department has some state of the art experimental facilities for graduate students to carry out their research.

### Entry Requirements

- 16 years degree in one of the subjects: Physics, Computer Science (with BSc. in Physics and Mathematics), Mathematics (Applied), Computer Engineering, Engineering Sciences, BE in Electrical Engineering, BS in Material Science/Metallurgical Engineering and BE in Mechatronics, BS in Medical Physics, Applied Physics, Computational Physics, Space Physics/Space Sciences and the relevant allied field from an accredited educational

institution with First Division (annual system) or CGPA 2.5/4.0 (semester system). Candidates majoring in subjects other than physics will be required to take some additional pre-requisite courses.

- No third division (annual system) or D grade (semester system) throughout the academic career.
- GAT (General) with 50% marks minimum.

### Offering Campuses

- Islamabad, Lahore

### Master of Science in Nanotechnology

Master of Science in Nanotechnology program has applications in diverse sectors of the economy, including energy, health, electronics, transportation, environment, and national security. The Department of Physics has a strong faculty with diverse interests and state of the art research facilities in nano-science and nano-technology. The Department of Physics feels that this new two-year Master of Science program in nanotechnology will equip scholars with the necessary skills that help the country, especially, in finding alternate energy solutions.

### Entry Requirements

- 16 years degree in one of the

subjects: Physics, Computer Science (with BSc. in Physics and Mathematics), Mathematics (Applied), Computer Engineering, Engineering Sciences, BE in Electrical Engineering, BS in Metallurgy/Material Engineering and BE in Mechatronics and the relevant allied field from an accredited educational institution with minimum First Division (annual system) or CGPA 2.5/4.0 (semester system). Candidates majoring in subjects other than physics will be required to take some additional pre-requisite courses.

- No third division (annual system) or D grade (semester system) throughout the academic career.
- GAT (General) with 50% marks minimum.

### Offering Campus

- Islamabad

### Doctor of Philosophy in Physics

The Doctor of Philosophy in Physics program offered by the Department of Physics has been contributing significantly in higher education learning. Besides doing theoretical research in a variety of areas like high energy physics, quantum optics, etc., availability of state of the art experimental facilities at the department

offers great opportunity to the scholars to carry out research activities in the field of material science, condensed matter, high energy physics, radiation physics, nanotechnology, etc. in accordance with the highest standards set by the international community.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campuses

- Islamabad, Lahore



▲ COMSATS-Lancaster Cricket Championship

## FACULTY MEMBERS

### DEPARTMENT OF PHYSICS

#### Islamabad Campus

##### Professors

- **Dr. Arshad Saleem Bhatti**, T.I., PhD, Cambridge University, UK
- **Dr. Sajid Qamar**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Mahnaz Qader Haseeb**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Khalid Jamil**, PhD, Florida University, USA
- **Dr. Ehtiram Shahaliyev**, PhD, Joint Institute for Nuclear Research, Dubna, Moscow, Russia
- **Dr. Izhar ul Haq**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Ishaq Ahmad**, PhD, Quaid e Azam University, Islamabad, Pakistan

##### Chief Scientific Officer

- **Dr. Shahid Manzoor**, PhD, University of Bologna, Italy

##### Advisors

- **Dr. Hameed Ahmed Khan**, PhD, Birmingham University, UK
- **Dr. M. Zafar Iqbal**, PhD, Manchester University, UK
- **Dr. Mrs. Nasim Zafar**, PhD, Cambridge University, UK
- **Dr. Javaid Anwar**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Abdul Waheed**, PhD, Bahauddin Zakariya University, Multan, Pakistan

- **Dr. Mais Suleynanov**, PhD, Joint Institute for Nuclear Research, Dubna, Moscow, Russia
- **Dr. Muhammad Aslam Khan**, PhD, Hull University, UK

##### Associate Professors

- **Dr. Farida P. Tahir**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Muhammad Anis-ur-Rehman**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Nazar Abbas Shah**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Ahmer Naweed**, PhD, University of Massachusetts, USA
- **Dr. Sadia Manzoor**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Ashfaq Hussain Khosa**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Waqas Masood**, PhD, University of London, UK
- **Dr. Altaf Karim**, PhD, Kansas State University Manhattan, USA
- **Dr. Siraj-ul-Islam Ahmad**, Ph.D, PIEAS Islamabad, Pakistan
- **Dr. Khusniddin Olimov**, PhD, Uzbekistan Academy of Sciences, Uzbekistan

##### Assistant Professors

- **Dr. Uzma Khaliq**, PhD, Eindhoven University of Technology, Netherlands
- **Dr. Ahsan Illahi**, PhD, Quaid e Azam University, Islamabad, Pakistan

- **Dr. Muhammad Irfan Memon**, PhD, Bristol University, UK
- **Dr. Ijaz Ahmed**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Umair Manzoor**, PhD, Korea Advanced Institute of Science and Technology, Korea
- **Dr. Mubarak Ali**, PhD, Universiti Teknologi Petronas, Malaysia
- **Dr. Javeed Akhtar**, PhD, Manchester University, UK
- **Dr. Sana Sabahat**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Mushtaq Ali**, PhD, University of Camerino, Italy
- **Dr. Waqqar Ahmed**, PhD, University of Twente, Netherlands
- **Dr. Waqas Khalid**, PhD, Philipps Universitat, Marburg, Philippines
- **Dr. Najeeb-ur-Rehman**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Muhammad Kamran**, PhD, Innsbruck University, Austria
- **Dr. Salman Khan Safi**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Shumaila Karamat**, PhD, Nanyang Technical University, Singapore
- **Dr. Sameena Shah Zaman**, PhD, Vienna University, Austria
- **Dr. Fazal Ghafoor**, PhD, Quaid e Azam University, Islamabad, Pakistan
- **Dr. Faheel Hashmi**, PhD, University of Paul Sabatier, Toulouse, France

- **Dr. Muhammad Umair Hassan**, PhD, Cambridge University, UK
- **Dr. Lubna Tabassum**, PhD, University of Camerino, Italy
- **Dr. Uzma Tabassum**, PhD, University of Camerino, Italy
- **Dr. Hajrah Tabassum**, PhD, University of Edinburgh, UK
- **Dr. Farrukh Shahzad**, PhD, Karl-Franzen University, Graz, Austria
- **Dr. Attiq-Ur-Rehman**, PhD, University of Bergen, Norway
- **Dr. Qaiser Waheed**, KTH Royal Institute of Technology, Sweden
- **Dr. Saira Arif**, PhD, University of Vienna, Austria
- **Dr. Ghazanfar Abbas**, Ph.D, Bahauddin Zakarhya University Multan, Pakistan
- **Dr. Khurram Mehboob**, Ph.D, Harbin Engineering University China
- **Dr. Muhammad Saeed**, Ph.D, Hokkaido University Japan
- **Dr. Muhammad Hammad**, Ph.D, Islamia University Bahawalpur, Pakistan
- **Dr. Muhammad Waseem**, Ph.D, University of Peshawar, Pakistan
- **Dr. Hira Siddiqui**, Ph.D, Institute for Theoretische Physics, Germany
- **Dr. Azeem Mir**, Ph.D, CIIT Islamabad, Pakistan
- **Dr. Muhammad Hannan Younis**, Ph.D, Politecnico di Torino, Italy
- **Dr. Muhammad Bashir**, Ph.D, University of Sheffield, UK

Besides, 13 Assistant Professors, 36 Lecturers and 32 Research Associates are also working in this department.

## Lahore Campus

### Professors

- **Dr. Saleem Farooq Shaukat**, PhD, Brunel University, London, UK
- **Dr. Ashfaq Ahmad**, PhD, University of the Punjab, Lahore

### Chief Scientific Officer

- **Dr. Syed Javaid Iqbal**, PhD, Martin Luther University, Germany

### Associate Professors

- **Dr. Muhammad Asif**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China
- **Dr. Hafiz M. Ashfaq Ahmad**, PhD, Harbin Institute of Technology, China

### Assistant Professors

- **Dr. Salman Naeem Khan**, PhD, ZJU, China
- **Dr. Naveed Aslam**, PhD, GCU, Pakistan
- **Dr. Shabana Nisar**, PhD, Syracuse University, USA
- **Dr. Muhammad Asif**, PhD, Linkoping University, Sweden
- **Dr. Muhammad Aamir Razaq**, PhD, Uppsala University, Sweden
- **Dr. Muhammad Idrees**, PhD, PIEAS, Islamabad, Pakistan
- **Dr. Rizwan Raza**, PhD, KTH, Stockholm, Sweden
- **Dr. Hassan Mahmood**, PhD, University at Albany state university of New York, USA

- **Dr. Abdul Sattar**, PhD, University of Canterbury, New Zealand
- **Dr. Majid Niaz**, PhD, Universiti Teknologi PETRONAS, Malaysia
- **Dr. Farah Alvi**, PhD, University South Florida, United State
- **Dr. Nadeem Akram**, PhD, Stockholm University, Sweden
- **Dr. Zahida Ehsan**, PhD, University of Leuven- Katholieke Universiteit Leuven, Belgium
- **Dr. Muhammad Jamil**, PhD, Government College University, Lahore, Pakistan
- **Dr. Ayesha Jamil**, PhD, Cambridge University, United Kingdom
- **Dr. Ishrat Sultana**, PhD, Sungkyunkwan University, South Korea
- **Dr. M. Saleem**, PhD, China



## Department of Pharmacy

Department of Pharmacy at CIIT is dedicated to educate future pharmacists and scientists and provide professional development opportunities to local and national practicing pharmacists. All of our programs are driven by our mission to enhance the quality of life for the local people and the global community through improved health. According to WHO, there is a dire need of Pharmacy professional worldwide, particularly in the third world countries and as per their recommendations for the current population of Pakistan, there is need of 90,000 Pharmacists against the existing about 7000 pharmacists serving the nation.

Resultantly, a huge demand for more professional pharmacists, not only for the country, but also in the world exists. The Department of Pharmacy at CIIT Abbottabad Campus is playing an active role to cater the national health care needs through a broad-based higher and professional education of pharmacy. In order to deliver quality education in the field of pharmaceutical sciences, the department has services of internationally qualified faculty and has established state of the art laboratories.

### Graduate Programs

The mission of the graduate program is to provide exemplary educational,

research, and growth opportunities during a student's tenure. We have researchers working actively in the areas of basic and applied pharmacology, bioactive natural products, cardiovascular pharmacology, drug delivery and formulation development, drug development based on enzyme inhibition, pharmacy practice, pharmacy practice and clinical research. The students graduate with a MS or Ph.D. in pharmaceutical sciences with a specialization in one of five areas: pharmacology, pharmaceutical chemistry, pharmaceutics, Pharmacy practice and pharmacognosy.

The research activities of researchers can be viewed at <http://ciit-atd.edu.pk/researchgroups>

Currently the following graduate programs are being offered and pursued as per latest trends in the dynamic market.

### Master of Science in Pharmacy

The Master of Science in Pharmacy program currently focuses on research training in Pharmaceutics, Pharmacy Practice, Pharmacology, Pharmaceutical chemistry and Pharmacognosy. This program includes two semesters of coursework and a further two semesters of research focusing on topics like discovery and evaluation of novel drugs, determination of a drug's effects on the body, delivery methods to improve drug treatment, and how

medication is used and applied to enhance patient outcomes. Other areas of research activity include cosmetics, nutraceuticals, herbal medicines, and strategies for assessing individual variations in drug response and clinical research. This program fulfills high demand of scientifically trained young people in the pharmaceutical industry, herbal industry and hospital/community pharmacy and academia.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Abbottabad

### Doctor of Philosophy in Pharmacy

The Doctor of Philosophy in Pharmacy program aims to prepare students for positions in academia, government and the pharmaceutical industry that will require experience and knowledge in the conduct of original investigation related to the pharmaceutical sciences. The department maintains an active research program with emphasis in discovery of anticancer, anti diabetic, anti Alzheimer drugs, Targeted drug delivery, enzyme inhibition, cell culture, immunopharmacology, neuro pharmacology and cardiovascular diseases. The activities of department researchers have long been supported by a wide range of funding sources.

The program offers two semesters of coursework prior to the commencement of research activities by the research scholar. Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

## Offering Campus

- Abbottabad

## FACULTY MEMBERS DEPARTMENT OF PHARMACY

*In order to deliver quality education in the field of pharmaceutical sciences, the department has arranged excellent facilities and hired the services of internationally qualified faculty members.*

### Abbottabad Campus

#### Professors

- **Dr. Nisar ur Rehman,** PhD, University of Science, Malaysia, Malaysia
- **Dr. Izhar Hussain,** T.I., PhD, Imperial College of Science, Tech. and Medicine, London, UK
- **Dr. Jamshed Iqbal,** T.I., PhD, University of Bonn, Germany

#### Advisors

- **Dr. Qazi Najam us Saqib,** PhD, University of Karachi, Pakistan

#### Associate Professors

- **Dr. Taous Khan,** PhD, Kyungpook National University, South Korea
- **Dr. Abdul Jabbar Shah,** PhD, Agha Khan University, Pakistan

### Assistant Professors

- **Dr. Ghulam Murtaza,** PhD, Islamia University Bahawalpur, Pakistan
- **Dr. Abdul Mannan,** PhD, Quaid-i-Azam University, Pakistan
- **Dr. Shujat Ali Khan,** PhD, Islamia University Bahawalpur, Pakistan
- **Dr. Arfat Yameen,** PhD, Quaid-i-Azam University, Pakistan
- **Dr. Wajahat Mahmood,** PhD, Menzies School of Health Research Charles Darwin University Australia
- **Dr. Ghulam Abbas,** PhD, HEJ Research Institute of Chemistry, Karachi, Pakistan
- **Dr. Khalid Raouf,** PhD, University of Peshawar, Pakistan
- **Dr. Saira Azhar,** PhD, University Sains, Malaysia, Malaysia
- **Dr. Aun Muhammad,** PhD, Quaid-e-Azam University, Pakistan
- **Dr. Nabi Shah,** PhD, University of Karachi, Pakistan

Besides, 03 Assistant Professor, 07 Lecturers and 10 Research Associates are also part of this department.



## Department of Statistics

Department of Statistics has been recently established at CIIT Lahore Campus. The department intends to achieve excellence in teaching and research in statistics by hiring world class faculty, providing state-of-the-art facilities and environment for quality teaching and world class research. The Department aims to pursue excellence in Statistics through teaching and research by developing appropriate curricula and teaching practices, hiring talented faculty members, and providing conducive environment for teaching, research and learning activities.

### Master of Science in Statistics

The Master of Science in Statistics inculcates huge exposure of knowledge and provides the platform to pursue suitable career in the relevant field. The breadth and depth of work will depend on the degree level and the students are encouraged to develop new ideas in research and to apply them in real world problems.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campus

- Lahore

## Doctor of Philosophy in Statistics

While a career in mathematics can be very attractive, it takes time to acquire the necessary skills, particularly for advance research at the Ph.D. level. Graduate study is essential for most fields. The graduate course sequence for this program provides a foundation upon which more advanced statistics will be built. In graduate study, required course work provides basic training opportunities and then more specialized courses advances the frontiers of research. The course of Applied Statistics in various application areas is offered to acquire experience in modeling the real world, and to learn how statistics can help in problem solving. This program will also help the students to develop their capacity of reasoning so that they will think more logically and independently in making rational decisions.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campus

- Lahore

## FACULTY MEMBERS DEPARTMENT OF STATISTICS

### Lahore Campus

#### Professors

- **Dr. M. Qaiser Shahbaz**, PhD, National College of Business Administration and Economics, Pakistan

#### Assistant Professors

- **Dr. Faisal Tahseen Shah**, PhD, University of the Punjab, Pakistan
- **Dr. Mohammad Mohsin**, PhD, Alpen-Adria University, Klagenfurt, Austria
- **Dr. Saman Shahbaz**, PhD, National College of Business Administration and Economics (NCBA&E), Pakistan
- **Dr. Tajamal Hussain**, PhD, University of the Punjab, Lahore, Pakistan
- **Dr. Nadeem S. Butt**, PhD, University of the Punjab, Lahore, Pakistan
- **Dr. Muhammad Ismail**, PhD, National College of Business Administration and Economics, Pakistan

# Faculty of Business Administration

## DEAN'S MESSAGE



I am delighted that you are considering graduate studies at COMSATS Institute of Information Technology (CIIT). CIIT has been at the forefront of research based education and has played an active part in shaping the modern day higher education since its inception in 2000. On the basis of research Performance, CIIT is currently ranked at 6<sup>th</sup> by the Higher Education Commission of Pakistan, amongst 134 higher education institutions of the country.

The Faculty of Business Administration at CIIT, with its distributed network in the regional campuses, has emerged as one of the leading Business Administration Faculty of the country and is house to intellectual excitement and world-class research. The faculty of Business administration is an amalgamate of three departments including the Department of Management Sciences, Department of Humanities, and Department of Development Studies. Whether you intend to develop your existing expertise or to become competitive in a new area, Faculty of Business Administration at CIIT offers wide-ranging programs, giving you opportunity to distinguish yourself in the market.

Our academics are at the forefront of developments in the business, management and social sciences and their expertise is called upon by governments, businesses and media across the country and abroad. The selection criteria for students strictly reside upon their academic ability, intellectual curiosity and commitment to their chosen field of study. The interaction between staff, faculty, students and visitors both in and out of the classroom makes CIIT a dynamic, conducive and stimulating environment.

CIIT aims at fostering well groomed global citizens who not only succeed against global competition, but can also emerge as inspirational thinkers. I hope this prospectus will inspire you to join this league of thinkers.

**Prof. Dr. Qaisar Abbas**



## Department of Management Sciences

Department of Management Sciences started its journey at CIIT about 12 years ago and with its phenomenal ascent is presently one of the top departments in this country's higher educational landscape. This department endeavours to contribute to the broader social role in providing high quality education, distinguished by cutting edge technologies and modern managerial practices. It is committed to prepare students at par with the market trends. It has one of the largest concentrations of doctoral degree holders in the country and maintains multiple partnerships and cooperation agreements with prestigious universities across the globe.

Together with enjoying a good reputation among employers, our programs provide students a thorough insight into latest trends in management and business practices. Together with grooming the personality of our students and sharpening their communication skills, greater emphasis is laid upon the intellectual augmentation and perpetual development of students with both curricular and extracurricular efforts.

### Graduate Programs

Currently the following graduate programs are being offered and pursued as per latest trends in the dynamic market.

## Master of Science in Management Sciences

The Master of Science in Management Science program offers a professional graduate course of study designed to provide competency in management and to acquaint the student with a variety of business activities. The specializations offered include: General Management, Finance, Marketing, Information Technology Management, and Business Economics. On successful completion of the course the graduates will have an excellent opportunity in finding employment in areas with a broad, critical and practice - based understanding of Management Sciences disciplines. This knowledge makes them ready for a variety of leadership positions in complex contemporary environments and teaching careers in universities.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campuses

- Islamabad, Abbottabad, Wah, Lahore, Attock, Sahiwal, Vehari

## Master of Science in Project Management

It is a well-known fact that vast sums of public resources are wasted due to mismanagement of projects, particularly

in the social sector. Project failures – as measured with respect to the non-attainment of its goal, and/or cost or schedule overruns – are common in Pakistan. This problem is attributable in part to the lack of project management knowledge of the initiators, planners and implementers of projects as well as the lack of support from researchers in academia and industry who are supposed to highlight grey areas and suggest feasible solutions. CIIT's Master of Science in Project Management program will help to fill a major gap in project management education and research in Pakistan. The graduates will have endless opportunities in both corporate and academic world at the end of program.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campuses

- Islamabad, Abbottabad, Lahore, Attock, Virtual Campus

## Master of Science in Energy Management

The aim of MS in Energy Management program at CIIT, is to strengthen the alliance between industry and academia in the energy sector and help to create robust business partnerships between organizations and institutes both within Pakistan and with other developing

nations. There are, however, only a very few institutions and “think tanks” in the world that focus on Energy Management and Energy Strategies at the national and global levels. Equipped with the knowledge imparted in the Energy courses, the students acquire the capability to break new grounds and produce new knowledge by undertaking research activities in the field of Energy Management.

The graduates of this program will be able to work in several important and highly demanded jobs including: Energy Analysts, Managerial Positions in the Energy organizations and Energy Intensive Industries, Energy Policy and Planning Strategists, Energy Investment Portfolio Management Officers, CEO of Energy Companies/

Utilities Analysts, Energy Consultants, Energy Conservation and Audit Energy Project Management Officers, Energy Environment Specialists, Managers of companies of 21<sup>st</sup> century (energy efficient and committed to sustainable development).

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campus

- Islamabad

### Master of Science in Banking and Finance

The primary objective of banking

and finance at CIIT is to develop knowledgeable and capable executives and workforce to move quickly to key positions in the financial services sector and to demonstrate the skills necessary to tackle problems within the complex world of international finance and banking. Graduates of banking and finance are one of the most sought after graduates worldwide and their employment opportunities are practically endless. After the successful completion of the degree, the graduate may work for a public or private organization, do consultancy or work in the field of academia.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

### Offering Campuses

- Islamabad, Abbottabad, Wah, Virtual Campus

### Master of Business Administration (1.5 years)

The MBA curriculum has been designed to develop an in-depth understanding of all business functions. Most importantly, the areas are integrated throughout the curriculum to develop an understating of all aspects of business. The one and half year program will meet the increasing demand for advance business education which will not only combine text book learning with case study



methodology but will expose students to an environment which will facilitate development of their conceptual skills as well as personal growth. This program is offered to those who have completed their 16 years of education. Following specializations are offered in the program:

- Finance
- Marketing
- Logistics and Supply Chain Management
- Human Resource Management
- International Business

On successful completion of the course the graduates would have opportunities in practically all the sectors in an economy including telecom, energy, textile and many more.

### Entry Requirements

- A 16 years degree in relevant field from an accredited educational institution, with minimum First division (annual system) or CGPA 2.5/4.0 (semester system).
- No third division (annual system) or D grade (semester system) throughout the academic career.
- GAT (General) with 50% marks minimum.



## Duration

- With project/internship and one elective course: minimum 1.5 years
- With thesis: minimum 2 years

## Credit Hours Requirements

- Minimum 36 Cr. Hrs.

## Offering Campuses

- Islamabad, Abbottabad, Wah, Lahore, Attock, Sahiwal, Virtual Campus

## Master of Business Administration (2.5 years)

The two-and-half-year MBA program will meet the increasing demand for advanced business education, which will not only combine text book learning with case study methodology but also expose students to an environment which will facilitate development of their conceptual skills as well as personal growth. This program will be offered to those who do not have a business or management related previous qualification. The basic objective of this program is to provide the students with knowledge of business. Students will be

able to understand financial theories and markets, the financial reporting system, and financial analysis, will be able to identify customer needs and participate in the process of developing products and services to meet these needs. They will come to know about production models and distribution systems, and their role in the value creation process. Courses in the MBA program are designed to introduce students to the various areas of business such as accounting, finance, marketing, human resources, operations management, etc.

## Entry Requirements

- A 16 years non business education like BE, MBBS, MA, M.Sc, IT, Mathematics and other equivalent qualification from an accredited institution with minimum First Division (annual system) or CGPA 2.5/4.0 (semester system).
- No third division (annual system) or D grade (semester system) throughout the academic career.
- GAT (General) with 50% marks minimum.

## Credit Hours requirement

- Minimum 69 Cr. Hrs.

## Duration

- 5 Semesters; 2.5 Years



## Offering Semesters

- Fall and Spring

## Offering Campuses

- Islamabad, Lahore

## Master of Science in Economics

As the economy continues to expand and diversify, there is growing need for economic expertise for understanding various facts of this increasingly complex economic system. Demand for well educated economics graduates comes from business, industry, academia, government and international development finance institutions. CIIT is well placed to play an important role in catering to these national and global needs by producing high quality economics graduates with MS and PhD degrees. The Graduate Program in Economics would aim to develop the best economics program in the country and in the region. The graduates of the program could take up careers in governmental and nongovernmental organization. Specializations offered include: International Economics, Development and Public Policy, Agricultural Economics, Marketing.

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

## Offering Campuses

- Islamabad, Abbottabad, Lahore

## Master of Science in Strategic Marketing

The program allows students to develop skills in dealing with strategic marketing problems found in both profit and nonprofit settings. The focus is on a developing a framework for strategic marketing plans with emphasis on consumer and environmental analysis. Market segmentation, product positioning, marketing responsiveness, and competitive reaction will be explored. Furthermore, the program will offer insights into modern strategic marketing, combining topical and practical knowledge with an emphasis on the ability to sense, shape and prepare to meet the needs of the future. Taking a strategic approach, it brings marketing into the 21st century, modernizing it and putting it on a more scientific footing, while reflecting upon major new and escalating challenges that confront business and marketing professionals.

Admission requirements, program duration, course work and thesis details are given at page number 59.

## Offering Campus

- Lahore

## Doctor of Philosophy in Management Sciences

The program addresses the need to train students to develop and sharpen management theories to enhance their contribution to management education, research and practice. Students acquire advanced knowledge of literature and theory in their area of their specializations and the business and management field overall. They also gain theoretical and practical knowledge of advanced research skills, essential for publishing in leading academic journals. The Ph.D. program furnishes opportunities to its graduates in research, academia, business, and government worlds. Specializations offered include:

- Management
- Finance
- Marketing
- Information Technology Management
- Business Economics

Admission requirements, program duration, course work and thesis/ research project details are given at page number 59.

## Offering Campuses

- Islamabad, Lahore

# FACULTY MEMBERS

## DEPARTMENT OF MANAGEMENT SCIENCES

### Islamabad Campus

#### Professors

- **Dr. Qaisar Abbas**, PhD, Nankai University Tianjin, China
- **Dr. Khalid Riaz**, PhD, Iowa State University, USA
- **Dr. Syed Zulfiqar Ali Shah**, PhD, University of Manchester, UK

#### Advisors

- **Dr. Muzaffar Ali Qureshi**, PhD, Rensselaer Polytechnic Institute, Troy, NY/University of Southern California, USA

#### Associate Professors

- **Dr. Muhammad Arshad Khan**, PhD, PIDE, Islamabad, Pakistan
- **Dr. Muhammad Zahid Iqbal**, PhD, NUML, Islamabad, Pakistan

#### Assistant Professors

- **Dr. Amna Yousaf**, PhD, University of TWENTE, Netherlands
- **Dr. Bashir Ahmad Fida**, PhD, Shanghai University of Finance and Economics, China
- **Dr. Farrukh Nawaz Kayani**, PhD, University of International Business and Economics, China
- **Dr. Husnain A. Naqvi**, PhD, University of Dundee, UK

- **Dr. Muhammad Azhar Khan**, PhD, Hokkaido University Sapporo, Japan
- **Dr. Muhammad Majid Khan**, PhD, University of Massachusetts, USA
- **Dr. Muhammad Zakaria**, PhD, QAU, Pakistan
- **Dr. Raja Saquib Yusaf Janjua**, PhD, Vienna University of Economics and Business Administration, Austria
- **Dr. Seeme Mallick**, PhD, Macquarie University, Australia
- **Dr. Shahab Alam Malik**, PhD, Harbin Institute of Technology, China
- **Dr. Umara Noreen**, PhD, Foundation University, Pakistan
- **Dr. Uzma Javed**, PhD, Cardiff University, UK
- **Dr. Azad Haider**, PhD, Federal Urdu University, Pakistan
- **Dr. Faisal Abbas**, PhD, Research University of Bonn, Germany
- **Dr. M. Iftikharul Hasnain**, PhD, Federal Urdu University, Pakistan
- **Dr. Mumtaz Ahmed**, PhD, International Islamic University, Pakistan
- **Dr. Noureen Adnan**, PhD, University of Surrey, UK
- **Dr. Usman Ayub**, PhD, CIIT Islamabad, Pakistan
- **Dr. Azad Haider**, PhD, FAST, Islamabad, Pakistan

- **Dr. Mansoor Ahmed**, PhD, University of Manchester, UK

Besides, 31 Assistant Professors, 34 Lecturers and 10 Research Associates are also part of this Department.

### Lahore Campus

#### Professors

- **Dr. Mahmood Ahmad Bodla**, PhD, Wayne State University, USA
- **Dr. Talat Afza**, PhD, Wayne State University, USA
- **Dr. Ahmad Kaleem**, PhD, Malaya University, Kuala Lumpur, Malaysia

#### Associate Professors

- **Dr. Abdus Sattar Abbasi**, PhD, NUML, Islamabad, Pakistan

#### Assistant Professors

- **Dr. Abdul Haque**, PhD, Huzhong University of Science and Technology, Wuhan, China
- **Dr. Hafiz Zahid Mahmood**, PhD, Humboldt University of Berlin, Germany
- **Dr. Faisal Tahseen Shah**, PhD, University of the Punjab, Pakistan
- **Dr. Muhammad Khan**, PhD, Federal Urdu University, Islamabad, Pakistan
- **Dr. Waheed Akhtar**, PhD, NUML Islamabad, Pakistan

- **Dr. Yahya Rashid**, PhD, University of British Columbia, Vancouver, Canada
- **Dr. Asma Imran**, PhD, Foundation University, Rawalpindi, Pakistan
- **Dr. Ahmad Nawaz**, PhD, University of Gottingen, Germany
- **Dr. Zahera Waheed**, PhD, Heriot-watt University, Edinburgh, UK
- **Dr. Muhammad Shahbaz Shabbir**, PhD, University of Malaya, Malaysia
- **Dr. M. Ali Jibran Qamar**, PhD, University of Gloucestershire, UK
- **Dr. Muhammad Amir Rashid**, PhD, University Technology Malaysia, Malaysia

Besides, 19 Assistant Professors, 21 Lecturers and 5 Research Associates are also part of this Department.

## Abbottabad Campus

### Professors

- **Dr. Syed Amjad Farid Hasnu**, PhD, University of Bradford, UK
- **Dr. Khawaja Farooq Ahmad**, PhD, University of Newcastle, UK

### Associate Professors

- **Dr. Kashif Rasheed**, PhD, Victoria University of Melbourne, Australia

## Assistant Professors

- **Dr. Amjad Ali**, PhD, Foundation University, Islamabad
- **Dr. Imran Naseem**, PhD, Qurtuba University of Science and Technology, D.I Khan, Pakistan
- **Dr. Muhammad Saeed Lodhi**, PhD, HRADEC KRALOVE University, Czech
- **Dr. Osman Sadiq Paracha**, PhD, University Technology Malaysia, Malaysia
- **Dr. Mansoor Shahab**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China
- **Dr. Yasir Javed**, PhD, Massey University, New Zealand

Besides, 13 Assistant Professors, 53 Lecturers and 01 Research Associate are also part of this Department.

## Wah Campus

### Advisors

- **Dr. Mushtaq Ahmad**, PhD, University of Wales, Australia

### Associate Professors

- **Dr. Saqib Gulzar**, PhD, Harbin Institute of Information Technology, China
- **Dr. Samina Nawab**, PhD, Institute of Policy and Management, Beijing, China

## Assistant Professors

- **Dr. Abdul Qayyum Khan**, PhD, University of Peshawar, Pakistan
- **Dr. Adnan Tahir Qureshi**, PhD, NUML, Islamabad, Pakistan
- **Dr. Babur Wasim Arif**, PhD, National Graduate Institute for Policy Studies. Tokyo, Japan
- **Dr. Syed Muhammad Ali Tirmizi**, PhD, Foundation University, Islamabad, Pakistan
- **Dr. Syed Mazhar Abbas Zaidi**, PhD, Foundation University, Islamabad, Pakistan

Besides, 10 Assistant Professors, 23 Lecturers and 02 Research Associates are also part of this Department.

## Attock Campus

### Assistant Professors

- **Dr. Muhammad Sajjad**, PhD, Foundation University, Islamabad, Pakistan
- **Dr. Shabir Hyder**, PhD, Federal Urdu University, Islamabad, Pakistan
- **Dr. Saddam Hussian**, PhD, University of Peshawar, Pakistan
- **Dr. Muhammad Imran Malik**, PhD, Foundation University Islamabad, Pakistan

## FACULTY MEMBERS

### DEPARTMENT OF MANAGEMENT SCIENCES

- **Dr. Muhammad Shakil Ahmad**, PhD, University Technology Malaysia, Malaysia
- **Dr. Jamshaid Ahmed**, PhD, Hamdard University, Karachi, Pakistan

Besides, 06 Assistant Professors, 18 Lecturers and 2 Research Associates are also part of this Department.

### Sahiwal Campus

#### Assistant Professors

- **Dr. Rashid Saeed**, PhD, University of Agronomic and Veterinary Sciences, Burchares, Romania
- **Dr. Raja Irfan Sabir**, PhD, Wuhan University of Technology, Wuhan, China
- **Dr. Iram Batool**, PhD, Pakistan Institute of Development Economics, Islamabad, Pakistan
- **Dr. Hafiz Muhammad Arshad**, PhD, Islamia University, Bahawalpur, Pakistan
- **Dr. Muhammad Tahir Yaqoob**, PhD, Bahauddin Zakariya University, Multan, Pakistan

Besides, 08 Assistant Professors, 23 Lecturers and 01 Research Associates are also part of this Department.

### Vehari Campus

#### Assistant Professor

- **Dr. Munir Ahmed**, PhD, Bahauddin Zakariya University, Multan, Pakistan
- **Dr. Asad Afzal Humayon**, PhD, Foundation University, Islamabad, Pakistan

Beside, 03 Assistant Professors, 18 Lecturers and 04 Research Associates are also part of this Department.





## Department of Development Studies

As a premier institution of the region and on the basis of a prioritized need assessment, CIIT expanded its role to encompass Development Studies as a separate department in 2004. Development Studies is an interdisciplinary field focusing on the study of societies, economies and institutions of the developing countries, their inter-connectedness with the developed world and processes through which the international institutions and mechanisms impact upon the overall goals of development within

a global context. After completing development studies programs, a lot of job opportunities can be availed in both national and international market.

### Master of Science in Development Studies

The MS in Development Studies core curriculum integrates substantive knowledge, spanning the disciplines of social, environment, administrative and management sciences in order to foster the development of cross-disciplinary skills necessary to prepare students for the field of Development Studies. In addition, specific learning outcomes for the program identify essential

knowledge and skills that each graduate should acquire throughout the course of the program.

The MS degree program in Development Studies will be spread over 30 credit hours including 12 credit hours of core courses, 12 credit hours of elective courses and 6 credit hours of research thesis.

The aim of the Development Studies Program is development of professionals, managers, practitioners, consultants, teachers and students to equip them with transferable knowledge and skills necessary in the varying fields and disciplines of different 'development' and related subjects. After completing studies, the graduates will be able to thrive in any world class organization and competitive international environment.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Abbottabad

### Master of Science in Conflict, Peace and Development

The program is designed with partner Universities (Tribhuvan University (TU), Nepal Ruhana University and Norwegian University of Life Sciences



(UMB) Norway) to address the issues of conflict which leads to unfold possibilities of peace and development. This Inter-multidisciplinary program provides key insights and strengths from several disciplines in social sciences, humanities and environmental sciences to provide a comprehensive understanding of the multi-faceted phenomena. Through a rigorous set of lectures, seminars, research and fieldwork the graduates strives to impart theoretical, methodological, and practical knowledge to operate in a variety of roles at national, multinational and international level.

### Entry Requirements

- A 16 years degree in social sciences, humanities, management/administrative sciences or relevant field from an accredited educational institution, with minimum first division (annual system) or CGPA 2.5/4.0 (semester system).
- No third division (annual system) or D grade (semester system) throughout the academic career.
- GAT (General) with 50% marks minimum.

### Offering Campus

- Abbottabad

## Doctor of Philosophy in Development Studies

The PhD in Development Studies integrates substantive knowledge spanning the disciplines of social, environment, administrative and management sciences in order to foster the development of cross-disciplinary skills necessary to prepare students for the field of Development Studies. In addition, specific learning outcomes for the program identify essential knowledge and skills that each graduate should acquire throughout the course of the program.

### Entry Requirements

- MS/M.Phil degree in the field of social/natural sciences with Thesis or its equivalent degree with Thesis, from an accredited educational institution with minimum CGPA of 3.0/4.0 (semester system) or 70% marks (annual system).
- No third division (annual system) or D grade (semester system) throughout the academic career.
- GAT (Subject) with 60% marks minimum.

### Offering Campus

- Abbottabad

## FACULTY MEMBERS DEVELOPMENT STUDIES

### Abbottabad Campus

#### Professors

- **Dr. Shehla Nasreen Amjad**, PhD, University of Bradford, UK

#### Associate Professors

- **Dr. Bahadar Nawab**, PhD, Norwegian University of Life Sciences, Norway
- **Dr. Musarrat Jabeen**, PhD, University of Karachi, Pakistan

#### Assistant Professors

- **Dr. Tahir Mehmood**, PhD, Georg-August University, Goettingen, Germany
- **Dr. Adnan Dogar**, PhD, Ecoles Des Hautes Etudes En Sciences Sociales, France
- **Dr. Zahid Hussain**, PhD, Agriculture University Peshawar, Pakistan
- **Dr. Arif Alam**, PhD, University of Tokyo, Japan

Besides, 05 Assistant Professors, 03 Lecturers are also part of this Department.



## Department of Humanities

Department of Humanities at CIIT has the highly qualified faculty members of many different fields including English Language, English Literature, Applied Linguistics, Psychology, French, Islamic Studies, International Relations, and Pakistan Studies.

The Department offers world-class teaching and research, backed by the superb resources of the library, e-library and language laboratories. Such historic resources are linked to cutting-edge agendas in research and teaching, with an increasing emphasis on interdisciplinary study addressing practical, educational and personality building issues significant to learners, educators, policy makers, communication professionals, and human resources managers. The Department of Humanities is continually pioneering new ways to teach and assess language, to research written discourse, and to teach writing for specific purposes.

Along with facilitating students to enhance effective English-usage at its best, the department plays a pivotal role in making students aware of their religious and moral values by teaching Islamic Studies, keeping track of the current political and social issues through courses of Pakistan Studies and International Relations, and making

our youth aware of the humanitarian standards catering to their emotional well-being through Sociology and Psychology.

### Master of Science in English (Linguistics and Literature)

The program is designed to provide students an in-depth knowledge of language, linguistics and literature with added areas of interest for research. The program inculcates a thorough understanding of theoretical as well as practical applications of various modern and contemporary developments in the fields of linguistics and literature. The program will help students to explore the interdisciplinary aspect of language, linguistics, and literature and how these three dimensions interrelate and exist as integral parts of the whole, and yet have an independent existence as well. On the whole, the program is oriented to the study of and impact of literature in the evolution and development of cultural consciousnesses, and its role as an invaluable record of the significant advancements in human civilization. The program also emphasizes the enrichment of knowledge and understanding of concepts, present issues and concerns and up-to-date research in the core areas of linguistics and language.

### Entry Requirements

- A 16 years degree, in the relevant field, from an accredited educational institution with

Second Division (annual system) or CGPA 2.5/4.0 (semester system).

- No third division (annual system) or D grade (semester system) throughout the academic career.
- GAT (General) with 50% marks minimum.

### Offering Campuses

- Islamabad, Lahore





## Master of Science in International Relations

The program is aimed at providing the leaders-in-making with the right set of skills and conceptual frameworks to take challenges head-on in the international arena. The program shall draw its foundations on three significant methodologies: leadership, analysis, and administration. The program seeks to provide its students with knowledge, skills and abilities to solve problems through an in-depth analysis of the international relations (IR) issues and challenges which formulate the dimensions of a problem. The goal of the program is to bring about demonstrable improvement in performance of politics, government, non-profit organizations, international organizations, international business organizations and foreign services by preparing future leaders to have the analytical tools, leadership capabilities, managerial skills and an in-depth understanding of IR issues

Admission requirements, program duration, course work and thesis details are given at page number 59.

### Offering Campus

- Islamabad

## FACULTY MEMBERS

### DEPARTMENT OF HUMANITIES

#### Islamabad Campus

##### Principal Research Officer

- **Dr. Aliya M. Zafar**, PhD, University of Florida, USA

##### Advisors

- **Dr. Amir Hamid Jafri**, PhD, Oklahoma State University Stillwater, USA
- **Dr. Samina Nadeem**, Masters, University of Warwick, UK, PhD, QAU, Islamabad

##### Assistant Professors

- **Dr. Tanveer Zara**, PhD, University of Indiana, Bloomington, USA
- **Dr. Azeema Voleger**, PhD, University of Hawai Monoa, USA
- **Dr. Mobeen Akhtar**, PhD, University of Gottingen, Germany
- **Dr. Farhat Nisar**, PhD, NUML, Islamabad, Pakistan
- **Dr. Najia Asrar Zaidi**, PhD, University of Baluchistan, Quetta, Pakistan
- **Dr. Fayyaz Ahmed Faize**, PhD, International Islamic University (IIU), Islamabad, Pakistan

Besides, 08 Assistant Professors, 18 Lecturers and 02 Research Associates are also part of this Department.

#### Lahore campus

##### Advisors

- **Dr. Hina Qanber Abbasi**, PhD, Moseon State University, Russia

##### Principal Research Officer

- **Dr. Zulfaqar Ali Chughtai**, PhD, University of Sindh, Pakistan

##### Assistant Professors

- **Dr. Filza Waseem**, PhD, National University of Modern Language, Islamabad, Pakistan
- **Dr. Urooj Sadiq**, PhD, University of Karachi, Pakistan
- **Dr. Tahira Jabeen**, PhD, University of Punjab, Lahore, Pakistan
- **Dr. Khawar Bilal**, PhD, University of Karachi, Pakistan
- **Dr. Muhammad Zuabir**, PhD, University of Punjab, Lahore, Pakistan
- **Dr. Shameem Fatima**, PhD, University of Punjab, Lahore, Pakistan

Besides, 05 Assistant Professors, 13 Lecturers are also part of this Department.

#### Abbottabad Campus

##### Professors

- **Dr. Mushtaq Khan Jadoon**, PhD, University of Groningen, Netherlands

##### Assistant Professors

- **Dr. Zahid Shah**, PhD, University of Peshawar, Pakistan
- **Dr. Nasir Ali Khan**, PhD, University of Karachi, Pakistan
- **Dr. Muhammad Shakeel Ahmad**, PhD, Quaid i Azam University, Islamabad, Pakistan

Besides, 01 Assistant Professor and 18 Lecturers are also part of this Department.

#### Vehari Campus

##### Assistant Professors

- **Dr. Abdul Razaq Azad**, PhD, University of Karachi, Pakistan

Besides, 05 Lecturers are also part of this Department.

## DEAN'S MESSAGE



Engineering at CIIT offers unique opportunities for innovative education, and research. At CIIT engineering education was initiated in 1999 with single discipline and now, after more than nine years, engineering has grown beyond expectations having eight different engineering disciplines at undergraduate and graduate levels and many more are in progress. It has been consistently ranked among top eight Engineering Faculties of Pakistan by Higher Education Commission of Pakistan.

Since its inception, Faculty of Engineering has been active in recruiting outstanding new faculty members to support their teaching and research activities. Under the umbrella of Faculty development program every year we send our faculty members for higher education and short-term scientific and research training in well reputed International Universities. Our young and highly qualified Faculty members have tremendous potential to change the traditional way of thinking about engineering education, pedagogy and research excellence. I am convinced that as it continues to mature and expand it will

emerge as an internationally recognized centre of excellence in the field of Engineering.

Since the establishment, we have increased our students to over 8,000 at different campuses of CIIT. The Engineering education at CIIT is distinguished by the extraordinary quality of its students. Our students represent a rich blend of diverse geographic locations in Pakistan and are ranked among the top tier statistically.

When it comes to career development and planning, students at CIIT are supported by our career development centers and Industrial Liaison offices at different campuses. The Industrial liaison offices work closely with career development offices to liaise with relevant employers in order to learn their hiring priorities and guide the students accordingly. These arrangements reflect CIIT's commitment, enabling all of our students to access the maximum possible range of career opportunities in engineering sectors.

We offer Graduate/undergraduate degree programs at different Campuses of CIIT in Telecommunication Engineering, Electronics Engineering, Electrical Engineering, Electrical Power Engineering Computer Engineering, Chemical Engineering, Mechanical Engineering and Civil Engineering. We are also in process of launching few degree programs in collaboration with International Universities of very good repute. We have established a Center for Advanced Studies in Telecommunication (CAST) at Islamabad Campus in order to conduct state of the art research in this area. Similar centers of excellence in other areas of Engineering are going to be established in other campuses of CIIT.

## Department of Electrical Engineering

Our newly developed campuses are equipped with state-of-art teaching and research Laboratories, libraries (one of the largest in the country), modern teaching aids and supplemented with wide range of facilities for extracurricular activities. Apart from educational excellence, we recognize that the choice of an institution is influenced by practical concerns such as location and cost. Our campuses are located at very convenient places and we are also striving to keep our tuition fee well-below the tuition fee charged by many other institutions of the country.

Our past achievements are a source of pride to CIIT and many more exciting changes are planned for the years to come, the changes which are premeditated to ensure that the Faculty of Engineering at CIIT remains one of the leading Faculties nationally and internationally. This is the best time to be a student at Engineering departments of CIIT and take full advantage of their rich learning environment.

**Prof. Dr. Shahzad A. Malik**

Department of Electrical Engineering at CIIT Islamabad, Abbottabad and Wah Campuses was established in 2001 and at CIIT Lahore, Attock and Sahiwal Campuses in 2002, 2007 and 2012 respectively. During this short span it has made big strides by offering conducive environment for studying various disciplines of Electrical Engineering. The curriculum ensures that the students to learn not only the theoretical knowledge required solving complex engineering problems and at the same time acquaints them with state of the art tools and technique used in practice.

One of the main goals of the department is to actively achieve gender mainstreaming in its programs. Women are doing remarkable work in the engineering field today. Fields such as Computer Engineering, Telecommunication Engineering, Power Engineering and Electronics Engineering are offering congenial work environments for females. As such there is an increased demand from the female students to enroll in the Engineering Department programs. The primary research areas focused in the proposed program are as follows:

- Computer Engineering
- Power and Energy Engineering
- Electronic Systems Engineering

- Photonic System Engineering
- Automation and Control Engineering
- Telecommunications Engineering
- Networks Engineering
- Communication and Radar Technology

COMSATS Electrical Engineering program provides its student with the best updated laboratories. The Department of Electrical Engineering at CIIT has the following Laboratories for research and development:

- VLSI/ Comp. Architecture Laboratory
- Microprocessor Laboratory
- Communication Laboratory
- Electronics Laboratory
- Microwave Laboratory
- Control Laboratory
- Project Laboratory
- Graduate Laboratory
- Networks Laboratory
- Radio Frequency Laboratory

These Labs are equipped with sophisticated software and hardware technology. These well - equipped Laboratories are maintained and kept up-to-date so that the students can take up research projects in any of the areas mentioned above.



## Research Groups

### Mobile Communication and Networks (MCN)

The advancements in Mobile Cellular Communications have revolutionized the concepts of connectivity, reliability and ease of communication. Mobile cellular networks have received wide spread approval and appreciation from masses. However, better Quality of Service (QoS) and resource management requirements have introduced several new challenges for researchers. The group aims to conduct research and development in areas of security, QoS, wireless resource management and mobility management in next generation cellular mobile networks. Currently work is underway on Adaptive Call Queuing Schemes that prioritize resource distribution among new and handoff calls on the basis of call types (voice, multimedia calls) and user mobility.

### Signal Processing for Wireless Communications (SPWCOM)

The Signal Processing Group develops signal processing algorithms that cover a wide variety of application areas including speech and image processing, wireless sensor networks, analog and digital communications, radar and sonar. Our prime focus is on algorithm development in general, with the applications serving as

motivating contexts. Our approach to new algorithms includes some unconventional directions, such as algorithms based on fractal signals, chaotic behavior in nonlinear dynamical systems in addition to the more conventional areas of signal modeling, quantization, parameter estimation, sampling and signal representation.

The group aims:

- To develop new algorithms based on advanced filtering techniques
- To apply probabilistic modeling in recognition algorithms
- To enhance the performance of MIMO OFDM systems
- To develop recent research based CAD Models / Simulations

### Optical and Wireless Communications (OptiCom)

The Optical Communications research group undertakes research on a range of topics applicable to cutting edge optical communications technology. Optical communication systems have successfully rationalized in back bone transmission systems in terms of economic scalability, technology up gradation, protocol transparency, high data rates and logically independent hierarchical connectivity. Optical Communication is a promising source to accomplish the up-coming high bandwidth demands.

The key areas of research in Optical communication are WDM Passive optical networks, free space laser communication, high precision optical measurement technologies, and optical sensors, Free Space Optics (FSO), Fiber Channel Storage Area Networks, Fiber over Wireless (FiWi) networks, Radio-and-Fiber (RandF) and Radio-Over-Fiber (RoF). The research activities in Microwave communications are focused on multiple-element antennas and associated signal process in g techniques, target recognition, Antennas Propagation, Microwave Filters, Mm-wave and Submm-wave (THz) antennas.

### The major objectives are:

- To develop an open source graphical user interface (GUI) based software toolkit for the purpose of education, research and design of optical fiber communication systems
- To develop Computer Aided Design models/simulations for optical communication systems

### Multirate Communication Network (MRCN)

With the influx of the internet and multimedia applications in everyday life, the need for a cost effective solution, that offers reliable communication with higher data rates, cannot be overlooked. We can save extra cost and effort involved in setting up a new dedicated network by opting for the “No New

Wires” solution for communication networks, such as the digital subscriber line (DSL) and the power lines. However these wire line media have their share of problems, crosstalk and high noise content in the channel. Application of multi rate signal processing techniques/ wavelet transforms in combination with multicarrier Modulation can be utilized to mitigate these channel impairments

The greatest motivation for pursuing Wavelet Multicarrier Modulation (W-MCM) systems lies in the freedom that they provide to communication system designers. By tailoring the design specifications, a wavelet based system that best suits an engineering requirement could be conceived. The group has the objective to design

and hardware implementation of transceivers based on Multirate signal processing techniques and MCM.

The future directions for the group are:

- Design and Hardware Implementation of transceivers based on Multirate signal Processing techniques and MCM
- Wavelet OFDM for wireless communications
- Discrete wavelet Multitone for PLC and DSL
- Equalization techniques for discrete wavelet multitone modulation (DWT) techniques

## Computer Vision (COMVIS)

Computer vision research is becoming more essential for the technological advancement of a country with an increasing number of applications in civil, defense and industrial sector. Some of the key application areas of computer vision are in public security, e.g. surveillance, biometric authentication, forensic recordanalysis such as face, finger prints etc., to assist in crime control.

The group has primarily focuses on these application areas:

- Applied Basic Research in Image Pattern Recognition: fundamental issues in statistical learning
- Biometric Recognition: individual identification by analyzing their physiological and behavioral characteristics, including face, iris, fingerprint, palm print, etc.
- Intelligent video processing and understanding: automatic video analysis and understanding to reduce human intervention in surveillance
- Surveillance ( tracking, identification, road safety)
- Object Categorization and sense analysis in natural images (e.g. building extraction, object recognition, camouflage breaking, feature analysis)



## Renewable Energy and Power Systems (REPS)

Renewable Energy and Power Systems research group is multidisciplinary group that fosters collaborative research efforts and advances in the areas of efficient and sustainable power system technologies. The group will develop fundamental and applied knowledge that is required for the next generation of low-emission, high-efficiency power generation systems. The objectives of the REPS group are publishing of research papers, Starting of M.Sc in Power and Energy System, Industrial Projects and Collaboration, Seminars / Workshops on MATLAB, ANSYS, MEMS, Auto CAD, etc. The goal is to design and implement Micro Grid Station at CIIT using Renewable Technologies. Involvement of Undergraduate/graduate students in implementation of these projects (Photovoltaic System, Micro-Wind Turbine, Biomass, etc), empower them in design methodology of Power Distribution System.

## Islamabad Campus Research Groups

### Antenna and Microwave Engineering Research Group

The research group was established in 2005 with a few projects in the area of antennas. Thanks to the large human resource and state - of - the art equipment, the research group is now

actively involved in various applications of microwave engineering. Apart from conventional research work on filters and antennas, we focus the activities towards interdisciplinary research. Group members have a large number of publications on their credit ranging from high impact transactions to international conferences. We specialize in antenna designing and offer a wide range of undergraduate and post graduate projects every year.

The group is currently involved in various antenna focused research projects that involve multiple research students working towards their PhDs. Apart from PhD students we have a number of master students working in the Laboratory. The group also works on RF front-end design involving

both active and passive components, electronically tunable band-pass filter and band-stop filter for various wireless communication standards. The present research targets application development in broader microwave, microwave near-field and far-field imaging, dielectric characterization and microwave meta material applications.

### Communications Research Group

The Communications Research Group at the Department of Electrical Engineering works within the broad area of Wireless and Digital Communication systems and theory. Our focus is on investigation of techniques and algorithms at the physical layer of the OSI model that can contribute to reliable



high speed communications over the transmission channel.

The group members have been actively involved with developing adaptive/blind equalization algorithms, near-capacity channel coding, EXIT-Chart analysis of Communication Systems, and measurements and modeling of radio channels for MIMO systems, Sensor Networks, and UWB systems. The group members have published more than 70 research papers in prestigious international peer-reviewed journals and conference papers.

Our current research efforts are on Cooperative Communications, Cognitive Radio, Multi-carrier CDMA and Blind Channel Estimation. Some of the group members have

research proposals submitted to local funding agencies while other funding applications are in preparation.

### **Integrated Circuits and System Research Group**

The Integrated Circuits and Systems Research Group targets R & D activities in the areas of Integrated circuits and systems using ASICs and FPGA based prototyping. The three essential activities are to maintain a healthy offering of related courses at the graduate and undergraduate levels to train an adequate number of researchers on an on-going basis. The second priority is practical product design as a result of research. The third initiative is the development of open source curricula and supporting materials using

open source software and hardware platforms to aid third world nations achieve a level of engineering education that is globally acceptable. The group is actively engaged in research in quite a few areas like fast prototyping set up to enable product design, HDL/ESL methodologies, computer architecture, clocking and serial links, embedded systems and simulation of mixed-mode systems and digital and analog systems.

### **Networks Research Group (NRG)**

The Networks Research Group (NRG) embraces dynamic and dedicated researchers that carry out research in the future and demanding areas spanning from Wired to the Wireless Communication Networks.

The mission of Network Research group is to study, explore, design, analyze and develop the feasible, economic, reliable, scalable, dynamic, self - healing and self - managing solutions for the wired and wireless futuristic network systems.

Core research of this group includes; 3G/4G Mobile Communication Systems, Next Generation All-IP Network and Systems, Mobile Ad hoc Networks (MANETs), Wireless and Underwater Sensor Networks, Embedded System Design, Wireless Network Planning and Optimization, Real-Time Spam SMS filtering in Wireless Networks, and Seamless Mobility and Bandwidth aggregation in Heterogeneous Network



Environment for Multi-interface Mobile devices.

The group aims to publish and discuss its research in various International journals and flagship conferences round the globe.

### **Robotics and Control Research (RCR) Group**

The Robotics and Control Research Group is actively working within the domain of analysis, design and development of robotic mechanisms and control systems. The group has published more than 20 research papers in reputed international conferences and journals and authored one book and a book chapter (Springer).

Research interests are within the domain of design and development and analysis of robotic mechanism, Mechatronics systems and Control systems.

### **Renewable Energy and Power Engineering**

The Renewable Energy and Power Engineering Research Group works on the technologies for renewable energy generation, power production and energy management to reduce energy consumption and improve energy efficiency. The research activities are with in the area of Power and Energy, Power Electronics, Solar thermal and photovoltaic, Smart grid, Wind power generation, Machine Design, Power

Quality Issues and AC/DC Drives.

### **Signal Processing Research Group**

The Signal Processing Research Group is working on a wide range of topics in signal processing with emphasis on adaptive signal processing, statistical estimation and detection methods, multi-scale analysis, multivariate data driven time-frequency algorithms, and image processing. In addition to working on core algorithms in the above mentioned areas, the group focuses on practical applications of signal processing methods in communications, health care, renewable energy, and source separation.

Currently, a research project funded by HEC is underway which aims to develop robust data and image fusion techniques using multivariate multi-scale data driven algorithms; another research proposal related to signal processing applications in renewable energy is under review in ICT R&D fund.

### **Graduate Programs**

Currently the following graduate programs are being offered and pursued as per latest trends in the professional dynamic market.

### **Master of Science in Electrical Engineering**

The Master of Science in Electrical

Engineering program is designed to prepare students for technically demanding careers in industry as well as for post-master's graduate studies in Electrical Engineering. It allows students to take up rigorous and appropriately structured advanced engineering courses for employment/ research in industry. The program includes 24 credit hours of course work and 6 credit hours of research work. MS in Electrical Engineering program focuses on the topics ranging from fundamental techniques to cutting edge technologies in Electrical Engineering. Our primary aim is to provide a learning experience which maximizes our students' employability in a competitive job market and subsequently accelerates their career progression with an excellent preparation for PhD studies.

On successful completion of the course the graduates will have an excellent opportunity in finding employment in areas with a broad, critical and practice - based understanding of Electrical Engineering and specialized disciplines. This knowledge makes them ready for a variety of leadership positions in complex contemporary environments and teaching careers in universities.

### **Specializations in Electrical Engineering**

- Computer Engineering
- Power and Energy Engineering
- Electronic Systems Engineering

- Photonic Systems Engineering
- Automation and Control Engineering
- Telecommunications Engineering
- Networks Engineering
- Communication and Radar Technology

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campuses

- Islamabad, Abbottabad, Wah, Lahore, Attock

### Doctor of Philosophy in Electrical Engineering

The Department of Electrical Engineering offers Doctor of Philosophy

in Electrical Engineering and conducts research in various specialized areas. The quality and impact of the research are demonstrated by many highly cited publications in National/International ISI indexed journals. Students enrolled in the program, complete the required number of courses and then proceed to do research in their area of specialization. Doctor of Philosophy in Electrical Engineering program is usually completed in three to five years and it requires course work and research work.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campuses

- Islamabad, Abbottabad, Lahore, Wah

### Master of Science in Mechatronics Engineering

The Master of Science in Mechatronics Engineering is designed to address the requirements of technology-based industries. It will give in-depth familiarity in the fundamentals, design, analysis and operation of mechatronic systems. The objective of the program is to provide a course of study which enables the student to work efficiently.

The objective of the curriculum being taught is to provide an in-depth understanding of mechatronic systems to engineers having multidisciplinary background. Curriculum which is recommended, not only addresses the requirement of the industries involved in this field, but also meet the requirements of the students from different disciplines.

### Specializations in Mechatronics

#### Engineering

1. Robotics Engineering
2. Industrial Automation Engineering
3. Control and Automation Engineering
4. Intelligent Machine Engineering
5. Embedded System Engineering

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.



## Offering Campus

- Islamabad

### Master of Science in Renewable Energy Engineering

The Master of Science (MS) in Renewable Energy Engineering program will accommodate both full-time students and working professionals. The MS program is designed to prepare graduates to be energy engineering professionals who have advanced knowledge and skills that enable them to assume a broad range of technical leadership roles.

The curriculum is built upon core tracks in research methods, innovation and advanced energy engineering. These courses provide the foundation for three required specialized course sequences in renewable energy technologies and six credits of thesis.

### Specializations in Renewable Energy Engineering

1. Wind Power Systems
2. Hydro Power Systems
3. Biofuels and Biomass
4. Photovoltaic and solar systems
5. Electrochemical and Fuel Cell Systems
6. Geothermal and Marine Energy
7. Energy Efficient Building Systems and Global Energy Issues

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

## Offering Campus

- Islamabad

### Master of Science in Computer Engineering

The Master of Science in Computer Engineering program has been designed for students who wish to broaden and deepen their understanding of computer engineering. The program provides a unique opportunity to develop cutting edge, in-depth knowledge of specific computer engineering disciplines. MS students are encouraged to participate in research with different research groups. The degree requirements include 24 credit hours of course work and 6 credit hours of research work.

### Specializations in Computer Engineering

- Communication Systems
- Embedded Systems
- Image and Signal Processing
- Machine Learning and Artificial Intelligence
- Computer and Wireless Networks
- Software Engineering
- Control Systems

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

## Offering Campus

- Islamabad

### Doctor of Philosophy in Computer Engineering

The Department of Electrical Engineering encouraged by the Ph.D. faculty in the field of Computer Engineering has launched Doctor of Philosophy in Computer Engineering program. The program is aimed to provide highly skilled manpower for the industry, research organizations and universities. The Electrical Engineering Department has a strong research base reflected by the large number of publications in National/International ISI Indexed Journals. The duration of the program is three to five years which includes course work and research work.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

## Offering Campus

- Islamabad

# FACULTY MEMBERS

## DEPARTMENT OF ELECTRICAL ENGINEERING

### Islamabad Campus

#### Professors

- **Dr. Shahid Ahmed Khan**, PhD, University of Portsmouth, UK
- **Dr. Nassrullah Khan**, PhD, Essex University, UK
- **Dr. Shahzad A. Malik**, PhD, Ecole National Supérieur Des Telecommunication, France
- **Dr. Junaid Mughal**, PhD, University of Birmingham, UK

#### Associate Professor

- **Dr. Shafayat Abrar**, PhD, Liverpool University, UK

#### Principal Engineer

- **Dr. Qadeer ul Hassan**, PhD, Boston University, USA

#### Assistant Professors

- **Dr. Jamshed Iqbal**, PhD, University of Genova, Italy
- **Dr. Mustafa Shakir**, PhD, Beijing Institute of Technology, China
- **Dr. Safdar Hussain Bouk**, PhD, Keio University, Japan
- **Dr. Shahrukh Agha**, PhD, Loughborough University, UK
- **Dr. Shurjeel Wyne**, PhD, Lund University, Sweden
- **Dr. Muhammad FasihUd din Butt**, PhD, University of Southampton, UK
- **Dr. Syed Irfan Ahmed**, PhD, Carleton University, Canada

- **Dr. Zeeshan Ali Khan**, PhD, University of Nice- Sophia Antipolis, France
- **Dr. Junaid Ahmed**, PhD, Manchester University, UK
- **Dr. Naveed Ur Rehman**, PhD, Imperial College, London, UK
- **Dr. Moazzam Islam Tiwana**, PhD, Orange Laboratories (France Telecom) in collaboration with Institute National de Telecommunication, Evry, France
- **Dr. Ahmed Bilal Awan**, PhD, Institute National Polytechnique de Lorraine, France
- **Dr. Junaid Nawaz**, PhD, Muhammad Ali Jinnah University, Pakistan
- **Dr. Guftar Ahmed**, PhD, Jacobs University, Germany
- **Dr. HammadUmer**, PhD, Imperial College, London, UK
- **Dr. Aamir M. Khan**, PhD, University of Nice-Sophia Anitpolis, France

Besides, 34 Assistant Professors, 36 Lecturers, 19 Lab Engineers and 14 Research Associates are also part of this department.

### Abbottabad Campus

#### Professors

- **Dr. Shahid Khattak**, PhD, Technische Universitat Dresden, Germany

- **Dr. Laiq Khan**, PhD, University of Strathclyde, Glasgow, UK

#### Associate Professors

- **Dr. Imdad Khan**, PhD, Birmingham University, UK
- **Dr. Owais**, PhD, Linkoping University, Sweden

#### Cheif Engineer

- **Dr. Abdur Rashid**, PhD, University of Manchester, UK

#### Assistant Professors

- **Dr. Ghulam Mujtaba**, PhD, Loughborough University, UK
- **Dr. Mohsin Amin**, PhD, University of Lorraine, Metz, France
- **Dr. Sohail Razzaq**, PhD, Lancaster University, UK
- **Dr. Khurram Aziz**, PhD, Vienna University, Austria
- **Dr. Sajjad Ali Mushtaq**, PhD, Ecole National Supérieur Des Telecommunication de Bretagne, France

Besides, 18 Assistant Professors, 82 Lecturers and 01 Research Associates are also associated with this department.

### Lahore Campus

#### Associate Professors

- **Dr. Saleem Akhtar**, PhD, Ecole National Supérieur Des Telecommunication, France

- **Dr. Sobia Baig**, PhD, Ghulam Ishaq Khan Institute of Engineering, Science and Technology, Topi, Swabi, Pakistan

### Assistant Professors

- **Dr. Ali Nawaz Khan**, PhD, Harbin Institute of Technology, China
- **Dr. Ejaz Ahmad Ansari**, PhD, Asian Institution of Technology, Thailand
- **Dr. Muhammad Saqib Sarfraz**, PhD, Technical University Berlin, Germany
- **Dr. Umer Farooq**, PhD, Universite Pierre et Marie Curie, France
- **Dr. Junaid Zafar**, PhD, Manchester University, UK
- **Dr. Muhammad Khurram**, PhD, University of Nice-Sophia Antipolis, France
- **Dr. Asim Ali Khan**, PhD, Manchester University, UK
- **Dr. Mujtaba Hussain Jaffery**, PhD, University of Surrey, UK
- **Dr. Hafiz Muhammad Asif**, PhD, Lancaster University, UK
- **Dr. Irfan Ahmad**, PhD, University of Grenoble, France
- **Dr. Muhammad Nadeem**, PhD, Auckland University, New Zealand
- **Dr. Muhammad Naeem Awais**, PhD, Jeju National University, Republic of Korea
- **Dr. Muhammad Naeem Shehzad**, PhD, Ecole Polytech de Nantes, France

Besides, 04 Assistant Professors, 33 Lecturers, 6 Research Associates and 13 Lab Engineers are also part of this department.

### Wah Campus

#### Advisors

- **Dr. Muhammad Amin**, PhD, UET, Taxila, Pakistan

#### Associate Professors

- **Dr. Rahim Dad Khan**, Ph.D, ECUST, Shanghai, China
- **Dr. Sheraz Anjum**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China
- **Dr. Nadia Nawaz**, PhD, Essex University, UK
- **Dr. Muhammad Altaf**, PhD, Essex University, UK

#### Assistant Professors

- **Dr. Mubashir Hussain Rehmani**, Ph.D, Universite Pierre et Marie CURIE, France
- **Dr. Ayaz Ahmad**, PhD, Paris Sud 11 University, France
- **Dr. Sajid Siraj**, PhD, Manchester University, UK
- **Dr. Muhammad Iqbal**, PhD, University of Posts and Telecommunication, China
- **Dr. Wasim Qaiser Awan**, PhD, Ivanovo State Power Engineering University, Russia

- **Dr. Abdul Naeem**, Ph.D, KTH-Royal Institute of Technology, Sweden
- **Dr. Muhammad Naeem**, Ph.D, Simon Fraser University, Burnaby, Canada

Besides, 10 Assistant Professors, 14 Lecturers, 05 Research Associates and 01 Lab Engineer is also associated with this department.

### Attock Campus

#### Assistant Professors

- **Dr. Shujaat Ali Khan Tanoli**, PhD, Asian Institute of Technology, Bangkok, Thailand
- **Dr. Saeed Ehsan Awan**, PhD, PIEAS, Nilore, Islamabad, Pakistan
- **Dr. Junaid Ali Khan**, PhD, International Islamic University, Islamabad, Pakistan
- **Dr. Muhammad Asif Zahoor Raja**, PhD, International Islamic University, Islamabad, Pakistan
- **Dr. Shahab Ahmad Niazi**, PhD, Beijing University of Posts and Telecommunications, China

Besides, 03 Assistant Professors and 07 Lecturers are also associated with this department.



## Department of Chemical Engineering

Chemical Engineering is one of the popular engineering disciplines that bear a promising market, both at home and abroad. The Department of Chemical Engineering at COMSATS Institute of Information Technology (CIIT) Lahore launched its academic programs in Fall-2005 with a vision to produce outstanding chemical engineers equipped with extensive up-to-date technical knowledge and skilful hand-on-training to meet the changing demands of the society. The Department offers enabling academic as well as social environment to its students to nourish their mental faculties. It strives for producing chemical engineers who are distinguished by their innovative approach, professional competence and managerial skills.

The Department has a rich tradition of providing quality education with an emphasis on applied research and all possible international linkages to uplift the standards of engineering education in Pakistan.

### Graduate Programs

Currently the following graduate programs are being offered and pursued as per latest trends in the professional dynamic market.

### Master of Science in Chemical Engineering

The graduate Master of Science in Chemical Engineering Program emphasizes the practical application of Chemical Sciences and Technology to cater the needs of society. The program is designed to prepare students for industry, teaching and research careers, and to meet the need for rigorous and advanced training in the applied aspects of modern technology. The objectives of MS degree program in Chemical Engineering are to create new knowledge by participating in the process of discovery and invention, educate the graduate students with a solid background of fundamentals, stretching their imagination, and preparing them for an exciting future, serve the society through research, education and outreach activities.

The graduates will have an excellent opportunity in finding employment in

areas with a broad, critical and practice - based understanding of Chemical Engineering and specialized disciplines, on successful completion of the this program. This knowledge makes them ready for a variety of leadership positions in complex contemporary environments and teaching careers in universities.

The Department offers specializations in the following fields:

- Oil and Gas production and Processing;
- Environmental Technology;
- Polymer and Rubber Technology;
- Bio-Chemical Engineering;
- Textile Processing

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.



## Offering Campus

- Lahore

## Doctor of Philosophy in Chemical Engineering

The purpose of the Doctor of Philosophy in Chemical Engineering Program is to provide research experience to enable chemical engineering graduates to develop new knowledge in the discipline. The developmental changes in program are continuously incorporated in accordance with the stipulated administrative, academic and research forums.

The objective of Chemical Engineering PhD Program is to provide a comprehensive and rigorous education to the graduate students. The program is expected to produce chemical engineers who will contribute to the chemical engineering industries worldwide. The graduates of this program will be able to utilize the principles of chemical engineering for addressing the needs of industry, the scientific community, and society. The program is intended to disseminate the research outcomes in the form of industrial solutions, publications and public presentations.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

## Offering Campus

- Lahore

## FACULTY MEMBERS

### DEPARTMENT OF CHEMICAL ENGINEERING

#### Professors

- **Dr. Asad Ullah Khan**, PhD Imperial College London, UK
- **Dr. Robina Farooq**, PhD, East China University of Science and Technology, Shanghai, China

#### Advisors

- **Dr. Javaid Ahmad**, PhD, Brunel University, London, UK

#### Associate Professors

- **Dr. Moin-ud-Din Ghauri**, PhD, University of Sheffield, UK
- **Dr. Nasir Mahmood**, PhD, Martin Luther University of Halle-Wittenberg, Germany
- **Dr. Anwar ul Haq**, PhD, Ivanovo State University of Chemistry and Technology, Russia

#### Assistant Professors

- **Dr. Aqeel Ahmad Bazmi**, PhD, University Technology Malaysia, Malaysia
- **Dr. Mazhar Amjad Gilani**, PhD, Clausthal University of Technology, Germany

- **Dr. Javed Iqbal**, PhD, Martin Luther University Halle-Wittenberg, Germany
- **Dr. Zulfiqar Ali**, PhD, Martin Luther University of Halle-Wittenberg, Germany
- **Dr. Asim Laeeq Khan**, PhD, Catholic University of Leuven, Belgium
- **Dr. Murid Hussain Malik**, PhD, Korea Advanced Institute of Science and Technology, Korea
- **Dr. M. Umar Manzoor**, PhD, University of Ulster, UK
- **Dr. Sikander Rafiq**, PhD, University Technology Petronas, Malaysia
- **Dr. Faizan Ahmad**, PhD, University Technology Petronas, Malaysia
- **Dr. Zakir Khan**, PhD, University Technology Petronas, Malaysia
- **Dr. Muhammad Rizwan**, PhD, Hanyang University, Korea
- **Dr. Aqeel Ahmad Khan**, PhD, University of Manchester, UK

Besides, 04 Assistant Professors, 30 Lecturers and 04 Research Associates are also associated with the Department.



## Department of Civil Engineering

The Department of Civil Engineering was established at CIIT Wah and Abbottabad Campuses in Fall 2012. The department offers a competitive four years degree program at the undergraduate level based on a *comprehensive* curriculum designed in accordance with the HEC and PEC guidelines and in line with international standards. The department has diverse and experienced faculty of international repute. The department aims at the diversion of all natural resources to the well-being of mankind.

### Graduate Programs

Currently the following graduate programs are being offered and pursued as per latest trends in the dynamic market.

#### Master of Science in Environmental Engineering

The MS in Environmental Engineering is a two year graduate program after BS Engineering. The program spans over 4 semesters with a minimum requirement of 30 credit hours. There is a research project in the last semester of the program in which the students apply their learning in consolidation. The program focuses on the attainment of environmental excellence in civil engineering projects and thereby to deliver improved

environmental performance in project specification, design and construction. Closely aligned with industry's needs, this MS degree aims to provide students with the knowledge and skills to equip them for a career in environmental engineering. The course prepares students to think and act holistically with regard to environmental and sustainability issues, by developing their ability to make sound judgments in relation to the built and natural environments, while meeting the principles of sustainability.

The overall objective of the program is to provide advanced education and training for graduates in engineering, science, and related areas to meet current and future needs of environmental engineering in the region. The program emphasizes on providing engineers with an in-depth understanding of the technical, economic and managerial factors and their integration in the specification, design and operation of environmental engineering systems. The MS in Environmental Engineering build an important foundation, with a variety of topics including the modeling and analysis of hydrological systems, atmospheric physics and chemistry, pollution transport, and the impact of environmental pollution on human health. Specialized course topics in water supply, and Industrial and Hazardous Waste Management are also offered. The graduates of this program have career in the most demanding

industry.

Environmental Engineering is an ever-green and demanding field. The demand of environmental engineers in the country in general and Hazara Division, AJK and GB in particular is at its peak. The following facts and figures reinforce the argument to initiate MS in Environmental Engineering at CIIT Abbottabad.

Deforestation in Himalayan range results in adverse effects on environment, climate and annual precipitation pattern. Indus water system which is the backbone of the agriculture economy of Pakistan originates from Himalaya mountain range. Any change in rainfall precipitation may have amplified impacts on economy of Pakistan. There is a dire need to assess the quantum of deterioration and to cope with the natural calamities with the help of environmental engineering expertise.

Water scarcity and energy crisis in country have warranted the construction of large dams. However large dams are always associated with environmental implications. Hence a huge number of environmental engineers will be required for environmental degradation assessment and their mitigation.

The construction of mega projects such as large dams would further accentuate the requirement of environmental engineer. The programme lays heavy emphasis on the practical application of knowledge,

while at the same time recognizing the importance of theoretical knowledge in developing the intellectual capacity of the graduate engineers. Possible employers of Environment Engineering graduates are Ministries of Water and Power, Irrigation, Environment and Natural resources, Regional development, Municipal councils, water service companies, Private consulting firms, National and International Non-Governmental Organizations, Environmental Protection Agency (EPA), Civil Engineering contractors, and Institutions of higher learning among others.

Admission requirements, program duration, course work and thesis/research project details are given at page number 59.

### Offering Campus

- Abbottabad

## FACULTY MEMBERS

### DEPARTMENT OF CIVIL ENGINEERING

#### Abbottabad Campus

##### Associate Professors

- **Dr. Muhammad Ashraf Tanoli**, PhD, Tottori University, Japan

##### Assistant Professors

- **Dr. Muhammad Atiq Ur Rehman Tariq**, PhD, Delft University of Technology, Holland
- **Dr. Tayyab Ashfaq**, PhD, KAIST, South Korea
- **Dr. Khalid Mehmood**, PhD, Busan National University, Busan, South Korea

Besides 04 Lecturers are also associated with this department

#### Wah Campus

##### Assistant Professors

- **Dr. Hasan Abbas**, PhD, Michigan State University, USA
- **Dr. Qadir Bux alias Imran Lateef**, PhD, Universiti Tun Hussein Onn Malaysia, Malaysia
- **Dr. Zafar Mehmood**, PhD, Saitama University, Japan
- **Dr. Khalil Ahmad**, PhD, Iowa State University, USA
- **Dr. Qazi Samiullah**, PhD, INSA Lyon, France

Besides 01 Assistant Professor and 01 Lecturer are also associated with this department.



## DEAN'S MESSAGE



Welcome to the Faculty of Information Sciences and Technology. True to our claims we dare say that our Faculty of Information Sciences and Technology has all the hallmarks that ought to be present in to-day's competitive world. Our dynamism to adapt to the changing times in respect of our courses, hiring of the requisite faculty and nearly dogged pursuit of our students after they have left our doors till they get good jobs is a pride of ours. We also strive to give atmosphere to our students where they feel at home not only in satisfying their academic queries we cater to their non-academic needs such as admissions, career counseling, job hunting and above all make them people of principles and letters.

Information Science is a unique area in many respects. We have a unique faculty and graduate program structure. The faculty has special connections with leading industries. The faculty is committed to interdisciplinary research. Computer Science departments are intensely involved in joint projects with faculty members in other departments producing world class research. The proof of this commitment is publication of papers in journals and conferences of international repute.

Our mission of the multidisciplinary Health Informatics Program is to “develop health care systems as information environments.” A useful model of the emergence of informatics is to consider different roles of clinicians, management and IT services in health care. Health Informatics is the science of information management in healthcare and its application to support clinical practice, decision-making and research. Health Informatics is a body of knowledge and a set of techniques to organize and manage information in support of research, education and patient care.

**Prof. Dr. Sajjad Mohsin**



## Department of Computer Science

The Department of Computer Science was established in 1999 at Islamabad and enrolled the pioneer batch of students in Fall 1999. The department made a modest beginning and is now proud of its excellent facilities and internationally qualified faculty members along with its presence at all Campuses of CIIT.

The department aims to impart competitive skills in effective development and application of modern technology to groom its students as excellent programmers, outstanding researchers, extra ordinary analysts and innovative designers. It is aware of everyday breakthroughs in modern

technology and thus committed to equipping and imparting our students with advanced competencies required for managing the growing needs of science and technology, especially computer sciences, in almost every professional field today.

Research activities have been given high priority within the department. This has resulted in national and international recognition for faculty and students alike. A number of research papers of national and international repute have been published in leading journals and presented at conferences all over the world. The department has dedicated research groups working in the areas of Databases, Algorithms, Artificial Intelligence, Computer Vision and Security Systems.

Computer science is increasingly concerned with the application of core techniques and methods to challenging real-world problems, for examples, in banking, aerospace, manufacturing, defense, medicine, telecommunications, pharmaceutical industries, consumer products, biomedical, intelligence, nonprofits, government, finance, insurance, health care and much more. This shift is reflected in the research we conduct and in the graduate and postgraduate programs we offer. The graduate and postgraduate programs comprise of Master of Science in Computer Science, Master of Science in Software Engineering, Master of Science in Information Security, and Doctor of Philosophy in Computer Science.

**Research Environment:** Conducive atmosphere for research exists at the Computer Science department which encourages MS and PhD students to participate and engage themselves with devotion and commitment to research. Senior faculty members provide requisite lead to their junior partners resulting in full-fledged research activities wherein both faculty as well as the students eagerly participates. The quality of research is fairly meeting the international standards.

**State of the art Laboratories:** The well-equipped computer Laboratories and other practical facilities are open to carry out research work. A high



bandwidth connection of internet is available round the clock over wired and wireless LANs. This connectivity becomes further productive when research scholars use HEC sponsored access to digital libraries and numerous research journals.

Furthermore, the Embedded Software Laboratory, based at the Computer Science department, facilitates software development for embedded systems. The laboratory contains embedded kits with varying processing power and available resources. These include kits with and without memory management unit and also the DSP processor based kits. All of these kits run a variant of Linux as the core embedded kernel. Therefore students learn the embedded development environment through student projects. The experiments done over the Intel based systems will be deployed to the embedded kits.

**Sun Laboratory - An Investment into Future:** CIIT is proud to be the first academic institution in Pakistan who has built Sun Laboratory for this purpose. In order to meet the academic objectives, CIIT has an overall 54 Sun computers installed at its different campuses. These computers include specialized servers and desktop machines. This computing facility is being used in various undergraduate and graduate programs in each campus.

**CIIT Computational Cluster Research Project (CCCRP):** High-performance computing clusters have gained the attention of researchers, scientists, and analysts since the release of the first parallel computing environment, Parallel Virtual Machine (PVM). Today, Computing Clusters are changing the economics of High performance Computing, offering opportunities to those interested in building HPC solutions. The CCCRP is an effort to provide researchers with a facility that allows them to study the dynamics of cluster based computing and to carry out software development projects in the area of parallel computing. The project was aimed at setting up a modest ( 4 0 - 5 0 GFLOPS/sec) computing cluster using commodity-of- the-shelf (COTS)

components. For this purpose, normal COTS components were purchased, in-house assembled and connected. Later, they were tuned up to work together in a single logical unit. So far, we have achieved 250GFLOPS/sec and further expansion in terms of hardware and performance is underway. The facilities in other departments like Electronics Laboratory, Microprocessor Laboratory, VLSI Laboratory, DSP Laboratory and library facilities are also accessible to pursue research work.

**CERN Collaboration:** The European Organization for Nuclear Research (CERN), is one of the world's largest and most respected centers for scientific research. At CERN, the world's largest and most complex scientific



instruments are being used to study the basic constituents of matter— the fundamental particles. By studying what happens when these particles collide, physicists learn about the laws of Nature. The instruments used at CERN are particle accelerators and detectors. Accelerators boost beams of particles to high energies before they are made to collide with each other or with stationary targets. Huge array of detectors observe and record the results of these collisions. Founded in 1954, the CERN Laboratory sits astride the Franco–Swiss border near Geneva. It was one of Europe’s first joint ventures and now has 20 Member States. Study of huge collision data needs excessive computing resources which will be arranged by using Universal grid, of

which CIIT setup is a part. In February 2009, COMSATS is listed among the grid computing sites for ALICE Experiment.

**Specialization at a Glance:** Numerous areas of research are offered by the department under the supervision of foreign qualified PhD faculty members such as Database Systems, Business Intelligence, Artificial Intelligence, Software Engineering, Semantic Web, Computer Networks, Communication, Security, Mobile Adhoc Networks, Wireless Networks, Multimedia Technologies, Computer Graphics and Visualization, Natural Language Processing, Image Processing, and Socio Informatics to name but a few.

## Graduate Programs

Currently the following graduate programs are being offered and pursued as per latest trends in the professional dynamic market.

### Master of Science in Computer Science

The Master of Science in Computer Science is a quality research program which draws upon a renowned reputation of excellent quality research. It also depends upon the exceptional teaching quality and facilities of the Computer Science Department at the CIIT. Industrial links enable us to provide a broad based program at a level beyond that of undergraduate degree. The program combines a wide range of taught advanced courses, with a research project undertaken in academia and industry. It aims to impart a sound understanding of the general principles of computer science. It provides sufficient breadth and depth of experience in up - to - date methodologies and in-depth treatment of selected, leading-edge research topics to significantly advance your career prospects within IT industry and to aid you in undertaking research in computer science. In order to accommodate the different needs for further education, recognizing in particular the needs of people in employment, we provide flexible ways of pursuing the MS degree in Computer Science by offering different specializations.



Academically challenging courses are designed to help students acquire these skills. Students must take responsibility for their own learning: a vital skill in such a rapidly developing field. Students begin by learning core areas such as computer architecture, algorithms and operating systems before they take advance electives in different areas such as databases, networks, graphics, semantic web, artificial intelligence etc., to create a well-rounded program of study. At the end of the degree program, you will have covered the essential aspects of computer science in breadth and depth. Together with team project and possible work placements, the course provides excellent preparation for professional computer scientists. The academic demands of this degree program from its outset are reflected in the additional entry requirements which include Mathematics. Crucially we regard enthusiasm, hard work and commitment as essential to meet the intellectual demands of computer science as a subject of academic study in a vibrant research - oriented environment.

Admission requirements, program duration, coursework and thesis/ research project details are given at page number 59.

### Offering Campuses

- Islamabad, Abbottabad, Lahore, Wah, Attock, Sahiwal

## Master of Science in Software Engineering

The Master of Science in Software Engineering is a specialized program which aims to bridge the gap between computer science theory and its practical applications using different technologies and tools. Program will prepare professionals who have a mastery of software development principles, theory, practice, and process to develop high quality software applications and to strive for research solutions against different challenges. Following the said philosophy, the Master of Science in Software Engineering program assists working professional in software engineering field and students who want to extend their skills not only in software development but in research. Advanced courses being taught in this program opens up new avenues for research and development which are crucial in the field of software engineering. All courses being taught at this level includes an extensive coaching, regular classes, practical Laboratory work, and group activities.

Admission requirements, program duration, coursework and thesis/ research project details are given at page number 59.

### Offering Campus

- Islamabad

## Master of Science in Information Security

The Master of Science in Information Security is ideally suited for students who want to assume leadership positions in the information security arena. In 24 months, the program enhances a technical education with additional courses in management, information security policy, privacy and other topics essential for the effective development and management of secure information systems. Graduates of the MSIS program become security experts equipped to manage the growing complexities associated with securing data, networks and systems. Through this program, the students will gain a detailed understanding of the interdisciplinary aspects (technical, business, management, policy) of information security, assess the information security risks faced by an organization, design and implement networked, software and distributed systems with information security in mind, acquire a detailed understanding of information security challenges in networks and software systems, gain expertise in both theory and practice of information security, manage the development, acquisition and evolution of a secure information infrastructure, and gain expertise to manage the growing complexities associated with securing data and networks.

Admission requirements, program duration coursework and thesis/research project details are given at page number 59.

## Offering Campus

- Islamabad

### Doctor of Philosophy in Computer Science

The Doctor of Philosophy in Computer Science program is to produce well groomed computer scientists who are capable of fulfilling the need for computer applications, research, and academia. The program is divided into various stages to make sure that a comprehensive learning is achieved as a strong base for result oriented

research in both qualitative and quantitative terms. Furthermore, this program targets to enhance scientific approach for maturing the needs of computing applications in real world scenarios, that's why specific research based, current and future need based, theoretically sound and practical courses are offered. The Doctor of Philosophy in Computer Science is challenging and rewarding, which provides training of independent research that enables the scholars to develop real skills in research and subsequently these skills enable our students in career development and in post PhD study.

The Doctor of Philosophy in Computer Science has the tendency to motivate the scholars to bring originality in

their research thought process. Special emphasis is given to the professional research development of the scholars through many activities/symposiums that are highly appreciated at both national and international level. Additionally, strong collaborations with renowned world class institutes provide them the facility to make continuous interactions in area of interest which also enhance their scientific approach. In our Doctor of Philosophy in Computer Science program, we provide a strong foundation to our students with course work in advance topics of computer science and cross disciplinary areas which set their foundation to meet challenges of quality research and to publish their scientific articles in international conferences and journals as determined by the HEC.

Admission requirements, program duration, coursework and thesis/research project details are given at page number 59.

## Offering Campuses

- Islamabad, Lahore, Abbottabad, Wah



# FACULTY MEMBERS

## DEPARTMENT OF COMPUTER SCIENCE

### Islamabad Campus

#### Professors

- **Dr. Sajjad Mohsin**, PhD, Muroran Institute of Technology, Japan

#### Associate Professors

- **Dr. Nasro Min-Allah**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China
- **Dr. M. Manzoor Ilahi Tamimy**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China
- **Dr. Masoom Alam**, PhD, University of Innsbruck, Austria

#### Assistant Professors

- **Dr. Muhammad Asim Noor**, PhD, Johannes Kepler University, Linz, Austria
- **Dr. Malik Najmus Saqib**, PhD, Technical University, Vienna, Austria
- **Dr. Majid Iqbal Khan**, PhD, University of Vienna, Austria
- **Dr. Sadaf Tanvir**, PhD, University of Grenoble, France
- **Dr. Naveed Ahmed**, PhD, Cambridge University, UK
- **Dr. Mansoor Ahmed Awan**, PhD, Vienna University of Technology, Austria
- **Dr. Farhana Jabeen**, PhD, Manchester University, UK

- **Dr. Abid Khan**, PhD, Harbin Institute of Technology, China
- **Dr. Iftikhar Azim Niaz**, PhD, University of Tsukuba, Japan
- **Dr. Muzafar Khan**, PhD, Universiti Teknologi Petronas, Malaysia
- **Dr. Amir Hayat**, PhD, Graz University of Technology, Austria
- **Dr. Sheikh Zia ud din**, PhD, Asian Institute of Technology, Pathum Thani, Thailand
- **Dr. Amir Hanif Dar**, PhD, Beijing Institute of Technology, China
- **Dr. Fatima Ashraf**, PhD, Universiti Utara Malaysia, Malaysia
- **Dr. Rafi Ullah**, PhD, PIEAS, Nilore, Islamabad, Pakistan
- **Dr. Ahmad Raza Shahid**, PhD, University of York, UK
- **Dr. Yasir Faheem**, PhD, University of Paris, France
- **Dr. Asad Ali Safi**, PhD, Technical University of Munich, Germany
- **Dr. Ghufuran Ahmed**, PhD, Muhammad Ali Jinnah university, Islamabad
- **Dr. Munam Ali Shah**, PhD, University of Bedfordshire, UK
- **Dr. Ubaid Abbasi**, PhD, University of Bordeaux, France
- **Dr. Malik Ahmad Kamran**, PhD, Vienna University of Technology, Austria

- **Dr. Shehla Abbas**, PhD, University of Bordeaux, France

Beside 14 Assistant Professors, 35 Lecturers and 15 Research Associates/Teaching Associates are also associated with the department.

### Lahore Campus

#### Professors

- **Dr. Syed Asad Hussain**, PhD, Queen's University Belfast, UK
- **Dr. Zulfiqar Habib**, PhD, Kagoshima University, Japan

#### Advisors

- **Dr. Javaid Sikandar Mirza**, PhD, University of Salford, UK

#### Associate Professors

- **Dr. Ghulam Rasool**, PhD, TU Ilmenau, Germany
- **Dr. Muhammad Umair**, PhD, Vrije Universiteit Amsterdam, Netherlands

#### Assistant Professors

- **Dr. Mudasser Naseer**, PhD, Beihang University, Beijing, China
- **Dr. Muhammad Atif**, PhD, Eindhoven University of Technology, Netherlands

## FACULTY MEMBERS

### DEPARTMENT OF COMPUTER SCIENCE

- **Dr. Muhammad Adnan Hashmi**, PhD, University Pierre and Marie Curie, France
- **Dr. Muhammad Humayoun**, PhD, University of Grenoble, France
- **Dr. M. Salman Ahmad Khan**, PhD, Graz university of Technology Austria
- **Dr. Rao Adeel Nawab**, PhD, University of Sheffield, UK
- **Dr. Sameer Ahmad**, PhD, University BlaisePascal,Clermont-Ferrand, France
- **Dr. Syed Asim Ali**, PhD, University of Paris, France
- **Dr. Tabbasum Naz**, PhD, Vienna University of Technology, Austria
- **Dr. Atif Manzoor**, PhD, Vienna University of Technology, Austria
- **Dr. Muhammad Intizar Ali**, PhD, University of Vienna, Austria
- **Dr. Saqib Rasool Ch**, PhD, Brunel University, UK
- **Dr. Hamid Turab Mirza**, PhD, Zhejiang University, China
- **Dr. Ijaz Ahmed**, PhD, University of Madeira, Portugal
- **Dr. Muhammad Hasanain Ch**, PhD, Asian Institute of Technology, Thailand
- **Dr. Safee Ullah Chaudhary**, PhD, Korea Advanced Institute of Science and Technology, South Korea
- **Dr. Saeed Ul Hassan**, PhD, Asian Institute of Technology, Thailand

- **Dr. Adnan Ahmad**, PhD, Massey University, New Zealand
- **Dr. Ghulam Mahdi**, PhD, University of Mantpelliea, France

Besides, 15 Assistant Professors, 15 Lecturers and 02 Research Associates are also associated with this department.

### Abbottabad Campus

#### Associate Professors

- **Dr. Sajjad Ahmad Madani**, PhD, Vienna University, Austria
- **Dr. Waqas Anwar**, PhD, Harbin Institute of Technology, China
- **Dr. Khizar Hayat**, PhD, Montpellier 2 University, France

#### Assistant Professors

- **Dr. Imran Ali Khan**, PhD, GSCAS, China
- **Dr. Danish Irfan**, Ph.D, Harbin Institute of Technology, China
- **Dr. Babar Nazir**, Ph.D, University Technology Petronas Malaysia
- **Dr. Tasswar Iqbal**, Ph.D, Vienna University of Technology, Austria
- **Dr. Abbas Khalid**, PhD, Lancaster University, UK
- **Dr. Eraj Khan**, PhD, Lancaster University, UK
- **Dr. Muhammad Shahzad Sarfraz**, PhD, Asian Institute of Technology, Thailand

- **Dr. Rafi us Shan**, PhD, Lancaster University, UK
- **Dr. Ahmed Din**, PhD, Politecnico di Torino, Italy
- **Dr. Usama Ijaz Bajwa**, PhD, CASE, UET Taxila, Pakistan
- **Dr. Fiaz Gul Khan**, PhD, Politecnico di Torino, Italy
- **Dr. Qadeer Baig**, PhD, University of Grenoble, France
- **Dr. Zia Ur Rehman**, PhD, PIEAS, Pakistan
- **Dr. Kashif Zia**, PhD, University of Linz, Austria
- **Dr. Shahid Raza**, PhD, Mälardalen University, Sweden

Besides, 08 Assistant Professors, 18 Lecturers are also associated with this department.

### Wah Campus

#### Associate Professors

- **Dr. Ehsan Ullah Munir**, PhD, Harbin Institute of Technology, China
- **Dr. M. Wasif Nisar**, PhD, Graduate School of Chinese Academy of Sciences, Beijing, China

## Assistant Professors

- **Dr. Zareen Mehboob**, PhD, University of Manchester, UK
- **Dr. Nadir Shah**, PhD, Beijing University, Beijing China
- **Dr. Waqar Mehmood**, PhD, Innsbruck University, Austria
- **Dr. Tariq Umar**, PhD, Lancaster University, UK
- **Dr. Farrukh Zeeshan Khan**, PhD, Vienna University of Technology, Austria
- **Dr. Mohammad Kamran**, PhD, FAST University Islamabad, Pakistan
- **Dr. Shafqat Ali Shad**, PhD, University of Science and Technology of China
- **Dr. Muhammad Sharif**, MS, CIIT, Islamabad, Pakistan

Besides, 09 Assistant Professors, 10 Lecturers and 02 Research Associates are also associated with this department.

## Attock Campus

### Assistant Professors

- **Dr. Farman Ali Khan**, PhD, Vienna University of Technology, Austria
- **Dr. Qasim Khan**, PhD, Norwegian University of Science and Technology, Norway
- **Dr. Adnan Sohail**, PhD, Vienna University of Technology, Austria

- **Dr. Saqib Iqbal**, PhD, University of Huddersfield, UK

Besides, 05 Assistant Professors and 09 Lecturers are also associated with this department.

## Sahiwal Campus

### Associate Professors

- **Dr. Amjad Farooq**, PhD, University of Engineering and Technology, Lahore, Pakistan

### Assistant Professors

- **Dr. Javed Ferzand**, PhD, Graz University of Technology, Austria
- **Dr. Sadia Aziz**, PhD, Wuhan University of Technology, China
- **Dr. Qaisar Abbas**, PhD, Huazhong University of Science and Technology, China
- **Dr. Syed Khuram Shahzad**, PhD, Graz University of Technology, Graz, Austria

Besides, 09 Assistant Professors, 15 Lecturers and 02 Research Associates are also associated with the department.

## Vehari Campus

### Associate Professors

- **Dr. Ziauddin**, PhD, Gomal University, D.I.K, Pakistan
- **Dr. Shaukat Iqbal**, PhD, GIKIEST, Topi, Pakistan

### Assistant Professors

- **Dr. Muhammad Imran**, PhD, Government College University Lahore, Pakistan
- **Dr. Muntazim Abbas Hashmi**, PhD, Government College University, Lahore, Pakistan

Besides, 02 Assistant Professors, 10 Lecturers and 02 Research Associates are also associated with this department.



## Health Informatics Unit

The Health Informatics Unit has established on Inter Departmental Research Group. Centre for Advanced Studies in Telecommunication (CAST), Computer Science Department (CS) and Health Information and Management System (HIMS), Ministry of Health are members of research group. Health Informatics Unit encompasses health information systems used in health care delivery and management. The Group focuses on the use of health information technology to improve the quality and reduce the cost of health care. Research Group members share an interest in health information technology issues such as using technology to support patient-centered care, develop disease management tools, enhance the coordination and continuity of care, identify beneficial uses of the Internet, and assist in the timely collection of data.

Health Informatics Unit offers courses of study ranging from an introductory overview to an intense, full curriculum in Health Informatics, with special emphasis placed on the fields of health information systems, management and health-enabling technologies. Courses of study are offered as part of an innovative curriculum, which involves collaborations with international universities and health care institutions. Health Informatics focuses on the

application of computer information systems to health care and public health. It extends beyond simply using the computer as a tool for computation into the process of knowledge acquisition, storage, retrieval, representation and manipulation of data.

Our mission of the multidisciplinary Health Informatics Program is to “Integrate Health care system with I.T.” A useful model of the emergence of informatics is to consider different roles of clinicians, management and IT services in health care. Health Informatics is the science of information management in healthcare and it blends clinical practice, decision - making and research. Health Informatics is a body of knowledge and a set of techniques to organize and manage information in support of research, education and patient care.

**Career Potential/Career Prospects:** After completing Masters in Health Informatics, you will have the capability to apply for a wide variety of posts both in public and private hospitals, pharmaceutical industries, and multi-national Health Care Organizations, N.G.Os and Overseas organizations. Following could be the professional roles:

- Clinician with health Informatics leader
- Health information management and exchange specialist

- Health information privacy and security specialist
- Research and development scientist
- Programmers and software engineer
- Health IT sub-specialist
- Practice work flow and information management redesign specialist
- Clinician / practitioner consultants
- Implementation support specialists
- Implementation managers
- Technical/software support

**Strategic Health Informatics Advanced Research:** The Health Information is supporting innovative research to address well-documented problems that impede the adoption of health IT. The knowledge generated and innovations created from this program will accelerate progress toward the meaningful use of IT in health, adaptive and nationwide health care system. The MS students get research opportunities in the fields of Health Informatics, Electronic Health Record, Modeling to Develop a Clinical Practice, Networking, Data Mining, Health Early Warning System, IT skills for health professionals and dispensing of controlled medicines through software, computing for Physicians, Dental Surgeons and Pharmacists are available. Health Informatics Unit and

University of Otago, New Zealand are research partners. Students' thesis will be supervised by senior Professor(s) of University of Otago and some other leading overseas universities, in addition to local faculty.

The Health Informatics Unit has following International linkages:

- Member of the International Medical Informatics Association (IMIA) USA
- Global Health Work Force (GHWA) Geneva (Switzerland) a subsidiary of World Health Organization (WHO)
- The Commission on Accreditation for Health Informatics and Management Education (CAHIM) USA
- Global Allied for ICT and Development
- (GAID) approved by the United Nations
- Global Development Network (GDN)
- Health System Action Network (HSAN)
- Health Care Information for All 2015 (HIFA)
- Geneva Foundation for Medical Education and Research (GFMER)
- The World Health Organization (WHO), Department of Human Resources for Health
- Reproductive Health and Research, the Health Professionals Global Network (HPGN)
- Canada's Health Informatics Association (COAH)
- International Network for the availability of Scientific Publications (INASP)
- Health Alliance (USA)
- Community mHealth Working Group (USA)
- Rural and Remote Health(The Electronic Journal Research, Education Practice andPolicy)
- National Prevention Information Network(NPIN)
- United NationsFoundation(USA)
- Health Data Management (USA)
- National Coordinator for Health Information Technology (USA)
- Information Technology and Innovation Foundation

### Graduate Programs

Currently the following graduate program is being offered and pursued as per latest trends in the professional dynamic market. The introduction of program is as under:

### Master of Science in Health Informatics

The Master of Science in Health Informatics program at CIIT is

designed to deliver advanced training in informatics to the health care professionals who want to redirect their careers to become health informatics researchers, as well as those who are interested in integrating health informatics expertise in their current professional roles. This program is likely to appeal to the so-called "early adopters" within the health care environment, health professionals involved in system implementation and individuals with an interest in conducting related research.

This program requires satisfactory completion of courses of the program and the structure suggested by the department. This includes routine classroom coaching of core and elective courses demonstrated and explained with help of case studies, examples and real life scenarios. Health Informatics Unit offer courses of study ranging from an introductory overview to an intense, full curriculum in Health Informatics, with special emphasis placed on the fields of health information systems, management and health-enabling technologies. Courses of study are offered as part of an innovative curriculum, which involves collaborations with international universities and health care institutions. Health Informatics (HI) focuses on the application of computer information systems to health care and public health. It extends beyond simply using the computer as a tool for computation into

the process of knowledge acquisition, storage, retrieval, representation and manipulation of data.

### Entry Requirements

- A 16 years degree in relevant field (MBBS, BDS, Pharm. D, and BS Nursing) from an accredited educational institution with First Division (annual system) or CGPA 2.5/4.0 (semester system).
- No third division (annual system) or D grade (semester system).
- GAT (General) with minimum of 50% marks.

### Offering Campus

- Islamabad

## HEALTH INFORMATICS UNIT

### Advisor

- **Dr. Shafaat A. Khan**, MS, New York Medical College, USA

### Assistant Professors

- **Dr. Abid Hussain**, MS CIIT Islamabad, Pakistan
- **Dr. Seema Rizvi**, MS, CIIT Islamabad, Pakistan

Beside 02 Lecturers are also associated with the department.



## Scheme of Studies

### Note

- a) The approved Scheme of Studies of all graduate programs is available in the Registrar Office of the respective campus.
- b) The approved rules and regulations governing graduate programs can be obtained from Registrar office of respective campus.
- c) All other regulations approved and issued from time to time, regarding undergraduate degree programs, shall also be applicable.

### *CIIT Campuses Map Guide*

#### **CIIT Islamabad**

CIIT Islamabad campus is accessible via Rawalpindi and Islamabad. From Rawalpindi take the Murree road crossing Faizabad chowk and heading straight towards Rawal Chowk. Take right to and take Park Road that will lead you to the splendid campus of CIIT located on the right side after 10 minutes drive. From within Islamabad follow any route connecting to Zero point and then take the Islamabad highway. After reaching Faizabad chowk take left and you will be heading towards Rawal chowk. After having reached to the Rawal Chowk, take right and take Park Road that will lead you to the splendid

campus of CIIT located on the right side after 10 minutes drive.

#### **CIIT Abbottabad**

Taking the route of Wah from Islamabad you will be crossing Wah, Hasanabdal and Hawalian to enter the main city of Abbottabad. Then on following the road leading to Military Academy Kakul will give you a sight to CIIT Abbottabad campus.

#### **CIIT Wah**

Starting from Islamabad, take the road to Taxila. After crossing Taxila underpass, take “u” turn in front of POF barrier No. 5 and move back towards Taxila. Drive further for 200 meters on G.T. Road, where CIIT wah campus is situated on left side of the road.

#### **CIIT Lahore**

Starting from Islamabad follow motorway route to Lahore. On reaching Lahore take Canal road i.e. near to Tokhar Niaz Baig chowk. From the round about turn towards the Raiwind road, at the end of the road, turn on right for Defence road on which the Lahore CIIT campus is situated.

#### **CIIT Attock**

Starting from Islamabad towards Peshawar on Grand Trunk Road, after crossing Wah and Hassanabdal, PAF

Aeronautical Complex Kamra will be reached. At Kamra, from Qutba Chowk take the left road. Then following the Kamra Road again take left from the crossing to enter Attock City where CIIT’s Campus is located on the right side before entering into the main city.

#### **CIIT Sahiwal**

Following the motorway route or Grand Trunk Road from Islamabad to Lahore, further take the road from Lahore to Multan to approach Sahiwal city. On arrival at Sahiwal city, take the Tufail Shaheed Road and after crossing Over Head Bridge, move towards Police Lines to reach Jail road, where CIIT Sahiwal Campus is situated.

#### **CIIT Vehari**

From Multan, take the Multan road to reach Vehari campus located near Peer Murad Adda on the right side of the road.

From Burewala, take the Burewala road to reach “V” chowk, and from there gear on to Multan road to reach Vehari campus located near Peer Murad Adda on the left side of the road.



## Contacts

### Admission Office Contacts

Following may be contacted for any admission query:

#### Principal Seat

Mr. Qazi Ammar Zia Uddin  
Assistant registrar (Exams)  
Phone (Off): 051-9049-5217  
Fax (Off): 051-9247006  
E-mail: qaziammar@comsats.edu.pk

#### Islamabad

Ms. Seemi Haq  
Incharge (Admissions)  
Phone (Off): 051-9247000-3  
Fax(Off): 051-9247006  
E-mail: seemihaq@comsats.edu.pk

#### Abbottabad

Mr. Ghias-ud-din Shah  
Incharge (Student Affairs)  
Phone (Off): 0992-383591-6  
Fax (Off): 0992-383441  
E-mail: ghias@ciit.net.pk

#### Wah

Dr. Akmal Javaid  
Incharge (Student Affairs)/OIC  
Admissions  
Phone (Off): 051-9272614-5  
Fax (Off): 051-4546850  
E-mail: akmal@ciitwah.edu.pk

#### Lahore

Mr. Ata Ur Rehman  
Incharge (Student Services Center)  
Phone (Off): 042-111001007  
Fax (Off): 042-99203100  
Email: arehman@ciitlahore.edu.pk

#### Attock

Dr. Jamshaid Ahmed  
Incharge Admissions  
Phone (Off): 057-9316330  
Ext: 143,158  
Fax (Off): 057-9316329  
Email: dr.jamshaid@ciit-attock.edu.pk

#### Sahiwal

Mr. Safdar Ali  
Incharge (Admissions)  
Phone (Off): 040-9200100, 4305001  
Fax (Off): 040-4305006  
E-mail: Safdar@ciitsahiwal.edu.pk

#### Vehari

Dr. Imran Khan  
Assistant Professor/Convener  
Admission Committee  
Phone (Off): 067-3001606  
E-mail: admissions@ciitvehari.edu.pk

#### Virtual Campus

Mr. Fazal Ur Rehman  
Incharge (Student Affairs)  
Phone (Off): 051-9262238  
Fax (Off): 051-9258489  
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