

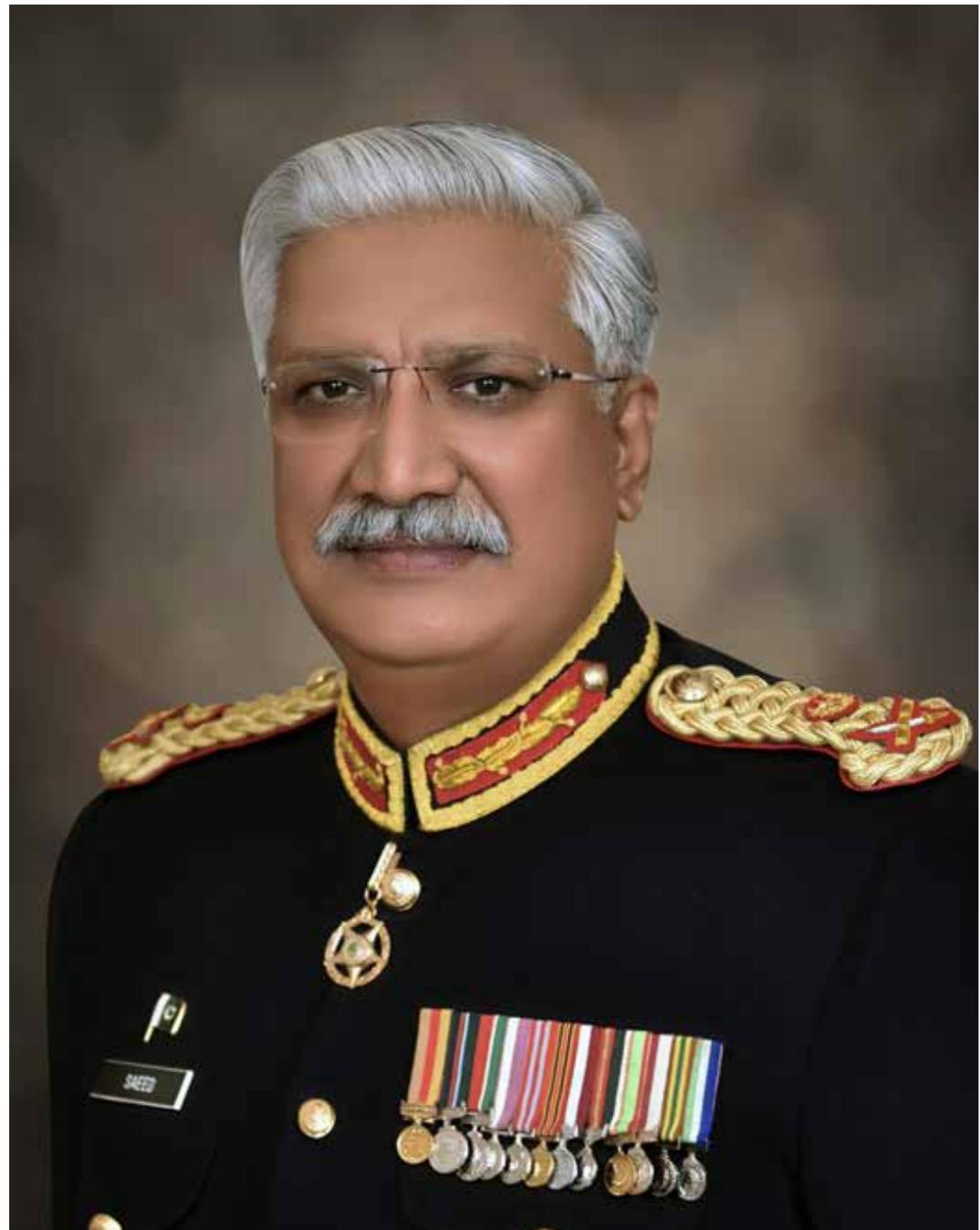


**DHA  
SUFFA  
UNIVERSITY**  
Learn to discover at Pakistan's  
fastest growing university



**PROSPECTUS  
2022-2023**

# CHANCELLOR OF THE UNIVERSITY



**Lt Gen Muhammad Saeed HI(M)**  
Commander 5 Corps  
President Executive Board, DHA Karachi

# DHA SUFFA FOUNDATION MEMBERS

**Administrator DHA Karachi**  
**Vice Chancellor DHA Suffa University**  
**Registrar DHA Suffa University**  
**Secretary DHA Karachi**  
**Director Finance DHA Karachi**

# DHA MEMBERS OF DSU BOARD OF GOVERNERS

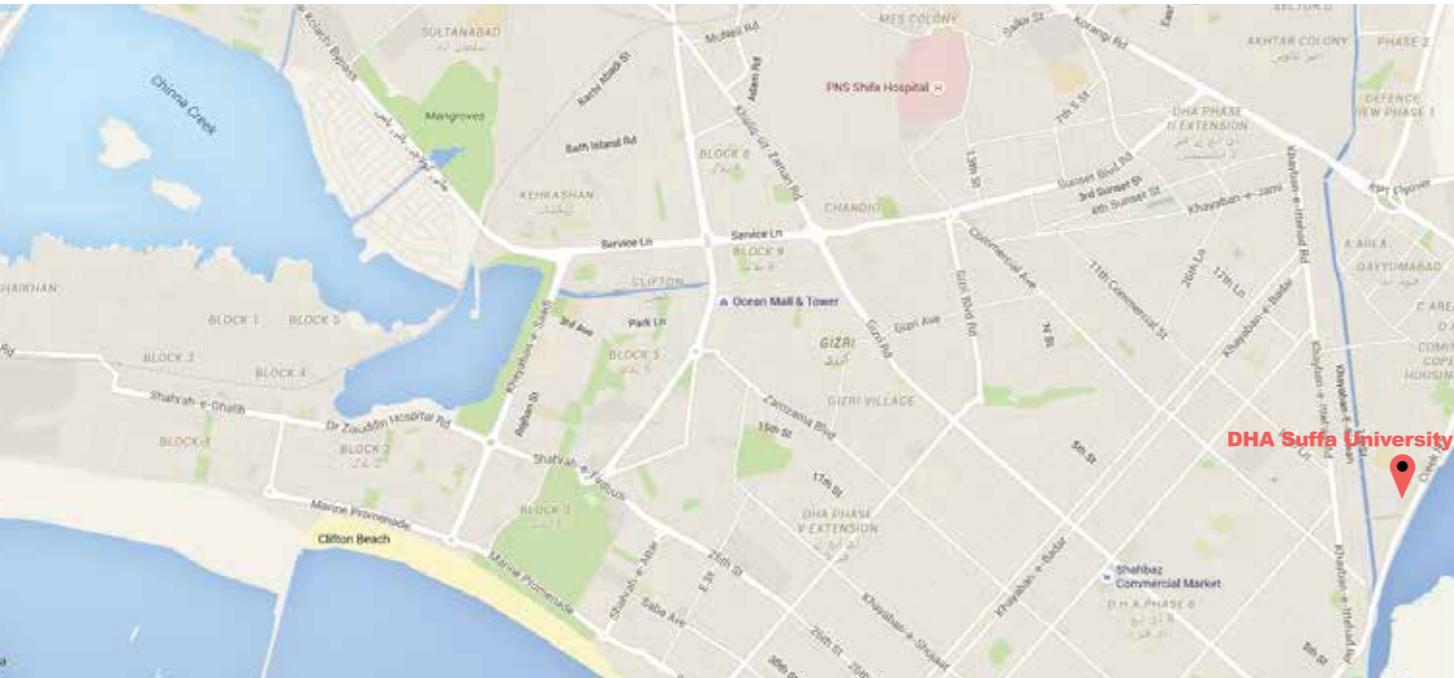
**Administrator DHA Karachi**  
**Secretary DHA Karachi**  
**Director Pers & Adm DHA Karachi**  
**Director Education DHA Karachi**  
**Director Finance DHA Karachi**



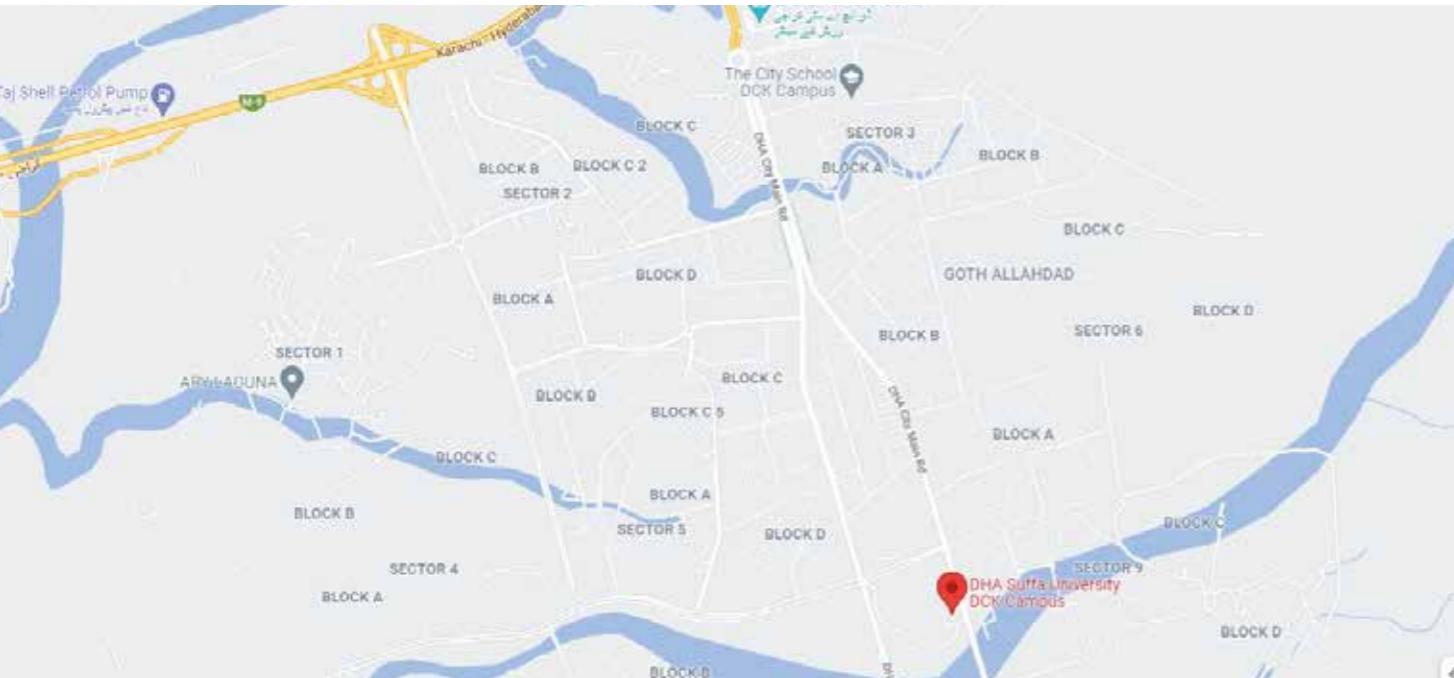
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## DSU MAIN CAMPUS LOCATION



## DSU CITY CAMPUS LOCATION



## DHA SUFFA UNIVERSITY A PREMIER INSTITUTION

DHA Karachi has always given due emphasis to the uplift of education and continues to take active measures towards ensuring that quality education is made accessible to the Pakistani youth. In the year 2002, it became the first DHA in Pakistan to obtain the Charter for establishing a University.

The 'DHA Suffa Foundation', under the patronage of DHA Karachi, aims to strive for the promotion and uplift of higher education and to act as a catalyst in technology advancement. It plans to establish other educational institutions including schools, colleges and computer learning centers to foster an environment of academic growth, entrepreneurship and professional development. This foundation has been created with a vision to expand and diversify the country's knowledge base and to promote cutting-edge research in various sectors for the nation's economic uplift.

DHA Suffa University (DSU) imparts quality education in one of the upscale housing societies of Pakistan's largest cosmopolitan city, Karachi. The purpose-built campus of DHA Suffa University is located on Khayaban-e-Tufail, a two-minute drive from main Khayaban-e-Ittehad. The campus, sprawling over 4 acres of land, with its imposing building and lush green lawns, serves as a landmark in the area. Nestled in the secure and serene environment of DHA Karachi, with major commercial banks, parks, medical centers, restaurants, sports arenas and mosques in close vicinity, the University is conveniently accessible by public transport.



# WELCOME NOTE FROM THE VICE CHANCELLOR



In the last five decades or so the world has witnessed so much exponential growth in scientific and technological fields which it had perhaps never seen in the previous several centuries. Phenomenal increase in scientific inventions, explorations, researches, innovations and technological advancements are all mind boggling and have left no choice for any country but to keep pace with them if they have to survive in the comity of nations with peace & dignity.

Those countries which lack in acquisition of modern knowledge particularly the technical & scientific knowledge would soon be in a disadvantageous position. When we look at the developed nations we visualize that they have progressed mainly because their economies were boosted by innovations which is carried out at the universities. Knowledge economy is a buzz word today which is in fact composed of new knowledge and its ramifications that is also developed at the universities.

Universities are expected worldwide to provide solutions for problems of the communities and industries and produce leaders. The institutions of higher learning have greater responsibilities to secure future of the nations, provide tools to accelerate engines of growth, create competitiveness and lead towards prosperity. These are the challenges facing our country today which should be taken as opportunities by our students for learning and serving. I am therefore, delighted to welcome the prospective students to DHA Suffa University (DSU) which is a modern center of higher learning for engineering, science and management programs in a conducive academic environment enabling them to nurture their talent and strengths.

Our focus is to raise quality of output, undertake research, steer the university into an arena of academic excellence, foster a vibrant, successful and interactive research community that generates ideas and discoveries, create new fields of knowledge and promote impact-driven research. Stress is laid on pursuit of innovative exploration, translate the ideas into knowledge economy and boost competitiveness and wellbeing for the country. Mentorship of our accomplished faculty is available alongside labs with state-of-the-art equipment. Moreover, we are in the process of setting up in-campus facilities for incubation and entrepreneurship and strengthening market-driven skill sets.

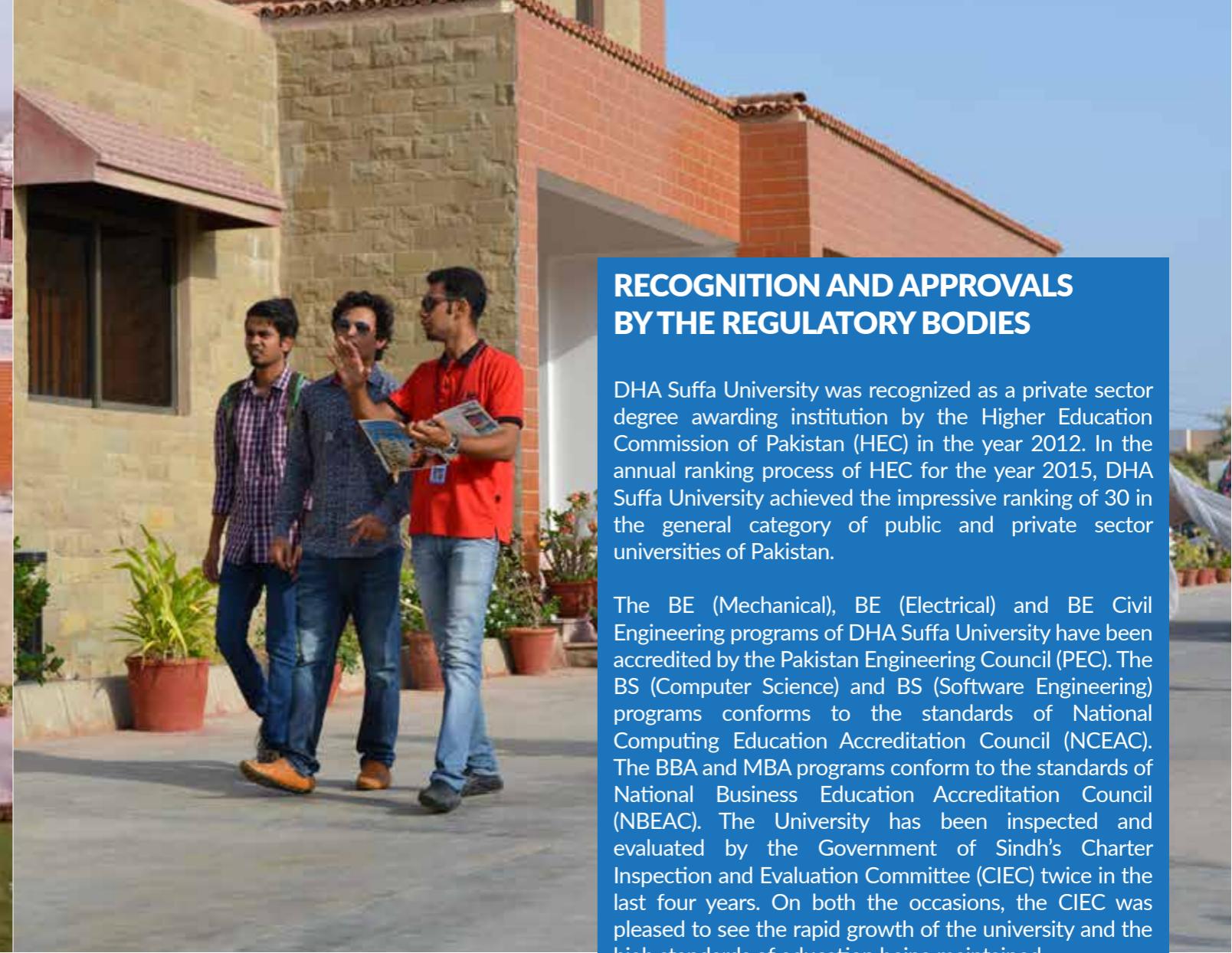
Currently a blend of selected degree programs is on offer, duly accredited by the regulatory bodies and demand-driven in the job market i.e. Mechanical Engineering, Electrical Engineering, Computer Science and Business Management. Shortly, we will add few more programs to cope with the burgeoning demand for new technologies/programs. Besides, we have on the anvil strengthening of our postgraduate program offering Ph. D. and Masters in selected technologies. We have future expansion plans to develop our DHA City Campus (DHA Phase-IX on Super Highway) to meet the upcoming demand for more technologies and new programs. It is hoped that soon you will become a part of DSU community of graduates and alumni network globally.

**Prof. Dr. Muhammad Afzal Haque**

**Vice Chancellor**

PhD (Mechanical Engineering/Nuclear Engineering), University of Manchester, UK





## RECOGNITION AND APPROVALS BY THE REGULATORY BODIES

DHA Suffa University was recognized as a private sector degree awarding institution by the Higher Education Commission of Pakistan (HEC) in the year 2012. In the annual ranking process of HEC for the year 2015, DHA Suffa University achieved the impressive ranking of 30 in the general category of public and private sector universities of Pakistan.

The BE (Mechanical), BE (Electrical) and BE Civil Engineering programs of DHA Suffa University have been accredited by the Pakistan Engineering Council (PEC). The BS (Computer Science) and BS (Software Engineering) programs conform to the standards of National Computing Education Accreditation Council (NCEAC). The BBA and MBA programs conform to the standards of National Business Education Accreditation Council (NBEAC). The University has been inspected and evaluated by the Government of Sindh's Charter Inspection and Evaluation Committee (CIEC) twice in the last four years. On both the occasions, the CIEC was pleased to see the rapid growth of the university and the high standards of education being maintained.

HEC NOC/Recognition Letter, July 2012

## DHA SUFFA UNIVERSITY AT A GLANCE

DHA Suffa University aspires to be ranked amongst the nation's top educational institutions. The University opened its doors in Fall 2012 to the youth of the country, with a vision to produce world class engineers, computer scientists, entrepreneurs and business leaders. DSU offers undergraduate, graduate and doctoral programs in Engineering, Computer Science, Management Sciences and newly launched program BS in Software Engineering, BE in Civil Engineering, BS in International Relations and BS in English. Over the past three years, DSU has undergone overwhelming changes to build effective systems. From infrastructure development to technology upgrades, curriculum revamp to formulation of pedagogy, addition of foreign qualified faculty to introduction of new programs, DSU is systematically taking giant leaps towards achieving its vision of being a premier educational institution.

## HISTORY

DHA Suffa University was granted a Charter by the Sindh Government in the year 2002. The Charter is not discipline specific. It gives freedom to launch programs in any discipline. The University derives its name from the rectangular platform in "Masjid-e-Nabwi", where companions of the Prophet (PBUH) used to spend most of their time, day and night in the quest of knowledge. The University intends to generate the same zeal and thirst for knowledge among its students and faculty.

The construction of the present campus on 4 acres of land in DHA Phase VII (Ext) started in the year 2004 and was completed in the year 2007. The capacity of this campus is 2000 students. The University is setting up its second campus, spreading over 30 acres of land in DHA City, Karachi.

The Master Plan of the new campus has been developed by M/S Osmani & Company (Pvt). Ltd, one of the leading town planners and real estate developers in the country. The new campus will be fully residential for the faculty, staff and students. It will have the capacity to accommodate 5000 students.



# SUCCESS STARTS AT DHA SUFFA UNIVERSITY

## STUDENT SOCIETIES

The Student Societies Coordination Committee at DHA Suffa University aligns student activities with the University's core values of faith, character, learning, discovery and diversity. Student Societies contribute to the social integration of students and provide them with avenues and opportunities to learn and acquire important skills and experiences that are essential for success in their careers.

Our student societies focus on developing both co-curricular and extra-curricular skills. Student societies at DSU are divided into two clusters that are as follows:

- **Professional/Technical Societies and Clubs** including ACM Society, ASME Section, Entrepreneur Society, IEEE Student Branch, IMechE Chapter, Management Society (Finance Club, HRM Club, Marketing Club and MIS club), Mathematics Society and Leadership Society.
- **Social/Cultural Societies and Clubs** including Debating and Public Speaking Society, Character Building Society, Literary Society, Sports Society, Women Empowerment Society, Entertainment and Excursion Society (Adventure Club, Drama and Music Club, Photography and Painting Club), Community Service and Conservation Society.

Student Societies at DSU have not only conducted various intra and inter-university events but have also proudly secured positions at national and international competitions.

## THE DSU PHILOSOPHY

The educational philosophy of DSU is three tiered: inculcating relevant knowledge in students, helping them with their personal development and giving them a real professional life experience. This philosophy makes the DSU experience "a reward for life". DSU's online admissions system, modern curricula, unique teaching methodologies, continuous evaluation, online examination system and an environment that is conducive to learning make it a progressive and sought after institution.

DSU believes that no student should be deprived of education on the basis of his/her financial status. It, therefore, practices a need-blind policy for admissions, which means the sole admission criterion for all students is merit.

## STUDY WITH OUR ACCOMPLISHED FACULTY

DSU boasts of a highly accomplished full-time faculty which is actively engaged in teaching as well as research. Our faculty members have a vast experience of working for some of the most prestigious institutions that are locally and globally recognized in academia, research and industry. Their interests include writing research papers, developing case studies and providing consultancy services to public and private sector organizations. They believe in creation of knowledge through research and innovation.

## VIBRANT STUDENT COMMUNITY

DSU's students hail from widely diverse backgrounds and they pursue a variety of interests and passions during their stay at the University. Our students take keen interest in various activities ranging from Model United Nations, Sports, Naat Competitions, Math Olympiads and Programming Competitions, both at home and overseas.





DHA Suffa University Campus at DHA City, Karachi

## VISION

To become a globally recognized institution of higher education and research, which would extend the frontiers of knowledge and contribute significantly in nation building.

## MISSION

To achieve high standards in teaching, learning and research for becoming a world renowned academic institution.

## EQUAL OPPORTUNITY POLICY

DHA Suffa University is an equal opportunity institution with no discrimination on the basis of status, gender, language, religion, region, color, caste or creed. Merit is the sole criteria for admission, employment, academic and career progression. DSU encourages and facilitates students from rural areas, financially constrained families and foreign countries to study on open merit.

# CORE VALUES



## FAITH

Faith, in general, means confidence or trust in a person or entity. However, for DHA Suffa University, faith specifically means confidence or trust in Almighty Allah, the creator of the universe. Faith in the creator is the foundation of all good human values. It establishes the vital link between the creator and the creation. All faiths promote peace and love. DHA Suffa University also upholds the view that faith and reason are not mutually exclusive. True faith must exhibit itself through action. However, we must not comment on another person's faith under any situation.

## LEARNING

DSU is a university where learning and acquiring knowledge is the core business. During the process of learning, human faculties of curiosity, understanding and communication are fully activated. At DSU, we uphold the view that learning is a layered and ongoing process.

## DISCOVERY

The spirit of curiosity forces the human mind to find reasons for why and how things happen in the natural world. This leads to an effort to discover or research for finding answers to questions that arise from observation of the natural world. Discovery or research is only possible after some learning has taken place. Discovery may need quantitative and qualitative analytical skills which are developed in students as part of the learning process at DSU.

## CHARACTER

Character means knowing the difference between right and wrong and having the courage to do the right thing. The University lays great emphasis on character building. DSU firmly believes that character is the accumulation of thoughts, values, words and actions. It is established by long-term conscientious adherence to moral values. Efforts by parents, teachers and others to instill these values are important, but ultimately, Character is both formed and revealed by how one deals with everyday situations as well as extraordinary pressures and temptations.

## DIVERSITY

DHA Suffa University promotes diversity and opens its doors to all persons regardless of their gender, religion, social status, color, caste and creed. DSU is committed to recognizing and appreciating the variety of characteristics that make individuals unique. It promotes and celebrates individual and collective achievements.

# STATUTORY BODIES

## BOARD OF GOVERNORS

**The general supervision and control of the affairs of the University rests with the Board of Governors, the composition of which is as follows:**

- Commander 5 Corps / PEB DHA who is Chancellor of the University and Chairman of the Board
- A Judge of the Sindh High Court, nominated by the Chief Justice
- The Secretary Education, Government of Sindh
- The Chairman, Higher Education Commission
- The Administrator, Defence Housing Authority, Karachi
- The Vice Chancellor, DSU
- One Vice Chancellor of a university nominated by the Chancellor
- Three nominees of the Defence Housing Authority, Karachi
- Two eminent educationists approved by the Chairman
- President of the Karachi Chamber of Commerce and Industry
- The Registrar who acts as the Secretary of the Board

## ACADEMIC COUNCIL

**The Academic Council is the highest academic body of the University, which oversees proper standards of instruction, research, publications and examinations. It regulates the academic activities of the University and comprises of the following members:**

- The Vice Chancellor who is the Chairperson of the Council
- All the Deans
- All the Heads of the Academic Departments
- All Professors and Associate Professors of the University
- One nominee of the Department of Education, Sindh
- One nominee of the Defence Housing Authority, Karachi
- Director Education of the Defence Housing Authority, Karachi
- Two eminent persons, one each from arts and sciences
- The Advisor (Academics) of the Higher Education Commission of Pakistan
- One nominee of Pakistan Engineering Council (PEC)
- The Director QEC
- The Registrar acts as the Secretary of the Council

# DEPARTMENT OF MECHANICAL ENGINEERING

## MISSION

To provide students with engineering knowledge and skills by offering undergraduate and graduate degree programs of high international standard in a conducive environment that promotes active learning and research.

## FACULTY

The faculty of mechanical engineering boasts of an accomplished and highly qualified pool of scholars, researchers and practical engineers. The faculty brings together a world of experience from Europe, North America, Middle and South East Asia enabling the latest knowledge and expertise to be available to students of the Mechanical Engineering Department at DHA Suffa University. Moreover, active partnerships and collaborations of our faculty members with leading research and development institutions ensures that our students are engaged in projects that stand parallel to the cutting-edge research around the world.

## ADVANCED LABORATORIES

The Mechanical Engineering Laboratories supplement the broad spectrum of theoretical Mechanical Engineering courses through practical and hands-on experience. The department has one of the best engineering laboratories in Pakistan and is continuously investing to upgrade and enhance its capabilities with the addition of state-of-the-art equipment and highly skilled laboratory staff. Students are strongly encouraged to conduct laboratory experiments and each student is mandated to work independently to understand difficult concepts more aptly through applications.

An additional feature of the Mechanical Engineering Laboratories is the use of software with high performance computers to design and corroborate advanced concepts of engineering in Fluid Dynamics, Heat Transfer, Structural Analysis, Materials Engineering, Manufacturing Technologies, CNC Processes, Optimization of Processes, Control Systems, Vibrations and Robotics.

The Mechanical Engineering Department is equipped with the following laboratories and workshop facilities:

### MECHANICAL ENGINEERING LABS

Computer Aided Engineering Center  
Computer Integrated Manufacturing Center  
Dynamics and Vibrations Lab  
Engineering Drawing Hall  
Engineering Workshop-I (Machine Shop)  
Engineering Workshop-II (Bench-Fitting Shop)  
Engineering Workshop-III (Welding Shop)  
Fluid Mechanics Lab  
Heat Transfer Lab  
Internal Combustion Engines Lab  
Machines Lab  
Materials Lab  
Manufacturing Lab  
Mechanics Lab  
Process Control Lab  
Refrigeration and Air Conditioning Lab  
Thermodynamics Lab

### ALLIED LABS

Applied Chemistry Lab  
Applied Physics Lab  
Computing Lab  
Programming Lab

## ACCREDITATIONS

The Mechanical Engineering programs at DHA Suffa University are approved by the Higher Education Commission (HEC) and the BE (Mechanical) program is fully-accredited by the Pakistan Engineering Council (PEC). The Department has successfully implemented Outcome Based Education (OBE) system across all semesters.



## DSU's FACILITIES OFFER LONG TERM BENEFITS PLACEMENTS AND INDUSTRIAL LIAISON

DHA Suffa University takes pride in providing the best and most ideal placement and internship opportunities to its students through a dedicated network of departmental Industrial Liaison Officers (ILOs) working closely in cooperation with Career Services and Corporate Relations (CS&CR) Directorate at DSU. The CS&CR Directorate works with dedication and utmost professionalism to ensure the students are placed in prestigious companies of the country. Industrial visits are arranged every semester starting from the third year of BE (Mechanical) program with the objective to acquaint students with industrial practices. The visits provide support to the curriculum requirements of the BE (Mechanical) degree program.

## PROFESSIONAL GROWTH

DHA Suffa University places strong emphasis on the professional growth of its students through a variety of curricular and co-curricular activities under the banner of student chapters of professional organizations. These include.

1. American Society of Mechanical Engineers (ASME)
2. Institution of Mechanical Engineers (IMechE)
3. The American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE)

In addition to these, DHA Suffa University has university-wide student societies that encourage students to participate proactively to develop and nurture soft-skills necessary for the modern-day work environments.

## INTERNATIONAL COMPETITIONS

Despite being in infancy stages, the ME Department, in strong congruence to the University's vision, has established professional centers for participation in international automotive and aerospace student-level competitions, namely:

1. Formula Student (Global)
2. Shell Eco-marathon Asia
3. Design, Build and Fly Competition, USA
4. IMechE UAS Challenge, UK

# DEPARTMENT OF ELECTRICAL ENGINEERING

## MISSION

The Department of Electrical Engineering (EE) at DSU has a mission to produce graduates who are mindful of societal issues and can assume diversified engineering roles in national and global organizations. We want our graduating students to become highly sought after by industries and business organizations and to undertake postgraduate research work that can contribute significantly to nation building.

At DSU's Electrical Engineering department, we believe in the holistic development of a student as an engineer. For this we have transformed our entire academic portfolio to an Outcome Based Education System (OBE) system. We focus on the overall development of students as Engineering Professionals and encourage them to participate in co-curricular and extra-curricular academic activities. Our students are rigorously groomed to deliver innovative and creative engineering solutions to the current societal problems. The Following are Program Educational Outcomes (PEOs) that we expect to see in our graduates after they have stepped into professional life:

1. Apply electrical engineering knowledge for analyzing complex industrial problems and propose technical solutions for the betterment of society.
2. Have the ability to perform in a multidisciplinary and challenging work environment, exhibiting effective communication skills, both individually and as a team member.
3. Be able to pursue research nationally as well as globally to enhance professional qualification and knowledge.

## FACULTY

DSU's Electrical Engineering Department boasts of highly qualified faculty members who are actively engaged in academic and research activities. The majority of EE faculty members at DSU have earned degrees from reputable foreign universities and have vast industrial work experience as well as research expertise in their respective professional fields. They have previously worked at the most prestigious national as well as international institutions and are up to date with latest concepts and trends in the field of Electrical Engineering. Their worthy research and teaching experience helps our students to excel in academics, acquire practical knowledge and hone their research capabilities.

## STATE-OF-THE-ART LABORATORIES

The Electrical Engineering Laboratories give students hands-on experience of Embedded Systems, Data Acquisition, Feedback Control, Communication Systems and Electrical Power Systems. The labs are equipped with advanced test and measurement equipment as well as computing platforms on which students are made to appreciate the real essence of Electrical Engineering design.

Our laboratories include:

- Computing Lab
- Programming Lab
- Circuits and Electronics Lab
- Digital Systems Lab
- Electrical Machines Lab
- Power Electronics Lab
- Telecom & Signal Processing Lab
- Electrical Power System Labs
- Process Control Lab
- Project Lab
- Electrical Workshop



## ACQUIRE APPROPRIATE SKILLS FOR SERVING THE INDUSTRY

## ACCREDITATION

Our BE (Electrical) program is recognized by HEC and approved by PEC. The University and the Department believe in working together with HEC and PEC at all levels to improve the quality of education in the country.

## CAREERS OUR GRADUATES CAN SEEK

DSU's alumni are employed in various renowned national and international organizations. The Electrical Engineering program offers its students three specialization streams: Electrical Power Systems, Telecommunications and Electronics. We enable our graduates to choose from a variety of fields in their professional careers. Graduates can become members of design or support engineering teams at industrial and business organizations, locally as well as globally. The opportunities to excel in higher education, research and consultancy can also be pursued.

## INDUSTRIAL LIAISON

Our department is rigorously taking steps to establish linkages with the industry. We believe that our students should fulfill the needs of employers, industries and the society at large. Recently, students have completed internships at major engineering industries in Karachi, including PIA and K-Electric. Field trips, participation in competitions organized by the industry and guest speaker sessions by experts from various companies are some of the ways through which we are extending and strengthening our collaboration with potential employers.

# DEPARTMENT OF COMPUTER SCIENCE

## VISION

The Computer Science Department aims to produce outstanding computer specialists to meet the requirements of the job market and add value to the field of Information Technology.

## INTRODUCTION

The Department of Computer Science offers programs that produce well-versed computer specialists to meet expectations of the market. Our curriculum is on par with the best in the world. It gives our students opportunities to adapt themselves to emerging technologies and innovative ideas. The department is keen to prepare its students to meet the needs of global as well as Pakistani companies; therefore, our pedagogy includes extensive laboratory work, independent projects, field work, task-based teaching and extensive research projects.

## FACULTY

The Department has outstanding faculty with immense experience of teaching and research in leading universities. A majority of them exhibit industrial experience. The faculty is keenly engaged in developing solutions for the contemporary problems using high-tech concepts. Such projects have great potential for local as well as overseas funding and grants. Our faculty provides guidance to conduct research in many areas including Artificial Intelligence, Bio-Informatics, Computational Genetics, Computational Linguistics, Networking, Wireless Networking, Databases, Distributed and Parallel Computing, Information Security, Multimedia and Game Development, Computer Graphics and Visualization, and Software Engineering.

## LABORATORIES

The laboratories in the Department of Computer Science at DSU provide students with hands-on experience in analysis, design, coding and testing activities for computational problems. Computing tools and devices are powered by a state-of-the-art data center to assist the development and analysis of computing intensive applications. The laboratories provide opportunities for students to explore and learn core computing practices and prepare them to tackle real-world problems. The Department has established the following labs to cater to the needs of students and researchers:

- Advanced Computing Lab
- Systems Lab
- DSU Media Lab
- CUDA Research Lab



## COMPUTER GRAPHICS AND VISUALIZATION

The Computer Graphics and Visualization (CGV) research group is the first and only research group in Pakistan that is working in the area of Advanced Computer Graphics and Visualization. Ever since its inception, the CGV research group has published several research articles at international venues and impact factor journals. It has developed close collaborations with research groups at several international universities, including University of Glasgow in UK, King Abdul Aziz University in Jeddah, Saudi Arabia, Dalian Maritime University in Dalian, PR China, and Nanyang Technological University, Singapore. The research center has won hardware grant from NVIDIA® through the NVIDIA CUDA® Teaching Center award twice. Students get the chance to work under the guidance of researchers in their final year projects. Specialized MS and PhD courses are also offered to ensure that students are able to improve their understanding of Computer Graphics fundamentals as well as advanced concepts.

## SUFFA INNOVATION LABS (SI LABS)

Founded in 2013, Suffa Innovation Labs is the in-house technology incubator where students develop innovative, intelligent, and interactive products. Students are provided a collaborative environment where they acquire hands-on experience on state-of-the-art software development tools and techniques. SI Labs offers two types of programs: Internship Program and Mentorship Program. The Internship Program is offered during Summer Semester breaks where students are selected after a rigorous screening test and interview. During the internship, students experience a working environment of a typical software development company and work on designing efficient solutions of various real-world problems. Our Mentorship Program spans over 6 months to 1 year. In this program, students work on start-up ideas under the mentorship of seasoned faculty. These start-up projects are evaluated by a panel of industry mentors and experienced technology entrepreneurs, who give valuable insights so these start-up ideas may be launched as viable products.

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## SOFTWARE ENGINEERING RESEARCH GROUP (SERG)

Software Engineering Research Group (SERG) aims to work in the area of Software Engineering. This group aims to provide research solutions to the problems faced by Pakistan's software development industry and help them to adopt cost-effective tools and techniques by providing training and consultancy services. This research group will work in close collaboration with bodies like Namcook Analytics Inc. USA, Function Point Modeler Inc. USA, Center for Systems and Software Engineering, University of Southern California, Pakistan Institute of Information & Security, etc. The tools and techniques will relate to different Software Process Improvement Standards like ISO, CISA-COBIT and CMMI, and the efficient implementation of all areas that lie under the SPI, such as Metrics and Measurement, Cost Estimation, Risk Management, Adaptation of Agile and Classical Process Models, Requirement Engineering, Project Management, Change Management, Verification & Validation areas and Secure Software Solution.

This group also intends to provide consultancy for legal matters related to Software Development for local as well as cross-border contractual issues. The research will be conducted with close industry contacts using empirical research methods, including surveys, experiments and case studies. The experimentation to be made under this group will guide the industry and researchers in evaluation and selection of different techniques. This research group will work in coordination with other research areas like Data Science, Machine Learning, Deep Learning, Big Data, etc. Members of this group teaching undergraduate and graduate courses in Software Engineering shall help inculcate research knowledge in students. Furthermore, the group will share its research findings through authentic books, editorials, conferences, and journal publications.



## WIRELESS SENSOR NETWORKS (WSN) & INTERNET OF THINGS (IoT) RESEARCH GROUP

This group will focus on research of the latest trends in Wireless Sensor Networks (WSN) and Internet of Things (IoT). The researchers and students in this group, will be working to deal with various challenges faced by low power devices in IoT and one of the major aims would be to improve the network lifetime and energy efficiency. Innovative schemes and protocols will be developed for the MAC & Network layer. The group will be performing simulations using tools such as OPNET and Avrora and testbed implementations using Sky motes. An upcoming project is to deploy WSN at a remote location of Pakistan (Cave City, Balochistan) and collect data for habitat monitoring. Collaborations will be developed with local and international research institutes and funding agencies. Students will work in this lab for their course or FYP projects, under the guidance of a research team. The lab will also offer positions for MS and PhD students to conduct research in different areas of IoT.

## INDUSTRIAL LINKAGE

The Department of Computer Science has established contacts with various software houses, IT companies and professional bodies for keeping the curriculum up-to-date and in coherence with the demand of the industry. For this purpose, the Department focuses on different training programs for students and the faculty. Furthermore, seminar sessions by senior IT entrepreneurs and professionals are held to apprise students with the latest trends in the industry. The Department is actively working with various software houses and IT companies for collaboration models that will promote exchange of knowledge and skills and will improve the research acumen of both the industry and the academia.

## CAREER PROSPECTS

The Department of Computer Science has established contacts for career advancement of its students with various software houses and IT companies. Some of the careers that students can select include IT Entrepreneur, Information Technology Manager, Information Technology Consultant, Software Architect, System Analyst, Software Engineer, Web Application Developer, Database Administrator, Network Administrator and Software Quality Assurance Analyst. Research and development can also be one of the lucrative fields for them. They can also obtain MS/PhD degrees to pursue a career in higher education. Entrepreneurship is another suitable choice that students can pursue after successfully earning the degree.

# DEPARTMENT OF MANAGEMENT SCIENCES

## Progression through Education

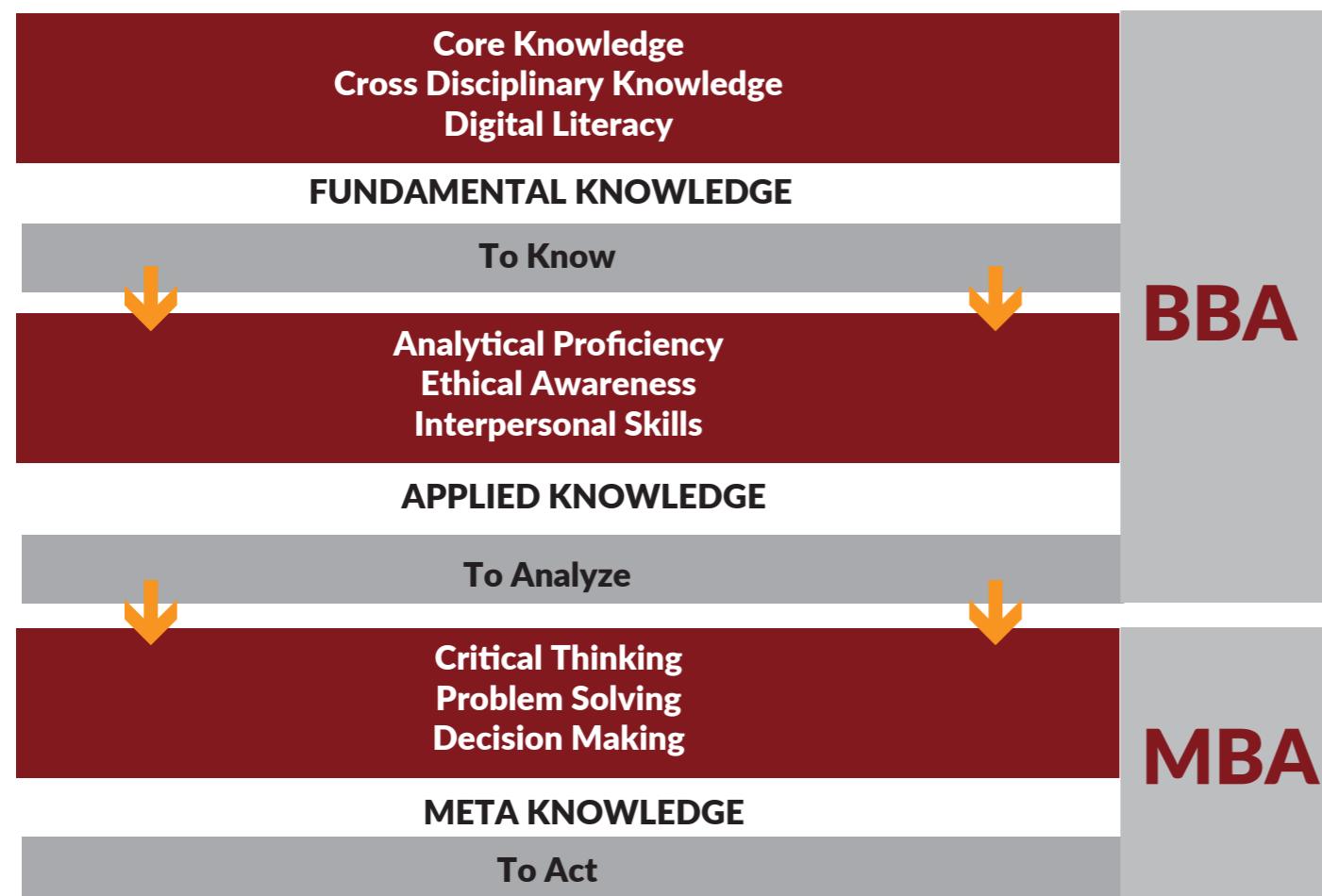
### VISION

We aspire to become a globally acknowledged business institution with a transformative influence on society through creation of knowledge and mentoring of future nation builders.

### MISSION

- To produce technically equipped and socially responsible professionals who contribute in shaping the way organizations are operated, managed and led
- To contribute in expanding the horizons of knowledge by encouraging, initiating and supporting production and dissemination of par excellence research
- To positively influence society through contributing engagements with industry, businesses and government beyond the boundaries of campus
- To do the above with integrity, transparency and accountability in order to become a role model to be followed.

### ACADEMIC ROADMAP



### FACULTY

The Department of Management Sciences has a highly qualified faculty possessing vast experience of teaching and research in leading universities. Most of them also have a rich experience of working for the industry. The faculty is actively engaged in developing solutions for present day business problems using futuristic concepts. Such projects have great potential for local and overseas funding and grants. The faculty has command over their respective subjects and bring to the classroom extensive academic knowledge supplemented by research, consultancy and industry experience.

### INDUSTRY AND ACADEMIC LINKAGES THROUGH CORPORATE MENTOR NETWORK

The Department of Management Science's Corporate Mentoring Network is a career mentoring platform that connects students with qualified professionals from the industry, providing them first-hand industry insights into their chosen professions. Mentors use their valuable knowledge and experiences to guide and assist students as they make choices and decisions about their future careers.

This program aims to support potential graduates with their transition out of the University and into the workplace and intends to include industry professionals in a mutually advantageous partnership. Industrial experts with considerable experience can act as mentors to provide students with information about specific industries, current and upcoming industrial trends and the skill-set required to compete, as well as advise them regarding their career directions, job hunt and skill improvement.

## FOREIGN LINKAGES

The International Education Resource Center (IERC) has been set up with the goal of promoting higher education opportunities in Germany, Turkey, Malaysia and China. It strives to provide an interface for DHA Suffa University's students to access the study abroad programs of leading international universities. At present, DHA Suffa University has MoUs with Eurasia Institute for International Education (EIIE-Berlin), Technical University of Applied Sciences (TUAS) Wildau, Germany, Senior Experten Service (SES, Bonn, Germany), AIMST University, Malaysia, Bilkent University, Turkey, Fateh Sultan Mehmet Vakif University, Turkey and Chengdu University, China. Additionally, through different initiatives such as Senior Experten Service (SES), each year, a number of foreign faculty members from top business schools are invited to teach at DHA Suffa University.

## INTERNSHIP PROGRAM

As a mandatory part of the degree program, students of the BBA and MBA Program are required to complete an internship of 4-6 weeks. DHA Suffa University has a dedicated Career Services & Corporate Relations department established to facilitate students in securing internships by establishing linkages with the corporate world. The internships not only help students get a foot in the door with a potential employer but also help them accumulate new skills.

## EMPLOYABILITY OF MANAGEMENT SCIENCES STUDENTS

The Department of Management Sciences caters to the job market by providing individuals who positively influence society through contributing engagements with industries, businesses and government beyond the boundaries of campus. Our graduates are placed in some of the blue-chip companies and other leading local and multinational companies such as Nestle, PSO, OGDCL, Bank AL-Habib, National Bank, Habib Bank, etc.

## COMMUNITY SERVICE

The scope of Corporate Social Responsibility (CSR) at DHA Suffa University includes community involvement and philanthropy for the development of communities, initiatives involving health and safety, efforts towards environmental protection and sustainability as well as a variety of other initiatives aimed at facilitating students that belong to disadvantaged segments of society. The CSR Department strives to engage DHA Suffa University students in volunteering activities via the Community Service and Sustainability Program (CSSP) and aims to make DHA Suffa University an institution that not only focuses on academic excellence but also on character building. The CSSP is an action program that plays an important role in invoking a sense of civic responsibility in our students.

To ensure that DHA Suffa University's vision of nation building is materialized, the University has made community service a mandatory requirement for undergraduate students of the Management Sciences Department. Students enrolled in the BBA program are required to complete 60 hours of community service in order to graduate. This requirement will enable the students to become well-rounded, compassionate and empathetic individuals who are able to gain a competitive edge in the job market by having a unique selling point. Furthermore, the CSR department aims to create awareness related to various aspects of CSR by arranging a variety of free sessions for faculty, staff and students and by working on the development of policies and procedures to facilitate CSR activities at DHA Suffa University. In addition, the students of the Community Service and Conservation Society (CSCS) at DHA Suffa University work in collaboration with the CSR department to ensure that DHA Suffa University students are actively involved in organizing and participating in CSR activities and events.

## MANAGEMENT SCIENCES

### SOCIETY

The Management Sciences Society caters to a diverse range of interests in various subject areas of business. Each student can find an area of his or her interest from a number of clubs namely Marketing Club, HR Club, Finance Club, Supply Chain Club and Economics Club, which exist under the patronage of the Management Sciences Society. The society is a well-organized body run by the students and aims to provide practical knowledge related to theory courses through competitions and events that not only give the students insights of the latest innovations in the above areas but also foster a sense of achievement and confidence in them. These events greatly help the students in their professional development. The Department of Management Sciences is keen to develop linkage with the industry; therefore, the MS Society also promotes the integration of industry through events where prominent industry figures come as judges, guest speakers and trainers to share their rich experiences.

## CAPSTONE PROJECTS

Students from the Undergraduate and Postgraduate degree programs are offered capstone projects in their final semester. These projects allow students to work on real world business issues. Under this program, students are required to work as consultants to a client company under the guidance of a faculty supervisor and a corporate mentor. The students conduct rigorous field research, secondary research and do data collection and analysis, followed by findings, conclusion and recommendations that are presented to the sponsoring company. The entire project is 6 credit hours and students are expected to complete it in one semester. These capstone projects provide a practical experience to Management Sciences students and provide them with opportunities to bring creative solutions to the problems at hand.

## CENTER FOR CASE DEVELOPMENT (CCD)

The Case Method of teaching has gained popularity as an effective classroom technique in recent years. The aim of CCD is to encourage case study pedagogy and develop real cases to bring actual business issues and problems to the classrooms. Under the umbrella of CCD, faculty along with a team of students work on developing indigenous case studies. In addition to this, the center has acquired membership of renowned international case repositories.

# DEPARTMENT OF CIVIL ENGINEERING

## MISSION

To provide a high-quality learning environment inculcating fundamental and specialized engineering knowledge, skills in critical thinking, communication, team-work and leadership for producing globally competitive engineers; and to create opportunities for students and faculty for conducting basic and applied research that contributes to society through sustainable engineering principles and practices

## INTRODUCTION

The Civil Engineering Department at DHA Suffa University shall offer a Bachelor's Degree Program BE (Civil) spanning over 4 years. The program has been prepared in accordance with the Pakistan Engineering Council (PEC) guidelines. Specialization streams of Construction Management, Structures, Transportation and Water Resources shall be offered through elective courses beyond the core Civil Engineering courses.

## WHY CIVIL AT DSU

Standing in the heart of DHA City Karachi (DCK), the Civil Engineering Department serves as the living lab for its students by providing them with an unmatched learning environment during the four years of their studies. The blended learning environment in the DCK is designed so that the students can experience immense professional growth throughout their 4-year journey by getting an opportunity to involve in the state-of-the-art DHA-owned projects within DCK.

Besides, indoor and outdoor sports facilities along with the furnished hostel rooms, mess and the transport facility from the City Centre to DCK adds to the rich and vibrant campus life at DCK.

## FACULTY

The Civil Engineering Faculty has foreign teaching and research experience. Most of them also have rich experience of working for the industry as well as academia. The faculty is actively involved in developing solutions for the present problems using futuristic concepts. Our faculty has publications in high-impact journals such as the American Society of Civil Engineers (ASCE).

## ADVANCED LABORATORIES

The Civil Engineering department has numerous laboratories established. All the labs, be it the Engineering Surveying or the Computer lab, have the latest equipment.

The Civil Engineering Department shall have the following labs available for its undergraduate students. Besides performing the lab experiments, the labs are designed such that to enable the undergraduate students to execute their Final Year Projects and producing quality outputs.

The Civil Engineering Department shall have the following labs available for its undergraduate students:

- Engineering Surveying Lab
- Computing Lab
- Engineering Mechanics Lab
- Engineering Materials Lab
- Fluid Mechanics Lab
- Soil Mechanics Lab
- Transportation Engineering lab

## APPROVALS

Pakistan Engineering Council Visited DHA Suffa University DCK Campus for the Zero Visit of the BE (Civil) program and allowed the university to start the program from Fall 2020.

The Department is implementing the Outcome-Based Education (OBE) system across all semesters on the same lines as followed in other Engineering programs.



## DSU FACILITIES OFFER LONG-TERM BENEFITS

### ADVANTAGES OF STUDYING BE CIVIL AT DSU DCK CAMPUS

#### PRACTICAL EXPOSURE:

Learning through compulsory internships, involvement in on-going mega projects at DCK including ARY Laguna, Malir Expressway etc., first-hand knowledge of the market trends, guest lectures from professionals etc.

#### DIVERSE FACULTY:

Highly qualified individuals besides professionals working in the industry

#### Accommodation:

Subsidized accommodation facility for students within DCK

#### FACILITIES:

The campus has a dedicated library, a cafeteria and an elevator. Besides, hostel Accommodation, purpose-built sports facilities such as tennis courts, Gym, medical centre, mosque and regular transport to and from Karachi for the faculty and students.

#### SPACIOUS LABS AND CLASSROOMS:

The four-story dedicated Civil Engineering building has been designed to cater 1000+ students with spacious labs, classrooms, drawing halls.

#### LOCATION:

Calm, secure and peaceful environment of DHA City Karachi.

## INDUSTRIAL LIAISON

Further, statutory bodies of DHA Suffa University include professionals from industry and technical heads of various engineering organizations established across the region. The purpose of our mutual collaboration is to work towards faculty support, student exposure to the industry, technology incubation, internships & placements, mutual work-study exercises and staff training, in an effort to bridge the gap between academia and industry.

# DEPARTMENT OF BASIC SCIENCES

## INTRODUCTION

The Department of BS aspires to achieve excellence in emanating quality education in the field of Science. The Department provides young engineers, scientists and entrepreneurs a strong foundation that is required to excel in their fields.

## FACULTY

The faculty of Basic Sciences is a highly dynamic and growing community of scholars, active in various principal areas of research in Mathematics and Natural Sciences. Many have gained national and international prominence and strive to foster a teaching methodology that enables the development of effective theoretical foundation, nurturing a pragmatic approach in students to sharpen their skills. The Department of Basic Sciences provides instructional support in teaching various fundamental courses of Applied and Natural Sciences. The practical implementation of theoretical knowledge is achieved through well-designed and well-equipped Applied Chemistry and Applied Physics laboratories.



## APPLIED PHYSICS LAB

The department has a well-equipped Applied Physics Lab with qualified technical staff. The basic facilities of this lab allow the students to acquire hands-on experience and practical realization of theoretical knowledge with the help of tools and equipment imported from renowned foreign companies. Experimental equipment for Electromagnetics, Acoustics, Mechanics and Optics are available in the Applied Physics Lab.

## APPLIED CHEMISTRY LAB

In the Applied Chemistry Lab, students have the opportunity to perform experiments to observe and grasp scientific phenomena related to Applied Chemistry using basic and advanced laboratory equipment. At the same time, the department has a vision to further upgrade the Applied Chemistry Lab to the level of postgraduate research and to provide laboratory testing and research services to industries and academic sectors in the near future. To reinforce this vision, the department is working towards implementation of advanced quality management and laboratory management systems. To ensure the health and safety of students and staff, adequate measures have been taken in the Applied Chemistry Lab.

# DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES

## INTRODUCTION

The Department of Humanities & Social Sciences at DHA Suffa University believes in developing critical thinking, communication skills and verbal reasoning to make the students effective communicators. The Department strives to make the students dynamic individuals who can play a vital role in the society.

## FACULTY

The faculty of Department of Humanities & Social Sciences is a perfect combination of experienced and qualified teachers, who have the experience of teaching at renowned national and international institutions. The Department boasts of faculty members who are active researchers in their areas of interest. The faculty of Humanities & Social Sciences contributes to teaching the compulsory and fundamental courses of Engineering, Computer Science and Management Sciences degree programs, which include courses on English Composition, Islamic Studies, Professional Ethics, Pakistan Studies, Functional English, Communication Skills and Technical Report Writing.

## ENGLISH

The Department of Humanities & Social Sciences is currently offering BS English and International Relations at DHA SUFFA UNIVERSITY. The department aims to provide students with programs that offer employability skills. It has spacious air conditioned rooms equipped with the state of the art facilities to make the learning and teaching comfortable.

BS English graduates can take up many interesting careers some of them are as follows: Publishing, speech therapy, journalism, media, teaching, advertising, translation and interpretation, computing, forensic, public relations, marketing communications.

## PSYCHOLOGY

### Unfold the Human Mind!

Our BS Psychology Program offers a unique scheme of study drawn from a broad spectrum of core courses in psychology to allow you to work across conventional boundaries. It will equip you with the recent skills and knowledge to excel in diversified career choices. Our BS psychology program get you a passport to:

- Clinical Psychology
- Organizational/Industrial Psychology
- Educational Psychology
- Criminal Psychology

## INTERNATIONAL RELATIONS

International Relations (IR) as a course of study reflects the dynamics of the International System. The System is a complex web with multiple but mutually functioning components and is characterized by interfacing changes and continuities, which are instrumental in the dynamic nature of the discipline. IR is a broad discipline that encapsulates the multivariate aspects of man in the global contexts. It is what can be described as 'a fusion of social science disciplines', as it deals with the basic elements of the social man; the only difference is that it looks at such essentials in relational contexts beyond national borders. Our richly connected, complex world seeks professionals skilled in International Relations, an exciting field of study that presents a globally oriented perspective on issues that transcend national boundaries.

It helps to understand:

The changing character of state and non-state actors who participate in International decision-making

The origins of war and the maintenance of peace  
The nature and exercise of power within the global system

Although International Relations has taken on a new significance because of our increasingly interconnected world, it is certainly not a new concept. Historically, the establishment of treaties between nations served as the earliest form of international relations.

Furthermore, the importance of media (Print, Electronics, and Social) can't be denied. This is the reason Universities have started offering BS in various areas such as International Relations. International Relations is also one of the emerging specializations which has gained popularity as a career prospect in

- Media outlets
- Intergovernmental organizations
- Government agencies
- Humanitarian organizations
- Research centers/Think tanks etc.

# INTERNATIONAL EDUCATION RESOURCE CENTER

The International Education Resource Center (IERC) has been set up with the goal of promoting foreign student mobility and continually improving DHA Suffa University's international outlook. It strives to provide an interface for DSU's students to access the study abroad programs of leading international universities and educational institutions. At present, DSU has MOUs with Eurasia Institute for International Education (EIIE-Berlin), Technical University of Applied Sciences (TUAS) Wildau Germany, SRH University North Rhine Westphalia, Germany, AIMST University, Malaysia, IIUM (International Islamic University), Malaysia, Bilkent University, Turkey, Fateh Sultan Mehmet Vakif University (FSMVU) Turkey, Chengdu University, China, Shenyang Aerospace University China, STDU (Shijiazhuang Tiedao University) University China, University of Hertfordshire, UK, Brock University (Canada) and the University of Wisconsin, USA. DHA Suffa University is also an international SAT Test Center of ETS College Board, USA and also has an agreement with the Senior Experten Service (SES), Bonn, Germany. The University regularly hosts foreign experts who contribute to its academic growth and professional development.

## MISSION

The mission of DSU's IERC is to foster academic growth and professional development through strong linkages with international academia.

## OBJECTIVES

- To raise awareness of the university community about educational, research and career opportunities in Europe, Malaysia, China, Turkey, UK, USA and Canada
- To promote and enhance academic cooperation at national and international levels
- To develop and implement joint degree programs
- To promote inter-cultural harmony by equipping faculty members and students with cross-cultural competence needed for working and studying in a multi-cultural environment
- To offer opportunities for learning foreign languages on-campus
- To equip students with a skill set that shall enable them to thrive in multi-cultural environments and embark on international career paths after graduation

At the IERC, we believe that only true understanding can bring cultures together and it is international education and exposure that lays a strong foundation for encouraging inter-cultural harmony. DSU's IERC, in collaboration with EIIE-Berlin, organizes summer camps every year in which students visit Europe for two weeks. They explore Europe, Germany in particular, as a destination for higher studies, experiencing the German culture and lifestyle. Activities at the summer camp include German language classes, visits to historic sites in and around Berlin city and visits to German universities as well as German industries. The IERC also organizes summer internships for students at AIMST University, Penang, Malaysia, giving them an opportunity to acquire international exposure. Moreover, DSU's IERC in collaboration with Bilkent University, Turkey, organizes semester exchange programs, whereby, DSU's students visit Ankara and study a semester at Bilkent University. Recently, in the year 2021 two undergraduate BBA students of DSU got selected for USEFP's (United States Education Foundation of Pakistan) semester exchange program, to study a semester at a US University. In the same year, a final semester Electrical Engineering student of DSU got selected for the prestigious 'Erasmus Mundus Joint Masters' scholarship to study a fully funded Masters in Europe. These student achievements are undoubtedly a testament to the role played by DSU's IERC in keeping DSU's students well informed about foreign scholarships & foreign mobility opportunities. The recent MOU signed between DSU & Brock University, Canada allows DSU's BS(Computer Science) students the flexibility to study two years of their undergraduate degree at DSU and then have their credits transferred to Brock University (Canada), which is yet another endeavour by DSU's IERC to provide DSU's students foreign credit mobility options.

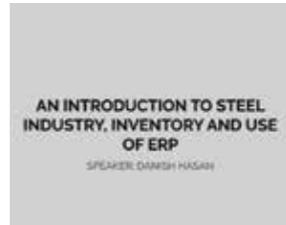
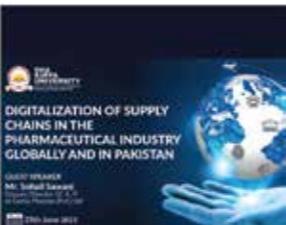


# PROFESSIONAL DEVELOPMENT CENTER

In a constantly evolving workplace and knowledge economy of today, managers need to broaden their capabilities to secure and retain competitive advantage. DHA Suffa University's Professional Development Center (PDC) offers programs that are designed to enhance your management acumen, provide tools needed to drive innovation and connect you to a network of peers, specialists and mentors. Our Executive Education programs are designed to stay a step ahead of business and innovation trends, offering workshops and short courses in the areas of general management, technology, marketing and leadership, to name a few - leaving you prepared to drive growth. PDC also aims to further strengthen DSU's linkages with both academia and industry, and conducts seminars, speaker sessions and symposiums that help disseminate knowledge and provide a platform for mutual learning and intellectual discourse.

## COURSES HELD BY PROFESSIONAL DEVELOPMENT CENTER IN 2021

Dec 20, 2020 - March 14, 2021	March 2021 - Jan 2022	March 27, 2021 - Feb 27, 2022	Aug 18, 2021 - Sep 11, 2021	Dec 27, 2021 - Dec 31, 2021
<b>APPLIED BUSINESS INTELLIGENCE &amp; ANALYTICS</b>  Data is the new "Oil" of the digital economy. Applied Business Intelligence & Analytics helps in making informed business decisions. Students learnt to make business decisions based on Data Analytics & Business Intelligence.	<b>DHA SUFFA UNIVERSITY - COURSERA PARTNERSHIP</b>  Bringing In-demand Skills to your doorstep. Students were given access to more than 4000 cutting edge courses taught by leading instructors from over 200 leading international universities with a choice of taking any one course "Free of cost" in 2021.	<b>DIPLOMA IN DATA SCIENCE</b>  Students learnt key software tools that enabled them to extract valuable information for use in strategic decision making, product development, trend analysis, and forecasting.	<b>BASIC ENGLISH LANGUAGE PROFICIENCY CRASH COURSE</b>  Students learnt to improve their listening, speaking, reading and writing skills in English this summer to embark on the journey to success.	<b>RENEWABLE ENERGY TECHNOLOGIES &amp; SMART GRIDS</b>  The learners gained hands-on experience on DOLORENZO (Italian Company) Lab Equipment, acquired a good understanding of Industrial Automation in Relation to SMART Grids and Wind & Solar Technology.

 <b>VULNERABILITY FACTOR ANALYSIS OF PAKISTAN</b> <b>ISRAR AYUB</b> Israr Ayub is a noted disaster management and knowledge management practitioner, trainer, teacher, consultant and theorist. NOV 18, 2020	 <b>MEDIA EVOLUTION IN PAKISTAN</b> <b>AMIR JAHANGIR</b> Co-Founder and CEO at Rinsta Technologies (Pvt.) Ltd., CEO Mishal Pakistan FEB 02, 2021	 <b>AN INTRODUCTION TO STEEL INDUSTRY, INVENTORY AND USE OF ERP</b> <b>DANISH HASAN</b> Manager Inventory Management at Amrelli steel JUN 19, 2021	 <b>MODERN PRACTICES IN SUPPLY CHAIN MANAGEMENT</b> In collaboration with FPCCI <b>FARHAT UMAR</b> Internationally-acclaimed Supply Chain Specialist from Massachusetts Institute of Technology (MIT) Senior Lecturer Director Professional Development Center at DHA Suffa University JUN 23, 2021
 <b>DIGITALIZATION OF SUPPLY CHAINS IN THE PHARMACEUTICAL INDUSTRY GLOBALLY AND IN PAKISTAN</b> <b>SOHAIL SAWANI</b> Deputy Director SC & IT at Genix Pharma (Pvt.) Ltd JUN 25, 2021	 <b>BECOME SUCCESSFUL GLOBAL SELLER USING MODERN SUPPLY CHAIN</b> In collaboration with FPCCI <b>FARHAT UMAR</b> JULY 07, 2021	 <b>MODERN PRACTICES IN HUMAN RESOURCE MANAGEMENT</b> In collaboration with FPCCI <b>DR. SOBIA IQBAL</b> Assistant Professor Director Career Service & Corporate Relations at DHA Suffa University JULY 09, 2021	 <b>HOW TO SHIFT YOUR BUSINESS ONLINE? A STEP BY STEP GUIDE FOR SME's</b> In collaboration with FPCCI <b>FARHAT UMAR</b> JULY 14, 2021



# CORPORATE SOCIAL RESPONSIBILITY

DHA Suffa University established its Corporate Social Responsibility (CSR) Department in the year 2017 in line with the University's vision to contribute significantly to nation building. The scope of CSR activities at DSU include community involvement and philanthropy for the development of communities, initiatives involving health and safety, efforts towards environmental protection and sustainability, as well as a variety of further initiatives aimed at uplifting students that belong to disadvantaged segments of society.

DSU is also a member of the Talloires Network and is proud to be an engaged institution that is actively involved in community service and outreach programs. By being a part of DSU, students can work on various community service projects and contribute positively to society.



# QUALITY ENHANCEMENT CELL

## VISION

The Quality Enhancement Cell (QEC) is committed to ensuring quality as a norm in all the operations of DHA Suffa University.

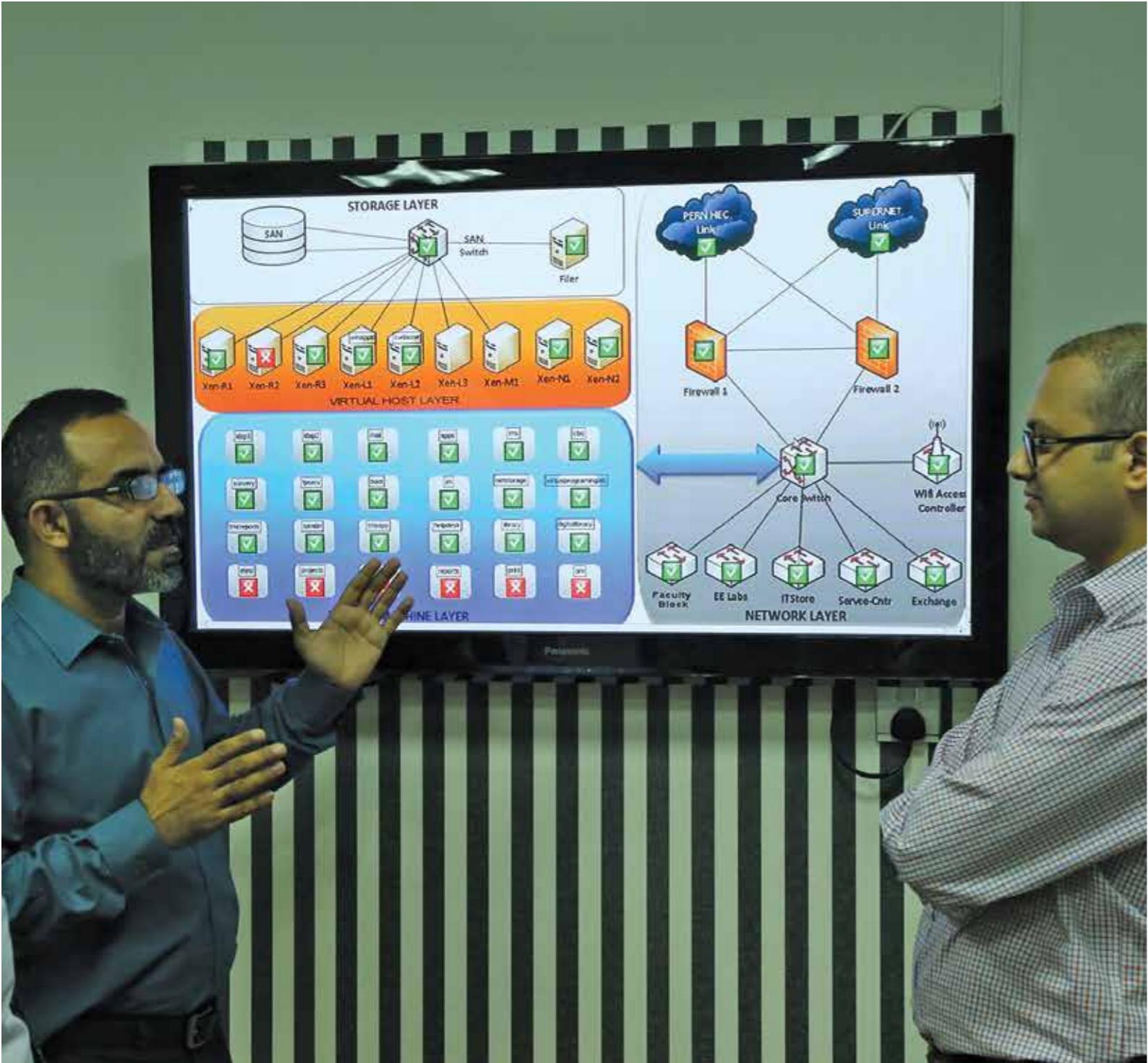
## OBJECTIVES

- Establishing, improving and maintaining academic standards
- Monitoring and enhancing students' learning
- Verifying compatibility of program objectives with institutional goals
- Providing feedback for quality assurance of academic programs and support services

Being an obligation by the Higher Education Commission, the QEC at DHA Suffa University does not just implement or operationalize the HEC quality enhancement rules, it takes confident steps in making DHA Suffa University work towards excellence. Aligned with this vision, the QEC entrenches quality in all academic degree programs, develops quality assurance processes and methods of evaluation and monitors the people who are involved in such activities (faculty, students and staff).

The QEC is responsible to liaise with all the nominated assessment team members of respective degree programs and coordinates with them in order to ensure conformity to the quality standards prescribed by HEC and various prestigious national and international regulatory bodies.

The QEC of DHA Suffa University performs so meticulously that HEC has acknowledged it in the form of a formal letter of appreciation.



## IT SERVICES

DHA Suffa University offers state-of-the-art IT infrastructure for its students and faculty to facilitate and augment the learning activities. The heart of IT services at DSU, is the latest cloud computing technologies based data center with high-end software, computing, storage and network infrastructure. Students and faculty can connect to the DSU portal and access resources pertinent to their needs round the clock. Students can access their course material, submit assignments and interact with their teachers using the DSU Learning Management System. Students can also track their academic progress online and even provide feedback for their courses from anywhere. The computing labs equipped with essential hardware and software resources deliver an exceptional computing experience. Campus-wide IT resources also include latest audio visual facilities in all classrooms, high speed Internet connectivity and across the campus Wi-Fi coverage.

**Prof. Dr. Muhammad Afzal Haque**  
**Vice Chancellor**

PhD (Mechanical Engineering/Nuclear Engineering), University of Manchester, UK



**Prof. Dr. Ahmed Saeed Minhas**  
**Professor & Pro-Vice Chancellor**

PhD (International Relations) Quaid-e-Azam University (QAU), Islamabad



**Engr. Prof. Dr. Johar Khurshid Farooqi**  
**Professor & Dean (Engineering and Applied Sciences)**  
**HOD (Mechanical Engineering)**

PhD (Mechanical Engineering), University of Manchester, UK



**Prof. Dr Bashir Ahmad**  
**Professor & Dean (Management and Social Sciences)**

PhD (Management Sciences), University of Karachi



**Engr. Dr. Muhammad Sabih**  
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**Engr. Prof. Dr. Ahmad Hussain**  
**Professor (Mechanical Engineering)**

Ph.D (Thermo-fluids), University Technology Malaysia, Johor, Malaysia, 2006



**Dr. Shama Siddiqui**  
**Assistant Professor & HOD (Computer Science)**

PhD (Computer Science), IBA



**Dr. Muhammad Ashhad Shahid**  
**Assistant Professor & HOD (Basic Sciences)**

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**Engr. Dr. Syed Fazal Abbas Baqueri**  
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**Dr. Razi Sultan Siddqui**  
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(PhD) from School of Economics, Finance and Banking, Universiti Utara Malaysia



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**Ms. Sidra Ahmed**  
Lecturer & Program Manager, BS (IR)

M.Phil leading to PhD: Department of International Relations,  
University of Karachi



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**Mr. Muhammad Abu Huraira**  
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**Engr. Dr. Muhammad Farrukh Shahab**  
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**Mr. Syed Hammad Ahmed**  
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(On Study Leave)

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**Engr. Umair Bin Mansoor**  
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MBA (MIS), IBA



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**Engr. Junaid Ahmed**  
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MCS (Computer Science), SZABIST



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**Engr. Muhammad Owais**  
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**Engr. Syed Zaid Hasany**  
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**Engr. Makhdoomzada Asadullah Siddiqui**  
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**Mr. Moheez Ur Rahim**  
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**Ms. Tehseen Azhar**  
Senior Lecturer

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**Engr. Salman Hameed Siddiqui**  
Senior Lecturer

Civil Engineering, NED University



**Engr. Syed Muhammad Farooq Shibli**  
Senior Lecturer

MS (Software Engineering), Bahria University



**Engr. Syed Asad Ali**  
Senior Lecturer

ME (Communication Systems & Networks), Mehran University



**Mr. Conrad Walter D'Silva**  
Senior Lecturer

MS (Software Engineering), Bahria University



**Mr. Sabah Quaiser**  
Senior Lecturer

MPhil (Statistics), University of Karachi



**Ms. Tehniat Mirza**  
Senior Lecturer

MS (Computer Science), PAF-KIET  
MCS (Computer Science), University of Karachi  
MSc (Applied Mathematics), University of Karachi



**Ms. Raazia Sosan Waseem**  
Senior Lecturer

MS (Computer Science), Hamdard University



**Engr. Ameen Uddin Ammar**  
Lecturer  
(On Study Leave)

MS (Materials & Surface Engineering), NUST



**Mr. Syed Saad Luqman**  
Lecturer

MSCS (Software Engineering), Hamdard University



**Abdul Qayoom**  
**Lecturer**  
**Lecturer**

MS (Computer Science): Muhammad Ali Jinnah University, Karachi



**Mr. Saqib Ghias**  
**Lecturer**

MPhil (Marketing), Iqra University



**Engr. Syed Sheraz Ali**  
**Lecturer**  
**(On Study Leave)**

MS (Mechanical Engineering), NUST



**Mr. Muhammad Rahim**  
**Lecturer**

MSc (Physics), University of Karachi



**Mrs. Saima Sardar Khan**  
**Lecturer**

MCom, University of Karachi



**Engr. Muhammad Ibrahim Abbas**  
**Lecturer**

ME (Water Resources Engineering), NED University



**Mr. Sulaman Ahmad Naz**  
**Lecturer**

BCS from University of Peshawar



**Ms. Tatheer Yawar Ali**  
**Lecturer**

MBA (Human Resource), SZABIST, Karachi



**Mr. Qazi Abdul Samad**  
**Lecturer**

MCIT, NED University



**Ms. Asma Bibi**  
**Lecturer**

BS (Computer Science), Bahria University



**Ms. Sadia Mehboob**  
**Lecturer**

MBA Hons (Finance), University of Sindh

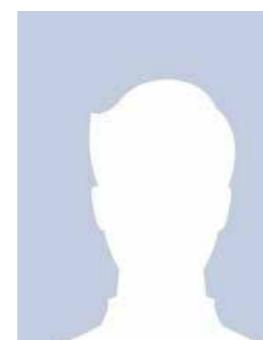


**Engr. Mansoor Idrees Dawson**  
**Lecturer**  
ME (Materials), NED University



**Engr. M. Imran**  
**Lecturer**  
(On Study Leave)

ME (Solid Mechanics), University of Malaya, Malaysia



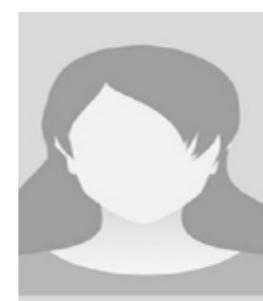
**Mr. Zahid Hussain**  
**Lecturer**

BS (Computer Science), Hamdard University



**Ms. Shafaq Sohail**  
**Lecturer**

MS (Software Engineering), NUST



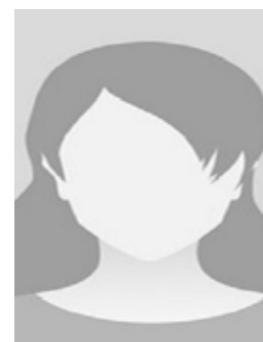
**Mr. Irfan Hussain**  
**Lab Instructor**  
(On Study Leave)

BS (Electronics), University of Sindh, Pakistan



**Ms. Fatima Kiran**  
**Lecturer**

PhD. in Mass Communication: Enrolled in 2020 at University of Karachi  
(In progress)



**Mr. Shad Mohammad,**  
**Lecturer**

MS – Cyber Security, COMSATS University Islamabad, Pakistan.



**Mr. Adnan Alam Khan**  
**Lecturer**

MS Software Engineering from PAF-KIET



**Ms. Urooba Javed**  
**Lab Instructor**

MS (Computer Science), IBA



**Mr. Maraj**  
Lecturer

MS (Applied Mathematics), NED University



**Yasir Jamal Pasha**  
Senior Lecturer

MS, (Business Sustainability & Decision Making), Hamdard University



**Mr. Usman Khalil**  
Lecturer

MSc in Applied Physics (Electronics), University of Karachi



**Engr. Syeda Wafa Zehra Abidi**  
Lecturer

M.E Transportation Engineering, NED University



**Mr. Azam Anwar Khan**  
Lecturer & Program Manager, BBA

MBA / M. Phil London



**Engr. Syed Muhammad Bilal Haider**  
Lecturer

M.Eng.Sc (Seismic Analysis of Highrise Structure) – Universiti Tunku Abdul Rahman (UTAR), Malaysia



**Ms. Saadia Khan**  
Lecturer

MSC: Organizational Psychology and Human Resource, IoBM



**Ms. Erum Fatima**  
Lecturer

MS (Management Science), Hamdard University



**Ms. Arifa Mustafa**  
Lecturer

MS (Computer Science and Information Technology), NED University



**Engr. Taha Irshad**  
Lab Engineer

BE (Mechanical Engineering), NED University



**Ms. Sidrah Abdullah**  
**Lecturer**

MS (CSIT), NED University



**Ms. Maleeha Shah**  
**Lab Instructor**

MCS (Computer Sciences), University of Karachi



**Engr. Hafsa Haseeb**  
**Lab Engineer**

BE (Electronics Engineering), Dawood University of Engineering & Technology



**Engr. Adeel Asghar**  
**Lab Engineer**

BE (Mechanical), DHA Suffa University



**Engr. Hassaan Ahmed Khan**  
**Lab Engineer**

BE (Mechanical Engineering), NED University



**Mr. Muzammil Maqsood**  
**Lab Instructor**

Bachelors in Computer Science, DHA Suffa University



**Ms. Ansha Zahid**  
**Lab Instructor**

BS (CS & IT), NED University



**Ms. Yusra Shahina**  
**Lab Instructor**

BE (Computer & Information Systems), NED University



**Ms. Rida Memon**  
**Lecturer**

BE(Computer Systems), Mehran UET



**Engr. Sara Noor**  
**Lab Engineer**  
*(On Study Leave)*

BE (Electrical Engineering), NUST



**Engr. Huzaifa Saleh Qureshi**  
**Lab Engineer**  
(On Study Leave)

B.Sc. (Mechanical Engineering), UET Taxila



**Engr. S.M. Musab Bin Naseem**  
**Lab Engineer**

BE (Mechanical), NEDUET



**Mr. Faisal Mehmood**  
**Lab Instructor**

BS Computer Science, PAF-KIET



# Bachelor Degree Programs

# BE (MECHANICAL)

## Introduction

The Mechanical Engineering Department at DHA Suffa University offers a four-year BE (Mechanical) degree program. The BE (Mechanical) curriculum is designed to prepare mechanical engineering students to comply with the continuously growing and evolving demands of both local and global industries, academia and R&D sector. Under continuous guidance and mentoring of highly qualified and experienced faculty members, the students are provided a congenial learning environment where they can develop theoretical, practical and managerial skills through exhaustive pedagogy, experiential learning as well as personal and professional grooming.

The department maintains a strong focus in ensuring one-to-one mentoring of each student. The department boasts of an impressive student-to-teacher ratio of 15:1. The learning experience of students is further enhanced with state-of-the-art laboratory facilities on which the department has invested more than 220 million rupees. These laboratory facilities are further being enhanced in line with HEC and PEC guidelines.

## Program Mission

To provide students with engineering knowledge and skills to contribute towards sustainable development of the society by offering undergraduate and graduate degree programs in mechanical engineering of high international standard in a conducive environment that promotes active learning and research.

## Program Educational Objectives (PEOs)

PEOs describe the expected professional achievements of our students after four years of study, we expect our graduates to:

- Be effective professional engineers grounded in sound engineering knowledge and practice
- Be responsible engineers, who exercise good ethics in their professional pursuits with due consideration to impact on society
- Be active engineers who advance their knowledge and adapt to technological changes in the field of mechanical engineering

## Eligibility

- Intermediate or an equivalent examination (Pre-Engineering) with at least 60% marks;
- Must have studied Mathematics, Physics and Chemistry at HSSC / A- level
- Applicants with O-Level / A-Level and Technical studies must submit equivalence from IBCC
- At least 50% marks in DSU Entrance Test

## Optional

Valid test scores of NEDUET (current year), NTS NAT (IE/ICS) (current year) or SAT II (within two years) if appeared. Applicants Submitting NEDUET, NTS NAT (IE/ICS) or SAT II test scores shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NEDUET, NTS NAT (IE/ICS) or SAT II scores will be advised to appear in the DSU Admissions Test for better chances of securing admission.



## Plan of Study

Semester	Course Title	Course Code	Theory	Lab	Credit Hours
I	Calculus and Analytical Geometry	BS 1301	3	0	
	Applied Physics	BS 1103	2	0	
	Applied Physics Lab	BS 1103L	0	1	
	English Composition	HU 1001	3	0	
	Engineering Drawing and Graphics	ME 1101	1	0	
	Engineering Drawing and Graphics Lab	ME 1101L	0	2	
	Introduction to Computing and Programming	CS 1200	2	0	
	Introduction to Computing and Programming Lab	CS 1200L	0	1	
	Applied Chemistry	BS 1201	2	0	
			Total	17	
II	Engineering Statics	ME 1103	3	0	
	Engineering Materials	ME 1201	3	0	
	Engineering Materials Lab	ME1201L	0	1	
	Linear Algebra and Ordinary Differential Equations	BS 2303	3	0	
	Thermodynamics - I	ME 1301	3	0	
	Workshop Practice	ME 1001L	0	2	
	Electrical Engineering	EE 2005	2	0	
	Electrical Engineering Lab	EE 2005L	0	1	
			Total	18	
III	Engineering Dynamics	ME 2101	3	0	
	Engineering Mechanics Lab	ME 2106L	0	1	
	Mechanics of Materials - I	ME 2102	3	0	
	Thermodynamics - II	ME 2301	3	0	
	Thermodynamics Lab	ME 2304L	0	1	
	Electronics Engineering	EE 2006	2	0	
	Electronics Engineering Lab	EE 2006L	0	1	
	Fluid Mechanics - I	ME 2302	3	0	
	Health, Safety and Environment	ME 2401	1	0	
			Total	18	
IV	Mechanics of Materials - II	ME 2103	3	0	
	Mechanics of Materials Lab	ME 2107L	0	1	
	Machine Design- I	ME 2105	2	0	
	Manufacturing Processes	ME 2402	3	0	
	Manufacturing Processes Lab	ME 2402L	0	1	
	Fluid Mechanics - II	ME 2303	3	0	
	Fluid Mechanics Lab	ME 2305L	0	1	
	Probability and Statistics	BS 1402	3	0	
	CAD Lab	ME 2108L	0	1	
			Total	18	
V	Technical Report Writing and Presentation Skills	HU 4009	3	0	
	Machine Design - II	ME 3104	3	0	
	Management Elective	MS XXXX	2	0	
	Numerical Analysis	BS 3303	2	0	
	Numerical Analysis Lab	BS 3303 L	0	1	
	Heat and Mass Transfer	ME 3301	3	0	
	Pakistan Studies	HU 2101	2	0	
	Foreign Language	-	NC		
			Total	16	
VI	Complex Variables and Transforms	BS 3301	3	0	
	Mechanics of Machines	ME 3102	3	0	
	ME Technical Elective - I	ME 3YZZ	2	0	
	Entrepreneurship	MS 3101	1	0	
	Heating, Ventilation and Air Conditioning	ME 3303	3	0	
	Heat Transfer and HVAC Lab	ME 3304L	0	1	
	Introduction to Finite Element Method	ME 3106	2	0	
	Introduction to Finite Element Method Lab	ME 3106L	0	1	
	Islamic Studies	HU 2201	2	0	
			Total	18	
VII	Internal Combustion Engines	ME 4302	2	0	
	Engineering Economics	MS 4407	2	0	
	Mechanical Vibrations	ME 4101	3	0	
	Machines and Vibrations Lab	ME 4103L	0	1	
	ME Technical Elective - II	ME 4YZZ	2	0	
	ME Design Project - I	ME 4903L	0	3	
	Measurement and Instrumentation	ME 3103	2	0	
	Measurement and Instrumentation Lab	ME 3103L	0	1	
			Total	16	
VIII	Control Engineering	ME 4102	2	0	
	Control Engineering Lab	ME 4102 L	0	1	
	ME Technical Elective - III	ME 4YZZ	2	0	
	ME Design Project - II	ME 4904L	0	3	
	Power Plants	ME 4623	3	0	
	IC Engines & Power Plants Lab	ME 4303L	0	1	
	Social Sciences Elective -I	HU XXXX	2	0	
	Professional and Business Ethics	HU 4702	1	0	
			Total	15	
					TOTAL CREDIT HOURS 136

### NOTES:

1. All aspects of the laboratory components including teaching, attendance, assignments, examination and grading are treated separately from the theory components.
2. The basis of this Plan of Study is HEC Revised BE (Mechanical) Curriculum, 2012.

## List of Electives

### Technical Electives

- Introduction to Finite Element Method
- Introduction to Robotics
- Gas Dynamics
- Industrial Safety & Environment
- Maintenance Engineering
- Industrial Quality Control & Assurance
- Introduction to Sustainable Energy
- Energy Resources & Utilization
- Renewable Energy Technologies
- Fatigue & Fracture Mechanics
- Advanced Finite Element Methods
- Advanced Mechanics of Materials
- Process Control
- Tool Design
- Turbomachinery
- Fluid Power: Hydraulics & Pneumatics
- Introduction to Computational Fluid Dynamics
- Aerodynamics
- Aerospace Propulsion Systems

### Management Electives

- Project Management
- Principles of Management
- Social Media Marketing
- Financial Management
- Entrepreneurship

### Social Sciences Electives

- Introduction to International Relations
- Critical Thinking
- Understanding Psychology and Human Behavior
- Professional Ethics
- Social Anthropology

## International Projects



### Shell Eco-Marathon Asia 2018

The Shell Eco-Marathon is an annual competition sponsored by Shell, in which participants build special vehicles to achieve the highest possible fuel efficiency. The Eco-Marathon is held around the world with events in Europe, America and Asia.

In March 2018, DSU student team participated in Shell Eco-Marathon Asia 2018 competition and was among the top 2 teams from Pakistan to make it to the track events and to register a valid run of 51 km/l.



### IMechE UAS Challenge 2018

The Unmanned Aircraft Systems Challenge (UAS) is an annual student competition in aerospace sector that is organized by the Institution of Mechanical Engineers (IMechE). The event was held from 18-19 June, 2018 at Snowdonia Aerospace Center, Llanbedr, UK.

Team Zarrar of DHA Suffa University (DSU) participated for the 2nd consecutive year in IMechE UAS Challenge. The team received special appreciation by Rod Williams, Chief Scrutineer of the competition.



### Formula Student Australasia (FSAF-A) 2016

In December 2016, our students participated in the international FSAE-A 2016 competition and earned the honor of being the first and only team from Pakistan to ever qualify for the dynamic track events in their very first year of participation.



# Bachelor Degree Programs BE (ELECTRICAL)



## Introduction

The Electrical Engineering Department at DHA Suffa University offers a Bachelor's Degree Program BE (Electrical) spanning over 4 years. The Electrical Engineering curriculum at DHA Suffa University is prepared in accordance with the most recent HEC guidelines. Specialization streams of Power Systems, Telecommunications, and Electronics are offered through elective courses beyond the core of Electrical Engineering. All BE (Electrical) students go through a common set of core Electrical Engineering courses in the first two years and then select a stream of their choice from the third year onwards. This allows students to select an area of their interest that also has market demand. This approach maximizes the chances of rapid absorption of BE (Electrical) graduates into the highly competitive job market.

## Program Mission

To produce graduates who are mindful of societal issues and can assume diversified engineering roles in national and global organizations.

## Program Educational Objectives (PEOs)

- Apply electrical engineering knowledge in solving complex engineering problems as either an employee or an entrepreneur.
- Have ability to perform with effective communication and management skills both individually and as a team member.
- Pursue research nationally and internationally to enhance their professional qualification and knowledge.
- Demonstrate professional integrity and commitment to social, environmental and ethical responsibilities.

## Eligibility

- Intermediate or an equivalent examination (Pre-Engineering) with at least 60% marks;
- Must have studied Mathematics, Physics and Chemistry at HSSC / A- level
- Applicants with O-Level / A-Level and Technical studies must submit equivalence from IBCC
- At least 50% marks in DSU Entrance Test

## Optional

Valid test scores of NEDUET (current year), NTS NAT (IE/ICS) (current year) or SAT II (within two years) if appeared. Applicants Submitting NEDUET, NTS NAT (IE/ICS) or SAT II test scores shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NEDUET, NTS NAT (IE/ICS) or SAT II scores will be advised to appear in the DSU Admissions Test for better chances of securing admission.

## Plan of Study

Semester	Course Title	Course Code	Credit Hours
I	Applied Physics Applied Physics Lab Calculus and Analytical Geometry Electrical Workshop Practice Introduction to Computing Introduction to Computing Lab Linear Circuit Analysis Linear Circuit Analysis Lab Functional English Islamic Studies	BS-1101 BS-1101L BS-1301 EE-1012L EE-1013 EE-1013L EE-1014 EE-1014L HU-1009 HU-2201	3 1 3 1 1 1 3 1 2 2
			<b>Total 18</b>
II	Linear Algebra Computer Aided Engineering Drawing Programming Fundamentals Programming Fundamentals Lab Electronic Devices and Circuits Electronic Devices and Circuits Lab Pakistan Studies Communication Skills IDEE-I	BS-1302 EE-1023L EE-1024 EE-1024L EE-1225 EE-1225L HU-2101 HU-XXXX XX-XXXX	3 1 2 1 3 1 2 2 3
			<b>Total 18</b>
III	Complex Variables and Transforms Electromagnetic Field Theory Electrical Network Analysis Electrical Network Analysis Lab Digital Logic Design Digital Logic Design Lab Computing Elective Computing Elective Lab	BS-3301 EE-2034 EE-2135 EE-2135L EE-2232 EE-2232L EE-2XXX EE-2XXXL	3 3 3 1 3 1 3 1
			<b>Total 18</b>
IV	Probability Method for Engineers Differential Equations Signals and Systems Signals and Systems Lab Introduction to Embedded Systems Introduction to Embedded Systems Lab Management Science Elective-I	BS-1403 BS-2302 EE-2043 EE-2043L EE-2241 EE-2241L MS-XXXX	3 3 3 1 3 1 3
			<b>Total 17</b>
V	Natural Science Elective Linear Control Systems Linear Control Systems Lab Electrical Machines Electrical Machines Lab Communication Systems Communication Systems Lab IDEE-II	BS-XXXX EE-3052 EE-3052L EE-3151 EE-3151L EE-3353 EE-3353L XX-XXXX	3 3 1 3 1 3 1 3
			<b>Total 18</b>
VI	Breadth Core-II Breadth Core-I Breadth Core-II Lab Breadth Core-I Lab Technical and Business Communication Humanities / Social Sciences Elective I Management Sciences Elective II	EE-3XXX EE-3XXX EE-3XXXL EE-3XXXL HU-4008 HU-XXXX MS-XXXX	3 3 1 1 3 2 3
			<b>Total 16</b>
VII	EE Design Project 1 Depth Elective II Depth Elective III Depth Elective I Depth Elective I Lab Depth Elective III Lab Depth Elective II Lab Humanities / Social Sciences Elective II	EE-4071 EE-4XXX EE-4XXX EE-4XXX EE-4XXXL EE-4XXXL EE-4XXXL HU-XXXX	2 3 3 3 1 1 1 2
			<b>Total 16</b>
VIII	EE Design Project 2 Depth Elective VI Depth Elective IV Depth Elective V Depth Elective V Lab Depth Elective IV Lab	EE-4081 EE-4XXX EE-4XXX EE-4XXX EE-4XXXL EE-4XXXL	4 3 3 3 1 1
			<b>Total 15</b>
			<b>TOTAL CREDIT HOURS 136</b>

## NOTES:

1. The lab/practical part of the course is treated separately. All aspects of the laboratory components including teaching, attendance, assignments, examination and grading are treated separately from the theory components.
2. HEC unified BE (Electrical) Curriculum NCRC 2012 is followed.

## Specialization Streams

Area	Course Title
Telecommunication	Computer Communication Networks
	Optical Communication
	Digital Communication
	RF and Microwave Engineering
	Digital Image Processing
	Satellite Engineering
Electronics	Information Theory and Coding
	Digital Control Systems
	Industrial Process Control
	Digital Electronics
	Instrumentation & Measurement
	Digital Image Processing
Computer Systems	Integrated Electronics
	Digital System Design
	Computer Communication Networks
	Operating Systems
	Introduction to AI
	Introduction to Data Science in Python
Power Systems	Deep Learning
	Introduction to Cloud Computing
	Introduction to Embedded Systems
	Digital Signal Processing
	Digital Image Processing
	Introduction to Biomedical Engineering
	Digital Control Systems
	Digital Systems Design
	Advanced Electrical Machines
	Power System Analysis
	Electrical Machine Design
	Power System Distribution
	Electrical Power Transmission

## Cross Registration

Under cross-registration, students enrolled in the BE (Electrical) degree program can get credits in their coursework at DSU by registering and taking exams in equivalent online courses offered by top-ranking foreign universities through edX or Coursera.

DSU Course	Foreign University Offering Equivalent Courses	Foreign University Course
EE-1021: Linear Circuit Analysis	MIT, USA	Circuits & Electronics
EE-3512: Electrical Power Systems	MIT, USA	Introduction to Electric Power Systems
EE-3232: Digital Signal Processing	Ecole Polytechnique Federale de Lausanne , France	Digital Signal Processing
EE-3113: Power Electronics	University of Colorado at Boulder, USA	Introduction to Power Electronics
EE-1011: Introduction to Computing & Programming	MIT, USA	Introduction to Computer Science and Programming
BS-1403: Probability and Statistics	UC Berkeley, USA	Introduction to Statistics
BS-1101: Applied Physics	University of Colorado at Boulder, USA	Physics-1 (for Physical Science Majors)
BS-1301: Calculus and Analytical Geometry	University of Pennsylvania, USA	Calculus: Single Variable
BS-1302: Linear Algebra	University of California, Irvine, USA	Algebra

# Bachelor Degree Programs

# BS (COMPUTER SCIENCE)



## Introduction

The Bachelor of Computer Science Program spans over four years consisting of core courses in Computing, Science, and Mathematics, with specialization courses in Cloud and Cluster Computing, Mobile & Ubiquitous Computing, Computational Linguistics, Computer Graphics & Visualization and Bio-Informatics. These courses are offered in close collaboration with the software industry so that students are well-prepared for the rapidly changing trends in IT. Students must complete 138 credit hours with a minimum CGPA of 2.0 to earn the degree. The purpose of the Bachelor in Computer Science Degree Program is to produce world-class IT entrepreneurs and researchers, who can be the backbone of the rapidly growing IT industry of Pakistan.

## Eligibility

- Intermediate or an equivalent examination (Pre-Engineering/ Pre-Medical/ General Science) with at least 50% marks;
- A-Level with minimum 3 passes in principal subjects
- Applicants with O-Level / A-Level and Technical studies must submit equivalence from IBCC
- At least 50% marks in DSU Entrance Test

## Optional

Valid test scores of NEDUET (current year), NTS NAT (IE/ICS) (current year) or SAT II (within two years) if appeared. Applicants Submitting NEDUET, NTS NAT (IE/ICS) or SAT II test scores shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NEDUET, NTS NAT (IE/ICS) or SAT II scores will be advised to appear in the DSU Admissions Test for better chances of securing admission.

## Plan of Study

Semester	Course Title	Course Code	Credit Hours	
I	Introduction to Information & Communication Technology	CS-1201	3	
	Introduction to Information & Communication Technology Lab	CS-1201L	1	
	Programming Fundamentals	CS-1001	3	
	Programming Fundamentals Lab	CS-1001L	1	
	Islamic Studies	HU-1002	2	
	English Composition & Comprehension	HU-1001	3	
	Calculus and Analytical Geometry	BS-1301	3	
Total			16	
II	Object Oriented Programming	CS-1002	3	
	Object Oriented Programming Lab	CS-1002L	1	
	Digital Logic Design	CS-1101	3	
	Digital Logic Design Lab	CS-1101L	1	
	Communication Skills	HU-2001	3	
	Multivariate Calculus	BS-2301	3	
	Basic Electronics	BS-1102	2	
Total			17	
III	Data Structures & Algorithms	CS-2001	3	
	Data Structures & Algorithms Lab	CS-2001L	1	
	Computer Organization & Assembly Language	CS-2101	2	
	Computer Organization & Assembly Language Lab	CS-2101L	1	
	Discrete Structures	CS-2002	3	
	Pakistan Studies	HU-1006	2	
	Technical & Business Writing	HU-3001	3	
Total			18	
IV	Database Systems	CS-2003	3	
	Database Systems Lab	CS-2003L	1	
	Operating Systems	CS-2004	3	
	Operating Systems Lab	CS-2004L	1	
	Theory of Automata & Formal Languages	CS-2102	3	
	HU/MG Elective-I	HU/MG-XXXX	3	
	Probability & Statistics	BS-1402	3	
Total			17	
V	Design & Analysis of Algorithms	CS-3001	3	
	Introduction to Software Engineering	CS-3102	3	
	Data Communication & Computer Networks	CS-3002	3	
	Compiler Construction	CS-3101	3	
	HU/MG Elective-II	HU/MG-XXXX	3	
	Differential Equations	BS-2302	3	
	Total			18
VI	Artificial Intelligence	CS-3103	3	
	Information Security	CS-3003	3	
	Computer Architecture	CS-3104	3	
	CS Elective-I	CS-33XX	3	
	HU/MG Elective-III	HU/MG-XXXX	3	
	Numerical Computing	BS-3302	3	
	Total			18
VII	Human Computer Interaction	CS-4100	3	
	CS Project - 1	CS-4001	3	
	CS Seminar Course 1	CS-4200	1	
	CS Elective-II	CS-43XX	3	
	CS Elective-III	CS-43XX	3	
	CS Elective-IV	CS-43XX	3	
	HU/MG Elective IV	HU/MG-XXXX	3	
Total			19	
VIII	Professional Issues in IT	CS-4202	3	
	CS Project - 2	CS-4002	3	
	CS Seminar Course 2	CS-4201	1	
	CS Elective-V	CS-43XX	3	
	CS Elective-VI	CS-43XX	3	
	Total			13
TOTAL CREDIT HOURS				136

## Specialization Streams

Area	Course Title	
Mobile & Ubiquitous Computing	Computing Mobile Mobile & Wireless Human Computer Interaction Android Programming	Application Development Computing Mobile Software Engineering Tiny OS Cyber Security
Cloud & Cluster Computing	High Performance Computing Social Computing Cluster & Grid Computing Concurrent & Distributed Computing	Cloud Computing Big Data Analytics Semantic Web Computational Social Science
Bio-Informatics	Introduction to Bio-Informatics Computational Genetics Biological Data	Computational Genomics Protein Sequence & Structural Analysis Management Computational Chemistry
Computational Linguistics	Natural Language Processing Statistical NLP Computational Grammar	Text Mining Machine Learning Computational Morphology
Computer Graphics and Visualization	Introduction to Computer Graphics using Modern OpenGL High Performance Computing using CUDA Physically based animation in Computer Mobile Graphics Programming on Android	Graphics Programming in the Web Browser using WebGL Mathematical Methods in Computer Graphics Graphics Introduction to GPU programming using Shaders Scientific Visualization

### Cross Registration

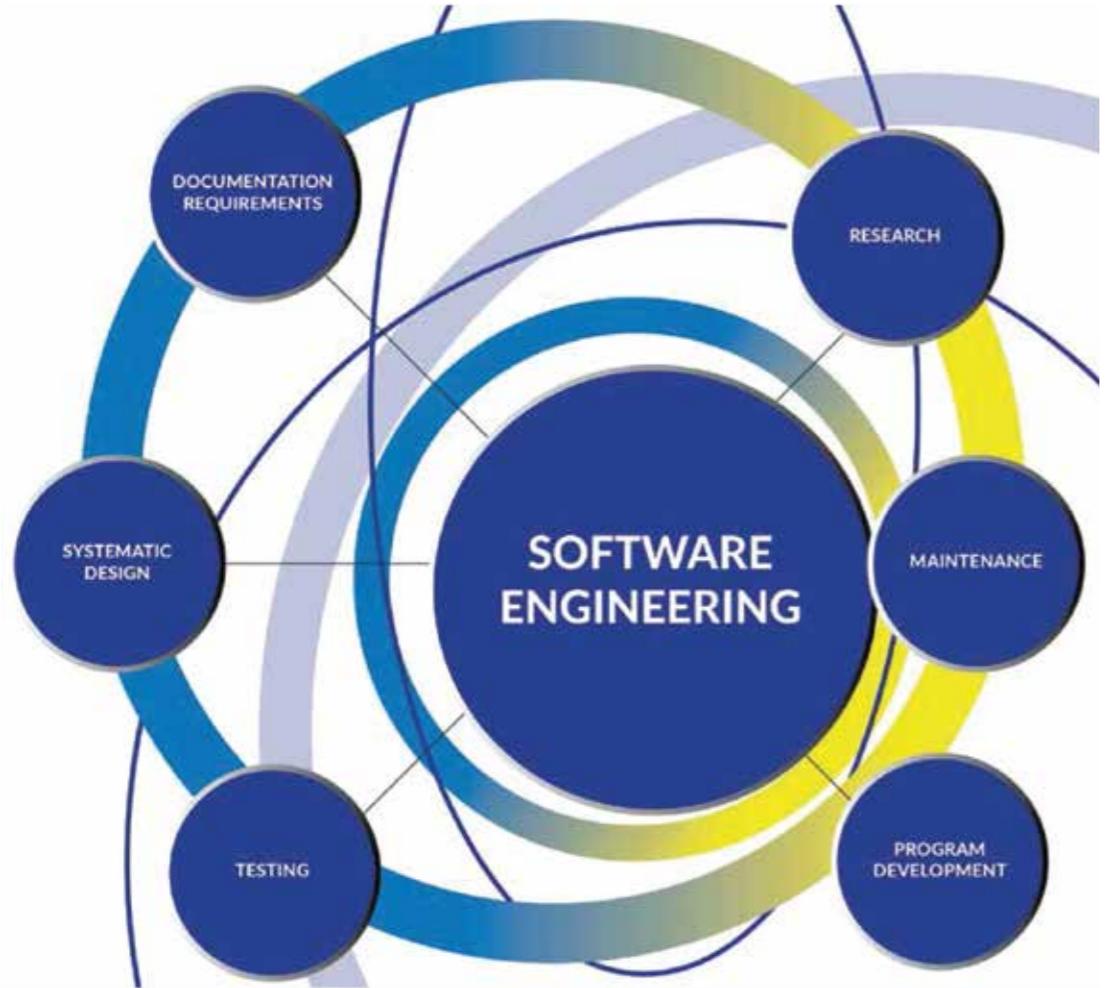
Under cross-registration, students enrolled in DSU BS (Computer Science) degree program can get credits in their coursework at DSU by registering and taking exams in equivalent online courses offered by top-ranking foreign universities.

### Cross Registration with Online Courses at Stanford, MIT, UC Berkeley and others

DSU Course	Foreign University Offering Equivalent Courses	Foreign University Course
USA CS-204: Database Systems	University of Washington, USA	Principles of Database Systems
USA CS-206: Operating Systems	UC Berkeley, USA	Operating Systems and System Programming
CS-302: Design and Analysis of Algorithms	MIT, USA	Introduction to Algorithms
CS-305: Software Engineering	UC Berkeley, USA	Software Engineering
CS-306: Artificial Intelligence	UC Berkeley, USA	Introduction to Artificial Intelligence
CS-313: Compiler Construction	UC Berkeley, USA	Programming Languages and Compilers
CS-404: Professional Issues in IT	MIT, USA	Introduction to Copyright Law
CS-440: Mobile Application Development	Stanford, USA	iPhone Application Development
CS-421: Machine Learning	University of California Irvine, USA	Machine Learning
CS-551 Introduction to Computer Graphics using Modern OpenGL	MIT, USA	Computer Graphics

# Bachelor Degree Programs

## BS (SOFTWARE ENGINEERING)



### Introduction

The Bachelor of Science in Software Engineering (BS-SE) Program spans over four years (Eight Semesters) with a total of 130 credit hours. The minimum CGPA of 2.0 (on a scale of 4.0) is required to obtain BS-SE degree. The courses are designed to meet the requirement of the Software Industry.

The BS-SE degree program consists of Computing-core courses, General education courses, Mathematics and Science foundation courses with specialization in the following suggested areas:-

Artificial Intelligence (AI), Data Warehousing & Data Mining, Digital Image Processing, E-Commerce, Global Software development, Information Security, Mobile Application Development, Simulation and Modeling, Multimedia Communications, Operation Research

### Eligibility

- Intermediate or an equivalent examination (Pre-Engineering/ Pre-Medical/ General Science) with at least 50% marks; Or
- A-Level with minimum 3 passes in principal subjects
- Applicants with O-Level / A-Level and Technical studies must submit equivalence from IBCC
- At least 50% marks in DSU Entrance Test

### Optional

Valid test scores of NEDUET (current year), NTS NAT (IE/ICS) (current year) or SAT II (within two years) if appeared. Applicants Submitting NEDUET, NTS NAT (IE/ICS) or SAT II test scores shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NEDUET, NTS NAT (IE/ICS) or SAT II scores will be advised to appear in the DSU Admissions Test for better chances of securing admission.

### Plan of Study

Semester	Course Title	Course Code	Credit Hours	Prerequisite
I	Introduction to Information and Communication Technology	SE-1201	2+1	—
	Programming Fundamentals	SE-1001	3+1	—
	English Composition & Comprehension	HU-1001	3+0	—
	Calculus & Analytical Geometry	BS-1301	3+0	—
	Pakistan Studies	HU-1006	2+0	—
	Applied Physics	BS-1101	3+0	—
Total 16+2				
II	Object Oriented Programming	SE-1002	3+1	Programming Fundamentals
	Communication & Presentation Skills	HU-2001	3+0	English Composition and Comprehension
	Discrete Structures	SE-2002	3+0	—
	Software Engineering	SE-XXXX	3+0	—
	Islamic Studies	HU-1002	2+0	—
	University Elective - I	SE-XXXX	3+0	—
Total 17+1				
III	Data Structures & Algorithms	SE-2001	3+1	Object Oriented Programming
	Software Requirement Engineering	SE-XXXX	3+0	Software Engineering
	Human Computer Interaction	SE-XXXX	3+0	Software Engineering
	Linear Algebra	BS-1302	3+0	—
	University Elective - II	SE-XXXX	3+0	—
	Total 15+1			
IV	Operating Systems	SE-2004	3+1	Data Structures & Algorithms
	Database Systems	SE-2003	3+1	Data Structures & Algorithms
	Software Design & Architecture	SE-XXXX	2+1	Software Requirement Engineering
	Probability and Statistics	BS-1402	3+0	—
	University Elective - III	SE-XXXX	3+0	—
	Total 14+3			
V	Software Construction and Development	SE-XXXX	2+1	Software Design and Architecture
	Computer Networks	SE-3002	3+1	—
	Technical and Business Writing	HU-3001	3+0	Communication & Presentation Skills
	SE Supporting -I	SE-XXXX	3+0	—
	SE Supporting -II	SE-XXXX	3+0	—
	Total 14+2			
VI	Software Quality Engineering	SE-XXXX	3+0	Software Engineering
	Information Security	SE-3003	3+0	—
	Professional Practice	HU-XXXX	3+0	—
	Web Engineering	SE-XXXX	3+0	—
	SE Elective -I	SE-XXXX	3+0	—
	SE Supporting -II	SE-XXXX	3+0	—
Total 18+0				
VII	Software Project Management	SE-XXXX	3+0	Software Engineering
	Software Re-Engineering	SE-XXXX	3+0	Software Construction & Development
	SE Elective -II	SE-XXXX	3+0	—
	SE Elective - III	SE-XXXX	3+0	—
	Final Year Project - I	SE-4001	0+3	—
	Total 12+3			
VIII	SE Elective - IV	SE-XXXX	3+0	—
	SE Elective - V	SE-XXXX	3+0	—
	Final Year Project - II	SE-4002	0+3	—
	University Elective - IV	SE-XXXX	3+0	—
	Total 9+3			
				<b>TOTAL CREDIT HOURS</b> <b>136</b>

# Bachelor Degree Programs

## BE (CIVIL)



### Introduction

The Civil Engineering Department at DHA Suffa University shall offer a Bachelor's Degree Program BE (Civil) spanning over 4 years. The program has been prepared in accordance with the Pakistan Engineering Council (PEC) guidelines. The DCK campus shall serve as the living lab for civil engineers with all sorts of ongoing mega projects in the vicinity area. Specialization streams of Construction Management, Structures, Transportation and Water Resources shall be offered through elective courses beyond the core Civil Engineering courses.

### Eligibility

- Intermediate or an equivalent examination (Pre-Engineering) with at least 60% marks;
- Must have studied Mathematics, Physics and Chemistry at HSSC / A- level
- Applicants with O-Level / A-Level and Technical studies must submit equivalence from IBCC
- At least 50% marks in DSU Entrance Test

### Optional

Valid test scores of NEDUET (current year), NTS NAT (IE/ICS) (current year) or SAT II (within two years) if appeared. Applicants Submitting NEDUET, NTS NAT (IE/ICS) or SAT II test scores shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NEDUET, NTS NAT (IE/ICS) or SAT II scores will be advised to appear in the DSU Admissions Test for better chances of securing admission.

### Plan of Study

Semester	Course Title	Course Code	Credit Hours
I	Engineering Drawing Engineering Drawing Lab Engineering Surveying Engineering Surveying Lab Basic Electrical Engineering Basic Electrical Engineering Lab Functional English Applied Calculus Pakistan Studies	CE-1101 CE-1101L CE-1102 CE-1102L EE-1030 EE-1030L HU-1009 BS-1301 HU-2101	1 2 2 1 1 1 2 3 2
			<b>Total 15</b>
II	Engineering Material Engineering Material Lab Engineering Mechanics Engineering Mechanics Lab Computer Programming Computer Programming Lab Basic Mechanical Engineering Islamic Studies / Ethical Behaviour (for non-Muslims) Linear Algebra & Ordinary Differential Equations	CE-1201 CE-1201L CE-1202 CE-1202L CE-1103 CE-1103L ME-1003 HU-2201 BS-2303	2 1 3 1 1 2 2 2 3
			<b>Total 17</b>
III	Civil Engineering Drawing and Graphics Civil Engineering Drawing and Graphics Lab Advanced Surveying Advanced Surveying Lab Mechanics of Solids-I Mechanics of Solids-I Lab Engineering Geology Probability & Statistics Probability & Statistics Lab Professional Ethics Foreign Language	CE-2104 CE-2104L CE-2105 CE-2105L CE-2203 CE-2203L CE-2301 BS-1405 BS-1405 HU-4701 -	1 2 2 1 2 1 2 2 2 NC
			<b>Total 16</b>
IV	Structural Analysis-I Soil Mechanics Soil Mechanics Lab Construction Engineering Fluid Mechanics-I Fluid Mechanics-I Engineering Economics Architecture and Town Planning	CE-2204 CE-2302 CE-2302L CE-2401 CE-2501 CE-2501L MS-4407 CE-2001	3 3 1 3 3 1 2 2
			<b>Total 18</b>
V	Quantity & Cost Estimations Quantity & Cost Estimations Lab Reinforced Concrete Design-I Reinforced Concrete Design-I Lab Advanced Fluid Mechanics Advanced Fluid Mechanics Lab Transportation Engineering-I Transportation Engineering-I Lab Technical and Business Communication	CE-3106 CE-3106L CE-3205 CE-3205L CE-3502 CE-3502L CE-3601 CE-3601L HU-4408	2 1 3 1 3 1 3 1 3
			<b>Total 18</b>
VI	Geo Informatics Geo Informatics Lab Mechanics of Solids-II Mechanics of Solids-II Lab Structural Analysis-II Construction Management Construction Management Lab Environmental Engineering-I Environmental Engineering-I Lab Humanities/ Social Science Elective	CE-3107 CE-3107L CE-3206 CE-3206L CE-3207 CE-3402 CE-3402L CE-3503 CE-3503L HU-xxxx	1 1 2 1 3 2 1 2 1 3
			<b>Total 17</b>
VII	Geo Technical & Foundation Engineering Geo Technical & Foundation Engineering Lab Transportation Engineering-II Transportation Engineering-II Lab Management Science elective Numerical Analysis Civil Engineering Project	CE-4303 CE-4303L CE-4602 CE-4602L MS-xxxx BS-3303 CE-4901L	3 1 3 1 3 3 3
			<b>Total 17</b>
VIII	Reinforced Concrete Design-II Reinforced Concrete Design-II Lab Design of Steel Structures Environmental Engineering-II Hydrology and Irrigation Engineering Civil Engineering Project Technical Elective	CE-4208 CE-4208L CE-4209 CE-4209 CE-4504 CE-4505 CE-4902L CE-xxxx	3 1 3 2 3 3 3 3
			<b>Total 18</b>
		<b>TOTAL CREDIT HOURS</b>	<b>136</b>

# Bachelor Degree Programs

## BBA



### Program Philosophy

The BBA program at DHA Suffa University anchors on providing **core** and **applied knowledge** of Management Sciences through an interactive and **experiential learning** process.

### Program Objectives

- To provide a platform for the development of conceptual, critical and analytical skills to manage complex business situations in a global, intercultural and diverse environment.
- To facilitate understanding of interdisciplinary knowledge in order to recognize dynamic factors in business challenges and to propose innovative ideas for pragmatic solutions.
- To indoctrinate the core ethical principles within dynamics of the organizations & society that are necessary to become socially responsible and capable of adding value in the business world.

### Learning Outcomes

We expect our students to achieve the following:

- Analytical Knowledge:** Students can demonstrate sound technical & analytical competence pertaining to business management concepts & practices in a domestic as well as global scenario.
- Strategic Thinking:** Students possess strategic & reflective cognitive skills that inculcate out of the box thinking with the ability to develop a pragmatic stance and situation rationalization for optimum results.
- Interdisciplinary Competence:** Students are able to decipher real business challenges and to manage complex business situations in a heterogeneous cultural environment.
- Communication Skills:** Students have confident verbal and written communication skills with the ability to develop and deliver quality content in a professional manner.
- Ethical Awareness:** Students are ethically aware and equipped to become responsible citizens and help build a better society through continuous engagement in community service.

### Eligibility

- Intermediate or an equivalent examination Or
- A-Level with minimum 3 passes in principal subjects
- Applicants with O-Level / A-Level and Technical studies must submit equivalence from IBCC
- At least 50% marks in DSU Entrance Test

### Optional

Valid test scores of NTS (current year) or SAT I (within two years) if appeared. Applicants Submitting NTS or SAT I test scores shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NTS or SAT I scores will be advised to appear in the DSU Admissions Test for better chances of securing admission

*\*Candidates less than 50% have to appear for an interview*

### Plan of Study (BBA 4 Years)

Semester	Course Title	Course Code	Credit Hours
I	Business Mathematics	BS-1401	3
	Freshman English - I	HU-1005	3
	Islamic Studies	HU-1203	2
	Pakistan Studies	HU-2101	2
	Introduction to Computing	MS-1301	3
	Microeconomics	MS-1401	3
<b>Total 16</b>			
II	Understanding Psychology and Human Behavior	HU-1303	3
	Sociology	HU-1401	3
	Oral Communication and Presentation Skills	HU-2007	3
	Principles of Management	MS-1101	3
	Principles of Accounting	MS-1201	3
	Macroeconomics	MS-1402	3
<b>Total 18</b>			
III	Business Statistics	BS-2402	3
	Business Communication	HU-2008	3
	Critical Thinking	HU-2501	3
	Business Law	MS-2102	3
	Financial Accounting	MS-2202	3
	Development Economics	MS-2403	3
<b>Total 18</b>			
IV	Statistical Inference	BS-2403	3
	Academic Writing	HU-2010	3
	Principles of Marketing	MS-2001	3
	Organizational Behavior	MS-2103	3
	Economic Issues of Pakistan	MS-2404	3
	Introduction to Business Finance	MS-3204	3
<b>Total 18</b>			
V	Cost Accounting	MS-2203	3
	Marketing Management	MS-3002	3
	Human Resource Management	MS-3104	3
	Management Information System	MS-3302	3
	Production and Operation Management	MS-3501	3
	Business Research Methods	MS-3601	3
<b>Total 18</b>			
VI	Consumer Behavior	MS-3003	3
	Entrepreneurship and Small Business Management	MS-3105	3
	E-Business	MS-3303	3
	Data Analytics	MS-3602	3
	Business Ethics	MS-3710	3
	Financial Management	MS-4205	3
<b>Total 18</b>			
VII	Specialization - I	-----	3
	Specialization - II	-----	3
	Professional Development	MS-4106	3
	Business Policy	MS-4107	3
	Financial Markets and Institutions	MS-4206	3
	Foreign Language	MS-4711	3
<b>Total 18</b>			
VIII	Specialization - III	-----	3
	Specialization - IV	-----	3
	Research Project	MS-4603	6
<b>Total 12</b>			
<b>TOTAL CREDIT HOURS 136</b>			

## BBA 2.5 Years (After 14 Years of Education)

Semester	Course Title	Course Code	Credit Hours
I	Introduction to Computing	MS-1301	3
	Principles of Management	MS-1101	3
	Principles of Accounting	MS-1201	3
	Business Economics	MS-1403	3
	Academic Writing	HU-2010	3
	Business Mathematics & Statistics	BS-5410	3
<b>Total 18</b>			
II	Marketing Management	MS-3002	3
	Human Resource Management	MS-3104	3
	Introduction to Business Finance	MS-3204	3
	Management Information System	MS-3302	3
	Production & Operations Management	MS-3501	3
	Business Research Methods	MS-3601	3
<b>Total 18</b>			
III	Consumer Behavior	MS-3003	3
	Financial Management	MS-4205	3
	Entrepreneurship & Small Business Management	MS-3105	3
	E-Business	MS-3303	3
	Data Analytics	MS-3602	3
	Business Ethics	MS-3710	3
<b>Total 18</b>			
IV	Professional Development	MS-4106	3
	Financial Markets & Institutions	MS-4206	3
	Foreign Language	MS-4711	3
	Specialization - I	MS-4000	3
	Specialization - II	MS-4000	3
	Business Policy	MS-4107	3
<b>Total 18</b>			
V	Research Project	MS-4603	6
	Specialization - III	MS-4000	3
	Specialization - IV	MS-4000	3
<b>Total 12</b>			
<b>Total Credit Hours 84</b>			

## Specialization Streams

Area	Course Title
Marketing	Advertising
	Global Marketing/International Marketing
	Retail Marketing
	Customer Relationship Management
	Direct Marketing
	Export Marketing
	Event Management
	Internet Marketing/Digital Marketing
	Marketing Planning & Analysis
	Social Media Marketing
	Relationship Marketing
	Sales Management
	Business to Business Marketing
	Promotional and Advertisement Management
Human Resource Management	Conflict Resolution & Negotiation
	Leadership & Motivational Techniques
	Performance Appraisal
	HR Information System
	Compensation Management
	Human Resource Management
	Staffing & Performance Management
	International HRM
	Change Management
	Recruitment & Selection
	Training & Development
	Human Resource Planning
	Legal, Ethical and Safety Issues
	Organizational Development
Finance	Security Analysis
	Treasury & Fund Management
	International Finance
	Financial Economics
	Entrepreneurial & Small Business Finance
	Financial Markets & Institutions
	Business Taxation Policy & Practice
	Accounting for Decision Making
	Islamic Banking & Finance
	Investment & Portfolio Management
	Risk Management
	Analysis of Financial Statement
	Managerial Accounting
	Auditing
	Marketing of Financial Services
Management Information Systems	Programming Application Systems
	Information Systems Analysis and Design
	Database Systems
	Networking
	Business Application Programming
	Information Systems Security
Supply Chain Management	System and Network Administration
	Web Application Development
	Strategic Information Technology Management
	Introduction to Supply Chain Management
	Lean and Six Sigma Processes
	Logistics and Transportation Management
	Global Supply Chain Management
	Total Quality Management
	Distribution and Supply Chain Network Design
	Production Planning and Inventory Control
	Supply Chain Modeling and Optimization
	Supply Chain Design, Management & Control

# Bachelor Degree Programs

## BS (ACCOUNTING & FINANCE)



### Introduction

The program will help students acquire technical skills required to analyze financial statements, perform financial analysis and study financial and security markets. They would develop in depth knowledge of the role of accounting and finance in measuring business growth. The program comprises of curriculum which would equip the students to pursue a career in leading banks and financial institutions. The specialization stream provides graduates an opportunity to pursue careers as accountants, auditors, tax specialists, financial analysts, fund managers, traders, brokers and investment researchers.

### Eligibility

- Intermediate or an equivalent examination with at least 45% marks;
- A-Level with minimum 3 passes in principal subjects
- Applicants with O-Level / A-Level and Technical studies must submit equivalence from IBCC
- At least 50% marks in DSU Entrance Test

### Optional

Valid test scores of NTS (current year) or SAT I (within two years) if appeared. Applicants Submitting NTS or SAT I test scores shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NTS or SAT I scores will be advised to appear in the DSU Admissions Test for better chances of securing admission.

### Plan of Study

Semester	Course Title	Cr Hr	ICAP	ICMAP	ACCA
I	Functional English	3	✓		
	Introduction to Mathematics	3	✓		✓
	Introduction to Statistics	3	✓		✓
	Islamic Studies	3			
	Pakistan Studies	3			
II	Mercantile Law	3	✓	✓	✓
	Business Communication	3	✓		✓
	Introduction to Economics	3	✓		✓
	Introduction to Finance	3	✓		
	Introduction to Financial Accounting	3	✓	✓	✓
III	Financial Accounting	3	✓	✓	✓
	Money, Banking & Capital Markets	3			
	Governance, Risk & Ethics	3			✓
	Organizational Behavior	3	✓		
	Taxation	3	✓	✓	✓
IV	Company Law	3	✓		✓
	Cost Accounting	3	✓		✓
	Financial Management	3			✓
	Auditing	3	✓	✓	✓
	Information Technology	3	✓		
V	IT Management, Audit & Control	3	✓		✓
	Advanced Accounting	3	✓	✓	✓
	Financial Reporting	3	✓	✓	✓
	Corporate Law	3	✓		✓
	Management Accounting	3	✓	✓	✓
VI	Strategic Financial Management	3			✓
	Strategic Management Accounting	3			✓
	Business Management	3	✓	✓	✓
	Advanced Taxation	3	✓		✓
	Advanced Auditing	3	✓		✓
VII	Business Finance Decision	3	✓		
	Business Research Methods	3			
	Business Analysis	3			
	Strategic Management	3			✓
	Performance Management	3			✓
VIII	Advanced Financial Management	3			✓
	Islamic Banking & Finance	3			
	Investment Analysis & Portfolio Management	3			✓
	Advanced Performance Management	3			✓
	Research Project	3			
<b>Total Credit Hours</b>		<b>120</b>			

### Exemptions

- Will only be allowed for courses passed from the HEC recognized institutions e.g., Institute of Chartered Accountants of Pakistan (ICAP), Institute of Cost and Management Accountants of Pakistan (ICMAP) and others.
- Will be granted where the original earned grade is 'C' or better.
- Will be granted to a maximum of 50% of the total credits in the program.
- All exemptions shall be governed by relevant HEC guidelines.

# Bachelor Degree Programs

## BS (ENGLISH)



### Introduction

The English program, Department of Humanities and Social Sciences seeks to propagate freedom of inquiry and creativity through scholarship and learning of highest calibre among leaders of the future. DSU's BS English is one of the best English Programs par excellence, which aims at honing critical, analytical and rational faculties of students; exposing them to a wide variety of globally competitive and intellectually stimulating courses. The methodical approach to teaching is eclectic; offering courses in classical, modern, postmodern and contemporary literature. The carefully chalked out scheme of study equally accentuates linguistics; introducing new streams in terms of rhetoric and critical discourse. BS English program ensures that students are well-grounded in the research milieu. The department aims at producing high employability graduates to meet the challenges of international job market. Workshops, seminars and training sessions are a regular feature of the English Program to keep the students abreast of the latest developments in English Studies.

### Eligibility

- Intermediate or an equivalent examination Or
- A-Level with minimum 3 passes in principal subjects
- Applicants with O-Level / A-Level and Technical studies must submit equivalence from IBCC
- At least 50% marks in DSU Entrance Test

### Optional

Valid test scores of NTS (current year) or SAT I (within two years) if appeared. Applicants Submitting NTS or SAT I test scores shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NTS or SAT I scores will be advised to appear in the DSU Admissions Test for better chances of securing admission.

### Plan of Study

Semester	Course Title	Course Code	Credit Hours
I	Study Skills English I: Reading and Writing Skills Introduction to English Language Introduction to English Literature Sociology Pakistan Studies	EN-1201 EN-1301 EN-1101 EN-1001 HU-1401 HU-2101	3 3 3 3 3 2
			<b>TOTAL 17</b>
II	EnglishII: Exploring Creative Writing Introduction to Phonetics and Phonology Literary Forms and Movements Human Resource Management Copywriting Islamic Studies	EN-1302 EN-1102 EN-1002 MS-3104 EN-1103 HU-1203	3 3 3 3 3 2
			<b>TOTAL 17</b>
III	Introduction to Information and Computer Technology (ICT) Skills Principles of Marketing Introduction to Morphology and Semantics Global Poetry English III: Public Speaking and Presentation Skills Short Fictional Narratives	CS-1210 MS-2001 EN-2103 EN-2003 EN-2303 EN-2004	3 3 3 3 3 3
			<b>TOTAL 18</b>
IV	English IV: Academic Reading and Writing Human Rights and Citizenship Classical and Renaissance Drama Classical Poetry Evaluation, Adaptation and Materials Development Rise of the Novel (18th to 19th century)	EN-2304 IR-2312 EN-2005 EN-2006 EN-2104 EN-2007	3 3 3 3 3 3
			<b>TOTAL 18</b>
V	International Relations Popular Fiction Romantic and Victorian Poetry Foundations of Literary Theory and Criticism Sociolinguistics Introduction to Environmental Studies	IR-1301 EN-3008 EN-3009 EN-3010 EN-3105 BS-1502	3 3 3 3 3 3
			<b>TOTAL 18</b>
VI	Modern Poetry Modern Drama Modern Novel Introduction to Syntax Discourse Analysis Writing Non Fiction	EN-3011 EN-3012 EN-3013 EN-3106 EN-3107 EN-3014	3 3 3 3 3 3
			<b>TOTAL 18</b>
VII	Research Methods and Term Paper writing Introduction to Applied Linguistics Introduction to Stylistics Literary Theory and Practice Pakistani Literature in English	EN-4108 EN-4109 EN-4110 EN-4015 EN-4016	3 3 3 3 3
			<b>TOTAL 15</b>
VIII	Introduction to Translation Studies American Literature Postcolonial Literature World Englishes Language Testing & Assessment	EN-4111 EN-4017 EN-4018 EN-4112 EN-4113	3 3 3 3 3
			<b>TOTAL 15</b>
		<b>TOTAL CREDIT HOURS</b>	<b>136</b>

# Bachelor Degree Programs

## BS (INTERNATIONAL RELATIONS)



### Introduction

International Relations (IR) as a course of study reflects the dynamics of the International System. The System is a complex web with multiple but mutually functioning components and is characterized by interfacing changes and continuities, which are instrumental in the dynamic nature of the discipline. IR is a broad discipline that encapsulates the multivariate aspects of man in the global contexts. It is what can be described as 'a fusion of social science disciplines', as it deals with the basic elements of the social man; the only difference is that it looks at such essentials in relational contexts beyond national borders. Our richly connected, complex world seeks professionals skilled in International Relations, an exciting field of study that presents a globally oriented perspective on issues that transcend national boundaries.

### Eligibility

- Intermediate or an equivalent examination Or
- A-Level with minimum 3 passes in principal subjects
- Applicants with O-Level / A-Level and Technical studies must submit equivalence from IBCC
- At least 50% marks in DSU Entrance Test

### Optional

Valid test scores of NTS (current year) or SAT I (within two years) if appeared. Applicants Submitting NTS or SAT I test scores shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NTS or SAT I scores will be advised to appear in the DSU Admissions Test for better chances of securing admission.

### Plan of Study

Semester	Course Title	Credit Hours
I	English- I Pakistan Studies Basic Mathematics Introduction to International Relations Introduction to Political Science Introduction to Economics	3 2 3 3 3 3
		<b>TOTAL 17</b>
II	English II- Comprehension, Reading and Prose Islamic Studies/Ethics Introduction to Statistics Computer skills for Social Sciences Research Approaches and Theories of International Relations Evolution of State	3 2 3 3 3 3
		<b>TOTAL 17</b>
III	English III – (Communication and Writing Skills) Geopolitical Structure of the World International Relations: 1648-1945 Research Methodology I F-VI Everyday Science General-III	3 3 3 3 3 3
		<b>TOTAL 18</b>
IV	International Relations Since 1945 Introduction to International Law General IV Globalization and IR Foreign Policy Analysis General V	3 3 3 3 3 3
		<b>TOTAL 18</b>
V	Foreign Policy of Pakistan General VI Strategic Studies Regional and International Organizations International Law II Introduction to International Security	3 3 3 3 3 3
		<b>TOTAL 18</b>
VI	Diplomacy Conflict Management and Resolution International Politics of Human Rights Politics of International Economy Nuclear Studies Dimensions of Modern Strategy	3 3 3 3 3 3
		<b>TOTAL 18</b>
VII	Comparative Politics Comparative Foreign Policies of US, Russia, and China Regional Connectivity and CPEC International Politics Of Environment Elective-II	3 3 3 3 3
		<b>TOTAL 15</b>
VIII	Research Thesis Elective-III Arms Control, Armaments, Disarmament and Nuclear Non Proliferation Peace Studies Elective -IV	3 6 3 3 3
		<b>TOTAL CREDIT HOURS 136</b>

# Bachelor Degree Programs

## BS (PSYCHOLOGY)



### Introduction

The Psychology Program offers a unique scheme of study drawn from a broad spectrum of core courses in psychology to allow students to work across conventional boundaries. The program aims at equipping students with requisite critical and creative skills.

In the final undergraduate year, students find themselves standing at a cross-roads to decide which stream they wish to opt for. Hence they will be offered following streams to steer their career path.

- 1- Clinical Psychology
- 2- Organizational/Industrial Psychology
- 3- Educational Psychology
- 4- Criminal Psychology

### Eligibility

- Intermediate or an equivalent examination Or
- A-Level with minimum 3 passes in principal subjects
- Applicants with O-Level / A-Level and Technical studies must submit equivalence from IBCC
- At least 50% marks in DSU Entrance Test

### Optional

Valid test scores of NTS (current year) or SAT I (within two years) if appeared. Applicants Submitting NTS or SAT I test scores shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NTS or SAT I scores will be advised to appear in the DSU Admissions Test for better chances of securing admission.

### Plan of Study (4 Years 8 Semesters BS Psychology)

Name of Subject	Cr. Hrs	Name of Subject	Cr. Hrs
<b>1st Semester</b>		<b>2nd Semester</b>	
English – I: Prose, Reading and Comprehension	3	English – II: Creative Writing	3
Pakistan Studies	3	Islamic Studies /Ethics	3
Basic Mathematics	3	Computer Skills for Social Sciences Research	3
Principles of Psychology	3	Experimental Psychology and Practicum	3
Introduction to Economics	3	History and Perspectives in Psychology	3
	<b>15</b>	Principles of Management	3
<b>3rd Semester</b>		<b>4th Semester</b>	
English – III: Public Speaking	3	Mental Health & Psycho-pathology-I	3
Language (UN Language)	3	Cognitive Psychology	3
Biological Bases of Behavior	3	Social Psychology	3
Theories of Personality	3	Psycholinguistics	3
Introduction to Sociology	3	Principles of Marketing	3
Critical Thinking	3	Human Resource Management	3
	<b>18</b>		<b>18</b>
<b>Mandatory 30 hours of Active Citizenship / Voluntary / Community Work must be completed during the first two years of the degree facilitated by CSR Dept.</b>			
<b>5th Semester</b>		<b>6th Semester</b>	
Mental Health & Psycho-pathology-II	3	Psychological Testing and Assessment - II	3
Psychological Testing and Assessment - I	3	Developmental Psychology	3
Statistics in Psychology-I	3	Statistics in Psychology-II	3
Positive Psychology	3	Psychopharmacology	3
Research Methods (Quantitative)	3	Research Methods (Qualitative)	3
Clinical Psychology	3	Educational Psychology	3
	<b>18</b>		<b>18</b>
<b>7th Semester</b>		<b>8th Semester</b>	
Counselling Psychology	3	Ethical Issues in Psychology	3
Industrial and Organization Psychology	3	Criminal Psychology	3
Research Project – I	3	Research Project – II	3
Elective – I	3	Elective – III	3
Elective – II	3	Elective – IV	3
	<b>15</b>		<b>15</b>
<b>Mandatory 4 to 6 weeks of Internship may be carried out after 6th Semester of the degree facilitated by CS &amp; CR Dept.</b>			
<b>Total Credit Hours: 135</b>			

**Electives:** Elective courses will be offered from one or more than one streams depending on the availability of relevant faculty members and resources.

S.No	Course Titles	Streams
1	Health Psychology	
2	Psychodiagnostics	
3	Counseling and Psychotherapy	Clinical Psychology
4	Disaster and Trauma Management	Elective Courses
5	Family Psychology	
6	Community Psychology	
7	Consumer Psychology	
8	Leadership in Psychology	Organizational/ Industrial Psychology Electives Courses
9	Strategic Human Resource Management	
10	Conflict & Negotiation skills	
11	Environmental Psychology	
12	Group Dynamics and Mob Psychology	
13	Teaching and Learning Skills	
14	Psychology of Individual Differences and Exceptional	Educational Psychology
15	School Management and Leadership	Elective Courses
16	Personal and Motivational Factors in Education	
17	Learning and Behavioral Modification	
18	Child and Adolescent Psychology	
19	Forensic Psychology	
20	Psychology of Jurisprudence	
21	Drugs, Addiction, and Crime	Criminal Psychology
22	Countering Violence Extremism (CVE)	Electives Courses
23	Peace Psychology	
24	Military Psychology	

# Master Degree Programs ME (MECHANICAL)

## Introduction

The Department of Mechanical Engineering offers ME Mechanical Engineering Degree Program in the following four specializations:

1. Engineering Mechanics
2. Thermofluids
3. Materials and Manufacturing
4. Energy Systems and Technologies

ME (Mechanical) students are required to complete 30 credit hours of graduate studies which include:

- Coursework: 24 Credit Hours
- Thesis Research: 6 Credit Hours

The ME (Mechanical) coursework is divided between a set of core and specialization (elective) courses offered by the ME Department, subject to availability of faculty and its teaching or research interests.

The complete list of electives is available on the next pages.

### Eligibility

- Sixteen years of schooling or 4-years education after HSSC/Grade 12 equivalent in a relevant field of study will be required for admission in the Masters program
- The applicant must pass the NTS GAT General Test with a minimum score of 50% or other such equivalent test acceptable as per HEC guidelines
- In case of admission tests conducted by the university, a minimum of 60% marks will be required

\*or other such equivalent tests acceptable as per HEC guidelines

## Plan of Study

S. No.	Course Title	Credit Hours
<b>Semester 1</b>		
1	Compulsory 1 – Mathematics	3
2	Compulsory 2 – Specialization	3
3	Compulsory 3 – Specialization	3
4	Compulsory 4 – Specialization	3
<b>Semester 2</b>		
5	Elective 1 – Specialization Elective	3
6	Elective 2 – Specialization Elective	3
7	Elective 3 – General Elective	3
8	Elective 4 – General Elective	3
<b>Semester 3</b>		
9	Thesis / Elective 5 – General Elective Elective 6 – General Elective	6 / 3 3
<b>TOTAL</b>		<b>30</b>

Note: 'Elective 3 - General' and 'Elective 4 - General' courses can be taken from any of the courses listed under 'Elective Courses for ME and PhD in Mechanical Engineering'.

## ME (Mechanical) Coursework – Compulsory Courses

- a. The general elective courses can be taken from Mathematics, general or any specialization stream courses  
Students will be required to take three compulsory courses in their area of specialization which are as follows.:

### Engineering Mechanics

1. Continuum Mechanics
2. Advanced Dynamics
3. Advanced Finite Element Analysis

### Thermofluids

1. Advanced Fluid Mechanics
2. Advanced Heat & Mass Transfer
3. Advanced Thermodynamics

### Materials and Manufacturing

1. Advanced Manufacturing Processes
2. Advanced Engineering Materials
3. Selection of Materials

### Energy Systems and Technologies

1. Advanced Heat and Mass Transfer
2. Energy Management and Utilization
3. Fundamentals of Energy Engineering

- b. In addition, the students will be required to take one course from the following list of five approved graduate level mathematics courses:

1. Advanced Numerical Methods
2. Functional Analysis and Computational Linear Algebra
3. Applied Regression and Design of Experiments
4. Advanced Probability and Statistics
5. Advanced Mathematical Techniques

## ME (Mechanical) Coursework – Elective Courses

In addition to the four compulsory courses, each ME student at DSU will be required to complete four elective courses (12 credit hours). The elective courses offered by the Department of Mechanical Engineering will depend on the teaching and research interests of the ME graduate faculty.

## Elective Courses for ME and PhD in Mechanical Engineering

Area	Course Title
General Courses	Optimization of Engineering Systems Measurements and Instrumentation Special Topics in Mechanical Engineering
Mathematics Courses	Advanced Numerical Methods Functional Analysis and Computational Linear Algebra Applied Regression and Design of Experiments Advanced Probability and Statistics Advanced Mathematical Techniques
Engineering Mechanics Stream Courses	Continuum Mechanics Advanced Finite Element Methods Advanced Dynamics Constitutive Modeling of Materials Advanced Vibrations Nonlinear Dynamics and Chaos Microelectromechanical Systems Robotics and Parallel Mechanisms Theory of Elasticity Theory of Plasticity Modern Control of Linear Systems Rotordynamics Smart Materials and Structures Mechanics of Composite Materials Theory of Plates and Shells Special Topics in Engineering Mechanics

Area	Course Title
Thermofluid Stream Courses	Advanced Fluid Mechanics Computational Fluid Dynamics Modeling and Simulation of Turbulent Flows Two Phase Flows and Phase Change Fluid Structure Interaction Turbulence and Mixing Advanced Heat and Mass Transfer Combustion Phenomena Viscous Flow Power Plant Engineering Aerodynamics Aerospace Propulsion Advanced Gas Dynamics Renewable Energy Technologies Advanced Thermodynamics Conduction Heat Transfer Convection Heat Transfer Radiation Heat Transfer Advanced Turbomachinery Transport Processes in Energy Systems Experimental Fluid Mechanics Inviscid Flow Special Topics in Thermofluids
Materials and Manufacturing Stream Courses	Continuum Mechanics Advanced FEA Materials for High Temperature Applications Advanced Fatigue and Fracture Analysis Tribology Material Structure and Defects Thermodynamics of Materials Engineering Nanomaterials Mechanical Properties of Engineering Polymers Advanced Manufacturing Processes Advanced Product Design Manufacturing Process Capability Supply Chain Management in Engineering Simulation of Industrial System Operations Research Finite Element Analysis in Manufacturing Processes Advanced Machine Design Non-destructive Testing Project Management Application of Computer Graphics in Engineering Artificial Intelligence in Design and Manufacturing Reliability and Quality Engineering Sustainable Manufacturing Selection of Materials Special Topics in Materials and Manufacturing
Energy System and Technology Stream Courses	Energy Audit and Management Solar Thermal Engineering Bio Energy Engineering Environmental Impact Assessment Hybrid Power Sources Hydro Power Plants Wind Energy Engineering Instrumentation in Energy Systems Fuels and Combustion Power Electronics and Motor Drives Electrical Power Transmission and Distribution Renewable Energy Systems Energy Systems Modelling and Simulation Advanced Clean Coal Technologies Combustion and Pollution Control Hydrogen Technologies and Fuel Cells Energy Management in Buildings Energy Economics and Management Solar Photovoltaic Systems Biofuels Engineering Advanced Heat and Mass Transfer Energy Management and Utilization Fundamentals of Energy Engineering Electrical Power Generation Systems

### ME Thesis

As part of the requirements for the award of ME degree, the ME student must carry out research work on an approved topic and submit a thesis. The thesis work is required to be carried out under the supervision of an approved Supervisor and Advisory Committee. The ME Thesis will be evaluated as specified in the DHA Suffa University Rules and Regulations for Graduate Studies.

# Master Degree Programs ME (ELECTRICAL)



### Introduction

The Department of Electrical Engineering offers a ME Electrical Engineering Degree Program requiring the student to complete 30 credit hours of graduate studies which include:

- Coursework : 24 Credit Hours
- Thesis Research : 6 Credit Hours

ME (Electrical) program requires the students to complete a small set of core courses and allows them to choose most of the remaining courses from the advanced elective courses offered.

### Eligibility

- Sixteen years of schooling or 4-years education after HSSC/Grade 12 equivalent in a relevant field of study will be required for admission in the Masters program
- The applicant must pass the NTS GAT General Test with a minimum score of 50% or other such equivalent test acceptable as per HEC guidelines

\*or other such equivalent tests acceptable as per HEC guidelines

### Plan of Study

S. No.	Course Title	Credit Hours
<b>Semester 1</b>		
1	Compulsory 1- Mathematics	3
2	Compulsory 2- Specialization	3
3	Elective 1-Specialization	3
4	Elective 2-Specialization	3
<b>Semester 2</b>		
5	Compulsory 3- Specialization	3
6	Compulsory 4- Specialization	3
7	Elective 3 – General	3
8	Elective 4 – General	3
<b>Semester 3</b>		
9	Thesis* OR Elective 5 – Specialization** Elective 6 – Specialization**	6
		<b>TOTAL 30</b>

## ME (Electrical) Coursework – Core Courses

The core courses of the ME (EE) Program are:

- Advanced Mathematical Techniques
- Advanced Computing and Simulation Techniques
- Research Methodology

## ME (Electrical) Coursework – Elective Courses

In addition to the three core courses, each ME (Electrical) student at DSU shall choose five elective courses (15 credit hours) from the graduate courses offered by the Electrical Engineering Department. Furthermore, out of the five elective courses, a student may choose two approved graduate courses offered by other departments at DSU. The elective courses offered by the Department of Electrical Engineering will depend on the teaching and research interests of the EE graduate faculty. A tentative list of sample EE Elective Courses that may be offered by the Department is given on page 75.

## Elective Courses for ME and PhD in Electrical Engineering

Area	Course Title	
Power Systems Engineering	Advanced High Voltage Engineering Power System Modeling and Analysis Power System Distribution Advanced Power System Protection Power Generation Economics Energy Management Advanced Power Quality Distributed Generation Condition Control of DC Machines and Drives Power Electronics Devices and Converters Switch-Mode Power Supplies Special Electrical Machines	Power System Circuit Breakers and Sub-stations Advanced Power System Transmission Power System Reliability Insulation Coordination in Power Systems Power System Restructuring Power System Stability Renewable Energy Systems Monitoring Techniques Control of AC Machines and Drives Modeling and Simulation of Converters Modeling and Simulation of Electrical Machines Advanced Electrical Machine Design
Control Engineering	Linear Control Systems Linear Multi variable Control Theory Optimal Control Systems Random Stochastic Processes in Electrical Adaptive Control Systems Digital Control Systems Introduction to Chaos Theory Linear Control Systems Non-linear Control Systems Robust Control Adaptive Filter Theory Filtering & Tracking	Non-Linear Control Systems Control System Optimization Variables and Stochastic Processes Engineering Estimation Theory Stochastic Control Dynamics of Robots Chaos Theory & Fractals Digital Control Optimal Multi variable Control System Identification Detection & Estimation Fuzzy Control
Electronics and Embedded Systems	Semiconductor Device Physics Linear Control Systems Stochastic Systems Microwave Devices Non-Linear Control Systems Radiating Systems & Antennas Thin Film Characterization Digital Integrated Circuit Design	Semiconductor Processing Electromagnetic Field Analysis Quantum Mechanics Solid State Electronics Thin Film Processing Photonic Devices Organic Electronics Analog Integrated Circuit Design
Telecommunication	Probability and Random Processes Advanced Digital Communication Advanced Communication Advanced concepts in Radar Applications Advanced Digital Signal Processing Signal Detection and Estimation Advanced Satellite Communications Broadband Communication	Advanced Communication Systems Information Theory and Coding Networks Microwave Systems Global Positioning and Navigation Systems Advanced Mobile Communication Advanced Optical Communication Radio wave Propagation Electromagnetic Compatibility
Communication Systems and Networks	Electromagnetic Field Analysis Linear Control Systems Stochastic Systems Microwave Networks & Passive Components Advanced Computer Networks Secure Communications Computational E.M. Real-time DSP Filtering & Tracking Wireless Communication Stochastic Processes Telecommunication Network Operations	Semiconductor Device Physics Advanced DSP Radiating Systems & Antennas Microwave Devices Adaptive Filter Theory Advanced Digital Communication Microwave IC Design Spatial Array Processing Information & Coding Theory Digital Integrated Circuit Design Modeling and Simulation Signal Processing Applications in Reconfigurable Architecture

## ME Thesis

As part of the requirements for the award of ME (EE) degree the ME students carry out research work on an approved topic and submit a thesis. Students conduct the thesis research under the supervision of an approved Supervisor and Advisory Committee. Both the thesis and the student must pass the evaluation as specified in the DHA Suffa University Rules and Regulations for Graduate Studies.

# Master Degree Programs

## MS (COMPUTER SCIENCE)



### Introduction

The Master in Computer Science program at DSU is designed to help students advance their professional knowledge and skills beyond the Bachelor level. The specific objectives of the program are to enable graduates to:

- Engage in problem solving through critical thinking which is essential for studying at the doctoral level;
- Understand the computing profession with respect to professional, social, and ethical issues that prepare them for potential challenges in the future;
- Analyze the computing needs of user communities and individuals;
- Prepare a design to solve computational problems using state-of-the-art knowledge and information resources;
- Solve the real-world problems using algorithmic abstraction for the betterment of mankind.

### Program Structure

The MS in Computer Science program at DSU is a blend of the academic and professional exposure to implement an effective curriculum model. A rigorous 24 credit hours coursework is followed by 6 credit hours thesis work unified with the chosen field of specialization. The program is spread over 4 semesters with minimum 30 credit hours that are based on 2 core courses of fundamental computing with 6 electives from a wide range of elective courses. The research interests in the department include: High Performance Computing, Ubiquitous Computing, Software Engineering, Computer Networks and Information Security, Computer Graphics and Visualization, Bio-informatics and Big Data Analytics.

### Eligibility

- Sixteen years of schooling or 4-years education after HSSC/Grade 12 equivalent in a relevant field of study will be required for admission in the Masters program
- The applicant must pass the NTS GAT General Test with a minimum score of 50% or other such equivalent test acceptable as per HEC guidelines

## Plan of Study

S. No.	Course Title	Credit Hours
<b>Semester 1</b>		
1	Advanced Analysis of Algorithms	3
2	Advanced Theory of Computation	3
3	MS(CS) Elective 1	3
4	Research Methodology	1
<b>Semester 2</b>		
5	Advanced Computer Architecture	3
6	Advanced Operating Systems	3
7	MS(CS) Elective 2	3
<b>Semester 3</b>		
8	MS(CS) Elective 3	3
9	MS(CS) Elective 4	3
10	MS Thesis-I	3
<b>Semester 4</b>		
11	MS Thesis-II	3
<b>TOTAL</b>		<b>31</b>

In lieu of MS Thesis (6 credit hours) student may opt one course (3 credit hours) and Research Project (3 credit hours).

## Elective Courses for MS and PhD in Computer Science

Mobile & Ubiquitous Computing	Ubiquitous Computing Mobile Application Development Mobile & Wireless Computing Mobile Software Engineering
Cloud & Cluster Computing	Computing Cloud Computing Social Computing Cluster & Grid Computing Concurrent & Distributed Computing Big Data Analytics Computational Social Science Data Mining
Bioinformatics	Introduction to Bioinformatics Computational Biology Biological Data Management Computational Genomics Protein Sequence & Structural Analysis System Biology
Computational Linguistics	Natural Language Processing Statistical NLP Computational Grammar Machine Learning Computational Morphology
Computer Graphics & Visualization	Advanced Computer Graphics Physically based Animation in Computer Graphics Mobile Graphics Programming on Android High Performance Computing using CUDA Graphics Programming in the Web Browser using WebGL Mathematical Methods in Computer Graphics Introduction to GPU Programming using Shaders Scientific Visualization

# Master Degree Programs

## MBA

### Program Philosophy

The MBA program at DHA Suffa University strives to provide meta knowledge to analytical minds by promoting critical and reflective thinking in situation analysis & decision making within an environment that nurtures innovative ideas.

### Program Objectives

- To prepare tomorrow's business strategists and decision makers through interactive facilitation of learning in a practical environment.
- To stimulate application of conceptual theories on meta-theoretical business situations to bridge the gap between academia and industry.
- To highlight the need to intertwine business practices with ethics, transparency and accountability to become a role model.

### Learning Outcomes

We expect our students to achieve the following:

- **Business Decision Making:** Graduates demonstrate the ability to perform necessary analysis, diagnose problems, evaluate alternatives and make effective decisions as a result of our case based pedagogy.
- **Critical Thinking:** Graduates understand the complexities of a business environment and possess the required cognitive skill-set to think critically and develop strategies within the limits of available resources.
- **Situation Analysis & Management:** Graduates can apply qualitative and quantitative approaches to obtain valuable information and tackle complex business situations utilizing global perspectives to identify and understand significant international and multicultural issues.
- **Entrepreneurship & Innovation:** Graduates possess fundamental skills of creating and managing innovation, new business development, and high-growth potential entities in a highly competitive environment.
- **Social & Ethical Sentience:** Graduates exhibit ethical consciousness and understand implications of decisions on society and environment.

### Eligibility

The applicant must pass the NTS GAT General Test with a minimum score of 50% or other such equivalent test acceptable as per HEC guidelines

Cr Hrs: 30, Duration 1.5 years, Semester: 3

- MBA pathway for 16 years of Business Education (e.g. BBA, MBA, MCom) with minimum CGPA 2.0/4.0 or 50% marks:
- Professionally qualified Chartered Accountants (ACA/FCA) and cost & Management Accountants (ACMA/FCMA) will be given preference

Cr Hrs: 60, Duration: 2 years, Semester: 4

- MBA pathway for 16 years of education (e.g. BE, MBBS, MSc, MA etc.) with minimum CGPA 2.0/4.0 or 50% marks:

## MBA 36 Credit Hours (1.5 Years)

Semester	Course Title	Course Code	Credit Hours
I	International Business	MS-5006	3
	Strategic Finance	MS-5206	3
	Advanced & Applied Research Methods	MS-5604	3
	Specialization - I	MS-XXXX	3
		Total	12
II	Strategic Marketing	MS-5005	3
	Strategic HRM	MS-5108	3
	Specialization - II	MS-XXXX	3
	Specialization - I11	MS-XXXX	3
		Total	12
III	Strategic Management	MS-6109	3
	Final / Capstone Project	MS-XXXX	6
	Specialization - IV	MS-XXXX	3
		Total	12
		<b>TOTAL CREDIT HOURS</b>	<b>36</b>

## Specialization Streams

Students can choose elective courses from one of the following five specialization streams namely Finance, Marketing, Human Resource Management (HRM), Management Information System and Supply Chain Management.

Area	Course Title	
Marketing	Services Marketing	Media Planning
	Public Relations & Media Marketing	Integrated Marketing Communications
Human Resource Management	Trade Marketing	Marketing Research
	Competitive Intelligence Marketing	Pharmaceutical Marketing
Finance	Industrial Marketing	Pharmaceutical Sales Management
	Brand Management	Healthcare Marketing
Management Information Systems	Talent Management	International HRM Challenges
	Crisis Management	Employee Engagement
Supply Chain Management	Compensation and Benefits	Organizational Development
	Job Analysis & Design	Labor Relations
Information Systems	Motivation & Reward Management	Workforce Planning, Development & Outsourcing
	Strategic HRM & Leadership	Recruitment & Selection
Data Mining	Workforce Diversity Management	Conflict Resolution & Negotiation
	Industrial & Organizational Psychology	Training & Development
Supply Chain Management	Financial Derivatives	Banking Operation & Credit Management
	Working Capital Management	Applied Portfolio & Fund Management
Information Systems	Corporate Governance	Corporate Finance
	Financial Strategy & Corporate Restructuring	Security Analysis
Data Mining	Capital Budgeting & Financial Planning	Corporate & Investment Banking
	Venture Capital & Private Finance	Auditing
Management Information Systems	Multinational Finance Management	Taxation
	Fixed Income Securities	Islamic Finance Theory and Practice
Management Information Systems	Prudential Regulations	
	Information Systems Project Management	Data Mining
Supply Chain Management	Decision Support and Business Intelligence Systems	Customer Relationship Management Technologies
	Advanced Database Management	E-Commerce Technologies
Information Systems	Advanced Systems Analysis and Design	Data Communication and Networking
	Business Information Security	Software Development Methodologies
Data Mining	Data Warehousing	Internet Development Technologies
	Information Systems Sourcing	Oracle IT
Management Information Systems	IT Security Controls	Information Security, Audit & Control
Supply Chain Management	Procurement and Sourcing	Project Management
	BPR/ERP	Vendor Selection and Development
Information Systems	Strategic Logistics Management	Customer Relationship Management
	Distribution and Channels Management	Quality Assurance in Supply Chain Management
Data Mining	SCM Technology and Applications	Supply Chain Strategies
	Forecasting in Supply Chain	Marketing Channels

## MBA 60 Credit Hours (2 Years)

Semester	Course Title	Course Code	Credit Hours
I	Principles of Marketing	MS-4001	3
	Business Management & Ethics	MS-4110	3
	Financial Accounting	MS-4202	3
	Managerial Communication	HU-5001	3
	Business Mathematics & Statistics	BS-5410	3
		Total	15
II	Marketing Management	MS-5002	3
	Strategic HRM	MS-5108	3
	Financial Management	MS-5205	3
	Business Economics	MS-5405	3
	Specialization - I	MS-XXXX	3
		Total	15
III	Strategic Marketing	MS-5005	3
	International Business	MS-5006	3
	Strategic Finance	MS-5206	3
	Advanced & Applied Research Methods	MS-5604	3
	Specialization - II	MS-XXXX	3
		Total	15
IV	Strategic Management	MS-6109	3
	Specialization - III	MS-XXXX	3
	Specialization - IV	MS-XXXX	3
	Final / Capstone Project	MS-XXXX	6
		Total	15
		<b>TOTAL CREDIT HOURS</b>	<b>60</b>

# Master Degree Programs

## MS (MANAGEMENT SCIENCES)

### Introduction

The Department of (Management Sciences) offers a Master of Science in Management Sciences degree program which requires the students to complete 30-credit hours of graduate studies as follows:

- (a) Core coursework: 12 Credit Hours
- (b) Specialization Courses: 12 Credit Hours
- (c) Thesis Research: 6 Credit Hours

The MS (Management Sciences) program has been structured to envisage the current challenges being faced by the management professionals and scholars and provides the participants with the

- Vision and capacity to excel in their professional careers;
- Latest theoretical and practical advances in the relevant fields;
- Research methods and techniques to undertake research assignments independently;
- Appropriate academic writing and publication guidelines; and
- Tools necessary for a career in academia.

### Eligibility

- Sixteen years of schooling or 4-years education after HSSC/Grade 12 equivalent in a relevant field of study will be required for admission in the Masters program.
- The applicant must pass the NTS GAT General Test with a minimum score of 50% or other such equivalent test acceptable as per HEC guidelines.

### Plan of Study

S. No.	Course Title	Credit Hours
<b>Semester 1</b>		
1	Strategic Management	3
2	Advanced Research Methodology	3
3	Strategic Marketing	3
4	Elective - I	3
<b>Semester 2</b>		
5	Strategic Finance	3
6	Elective-II	3
7	Elective-III	3
8	Elective IV	3
<b>Semester 3</b>		
9	Thesis / Two Elective Courses*	6
<b>TOTAL 30</b>		

### Specialization

Area	Course Title
Finance	Investment Analysis Portfolio Management Derivatives Risk Management Analysis of Financial Statements
Marketing	Brand Management Advertising Consumer Behavior Services Marketing Marketing Research
HRM	Training & Development Recruitment & Selection Performance Appraisal Compensation Management Change Management Conflict Resolution and Negotiation Skills



# Doctoral Programs

## PhD (MANAGEMENT SCIENCES)



### Introduction

The Department of Management Sciences provides a productive and supportive atmosphere for postgraduate studies. The students receive in-depth research guidance, involving various research techniques, methods and approaches. The aim of the PhD program is to prepare students to conduct high level independent research which makes an original contribution to the body of knowledge in the field of Management Sciences. Students are mentored by HEC recognized supervisors to produce extraordinary research work.

### Eligibility

- Master's degree or equivalent with eighteen (18) years of education in Management Sciences or a closely related field of study with a minimum CGPA of 3.0 out of 4.0 in the semester system or 60% marks in the annual system; and
- NTS GAT Subject in Management Sciences with minimum cumulative score of 60% or other such equivalent tests acceptable as per HEC guidelines

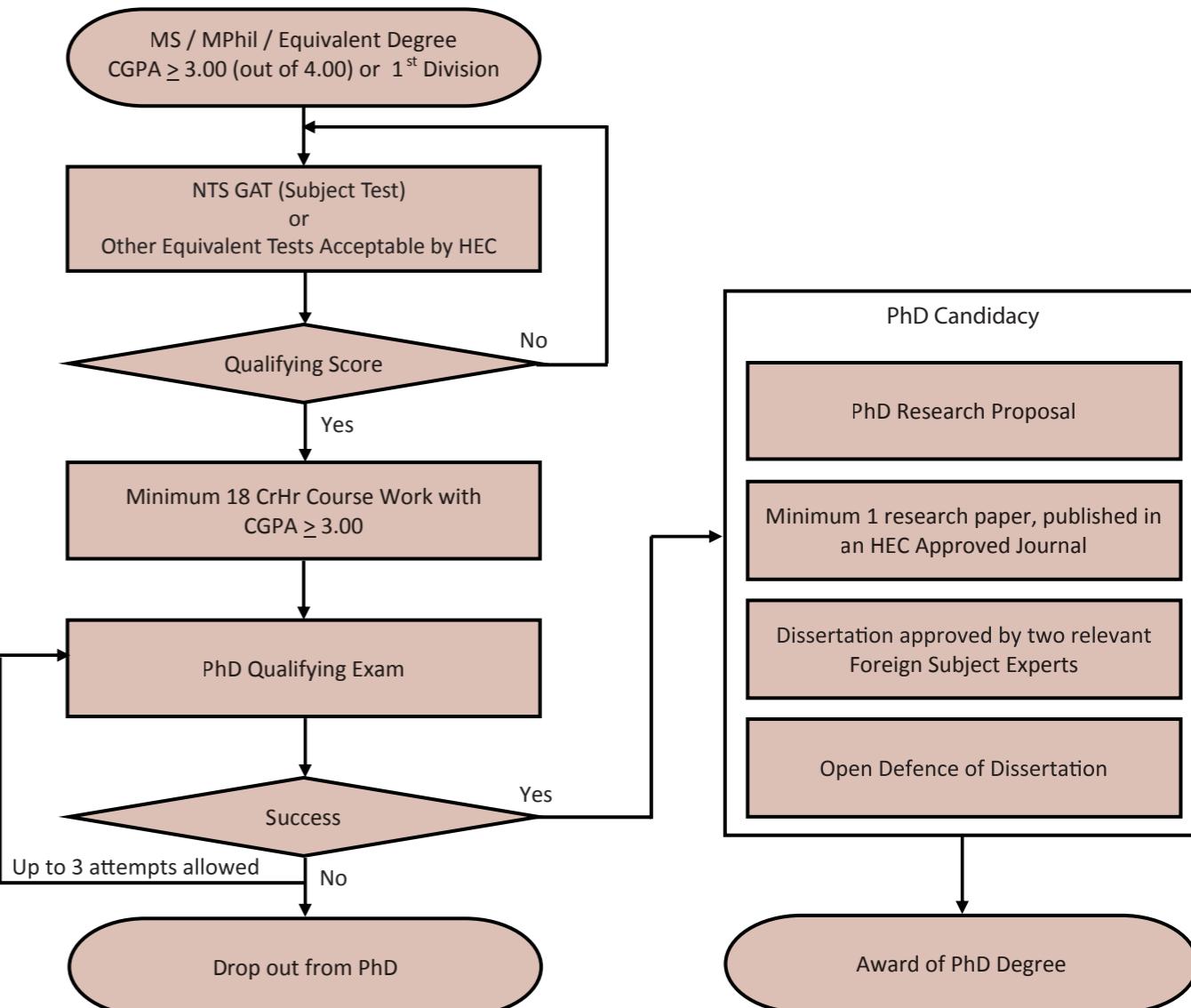
### Plan of Study

S. No.	Course Title	Credit Hours
<b>Semester 1</b>		
1	Seminar in Advanced Research Techniques	3
2	Seminar in Advanced Quantitative Tools	3
3	Elective-I	3
<b>Semester 2</b>		
4	Independent Research Study	3
5	Elective-III	3
6	Elective-IV	3
<b>Semester 3</b>		
7	Comprehensive Exam	3
<b>Semester 4 - 6</b>		
7	Dissertation	36
		<b>TOTAL 54</b>

\*Student may opt 02 elective courses of 3 credit hours each in lieu of MS thesis.

The elective courses will be offered subject to the number of students required for a course to be announced

## PhD Flow Chart



# Doctoral Programs

## PhD (MECHANICAL ENGINEERING)



### Introduction

The Department of Mechanical Engineering offers a PhD program in line with DSU's general guidelines and policies as stated in DHA Suffa University's Academic Regulations and subject to fulfilling HEC's mandatory requirements for PhD programs.

### Eligibility

- Master's degree or equivalent with eighteen (18) years of education in Mechanical Engineering or a closely related field of study with a minimum CGPA of 3.0 out of 4.0 in the semester system or 60% marks in the annual system; and
- NTS GAT Subject in Mechanical Engineering with minimum cumulative score of 60% or other such equivalent tests acceptable as per HEC guidelines
- In case of admission tests conducted by the university, a minimum of 70% marks will be required

### Plan of Study

S. No.	Course Title	Credit Hours
<b>Semester 1</b>		
1	Elective 1	3
2	Elective 2	3
3	Elective 3	3
<b>Semester 2</b>		
4	Elective 4	3
5	Elective 5	3
6	Elective 6	3
<b>Semester 3</b>		
7	PhD Comprehensive Exam	-
<b>Semester 4</b>		
8	PhD Dissertation Proposal	-
<b>Semester 5 Onwards</b>		
9	PhD Dissertation	36
<b>TOTAL 54</b>		

The courses can be taken from Mathematics, general or any specialization stream courses. The coursework for PhD candidates is specified by the Supervisor in consultation with the Advisory Committee.

### Elective Courses

Based on the available faculty and its teaching and research interests, PhD students can choose elective courses in the following four specializations:

1. Engineering Mechanics
2. Thermofluids
3. Materials and Manufacturing
4. Energy Systems and Technologies

The students are required to complete 48 credit hours of doctoral studies which include:

- Coursework: 18 Credit Hours
- Dissertation: 30 Credit Hours

The tentative list of Elective Courses for PhD (Mechanical Engineering) is the same as the Master's degree program.

# Doctoral Programs

## PhD (ELECTRICAL ENGINEERING)



### Introduction

The Department of Electrical Engineering offers a PhD program according to DSU's general guidelines and policies stated in DHA Suffa University's Academic Regulations and in accordance with the HEC mandatory requirements for PhD programs. The PhD program in Electrical Engineering prepares its graduates for careers in academia and industrial research.

### Eligibility

- Master's degree or equivalent with eighteen (18) years of education in Mechanical Engineering or a closely related field of study with a minimum CGPA of 3.0 out of 4.0 in the semester system or 60% marks in the annual system; and
- NTS GAT Subject in Mechanical Engineering with minimum cumulative score of 60% or other such equivalent tests acceptable as per HEC guidelines

### Plan of Study

S. No.	Course Title	Credit Hours
<b>Semester 1</b>		
1	Elective 1	3
2	Elective 2	3
3	Elective 3	3
<b>Semester 2</b>		
4	Elective 4	3
5	Elective 5	3
6	Elective 6	3
<b>Semester 3</b>		
7	Written Comprehensive Exam & PhD Proposal Defense	-
<b>Semester 4,5,6</b>		
8	PhD Dissertation	36
<b>TOTAL 54</b>		

### Elective Courses

Based on the available faculty and its teaching and research interest, PhD students can choose elective courses from areas of Control Systems, Telecommunications, Electronics and Embedded Systems, Communication Systems and Networks and Power Systems. The tentative list of Elective Courses for PhD Electrical Engineering is given on page 76.

# Doctoral Programs

## PhD (COMPUTER SCIENCE)



### Plan of Study

S. No.	Course Title	Credit Hours
1	Semester 1 Elective 1	3
2	Elective 2	3
3	Elective 3	3
	<b>Semester 2</b>	
4	Elective 4	3
5	Elective 5	3
6	Elective 6	3
	<b>Semester 3</b>	
7	Written Comprehensive Exam & Proposal Defence	-
	<b>Semester 4</b>	
8	PhD Dissertation	12
	<b>Semester 5</b>	
9	PhD Dissertation	12
	<b>Semester 6</b>	
10	PhD Dissertation	12
	<b>TOTAL</b>	<b>54</b>

### Elective Courses

In our thematic PhD program, students can choose elective courses from areas of Software Engineering, Computer Networks and Information Security, High Performance Computing, Ubiquitous Computing, Computer Graphics and Visualization, Bio-Informatics, and Big Data Analytics. The courses are offered depending on the available faculty and their teaching and research interests. The tentative list of Elective Courses for PhD Computer Science is given on page 78.

### Introduction

The PhD in Computer Science program at DSU has been introduced for those who want to extend the universal horizon of knowledge and skills. The program is a combination of coursework and research which enables the students to create new knowledge, tools and paradigms. The coursework enables the students to acquire latest cutting edge knowledge and skills in their fields of interest. The research work enables the students to produce high quality research output for their thesis/dissertation.

In their dissertations, the students are encouraged to work for the improvement of society. Research fields available in the Department are: High Performance Computing, Ubiquitous Computing, Software Engineering, Information Management, Network & Information Security, Computer Graphics and Visualization, Bio-informatics and Big Data Analytics.

### Eligibility

- Masters degree or equivalent with eighteen (18) years of education in Computer Science or a closely related field of study with a minimum CGPA of 3.0 out of 4.0 in the semester system or 60% marks in the annual system; and
- NTS GAT Subject Test with minimum cumulative score of 60% or other such equivalent tests acceptable as per HEC guidelines

## UNIVERSITY FACILITIES AND SUPPORT

### DSU Library

The campus has a well-stocked library and resource center with an extensive range of text and multimedia resources. The DSU library holds a rich collection of textbooks and reference books, local and foreign newspapers, magazines, journals and audio-visual material. DHA's well-known Defence Central Library (DCL) is also accessible to DSU students and faculty as an additional resource. Moreover, photocopying, printing, binding, scanning and internet services are also available.

### Stylish Cafeteria

The self service cafeteria at DSU offers a wide variety of food and snacks to students and staff in a hygienic and relaxing environment. It also acts as a hub for student interaction and activity.

### Separate Prayer Areas

DSU equally values the diversity of religious beliefs and convictions held by its students and staff. In an effort to facilitate students and staff, separate praying areas for men and women are provided.

### Executive Lecture Theater

A world class Executive Lecture Theater has been established. The theater holds an impressive ambiance with modern facilities to conduct seminars, conferences, workshops and training programs.

### DSU Auditorium and Conference Room

A state-of-the-art conference room and a spacious auditorium is available to students to organize seminars, conferences and other co-curricular activities at the campus.

### Transport

Transport facility is also available for DSU students commuting from different accessible points in the city. This service is provided by transporters contracted by the University.

### Sports Facilities

Students regularly utilize sports facilities available to them for basketball, volleyball, table tennis and other indoor games. Also, DSU frequently sponsors the participation of its students in inter-university sports and extra-curricular competitions.

### Common Room for Girls

A common room is provided for girls to relax or offer prayers.



## UNIVERSITY SERVICES

### Career Services & Corporate Relations

The prime objective of the Department of Career Services & Corporate Relations (CS & CR) is to assist the graduating students in job placements and enroll students in registering for corporate and industry internship programs. The CS & CR department works in close collaboration with the departments of Mechanical Engineering, Electrical Engineering, Computer Science and Management Sciences to ensure that students and graduates get connected with the right employer. The CS & CR department uses technology-based solutions to scan the right opportunities in the market and also focuses on cultivating deep relationships in the industry. This mechanism facilitates DSU graduates and students in matching their skills with the requirements of the job market.

The department of CS & CR enables DSU students and graduates to learn how to apply their academic knowledge and skills in the practical world. Student development programs such as Leadership Development Workshops, Mock Interviews and Employer Branding sessions are scheduled specifically to prepare students to best achieve their objective and be recruited by the organization of their choice. Other activities of the department include organizing Career Fairs, Recruitment Drives, Press Briefings and conducting Employer Surveys on a regular basis. As a result of the services offered by the department of CS & CR, DSU graduates are placed in some of the most prestigious organizations in the country and abroad.

### Academic Guidance

Academic guidance is important to familiarize the students with the current academic requirements to excel in their educational career. Although, our faculty members are willing to meet and help students according to their need, each class has been allocated an advisor to provide dedicated and specialized attention to students at an individual level. The students can contact the assigned advisor if they encounter any problem. Moreover, a female advisor has also been appointed to guide female students.

## Alumni Relations

DHA Suffa University established its Office of Alumni Relations in the year 2018 as it recognizes and values the importance of maintaining ties with its graduates and involving them in the development of the University. The Alumni Relations Office provides invaluable services to its graduates, such as career guidance, access to learning services and resources, and variety of other facilities at DSU. These include life-long engagement through the Alumni Card, opportunities to be involved in activities such as public lectures, conferences, sports, industry linkages and staying connected to each other. Furthermore, this office aims to keep the Alumni informed about their Alma Mater through testimonials, the Alumni Directory and Alumni meet-ups by bringing them together, being of service to them and facilitating their involvement in the DSU community.

This office uses different media such as Facebook and LinkedIn to establish and maintain the essential elements of a successful Alumni program and also shares the available opportunities in the market that will help the Alumni to grow further in their professional careers. The Alumni Association is another aspect through which Alumni can register themselves and be elected for the organizing body of the DSU Alumni Association. The Alumni Card is yet another avenue which provides corporate discount offers to DSU graduates. Apart from these, this office also conducts Alumni Surveys on a regular basis to keep their database updated

## CODE OF CONDUCT FOR STUDENTS

Students are expected to observe the following rules on the University premises, in the University administered places of other activities being held under the auspices of the University:

- Loyalty to Pakistan and refraining from doing anything which is repugnant to its honor and prestige in any way
- Respect for convictions and traditions of others in matters of religion, conscience and customs while observing own religious duties
- Truthfulness and honesty in dealing with other people, respect for elders and politeness to all
- Special respect for teachers and others in authority
- Cleanliness of body, mind, speech and habits
- Helpfulness to fellow human beings
- Devotion to studies and co-curricular activities; observance of thrift and protection of public property

The following acts are prohibited at DSU:

- Smoking on campus premises
- Consumption of alcoholic drinks or other intoxicating drugs
- Organizing or taking part in any function inside the campus or organizing any club or society of students except in accordance with the prescribed rules and regulations
- Collecting any money or receiving funds or pecuniary assistance for or on behalf of DSU, except with the written permission of the competent authority.

## EXAMINATIONS

Effective Spring 2018, the University is following the relative grading system. The Grade Point Average is worked out by awarding letter grades on a scale of 4.0. Letter grades are awarded as per the following distribution:

Letter Grade	Grade Points
A	4.00
A-	3.67
B+	3.33
B	3.00
B-	2.67
C+	2.50
C	2.00
C-	1.67
D+	1.33
D	1.00
F	0.00
W	Withdrawn
I	Incomplete

## DRESS CODE

The dress code at DSU is based on the general principles of decency and in conformity with the social norms of the country. The dress should not be indecent having provocative images or scripts. Female students are not expected to put on makeup or expensive jewelry.

## STUDENTS HANDBOOK

For detailed information about DSU examination rules and policies, dress code and student code of conduct, students can refer to the DSU Student Handbook. Students are expected to strictly abide by the rules and regulations presented in the DSU Student Handbook.



## FEE STRUCTURE

Program	One Time Charges		Per Semester			
	Admission Fee	Caution Money(Refundable) Charges	IT Charges	Misc. Charges	Lab Charges (Per Credit Hour)	Tution Fee (Per Credit Hour)
BE(Mechanical)	15,000	10,000	5,000	6,500	13,750	4,600
BE(Civil)	15,000	10,000	5,000	6,500	13,750	4,600 (25% scholarship in Tuition Fee for all students)
BE(Electrical)	15,000	10,000	5,000	6,500	9,000	4,600 (25% scholarship in Tuition Fee for all students)
BS(Computer Science)	15,000	10,000	5,000	6,500	10,000	4,600 (25% scholarship in Tuition Fee for DCK Campus only)
BS(Data Science)*	15,000	10,000	5,000	6,500	10,000	4,600 (25% scholarship in Tuition Fee for all students)
BS(Software Engineering)	15,000	10,000	5,000	6,500	10,000	4,600
BS (International Relations)	10,000	5,000	5,000	6,500	-	4,000 (25% scholarship in Tuition Fee for all students)
BS (English)	10,000	5,000	5,000	6,500	-	4,000 (25% scholarship in Tuition Fee for all students)
BS (Psychology)	10,000	5,000	5,000	6,500	-	4,000 (25% scholarship in Tuition Fee for all students)
BS (A&F)	15,000	10,000	5,000	6,500	-	4,600 (25% scholarship in Tuition Fee for all students)
BBA	15,000	10,000	5,000	6,500	-	4,600
MBA	15,000	10,000	5,000	6,500	-	4,600
MS/ME	15,000	10,000	5,000	6,500	-	4,600
PhD	15,000	10,000	5,000	6,500	-	4,600

Semester	BBA/BS(A&F)		BS (CS)		BS (SE)		BS (PSY)		BS (IR)		BS (ENG)		BE (EE)		BE (ME)		BE (CE)	
	Theory Lab Cr. Hr.	Cr. Hr.																
I	16	-	15	2	16	2	15	0	17	0	17	0	14	4	13	4	11	4
II	18	-	15	2	17	1	18	0	17	0	17	0	15	3	14	4	12	5
III	18	-	15	2	15	1	18	0	18	0	18	0	14	3	15	3	11	5
IV	18	-	15	1	14	3	18	0	18	0	18	0	15	3	14	4	17	1
V	18	-	15	1	14	2	18	0	18	0	18	0	15	3	15	1	14	4
VI	18	-	15	2	18	0	18	0	18	0	18	0	15	3	16	2	13	4
VII	18	-	17	-	12	3	15	0	15	0	15	0	14	4	11	5	12	5
VIII	12	-	14	-	9	3	15	0	15	0	15	0	11	4	10	5	14	4

### NOTE:

- 25% scholarship in Tuition Fee for all students of BE Electrical, BS Data Science, BS Psychology, BS English, BS International Relations offered at DSU Main Campus besides BE Civil Engineering and BS CS being offered at DSU DCK Campus only
- \* 80% and above marks in Intermediate 50% discount (subject to maintaining 3 CGPA) in BS Data Science
- \* 70% to 79.99% marks in Intermediate 40% discount (subject to maintaining 3 CGPA) in BS Data Science
- \* 50% and above marks in Intermediate 25% discount (subject to maintaining 3 CGPA) for all Computer Science Department programs offered at DCK Campus

<http://download1.fbr.gov.pk/Docs/201372214742171992013CIRCULAR06.pdf>

Programs	1st Semester Fee Amount	Sem Fee (Without Adm & C/ Money)	Credit Hours 1st Semester
BE(Mechanical)	151,300	126,300	13 + 4
BE(Civil)	129,450	104,450	11 + 4
BE(Electrical)	120,800	90,250	14 + 4
BS(Computer Science) (Main Campus)	125,500	100,500	15 + 2
BS(Computer Science) (DCK Campus)	108,250	83,250	15 + 2
BS(Data Science)	108,250	83,250	15 + 2
BS(Software Engineering)	130,100	105,100	16 + 2
BS(International Relations)	77,500	62,500	17 + 0
BS(English)	77,500	62,500	17 + 0
BS(Psychology)	71,500	56,500	15 + 0
BBA	110,100	85,100	16 + 0
BS(Accounting and Finance)	91,700	73,600	16 + 0

# Scholarships and Fee Concessions

Scholarships are part of DSU's commitment to reward academic excellence and enabling students from all backgrounds to realize their potential.

DSU practices a need-blind policy and believes in merit as the sole criteria for admission to its programs. The Scholarships Award Committee (SAC) aims to select deserving students in order to assist them with their educational expenses. DSU awards three types of scholarships, namely:

- **Need-Based Scholarship**
- **Merit-Based Scholarship**
- **DHA Scholarship**

## Need-based Scholarships

These are awarded to students with financial constraints with good academic standing to help them continue their education at the University. Students must apply on the prescribed form by the closing date in the beginning of every semester if they wish to avail themselves of the Need-Based Scholarship. Form and guidance can be obtained from Admissions and Registration offices.

## Merit-Based Scholarships

These are awarded to academically outstanding students who have excelled in studies at the University.

## DHA Scholarship

**(For MBA Program Only)**

DHA scholarship of upto 100% of the tuition fee on CGPA of 2.5/4.0 to 4.0/4.0 will be offered on pro-rata basis to existing undergraduate students of all programs within DSU to continue education at postgraduate level in the Department of Management Sciences. Also additional 50% concession is offered in the remaining tuition fee to the serving / retired Armed Forces personnel, DHA employees and their spouses and dependent children.

### **(Special Scholarships for MS/ME and PhD Programs)**

Limited scholarships with 50% waiver in Tuition Fee for MS and PhD students with CGPA 3.00 in semester system or 70% marks in case of annual examination in last degree or distinction holders, from HEC recognized Universities.

Full tuition fee waiver for limited number of DSU faculty members.

\*(Terms and Conditions apply)

# Apply Now to Experience What DSU has to Offer

Students should contact DSU Admissions Office for all information related to programs, eligibility requirements, admissions schedule and fee details. The Admissions Officers can be contacted at:

**Admissions Officer**  
Phone: 021-35244851- 52  
Cell: 0324 2444595  
Email: [info@dsu.edu.pk](mailto:info@dsu.edu.pk)

## External Students

The University permits enrolment as an external student in any course being offered as part of any degree program, on payment of prescribed fee and meeting the eligibility criteria of the course, following the specified procedure. An external student will be issued a certificate on successful completion of the course. If such a student later enrols in a degree program the credits earned as External Student may be used to satisfy the degree requirements provided he/she, if eligible, enrols in the degree program within two years of earning the credit.

## Application Process

### 1 Check Eligibility

Check your eligibility through the DSU website, prospectus, program brochures or Admissions Office.

Candidates awaiting results are eligible to apply. All selected candidates shall be granted provisional admission on signing of an undertaking and subject to verification of the Board Results.

### 2 Apply Online

Visit [www.dsu.edu.pk](http://www.dsu.edu.pk). Fill and submit the Admission Application Form online.

Note: Students applying to study MS and Doctoral degree programs should directly email the relevant department at:

[\(Mechanical Engineering\)](mailto:info.me@dsu.edu.pk)  
[\(Electrical Engineering\)](mailto:info.ee@dsu.edu.pk)  
[\(Computer Science\)](mailto:info.cs@dsu.edu.pk)  
[\(Management Science\)](mailto:info.ms@dsu.edu.pk)  
**OR**  
[\(Admissions Office\)](mailto:info@dsu.edu.pk)

### 3 Form Submission & Payment

#### Stage 1: Application Submission Process

##### Option I

###### Online Application Submission Process

- Go to the website
- Choose your degree program and read admission criteria / eligibility
- Know the critical dates
- Fill out your application : [http://admissions.dsu.edu.pk/apply/apply\\_online.php](http://admissions.dsu.edu.pk/apply/apply_online.php)
- Upload your required documents (scanned) and submit your application online
- Receive an e-voucher via SMS and email with a unique payment/ transaction ID. By using the ID communicated via SMS and Email, you can easily make the payment through various channels which include:
  1. Online Banking
  2. Over the counter cash payment at TCS / SilkBank / Meezan Bank & Al-Barka Bank
  3. Through mobile app including Easypaisa & Keenu
- Receive an e-admit card notifying test date & time

###### Option II (Not available due to current Covid-19 pandemic situation)

###### Courier or self-submission to Admissions Office

- Go to the website
- Choose your degree program and read admission criteria / eligibility
- Know the critical dates
- Fill out your application : [http://admissions.dsu.edu.pk/apply/apply\\_online.php](http://admissions.dsu.edu.pk/apply/apply_online.php)
- Courier or submit the documents and processing fee (pay order) to the Admissions Office at DSU.
- Receive the admit card notifying test date & time

#### Stage 2: Test & Result

- Appear in computer-based admission test and admission selection interview (if applicable)
- Receive and print out your Notification of Selection Result

#### Stage 3: Admission Offer & Submission of Fee

- Receive an offer letter, supporting documents and payment voucher
- Submit the admission acceptance along with the required documents and payment draft / pay order in the name of 'DHA SUFFA UNIVERSITY' at the DSU Admissions Office

##### Note:

It is responsibility of the candidate to provide all the documents and if at any stage the documents are found to be fake/forged the university will have the right to take disciplinary action which may lead to cancellation of admission.

##### List of Required Documents

- Matriculation / O-Level / Equivalent Marks Sheet / Statements and Certificates
- Intermediate / Equivalent / A-Level Marks Sheet / Statements and Certificates
- Applicants with O-Level / A-Level and Technical studies must submit equivalence from IBCC
- College Provisional Certificate
- A copy of CNIC and B-Form
- 3 passport-sized photographs with white background
- Admit Card / Statement of Entry is required, if awaiting result

##### OPTIONAL:

###### Engineering and CS /SE Program Eligibility:

Valid Test Score of NEDUET, NTS NAT (IE/ICS) or SAT II, if appeared. Applicants submitting their NEDUET (current year), NTS NAT (IE/ICS) or SAT II test scores obtained within last one year shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NEDUET/ SAT/ NTS scores will be advised to appear in the DSU Admissions Test for better chances of securing admission.

###### BBA/ BS AF/BS IR/ BS English Program Eligibility:

Valid test scores of NTS or SAT I if appeared. Applicants Submitting NTS or SAT I test scores obtained within last one year shall be exempted from taking DSU's entrance test. However, candidates who do not have good enough NTS or SAT I scores will be advised to appear in the DSU Admissions Test for better chances of securing admission.

Applicants who submit NEDUET, NTS NAT (IE/ICS) or SAT II (for BE ME, BE EE and BS CS) and NTS NAT (ICOM/IGS) or SAT I (for BBA / BS Accounting & Finance) test scores obtained within last one year can be exempted from taking DSU's entrance test. However, Candidates who do not have good enough NEDUET / SAT/ NTS scores will be advised to appear in the Test for better chances of securing admission.

### 4 DHA Suffa University Entrance Test

Appear in DSU Entrance Test on the date notified by the Admissions Office.

Each eligible candidate may appear in DSU Entrance Test 3 times in order to improve his/her test score. The fee for each attempt is 1000/- PKR (non-refundable)

### 5 Await Admission Offer

Assessment of your application requires 1-2 weeks.

If additional documents are required to assess your application, they will be requested from you.

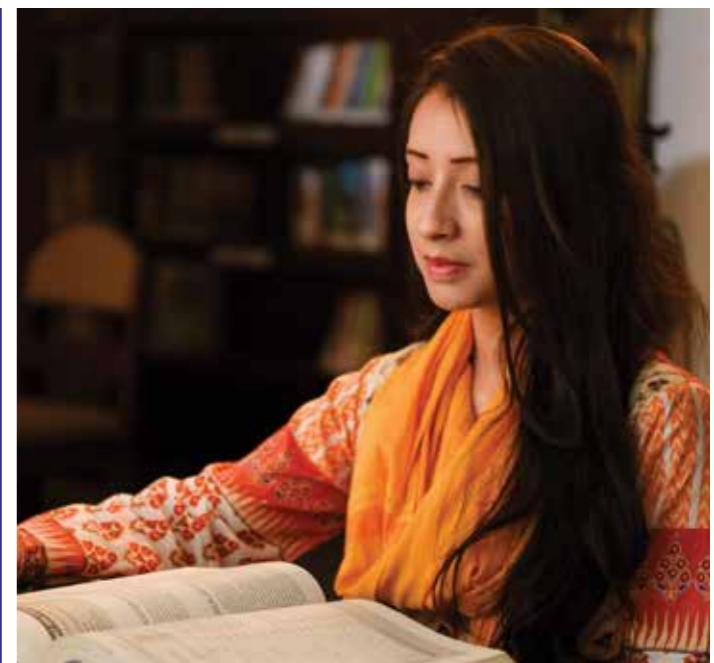
### 6 Acceptance of Offer

If offered Admission, collect provisional Offer Letter and Fee Challan from the Admission Office.

Read your Offer Letter carefully, ensuring your name, program title and semester are accurate.

Meet all pre-requisites mentioned in your Offer Letter. Deposit prescribed fee to the Accounts Office at DHA Suffa University through a pay order in the name of **'DHA SUFFA UNIVERSITY'**.

Submit a photocopy of the payment receipt to the Admissions Office at **DHA Suffa University**.



Find out more about  
**DHA SUFFA UNIVERSITY**



[www.dsu.edu.pk](http://www.dsu.edu.pk)



[@lifeatdsu](https://twitter.com/lifeatdsu)



[@dha.suffa](https://www.facebook.com/dha.suffa)



[@dsu\\_official](https://www.instagram.com/dsu_official)

For further information:

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**Telephone:** 021 35244851-53  
**Cell:** 0324-2444595  
**Email:** [info@dsu.edu.pk](mailto:info@dsu.edu.pk)