



Industrial Automation lab (Engr. Muhammad Nabeel)



Electronics lab (Engr. Muhammad Shan)



Robotics & Control lab (Engr. Ismail Mansoor)



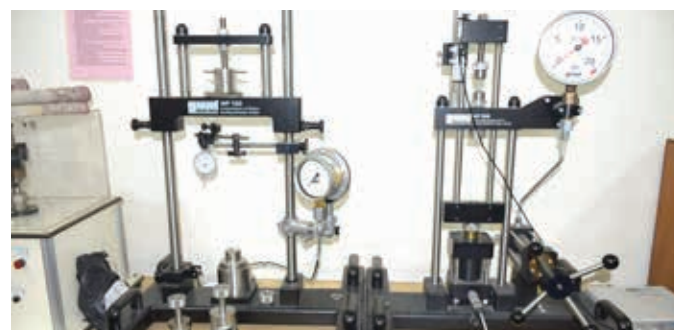
Engineering Drawing lab (Engr. Hamza Baig)



Thermo Fluids lab (Engr. Rayan Isran)



Design and Simulation lab (Engr. Khalil ur Rehman)



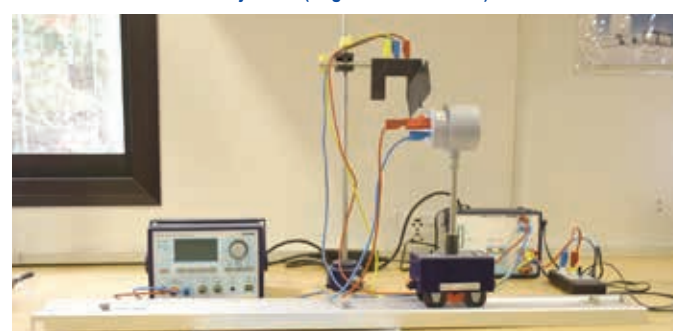
Mechanics lab (Engr. Abbas Shabbir)



Project lab (Engr. Mubeen Ahmed)



Engineering Workshop (Engr. Fahad Ahmed)



Physics lab (Engr. Ahmar Hayat Khan)



MECHATRONIC ENGINEERING



## Dean (Computing & Engineering Sciences)

Dr. M Altaf Mukati  
Ph.D (Computer Engg.),  
Boston/Hamard University.

## Head of Department

Dr. Faraz Junejo  
Ph.D (Mechatronics Engg.),  
Loughborough University, UK.

## Professor/Director ORIC

Dr. Ahmed Hussain  
PhD (University Technology, Malaysia)  
Mechanical Engineering

## Assistant Professor

Dr. Raza Akbar  
PhD (Aeronautical Engg.),  
Rensselaer Polytechnic Institute, USA.

## Assistant Professor

Engr. Humera Rafique  
MS (Telecommunication Engg.), SSUET, Karachi.

## Assistant Professor/Program Manager

Engr. Aneel Ahmed  
MS (Telecommunication Engg.),  
NUCES-FAST Lahore

## Assistant Professor

Engr. Abdul Hussain Saeed  
MS (Electrical Engg.),  
Texas Tech University, USA

## Assistant Professor

Engr. Tanzila Younas  
MS (Industrial Manufacturing Engineering &  
Management), NUST, Karachi.

## Assistant Professor

Engr. Moez Ul Hassan  
MS (Electrical Control Engg.),  
NUST, Karachi.

## Assistant Professor

Engr. Nasreen Bano  
ME (Micro System Design),  
NED University, Karachi.

## Lecturer

Engr. Khurram Amjad  
ME (Mechanical Engg.),  
Sheffield University, UK

## Lecturer

Engr. Farhan Mumtaz  
MS (Hamard University)  
Industrial Control & Automation

## Lecturer

Engr. Sarmad Hameed  
MS (Industrial Control & Automation),  
UIT, Karachi.

## Lecturer

Engr. M. Atif Saeed  
ME (Mechanical Design & Fabrication),  
NED University, Karachi.

## Mechatronics at SZABIST

This program in Mechatronics provides a structured hands-on approach to understand microcomputer and control technology, coupled with engineering design integration applied to products. For this purpose, the department offers a program that includes various engineering science courses from the relevant fields in addition to a strong foundation in basic sciences and mathematics.

Furthermore, state-of-the-art scientific and technological research laboratories with campus licensing of wide range of commercial developmental software provides an environment unrivaled by majority of reputed universities in Pakistan.

SZABIST is ranked as one of the most reputed university by HEC and Chartered Inspection and Evaluation Committee (CIEC). SZABIST Business School has been rated as "Outstanding" by CIEC and HEC, Pakistan. In addition, all the relevant programs are accredited and recognized by NBEAC, NCEAC, NACTE, PEC, and KHDA Dubai. Since 2012, the SZABIST-QEC has been awarded more than 91% in the quantitative assessment by Quality Assurance Agency (QAA) HEC, Pakistan.

## BE Mechatronics Program Objectives

The objectives of the program are to provide a broad and basic education in multiple disciplines comprised of Mechanical, Electronics, and Computer Engineering, to ensure that students in the program are exposed to a wide spectrum of engineering knowledge and practice. Upon completion of their degree, the Bachelor of Engineering (Mechatronics) graduates will be able to:

1. Be competent mechatronic engineers who are knowledgeable, skillful and able to solve complex engineering problems.
2. Have inclination towards research and lifelong learning and be able to promote entrepreneurial ideas.
3. Be effective engineers with leadership qualities and high morals & professional ethics.

## MS Mechatronics Program Objectives

The broad objectives of the Master's program in Mechatronics Engineering are to instill in its students a solid foundation of mathematical, scientific and engineering knowledge in addition to developing the intellectual skills essential for prosperity and success in their careers. The program is structured in such a manner that the students are provided a firm theoretical foundation with opportunity to strengthen their knowledge through research assignments, practical training and projects. The objectives of Masters in Mechatronics Engineering program are to:

- Enable students to pursue a rigorous post doctorate / research program in Mechatronics Engineering.
- Improve the marketability of our students in the local industry, public sector and R&D organizations.
- Provide technical confidence and financial guidance needed to start a small-scale industry to graduates interested in self-employment.

## Employment Opportunities

Graduates with a Mechatronic degree can take up careers in a wide spectrum of industries including:

- Robotics
- Aerospace
- Chemical
- Defense
- Automotive and Manufacturing
- Health, Medical and many more

As well as in businesses that requires extensive computer support, such as banking and commerce.

Contributions can be made to these industries in a variety of roles including design engineer, software engineer, project planner, product designer and project manager.

## BE (Mechatronic Engineering) Program

SZABIST offers a four-year (eight semesters) BE Mechatronic Engineering degree program which is accredited by Pakistan Engineering Council (PEC). This program has received 7-Stars i.e., World Class rating by Chartered Inspection & Evaluation Committee (CIEC) Sindh. SZABIST is a pioneer university to offer this program at undergraduate level in the province of Sindh. The program is essentially a day program and consists of 48 courses with a total of 140 credit hours (all electives and certain courses may be offered in the evening). The program is supported through well-equipped state-of-the-art laboratories. Internship opportunities are provided to meet degree requirement. The maximum time limit to complete the BE-ME degree program is six years.

## Admission Requirements

The candidate must have completed Intermediate (Pre-Engineering)/ O-Levels (minimum 8 subjects including 5 compulsory subjects; English, Urdu, Maths, Islamiat & Pakistan Studies) and A-levels (minimum 3 subjects) or equivalent with a combination of (Physics, Chemistry and Mathematics) with minimum 60% marks (those waiting for result can also apply).  
Equivalency of grades for the candidates having Cambridge High School Certificate with Mathematics, Physics and Chemistry subjects are obtained as follows:

A-Level Grade	A	B	C	D	E
Equivalent Intermediate %	85	75	65	55	45

- Candidates with DAE (Mechanical/Electronics/Electrical/Instrumentation/ Automation) having at least 60% aggregate marks from an institute recognized by the Government can also apply.
- Minimum 60% aggregate marks each in matriculation and inIntermediate/ equivalent exams.
- Please note that no deviation in this regard is allowed.
- Inter Board Committee of Chairmen (IBCC) equivalency is required for O & A Levels/IB Diploma/High School Diploma or equivalent.
- General Paper (A Levels) will not be counted.

## Scholarships and Financial Assistance

### SZABIST Funded Scholarships

- SZABIST Need-Based Scholarship
- SZABIST Merit-Based Scholarship

### External Donor Funded Scholarships

- Sindh Endowment Fund Scholarships
- Balochistan Endowment Fund Scholarships (BEFS)
- Balochistan Education Endowment Fund Scholarships (BEEFS)
- Chief Minister - SZABIST Merit and Need-Based Scholarships
- Prime Minister's National ICT R&D Fund Scholarships
- National Grass Root ICT Research Initiative (NGIRI)
- Khairpur District Scholarships
- Ministry of Religious Affair & Interfaith Harmony
- Ihsan Trust Qarz-e-Hasna Facility

## Fee Structure\*\*

	For Pakistani Nationals	Foreign Nationals
Admission Fees:	Rs. 20,000	US\$ 500
Security Deposit (refundable):	Rs. 10,000	US\$ 330
Student Activity Charges:	Rs. 1000	US\$ 30
Tuition Fees per Course (BE-Mechatronics)*:	Rs. 17,400 (after 5% Subsidy 16,530)	US\$ 390
Tuition Fees per Course (MS-Mechatronics)*:	Rs. 22,200 (after 25% Subsidy 16,650)	US\$ 525

Note: \*\*SZABIST reserves the rights to revise the fee/withdraw of scholarship without any prior notice. \*3 Credit Hour fee.

## MS (Mechatronic Engineering) Program

SZABIST offers MS (Mechatronic Engineering) degree with two specializations; namely: Robotics & Industrial automation and Smart Electromechanical Systems. The program is of 2-years duration and is offered in the evening. In addition to five core courses, students are required to complete 3 elective courses in their choice of specialization. Although students are encouraged to undertake Thesis/Research Project of 6 credit hours, but they also have an option to undertake two elective courses in lieu of the Thesis/Research Project in their choice of specialization. The maximum time limit to complete the MS degree is 4-years.

## Admission Requirements

For admissions in the MS Mechatronic Engineering program, candidates must possess BE in Mechatronics/Mechanical/ Electronics/Electrical /Telecommunication/Industrial/Manufacturing/Aerospace/Avionics with minimum 55% marks/2.0 CGPA from a university recognized by HEC. Bachelor of Engineering Degree must be accredited by PEC. GAT (General) or HAT relevant is mandatory for MS students with minimum 50% score. Last degree verification from HEC is required.



Admissions Start	: April 29, 2019
Last Date to Apply	: June 24, 2019
Admission Test	: June 26 to July 02, 2019
Interviews	: July 08 - 13, 2019
Classes Commence	: September 02, 2019

## APPLY ONLINE:

Log on to : <http://admissions.szabist.edu.pk>  
Online applications can also be filled at SZABIST campus  
For further information please contact:  
F-153, Clifton, Block-5, Karachi, Pakistan. UAN: 111-922-478,  
Tel: 021-35823433 (Ext:147-148-104). Fax: 021-358 21537. [www.szabist.edu.pk](http://www.szabist.edu.pk)