



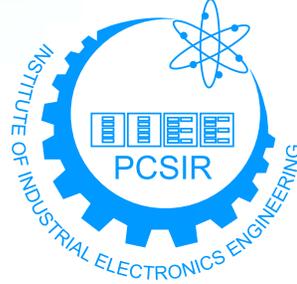
**BACHELOR OF INDUSTRIAL  
ELECTRONICS ENGINEERING  
PROGRAMME**

# PROSPECTUS 2022

Department of Electronics  
University of Sindh, Jamshoro  
Pakistan Council of Scientific & Industrial Research (PCSIR)  
INSTITUTE OF INDUSTRIAL ELECTRONICS  
ENGINEERING (IIEE), KARACHI

# IIEE

INSTITUTE OF INDUSTRIAL  
ELECTRONICS ENGINEERING  
KARACHI



# Bachelor of Industrial Electronics Engineering Programme

## PROSPECTUS 2022

INSTITUTE OF INDUSTRIAL ELECTRONICS ENGINEERING, KARACHI



# INSTITUTE OF INDUSTRIAL ELECTRONICS ENGINEERING, KARACHI PROSPECTUS 2022

## MESSAGE FROM THE CHAIRMAN PCSIR



It is a matter of great satisfaction and pleasure that INSTITUTE OF INDUSTRIAL ELECTRONICS ENGINEERING (IIEE) is producing high quality manpower, in the form of B.E. (Industrial Electronics) graduates under the patronage of Pakistan Council of Scientific and Industrial Research (PCSIR), which is a premier R&D organization of Ministry of Science & Technology.

In today's world of intense economic competition, Pakistan being a developing country can only survive through sustainable economic development and technological self-finance for which human resource development is directly needed.

This is great challenge for our industrialist's public and private sector, R&D organization to come up with indigenous development of technology & trained manpower.

IIEE symbolizes a unique bilateral collaboration between Government of Switzerland & Pakistan and the graduates are playing a pivotal role in industries and organizations across the globe including developed countries. In Pakistan, they are providing services to the industrial sector, research organizations and are also pursuing their career as entrepreneurs and academicians.

I wish that IIEE contributes strides of success in the mission to provide high quality

**Dr. Syed Hussain Abidi**  
Chairman, PCSIR

MESSAGE FROM THE MEMBER TECHNOLOGY PCSIR



**H**uman Resource Development through specialized education and training is the most powerful tool to bring about technological changes in our society. To face the challenges ahead in this millennium, it is quite imperative that we open the doors of latest education and technological development to our youth, so that they may be able to carve out a bright future for themselves and for the country. Pakistan Council of Scientific & Industrial Research (PCSIR) with the support of Ministry of Science and Technology is effectively contributing in both directions, i.e., education and research.

Institute of Industrial Electronics Engineering (IIEE) established in 1988, offers four years Bachelors of Engineering Program in Industrial Electronics, accredited by Pakistan Engineering Council (PEC) and affiliated with NED University of Engineering and Technology for degree awarding. IIEE provides conducive environment and state of art equipment and trainers in the labs. The well-trained graduates with engineering insight and professional expertise are gainfully contributing towards sustainable development of the country. I take this opportunity to convert my best wishes to new admitting students and to advise them to excel in their field of specialization so that they can make a good career in their lives and serve the country and nation with great zeal and conviction

**Engr. Sohail Ameer Marwat**  
Member Technology, PCSIR



# INSTITUTE OF INDUSTRIAL ELECTRONICS ENGINEERING, KARACHI

## PROSPECTUS 2022

### MESSAGE FROM PRINCIPAL IIEE



Welcome to Institute of Industrial Electronics Engineering (IIEE). It is a Federal Government institution running under the administrative control of Pakistan Council of Scientific and Industrial Research (PCSIR), Ministry of Science and Technology (MoST). IIEE offers Bachelor of Engineering in Industrial Electronics (IE) for the last three decades and is always well recognized for its excellent teaching standards and high-quality B.E (IE) graduates, gainfully employed and pursuing their career animatedly throughout the country and abroad.

The academic program is affiliated with NED University of Engineering and Technology and is accredited with Pakistan Engineering Council (PEC). The curriculum congregates the Electronics Engineering with the focused knowledge of Instrumentation, Power Electronics, Embedded Systems, Industrial Networks, Control and Automation to meet the demands and requirements of industrial sector. The teaching and learning process inculcates analytical and designing skills among the students under the framework of Outcome Based Education (OBE) System.

With the support of PCSIR and MoST, an appreciable upgradation of equipment, infrastructure and allied facilities is under progress through project of Public Sector Development Program (PSDP). For promotion and outreach in industrial and professional community, IIEE Students' Project Display Center has also been established recently within IIEE premises.

With an annual intake of (50) students being selected from all over the country, each student as an individual is focused to develop Integrity, Respect and Responsibility. Moral and Ethical practices lead them to serve for the societal development of Pakistan and the world. A safe and healthy environment is created for our students to learn and succeed in future.

I am proud of the significant accomplishments of IIEE alumni and envision that the new comers would be much ahead of them. They would lead engineers, innovators, researchers and entrepreneurs and thereby contribute value to the knowledge-based economy and society.

**Engr. Dr. Farah Haroon**  
Principal, IIEE



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## INTRODUCTION

## 1.1 HISTORY OF IIEE

Rapid advancement in the field of electronics and its influence in our day-to-day life in general and in all aspects of industrial sectors in particular has caused challenging demands on engineering education as a whole. Thus the need of establishing the Institute of Industrial Electronics Engineering was felt by the Government of Pakistan and the task was assigned to the Ministry of Science and Technology/PCSIR.

In 1985 a study mission of Swiss Experts was invited to Pakistan and it was identified by the mission that Pakistan needs practical oriented engineers particularly in the field of Electronics Engineering. The Swiss Government offered to establish Institute of Industrial Electronics Engineering and an agreement of cooperation was signed.

The present location was selected for building Institute, while the cost of building, the infrastructure, provision of utilities etc. were borne by the Ministry of Science and Technology through PCSIR. Equipment for establishing laboratories and experts were arranged by the Swiss Government. PCSIR recruited the faculty staff to support the academic/administrative activities.

The curriculum and training programme was jointly worked out by SWISS and Pakistani authorities, (presently IIEE is following revised syllabus on HEC/PEC Pakistan standards). N.E.D. University, Karachi was approached for the grant of affiliation of the Institute and for award of B.E degree. After due inspection and assessment the University granted affiliation to the Institute to conduct B.E degree course in Industrial Electronics Engineering.

Academic activities commenced from June 1989 with an intake of 40 students, and now batch of 50 undergraduates is being inducted in 1st Year Engineering. Graduate Engineers of IIEE are very much sought by the Industries/Organizations and those who have so far graduated are gainfully employed throughout the country and abroad.



## INTRODUCTION

### 1.2 ADMINISTRATION

#### PRINCIPAL

**Engr. Dr. Farah Haroon**

PhD (Telecom), Asian Institute of Tech., Thailand.  
Master of Electrical Engineering, NED-UET, Karachi  
B.E (Industrial Electronics), IIEE, NED-UET, Karachi

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#### P.A. to PRINCIPAL

**Syed Irfan Hussain Shah**

B.A from Sindh University Jamshoro

021-99244218

#### VICE PRINCIPAL / CHIEF COORDINATOR (INCHARGE QUALITY ENHANCEMENT CELL)

**Engr. Anjum Darakhshan**

M. Engg. (Industrial Control & Automation), UIT, Hamdard University, Karachi.  
B.E (Electronics), DCET / NED-UET, Karachi

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Ext. 106

#### SENIOR ADMIN OFFICER

**Syed Mukarrum Ali**

B.Sc., M.Ed

021-99244219

#### INCHARGE ADMISSIONS & IIEE LIBRARY

**Engr. Sajid Hussain**

M. Engg. (Industrial Control & Automation), UIT, Hamdard University, Karachi.  
B.E. (Industrial Electronics), IIEE, NED-UET, Karachi

021-99244222

#### ASSISSTANT: LIBRARY & BOOK BANK

**Mrs. Faiqa Khatoon**

M.A (Economics), University of Karachi.  
Certificate; Library Science, from School of Librarianship PBWG, Karachi

021-99244222

#### INCHARGE EXAMINATION & VISITING FACULTY

**Engr. Muhammad Asghar Daudani**

M. Engg. (Industrial Electronics), NED-UET, Karachi  
B.E (Electronics), MUET, Jamshoro

021-99244582

#### OUTCOME BASED EDUCATION (OBE) COORDINATOR

**Engr. Agha Muhammad Shakir**

M. Engg. (Industrial Electronics) NED-UET, Karachi.  
B.E (Electrical), NED-UET, Karachi

021-99244582

#### INCHARGE ACCOUNTS

**Mr. Fareed Ahmed, (Accounts Officer)**

B.Com., M.A, University of Karachi

021-99244220

#### STUDENTS REGISTRY & COUNSELING BRANCH (SRCB)

**Engr. Dr. Muhammad Sameer Ahmed**

PhD (Electronics) YILDIZ Technical University,  
Turkey

021-99244218  
Ext. 113

#### STUDENT AFFAIRS & RECORD BRANCH

**Mr. S.M. Qayyum**

(Assistant)

021-99244218  
Ext. 102



## INTRODUCTION

### 1.3 TEACHING FACULTY (REGULAR)

#### PRINCIPAL INSTRUCTORS

BPS-20

**Engr. Dr. Farah Haroon**  
Associate Professor

PhD (Telecom), Asian Institute of Tech., Thailand.  
M. Engg. (Electrical), NED-UET, Karachi  
B.E (industrial Electronics), IIEE, NED-UET, Karachi

**Engr. Anjum Darakhshan**  
Assistant Professor

M. Engg. (Industrial Control & Automation), Usman Institute of  
Technology (UIT), Hamdard University (HU), Karachi.  
B.E. (Electronics), DCET / NED-UET, Karachi

#### PRINCIPAL INSTRUCTOR

BPS-19

**Engr. M. Asghar Daudani**  
Assistant Professor / Principal Engineer

PhD Scholar (Electronics), Dawood-UET, Karachi  
M. Engg. (Industrial Electronics), NED-UET, Karachi  
B.E. (Electrical), Mehran-UET, Jamshoro.

**Engr. Dr. Muhammad Sameer Ahmed**  
Associate Professor / Principal Engineer

PhD (Electronics), YILDIZ Technical University, Turkey  
M. Engg. (Industrial Control & Automation), UIT,  
Hamdard University, Karachi.  
B.E (Electronics), UIT, Hamdard University, Karachi.

**Engr. Dr. S. Saeed Jaffar**  
Associate Professor / Principal Engineer

PhD (Optical & Wireless Communication Net Work),  
HIIEC University, Taxila, Pakistan  
MS (Telecom), Institute of communication Technologies  
(ICT), Ethisalat, PTCL Academy  
BS (Electronics), Sir Sayed University of Engineering  
& Technology (SSUET), Karachi

#### CHIEF INSTRUCTOR

BPS-18

**Engr. Sajid Hussain**  
Assistant Professor / Chief Instructor

PhD Scholar (Electronics), NED-UET, Karachi  
M. Engg. (Industrial Control & Automation), UIT, Hamdard  
University (HU), Karachi.  
B.E. (Industrial Electronics), IIEE, NED-UET, Karachi.

**Engr. Agha Muhammad Shakir**  
Assistant Professor / Chief Instructor

M. Engg. (Industrial Electronics) NED-UET, Karachi.  
B.E (Electrical), NED-UET, Karachi.

**Engr. Dr. Asif Ahmed Memon**  
Assistant Professor / Chief Instructor

PhD (Electronics), NED-UET, Karachi  
M. Engg. (Industrial Electronics) NED-UET, Karachi.  
B.E (Electrical), Baluchistan Engineering College, Khuzdar,  
University of Baluchistan

**Engr. Qurrat-ul-Ain**  
Assistant Professor / Chief Instructor

M.S (Electrical Communication), PNEC, National University of Sciences  
& Technology (NUST), Karachi.  
B.E. (Industrial Electronics), IIEE, NED-UET, Karachi.

**Engr. Mazhar Ali**  
Assistant Professor / Chief Instructor

M. Engg. (Engineering Management), NED-UET, Karachi  
B.E (Mechanical), QUEST, Nawabshah.

#### SENIOR INSTRUCTOR

BPS-17

**Engr. Ghulam Mustafa Rind**

M.S (Electronics), Dawood UET, Karachi  
B.E. (Electronics), Dawood CET / NED-UET, Karachi.

**NOTE:** University Equivalent Designations (Associate Prof., Assistant Prof., and Lecturer) are being shown here in compliance of instructions of Pakistan Engineering Council



## INTRODUCTION

### 1.4 TEACHING FACULTY (LAB STAFF)

#### CHIEF INSTRUCTOR

BPS-18

**1. Mr. Liaquat Ali**  
IT System Manager

BSc, & MAS, University of Karachi.

#### SENIOR INSTRUCTOR

BPS-17

**3. Mr. Ameer Hamza**

B. Tech (Pass), Mechanical NED-UET Karachi  
D.A.E (Mechanical Technology), Karachi.

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## INTRODUCTION

### 1.5 INFRASTRUCTURE

The main building of the Institute comprises of ground +3 floors with main library, auditorium and administration. The classrooms are fully furnished and equipped with multimedia facility. The laboratories along with mechanical bench and fabrication workshops are available to give hand on skill training in highly conducive environment. Complete set of equipment and tools are issued to the students on yearly basis.

A computer simulations laboratory with latest PCs and an Ethernet & Wireless based LAN provides connectivity to various labs and sections. The Institute has an Internet facility which is being further expanded to provide access to data-bases, information agencies, linkage with local and foreign libraries and universities for resource sharing. A range of general & special purpose software are already in use.

Besides the main building, there is one mosque and staff residential colony within the premises of IIEE.



IIEE Building



## INTRODUCTION

### 1.6 ACADEMIC PROGRAMME

The candidates who aim to take up the degree course should by character and aptitude capable of profiling themselves from the instruction at the Institute level. The main objective of this course is to provide the student with a thorough knowledge of the fundamentals on which the modern engineering science is based. Theoretical instruction is supplemented with relevant experimental work in the laboratories and workshops. Comprehensive instructional Programme is designed to develop rational thinking and approach to solve engineering problems, which subsequently prepares a young professional engineer, who may choose to work in the field or undertake advance studies and research. The students who comply with the conditions prescribed by the Institute and successfully complete their courses and pass the required examinations are awarded, the Degree of Bachelor of Engineering in Industrial Electronics



Students involved in laboratory work



## 2. B.E. IN INDUSTRIAL ELECTRONICS ENGINEERING

Institute of Industrial Electronics Engineering, IIEE offers four years course leading to degree of Bachelor of Engineering in the discipline of Industrial Electronics (IE) which is not being offered by any other university of Pakistan. It is therefore, the graduate engineers of IIEE have a unique status in the job market.

### 2.1 DEGREE AWARDING AUTHORITY

The students who comply with the conditions prescribed by the Institute and successfully complete their course and pass the required Examination with minimum 2CGPA are awarded the degree of B.E. in Industrial Electronics by NED University of Engineering & Technology, Karachi

### 2.2 ACCREDITATION

The academic programme since its inception is accredited by Pakistan Engineering Council (PEC). To facilitate global mobility and international recognition, IIEE has adopted Outcome Based Education (OBE) in both academics and assessments.

### 2.3 OUTCOME BASED EDUCATION STATEMENTS

#### 2.3.1 IIEE VISION

To produce Professionals contributing towards sustainable Industrial development for progressive and prosperous society.

#### 2.3.2 IIEE MISSION STATEMENT

Prepare Industrial Electronic Engineers to meet emerging Industrial and societal needs through collaboration of Industry, research and academia with professional ethics.

#### 2.3.3 IIEE PROGRAM EDUCATIONAL OBJECTIVES (PEO)

**PEO-1:** Provide students with essential knowledge and skills to investigate, analyze and solve Industrial Electronics Engineering problems.

**PEO-2:** Work efficiently with the spirit of team work and leadership with effective communication skills.

**PEO-3:** Develop professional ethics and engineering practice in students for societal and environmental development.

**PEO-4:** Engage in lifelong learning for continued professional growth

#### 2.3.4 PROGRAM LEARNING OUTCOMES (PLO)

On successful completion of this program, students are expected to possess following twelve attributes;

##### **PLO-1: Engineering Knowledge**

An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems

##### **PLO-2: : Problem Analysis**

An ability to identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.



## B.E. IN INDUSTRIAL ELECTRONICS ENGINEERING

### **PLO-3: Design/Development of Solutions**

An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations

### **PLO-4: Investigation**

An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data and synthesis of information to derive valid conclusions.

### **PLO-5: Modern Tool Usage**

An ability to create, select and apply appropriate techniques, resources and modern engineering and IT tools, including prediction and modelling, to complex engineering activities, with an understanding of the limitations.

### **PLO-6: The Engineer and Society**

An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

### **PLO-7: Environment and Sustainability**

An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

### **PLO-8: Ethics**

Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

### **PLO-9: Individual and Team Work**

An ability to work effectively as an individual or in a team, on multifaceted and/or multidisciplinary settings.

### **PLO-10: Communication**

A skill to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentations, make effective presentations, and give and receive clear instructions.

### **PLO-11: Project Management**

An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

### **PLO-12: Lifelong Learning**

An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

## 2.4 REGULATIONS PERTAINING TO SEMESTER DURATION

The course of study leading to the B.E. (IE) degree is of four academic years (8 semesters) duration. Each semester is of 16 weeks academic activity, that is, 16 weeks for the classes followed by the Semester final examinations. In these 16 weeks of academic activity; there must be at least 48 hours of teaching of theory classes (for 3 credit of theory), and 16 lab sessions, (for 1 credit lab).

**Note: Tutorial sessions can be a part of theory classes.**

The mode of instructions in all courses and laboratories are in English language. The instructional programs and examination system of the Institute is based on semester system. The students are advised to study rules and regulations relating to semester system of examination.

Practical examinations are held along with theory examination by the Institute in courses where the practical work forms part of the curriculum.

## 2.5 ADMISSIONS IN SUBSEQUENT SEMESTER/YEAR OF STUDY

- a) Admission in any Semester shall be allowed only during first three weeks after commencement of classes of that Semester.
- b) Admission in Spring Semester of any Year shall be open to any student who submits the Final Examination Form of Fall Semester of that year.
- c) In any case, the number of registered courses in any semester including all prescribed courses of a semester, should not exceed the maximum prescribed limit, of NED University of Engineering and Technology.
- d) In any Semester, the student shall be allowed to register in maximum of seven theory courses in total.
- e) Any such students who after being in second probation have obtained more than 1.0 CGPA but less than 2.0 CGPA shall not be allowed to register in subsequent semester. He/She will be required to improve his/her CGPA up to 2.0 before being allowed to register in subsequent semester with junior batch.
- f) Along with CGPA, the student shall also be required to fulfill the following conditions:
- g) For admission in Third Year, the student must have passed all courses of the First Year, or 80% of the courses up to the Second Year.
- h) For admission in Fourth Year, the student must have passed all courses up to the Second Year, OR all courses of the First Year and 90% of the courses up to Third Year with at least 1.7 CGPA

## 2.6 CANCELLATION OF ADMISSION

- a) Students who fail to register themselves with the Controller of Examinations (NED) in 1st semester examinations on any account shall have their admission automatically cancelled. No fees or charges deposited earlier by such students shall be refundable.
- b) Admission of any such student shall be cancelled, who after being on second probation during Second Year Fall Semester fails to obtain 1.0 CGPA on completion of that semester.
- c) Students who do not pass all their examinations from first to final year of B.E. program within 7 academic years shall have their enrolment cancelled. They shall not be given any further chance to clear their failed subjects/examination after the expiry of the above specified period.
- d) Any student who discontinues his/her studies for continuous period of one year would not be eligible to continue his/her study in that academic year and is obligated for re-admission



## B.E. IN INDUSTRIAL ELECTRONICS ENGINEERING

### 2.7 ATTENDANCE RULES

- a) Any candidate, who registered during the semester, will be allowed to appear only in such course(s) in which his/her attendance is at least 75% during the semester.
- b) Any candidate, who registered during the semester, will be allowed to appear in all courses of the semester provided his/her aggregate attendance in all courses is at least 75% of the total of all classes held in the courses during the semester.

### 2.8 CLASS REPRESENTATIVE

A class representative will only be selected from first three top merit positions of the last semester. He/ she would be held responsible of any misconduct of classmates and therefore is advised to report the same to the management



*Class Representative of 3rd Year Involving Students in IEEE Activities*

## 2.9 COURSE SCHEME

Following is the latest course scheme of B.E (Industrial Electronics) approved by the NED

### FIRST YEAR OF ENGINEERING

FE (IE) Fall course Semester					FE (IE) Spring Semester				
Subj. Code	Course Title	Credit Hours			Subj. Code	Course Title	Credit Hours		
		Theo	Lab	Total			Theo	Lab	Total
HS114	Functional English	3	0	3	HS121	Communication Skills	3	0	3
MS111	Calculus and Analytical Geometry	3	0	3	HS122	Islamic Studies (For Muslims)	2	0	2
					HS123	Ethical Behaviour (For Non-Muslims)			
MS114	Applied Physics	3	1	4	MS121	Differential Equations	3	0	3
IE114	Engineering Drawing	0	1	1	IE121	Basic Electronics	3	1	4
IE115	Engineering Materials & Workshop	1	1	2	IE122	Fabrication Workshop	0	1	1
IE116	Linear Circuit Analysis	3	1	4	IE238	Introduction To Computer & Programming	3	1	4
HSK1	Chinese Language Course	-	-	-	HSK2	Chinese Language Course	-	-	-
<b>Total =</b>		<b>13</b>	<b>4</b>	<b>17</b>	<b>Total =</b>		<b>14</b>	<b>3</b>	<b>17</b>

### SECOND YEAR OF ENGINEERING

SE (IE) Fall Semester					SE (IE) Spring Semester				
Subj. Code	Course Title	Credit Hours			Subj. Code	Course Title	Credit Hours		
		Theo	Lab	Total			Theo	Lab	Total
HS231	Pakistan Studies	2	0	2	MS241	Linear Algebra	3	0	3
MS231	Complex Variables & Transforms	3	0	3	IE245	Digital Logic Design	3	1	4
IE234	PCB Manufacturing	1	1	2	IE246	Instrumentation & Measurements	3	1	4
IE235	Electronic Circuit Design	3	1	4	IE247	Basic Mechanical Engineering	2	0	2
IE239	Electromagnetic Field Theory	3	0	3	IE248	Electric Network Analysis	3	1	4
IE366	Object Oriented Programming	3	1	4	HS200	Community Service	-	-	-
<b>Total =</b>		<b>15</b>	<b>3</b>	<b>18</b>	<b>Total=</b>		<b>14</b>	<b>3</b>	<b>17</b>



**B.E. IN INDUSTRIAL ELECTRONICS ENGINEERING**

**THIRD YEAR OF ENGINEERING**

TE (IE) Fall Semester					TE (IE) Spring Semester				
Subj. Code	Course Title	Credit Hours			Subj. Code	Course Title	Credit Hours		
		Theo	Lab	Total			Theo	Lab	Total
HS351	Technical Report Writing and Professional Skills	2	0	2	MS361	Probability & Statistics	3	0	3
IE352	Integrated Circuits	3	1	4	IE361	Feedback Control System	3	1	4
IE355	Microprocessor Architecture & Programming	3	1	4	IE362	Power Electronics	3	1	4
IE356	Signals & Systems	3	1	4	IE363	Embedded System	2	1	3
IE357	Electrical Machines	3	1	4	IE484	Communication Systems	3	1	4
<b>Total =</b>		<b>14</b>	<b>4</b>	<b>18</b>	<b>Total=</b>		<b>14</b>	<b>4</b>	<b>18</b>

**FOURTH YEAR OF ENGINEERING**

BE (IE) Fall Semester					BE (IE) Spring Semester				
Subj. Code	Course Title	Credit Hours			Subj. Code	Course Title	Credit Hours		
		Theo	Lab	Total			Theo	Lab	Total
MS484	Entrepreneurship	2	0	2	MS471	Numerical Methods	3	0	3
IE471	Digital Signal Processing (DSP)	3	1	4	MS483	Engineering Economics & Management	3	0	3
EL47X	Elective-I	3	1	4	EL48X	Elective-II	3	0	3
IE473	Industrial Process Control	2	1	3	IE482	Industrial Instrumentation Systems	2	1	3
IE478	Industrial Electronics Engineering Project Work I	0	3	3	IE488	Industrial Electronics Engineering Project Work	0	3	3
<b>Total =</b>		<b>10</b>	<b>6</b>	<b>16</b>	<b>Total=</b>		<b>11</b>	<b>4</b>	<b>15</b>
<b>GRAND TOTAL: 136 Credit Hours</b>									

**Elective I**

- EL471 Electronic Motor Drives (3+1)
- EL472 Digital System Design (3+1)
- EL473 Digital Control Systems (3+1)

**Elective II**

- EL481 Organizational Behavior (3+0)
- EL482 Professional Ethics (3+0)
- EL483 Sociology for Engineers (3+0)

**2.10 BOARD OF STUDIES (BOS)**

Title and Contents of the courses are subject to change, without prior notification, as and when deemed necessary by the IIEE Board of Studies (BOS) with the subsequent approval by the NED University of Engineering & Technology, Karachi.

IIEE board of studies (BOS) is academic regulatory body of the institute. The Board is chaired by the Principal IIEE, and it consists of senior IIEE faculty members and two nominated members from NED University of Engineering and Technology. On recommendation of PEC, two external members from industry and academia have recently been included in IIEE BOS. Regular BOS meetings are held at least once in a semester.

## ADMISSION POLICY

### 2.11 INDUSTRIAL ADVISORY BOARD

Industrial Advisory Board (IAB) has been constituted at IIEE with highly motivated industrial professionals who are positively contributing towards IIEE Curriculum and Learning Process. The board is established to provide a platform for IIEE faculty and industry interaction to

- Obtain professionals review on Program Educational Objectives and Curriculum of Industrial Electronics Engineering
- Keep track with new trends and transformational changes that are taking place, or are expected to take place, in industry
- Explore opportunities for joint collaboration
- Identify potential employers for IIEE graduates
- Promote institute outreach in Industrial community

## 3. ADMISSION POLICY

### 3.1 ELIGIBILITY FOR ADMISSION & MERIT CRITERIA

#### 3.1.1 Merit Criteria for Admissions-2022:

Provisional admission to be offered based upon the marks secured by the individuals in HSC-I/Equivalent Examination and Pre-Admission Entry Test with the weightage being 50% and 50% respectively.

- Those candidates who had their HSC/ A-Level qualified during earlier years will have 50% weightage to complete result i.e., HSC/ A-Level.
- Candidates who have Diploma of Associate Engineer (DAE) Certificate from Provincial Board of Technical Educations in year 2021, 2020 & 2019 (with at least 60% Marks) are also eligible to apply.

**Note:**

- The admission will be confirmed only after the candidate submits his/her final marks being minimum 60%
- An applicant should have passed
  - Pre-admission Entry Test of IIEE. Or
  - Pre-Admission Entry Test of the NED University of Engineering & Technology with at least 50% marks. Or;
  - NAT-IE test administered by NTS-Pakistan with at least 50% marks. Or,
  - SAT-I with minimum 800 score and SAT -II with at least 1500 score; if applicable

#### 3.1.2 Tie in Merit Position:

The tie in merit position shall be resolved as per the policy approved last year which is reproduced as under:

- Aggregate marks obtained in Pre-Admission Entry Test shall be the criterion for resolving the merit.
- Any further tie shall be resolved by considering the following criteria.

For applicants with Pre-Engineering Science: marks obtained in sections of Mathematics, then Physics and then Chemistry of HSC or equivalent

- The admission offered based upon above merit shall remain provisional till the submission and subsequent verification (from relevant authorities) of final HSC or equivalent Mark Sheet or IBCC Equivalency Certificate (**for foreign exams only**) with minimum 60% marks obtained. In any case the final Mark Sheet must be submitted before 31st December, 2022 as otherwise the admission will be liable to be cancelled.



## ADMISSION POLICY

- Marks deduction for additional attempt
  - The merit positions of applicants who have passed their HSC examination prior to the admission year including applicants who have taken the improvement in the same calendar year shall be determined after deduction of 10 marks per year from the total obtained in their respective HSC examinations.
  - Additional Marks for Hafiz-e-Quran
  - Any eligible applicant who is Hafiz-e-Quran shall have 20 marks added to the marks obtained by the applicant in HSC Examination.
- i. The applicant shall have to provide the original “Hafiz-e-Quran Sanad” from Wafaq-ul-Madaris.
  - ii. The applicant shall have to pass the “Hafiz-e-Quran Test”, at IIEE.

### 3.2 REJECTION OF APPLICATION FORM

- a) The applications not fulfilling the conditions under para 3.1 will be rejected.
- b) The candidates found guilty of suppression or misrepresentation of material facts at any stage shall be rejected for admission.
- c) The Principal of the Institute shall be competent to reject any application for admission and to cancel or withdraw admission of any student without assigning any reason.

### 3.3 SEATS ALLOCATIONS

IIEE has total 50 number of seats available for admissions, which are distributed in four (4) main categories (given in Table) as prescribed by the Federal Ministry of Science & Technology, Government of Pakistan. The main categories are;

- Category 1.0: All Pakistan Open Merit
- Category 2.0: Provincial Quota
- Category 3.0: PCSIR employee's Son(s)/ Daughter(s) Quota;
- Category 4.0: Self-Finance Scheme

CATEGORY	QUOTA DEFINITIONS	No. of Seats
1.0	All Pakistan Merit (Top five candidates in overall / combined merit list.)	05
2.1	Sindh (Urban) Domiciled	07
2.2	Sindh (Rural) Domiciled	11
2.3	Punjab Domiciled	12
2.4	Khyber Pakhtoonkhwa (KPK) Domiciled	03
2.5	Baluchistan Domiciled	01
2.6	A. J. & K. Domiciled	01
2.7	FATA/FANA (Including Gilgit-Baltistan) Domiciled	01
3.0	Reserved Seats for PCSIR employee's Son(s)/ Daughter(s)	04
4.0	Reserved Seats for Self-Finance Scheme	05
<b>Total No. of Seats</b>		<b>50</b>

Note:

- The vacant seats in any Category (other than Category 1.0) due to non-availability of eligible candidates, shall be shifted to the Category 1.0.
- Candidate applying for admission on self-finance program must enclose Bank Draft of Rs.600,000/- (Rupees six hundred thousand) in the name of IIEE Karachi, on submission of Admission Form.

## ADMISSION POLICY

### 3.4 ADMISSION ON PCSIR EMPLOYEES' SON/DAUGHTER QUOTA

Four (04) seats are available for admission on PCSIR employee's Sons/ Daughters on merit basis in B.E. degree program in Industrial Electronics. The candidate for admission of PCSIR employee's Sons/ Daughters subject to fulfilling all eligibility conditions given in 3.1. And;

- a) Additional processing fee of Rs. 1000/- must be submitted with an application fee.
- b) Student should submit one form by marking the both options Regular and PCSIR employee's Sons/Daughters scheme.
- c) The candidate admitted to 1<sup>st</sup> year engineering under PCSIR employee's Sons/ Daughters program shall be required to qualify medical fitness examination and payment of normal tuition fee as prescribed by the Institute.
- d) All other terms & conditions will be the same.

### 3.5 ADMISSION UNDER SELF-FINANCE SCHEME

Five (05) seats are available for admission on self-finance basis in B.E. degree program in Industrial Electronics. The candidate for admission of self-finance subject to fulfilling all eligibility conditions given in 3.1. and;

- a) Candidate applying for admission on self-finance program ONLY, the processing fee of Rs. 1500/- must be submitted with an application form.
- b) Candidate applying for admission on both regular and self-finance category, the processing fee of Rs. 3000/- + Rs. 1000/- must be submitted with an application form.
- c) Candidate applying for admission on self-finance program must enclose Pay Order/Demand Draft Rs. 600,000/- (Rupees six hundred thousand) in the name of IIEE Karachi on submission of admission form. The selection of the candidate under self-finance program shall be after passing the Entrance Test on merit only, to be determined on the basis of the marks obtained by the candidate in the entrance examination.
- d) Student may submit one form by marking for one or both options; Regular and Self-Finance schemes.
- e) Candidate applied ONLY for on self-finance schemes; they will not be considered on regular merit category.
- f) Candidate applied on both Regular and self-finance category, will not Selected on merit category after display of First merit list will, ONLY considered on Self-finance schemes.
- g) The Pay Order/Demand Draft of a candidate once admitted under self-finance program, shall not be refunded/returned on any account. However, the candidate who is not selected for admission, or candidate who selected on merit category in First merit category list, the amount deposited by them will be refunded after the admission for that session is declared closed by the Institute. The Pay Order of the candidate withdrawing their application before admission shall be returned on receipt of such applications duly supported by their father/parent in person and their name shall stand deleted from the merit list.
- h) The candidate admitted to 1st year engineering under self-finance program shall be required to qualify medical fitness examination and payment of normal tuition fee as prescribed by the Institute.
- i) All other terms & conditions will be the same.

### 3.6 SELECTED CANDIDATES

- a) Merit list of successful candidates and those on the waiting list shall be displayed on the Notice Board of the Institute. Merit List will also be displayed on IIEE Website.



## ADMISSION POLICY

- b) Application form should be signed by both an applicant and guardian and witnessed by 17 grade Gazetted Officer.
- c) A short list of names under each quota category shall be prepared in strict order of merit.
- d) Subject to availability of any vacant seats the candidates on waiting list referred in sub-para (a) above will be offered admission, after expiry of the deadline given to the selected candidate for admission.
- e) Principal has a final authority to cancel any admission.

### 3.7 PROVISIONAL ADMISSION

- a) The selected candidates shall complete and submit in original the following forms, within due date.
  - i. Medical Fitness Form
  - ii. Application form for Enrolment with N.E.D University.
  - iii. All candidates shall also be required to submit an **Affidavit** of Rs. 100/- on Judicial Stamp paper (matter can be downloaded from IIEE website) for the compliance and fulfilment of the requirement (In any case, the candidate shall be required to submit his/her original Mark Sheet/IBCC Equivalency Certificate with at least 60% after announcement of their respective results). Any non-compliance shall result in cancellation of provisional admissions
- b) If a candidate fails to get admission as required under sub-para (a) & (b) above and does not confirm his/her consent by submitting the required fees within the specified due date, his/her seat will be declared vacant and will be filled up from the candidates on the waiting list.
- c) Any candidate of the merit list who did not follow approved IIEE Admission Procedure is liable of

### 3.8 MEDICAL FITNESS

Candidate must be in sound physical and mental health free from any congenital malformation or defect with normal speech and hearing. The eyesight, aided or un-aided, should not be less than 6/9 in one eye and 6/12 in other eye. The chest expansion should be less than 4 cm and X-Ray of the chest satisfactory. The limbs, including the feet and toes, should be well formed and developed with perfect and un-restricted movement of all joints. The candidate should not suffer from any remarkable skin disease or venereal disease. Final decision of the applicant fitness shall be made by Medical Officer nominated by IIEE (for Medical fitness checkup student will have to submit Rs. 500/- at time of checkup).

### 3.9 RECHECKING OF ENTRY TEST PAPERS

IIEE Admission Committee cannot entertain rechecking of Entry Test Papers. The candidates can contact their respective Testing Authorities and shall have to follow their policy and procedures, in this regards.

### 3.10 EMPLOYMENT/SIMULTANEOUS ENROLMENT IN OTHER EDUCATIONAL INSTITUTIONS

The Programme leading to B.E. (Industrial Electronics) Degree is a regular full time day Programme and thus no student admitted in this Institute shall be allowed to engage himself/ herself in employment or maintain a simultaneous enrolment in other course of studies in other educational institution. Violation of above may lead to cancellation of admission.

### 3.11 INSTRUCTIONS TO FILL ADMISSION FORM

- a) Candidates for admission must fill their application forms either in their own handwriting (must be legible) or using a word processor.
- b) Please attach one attested copy of each of the following documents:
  - i) SSC Certificate & Marks Sheet or "O" level Certificate
  - ii) HSC (**Passed in 2020, 2019, 2018**) Marks Sheet or A-Level certificates.

## ADMISSION POLICY

- ii) HSC (**Passed in 2020, 2019, 2018**) Marks Sheet or A-Level certificates.
- iii) Applicant's CNIC / B Form (if below 18 years in age)
- iv) Parent's/Guardian's CNIC
- v) Applicant's Domicile Certificate (verified from concerned district)
- vi) Applicant's Permanent Residence Certificate (PRC) (only for applicants from Sindh Province)
- vii) Equivalence Certificate from IBCC for "O" level / "A" level applicants
- viii) Applicants applying additionally on PCSIR Employee's Son/Daughter Quota attach PCSIR Employment Certificate of his/her parent (Mother or Father) duly issued by Director General/Director of PCSIR's concerned unit
- c) Application form and the documents attached shall not be returned.
- d) Incomplete application forms shall not be considered.
- e) The application shall be rejected similarly in case the candidate is found guilty of suppression or misrepresentation of material facts.
- f) The completed application form comprising the material specified in para (b) must reach the Institute either by hand or by Registered Post, not later than 2:00 p.m. on the last date of submission of application form notified in the

press advertisement. Any application received after this date and time or found deficient in any respect will be rejected.

Any certificate or matter in addition to the specified requirement shall be treated as irrelevant and discarded.

**NOTE: Original documents should not be attached.**



*IIEE Admission Test 2022 at NED, UET*



## SEMESTER RULES AND REGULATIONS

## 4. SEMESTER RULES AND REGULATIONS

IIEE follows 16 weeks of academic activity in a semester, as per PEC rules. The teaching at the Institute commences from 8:00 a.m. according to the time table including labs/workshop practice etc. and it concludes at 4:00 p.m.

## 4.1 EVALUATION SYSTEM

The Grade/Grade-Point are used for evaluation of student's academic performance, in semester system. Following is the Grade/Grade-Point equated with percentage of marks and other grades.

GRADE	GRADE POINT	% MARKS	REMARKS
A+	4.0	94 - 100	Extra Ordinary
A	4.0	85 - 93	Excellent
A-	3.7	80 - 84	Very Good
B+	3.4	75 - 79	Very Good
B	3.0	70 - 74	Good
B-	2.7	67 - 69	Above Average
C+	2.4	64 - 66	Average
C	2.0	60 - 63	Satisfactory
C-	1.7	57 - 59	Adequate
D+	1.4	54 - 56	Pass
D	1.0	50 - 53	Pass
F	0.0	Below 50	Fail
P	---	50 - 100	Pass in non-credit course
IP	---	---	In Progress
X	---	---	Exempted
I	---	---	Incomplete
W	---	---	Withdrawal
WU	---	---	Withdrawal Unofficially

Grade Point Average (GPA) for any semester and Cumulative Grade Point Average (CGPA) for more than one semester shall be calculated as:

$$\text{GPA/CGPA} = \frac{\text{Sum of (credit hours of each course multiplied by grade point in that course)}}{\text{Total credit hours of the course together}}$$

Distribution of marks assigned to any course shall be as under

- Each theory paper shall have 60% marks for final examination and 40% marks for session aevaluation.
- Each practical and final year project shall have 60% marks for final examination and 40% marks for session aevaluation.
- Each practical and final year project shall have 60% marks for final examination and 40% marks for session evaluation.

## SEMESTER RULES AND REGULATIONS

**4.2 LEAVE OF ABSENCE**

- A student must have at least 75% attendance in each Theory and Lab Class overall, so as to be eligible to appear in the respective final semester examination.
- IIEE is a Federal Institute running under PCSIR and hence the leave pattern of Provincial government is not followed.
- Under exceptional circumstances, students may apply for leave of absence to the Principal of the Institute who may sanction such leave which will however not be acceptable as a plea for not putting in 75% of the attendance, which is a pre-requisite for being eligible to appear in the Final Examination of a semester.
- The student is advised to strictly follow punctuality in both the theory and practical classes.

**4.3 REQUIRED DOCUMENTS AT TIME OF ADMISSION**

According to the rule of the Institute the following documents of the selected candidate admitted are required.

- HSC (**Passed in 2021, 2020, 2019**) Marks Sheet or A-Level certificates of qualifying examination in original (to be sent to NED University for Enrolment).
- Migration Certificate (If required as para 3.15 (f) in original (to be sent to NED University for enrolment)
- Secondary School Certificate exam mark sheet (retained by IIEE).
- P.R.C. in original (retained by IIEE). (Only for applicants from Sindh Province).
- H.S.C Provisional Certificate (to be sent to NED University for enrolment)
- Domicile Certificate (verified from concerned district/DC office) in original (retained by IIEE).

The above documents shall not be made available with the student concerned, during his/her studies at IIEE. However, under exceptional cases the Photostat of the required documents retained by IIEE can be provided to the candidate on submission of his/her application.

**4.4 DEGREE AWARD REQUIREMENTS**

Any student who was admitted in First Year and passed all courses during four years of study as prescribed in (with CGPA of at least 2.0, in semester system) shall be eligible for award of Degree in Industrial Electronic Engineering by the, NED University of Engineering & Technology, Karachi.

**4.5 INDUSTRIAL LINKAGE**

Industrial linkage has emerged as a common and widely acceptable diverse phenomenon in areas of education/training and research. It covers a broad spectrum including consultancy, research contracts, jointly organized conferences and exhibitions and above all awarding of Final Year projects. All such connections of students with an Industrial sector would be highly appreciable but however, this interaction in all cases would always be channelized through the Institution. Any violation of this would not be tolerable and hence would be considered as an act of misconduct.



*Students at Industrial Visit*



## FEES & EXPENSES

### 5. FEES & EXPENSES

#### 5.1 FEES STRUCTURE

Following is the fee structure, which is normally to be paid per Semester, (unless stated otherwise). Semester fee is required to be paid **within first 15 days of the semester**, otherwise candidate may not be allowed to attend the class.

- a) None of the fees is refundable under any circumstances except the Security deposit according to Sub-Para(b).

Type of Fees	Amount in Rs.	Payments
Tuition fee	35,000.00	Per Semester.
Admission fee(Non Refundable)	10,000.00	Only Once
Student Activities Fund	2,000.00	Per Semester.
Sports Fund	500.00	Per Semester.
Local Study Tour Charges	500.00	Per Semester.
Internet Charges	1,000.00	Per Semester.
Student welfare Fund	2,000.00	Only Once
Security Deposit (Refundable)	2,000.00	Only once
I.D. Card Charges	500.00	Only Once
Verification of documents	3,500.00	Only Once
Enrolment Charges	5,000.00	Only Once
Lab Coat Charges	1,000.00	Only Once
Amount to be paid at the time of Admission	<b>63,000.00</b>	

- b) The security deposit is against breakage and any other damage to the Institute property, instruments and tools caused by the student and is deducted from security deposit at the beginning of each semester. The balance shall be only refunded to the students if claimed within one year after the graduation and old deposit in this head is now considered as forfeited.
- c) Each student will submit two separate Pay Order (i) in the name of "IIEE Student Fund Account" amounting of **Rs.18,000/=** and (ii) Demand Draft in the name of "Centralized Deposit Account PCSIR NIDA 16-3 Islamabad" amounting of **Rs.45,000/=**The Institute does not provide any hostel facility. The student has to arrange accommodation and transport of their own.

#### 5.2 REFUND POLICY

The Institute will refund fees as mentioned.

#### 5.3 REGULAR REFUND OF FEE

Any student after being admitted requests for cancellation of admission shall have refund of his/her paid fee dealt as under:

- In case of applying for cancellation of admission and refund of fee before commencement of classes shall have all fee refunded except of Admission and Tuition fee
- In case of applying for cancellation of admission after commencement of classes shall only have security deposit refunded.



## FEES & EXPENSES

### 5.4 REFUND OF SELF FINANCE FEE

Any student after being admitted under self-finance category requests for cancellation of admission shall have refund of his/her self-finance fee dealt as under:

- I. In case of applying for cancellation of admission and refund of fee before commencement of classes shall have all self-finance fee refunded.
- II. In case of applying for cancellation of admission after commencement of classes Self-finance amount will not refunded.

**Note: Apart from the rest of the fee paid at the time of admission will be handled according to above clause (5.3 Regular refund of fee)**

The Institute will refund only the security deposit if the student does not join the Institute. Admission processing Fee is not refundable.

### 5.5 ADMISSION WITHDRAWAL

In any case withdrawal shall only be allowed;

- a) After successful completion of First Year Fall Semester.
- b) All dues up to the withdrawal Semester should be cleared.

### 5.6 LATE PAYMENT OF TUTION FEE

Students who did not pay fee in time for the session, may not be allowed to appear in the respective semester examination.

### 5.7 EXAMINATION FEE

On announcement of the examination schedule, the students have to deposit the examination fee and fine (if any) as announced by the NED University along with examination form.

### 5.8 FEE EXEMPTION AWARD

The Institute has a defined fee exemption policy for meritorious and deserving students. In each semester, the top three students are granted, fee exemption based on the results of previous semester.

*Note: If a position holder student, referred in sub-para above, withdraws from the fee exemption award, the same shifts to the next consecutive position holders. There is no fee exemption in first semester.*

### 5.9 SCHOLARSHIP

IIEE always welcomes scholarship awards to its diligent and needy students. However, in all means the respective requests and the grants should be channelized through the Institution.

Scholarships on need cum merit basis are available from IIEE student welfare fund.

## STUDENTS FACILITIES

### 6. STUDENTS FACILITIES

All labs are well equipped with the most modern electronic equipment and instruments. They are fully accessible to the students with the ratio of 4 students to the full pack of set of 5 to 6 instruments for experiments. All equipment & instruments are in running condition all the time, and students are required to return these instruments in same condition at the end of year.

#### 6.1 AUDITORIUM

Auditorium of the Institute is centrally air-conditioned with a sitting capacity of 244. It is available for all student activities, academic seminars, conferences and other audience & nonacademic activities. Examinations are also held in the Auditorium.



*IIEE Auditorium*



*IIEE Library*

#### 6.2 LIBRARY & BOOK BANK

The library of the Institute has a stock of more than 5000 books on various subjects. The books are selected to help the students and the faculty in their course of study and for further enhancement of their knowledge. Additionally, the text books are issued to all the students of four years from the book bank. However, the books are required to be returned to Library at the end of the academic year. The seating capacity in the library is for 50 students. The library subscribes a number of different technical magazines and journals mainly on electronics and computer sciences.

The library also offers Book – Bank facility free of charges. The students are issued textbooks at the beginning of the semester for the whole duration of the semester.

#### 6.3 HOSTEL ACCOMMODATION

IIEE does not provide Hostels facility to its students. However, students find and share apartments in the very neighborhood of the institute, at very affordable rates. The new students who desire to live in the rented apartments may contact IIEE Students' Counselor for help and guidance.

#### 6.4 SPORTS FACILITIES

An extra curriculum activity plays a vital role for healthy & competition environment in an Institute. Every year IIEE organizes a sports week with great fervor and enthusiasm. A significant budget is allocated and both the indoor and outdoor games are organized among the students of all the four years. A playground in-front and a separate football ground at the back of IIEE main building are available for student extra curriculum activities.

## STUDENTS FACILITIES

### 6.5 IIEE STUDENT'S PROJECT DISPLAY CENTRE

A separate building is dedicated for the display of student's final year projects name as **Project Display Centre**.



*IIEE Students' Project Display Centre*

### 6.6 CANTEEN

Keeping in view the demand of Students, new management has established a working canteen with in Institute premises.



*IIEE Canteen*



## DISCIPLINE

### 7. DISCIPLINE

- a) All students of the Institute shall conform to the Rules and Regulations of the Institute and are under overall disciplinary control of the principal.
- b) Breach of rules, misconduct, irregularity in time keeping, idleness, lack or unreasonable progress in studies etc., will render a student liable to disciplinary action including expulsion or rustication from the Institute. In this regard, the Principal is the sole and final authority.
- c) Students who abstain themselves (for seven days at a stretch without notice) either from lectures or from laboratory work will not be allowed to resume their study until satisfactory explanation is submitted and accepted.
- d) A student desirous of leaving the Institute must apply in writing and the student's parent or guardian must countersign such application. Admission once cancelled shall not be restored.
- e) Students are strictly forbidden from forwarding applications, appeals or any other communication direct to any authority other than the Principal of the Institute and any contravention of this rule shall make the student liable for disciplinary action.
- f) Students may be permitted to form or carry on only such association or club as are provided under the Rules. Such association or club must be open for membership regardless of religion, community or political opinion. In no circumstances will any association, the object or membership of which is directly or indirectly sectarian or political, shall be permitted. No member of the association or club can invite any outsider in the Institute without prior permission in writing from the Principal.
- g) No sectarian functions are permitted to be held by the students in the Institute.
- h) Every student must carry his Identity Card with him/her which are issued by the Institute
- i) Duplicate Identity Card may be issued on a written request on the prescribed form on reasonable grounds/charges.
- j) Students are levied fines for the loss or damage caused due to the negligence or mishandling to any instrument or equipment or any other property of the Institute.
- k) Principal's decision in all matters shall be final.
- l) The following among other shall constitute acts of indiscipline for which action may be taken against the student or students.
  - Breach of any rule of public moral, such as use of indecent or filthy language.
  - Disorderly behavior, such as shouting, abusing, quarrelling, fighting and insolency.
  - Defiance of authority.
  - False impersonation or giving false information or willful suppression of information, cheating or deceiving.
  - Visiting places declared out of bound for students.
  - Inciting or staging a walk out, a strike or an unauthorized procession.
  - Shouting of slogans derogatory to the prestige of the Institute or the reputation of its officers or teachers.



## DISCIPLINE

## 7.1 PENALTIES

- Principal IIEE is authorized to penalize Rs. 4,000/- against violation of each discipline, besides payment of damages, if any.
- Maximum total penalty can be Rs. 20,000/-, in case of more than one discipline violation.
- In case of loss or damage to the books borrowed from the library of the Institute, a fine of double the current market price is charged from the student. For late return of books, a fine of Rs.10/- per book is charged.

## 7.2 OUTSTANDING IIEE ALUMNI

- **Dr. Khurram Hameed**

*Dr. Khurram Hameed* has been awarded Civil Award, Tamgha-i-Imtiaz by the President of Pakistan on 14<sup>th</sup> August 2022. He is also a recipient of PEC excellence award 2020

- **Engr. Dr. Kashif Ishaque**

- Engr. Dr. Kashif Ishaque* (IIEE Alumni) is the only research scientist from Pakistan in the field of Electrical and Electronics Engineering to be included in global list of most cited 02% Scientist compiled by Stanford University, 2020, 2021 & 2022.
- It should be noted that Engr. Dr. Kashif Ishaq earlier, the Pakistan Council of Science and Technology (P.C.S.T) ranked first in the Directory of Productive Scientists of Pakistan during 2017.

- **Dr. Muhammad Arsalan**

- Dr. Muhammad Arsalan* has been awarded 2022, Regional Completions Optimization and Technology Award, by Society of Petroleum Engineers, Kingdom of Saudi Arabia.
- Dr. Muhammad Arsalan* was also honored to receive the king prize (Takreem-www.kingprize.sa) from custodian of the two Holy mosques, the king of Saudi Arabia for the indication related to the US Patent # US9804105B2 with co-inverter from KAUST. This is the highest honor an inverter can receive in the Kingdom.
- Muhammad Arsalan* was honored as best PhD student researcher award for devising embedded micor-antenna from Ottawa Centre for Research and Innovation.

- **Dr. Khurram Bhatti and Engr. Khalil Sultan**

*Dr. Khurram Bhatti* and *Engr. Khalil Sultan* won a prestigious grant from NCGSA, Pakistan to work on oil/chemical detection in Arabian Sea in 2021.

- **Engr. Sajjad Khan**

*Engr. Sajjad Khan* joined PORSCHE in 2022, after serving the Mercedes-Benz, in June 2017, for development of new software for digital vehicle and mobility. He is now holding the position of; *Vice President of Digital Vehicle & Mobility at Daimler*.

- **Dr. Sheraz Khan**

- Dr. Sheraz Khan* got recognition in Guinness Book of World Record in 2013 for his; "First ever Weakest Magnetic Field measurement on surface of earth at the Massachusetts Institute of Technology (MIT), USA"
- Obtained Assistant Professor Faculty position at Harvard Medical School in 2020.

- **Engr. Ismail Sultan**

- Recipient of Fulbright Scholarship for; Class of 2013 MS Ocean Engineering Program, from Florida Institute of Technology, USA.
- Recipient of Myron Zucker Design Award 2004, of IEEE USA.



## DISCIPLINE

c) Now he is working as QHSSE Manager at GTI Fujairah FZC, United Arab Emirates.

- **Engr. Khalil Sultan**

- a) Recipient of Fulbright Scholarship for; Master of Engineering Management, Concentration: Energy, (GPA: 3.7/4.0), Duke University Durham, NC, USA.
- b) Recipient of Myron Zucker Design Award 2004, of IEEE USA.
- c) He is **Strategy Consultant** at *RTI International, North Carolina, USA*.

- **Dr. Zeeshan Shareef**

- a) Recipient Gold Medal in IIEE 3rd Convocation on First-Class-First Position in BE Industrial Electronics 2004-07.
- b) Recipient Gold Medal in PIEAS Convocation on securing **First-Class-First-Position** in MS Systems Engineering (2008-2010). He got admission in PIEAS, Islamabad on MS Scholarship
- c) Recipient of **Merit scholarship from German Government for PhD Studies**. He completed PhD studies in Mechatronics and Robotics from University of Paderborn, Germany.
- d) Postdoc from University of Bielefeld (Germany) in area of Robotics and Machine Learning, and Postdoc from Technical University of Braunschweig (Germany) in area of Robotics and Machine Learning.
- e) Currently working as System Developer and Machine Learning Expert in Robert Bosch GmbH

- **Engr. Junaid Ahmed**

- a) Recipient of Fulbright Scholarship for; Master of Science in Electrical Engineering, North Carolina State University, Raleigh, NC, USA.
- b) He is now serving **Habib University**, Karachi, and carrying out Academic and Research assignments.

- **Engr. Shahzeb Khanzada**

Although Mr. Shahzeb Khanzada is graduated from IIEE, and earned BE degree in industrial electronics, he made his career in Electronic Media Journalism. Now his working with GEO News (Jung Group) and he is the anchor person of a very popular talk show; *Aaj Shahzeb Khanzada Kay Sath*.

## PHOTO GALLERY

### STUDENTS WITH THEIR FINAL YEAR PROJECTS (BATCH 2016-17)



### INDUSTRIAL VISITS





## PHOTO GALLERY

### COMMUNITY SERVICE (BLOOD DONATION DRIVE, INDUS HOSPITAL)



### ANNUAL FAREWELL PROGRAM 2021



### IEEE SEMINAR, LETS RISE AGAIN



## PHOTO GALLERY

### PAKISTAN ENGINEERING COUNCIL VISIT 2021



### AWARENESS PROGRAM ON TRAFFIC RULES & SAFETY PRECAUTIONS



### FACULTY INVOLVED IN TRAINING ON OUTCOME BASED EDUCATION



### ORIENTATION BATCH 2021





NOTE

**This Prospectus is informational and should not be taken as binding on the Institute. The Institute, therefore, reserves the right to make any changes in the Institute's prospectus without any prior notice and whenever it is deemed appropriate.**



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