SIR SYED
C@SE INSTITUTE OF TECHNOLOGY

DEPARTMENT OF
ALLIED MEDICAL AND HEALTH SCIENCES

PROSPECTUS

H.E.C. RECOGNISED

GOVERNMENT OF PAKISTAN APPROVED,
FEDERALLY CHARTERED DEGREE AWARDING INSTITUTE

Disclaimer

The contents of this prospectus supersede all policies. Rules, regulations, procedures, requirements, conditions and financial charges notified earlier. The institute reserves the right to change any part or whole of this prospectus without notice or obligation. In case of any ambiguity or non-existence of rules and regulations, the final authority for their interpretation and provision shall rest with the institution whose decision shall be final and binding for all the parties concerned.

1,750 +

Bachelor's Graduates

2,143 +

Master's Graduates

71 +

PhD Graduates

11 +

Awards

Vision

By disseminating world class education, we strive to build an institution of learning where the talent is attracted, groomed and developed to take leadership positions in the world. A future of excellence and continuous improvement is our hallmark.

Mission

Provide a high-quality education to our students and practicing professionals through programs of excellence in teaching and research which will address and support to national needs for the development in meaningful and sustainable ways.

Contents

Chancellor's Message

CASE was established in 2001. Its degree programs were offered in affiliation with the University of Engineering & Technology Taxila.

In a short period of time, CASE established a prominent and unique position in educational and R&D institutions of Pakistan. It has produced more than 3,700 graduates including 70 PhDs in different areas of engineering, computing, and business management at the Bachelor, Masters and PhD levels. We, as a team, have always been tirelessly working with sincerity of objective, not hesitating to shed toil, tears and sweat to achieve our goals.

CASE was awarded Federal Charter as a Degree Awarding Institute in May, 2018; with a new name - Sir Syed CASE Institute of Technology.

We are committed to provide high quality education and research to the youth of our nation. By the grace of Allah, SS-CASE-IT is housed in its own custom-built campus in Sector B-17 of Islamabad. CASE has emerged as one of the leading institutes in Pakistan providing Online Education during the Covid 19 pandemic. It promptly developed state-of-the-art virtual class rooms for this purpose.

At present, CASE offers multiple BS, MS and PhD level programs in the field of engineering, management, computing, humanities, allied health and sciences. Once you join this institute, you become part of the CASE family, where all of its members share the same values, and strive to contribute in creating knowledge-based economy for the prosperity and betterment of Pakistan.

Dr. Shoab Ahmed Khan
Chancellor

Vice Chancellor's Message

It is a privilege to lead a team of devoted faculty members, and administrative staff who is always prepared and determined to provide best possible services to students. Our students are lifeblood of academic activities and torchbearers for the better future of Pakistan. SS-CASE-IT has always been known for academic excellence and market-driven programs, ever since its inception in 2001. Our faculty members are bestowed upon research-oriented mindsets and they have succeeded to reap out research funding of Rs. 255 million from various organizations of Pakistan for Research & Development. The students are enthusiastically involved in projects for the extension of their practical knowledge.

Industrial linkage of CARE (Pvt) and SS-CASE-IT paves the path for converting Research into Commercialization, in diverse areas such as Health Care, Defense, Telecomm and Power. Faculty members and alumni have established various start-ups for imparting Hi-tech training and internships. Such trainings groom our students for widening their intellectual horizons and help in understanding corporate culture. During study, students get a technological edge as well as a flavor of entrepreneurship. SS-CASE-IT offers degree programs in engineering, computing, management, business studies, allied health and siences. All these programs are aimed at improving a candidate's intellect.

Quality of education at SS-CASE-IT is self-evident from the fact that since 2001 we have been producing industry-fit individuals for Pakistan and abroad. Programs at SS-CASE-IT adhere to best industrial and academic benchmarks and are accredited by relevant professional bodies. Since 2015, our Electrical Engineering Program has been accredited by PEC under OBE System of Education (Washington Accord). Similarly, Computing programs are also accredited by NCEAC.

SS-CASE-IT alumni are employed at key positions in national and multinational organizations for their knowledge and skills, and are contributing by uplifting their organizations. A large number of our alumni have set up their own businesses in their chosen fields, and are assisting in accelerating the social-economic growth of Pakistan. We are wholeheartedly committed to make this institute a platform where our students can, not only achieve their dreamed positions but can also set up their own businesses to create jobs.

I welcome the students to our new custom-built campus constructed at the foot of enticing Margalla hills, located in a beautiful housing society in Islamabad.

Dr. Mohammad Ayub Alvi
Vice Chancellor

Dean's Message

Welcome to the Department of Allied Medical and Health Sciences, where your journey towards a successful and fulfilling career in the healthcare industry begins! As the Dean of this esteemed institution, I introduce you to an educational experience that will not only empower you with knowledge but also provide you with hands-on experience that significantly enhances your employability prospects.

At the Department of Allied Medical and Health Sciences, we are committed to shaping the healthcare professionals of tomorrow. Our mission is to provide a top-tier healthcare education that prepares compassionate, skilled, and lifelong learning-focused professionals, to be part of a diverse intellectual community with widespread influence. We take pride in being a degree-awarding institute, which reflects our commitment towards the education ecosystem.

We believe that true learning happens when theory meets practice, and our curriculum is designed with this principle in mind. When you enroll in our programs, you can expect to engage in hands-on experiences with industrial and hospital exposure, enabling you to feel the professional environment from the very start. Whether you are pursuing a degree in Physical therapy, Medical Lab Technology, Radiology & Imaging Technology or any other field within the health sciences, you will have ample opportunities to work in real-world diverse healthcare settings.

Our Industrial collaboration with ShifaCare has enabled the students of SS-CASE-IT to have hands-on experience in the healthcare industry, before introducing formal education for allied medical and health sciences. ShifaCare is providing clinical transformation solutions to the Healthcare Provider Organisation. The team consists of healthcare providers, business consultants and technology professionals.

Some of the contribution in healthcare industry by our industrial partners include:
- Medetective - Medical Benefit Optimiser
- Genetics Way - Patient Experience Management
- Urinox - Home Healthcare
- DOT- NFT based Human Organ Donation & Transplant Platform

We are dedicated to fostering well-rounded personalities through a combination of curricular and extracurricular activities. Our overarching goal is to empower our students with the skills and experiences necessary to excel in their academic and professional journey.To achieve this, we provide a multifaceted approach that includes engaging in a wide range of events, comprehensive training programs, enlightening workshops, valuable volunteer opportunities, and an intensive mentorship program.Our commitment to hands-on learning is reflected in our state-of-the-art laboratories. Each program is equipped with dedicated technologies and modern equipment, allowing our students to immerse themselves in the latest advancements and gain practical experience. This firsthand exposure to leading-edge technology is a crucial stepping stone towards a successful professional career.

Our strong programs in artificial intelligence, computational sciences, engineering & technologies, and diverse range of health related programs provides additional learning opportunities through interaction with the students and faculty of inter related programs.
The opportunities provided at the Department of Allied Medicine and Health Sciences will shape you up both academically and professionally with a deep understanding of modern techniques of patient care. CASE Institute's graduates consistently stand out in the job market, and many of them secure job offers even before graduation during the job fares organized and alumni networking opportunities provided by the institute.

CASE's Department of Allied Medical and Health Sciences combines academic excellence with hands-on experience in order to develop employable human resources for the healthcare industry.
Let us help you become the healthcare professional you aspire to be!

Prof. Dr. Abdul Khaliq
Masters & Ph.D USA
Dean SS-CASE-Institute of Technology

Visionary's Message

I have been a practicing doctor for over 30 years, and throughout my career, I've noticed a significant gap in the education of graduates from allied health departments. While they are well-versed academically, they often lack practical knowledge, which is essential in the healthcare industry. It takes them 4-5 years of real-world experience to truly understand their roles, and this learning curve can lead many to switch to different fields. This shift results in a shortage of skilled healthcare professionals.

To address this issue, we've established the Department of Allied Medical and Health Sciences at CASE Institute of Technology. Our primary goal is to provide students with hands-on experience from the very beginning of their undergraduate studies through their postgraduate education. We also plan to introduce a mandatory practical course or certification upon completion of their degree programs to reinforce their practical skills. With this approach, CASE Department of Allied Medical and Health Sciences aims to produce graduates who are not just academically knowledgeable but also well-prepared for the demands of the healthcare industry. This will, in turn, enhance their employability and contribute to bridging the healthcare knowledge gap.

Brig (Retd) Dr. Basit Saleem (MBBS FCPS)
Consultant
General Surgeon

Having dedicated four decades of my life to the field of education, I have witnessed the evolving landscape of higher education and recognized a critical need for skill-based learning through my involvement in producing high quality MS and Ph.D students along with devising Higher Education Policy for GoP and renowned Universities. It is with this perspective that I took the initiative to ideate the Department of Allied Medical and Health Sciences at CASE Institute of Technology. This department is born out of a deep-seated belief that a transformation in higher education is imperative to bridge the gap between academic knowledge and industry readiness.

In today's fast-paced world, it's not sufficient for students to be equipped solely with theoretical understanding. Practical skills are the bedrock of success in the professional world. CASE Institute of Technology is committed to a pioneering approach of inculcating these essential skills right from the undergraduate level. We firmly believe that students should not only possess theoretical knowledge but should also be industry-fit and employable from the very first day they step into the workforce.

The curriculum at the Department of Allied Medical and Health Sciences is meticulously designed to integrate hands-on experiences, ensuring that our graduates are well-versed in the practical aspects of their chosen fields. We aim to produce healthcare professionals who are not just academically competent but also possess the skills that make them valuable assets in the medical and healthcare industry.

This revolutionary approach is designed to make a lasting impact on the education system, producing graduates who are ready to excel in their careers, meet the industry's demands, and contribute significantly to the healthcare sector. We are committed to nurturing a new generation of professionals who will be at the forefront of healthcare innovation and service, and we invite all those who share our vision to join us on this transformative journey. We have with us Kulsum International Hospital and Institute of Regenerative Medicine as partners to reshape higher education and enhance the employability and impact of our students in the healthcare sector.
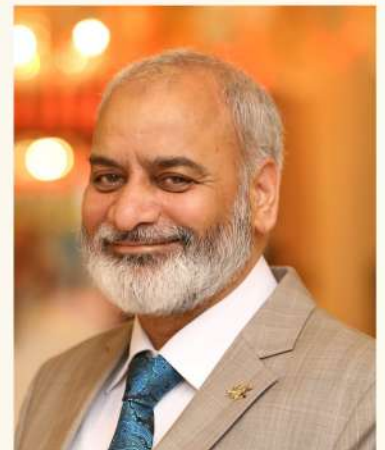
Prof.Dr. Zahid Saleem
Educationist, MS & Ph.D, UK
Ex-Member NUST Academic Council
Ex-Member BOG Comsats University
Ex-Advisor Shifa Tameer-i-Millat University
Ex-Member Pakistan Railway Board
Ex-Advisor Electronic Policy, GoP
Ex-representative HEC, Pakistan Engineering Council BOG
Advisor and Member BOD Abasyn University
Advisor CASE Institute of Technology

History

In 1998, a research and development organization named Communications Enabling Technologies (CET) Pakistan was established in Rawalpindi. Soon, CET headed by Dr. Shoab Ahmed Khan (Tamgha-e-Imtiaz) attracted some of the best professionals in Pakistan. Dr. Farrukh Kamran (Tamgha-e- Imtiaz), Dr. Saeed Ur Rahman, and Dr. Sohail Naqvi (Former Executive Director, HEC) joined CET in its early days and played a key role in establishing CASE. Later, this group was joined by more outstanding professionals like Dr. Syed Ismail Shah (Ex-Chairman Pakistan Telecommunications Authority), Dr. Aamer Iqbal Bhatti, Dr. Amir Qayyum, Dr. Imtiaz A. Taj, Dr. Sheikh Muhammad Farhan, Mr. Saleem Ahmed Khan, Dr. Mohsin Rahmatullah, Mr. Hammad Ahmed Khan, Dr. Zaheer Ahmed and Ms. Durdana Habib.

These outstanding and talented engineers and scientists formed the Engineering Education Trust (EET) in May 2001.

Center for Advanced Studies in Engineering (CASE), was set-up in January 2001 as a not-for-profit project of the Engineering Education Trust (EET). The objective of CASE was to create an institute of higher technical learning in Pakistan. Its initial objective was to disseminate advanced knowledge in engineering and management to professional engineers and scientists.

UET Taxila granted affiliation to the MS (Computer Engineering) program with permission to admit 60 students. This led to the establishment of CASE on September 11, 2001. CASE was initially located in the Software Technology Park, Islamabad.

CASE was inaugurated by the then Federal Minister of Science and Technology Prof. Dr. Atta-ur-Rehman. The institute had an excellent teaching faculty comprising 10 PhD and 8 MS qualified faculty members. Later on, new programs were added, keeping in view the industry demand.

CASE has the honor of establishing Pakistan's first department of Engineering Management in Fall 2002, headed by Dr. Ali Sajid. In that year,192 students registered in MS (Computer Engineering) and 41 in the MS (Engineering Management). CASE programs attracted high quality graduate students.

In 2004, CASE started an undergraduate program in Electrical Engineering and got the program accredited by the Pakistan Engineering Council (PEC).

In fall 2008, BBA program was started to align engineering education with business and management education.

After the successful establishment of these programs, CASE gradually started various new programs in the following years. These included BS (Computer Science), MS (Electrical Engineering), MS (Software Engineering), MS (Project Management), and MS (Engineering Management). CASE has now established its department of Allied Medical and Health Sciences with the aim to produce industry-fit graduates in the healthcare industry.

CASE has not only excelled in education but also on the forefront of research. CASE developed product focused research needs of the country in collaboration with our partner CARE (Pvt.) Ltd. CASE acquired research funding from CISCO Systems, PTCL Ignite National Technology Fund, Ministry of IT, Government of Pakistan and HEC.

Sir Syed CASE Institute of Technology (SS-CASE-IT) received federal degree awarding charter in May 2018.

Late Brig (R) Iqbal Shafi, Begum Majida Shafi, Late Dr Tahir Hussain, Dr Fatima Farhee Rehman, and many old Aligarians had a vision to transform CASE into Sir Syed CASE Institute of Technology to pass on the message of our great leaders of Tehreek e Pakistan (Quaid e Azam Muhammad Ali Jinnah, Allama Mohammad Iqbal, Sir Syed Ahmed Khan) to our youth and also to continue the mission of Sir Syed Ahmed Khan by spreading education in science and technology with a blend of Islamic teachings. Today, this institute is ready to achieve these goals.

SS CASE IT, has achieved a major milestone by entering into a new era by becoming a degree awarding multi-disciplinary institute located in Islamabad, to meet the increasing demand of world class university education in the fields of engineering, management, computing, allied health and humanities on its campus, in order to generate highly skilled and innovative young persons.

DEPARTMENT OF ALLIED MEDICAL AND HEALTH SCIENCES

Step into the future of industry-relevant healthcare at our department.
Discover endless possibilities and embark on a transformative journey towards a rewarding career in the health sciences in Pakistan and abroad.

A Brief Overview:

At SS-CASE-IT, we believe that education is a transformative journey. Our Health sciences degree programs are designed to not only equip the students with knowledge but also provide with an unparalleled experience that will set them on the path to success in the medical and healthcare industry. With a commitment to excellence, innovation, and patient-centered care, our department offers a range of degree programs that provide a solid foundation for a successful career.

Our strong programs in artificial intelligence, computational sciences, engineering & technologies, and diverse range of health-related programs provides additional learning opportunities through inter-disciplinary interactions and synergy which broadens the academic and professional horizon of the students, preparing them to be globally competitive.

Vision

To be a leading institution of excellence in healthcare education and research, dedicated to producing compassionate and competent healthcare professionals who positively impact the well-being of individuals and communities."

Mission

Our mission is to provide a top-tier healthcare education, that prepares compassionate, skilled, and lifelong learning-focused professionals, to be part of diverse intellectual community with widespread influence. We're dedicated to industrial hands-on exposure, research, community engagement, and aim to provide learning environment fostering innovation and critical thinking through latest techniques for the benefit of individuals, society and the healthcare industry.

- More than 50% Ph.D and Equivalent Faculty
- Foreign Qualified Industry Healthcare experts and Experienced Doctors
- Well-equipped labs for hands-on experience
- Reputed International Standard Partner Hospitals for hospital environment training
- Complementary IELTS Training, for foreign study exchange and employability
- Preparation for foreign Healthcare worker license

Programs Offered

Choosing CASE's Department of Allied Medical and Health Sciences means choosing a future filled with global opportunities, knowledge, and the skills you need to excel in the healthcare field. Join us on this transformative educational journey and become a healthcare professional who makes a meaningful difference in the lives of others.

Ready to take the first step toward a rewarding healthcare career? Apply now and unlock your potential at the Department of Allied Medical and Health Sciences!

Programs Offered:

1. Doctor Of Physical Therapy
2. BS Medical Laboratory Technology
3. BS Radiology and Medical Imaging Technology
4. BS Vision Sciences and Optometry
5. BS Operation Theater Technology

Degree Abbreviation	DPT	BS MLT	BS RMIT	BS VSO	BS OTT
Degree Level	Bachelors	Bachelors	Bachelors	Bachelors	Bachelors
Degree Name	Doctor of Physical Therapy (DPT)	BS Medical Laboratory Technology	BS Radiology and Medical Imaging Technology	BS Vision Sciences and Optometry	BS Operation Theater Technology
Total Credit Hours	175	131	131	131	131
Minimum Duration	5	4	4	4	4
Maximum Duration	7	6	6	6	6
Eligibility	50% unadjusted Marks in HSSC or equivalent 50% unadjusted marks for all foreign examinations. A certificate of equivalence with HSSC issued by IBSS must be provided.(additional foundation courses shall be offered by Institute to all the students not having the required HSSC subjects)				

Why Allied Medical and Health Sciences at SS-CASE-IT?

1. **Exceptional Faculty:** Expert, dedicated faculty bring real-world experience.
2. **Hands-on Learning:** Programs offer practical experience in healthcare.
3. **Industry-Relevant Curriculum:** Collaboration with experts ensures graduates possess current, sought-after skills.
4. **Diverse Degree Options:** Range of healthcare degree programs to suit various interests and career goals.
5. **Research Opportunities:** Encourages research initiatives to contribute to healthcare knowledge.
6. **Community Engagement:** Provides opportunities for impactful healthcare outreach programs and services.
7. **Career Support:** Offers internship placements, resume workshops, and job placement assistance for graduates.
8. **Commitment to Diversity and Inclusion:** Values diverse perspectives and backgrounds.
9. **Strong Alumni Network:** Provides Opportunity to join a community of successful professionals with valuable connections.
10. **Continuous Professional Improvement:** Ensures programs stay aligned with industry trends and global job market.
11. **Environment:** Located in the green foothills of Islamabad, creating an academically friendly setting.

Strong Industry-Academia Linkages through CARE (Pvt) Ltd

PKR 255 million in research grants from IGNITE Technology Fund HEC, Pakistan Science Foundation

High employment rate in world class organizations like Google, Volkswagen, Sony, APT Satellite and many more.

National Centers of Excellence Labs in Swarm Robotics, Cyber Security and MEMs Microchip Design

Online Learning Management System (LMS)

State-of-the-art Labs: Industrial Simulation Lab, Electromechanic Lab, Digital Logic Design Lab and Computer Lab

Well established Anatomy Lab Physiology Lab Biochemistry Lab Microbiology Lab Industrial collaborations for Expert healthcare labs.

Innovative Approaches to Teaching and Learning

Learning based on:
Case Study
Evidence
Real-life Problem
Simulation
Peer-assistance
Observation
Video Lectures

In-class and Take-home: Assignments, Projects, Presentations

Mid-term & Final Exams

practical assessment (in-lab and Hospital)

Affiliated Hospitals Well-reputed hospitals and clinics in Rawalpindi and Islamabad

Doctor of Physical Therapy

Introduction

A five year program of DPT is a vital component of the healthcare system which deals with the application of different techniques for the relief of body pain and related complications in patients to improve their mobility and body functions.

Program Objectives

The objective of DPT program is to produce students who would be able to; screen, examine, evaluate and diagnose individuals with impairments, functional limitations and disabilities related to movement, physical dysfunction, health and wellness.

Eligibility Criteria

- 50% unadjusted Marks in HSSC or equivalent
- 50% unadjusted marks for all foreign examinations. A certificate of equivalence with HSSC issued by IBSS must be provided.

(additional foundation courses shall be offered by Institute to all the students not having the required HSSC subjects)

Degree Requirement

A student must successfully complete the course work outlined in this degree plan with a maximum of 175 credit hours and attain minimum CGPA of 2.0 out of 4.0.

Program Duration

Minimum: 5 years (10 regular semesters)
Maximum: 7 years

Duration of semester

16-18 weeks

Clinical Training & Independent Projects

Clinical training helps students in problem solving, clinical decision making, clinical reasoning and clinical judgment.
Mandatory supervised healthcare research and practical projects in the last year of education to develop skills needed to combat challenging practical environments and increase employability.

Career Opportunity

As a DPT graduate, you'll be in high demand. Physical Therapists with a DPT degree are the practitioners for diagnosing, intervening, and preventing impairments, activity limitations, participation restrictions, and environmental barriers related to movement and health. The job prospects in this field are in hospitals, rehabilitation centers, nursing homes, clinics, sports facilities, and personal practice.

Doctor of Physical Therapy

Courses of Doctor of Physical Therapy (5 Years Program)

Compulsory Requirement	Foundation Courses	Descipline Specific Courses
English-I English-II Pakistan Studies Islamic Studies Introduction To Computer Behavioral Sciences (Psychiatry & Psychology) Biostatistics-I Biostatistics-II /University Optional English-III(Technical Writing & Presentation Skills Sociology Professional Practice (Laws , Ethics &Administration) Scientific Inquiry & Research Methodology	Physiology-I Physiology-II Physiology-III Biochemistry & Genetics I Biochemistry & Genetics Ii Anatomy-I Anatomy-II Anatomy-III Anatomy-IV (Neuro Anatomy) Kinesiology-I Kinesiology-II Medicine I Medicine II Surgery I Surgery II Pathology & Microbiology I Radiology & Diagnostic Imaging Medical Physics Pharmacology I Health & Wellness Obstetrics & Gynaecological	Biomechanics & Ergonomics-I Biomechanics & Ergonomics-II Exercise Physiology Physical Agents & Electrotherapy I Therapeutic Exercises & Techniques Musculoskeletal Physical Therapy Prosthetics & Orthotics Cardiopulmonary Physical Therapy Emergency Procedures & Primary Care In Physical Therapy Clinical Decision Making & Differential Diagnosis Integumentry Physical Therapy Paediatric Physical Therapy Gerontology & Geriatric Physical Therapy Sports Physical Therapy Supervised Clinical Practice I Supervised Clinical Practice II Supervised Clinical Practice III Supervised Clinical Practice IV Supervised Clinical Practice V Supervised Clinical Practice VI Research Project / Final Project

BS Medical Lab Technology

Introduction

Medical Lab Technology is an emerging field as diagnostic tests are basic tools to confirm the disease in relation to a patient's physical condition and his response to medicines, and other therapies. It comprises different disciplines including molecular biology, microbiology, histopathology, clinical chemistry, urinalysis, immunology, serology, hematology etc.

Program Objectives

The program will enable students to learn the complex laboratory tests and gain the knowledge of physiologic and pathologic conditions affecting results in order to support medical decisions. The complex and varied tests performed by them would help in the diagnosis , treatment and prevention of diseases. The course also equips candidates with the skill required to handle advanced equipment so as to perform accurate laboratory tests and ensure its quality . This program will help the students to explore their potential in the field of research work..

Eligibility Criteria

- 50% unadjusted Marks in HSSC or equivalent
- 50% unadjusted marks for all foreign examinations. A certificate of equivalence with HSSC issued by IBSS must be provided.

(additional foundation courses shall be offered by Institute to all the students not having the required HSSC subjects)

Degree Requirement

A student must successfully complete the course work outlined in this degree plan with a maximum of 132 credit hours and attain minimum CGPA of 2.0 out of 4.0.

Program Duration

Minimum: 4 years (8 regular semesters)
Maximum: 6 years

Duration of semester

16-18 weeks

Clinical Training & Research Project

Clinical training will be conducted at public and private sectors diagnostic labs equipped with latest equipment to boost the potential of students.
A supervised final year research project is mandatory for the award of a degree.

Career Opportunity

With a degree in Medical Laboratory Technology, graduates will have a wide array of career opportunities in hospitals, clinics, research laboratories, pharmaceutical industry, academia and public health agencies. Doctors are highly dependent on laboratory tests in their professional work. Our high growing health and related systems created a high demand for skilled professionals in this field , ensuring excellent job prospects.

BS Medical Lab Technology

BS Medical Laboratory Technology (4 years Degree Program)

Compulsory Requirement	Foundation Courses	Discipline Specific Courses
English-I English-II Pakistan Studies Islamic Studies Computer skills Communication Skills Research Methodology Behavioral Sciences Bio-Statisitcs Laboratory Mathematics Medical Lab Management Skills Bio Ethics Bioinformatics	Human Physiology-I Human Physiology-II Medical BioChemistry-I Medical BioChemistry-II Human Anatomy-I Human Anatomy-II Pharmacology-I Pharmacology-II General Pathology Pathology-II Hematology-I Hematology-II Clinical Bacteriology Molecular Biology Medical Microbiology-I (Non-MLT) Medical Microbiology-II (Non-MLT) Bio Technology Laboratory Instrumentation & Techniques Histo-Techniques Biosafety and Biosecurity	RBCs Disorder WBC and Genetics Disorder Diagnostic Bacteriology Human Genetics Clinical Parasitology Chemical Pathology Clinical Pathology Blood Banking Immunology & Serology Toxicology and Forensic Serology Clinical Virology and Mycology Cytology & Cytogenetics Epidemiology Research Project / Final Project

BS Radiology and Medical Imaging Technology

Introduction

The program aims to develop Radiology and Medical Imaging Technology skills in students to professionally assist physicians in diagnosis and treatment of disease e.g. angiography, CT scan, MRI etc which play a vital role in modern hospital setups.

Program Objective

The student will gain knowledge and skill in Radiology and Medical Imaging Technology principles, procedure anatomy, pathology and research practices. Moreover, learn the usage of related equipment which helps in diagnosis and treatment of the disease.

Eligibility Criteria

- 50% unadjusted Marks in HSSC or equivalent
- 50% unadjusted marks for all foreign examinations. A certificate of equivalence with HSSC issued by IBSS must be provided.

(additional foundation courses shall be offered by Institute to all the students not having the required HSSC subjects)

Degree Requirement

A student must successfully complete the course work outlined in this degree plan with a maximum of 131 credit hours and attain minimum CGPA of 2.0 out of 4.0.

Program Duration

Minimum: 4 years (8 regular semesters)
Maximum: 6 years

Duration of semester

16-18 weeks

Clinical Training & Research Project

For necessary and diverse experience, the students will be given training in hospitals and diagnostic labs.
A supervised final year research project is mandatory for the award of a degree.

Career Opportunity

With a Bachelor of Science in RMIT, the graduate will have an array of career pathways in healthcare, including hospitals, medical imaging centers, research facilities, and more. Your specialised knowledge and skills will make you a sought-after professional as a diagnostic radiographer, diagnostic medical sonographer. .

BS Radiology and Medical Imaging Technology

BS Radiology and Medical Imaging Technology (4 years Degree Program)

Compulsory Requirement	Foundation Courses	Descipline Specific Courses
English-I	Human Anatomy-I	
English-II	Human Anatomy-II	Regional and Radiological
Pakistan Studies	Human Physiology-I	Anatomy-I
Islamic Studies	Human Physiology-II	Regional and Radiological
Computer skills	Medical BioChemistry-I	Anatomy-II
Communication Skills	Medical BioChemistry-II	Radiation Sciences and
Research Methodology	General Pharmacology	Technology
Biostatistics	General Pathology	General Radiology
	Clinical Medicine-I	Conventional Radiological
	Clinical Medicine-II	Procedures & Clinical Practice
	General Surgery	Radiological Positioning & Clinical
	Patient care and	Practice
	management	Research Project / Final Project

BS Vision Sciences and Optometry

Introduction

The field of vision sciences and optometry is a healthcare profession which focuses on eye care. It deals with the eye abnormalities and defects, and its treatment. It is different from an ophthalmologist who treats eye ailments. Optometrists provide primary vision care like eye testing, diagnosis, treatment and management of vision changes by prescribing lenses and medicines for few eye diseases.

Program Objective

The program objective is to train the students in the field of eye care so that they will be able to examine and diagnose eye abnormalities and defects, and correctly manage it by recommending the vision aids, and also provide post care to patients who have undergone eye surgery.

Eligibility Criteria

- 50% unadjusted Marks in HSSC or equivalent
- 50% unadjusted marks for all foreign examinations. A certificate of equivalence with HSSC issued by IBSS must be provided.

(additional foundation courses shall be offered by Institute to all the students not having the required HSSC subjects)

Degree Requirement

A student must successfully complete the course work outlined in this degree plan with a maximum of 136 credit hours and attain minimum CGPA of 2.0 out of 4.0.

Program Duration

Minimum: 4 years (8 regular semesters)
Maximum: 6 years

Duration of semester

16-18 weeks

Clinical Training & Research Project

To develop field experience, the students will be given training in eye hospitals.
A supervised final year research project is mandatory for the award of a degree.

Career Opportunity

With a Bachelor of Science in VSO, the graduate can run his own clinic, work in a hospital setting and also in the ophthalmic industry which is involved in manufacturing of ophthalmic devices.

BS Vision Sciences and Optometry

BS Vision Sciences and Optometry (4 years Degree Program)

Compulsory Requirement	Foundation Courses	Descipline Specific Courses
English-I English-II Pakistan Studies Islamic Studies Introduction to Computing Research Methodology and Professional Ethics Behavioral Sciences Bio-Statisitcs	General Anatomy General Physiology Microbiology Pharmacology Pathology Biochemistry Ocular Anatomy Ocular Physiology Ocular Pharmacology Basic Orthoptics Basic & Clinical Refraction First Aid & Hygiene	Physical & Geometrical optics Ocular Disease-I Ocular Disease-II OPD and Ward Procedures OT Procedures Computer applications in VS Instrument Optics Visual and Clinical Optics Ocular Investigation Refraction Clinic-I Refraction Clinic-II Refraction Clinic-III Refraction Clinic-IV Advanced Refraction Contact Lenses Contact Lens Clinic-I Contact Lens Clinic-II Dispensing Optics-I Dispensing Optics-II Optical Laboratory-I Optical Laboratory-II Community Ophthalmology Low Vision-I Low Vision-II Occupational Optometry Orthoptics Clinic-I Orthoptics Clinic-II Low Vision Clinic – I Low Vision Clinic-II Clinical Orthoptics Optical Shop and Industry Management Ophthalmic Instruments & Maintenance Special Clinical Duty-I Special Clinical Duty-II Dissertation Writing

BS Operation Theater Technology

Introduction

The field of Operation Theater Technology involves tasks such as operation theater and its equipment maintenance, their sterilization, assisting the doctor during the surgery and providing supplies to the surgical team, undertaking safety checks on instruments, equipments etc, carrying out instruction of the medical staff in order to relieve pain of patients and patients monitoring.

Program Objectives

The program objective is to train the students in the field of operation theater technology which is an integral part of hospital setups. Providing them knowledge of human anatomy, physiologic and pathologic conditions which would help them to understand operating procedures and their requirements to conduct surgery.

Eligibility Criteria

- 50% unadjusted Marks in HSSC or equivalent
- 50% unadjusted marks for all foreign examinations. A certificate of equivalence with HSSC issued by IBSS must be provided.

(additional foundation courses shall be offered by Institute to all the students not having the required HSSC subjects)

Degree Requirement

A student must successfully complete the course work outlined in this degree plan with a maximum of 136 credit hours and attain minimum CGPA of 2.0 out of 4.0.

Program Duration

Minimum: 4 years (8 regular semesters)
Maximum: 6 years

Duration of semester

16-18 weeks

Hospital Training & Research Project

Training will be provided in hospital operation theaters for field experience.
A supervised final year research project is mandatory for the award of a degree.

Career Opportunity

With a degree of BS in Operation Theater Technology and the knowledge imparted by us, the graduate will be in high demand in hospitals, healthcare facilities and industry. This specialized knowledge and skills make students a valuable asset to any surgical team.

BS Operation Theater Technology

BS Operation Theater Technology (4 years Degree Program)

Compulsory Requirement	Foundation Courses	Descipline Specific Courses
English-I Pakistan Studies Islamic Studies Computer Applications in Health Sciences Technical Report Writing Bio Statisitcs Bio Informatics Introduction to Psychology	Anatomy Physiology Biochemistry General Pathology Pharmacology Community Medicine / Public Health General Microbiology & Sterilization Principles of Surgery Clinical Pathology Advanced Diagnostic Techniques Critical Care Forensic Medicine Clinical & Applied Microbiology Epidemiology	Fundamentals of Operation Theatre Technology Operation Theatre Instruments & Techniques –I Operating Room Skills I Surgical Procedures & Skills I Basic Anesthesia & Techniques Operation Theatre Instruments & Techniques – II Surgical Pharmacology I Surgical Pharmacology II Operating Room Skills II Surgical Anatomy I Medical Physics Operation Theater Technology – I Operating Room Skills III Operation Theater Technology – II Sterilization and Disinfection Surgical Anatomy II Operation Theatre Management Surgical Procedures & Skills II Advanced Anesthesia & Techniques Biomaterials & Surgical Implants Operation Theatre Design & Reconstruction Research Project / Final Project

Financial Information

Admission charges

A newly admitted student has to pay the following charges.
Admission Fee Rs 25,000 (one time payable)
Security Deposit Rs 10,000

Tuition Fee

Tuition fee is **payable at the start of every semester**, and varies for different programs as stated below:
For the academic year 2023-24, the following tuition fee is applicable to both new and current students:

Degree Name	Doctor of Physical Therapy	BS Medical Laboratory Technology	BS Radiology and Medical Imaging Technology	BS Vision Sciences and Optometry	BS Operation Theater Technology
Semester Fee	96,000	78,000	78,000	78,000	78,000
Admission Fee	25,000	25,000	25,000	25,000	25,000
Security Fee	10,000	10,000	10,000	10,000	10,000

Merit Scholarships (First Semester)

The Institute offers scholarships in the form of tuition fee waiver to talented students.
The following scholarships are awarded in the first semester.
1. 90% or more marks in HSSC, 100% tuition fee waiver in first semester
2. 80% or more marks in HSSC, 50% tuition fee waiver in first semester
3. Need based scholarships and Financial Aid to deserving candidates.

Student Acheivements

2nd place in Forensics Module of All Pakistan Science Fair conducted by GIKI Science Society.
Team Name: Unees Bees

Honorary Mention In PNA module of GIMUN held in GIKI University.
Name: Hamza Ashraf (Batch Sp22 CYS) (May 15, 2022)

IEEE SS CASE IT Robotics group who prepared students for the COMSATS WAH VISIO SPARK event. Well done team Burhan Ali, Unzillah adan and Zahid Ulla for becoming runners up. Congratulations to all participants. Keep it up (march 26, 2022)

IN IT TO WIN IT'22
Certificates and Prize Distribution Ceremony (March 18, 2022)

SS CASE IT is back to robotics and will continue excellence legacy.
IEEE SS CASE IT Robotics Society organized workshop on preparation of robots. (March 21, 2022)

Best Delegate award In PNA module of Nascon'22 Held in FAST UNIVERSITY.
Name: Hamza Ashraf (Batch Sp22 CYS)

Miss Asfa Khalid is the first graduate of Sir Syed CASE Institute of Technology (SS-CASE-IT) from MS in Engineering Management. Miss Asfa has obtained admission in Zhengzhou University, China for her PhD degree in Engineering Management (January 04, 2021)

A glimpse of the trip at Fecto Cement Factory organized by IEEE
(January 3rd 2022)

Student Acheivements

Singapore Autonomous Underwater Vehicle Challenge (SAUVC) 2017

Our team secured the first position in one of the world's largest underwater robotics challenges - SAUVC held in March 2017 in Singapore. SAUVC is famous for providing students with the opportunity to learn about the design of robots which can automatically navigate underwater and perform assigned tasks. The event is hosted by IEEE Singapore chapter at Singapore Polytechnic. This is the first time that any Pakistani team has participated in this prestigious event. Fourteen teams from eight countries including USA, China, India, Russia, Malaysia, Indonesia and Singapore participated in the event. Pakistani team, apart from sharing top position with Russia, also bagged Best Social Media Campaign award. Team from SS-CASE-IT comprised of four students, Le. Mr. Haider Iftikhar, Mr. Usman Abid, Mr. Saad Malik and Ms. Mehrosh Fareed. Students were supervised by three faculty members, ie, Dr. Mansoor Shaukat, Mr. Muhammad Adeel and Mr. Waqas Ur Rehman.Our students Competed in the event with confidence, courage and scored a win against India in a main event Pool Match

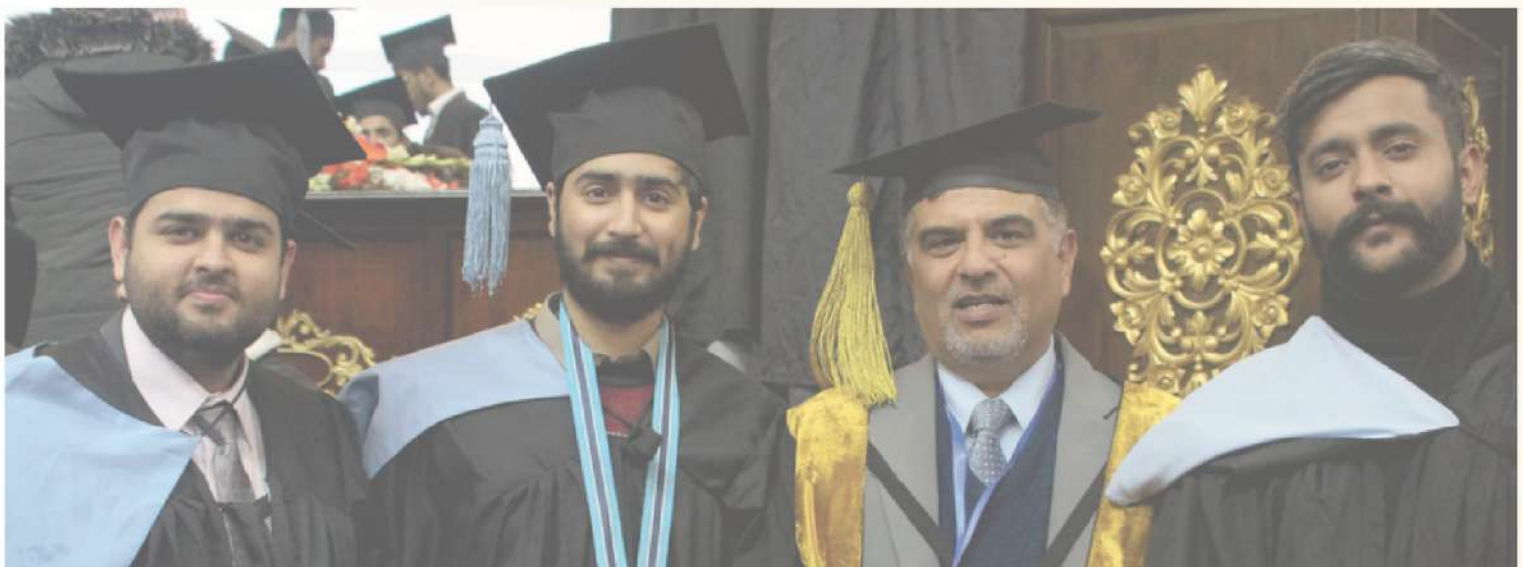Pakistani team's group photo at SAUVC 2017 with their underwater robot

Pakistan wins top position in underwater robotics challenges SAUVC 2017

Press clipping from Daily The Nation covering SAUVC 2017

ABU-ROBOCON 2019

Team from SS-CASE-IT after successfully qualifying national round went on to represent Pakistan as a National Robotics team for ABU-ROBOCON 2019. The event was held in Ulaanbaatar Mongolia. ROBOCON is the largest and most prestigious robotics event of the ASIA pacific region countries participate in the event comprising of some of the most, technological advance counties like Japan, China, Korea, Russia, Singapore, Hong Kong and many others. Top universities from these counties participate in the educational event. SS-CASE-IT as always prepped final year students for the event. Team from SS-CASE-IT comprised of four students, ie, Mr. Haider Ali, Mr. Hamzah Ayaz, Mr. Qamar Abbas and Abdullah Bukhari, Students were supervised by two faculty members, ie, Dr. M Umer and Mr. Waqas Ur Rehman

Campus Life

Industrial Visit Ghazi Brotha Dam December 2018

Speaker of PLC and SCADA Seminar May 2018

Student Societies & Club

Co-curricular and extra-curricular activities are vital for the physical, social and psychological growth of students. Such activities admittedly invigorate a healthy relationship among the students and develop a sense of co-ordination in the living-learning processes of the students, faculty and administration. Student Societies are also a great way to meet like-minded people, develop new skills and expand your horizons while studying.

At SS-CASE-IT, multiple societies and clubs have been formulated for the students. They are supported with financial assistance to promote sports and social activities on campus. These societies and clubs have helped students at SS-CASE-IT develop their physical health and mental skills through a number of events. Existing details of Student Societies & Clubs is given below:.

Community Service Club

The Community Service Club at SS-CASE-IT is a dynamic, student-driven organization dedicated to the well-being of patients and the advancement of healthcare. It stands as a testament to our students' passion for hands-on learning and their dedication to the principles of empathy and altruism.

Our primary mission is to provide compassionate support to patients facing health challenges. We extend our hands and hearts to ensure they receive not only medical care but also emotional comfort and companionship throughout their healthcare journey.

Our club offers students the unique opportunity to gain valuable clinical experience by volunteering in healthcare settings. It's an avenue for those interested in healthcare professions to learn, contribute, and grow as they work alongside experienced professionals.

Patient Welfare and Blood Donor Club

The Patient Welfare and Blood Donor Society is a prominent student-led organization within our university community, dedicated to the well-being of patients and the noble cause of blood donation. This society serves as a testament to our students' dedication to making a real difference in the lives of others.

We're driven by a genuine concern for the welfare of patients. Our mission is to provide emotional support and practical assistance to individuals and families navigating the challenges of illness. We firmly believe in going beyond textbooks and classrooms to offer comfort and solace to those in need.

The gift of blood is the gift of life. Our society actively promotes and organizes regular blood donation drives, contributing to a safe and reliable blood supply for medical emergencies and treatments.

Campus Life

IEEE SS-CASE-IT Student Branch Islamabad:

IEEE SS-CASE-IT Student Branch Challenges your competencies and knowledge at technical and social level to enhance your skill set. Institute of Electrical and Electronics Engineering (IEEE) main motive is "Advancing technology for humanity" and we are providing platform to the students to learn new technologies through workshops and seminars to intensify the knowledge and communication skills of students. We arrange conferences to promote research culture among students. We also arrange industrial visits to fill up the gap between academia and industry. WIE (Women in Engineering) is an affinity group of IEEE SS-CASE-IT Student Branch that aims to empower and promote participation of women in Engineering.

Some of the events organized under the umbrella of IEEE SS-CASE-IT Student Branch are:

- In It to Win It
- Robotics Workshop
- Model United Nations
- Industrial Visits

Thinker's Forum

The forum aims to promote awareness in the student community about all topics of their concern. It aims to help and encourage students to present their views and ideas in a professional way, shape their opinions with facts and knowledge, accept and honor the views of others and have sense to participate in healthy discussions. The forum arranges discussions and seminars on a variety of topics and invites scholars and thinkers of national repute to come and share their views with the SS-CASE-IT community. List of some major events of are:

- Qawali Night
- Presidential Debate Competition
- Old School Days Cultural Event

Adventure Club

The idea of having this club is to provide students with an opportunity to escape from the daily routine of the busy campus life and be able to enjoy the wilderness and natural resources of Mother Nature.

Adventure Club is not only about enjoying the life; it also directs the student to explore nature and visit different places. The main aim is to explore our beautiful country and to promote tourism in different places like Swat, Abbottabad, Gilgit, Skardu, Bahawalpur etc.

Adventure Club normally organizes at least one recreational visit in a semester and Barbeque Night like events.

Campus Life

Sports Society

Sports Society was formed with an aim to develop interaction, tolerance, sense of responsibility and sportsman spirit among the students of SS-CASE-IT. A student must not be competent in his own respective field but also should be able to participate in extracurricular activities. This society aims to provide a platform for students to show and improve their capabilities and skills and also to build character and leadership qualities.

Sports Society allows the students to express themselves using sports as a tool of communication by organizing many Intra/Inter-Universities event defined in the domain. For some of the more gifted students, it provides excellent opportunities to unleash their natural talent and is also relaxing exercise after the academia workload.

Sports Society organizes Sports Gala every year which includes tournaments of Cricket, Football, Table Tennis, Volley Ball, Badminton and E-Gamming

Entrepreneurship Society

The Entrepreneurship society is a dynamic student body which tends to deliver Entrepreneurial competitions under the umbrella of SS-CASE-IT. It is a platform for the students to enhance their entrepreneurial, managerial and leading skills. The main motive of this society is to provide the resources and the opportunities to facilitate meaningful immersion in entrepreneurial ventures. The Society is open to all students and welcomes all career interests.

List of some major events of this society are:

- Welcome Party
- Marketing Gala
- Job Fair
- Elevator Pitch
- Business Debates
- Entrepreneurship Conference
- Business Boot Camp
- Skill Learning Training Sessions

Code of Conduct

Sir Syed CASE Institute of Technology endeavors to inculcate in its students intellectual diversity, self-motivation, critical thinking and inquiry, research oriented approach, capacity for leadership, and community oriented, ethically guided high sense of professionalism. Institute aims to equip students to meet the challenges of the 21st century. The Institute expects its students to strive towards acquisition of attributes that befit the national objectives. These attributes, in turn, should be reflected in their everyday behaviour, attitude and dress.

In order to achieve these goals all students are obliged to strictly follow the Code of Conduct laid down below:

1. Students should refrain from conduct that may lead to the disruption of any academic program of the Campus or might damage the reputation of the Institute.
2. Students will show tolerance, understanding and respect for the rights of others. In case of any misunderstanding with peers or Institute management, etc., discussions and exchange of views within the frame work of decency and decorum would be the desirable course to follow. Threatening behaviour to fellow students, faculty, staff or the Institute as an institution can cause irrevocable dismissal from the Institute.
3. Students will be respectful to members of the opposite gender and will refrain from any behaviour that can be interpreted by others as 'gender harassment'.
4. Students are strictly reminded that gender mixing is permissible only within the accepted social and cultural norms of the society. Faculty tolerance should not be construed as an approval to undue intimacy and unacceptable proximity, openly or in isolated areas.
5. It is the responsibility of all to keep the Campus environment clean and tidy. Therefore, no littering or trash should be carelessly thrown or left on the Campus premises. The designated waste boxes should be used for the purpose. Those who litter have to pay a fine.
6. The students are advised to refrain from any damage to the institute fixtures/furniture including Venetian blinds, scribbling/carving on desks, writing on walls, misusing lab equipment, etc.
7. **The entire Campus is a non-smoking area. Anyone found smoking on Campus premises has to pay a fine.**
8. Students are advised to switch off mobiles in class rooms, labs and library so as not to disrupt the calm and quiet atmosphere. Mobile phones are not allowed in examination halls.
9. Students are advised to strictly follow the code of conduct on the field and off the field while taking part in sports and other extra-curricular activities. Students are expected to exhibit exemplary behaviour, especially while representing the Institute in an activity/competition.
10. Matters of indiscipline would be referred to the Disciplinary Committee, which is authorized to reprimand or check any indiscipline in any way it deems appropriate. Parents of students who disobey authority and violate the code of conduct will be called to the institute.
11. Students are required to follow campus IT usage policy, which forbids them from sending and receiving offensive and indecent emails, possession of non-academic materials on their assigned folders, forging or hiding identity, and misuse of IT resources and Internet for any non-academic activity.
12. Students must refrain from cheating, plagiarism, lying, stealing, and gender harassment in any setting of the Campus.

Dress Code (for Students, Faculty and Staff)

All are expected to dress keeping in view the local cultural values and norms. The dress should not have any script or image, which appears to be indecent or provocative. Dress should not be see-through. Wearing shorts or sleeveless shirts is not allowed. Females should not wear short length shirts. They should avoid wearing too much makeup and jewellery.

Transport

The Campus can be accessed from anywhere in Islamabad and Rawalpindi by public transport. To further facilitate students on other locations of Rawalpindi Islamabad, SS-CASE-IT facilitates transport facility with comparative rates.

Generally the cost of transport varies between Rs 11,000 to 13,500 per month according to the route selected.

To download transport form, visit www.case.edu.pk

NOTE: Transport service is provided for complete semester and cannot be discontinued with in semester

Hostel

Hostel Life

SS-CASE-IT has contracted with private hostel facility available within 10 minutes walking distance from SS-CASE-IT campus to provide this facility for male and female students. With the aim to provide an environment where the students can fully focus on their studies, SS-CASE-IT administration ensures proper maintenance of the room, kitchen and other services to provide peaceful, disciplined and secure environment for students.

Hostel facilities includes:

Triple sharing room (Attached bathroom)

Monthly charges include:

i) High Speed Internet and WIFI

ii) 2 times Meal (healthy and quality food)

iii) 3 times Meal (only on weekend / Gazetted Holidays)

Additional facilities include:

Laundry (as per actual) Extra Electrical Equipment Like TV, Fridge, AC, Room Cooler etc. could be provided & charged accordingly.

NOTE: Hostel service is provided for complete semester and cannot be discontinued with in semester
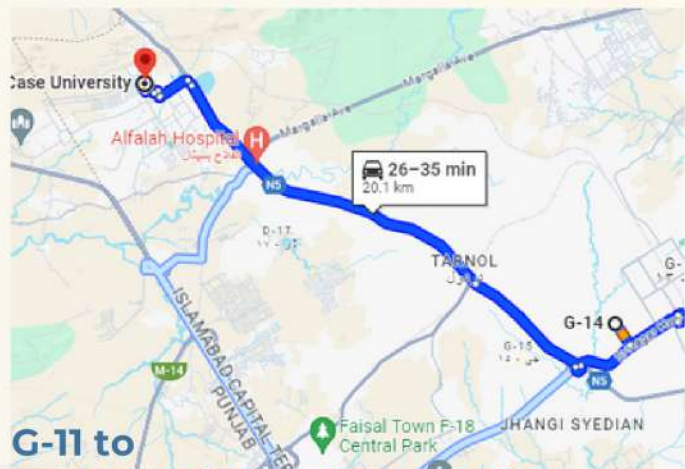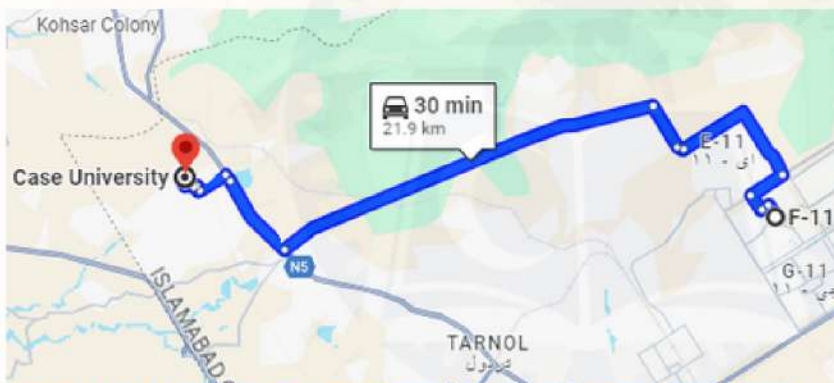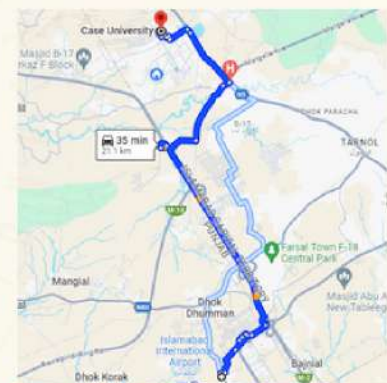
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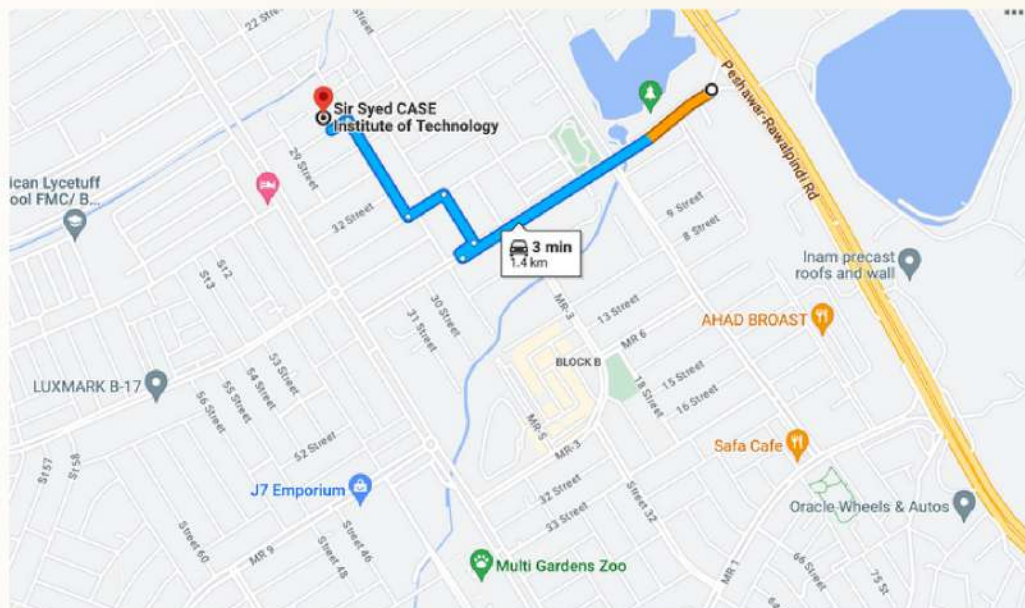
Accessibility

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CASE Institute of Technology
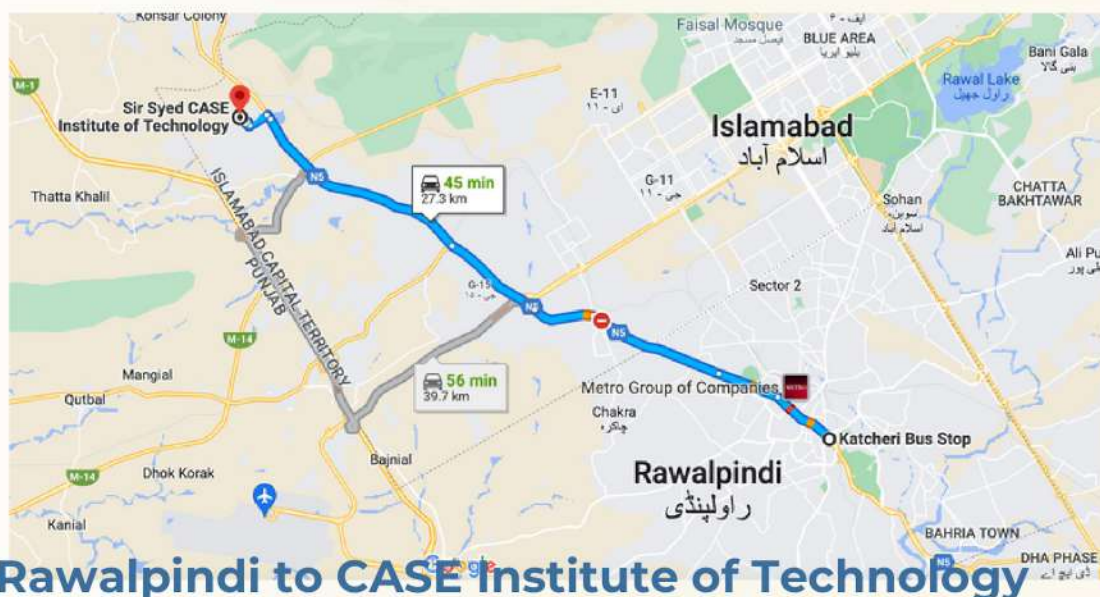

G-11 to
CASE Institute of Technology

F-11 Markaz to CASE Institute of Technology

Top City to CASE
Institute of Technology

Rawalpindi to CASE Institute of Technology

Sir Syed C@SE Institute of Technology

https://admissions.case.edu.pk/OnlineAdmission/

https://case.edu.pk/department-of-medical-health-sciences/

051-2503472 | 0327-7500684 | 0321-5103039

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