

IQRA NATIONAL UNIVERSITY (SWAT CAMPUS)

DEFINING POSSIBILITIES, CREATING OPPORTUNITIES

BS BONPUTER SCIENCE

Recognized by:

Higher Education Commission of Pakistan

Offered by : Iqra National University (Swat Campus) Chartered by: Govt: of Khyber Pakhtunkhwa



INU - SAWAT



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OBJECTIVE

Main Goals and Objectives of a Bachelor of Science (BS) in Computer Science Program:

- Building Essential Knowledge:
- Becoming Skilled in Programming:
- Improving Problem-Solving Abilities:
- Mastering Algorithms and Data Structures:
- Growing Software Development Skills:
- Understanding How Computers Work:
- Exploring How Operating Systems Function:
- Learning About Databases:
- Understanding Computer Networks and Security:
- Discovering Artificial Intelligence (AI) and Machine Learning (ML):
- Advancing Web Development Skills:
- Considering Ethics and Society:
- Enhancing Communication Skills:
- Developing Critical Thinking:
- Promoting Lifelong Learning: Encouraging a mindset of continuous learning, as thefield of computer science is always changing with new technologies and trends.



Online Apply

ELIGIBILITY CRITERIA

Having Completed 12 Years of Schooling or Equivalent:

Successfully finished Intermediate/12 years of schooling/A-Level or its equivalent.

Attaining a Minimum of 50% in the Stated Qualifications:

Obtained at least a 50% score in the mentioned qualifications.

Mathematics or Subject Deficiency Courses for Non-Mathematics/Computer

Students who haven't studied Mathematics/Computer at the intermediate level are required to complete deficiency courses in Mathematics (06 credits) within their initial two semesters.



IT-Incubation

ADMISSIONS ARE AVAILABLE BIANNUALLY

- Spring Intake: Between February and March
- Fall Intake: Spanning from August to September

EXAMINATION

Students' academic progress is assessed consistently throughout the semester. This evaluation encompasses assignments, online quizzes, mid-term examinations, and final-term examinations.

For Education Completed Abroad or under Different System:

If education was completed in a foreign country or under a different system, an equivalency certificate from IBCC is necessary.

Prerequisite of Mathematics in Intermediate/12 Years of Schooling/A-Level:

It is mandatory for applicants to have completed Intermediate/12 years of schooling/A-Level or its equivalent, with Mathematics/Computer as a subject.

AWARD OF DEGREE

- Minimum Credits for BS Degree in Computing: To receive a BS degree in any of the computing disciplines outlined in this document, a minimum of 130 credit hours is needed.
- **Completion Duration and Maximum Timeframe:** The minimum timeframe to complete BS Computing degrees is four years. However, the HEC grants a maximum of seven years to fulfill degree requirements.
- **Required CGPA for BS Computing Degree:** Attaining a minimum 2.2 CGPA (Cumulative Grade Point Average) on a 4.0 scale is necessary to qualify for a BS Computing Degree.

CLASS AND COURSE CALENDAR

The timetable for BS Computer Science program and course schedule is communicated to students via the notice board on the student portal.

SCHOLARSHIP OPPORTUNITIES OFFERED BY

- Worker Welfare Board
- Merit and Need-Based Scholarship
- Sports Scholarship
- Orphan & Sibling Scholarship



FEE DETAILS

PAYMENT PROCEDURE

Top choice:	Submit the online form along with the online payment to;
Bank:	The Bank of Punjab
Branch:	Odigram, Distt Swat, GT Road Odigram, Tehsil Babozai, Distt
Account Name:	Iqra National University Swat
Account Number:	602015800430015
IBAN:	PK21 BPUN 6020 1580 0430 0015
Alternative:	you can complete a manual admission form and make a fee deposit at the counter.

IT INCUBATION CENTER

- The university has set up its Information Technology Incubation center, designed to support startups from inception to acceleration. This platform enables students to effectively showcase their ideas and secure seed funding for their startup ventures.
- The department enhances practical learning through partnerships with software houses and development projects, providing students with opportunities for hands-on practice, client interaction, and realworld project execution.
- Our students are groomed for industry placements and encouraged to engage in entrepreneurship programs, equipping them not only for job readiness but also for launching their own ventures.

Employment Opportunities and Career Paths:

INU-Swat's BS program in Computer Science and Software Engineering
empowers students with essential skills for versatile careers in the computer
science domain. This encompasses roles in Software Development, Data Science,
Cybersecurity, Network and Database Administration.

Teaching Staff:

Dr. Ijaz Ali Associate Professor Associate Dean of Computer Science

Khwaja Jawad (SE),PhD (CS) Scholar

Mr. Sarwar Shah Khan Designation: Lecturer PhD (Scholar)

Engr. Kiramat Ullah (Full-Stack Software Engineer) **Dr. Gulzar Mehmood** (PhD in Wireless Networks) Assistant Professor & Head of Department.

Umar Islam MS (Computer Science)

Adil Khan M.Phil Mathematics

OPTIONAL COURSES

- Exploring Data Mining
- Diving into Machine Learning
- Studying Cybersecurity
- Delving into Cloud Computing
- Creating Games
- Developing Mobile Applications

COURSES CONTENTS

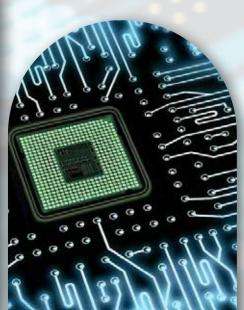
- Starting with Computing
- Basic Programming Principles
- Creating with Object-Oriented Programming
- Understanding Data Structures
- Exploring Database Systems
- Learning about Operating Systems
- Connecting in Computer Network
- Building Software Solutions
- Exploring Automata Theory
- Understanding Computer
 - Architecture
- Designing for the Web
- Unveiling Artificial Intelligence

ALUMNI

Several graduates of the Computer Science programhave opted to advance their education and have successfully earned their MS and PhD degrees from prestigious international universities. This showcases the program's effectiveness in cultivating enthusiasm for learning and scientific exploration.







COURSE CONTENTS

The program spans across 8 semesters, comprising a total of 130-136 credit hours. Here's an overview of the curriculumFirst Year (Semesters 1 and 2)

First Year (Semesters 1 and 2)

- Introduction to Computing
- Programming Fundamentals
- Object-Oriented Programming
- Discrete Mathematics
- Calculus and Analytical Geometry
- English Composition and Comprehension
- Pakistan Studies
- Islamic Studies / Ethics

Third Year (Semesters 5 and 6)

- Design and Analysis of Algorithms
- Software Engineering
- Computer Networks
- Theory of Automata
- Web Engineering
- Artificial Intelligence
- Elective courses

Elective courses

- Data Mining
- Machine Learning
- Cybersecurity
- Cloud Computing
- Game Development
- Mobile Application Development

INU - SWAT

Founded in 2010, IQRA National University is a private educational institution. It holds recognition from the Higher Education Commission of Pakistan, and a charter from the Government of Khyber Pakhtunkhwa. With a student population surpassing 4000 at its Peshawar and Swat Campuses, INU is committed to offering outstanding education. This includes a range of programs covering undergraduate, postgraduate, and advanced MS / PhD levels across fields such as Management Sciences, Allied Health Sciences, Nursing, Computer Sciences, Engineering, and Art & Design.

Database Systems Operating Systems Computer Architecture

Linear Algebra

Second Year

• Data Structures

• Differential Equations

(Semesters 3 and 4

- Technical and Business Writing
- Statistics and Probability

Fourth Year (Semesters 7 and 8)

- Human-Computer Interaction
- Professional Practices
- Final Year Project (over two semesters)
- Elective courses

