

BS PROGRAMMES

An Introduction To BS Programme

BS four year programme is termed as undergraduate programme comprising of eight semesters. In first two years, certain prerequisite courses of literature, Maths, Physics, etc., provide general knowledge and a foundation of variety of subjects prior to focusing on a specific field of study. In the third year, courses that lead to specialization are introduced. On the completion of four years and fulfillment of the university requirements, a student is awarded undergraduate degree.

Undergraduate Structure of Education

The HEC has outlined major policy guidelines of the implementation of uniform semester system in the country. Following is the basic structure of undergraduate programme:

Total No. of Credit Hours(Min)	124
Total No. of Credit Hours(Max)	140
Semester Duration	Min. 16 weeks of teaching excluding examination
Course Duration	Min. of 8 semesters / 4 years as per accreditation body
Extension of time limit	Max. time limit of 6 years, further extendable for one year with the approval of Statuary bodies
Semester Session	For Deficiency/failure/repetition of max. 2 courses of 3 CH each
Course Load Per Semester for Reg. Full-Time Students	15-18 Credit Hours
Min 160 and mx. 180-above credit hours for five-year degree prog. Subject to meeting the req. of respective accreditation councils to meet the international standards.	

Credit Hours for Undergraduate and Graduate Degrees

1. 1 credit hour means teaching / learning a theory course for one hour each week throughout the semester.
2. In lab. Or practical work/ project would require lab contact of three Cr. Hrs per week.
3. The Credit hours are denoted by two digits within a bracket with a hyphen/plus in between.
4. The first work. Thus 4(3+1)/4(3-1) means a total of 4 CR, of which, 3 are of theory while one CR is for Lab./ Practical work.

Course Layout for Undergraduate Programme (120-140 Cr)

1. All undergraduate degree programmes are composed of 124-140 CR

2. Min. of 160 and Max. of 180 CR for 4-years degree programme subject to meeting the req. of respective Accreditation Council.
3. Courses are classified into two categories: Foundation or General Courses and Major or Core Courses (from area of specialization).
4. A total of 78-87 CR must be earned taking a sequence of introductory, intermediate and advanced level courses prescribed for the major area of concentration.
5. The courses for social and basic sciences disciplines will consist of seventy percent of general curriculum leading towards discipline specific areas.
6. Engineering/ Technology programme will consist of 70% of curriculum towards the discipline specific areas of concentration as req. by Accreditation Councils. All undergraduate programmes have a required component of 8-9 courses of 22-25 CR of general education.
7. All students can follow the HEC policy regarding weightage for foundation, elective, major and core courses available on HEC Website.
8. An undergraduate degree programme usually includes theory courses, community work/ thesis/ research report/ project and internship.
 - a. **THEORY:** A theory course is of 3 to 4 Cr. Hrs as per requirement of the discipline.
 - b. **PROJECT:** Every student should write a report thesis or complete a project in the final year up to max. 6 Cr. Hrs individually on a research topic approved by the faculty.
 - c. **INTERNSHIP:** Students should be encouraged to do internship in a relevant academic, research or business organization, relating to the discipline chosen for specialization, of maximum of 3 Cr. Hrs. offered in any upper division semester as per requirement of the discipline.

Repeating Courses/ Improvement of CGPA

1. If a student gets 'F' grade, he/ she will be required to repeat the course or its recommended alternative, if any. However, "F" grade obtained earlier will also be recorded on the transcript,
2. Undergraduate students may be allowed to repeat a course in which he/she has obtained grade below "C". In such a case both the previous and new grades obtained will be recorded on the transcript; however, only the higher grade shall be calculated for CGPA. The institution may define maximum number (<6) of courses that a student may be allowed to repeat in an eight-semester degree programme.
3. A graduate student (MS/ M.Phil) with a 'c' grade can repeat the course to improve the grade. Each institution may define the maximum number of courses (<3) that a student may repeat. In such a case, both the course and the grade obtained will be recorded on the transcript, however, only the better grade shall

be calculated in the CGPA. In case of CGPA improvement, it would be recorded with (Imp) on the transcript.

Attendance

1. Attendance in classes is mandatory, especially in a semester system. Each institution may develop a policy for minimum attendance (<75%) in a course to complete the requirements of the university.
2. The instructor may report a student's absences and the student may be placed on attendance probation by his/her dean/ HOD and it will be notified by the department.
3. A student may be dropped from the university for violating the terms of such probation.

Examination System

1. In each semester, students may be required to appear in quizzes , tests, mid-terms, final examination, presentations. Group discussions and submit project/ assignments/lab reports.

The weightage may be determined on the basis of following guidelines:

Sr. No.	Elements	Weightage	Details
1	Midterm Assessment	25%	It takes at the mid-point of the semester.
2	Formative Assessment	15%	It is continuous assessment. It includes: Classroom participation, attendance, assignments and presentations, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3	Final Assessment	60%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based of term paper, research proposal development, field work and report writing etc.

2. In a semester system, the faculty awards the grades according to the instructions provided in the syllabus. Each university will evolve an honor code for faculty to ensure objectivity and ethical authenticity of grades assigned.
3. There is no supplementary or special exam in a semester system; if a student fails in a course, he/she is required to repeat it.

Award of Degree

Degree awarding criteria stating:

CGPA percentage required to Qualify: 2.0

Thesis /Project/Internship: Final Year Project Required

Any other requirement, e.g. Comprehensive examination (if applicable)

Fractionalized Grading Policy:

Following GPA/CGPA and percentage is recommended for adoption:

Grade	Grade Points	Percentage
A	4.00	85 and Above
A-	3.70	80-84
B+	3.30	75-79
B	3.00	70-74
B-	2.70	65-69
C+	2.30	61-64
C	2.00	58-60
C-	1.70	55-57
D	1.00	50-54
F	0.00	Below 50
W	-	Withdrawal

BS PROGRAMME

BS Information Technology

Department Mission

To rigorously train students in the field of Information Technology (IT) and affiliated disciplines, so that they can serve humanity with skill, knowledge and high character, and be a source of pride to humanity.

Department Introduction

IT has been a key player in digitizing our lives. From daily routing jots to the most sophisticated financial applications, IT provides the necessary enabling environments. It infrastructure in an organization is an important as its other physical and human resources. The Department of IT infrastructure in an organization is an important as its other physical and human resources. The Department of Information Technology (DIT) aims to provide state-of-art training to its students in the field or IT so that they are considered competitive both in national and international market.

Program Introduction

The bachelor of science in Information Technology (BSIT) program at the DIT has been designed in accordance with the guidelines provided by the National Computing Education Accreditation Council (NCEAC) constituted by the Higher Education Commission (HEC) of Pakistan. With the cutting-edge training imparted to the DIT student, the curriculum prepares DIT students not only for higher education and market jobs, but also for self-initiated ventures that may translate into successful startups.

Program Objectives

The objectives of the BSIT program are to

1. Prepare student to innovate, develop, deploy, analyze, and administer information technology artifacts to solve social and business problems.

2. Improve the problem-solving skills of students and to enable them to clarify their thought-processes by means of critical and computational thinking.
3. Nurture the skills to develop information technology artifacts by mean of creativity, and enabling them to think out-of-the-box.
4. Build a strong foundation in theoretical concepts, enabling them to innovate in computing and information technology.
5. Prepare student for rigors of graduate studies, as well as for careers in the academia and industry at both private and public sector organizations.
6. Hone the skills that facilitate lifelong learning and integrating new tools and technologies.
7. Cultivate skills that cater to organizational needs, such as system maintenance, data management, and data security preservation.
8. Foster a sense of professional and ethical responsibilities, and making them realize the impact of technology on society at large.
9. Provide a balanced exposure to liberal arts.
10. Prepare students for effective oral and technical communication.

Admission Eligibility Criteria

- **Years of Study completed:** 12 Years
- **Study Program /Subject:** Intermediate of Computer Science (ICS), Fsc pre-engineering, Fsc Pre-medical, Fsc Pre-medical with Additional Mathematics and Physics, Intermediate with Mathematics and Computer Science, Intermediate with Mathematics and Statistics, A-Levels (with relevant subjects), Diploma of Associate Engineer (DAE) in relevant discipline.
- **Percentage/CGPA:** 50% marks required with the exception of DAE where 60% marks are required for admission.
- **Entry Test (if applicable) with minimum requirement:** There is not compulsory entry test requirement. However, owing to the large number of applicants DIT conducts an entry test to select student as per numbers as per number of available seats.
- Any other (if applicable)

Duration of the Program

8 Semesters.

4 Years 131 Credit hours.

Allocation of Seats

A total of 50 seats are available with following distribution:

Sr. No.	Category	Quota%age	Intake
1.	No. of Seats		50
2.	Open Merit	80%	40
3.	Reserved Seats	20%	10
Details			

1.	Serving Army Personnel	10%	5
2.	Retired Army Personnel	4%	2
3.	Shuhada	3%	1
4.	FGEI Employees	2%	1
5.	Students with Disabilities	1%	1

Categorization of Courses as per HEC Recommendation

Note: Basic courses represent Math and Science Foundation course as per HEC/NCEAC approved curriculum

CC = Computing Core, DC = Domain Core, MS = Math and Science Foundation,

GE = General Education, UE = University Elective, MD = Math Deficiency,

Semester	Courses	Category (Credit Hours)								Semester Load
		Core Courses		Basic Courses		Major Electives (IT Supporting)	Minor Electives (IT Supporting)	Any Other		
		C C	D C	M S	G E			U E	M D	
1	6	0	0	6	10	0	0	0	3*	16
2	5	7	0	0	3	0	0	5	3*	15
3	5	8	0	3	0	3	0	3	0	17
4	5	11	0	3	0	0	3	0	0	17
5	5	7	4	0	0	3	3	0	0	17
6	5	0	7	0	0	3	3	0	0	17
7	5	3	10	0	0	3	0	0	0	16
8	6	3	4	0	6	3	0	1	0	17
PU	42	39	25	12	19	15	9	12	*6	131
HEC Guidelines	42	39	24	12	19	15	9	12	*6	130
Difference (HEC & PU)	0	1		0		0	0	0		1

*Core: Compulsory, Basic: Foundation, Major Electives: Professional Minor Electives: Specialization

***These MD (Math Deficiency) courses will be as Non-Credit courses with only Pass/Fail Grade assigned only to the Pre-medical students so that overall credit will not affect.**