



PROSPECTUS 2022-2023



#### Gulshan-E-Iqbal

ST-2D, Block-17, Gulshan-e-Iqbal Karachi, Pakistan UAN : 021-111 400 300 Ext: 101-104 Tel: 021-34801430-35 Email : admission@indus.edu.pk

#### Clifton

The Doctor Plaza Hall no. 508 to 513
5th Floor Do Talwar Clifton Karachi.
Tel: 021-35308640-47
Cell: 0336-2626980, 0314-2226082
Email: admission.cc@indus.edu.pk

www.indus.edu.pk (+92 21) 111 400 300





# TABLE OF CONTENT

Organizational Structure of Indus University	01
Message by the Chancellor	03
Message by the Vice Chancellor	
Message by the Pro Vice Chancellor	07
Message by the Registrar	
Message by the Director Academics	09
Vision, Mission & Core Values	
Indus University at a Glance	11
Purpose Build Infrastructure	13
Admission Policy	
Merit Scholarship Policy	
Programs Offered	
Semester Rules.	
Message by the Dean Faculty of Engineering, Science & Technology	30
Vision, Mission	31
Academic Rules & Regulations	35
Message by the Acting Chairperson Department of Electrical Engineering	
Vision, Mission & Objectives of Department of Electrical Engineering	
Program Information - PEC Permission	
Program Educational Objectives and Program Learning Outcomes	
Outcome based Education (OBE)	
BE Electrical Engineering (Electronics) (Course Scheme)	
ME Electrical Engineering (Course Scheme)	
Ph.D Electrical Engineering (Course Scheme)	47
Message by the Chairperson Department of Science & Technologies	
Vision, Mission & Objectives of Department of Science & Technologies	
Industrial Visit Department of Science & Technologies Students	
BS/B.Tech. Civil & Mechatronics (Course Scheme	
BS/B.Tech. Electrical & Electronics (Course Scheme)	53
Message by the Dean Faculty of Computing & Information Technology	54
Vision, Mission & Objectives	55
Projects in Progress	
Message by the Chairperson Department of Computing	
Vision, Mission & Objectives of Department of Computing	59
BS Computer Science (Course Scheme)	
BS Software Engineering (Course Scheme)	61
BS Information Technology (Course Scheme)	67
Advance Computer Lab	
MS Computer Science (Course Scheme)	
Ph.D Computer Science (Course Scheme)	
Ph.D Computer Science (Course Scheme)	
Message by the Acting Dean Faculty of Management Science	
Vision, Mission, Objectives & Outcomes	67
Message by the Chairperson Department of Business Administration	68
Program Educational & Learning Objectives	73
BBA 4 Years, BBA 2 Years & MBA 1.5 Years (Course Scheme)	74
MBA 2 Years MBA 2 Years (Course Scheme)	75
MS Management Sciences & Ph.D Management Sciences (Course Scheme)	76
Indus University Research Centre	
Extra Curricular Activities.	79

# **TABLE OF CONTENT**

Introduction of Faculty of Art & Design	8
Message by the Chairperson Department of Design	
Vision, Mission & Objectives Department of Design	
Program Educational Objectives	
Program Learning Outcomes	8
Curriculum Description	
Bachelor of Fashion Design & Bachelor of Textile Design (Course Schemes)	9
Bachelor of Interior Design (Course Schemes)	9
Fashionista	9
Vision, Mission Department of Media Science	
Program Objectives & Outcomes	
Lightning Studio & Sound Studio	
BS Media Science (Course Schemes)	
Editing Studio	9
Introduction of Faculty of Health & Medical Science	10
Message by the Chairperson Department of Physical Therapy & Rehabilation Science.	
Vision, Mission & Objectives Department of Physical Therapy & Rehabilation Science	
Salient Features	
Entry Test	
Physical Fitness Gym	
Doctor of Physical Therapy (DPT) (Course Scheme)	
Message by the Acting Dean, Chairperson Faculty of Social Science	11
Vision, Mission & Objectives	11
Program Education & Learning Objectives	11
B.Ed 4 Years (Course Scheme)	
B.Ed 1.5 Years (Course Scheme)	11
B.Ed 2 Years	11
Message by the Director Quality Enhancement Cell (QEC)	11/
Vision, Mission & Objectives	117
Orientation Session	
Feedback Mechanism	
International & Corporate Relations Office	
National & International Academics Linkages	
Executive Development Center (EDC)	
Execute Development Certer (LDC)	, 2.
Accreditation	
Convocations	
Community Service	
Student Societies	
Co-Curriculum Activities	
Indus University Statutory Bodies	
Hall of Fame	157

# in Memory of





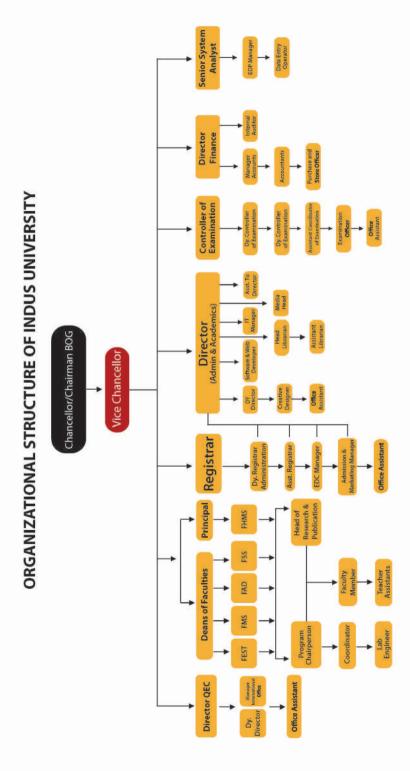




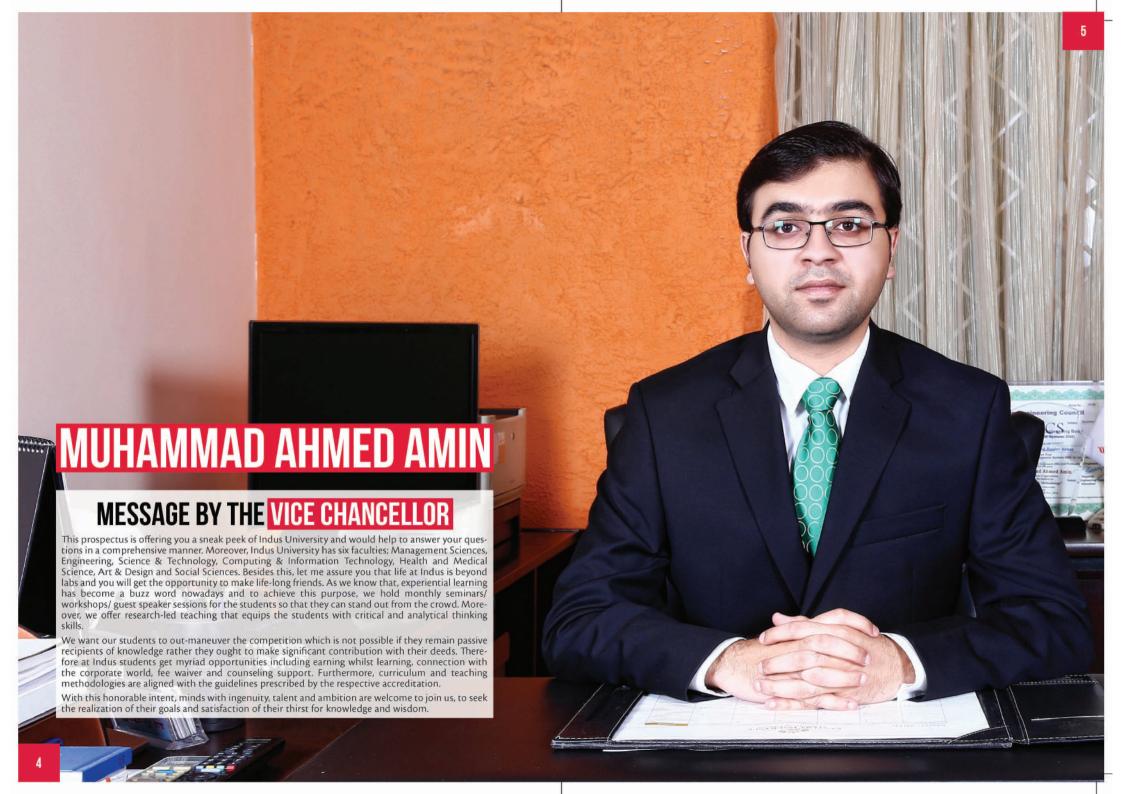
# "YOU WILL LIVE IN OUR HEARTS, ALWAYS"

A befitting tribute to the departed souls and an extraordinary gift to the nation.

Indus University upholds the noble mission of service above self in fostering the cause of higher education.

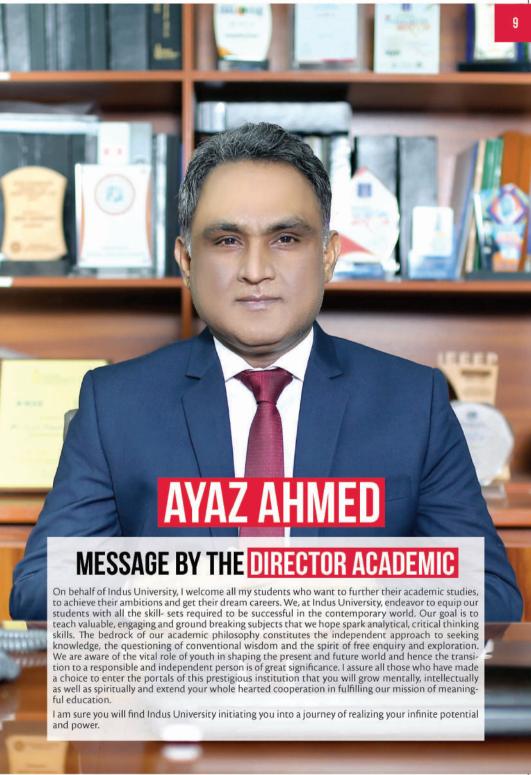












# **VISION**

Our vision is to nurture purpose, leadership and excellence in students, faculty and staff who are competent and eager to serve nation and the world.

# MISSION

Indus University enriches students and society by creating and disseminating fresh perspectives in knowledge, research, leadership and application. Our community of scholars and alumni is devoted to build sustainable society Nationally and Internationally.

# **CORE VALUES**

We cherish our ideas and mission by stewardship of following values:

- Foresight
- Excellence
- Creativity and Innovation
- Teaching by example
- Persistence
- Sharing
- Making Difference
- · Reaching out

# INDUS UNIVERSITY AT A GLANCE

Indus University primarily established as an Indus Institute of Higher Education (IIHE) on January 7, 2006 vide Sindh Assembly Act Ref No. PAS/ Legis-B-9/2004. Later, it was awarded the status of Indus University on April 5, 2012 vide Sindh Assembly Act No. Ref PAS/Legis-B33/2011.

Since its inception, Indus University is striving to impart quality education and playing a significant role in developing indigenous human resource through its landmark achievements and running the following faculties under its portfolio

- Faculty of Engineering, Science & Technology
- Faculty of Computing & Information Technology
- · Faculty of Management Sciences
- Faculty of Art & Design
- Faculty of Social Sciences
- · Faculty of Health and Medical Science

Indus University religiously follows the mantra of "LEARN WELL TO LIVE WELL" and we make every possible effort to instill our students with divergent thinking skills. Keeping in view the current socio-economic situation of Pakistan, this underlying task seems daunting however, management is eyeing towards exceeding its stakeholders' expectations in a dignified manner.

We believe in developing students into holistic individuals thereby establishing students' societies which will give them the platform to express themselves in a better way.

We aim to provide quality education and in this regard, Quality Enhancement Cell (QEC) has also been established to assess the quality of programs according to the guidelines prescribed by HEC so our students can come at par with the international standards.

The distinguishing features of Indus University are as follows:

- · Centrally located and easily accessible
- Degree programs accredited by the respective councils of HEC and PEC
- HEC Approved PhD Supervisors
- · Research-led teaching
- · State of the Art facilities
- Environment conducive to learning
- Foreign qualified faculty
- Experiential learning
- · Academic linkages with national and international universities
- · Employability in the job market
- · Merit and need based scholarship
- · Library housed with latest edition of books and workstations
- · Well-ventilated classrooms equipped with multimedia

#### PHYSICAL RESOURCES

Total Area	285,000 sq. feet (Cover Area)		
Lecture Rooms (With Audio Video Facility)	250		
Labs	53		
Multimedia	68		
General purpose computing laboratories facilities	250 PCs (60 Corei5)		
Engineering & Science laboratories	28		
Fashion, Textile &Interior Design Labs	11		
Auditorium	01		
Seminar Halls	04		
Admission Office	1st Building, Ground Floor		
Bookshop	02		
Quality Enhancement Cell (QEC) Office	1st Building, Ground Floor		
Executive Development Center (EDC) Office	1st Building, Ground Floor		
International Office	1st Building, Ground Floor		
Library equipped with digital access	01 Workstations (14)		
Video Conferencing Room	01		
Clinical Facility	01		
Canteen	04		
Girls Common Room (GCR)	05		
Information Cell	1st Building, Ground Floor		
Surveillance Cameras	356 units CCTV Camera System		
Research & Development Lab	1st Building, Third Floor		
WIFI	Available		
Physical Fitness Gym	1st Building, Ground Floor		
Prayer Room	Available		
Power Generation Lab	01 (Ground Floor)		
Media Room	Available		
Meeting Room	Available		

16Mbps Internet Dedicated 20Mbps Intranet Bandwidth

Digital Library Web Hosting Email Hosting

Three (3) 250 KVA Gas Power Generation

Access to Pakistan Education Research Network (PERN 2)

200 KVA Diesel 100 KVA Diesel

Sports Teams have been formulated for:

Football Cricket Badminton Table Tennis

**Banking Facility** 

Askari Bank (ATM)



Indoor Games



#### Merit

The admissions are granted strictly on merit subject to clearance of Entry Test and panel interviews. Candidates belonging to any area, class, caste or creed and clan are eligible for admission. Furthermore, we administer Entry Test to ensure induction of those students who possess sound academic background. It is worthy to mention that faculty based Admission Committees decide the criteria for admission, the number of seats, schedule of test & interviews.

#### Public Announcement

The admissions are announced through print/ electronics/ social media and official website. Awareness and promotion of academic programs is also generated through exhibitions held throughout the year.

#### Semester System

Academic year for regular programs consists of two semesters, i.e. Fall Semester & Spring Semester. The time span for each semester is shown below

Fall Semester: July – December Spring Semester: January – June

Summer Semester is also offered to the students who want to improve their deficiency or improve their GPA of previous attempted courses.

#### Semester Duration

The regular semester (spring & fall) is comprised of 16 – 18 weeks where as summer is spared over 6 weeks duration

#### Course Exemption/Transfer

There is an Equivalence committee which decides about the transfer/migration cases from universities and other institutions.

#### The terms & conditions are as follows:

- a) Transfer of credit hours:
  - Undergraduate Programs: Only course secured with 'A' & 'B' grades are transferable. This reflects on a 'Numerical Grade' as minimum 60%/CGPA 2.5
  - Graduate/Master Programs: Only course secured with 'A' & 'B' grades are transferable. This reflects on a 'Numerical Grade' as minimum 60%/CGPA 2.5
- b) The courses completed by the students at other institution will be compared with similar courses being offered at Indus University. Any deficiency shall have to be removed by the student.
- Not more than 50% of the courses are transferable. The student has to fulfill all admission requir ements and pay the following charges:
  - · Admission and Semester Fee
  - Course exemption fee (per course)
- d) In case student has not completed 50% of the coursework at other institution then she/he has to appear in Entry Test and Panel interview. A special examination `in lieu of` may also be conducted if the date of entry test is far away. If he/she has completed 50% coursework at other university, then entry exam shall be exempted.

#### Semester Drop

Temporary suspension is allowed to students facing acute domestic problems, valid reasons subject to the approval of the respective department on the recommendations of concerned Chairperson. During suspension period, the student shall be required to pay semester charges as Retention Fee for each suspended semester to continue his/her registration with the respective department.

#### Course Registration

The course registration is carried out before the commencement of classes of each semester. Only those students shall be allowed to register whose prerequisite courses are cleared. A student can drop/add any course, due to any reason, within two weeks of commencement of classes. No fee shall be charged for the dropped courses. If any student has already paid the fee, then his/her fee for the dropped course(s) shall be transferred to the next semester.

#### 1) Cancellation of Course

In case the enrolment in a course falls below a certain number of participants, the Dean, on recommendation of the Chairperson of Department, may cancel the course within one week after the course registration or commencement of classes. Consequently, the affected students may be offered a substitute course.

#### 2) Course Withdrawal

In case the enrolment in a course falls below a certain number of participants, the Dean, on recommendation of the Chairperson of Department, may cancel the course within one week after the course registration or commencement of classes. Consequently, the affected students may be offered a substitute course.

- 2.1 A student can apply for the withdrawal with the approval of the Dean of the Faculty upon recommendation of concerned Chairperson of the Department of any course before two weeks of the final examination. This provision is kept for the benefit of a good student, when he/she realizes that he/she is not going well in the particular subject and taking its final examination may badly affect his/her current GPA.
- 2.2 Full fee shall be charged for any withdrawn course(s). There shall be no full partial refund of fee under any circumstances.
- 2.3 Grade "W" will be mentioned in the transcript for any withdrawn courses and it will not be counted in the calculation of the CGPA.
- 2.4 Not more than two (2) courses can be withdrawn in one semester. The same course cannot be withdrawn twice.

#### 3) Course Load Per Semester

Undergraduate: The maximum course load per semester shall be six (6) courses (including theory and practical) whereas for summer semesters, maximum 02 courses are allowed.

Graduate: The maximum course load per semester shall be four (4) courses (including theory and practical).

Postgraduate: The maximum course load per semester shall be three (3) courses (including theory and practical).

# MERIT SCHOLARSHIP POLICY

Merit Scholarship For Intermediate Board High Achievers (For Undergraduate programs)

#### Up to 100% Fee Waiver

• (in tuition fee) for top three position holders of the National Intermediate Boards and Universities in all programs offered by the Indus University.

#### Up to 50% Fee Waiver

 (in tuition fee) for 80% (in Intermediate Examination and above) in National Intermediate Boards and Universities in all programs offered by the Indus University.

#### Up to 25% Fee Waiver

 (in tuition fee) for 70% (in Intermediate Examination and above) in National Intermediate Boards and Universities in all programs offered by the Indus University.

#### 10% Fee Waiver

(in tuition fee) for 75% and above in intermediate for Karachi, Aga Khan & Federal Board students in all
programs offered by the University, except B.E programs.

The above mentioned scholarship will be for the entire program. However its continuation during the subsequent semesters will be subject to the condition that awardees must maintain his/her minimum GPA of 3.75. These Scholarships are applicable only for the 1st Semester.

#### Merit Scholarship (For Batch Toppers of Indus University)

- A student can avail only one scholarship at a time.
- The high achiever student in the Program achieving GPA of 4.0 in Semester Examination will be awarded Merit Scholarship equal to 25% of Tuition Fee of the following semester. If there is no student with GPA of 4.0, then the high achiever obtaining a GPA of at least 3.75 will be awarded the Scholarship @ 20% of the Tuition Fee. In case of a tie, the student with the higher Marks will get the Scholarship. For all programs only, if there is no student with a GPA of 3.75 then the top scoring student with a minimum GPA of 3.50 will be awarded this Scholarship equal to 15% of the Tuition Fee in the following semester. In case of a tie, the scholarship Award Committee will decide on the basis of overall performance of the student.
- The scholarship awarded student must be regular during semester, not failure in any course and not be involved in any misconduct.

# Exemption of Admission Fee to Indus University Graduates/Alumni For Higher Education at Indus University

 Indus University graduate / Alumni will be given 100% Admission fee waiver for admission in MS / ME/ MPhil program.

#### Hafiz-e-Quran Scholarship:

#### 20% Fee Waiver

 for Hafiz-e-Quran having certificate from recognised Madaris (Wafaq ul Madaris) will be given to all Under-Graduate and Master Program Students.

#### Extracurricular Activities' Scholarship:

#### 10% Fee Waiver

• (in tuition Fee) will be given for Domestic and State-level Winner in Extracurricular Activities students in all programs offered by the university. (Only Applicable for the 1st Semester).

#### **Applications and Process:**

The students aspiring for any of the above scholarships will get and submit (duly filled) Scholarship Forms
from the Information Desk before one month of the last date of the fee submissions with full documentary
support.

#### **Scholarship Award Committee:**

• Information Desk will forward the submitted scholarship forms to the Scholarship Award Committee headed by the Vice Chancellor and the Registrar being its Convener. The Committee will comprise of Deans, Director Academic and Director Finance. Scrutiny of the forms will announce the interviews of the candidates. The Committee, after having interviews with the candidates will recommend the names of the deserving candidates to the Vice Chancellor for his approval and award of the scholarship. The approved names of the candidates will be put on the Notice Boards.

#### Mode of Award/Payments:

The mode of payment/award of the recommended amount of money depends solely on the policy
adopted by the University. The recommended award can be in the form of the fee concession at the time of the
fee submission by the students or it can be paid according to the recommended amount through cheque to the
students.

#### CHANGES IN THE POLICY

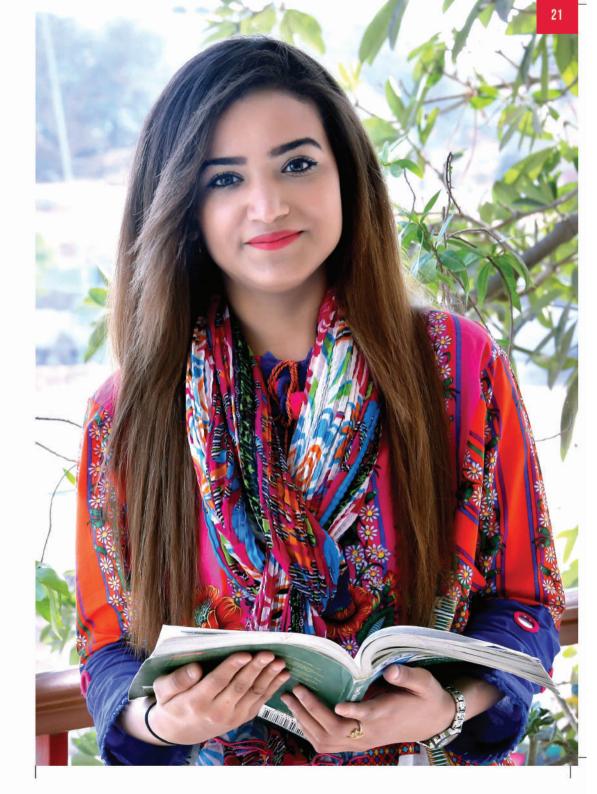
 The policy document is subject to changes/amendments from time to time depending upon the future requirements and status of funds available for the grant of scholarship.



FACULTY OF ENGIN	VEERI	NG, SCIE	NCE & TE	CHNOLOGY (FEST)
Undergraduate Programs				Eligibility Criteria
B.E Electrical (Power) Engineering B.E Electrical (Electronics) Engineering PEC Accredited Programs	4 years	8 semesters	136 Credit Hrs.	Intermediate (Pre-Engineering) / A-Level or any other equivalent/relevant qualification with minimum 60% marks. Diploma of Associate Engineering (DAE) in disciplines Electrical, Electronic with minimum 60% marks. University based entry test & interview.
BS Mechanical Engineering Technology BS Electronics Engineering Technology BS Electrical Engineering Technology BS Civil Engineering Technology	4 years	8 semesters	135 Credit Hrs. 141 Credit Hrs. 139 Credit Hrs. 136 Credit Hrs.	Intermediate (Pre-Engineering) /A Level/ DAE (must have studied Mathematics) or an equivalent/relevant qualification with 50% score. University Based Entry Test & Interview
Graduate Programs				Eligibility Criteria
ME (ElectricalEngineering)	2 years	4 semesters	33 Credit Hrs.	BE/BS in Electrical/Electronic Engineering or an equivalent/relevant qualification with 16 years of education with 50% marks or 2.0 CGPA with PEC registration is compulsory.  GRE/University test with minimum 60% cumulative score.

Postgraduate Programs		411		Eligibility Criteria
Ph.D in Electrical Engineering	3.5 to 7 year	7 semester	48 Credit Hrs.	ME/MS in Electronics/Electrical Engineering or an equivalent/relevant qualification with 18 years of education with minimum 3.0 CGPA
				GAT- Subject/University test with minimum 70% cumulative score.
FACULTY (	OF MA	NAGEM	<b>ENT SCIEN</b>	ICES (FMS)
Undergraduate Programs	- Constitution			Eligibility Criteria
Bachelor Business Administration (BBA)	4 years	8 semesters	144 Credit Hrs.	Intermediate/A levels or any other equivalent qualification with a minimum of "D" Grade.
Bachelor Business Administration (BBA)	2 years	4 semesters	72 Credit Hrs.	14 years of education BA, BSc / B.Com 2 years or any other equivalent qualification.
Graduate Programs				Eligibility Criteria
Master of Business Administration (MBA)	2 years	4 semesters	60 Credit Hrs.	Masters or 16 years of non-business education BE, MBBS, MA, MSc or any other equivalent/relevant qualification with CGPA 2.0 and above.  University Entry Test/GRE General Test with a minimum 60% score
Master of Business Administration (MBA)	1.5 years	3 semesters	30 Credit Hrs.	BBA (4 years) or any other equivalent/ relevant qualification with minimum CGPA 2.0 and above University Entry Test/GRE General Test with a minimum 60% score
MS (Management Sciences)	2 years	4 semesters	33 Credit Hrs.	BBA (4 years)/ MBA (16 years) / any other equivalent / relevant qualification with a minimum 50% marks and 2.0 CGPA.
				University Entry Test/GRE General Test with a minimum 60% score
Postgraduate Programs			1	Eligibility Criteria
Ph.D (Management Sciences)	3.5 to 7 year		48 Credit Hrs.	18 years of education (MS/MPhil) or any other equivalent/relevant qualification with a minimum 3.0 CGPA
				GAT- Subject / University test with minimum 70% cumulative score.
FACULTY OF COMPU	TING	& INFOR	MATTION	TECHNOLOGY (FCIT)
Undergraduate Programs				Eligibility Criteria
BS Computer Science BS Software Engineering BS Information Technology (IT)	4 years	8 semesters	130 Credit Hrs. 130 Credit Hrs. 130 Credit Hrs.	Intermediate (Pre-Engineering, Pre- Medical/A Level/ DAE (must have studied Mathematics) or an equivalent/relevant qualification with 50% score. University Based Entry Test & Interview.

Graduate Programs				Eligibility Criteria
MS (Computer Science)	2 years	4 semesters	33 Credit Hrs.	BS Computer Science/IT/ Software Engineering, BE Computer System Engineering an equivalent/ relevant qualification with 16 years of education with minimum 50% marks or 2.0 CGPA. GRE University test with minimum 60% cumulative score.
Postgraduate Programs				Eligibility Criteria
Ph.D in Computer Science	3.5 to 7 year	7 semester	48 Credit Hrs.	MS in Computer Science, IT, Computer or Software Engineering or an equivalent/relevant qualification 18 years of education with minimum 3.0 CGPA. GAT- Subject / University test with minimum 70% cumulative score.
FACI	JLTY	OF ART 8	DESIGN (	FAD)
Undergraduate Programs		reduktur karikultur bahar in ta		Eligibility Criteria
Bachelor of Fashion Design (BFD) Bachelor of Textile Design (BTD) Bachelor of Interior Design (BID)	4 years 4 years 4 years	8 semesters 8 semesters 8 semesters	141 Credit Hrs. 136 Credit Hrs. 135 Credit Hrs.	Intermediate / A levels or any other equivalent / relevant qualification with a minimum 'D' Grade University based entry test & interview.
Bachelor of Science in Media Sciences	4 years	8 semesters	136 Credit Hrs.	Intermediate / A levels or any other equivalent /relevant qualification with a minimum 'D' Grade. University based entry test & interview.
FACULTY OF	HEAL	TH & ME	DICAL SCI	ENCE (FHMS)
Undergraduate Programs				Eligibility Criteria
Doctor of Physical Therapy (DPT)	5 years	10 semesters	174 Credit Hrs.	Minimum 60% in Intermediate/ A Levels (Pre Medical) or any other equivalent/ relevant qualification. University based entry test & interview.
FACU	LTY O	F SOCIAI	SCIENCE	(FSS)
Undergraduate Programs				Eligibility Criteria
Bachelor of Studies in Education/ B.Ed (Hons.)	4 years	8 semesters	144 Credit Hrs.	Intermediate / A levels or any other equivalent/ relevant qualification with a minimum 'D' Grade. University based entry test & interview.
Bachelor of Studies in Education/ B.Ed (Hons.)	2 years	4 semesters	54 Credit Hrs.	Bachelor/ 14 years of education or any other equivalent/relevant qualification with a minimum 2nd division. University based entry test & interview.
Bachelor of Studies in Education/ B.Ed (Hons.)	1.5 years	3 semesters	54 Credit Hrs.	Master/ 16 years of education or any other equivalent/relevant qualification with a minimum 2nd division. University based entry test & interview.





Statutes/Regulations regarding the schedule and courses of studies, manner and method of teaching and admission of students, for the degree of Bachelor degree programmes.

### STATUTES

#### Title:

These Statutes/Regulations may be called the Indus University, Scheme of Studies, Method of Teaching, etc. for its Bachelor and Master degree programmes.

#### **Applicability**

These Statutes/Regulations shall be applicable to all the University students from the Academic year 2019 and onwards.

#### **Definitions:**

- "Academic Year" means the period of program covering two Semesters (Spring & Fall) and a Summer Session
- "Board of Governors" means the Board of Governors of the University. "Credit Course" means a course of study, the successful completion of which shall be a requirement for obtaining the Bachelor/Master
- "Credit Hours" means the rating allotted to each course during a Semester. One theory lecture hour per week throughout the semester consisting of 16 weeks teaching is equal to one Credit Hour. One lab work session of three contact hour per week throughout the semester is also equal to one Credit hour. If a course is taught for 3 lecture hours and one lab work session per week it shall be of 4 Credit Hours...
- "Cumulative Grade Point Average" means the Grade point Average of a student at the end of each semester considering the Grades obtained in all the courses or at the end of the entire period of study.

- "Quality Point" means a product of Grade Point (GP) and Credit Hours (CH).
- "Non-Credit Course" means a zero credit course of study, the Successful completion of which shall be a requirement for the Bachelor Degree.
- "Semester" means a period of teaching and examination as specified in the Academic Calendar including all gazetted holidays.
- "University" means Indus University.
- "Vice Chancellor" means the Vice Chancellor of the University.

#### 1. DURATION OF COURSES:

- The courses of study leading to the Bachelor Degree shall be of four years (08 semesters) duration, except DPT, the duration of courses of study for this discipline shall be five (05) years (10 Semesters). There shall be spring semester, fall semester and summer session in an Academic Year.
- The semester starting with the commencement of an Academic year shall be called the first semester and the next semester shall be called the second semester and so on.
- Instructions in all courses and laboratories are carried out in English language. The Examinations are also conducted in English. The student will be well advised to study Rules & Regulations relating to Semester system.
- A student must complete his/her Undergraduate Degree Course in a maximum period of 07 years for all programs and 08 years for DPT. No student will be allowed to study in the University beyond this period.
- A student must complete his/her MS/ME/MBA Degree Course in a maximum period of 05 years for all programs. No student will be allowed to study in the University beyond this period.

# 2. COURSE LOAD FOR FALL AND SPRING SEMESTERS

#### Undergraduate

An undergraduate program of instruction generally includes a 15-18 credit hours course load including exams in a regular semester. The required course load for a full time undergraduate is minimum of 15 credit hours per semester.

In case any students wishes to enroll for one more course beyond 18 cr. Hours s/he may be allowed by institution in either of two cases.

- If his / her CGPA is above 3.5 and
- The Students needs the course to graduate on time.
- MS/MPhill students

A graduate student normally enrolls for 9-12 credit hour in regular semester. A graduate student must take at least 9 credit hours in Fall and Spring Semesters to be classified as a full time student.

The University may allow a student to take additional courses (02 courses of 03/04 credit hours) in a semester depending on unique circumstances of the student with the advice of the course coordinator.

#### 3. REGISTRATION IN SUBSEQUENT SEMESTER REGISTRATIONS

All the students who intend to continue their studies at the University are required to complete the registration formalities before the start of each semester classes. A student who fails to register him/her-self for studies in a semester nor applies for a semester leave till the end of 1st week of that semester, would have his/her admission cancelled.

The students are required to pay full tuition fees at the start of the semester. Finance Department issues deposit slips to each student. The students are required to submit the registration form along with the paid fee voucher in their respective departments. If the dues are not paid in full by the stipulated time, he/she may not be allowed to attend the classes and to sit in the examinations. It is the responsibility of the students concerned to clear all dues outstanding against his/her name and report to the department's Chairperson for the confirmation of the registration.

#### LATE REGISTRATION

In case a student could not submit the semester registration form before start of each semester due to unavoidable and acceptable reasons, the Chairperson may grant approval of the late registration on the following terms and condition:

 The registration shall not be late by more than two weeks of the normal registration deadline, inclusive of holidays, if any.

- The Chairperson must have approved and recommended the registration form and forwarded it to the Registrar through the respective Dean of faculty.
- 2. If granted approval, the student must deposit a sum of Rs.5000/- per semester as late registration fee in the account office and submit a copy of the receipt along with the approved late registration forms to the Chairperson.

# 4. WITHDRAWAL OF COURSE AFTER REGISTRATION

Students may be allowed to withdraw from a course during 4-6 week of the semester. In such cases the transcript shall record that the students enrolled in the course and with drew. Consequently, grade W will be awarded to the student which shall have no impact on the calculation of the CGPA of the student. A student withdrawing after the 6th week shall be automatically awarded "F" grade which shall count in the GPA and stay on the transcript.

#### 5. GRADING SYSTEM

- Examinations/Tests:
- Evaluation of students shall be based on Peri odic Tests/ Examinations/Viva Voce Assign ments / Presentations.
- Grades given to a student in each course shall be of two types: -Numerical Grades:

Grade	Grade Points	Percentage Obtained in a Semester System
A	4,00	85 and above
A-	3,66	80-84
B+	3.33	75-79
В	3.00	71-74
B-	2.66	68-70
C+	2.33	64-67
С	2.00	61-63
C-	1.66	58-60
D+	1.3	54-57
D	1.00	50-53
F	0.00	Below 50

Assessment of performance on the basis of marks (out of 100) fixed for a course of any Credit Hours Unit, shall be termed "Numerical Grade" (NG).

- Alphabetical Grades: (AG). Each letter carries a value in terms of numerical points or Grade Point (GP) Equivalent of numerical grade in terms of alphabets shall be termed as Alphabetical Grade.
- 5. Grading System: Equivalence between letter grading and numerical grading shall be as follows:

#### **GRADE POINT AVERAGE:**

The Academic rating of a student shall be calculated on the basis of the Grade Point average. The Grade Points obtained by a student in each course shall be multiplied by the number of credit hours specified for that course and then the Grade Point Average (GPA) shall be calculated.

The Cumulative Grade Point Average (CGPA) shall be calculated at the end of each Semester.

#### **EXAMINATIONS:**

Types and number of Examinations:

There shall be following types of examinations for each course during each Semester.

- Mid-term Test
- 7. Practical Examination/Lab
- Semester Examination

#### **Mid-Term Test:**

There shall be a Mid-Term Test in a course during a semester, which will be held during the 8th/9th week after the commencement of each regular Semester. The duration of the midterm test shall not be more than 2 hours.

The conduct (fixing of time, date and place) of Mid-Term Test shall be the responsibility of the Chairperson of the respective departments with the approval of Dean of the Faculty.

If a student could not appear at Mid-term Test for genuine reasons he/ she may apply in writing to the Chairperson of the department concerned, as early as possible but not later than one week after culmination of the Mid-Term test, for permission to appear at a makeup Test in lieu of Mid-Term Test.

The scripts of Mid-term Tests will be shown to the students after evaluation/marking. The award lists/marks sheets of the tests will be displayed on the Notice Board of the Department immediately after evaluation within two weeks.

If any student is not satisfied with the evaluation of the Mid-term Test, he/she may represent to the Chairperson of the concerned Department within 7 days of the declaration of the result. The decision of the Chairperson shall be final. Representation after the expiry of 7 days will not be entertained.

The final award list including marks of Mid-Term Test, Tutorial/Assignments/class test, practical/lab and final semester examination result will be forwarded by the teacher through the concerned Chairperson to the Controller of Examinations. A copy of the final award will also be submitted by the teacher/examiner to the Chairperson of the department concerned.

#### **Practical Examination/ Lab Examination:**

The practical /lab examination may include: -

- 1. Journals, Reports, Computer Programmes.
- 2. Practical, Viva Voce Examinations
- Semester Examination:
- 4. The Semester Examination in all the courses will be conducted by the Controller of Examination. The Examination shall be open to a student who has been on the rolls of the University prior to applying for appearing at the examination and fulfils other pre-requisites and that examination form is duly certified and forwarded by the Chairperson of the Department.
- 5. The Semester Examination shall be held at the end of each Semester.
- 6. The Examination Schedule/Programme shall be prepared by the Controller of Examinations in consultation with the Chairperson of the Department concerned and approval by the Vice Chancellor / Director Academics on the recommendation of the Dean of the Faculty concerned.
- 7. If a student fails in a course, he/she is required to repeat it in summer session after proper registration and payment of fee.

There shall be a grievance committee comprising of relevant Dean of faculty who will be the Convenor, concerned Chairperson of the department and controller of examination.

All the students who intend to continue their studies at the University are required to complete the registration formalities before the start of each semester classes. A student who fails to register him/her-self for studies in a semester nor applies for a semester leave till the end of 1st week of that semester, would have his/her admission cancelled.

The committee may opt a member if deemd necessary. The grieved student shall submit an application to the Chairperson of the department not later than a week after announcement of the result. The Chairperson shall forward application to the Chairperson of the GC for consideration. The recommendations of the Examination Grievance committee will be sent through Controller of Examination to Vice Chancellor for final approval.

#### 6. IMPROVEMENT OF GRADES:

A student may repeat a course with grade C and below in regular semester or in summer session provided,

- 8. G.P.A is less than 2.5 in the semester
- Maximum number of courses allowed for improvement in a semester is two.

Distribution of Marks for Each Course: The distribution of marks (weightage of grade in Semester) will be as follows:

Distribution of Marks	Courses with Lab Work	Courses without Lab Work
Midterm Test	20	30
Quizzes	05	10
Assignments /	05	10
Presentation		
Lab Work	20	<b>3</b>
Total Sessional	50	50
Final Exam	50	50
Grand Total	100	100

#### **Condition of Passing a Course:**

In order to pass a course a candidate, besides obtaining at least 50% Marks in both the Sessional and semester examinations, must obtain at least 50% Marks in Lab work. (To pass a course, student must obtain 50% marks in Semester exam, Sessional and laboratory work separately).

#### 7. CLASS ATTENDANCE:

 A student with less than 75% attendance in class lectures and lab work will not be allowed to take the Semester Examination in a course. He/she has to repeat the course whenever it is offered. However, for genuine cases 5% attendance may be condoned by the Dean and 5% by the Vice Chancellor.

- 2. If a student fails to attend classes during the first four weeks after the commencement of the semester as per announced schedule, his / her admission shall stand cancelled automatically without any notification. However, he / she may be allowed re-admission on the recommendations by the Chairperson / Dean on the payment of re-admission fee of rupees 10,000/- only. It is the responsibility of the student to fulfil attendance requirement.
- 3. In the case of a sports person participating in games of National or International level, as verified by the Registrar and recommended by the Chairperson concerned, 75% of the attendance in class lectures and lab. Work will be calculated on the basis of total number of lectures delivered/practical conducted in a course minus the number of total lecture days actually spent by the sports person in representing the University in sports or game. In the case of students who are selected by the Government or the University, for proceeding on good will missions outside the country, the lectures delivered in the concerned classes during the period of absence of such persons not exceeding one month shall be deducted from the total number of lectures delivered to the class and the required percentage of attendance for purpose of examinations shall be based on the balance of lectures.
- 4. The re-admission shall be given to the students whose admission were cancelled as per clause 1.3.1 (b)not later than 5-6 weeks of the start of the semester and the attendance will be counted from the date of admission.

#### 8. PROMOTION TO HIGHER CLASS:

Registration in any Semester shall be allowed before the commencement of classes of that Semester. Registration in Fall Semester of any Year shall be open to any student who was registered in the Spring Semester of that Year. Similarly, Registration in Spring Semester of any Year shall be open to any student who was registered in Fall Semester of the preceding Year and eligible as per promotion rules.

 Student who fails to obtain at least 2.0 CGPA in 1st semester (Spring semester), the 2nd semester (fall Semester) shall remain on first probation. If a student still has CGPA less than 2.0 at the time of registration to Second year shall be on second probation during the semester. Such student shall be allowed to register for the semester courses along with remaining courses of previous semesters,

- Any further registration in subsequent semester shall be allowed subject to the condition that the student has obtained at least 2.0 CGPA after at most two probations.
- 3. A student being on second probation obtains less than 2.0 CGPA shall not be allowed to register in the next semester. The student is required improve his/her CGPA to 2.0 before registration to subsequent semester with junior batch.
- 4. In addition to CGPA, a student shall have to fulfil following conditions;
- 5. For registration in third year, the student must have passed all courses of the first year and 60% of the courses up to the second year.
- For registration in Fourth year, the student must have passed all courses up to the Second Year.
- 7. For registration in Fifth Year, the student must have passed all courses up to the Third Year. In all circumstances, re-admission to any student shall only be granted in the semester where the student has discontinued his/her study due to any reason.
- 8. A student admitted in any Semester shall be registered in all such courses prescribed in that Semester which the student has not passed earlier.
- In any Semester, the student may be allowed to register in maximum of two repeating courses in addition to the courses prescribed for that particular semester.
- 10. Registration in any repeating course(s) offered for any junior batch(es) in the Semester may also be allowed by the Chairperson of the Department concerned subject to payment of prescribed fee.

#### 9. CANCELLATION OF ADMISSION

- 1. In case at any stage it is found that the document on the basis of which admission was granted are forged/tempered, the admission will be cancelled and the fee paid shall be forfeited and will not be considered for admission in Indus University in future. The University reserves the right for legal action.
- If a student fails to attend classes for four weeks consecutively in a semester, without prior approval, his / her admission may be cancelled.

 A student desirous of leaving the University must apply in writing and such application must be countersigned by the student's parent or guardian. Admission once cancelled shall not be restored.

#### 10. RE-APPEARING IN COURSES

- A student will be allowed to register for course in which he / she has been absent due to unavoidable reasons acceptable to the University or has failed, whenever the course is offered.
- 2. If a student did not appear in 1st Semester Examinations he / she may apply to continue the studies from 1st Semester with New Batch. However, the case will be considered subject to availability of seat in the Department and fulfillment of admission criteria i.e. H.S.C. % etc.

The amount which was paid previously will be transferred to new admission after deducting admission fee, however, he / she has to pay difference of fee with new batch.

3. If a student did not appear in 2nd or onwards semester examinations he / she is required to apply to Head of Department to continue the studies in the Semester he / she is eligible.

#### 11. CONTINUATION OF STUDIES

If a student did not appear in a semester examinations he / she is required to apply to Head of Department to continue the studies in the Semester he / she is eligible. In case, his/her attendance is less than 10% fee of that semester (if deposited) may be transferred towards his registration with new batch (year back). However, he has to pay difference of fee with new batch.

#### 12. SUMMER SESSION

Objective of the summer class is to give an opportunity to the students, who have either failed in course(s) or could not attain required attendance due to any reasons, to improve his/her grade or understanding of the subjects. The duration of the summer programme spans only six to eight weeks.

Prescribed fee will be charged for each course and 75% attendance is compulsory to appear in the examination. The students shall register themselves by filling the prescribed form and paying required fee. A student will only be allowed to register in 2-3 courses of 6 credit hours.

Examination will be held at the end of the course(s) and result will be sent to the examination department within a week. After completion of course(s) a marks sheet of the result will be issued to the student.

#### 13. AWARD OF DEGREE:

The minimum requirements for the award of Bachelor of Science Degree are as follows:-

- 1. A candidate must have passed all the required courses.
- Must have obtained a CGPA of at least 2.0 at the end of 8th Semester or 10th semester in case of DPT.
- 3. Cleared all dues of the university.
- Issuance of Transcript / Provisional certificate

The following procedure is being adopted for the issuance of Transcript and Provisional Certificate. The Forms are issued by COE office to students from the counter of the Examinations Department. The form, duly filled in by the Students is received at the Counter. Acknowledgement receipt is issued to the concerned students with the receiving date of required document (s).

The examinations department sends the form to Finance Department to obtain the position of Dues. After obtaining the clearance from Finance Department, which might take 2 days, the Transcript / Provisional Certificate are prepared. If there are dues against the students, the form is returned to students with the instruction to clear the dues. All documents are issued from the counter of the examination department. All the processes are completed within 20 to 25 days, approximately. However, in case of "URGENT" it will take 5 to 6 days.

# 14. AMENDMENTS/ ALTERATIONS /ADDITIONS:

These Statutes/regulations can be amended/ altered by the Board of Governors/Academic Council and whenever the need be, new Rules can also be added.

#### **Course Exemption/Transfer:**

There is an Equivalence Committee which decides about the transfer/migration cases from universities and other institutions.

The terms & conditions are as follows:

The other institution from where a student wants to transfer to Indus University, the institution must be recognized by HEC and the respective program must be accrediated by respective accredited council (if applicable).

#### 15. TRANSFER OF CREDIT HOURS:

- 1. Undergraduate Programs: Only course secured with 'A', 'B' or 'C' grades can be transferable. This reflects on a 'Numerical Grade' as minimum 60%.
- 2. Graduate/Master Programs: Only course secured with 'A', 'B' or 'C' grades can be transferable. This reflects on a 'Numerical Grade' as minimum 60%.
- The courses completed by the student at other institution will be compared with similar courses being offered at Indus University.

#### 16. INDISCIPLINE IN EXAMINATION

Any candidate found guilty of following matters, his/her case will be submitted to Unfair Means Cases Committee constituted by the University. This committee will be constituted of 02 senior faculty members, Controler of Examination, Deputy Registrar & Director of student's affairs, headed by senior Professor of the University.

- Removes a leaf from his/her answer book, the answer book shall be cancelled.
- Submits forged or fake documents in connection with the examination.
- iii Commits impersonation in the examination.
- iv Copies from any paper, book or notes.
- v Mutilates the Answer Book.
- vi Possesses any kind of material, which may be helpful to his/her in the examination.
- vii Does anything that is immoral or illegal in connection with the examination and which may be helpfu to him/her in the examination.
- viii Refuses to obey the invigilation staff or refuses to follow the instructions issued by the University in connection with the examination.
- ix Misbehaves or creates any kind of disturbance in or around the examination

- Uses abusive or obscene language on the answer script.
- xi Possesses any kind of weapon in or around examination centre.
- xii Possesses any kind of electronic device which may be helpful in the examination
- His/her case shall result in penalties keeping in view the nature and intensity of offence.
- (i) Cancellation of paper.
- (ii) Suspension from programme for one semester.
- (iii) Heavy and light Fines
- (iv) Forever expulsion from the University.
- (v) Any other.

Unfair Means Cases Committee will decide that the student will have to appear in summer semester/with regular semester for the cancelled paper.

If a student is not satisfied by the decision of the Unfair Means Cases Committee, she/he can submit his/her appeal within a week after the decision of the Committee to the Vice Chancellor. No appeal shall lie against the decision of the Syndicate.

#### 17. PROBATION

Probation is a status granted to the student whose academic performance falls below the minimum University standard.

- i) The students acquiring less than 2.00/4.00 GPA in a semester but passing in all papers will be promoted with the condition to achieve more than 2.0 GPA in the next semester and s/he will be put on probation for the next semester.
- ii) The students acquiring GPA 1.7 and above but failing in any paper(s) will be placed on probation and promoted to the next semester conditionally. They will have to be registered for summer semester to improve the grade.
- iii) Students acquiring GPA less than 1.7 in two consecutive semesters and failing in any paper(s) even after attending summer semester for one academic year will be dropped from university rolls. However, s/he will be eligible to seek re-admission. Re-admission will be allowed only once during 4 years BS degree program. Re- admission will be allowed after the payment of full admission fee.

- iv) Students on probation in two consecutive semesters even after attending Summer Semester in one academic year will take re-admission in that particular academic year once only.
- v) There will be maximum two academic probations in four-year Bachelor degree program. Both the probations cannot be granted / availed in first four semesters. A student who is on probation 2nd time even after attending summer semester in first four semesters shall be removed from rolls of university / Director Academic. However, s/he can take re-admission only once during 4 years BS degree program.
- vi) In case of valid reason / excuse, the period of study may be extended for one additional year (Two Semesters) in all university programs. The student(s) who will not complete studies within stated periods including extension shall be struck off from the rolls of the university. The students who have been given the right to extend the duration of study for one additional year are required to pay new registration fee along with normal fee for that academic year.
- vii) It is also mandatory to obtain at least 50% marks in Practicals, Projects, Thesis, Assignments, Test and Theory Paper separately/aggregate.

#### 18. POST GRADUATE PROGRAMS SUMARY

#### **Duration:**

MS degree requires completion of course work and a Thesis. Minimum duration of the degree is 1.5 years and maximum 4 years (including freezing period if any) as per HEC guidelines and University policy.

#### Following are the details:

- Course work requirements consist of eight post-graduate level courses (24 credit hours and a Thesis of six credit hours).
- Registration of MS Thesis will be semesterwise with minimum of 06 credit hours a semester.
- Every semester 06, credit hours options will be offered on people's-soft for the registration of Thesis.
- Student can freeze a semester and maximum up to 03 semesters subject to the genuine problem and an approval from the relevant MS Coordinator/HOD. (Students application is supposed to be kept in student's record file).
- Research student is supposed to register each semester and will pay the fees accordingly.

## Requirements to complete by the MS/MPhil students:

- Pass prescribed eight courses of 03 credit hours each.
- MPhil/MS Proposal Development as per Indus University Format with the help of a Supervisor.
- Pass MS/MPhil Proposal in an open Defense.
- BASR Approval of MPhil/MS Proposal.
- Completion of six credits MPhil/MS Thesis
- Selection of two External Evaluators by BASR
- Evaluation of Thesis by two Evaluators (external faculty members).
- Thesis Finalization in the light of comments /changes (if any ) by the evaluators.
- Open defense of thesis by an external examiner along with Committee members consisting of: a
  Supervisor (as an observer), relevant MS / HoD/
  program Coordinator/ Dean, one subject expert (if
  required).
- Thesis Finalization in the light of comments /changes (if any) by the examiners and as per Indus University format.
- Final Thesis Submission to BASR for approval along with the completion certificate by the relevant people signed.
- Submission of 02 soft copies in CDs and 02 Hard copies as per Indus University Format.
- Completion of students file along with all required documents signed by the relevant authorities.
- Degree Award after the completion of all HEC and Indus University requirements.



The vision of the Faculty of Engineering, Science & Technology is to become a nationally and internationally recognized leading faculty aimed for excellence in undergraduate and postgraduate quality education and research in all disciplines through continued process of curriculum development, establishment of state-of-the-art experimental and computational laboratories, development of comprehensive instructional delivery system through qualified, experienced faculty and scholarly research activities enabling graduates to obtain the knowledge and skills necessary for immediate employment, continued career advancement and useful contributions for the benefit of the society and improvement of the relevant and also multidisciplinary engineering profession and also to be recognized as a valuable collaborative partner to local industries.

# MISSION

The mission of the Faculty of Engineering, Science & Technology is to support the commitments of Indus University's guiding principles of quality education through interactive and innovative learning and research environment, striving for excellence in performance and development of professional skills, fostering creativity and novelty.

Additionally, our mission is to strive for training of the Electrical, Power, Electronics, Telecommunication, Computer Systems, Civil, Textile, Mechatronics, Energy and Environment students to make them professionally sound engineers, technologists, entrepreneurs, managers and academicians possessive of sense of societal norms, professional morals and leadership qualities to cater for the challenges of relative engineering profession through logical and novel thinking for the betterment of humanity and to serve the industry needs through focus and emphasis on practical applications, hands-on experiences and laboratory works.

Furthermore, the design of Programs of Faculty of Engineering, Science & Technology is articulate to train students to be able to plan, design, produce, maintain and handle electronic, electrical telecommunication and computer systems, equipments and components with creativity and critical spirit in the technological development and also to gear-up the relevant Engineers to become a leader in providing quality professional services through dynamic and innovative education, research and consultancy for the benefits and advancement of their profession and progress of the nation.





#### **Semester Duration**

There are two regular semesters offered in a year at i. Spring Semester (18-20 weeks duration) ii. Fall Semester (18-20 weeks duration).

The distribution of semester duration shall be as follows

- Regular classes: 16 weeks
- Lectures (48 lectures)
- Make-up classes: 0-2 weeks
- Midterm Exam and Final Exams: 2 Weeks
- Total: 18-20 Weeks

However, the 'Summer Semester' (08 weeks duration) is also offered for the students who want to cover their deficiency courses.

There shall be only single (1) mid-term exam which shall be conducted in 9-10th week of the semester.

The maximum course load per semester shall be six (6) courses or 18 credit hours in regular Spring and and Fall semesters. For summer semesters (to cover deficiency of failed courses) maximum 02 courses are allowed.

The Marks distribution in each subject (except) BE programs) shall be as follows:

#### ASSESSMENT PLAN (Theory Course)

#### Theory Course (100 marks)

Assessment Activities	Marks	Outcome
Quizzes	Sessional	Each
Assignments	Marks	Assessment
Group Discussion/Task	As Per	Activity
Presentation/Case	OBE Plan	will be
or Any other Activity	(Up to 40%)	Mapped with
Midterm Exam	As Per OBE Plan	related Bloom
	(Up to 20%)	Taxonomy
Final Exam	As Per OBE Plan (Up to 40%)	Level, CLO and PLO

#### ii. Lab Course (50 Marks)

Marks	Outcome
Sessional Marks	Each
As Per OBE	Assessment
lan (Up to 20%)	Activity will
	be Mapped with related
As Per OBE	Bloom
Plan	Taxonomy
(Up to 30%)	Level, CLO
	and PLO &
	Assessment
	Rubrics
	Sessional Marks As Per OBE lan (Up to 20%) As Per OBE

- (a) There will not be any compensatory or 'in-lieu of sessional, nor mid-term or final examination will be conducted in any circumstances.
- (b) Theory subjects shall comprise of total 100 marks whereas, each practical subject shall carry 50 marks and they both shall be evaluated and treated separately.
- (c) The student must pass theory and Lab Examinations separately.

#### **Promotion and Probation Policy**

- a) Promotion
- b) Promotion on probation
- c) Relegation

#### Promotion

Student who meets the following conditions is consid ered "passed in the semester" and is promoted to the next semester.

- Student does not get three (3) "F" grades in the previous semester.
- His/her Semester GPA is not less than 1.50.

#### **Promotion on Probation**

Following are conditions of Registration in Higher Semesters of B.E. programs:

- A student is registering in 5th semester and in subsequent semesters has to ensure that he/she has cleared all subjects of previous semester as shown below:
- Register in 5th semester if he/she has cleared all subjects of 1st semester
- Register in 6th semester if he/she has cleared all subjects of 2nd Semester

#### Register in 7th semester if he/she has cleared all subjects of 3rd Semester

SEMESTERS RULES & REGULATIONS

Register in 8th semester if he/she has cleared all subjects of 4th Semester

#### c) Relegation

Relegation means that a student has to re-com mence his/her studies from an appropriate lower semester. A student shall be relegated if he/she:

- Obtains 3 or more "F" grades in the current
- Semester GPA of previous semester is less than 1.50.

#### 5. Minimum Attendance Requirement

A student shall not be allowed to appear in the final examination of any subject if he/she fails to maintain at least 75% attendance in that subject.

#### 6. Examination Admit Card Issuance

The examination Admit Cards, bearing the recent photograph and other particulars of the students are issued to enable them appearing in the midterm and final examinations. Admit Card shall be issued on the following conditions:

- All dues should be cleared.
- (b) The defaulters up to an extent of Rs. 10,000/may be allowed in special circumstances, subject to the permission of the Director Finance or the person designated for said purpose.

#### 7. Course Registration and Drop Policies

- The course registration is carried out before commencement of classes of each semester. Only those students shall be allowed to register whose prerequisite cours es are cleared.
- A student can drop/add any course, if due to any reason, within two weeks after com mencement of classes.
- No fee shall be charged for the dropped courses within specified dates. If any student. has already paid the fee, then his/her fee for the dropped course(s) shall be transferred to the next semester.

#### **Course Withdrawal Policy**

- (a) A student can apply for the withdrawal (with the approval of the Dean of the Faculty upon recommendation of concerned Chairperson of the Department of any course before two weeks of the final examination. This provision is kept for the benefit of a good student, when he/she realizes that he/she is not going well in the particular subject and taking its final examination, may badly affect his/her current SGPA and CGPA.
- (b) Full fee shall be charged for any withdrawn courses. There shall be no full or partial refund of fee allowed under any circumstances.
- (c) Grade "W" will be mentioned in the transcript for any withdrawn courses and it will not be counted in the calculation of the CGPA/SGPA.
- (d) Not more than two (2) courses can be withdrawn in one semester. The same course cannot be withdrawn twice.

#### **Incomplete Grade Policy**

- (a) A student can be allowed Incomplete grade in any subject to allow him/her not to appear in the final examination by Dean FEST with the consent of respective, Chairperson and teacher after being satisfied that the concerned student has a genuine reason, beyond any doubt, that disables him/her to appear in the final examination.
- (b) A student may only be allowed Incomplete if he/she has passed mid-term examination.
- (c) The student with incompelete grade has to take that course in later semesters, or he/she shall be required to appear in the final examination only with the consent of respective teacher and head of the concerned department.
- (d) Grade "I" shall be assigned for any Incomplete Course. No fee shall be charged to the student for reregistering the same course(s) in the subsequent semester.

### **ACADEMIC RULES & REGULATIONS**

#### 10. Semester Drop / Temporary Suspension

Temporary suspension is allowed to students facing acute domestic problems / valid reasons subject to the approval of the respective department on the recommendations of concerned Chairperson. During suspension period, the student shall be required to pay semester charges as Reten tion Fee for each suspended semester to continue his/her registration at FEST.

# 11. Migration of students from other Univer sity/Institution

The migration policy shall be as follows

a) The other institution from where a student wants tto transfer to Indus University must be accredited by Pakistan Engineering Council (PEC) (for BE programs) and HEC recognized institute/university in case of migration into BS and other programs.

#### b) Transfer of Credit hours:

- Undergraduate Programs: Only course secured with 'A', 'B' or 'C' grades are transferable. This reflects on a 'Numerical' Grade' as minimum 60%.
- Graduate/Master Programs: `A` and `B` grade course may be transferable. This reflects on a 'Numerical Grade' as minimum 70%.
- c) The courses completed by the student at other instritution will be compared with similar courses being offered.

  Any deficiency shall have to be removed by the student.
- d) Not more than 50% of the courses can be transferable. The student has to fulfil all admission requirements and pay the following fee
  - 1. Prospectus / Application Package Fee
  - 2. Admission and Semester Fee
  - 3. Other Registration & Enrolment requirement

#### 12. Admission & Selection Criteria for B.E. Programs

Minimum Admission Criteria HSC(Pre-Engineering)/DAE (Relevant Discipline) or equivalent: 60% or B Gradre.

#### 13. Selection Criteria/ Weightage

Entry Test + Interview: 50%
 HSC / DAE 40%
 SSC: 10%



# **VISION**

The vision behind the establishment of Department of Electrical Engineering is to achieve the leading position among all other institutes, by providing state-of-the-art knowledge and hand-on experience in relevant field by inducting qualified faculty and well-equipped laboratories as to become a symbol of excellence in Electrical engineering education.

Our mission is to attain academic excellence in research and innovation by offering cutting edge knowledge in order to produce highly qualified graduates in the field of Electrical Engineering, bearing contemporary knowledge with moral and ethical values as to play a vital role in development of industry and progress of country.

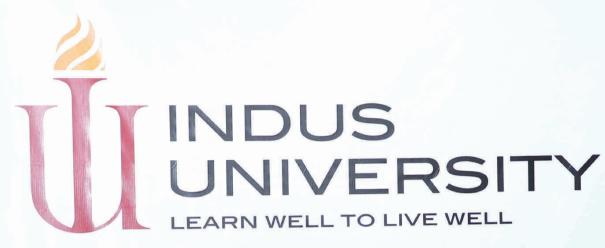
# **OBJECTIVES**

Following are the key objectives of Department of Electrical Engineering

- To provide quality of education with hand-on experience.
- To focus on strong basic sciences mathematical background.
- To develop research and innovation based approach.
- To introduce contemporary engineering courses.
- To fulfill the gap between industrial need and curriculum scheme by producing skilled man-power having latest knowledge in the field of Electrical and Electronics Engineering.









### PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Program Educational Objectives are broad statements describing the career and professional accomplishments that the program is preparing graduates to achieve after 3 to 5 years. The Electrical Engineering graduates, after few years of completion of their degrees will attain capability to professionally advance themselves as to contribute their gained knowledge for the welfare of community and society and engage themselves in continuous learning process through strong interpersonal skills. The electrical engineering program is designed to provide its graduates a solid educational foundation on which they can build successful and sustainable careers in electrical engineering or a related field.

Following are PEOs of the Program:

PEO#	PEO Statment
PEO1	Graduates should have effectiveness to demonstrate solid engineering knowledge through nalysis, synthesis, design and entrepreneurial skills for qualifying them to get immediate mployment or pursue postgraduate studies.
PEO2	Graduates should exhibit professionalism in their work at individual level as well as team member through effective communication and technological skills to achieve sustainable development goals in multidisciplinary engineering environment.
PEO3	Graduates should make contributions to knowledge and establish best engineering practice through research and development, as to assume positions of technical and/or managerial leadership as their careers develop.
PEO4	Graduates should express an ethical commitment to the community and the profession hrough involvement with professional organizations and society.
PEO5	Graduates should engage in lifelong learning that will enable them to continue their professional development either through advanced course work or continuing self-directed learning and development activities.

### PROGRAM LEARNING OUTCOMES (PLOS)/ PROGRAM OUTCOMES (POS)

Program Outcomes are narrower statements that describe what students are expected to know and be able to do by the time of graduation. These related to the skills, knowledge, and behaviors that students acquire in the graduation period through the program. The program must demonstrate that by the time of graduation the students have attained a certain set of knowledge, skills and behavioral traits, at least to some acceptable minimum level. Specifically, it is to be demonstrated that the students have acquired the following graduate attributes:

PO#	PO Attribute	PO Statement
PO1	Engineering Knowledge	An ability to apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
PO2	Problem Analysis	An ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PO3	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.
PO4	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.
PO5	Modern Tool Usage	An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.
PO6	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.
PO7	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.
PO8	Ethics	Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
PO9	Individual and Team Work	An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.
PO10	Communication	An ability 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 documentation, make effective presentations, and give and receive clear instructions.
PO11	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.
PO12	Lifelong Learning	An ability to recognize importance of and pursue lifelong learning in the broader context of innovation and technological developments.

#### **OUTCOME BASED EDUCATION (OBE)**

Pakistan Engineering Council (PEC) was enacted in 1976 by the Parliament as an autonomous statutory body to regulate the engineering profession in the country. According to PEC Act 1976 (amended in 2011), the Council was assigned the functions of accreditation of Engineering Qualifications and maintaining a register of persons qualified from an accredited engineering program to practice as Registered or Professional Engineers.

The OBE Accreditation Manual (2014) published by PEC emphasizes on elements of program learning/educational Outcomes and Program Outcomes required in the engineering curriculum and to adopt Continual Quality Improvement (CQI) procedures covering Outcome Based Education at Institutes/Universities in Pakistan. Consequently, Department of Electrical Engineering, Faculty of Engineering Science and Technology at Indus University has decided to implement OBE System for all its Engineering Programs from Semester Fall 2015 and onwards in order to ensure that the Department has demonstrated capabilities to ensure effectiveness of the Electrical Engineering program(s), Continual Quality Improvement (CQI) and following the spirit of Outcome-Based Education (OBE) over the period of accreditation cycle as

#### Process of Outcome Based Education (OBE)

OBE is a process that involves assessment and evaluation practices in education to reflect the attainment of expected learning outcomes and showing mastery in the program area. OBE in Nutshell

- What do you want the students to have or able to do?
- How can you best help students achieve it?
- How will you know what they have achieved?
- How do you close the loop?

#### Required Depth of Knowledge

S#	Professional	International Agreements	Problem Level To Handle	Required Knowledge Level
1	Engineer	Washington Accord	Complex Problems	Requires in depth knowledge that allows a fundamentals based first principles analytical approach
2	Technologist	Sydney Accord	Broadly Defined Problems	Requires knowledge of principles and applied procedures or method- ologies
3	Technician	Dublin Accord	Well Defined Problems	Requires limited theoretical knowl- edge but must have extensive practi- cal knowledge

#### **Attainment of Different Levels of Outcomes**

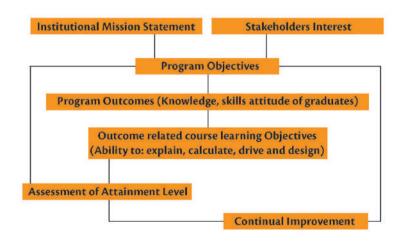
Program Educational Objectives	Few years after graduation (4-5 years)
Programme Outcomes	Upon Graduation
Course/Subject Outcomes	Upon Course Completion
Weekly Topic Outcomes	Upon Weekly Topic Completion

#### **Assessment Methods and Evaluation Tools**

Assessments Methods	Assessment/Evaluation Tools
Formative Assessment	Exit surveys, Exit interviews
Summative Assessment	Alumni surveys and interviews
Course Assessment	Employer surveys and interviews
Program Assessment	Job offers, starting salaries (relative to national benchmark)
Assessment Tools	Admission to graduate schools
Direct and Indirect Assessment	Assignments, reports and test in capstone design course Standardized tests
	Students surveys, individual and focus group interviews
	Peer evaluations, Self evaluations
	Student portfolios
	Behavioral observation
	Written tests linked to learning objectives
	Written project reports
	Oral presentation, live or videotape
	Research proposals, students formulated problems
	Classrooms assessment techniques
	Performance in group and internship assignments and in PBL situation

#### Continual Quality Improvement (CQI)

It is an approach to quality management that builds upon traditional quality assurance methods by emphasizing the organization and systems: It focuses on "process" rather than the individual, it recognizes both internal and external "customers", it promotes the need for objective data to analyze and improve processes. Following is the CQI Process flow for quality improvement in OBE system.



**PROGRAMS** vww.inquiry.indus.edu.pk

# B.E. ELECTRICAL ENGINEERING Course Scheme Total Credit Hours: 135

4 Years, 8 Semesters Program

		SEMESTER I		
Code	Course Title	Knowledge Area	Pre-Req	Credit H
H5(EE)-111	Functional English	Humanities & Social-II	None	2+0
HS(EE)-112	Islamic studies / Ethical Behavior	Humanities & Social-II	None	2+0
GS(EE)-111	Calculus and Analytical Geometry	Natural Sciences-I	None	3+0
GS(EE)-112	Applied Physics	Natural Sciences-H	None	3+1
EE-111	Introduction to Computing	Computing-I	None	1+1
EE-112	Linear Circuit Analysis	Electrical Engineering Foundation-I	None	3+1
Total Credit I		Electrical Engineering Foundation-	None	13+4=17
roun cicarei		SEMESTER II		The Assessment of the State of
HS(EE)-121	Communication Skills	Humanities & Social-III	None	2+0
GS(EE)-121	Differential Equations	Natural Sciences-III	None	3+0
GS(EE)-122	Multivariable Calculus	Natural Sciences-IV	None	3+0
EE-121	Programming Fundamentals	Computing-II	EE-111	3+1
EE-122	Workshop Practice	Electrical Engineering Foundation-II	None	0+
EE-123	Electronic Devices and Circuits	Electrical Engineering Foundation-III	EE-112	3+
Total Credit H				14+3=17
		SEMESTER III		
H5(EE)-211	Pakistan Studies	Humanities & Social-IV	None	2+0
GS(EE)-211	Complex Variables & Transforms	Natural Sciences-V	None	3+0
EE-211	Digital Logic Design	Electrical Engineering Foundation-IV	None	3+1
EE-212	Data Structures and Algorithms	Computing-III	EE-121	3+1
EE-213	Electrical Network Analysis	Electrical Engineering Foundation-V	EE-112	3+1
EE-214	Engineering Drawing	Electrical Engineering Foundation-VI	None	0+1
Total Credit I		THE COURSE W.		14+4=18
		SEMESTER IV		
HS(EE)-221	Engineering Ethics	Humanities-IV	None	3+0
GS(EE)-221	Linear Algebra	Natural Sciences-VI	None	3+0
EE-221	Probability Methods in Engineering	Electrical Engineering Foundation-VII	GS(EE)-111	3+0
EE-222	Introduction to Embedded Systems	Electrical Engineering Core-I	EE-121,EE-211	3+1
EE-223	Signals and Systems	Electrical Engineering Core-II	GS(EE)-211	3+1
PERSONAL PROPERTY AND PERSONS IN	lre .			15.3.17
Total Credit F				15+2=17
	W	SEMESTER, V		- 000000
ID(EE)-311	Thermodynamics	IDEE-I	None	3+0
ID(EE)-311 EE-311	Thermodynamics Electrical Machines	IDEE-I Electrical Engineering Core-III	EE-213	3+0 3+1
ID(EE)-311 EE-311 EE-312	Thermodynamics Electrical Machines Electromagnetic Field Theory	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII	EE-213 GS(EE)-122	3+0 3+1 3+1
ID(EE)-311 EE-311 EE-312 EE-313	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV	EE-213 GS(EE)-122 EE-221,EE-223	3+0 3+1 3+1 3+
ID(EE)-311 EE-311 EE-312 EE-313 EE-314	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII	EE-213 GS(EE)-122	3+0 3+1 3+1 3+ 3+
ID(EE)-311 EE-311 EE-312 EE-313	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V	EE-213 GS(EE)-122 EE-221,EE-223	3+0 3+1 3+0 3+1 3+1
D(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit I	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V SEMESTER VI	EE-213 GS(EE)-122 EE-221,EE-223 EE-223	3+( 3+1 3+1 3+ 3+ 3+ 15+3=18
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit I	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Irs  Technical Writing	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V SEMESTER VI Humanities & Social-VI	EE-213 GS(EE)-122 EE-221,EE-223 EE-223	3+0 3+1 3+1 3+1 3+ 15+3=18
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit H HS(EE)-321 HS(EE)-322	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Irs  Technical Writing Organizational Behavior	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V SEMESTER VI Humanities & Social-VI Humanities & Social-VI	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None	3+0 3+1 3+1 3+1 3+1 15+3=18 3+0 3+0
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit H HS(EE)-321 HS(EE)-322 MS(EE)-321	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems  Trechnical Writing Organizational Behavior Engineering Economics	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V SEMESTER VI Humanities & Social-VI Humanities & Social-VII Management Sciences-I	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None	3+0 3+1 3+1 3+1 3+1 15+3=18 3+0 3+0 3+0
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit H HS(EE)-321 HS(EE)-322 MS(EE)-321	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Its  Technical Writing Organizational Behavior Engineering Economics Breadth Core-1	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V SEMESTER VI Humanities & Social-VI Humanities & Social-VI	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None	3+0 3+1 3+1 3+1 3+1 15+3=18 3+0 3+0 3+0
ID(EE)-311 EE-311 EE-312 EE-312 EE-313 EE-314 Total Gredit H HS(EE)-321 HS(EE)-322 MS(EE)-321 EX-321	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems  Trechnical Writing Organizational Behavior Engineering Economics	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V SEMESTER VI Humanities & Social-VI Humanities & Social-VII Management Sciences-I	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None	3+0 3+1 3+1 3+1 3+1 15+3=18 3+0 3+0 3+0
D(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Gredit H HS(EE)-321 HS(EE)-322 MS(EE)-321 EX-321 EX-321	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V  SEMESTER VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VII	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None	3+0 3+1 3+1 3+1 3+1 15+3=18 3+0 3+0 3+1 3+1
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit H HS(EE)-321 HS(EE)-321 EX-321 EX-322 Total Credit H	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V  SEMESTER VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VII Electrical Engineering Core-VII	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None None	3+0 3+1 3+1 3+ 3+1 15+3=18 3+0 3+0 3+1 3+1 15+2=17
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Gredit H HS(EE)-321 HS(EE)-321 EX-321 EX-321 EX-322 Total Gredit H	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Iss  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V SEMESTER VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VII SEMESTER VII Management Sciences-II	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None None None None	3+0 3+1 3+1 3+1 15+3=18 3+0 3+1 3+1 3+1 15+2=17
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Gredit H HS(EE)-321 HS(EE)-321 EX-321 EX-321 EX-322 Total Gredit H	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V  SEMESTER VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VII  SEMESTER VII Management Sciences-II Electrical Engineering Specialization	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None None	3+4 3+1 3+1 3+1 15+3=18 3+0 3+1 3+1 3+1 15+2=17
ID(EE)-311 EE-311 EE-312 EE-312 EE-314 Total Credit H HS(EE)-321 HS(EE)-321 EX-321 EX-322 Total Credit H MS(EE)-411 EX-411	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Iss  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V SEMESTER VI Humanities & Social-VI Humanities & Social-VI Humanities & Social-VI Electrical Engineering Core-VI Electrical Engineering Core-VI Electrical Engineering Core-VII EMESTER VII Management Sciences-II Electrical Engineering Specialization Depth-I Electrical Engineering Specialization	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None None None None	3+0 3+1 3+1 3+1 15+3=18 3+0 3+1 3+1 3+1 15+2=17
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit H HS(EE)-321 HS(EE)-321 EX-321 EX-321 Total Credit H MS(EE)-411 EX-411 EX-412	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Its  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II Its	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V  SEMESTER VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VII  SEMESTER VII Management Sciences-II Electrical Engineering Specialization Depth-I	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None None None None None	3+0 3+1 3+1 3+1 15+3=18 3+0 3+0 3+0 3+1 3+1 15+2=17
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit IIII HS(EE)-321 HS(EE)-321 EX-321 EX-322 Total Credit IIII EX-411 EX-411	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Its  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II Its  Entrepreneurship Depth Elective – I Depth Elective – II IDEE - II (Introduction to Robotics and	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V  SEMESTER VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VII  SEMESTER VII Management Sciences-II Electrical Engineering Specialization Depth-I Electrical Engineering Specialization Depth-II	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None None None None None	3+0 3+1 3+1 3+1 3+1 15+3=18 3+0 3+1 3+1 3+1 3+1 3+1
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit I HS(EE)-321 HS(EE)-321 EX-321 EX-321 EX-322 Total Credit I EX-411 EX-411 EX-411 EX-411 EX-411 HS(EE)-411 EX-413 HS(EE)-411	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Its  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II Its  Entrepreneurship Depth Elective – I Depth Elective – II IDEE - II (Introduction to Robotics and Electromechanical Systems) Project Part - I Chinese Language Course	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-V  SEMESTER VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VII  SEMESTER VII Management Sciences-II Electrical Engineering Specialization Depth-I Electrical Engineering Specialization Depth-II IDEE-II	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None None None None None None	3+( 3++ 3++ 3++ 15+3=18 3+( 3+( 3+1 3++ 15+2=17 3+ 3+ 3+ 3+
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit II HS(EE)-321 HS(EE)-321 EX-321 EX-321 Total Credit II EX-411 EX-411 D(EE)-411 EE-413	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Irs  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II Irs  Entrepreneurship Depth Elective — I Depth Elective — II IDEE — II (Introduction to Robotics and Electromechanical Systems) Project Part ~ I Chinese Language Course Irs	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-IV Electrical Engineering Core-V  SEMESTER VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VI Electrical Engineering Specialization Depth-I Electrical Engineering Specialization Depth-II IDEE-II Senior Design Project-I Compulsory and Non Credit	EE-213 GS(EE)-122 EE-221,EE-223 EE-223  None None None None None None None Non	3+( 3+) 3+) 3+) 3+) 15+3=18 3+( 3+) 3+1 3+1 3+1 3+1 3+1
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit H HS(EE)-321 HS(EE)-321 EX-321 EX-321 Total Credit H WS(EE)-411 EX-412 D(EE)-411 EE-413 HS(EE)-411 Total Credit H	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Irs  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II Irs  Entrepreneurship Depth Elective – I Depth Elective – II IDEE – II (Introduction to Robotics and Electromechanical Systems) Project Part - I Chinese Language Course	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-IV Electrical Engineering Core-V  SEMESTER VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VII Electrical Engineering Core-VII Electrical Engineering Specialization Depth-I Electrical Engineering Specialization Depth-II Electrical Engineering Specialization Depth-II OEE-II	EE-213 GS(EE)-122 EE-221,EE-223 EE-223  None None None None None None None Non	3+( 3+1 3+1 3+1 3+2 3+6 3+6 3+1 3+1 3+1 3+1 3+1 3+1 3+1 3+1 3+1 3+1
ID(EE)-311 EE-311 EE-312 EE-313 EE-313 EE-314 Total Credit H HS(EE)-321 HS(EE)-321 EX-321 EX-321 EX-321 Total Credit H EX-411 EX-411 EX-411 EX-412 D(EE)-411 Total Credit H EE-413 HS(EE)-411 Total Credit H EX-421	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Ins  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II Ins  Entrepreneurship Depth Elective – I Depth Elective – I Depth Elective – II IDEE – II (Introduction to Robotics and Electromechanical Systems) Project Part – I Chinese Language Course Ins  Depth Elective – III	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-IV Electrical Engineering Core-V  SEMESTER VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VII Electrical Engineering Core-VII Electrical Engineering Specialization Depth-I Electrical Engineering Specialization Depth-II DEE-II Senior Design Project-I Compulsory and Non Credit EMESTER VIII EE Specialization Depth-III EE Specialization Depth-III	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None None None None None None	3+0 3+1 3+1 3+1 15+3=18 3+0 3+0 3+1 3+1 15+2=17 3+1 3+1 0+2 (week) 12+5=17
ID(EE)-311 EE-311 EE-312 EE-313 EE-314 Total Credit H HS(EE)-321 HS(EE)-321 EX-321 EX-322 Total Credit H MS(EE)-411 EX-412 D(EE)-411 Total Credit H HS(EE)-411 Total Credit H EX-422 EX-422	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Irs  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II Irs  Entrepreneurship Depth Elective – I Depth Elective – II IDEE – II (Introduction to Robotics and Electromechanical Systems) Project Part - I Chinese Language Course IS  Depth Elective - III	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-IV Electrical Engineering Core-V  SEMESTER VI Humanities & Social-VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VI Electrical Engineering Specialization Depth-I Electrical Engineering Specialization Depth-II IDEE-II Senior Design Project-I Compulsory and Non Credit EMESTER VIII EE Specialization Depth-III EE Specialization Depth-III EE Specialization Depth-III EE Specialization Depth-III	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None None None None None None	3+0 3+1 3+1 3+1 15+3=18 3+0 3+1 3+1 15+2=17 3+1 (week) 12+5=17 3+1
ID(EE)-311 EE-311 EE-312 EE-313 EE-313 EE-314 Total Credit I HS(EE)-321 HS(EE)-321 ES-321 ES-322 Total Credit I  MS(EE)-411 EX-412 ID(EE)-411 EE-413 HS(EE)-411	Thermodynamics Electrical Machines Electromagnetic Field Theory Communication Systems Linear Control Systems Ins  Technical Writing Organizational Behavior Engineering Economics Breadth Core-I Breadth Core-II Ins  Entrepreneurship Depth Elective – I Depth Elective – I Depth Elective – II IDEE – II (Introduction to Robotics and Electromechanical Systems) Project Part – I Chinese Language Course Ins  Depth Elective – III	IDEE-I Electrical Engineering Core-III Electrical Engineering Foundation-VIII Electrical Engineering Core-IV Electrical Engineering Core-IV Electrical Engineering Core-V  SEMESTER VI Humanities & Social-VI Humanities & Social-VI Management Sciences-I Electrical Engineering Core-VI Electrical Engineering Core-VII Electrical Engineering Core-VII Electrical Engineering Specialization Depth-I Electrical Engineering Specialization Depth-II DEE-II Senior Design Project-I Compulsory and Non Credit EMESTER VIII EE Specialization Depth-III EE Specialization Depth-III	EE-213 GS(EE)-122 EE-221,EE-223 EE-223 None None None None None None None None	3+0 3+1 3+1 3+1 15+3=18 3+0 3+0 3+0 3+1 3+1 15+2=17 3+0 3+1 3+1 0+3

3+1

**PROGRAMS** 

#### BREADTH CORE BE (EN FOR ELECTRONICS, EP FOR POWER STREAM)

Code	Course Title	Knowledge Area	Pre-Req	Credit Hrs
EN-321	Breadth Core-I (Electronics) (Electronic Circuit Design)	Electrical Engineering Core-VI		3+1
EP-321	Breadth Core-I (Power) (Power System Analysis)		EE-213	3+1
EN-321	Breadth Core-II (Electronics) (Electronic Circuit Design)	Electrical Engineering Core-VII		3+1
EP-321	Breadth Core-II (Power) (Power System Analysis)		EE-123 EE-213	3+1

#### **ELECTIVE COURSES BE ELECTRICAL (ELECTRONICS)**

Code	Course Title	Knowledge Area	Pre-Req	Credit Hrs
EN-411	Depth Elective - I (Electronics) (Instrumentation and Measurements)	Electrical Engineering Specialization Depth-I (Electronics)	None	3+1
EP-411	Breadth Core-I (Power) (Instrumentation and Measurements)	Electrical Engineering Specialization Depth-I (Power)	None	3+1
EN-412	Depth Elective - II (Electronics) (Digital Signal Processing)	Electrical Engineering Specialization Depth-II (Electronics)	None	3+1
EP-412	Breadth Core-II (Power) (Electrical Power Transmission)	Electrical Engineering Specialization Depth-II (Power)	EE-213	3+1
EN-421	Depth Elective - III (Electronics) (Digital System Design)	Electrical Engineering Specialization Depth-III (Electronics)	EE-222	3+1
EP-421	Breadth Core-III (Power) (High Voltage Engineering)	Electrical Engineering Specialization Depth-III (Power)	None	3+1
EN-422	Depth Elective - IV (Electronics) (Industrial Electronics)	Electrical Engineering Specialization Depth-IV (Electronics)	EE-322	3+1
EP-422	Breadth Core-IV (Power) (Power System Protection)	Electrical Engineering Specialization Depth-IV (Power)	EE-321	3+1
EN-423	Depth Elective - V (Electronics) (Optoelectronics)	Electrical Engineering Specialization Depth-IV (Electronics)	None	3+1
EP-423	Breadth Core-V (Power) (Power Generation)	Electrical Engineering Specialization Depth-V (Power)	None	3+0

# ME (Electrical Engineering ) Course Scheme

Total Credit Hours: 33 2 Years, 4 Semesters Program

Code	Course Title	Credit Hrs
EE 8xx	Core Course - I	3
EE 8xx	Core Course - II	3 3 3
EE 8xx	Core Course - III	3
Total Credit	Hrs	9
	SEMESTER II	
EE 8xx	Elective - I	3
EE 8xx	Elective- II	3
EE 8xx	Elective – III	3
Total Credit		9
	SEMESTER III	
EE 8xx	Elective – IV	3
RH 8xx	Research Methodology	3
EE 8xx	ME Thesis-I OR Elective	3
Total Credit	Hrs	9
	SEMESTER, IV	
EE 8xx	Elective - V	3
RH 8xx	ME Thesis-II OR Elective	3
Total Credit	Her	6

List of Core Courses		
S.No	Courses	
1.	Advanced Digital Signal Processing	
2.	Advanced Electrical Machines and Drives	
3.	Power Electronic Converters	
4.	Advanced Control Systems	
5.	Advanced Power Electronics	

	Mandatory Course		
5.No	Courses		
1.	Research Methodology (Mandatory)		

Lis	List of Elective Courses (Power Systems)		
S.No	Courses		
1.	Advanced Power System Analysis		
2.	Advanced High Voltage Engineering		
3.	Power System Stability and Control		
3. 4. 5.	Computational methods in power system analysis		
	Flexible AC Transmission System		
6.	High voltage DC Transmission System		
7. 8.	Distribution System Modeling and Analysis		
8.	Advanced Power System Operation and Control		
9.	Power Generation Economics		
10.	Power System Restructuring		
11.	Advanced Power System Transmission		
12.	Power System Reliability		
13.	Advanced Smart Grid		
14.	Power System Transients		

15.	Power Quality
16.	Modeling and Simulation of Power System Components
17.	Artificial Intelligence Techniques in Power System
18.	Advanced Power System Protection
19.	Insulation Coordination in Power Systems
20.	Power Generation Economics
21.	Power System Restructuring
22.	Energy Management
23.	Energy Audit
24.	Advanced Renewable Energy Systems
25.	Distributed Generation
26.	Condition Monitoring Techniques
27.	Modeling and Simulation of Electrical Machines
28.	Special Purpose Electrical Machines
29.	Advanced Electrical Machine Design
30.	Maintenance and Troubleshooting of Electrical Machines
31.	Photovoltaic Systems
32.	Power System Planning
33.	Integration of Green Energy sources with power system
34.	Optimization techniques in power systems
35.	Advanced topics in power system

S.No	Courses
1.	Simulation Modeling and Analysis
2.	Stochastic Processes
3.	Optimization Theory
4.	Advanced Computer Architecture
5.	Advanced Computer Networks
5.	Machine Learning
7.	Data Mining Concepts and Algorithms
В.	Embedded Systems Design
9.	Operating Systems Design
10.	Image and Video Processing
11.	Design and Analysis of Algorithms
12.	Network Security
13.	Wireless and Mobile Communication
14.	Information and Coding Theory
15.	Statistical Signal Processing
16.	Adaptive Filter Theory
17.	Optical Communications
18.	Advanced Electromagnetic Theory
19.	Analysis and Design of Microwave Linear Circuits
20.	Advanced VLSI System Design
21.	Antenna Theory and Design
22.	Power Electronic Converters
23.	Control of Electric Machine Drives
24.	Advanced Power Electronics
25.	Array Signal processing
26.	Adaptive Array Processing
27.	Artificial Intelligence
28.	Pattern Recognition
29.	Distributed Systems
30.	Nonlinear Microwave and RF Circuits

**PROGRAMS** 

# Doctor of Philosophy in Electrical Engineering Course Scheme Total Credit Hours: 48

3.5 Years, 7 Semesters Program

SEMESTER 1		
Code	Course Title	Credit Hrs
EL-9XX	Core	3
EL-9XX	Core	3
RH-928	Research Methodology	3
Total Credi	SEMESTER II	9
EL-XXX	Elective	3
EL-XXX	Elective	3
EL-XXX	Elective	3
Total Credi	t Hrs SEMESTER, III	9
	Control of the Control of Control	4400
EL-903	Comprehensive Exam	0
EL-904	Supervised Research (PhD Thesis) Proposal	6
Total Credi	SEMESTER IV	6
EL-905	Supervised Research (PhD Thesis) Part-1	6
	SEMESTER V	
EL-906	Supervised Research (PhD Thesis) Part-2	6
	SEMESTER VI	
EL-907	Supervised Research (PhD Thesis) Part-3	6
	SEMESTER VII	
EL-908	PhD Thesis Defense	6

Core Courses		
Code	Course Title	Credit Hrs
RH-929	Mathematical Modeling and Simulation	3
RH-930	Independent Study	3
EL-911	Research Methods in PhD Studies	3

Code	Course Title C	redit Hrs
EL-909	Real Time DSP Design and Applications	3
	Advanced Digital Communications	3
EL-912	Power management in wired and wireless system	ns 3
EL-913	Low Power System Design	3
EL-914	Advance System Modeling and Simulation	3
EL-915	Special Topics in distributed systems	3
EL-916	Power awareness in distributed systems	3
EL-917	Power System Stability and Dynamics	3
EL-918	Power System Transients	3
	HVDC and Flexible AC Transmission	3
EL-920	Rural Electrification and Distributed Generation	3
EL-921	Artificial Intelligence techniques in Power system	ns 3
EL-922	Power System Deregulation	3
EL-923	Advanced Computer Architecture	3
EL-924	Advanced Embedded Systems	3
EL-925	Advanced Digital Signal Processing	3
EL-926	Advanced Digital System Design	3
EL-927	ASIC Design Methodology	3
EL-928	Power Aware Computing	3
EL-945	Advanced Artificial Intelligence	3
EL-946	Advanced Neural Networks	3
EL-931	Advanced Optical Communication	3
EL-932	Data Ware housing and Mining	3
EL-933	Machine Learning	3
EL-934	Formal Methods and Specifications	3
EL-935	Human Aspects in Software Engineering	3
EL-936	Advanced Engineering Mathematics	3
EL-937	Logic and Research	3
EL-938	Advanced Qualitative Research Methods	3
EL-939	Advanced Quantitative Research Methods	3
EL-940	Critical Review of Literature	3
EL-941	Computer Vision	3
EL-942	Pattern Recognition	3
EL-943	Agent-Based Modeling	3
EL-944	Bio Medical Image Analysis	3





The vision of department of sciences & technology is to achieve the premier position amongst all other institutes, by providing state-of-the-art knowledge and hands-on experience in the field of Science & technology by fostering spirit of inquiry and nurturing curiosity, among faculty and students for diverse and challenging roles in a complex domestic and global environment, and become a symbol of reshaping trends in science & technology education.

# MISSION

To attain the position of excellence in academic, research and innovation, in order to produce highly qualified graduates in the field of science & and technology, combining the attributes of contemporary knowledge with moral and ethical values as to play a vital role in development of industry and progress of country.

# **OBJECTIVES**

Following are the key objectives of department of sciences & technology

- To produce graduates who are skilled critical thinkers, problem solvers, innovators and team players.
- To focus on strong basic sciences and mathematical background.
- To develop research and innovation based approach.
- To introduce contemporary science & technology related courses.
- To establish fully equipped state of the art Laboratories.
- To fulfill the gap between industrial need and curriculum scheme by producing skilled man-power having latest knowledge in the field of engineering technology
- Develop an appreciation for technology in our society while learning the proper and safe use of tools, machines and materials.







#### BS (Civil Engineering Technology)

**Course Scheme** Total Credit Hours: 137 4 Years, 8 Semesters Program

	SEMESTER I	
Code	Course Title Credit	
CS-113	Applied Mathematics -I	3
CT-123	Civil Engineering Drawing	3
CS-123	Introduction to Computer Fundamentals	3
CH-112	Islamic studies/Professional Ethics	2
CM-112	Occupational Health & Safety Management	2
CT-124	Surveying	4
Total Credi		17
	SEMESTER II	
CS-133	Applied Mathematics-II	3
CT-144	Applied Mechanics	4
CH-123	Communication Skills	3
CT-134	Concrete Technology	4
CT-154	Materials and Methods of Construction	4
Total Credi		18
iotai cicai	SEMESTER III	-
CT-243	Fluid Mechanics	3
CT-212	Introduction to Architecture and Town Planing	2
CT-254	Mechanics of Solids	2
CH-212	Pakistan Studies	2
CT-223A	Quantity Surveying and Contract Documents	3
CT-223A	Soil Mechanics	3
Total Credi		17
iotai Credi	SEMESTER, IV	1//
	197 (Barrier Brown	
CM-213	Environmental Management	3
CH-223	Technical Report Writing	3
CT-283	Theory of Structure	3
CT-264	Transportation Engineering	4
CT-274	Water Supply and Waste Water Management	4
Total Credi		17
	SEMESTER, V	
CT-343	Computer Aided Building Modeling and Design	3
CT-333	Construction and Hydraulic Machinery	3
CT-353	Foundations Engineering	3
CT-313	Hydrology	3
CM-313	Project Management	3
CT-323	Reinforced Concrete Structure	3
Total Credi		18
	SEMESTER, VI	
CT-373	Geology & Earthquake Engineering	3
CT-383	Irrigation and Hydraulic Structures	3
CT-363	Pre-Stressed & Precast Concrete	3
CT-3103	Project	3
CT-393	Steel Structures	3
Total Credi	(Hrs	15
	SEMESTER, VII	77.5
CT-3113	Project (Continue)	3
CT-4116	Supervised Industrial Training-I	16
Total Credi		19
	SEMESTER VIII	
CT-4216	Professional Supervised Field Training-II	16
Total Credi	HIS	16

BS (Mechanical Engineering Technology) Course Scheme Total Credit Hours: 136 4 Years, 8 Semesters Program

	SEMESTER I	
Code	Course Title Cre	dit Hrs
MS-133	Applied Chemistry	3
M5-123	Applied Mathematics -I	3
MS-113	Applied Physics	3
M5-143A	Introduction to Computer Fundamentals	3
MH-112	Islamic Studies/Professional Ethics	2
MT-113	Workshop Technology	3
Total Credit		17
Washington .	SEMESTER II	721
MS-153	Applied Mathematics-II	3
MT-134	Applied Thermodynamics-I	4
MT-144	Basic Electrical & Electronics	4
MH-122	Pakistan Studies	2
MT-124	Technical Drawing and CAD-1	4
Total Credit I	SEMESTER III	17
MT-243	Applied Thermodynamics-II	3
MT-213	CAD-II	3
MH-213	Communication Skills	3
MT-223	Industrial Material	3
MT-233	Mechanics of Material	3
Fotal Credit I	lis .	15
	SEMESTER, IV	
MT-273	Engineering Statics	3
MT-264	Fluid Mechanics	4
MT-253	Machine Design	3
MS-213	Probability and Statistics	3
MH-223	Technical Report Writing	3
MM-212	Total Quality Management	2
Total Credit I	SEMESTER, V	18
MT-333	Dynamics	3
MH-312	Economics	2
MT-313	Heat Transfer	3
VT-324	IC Engine	4
VT-343	Manufacturing Processes	3
MM-313	Project Management	3
Total Credit	Hrs	18
MT-353	SEMESTER VI Instrumentation and Control	3
MT-353	Material Handling & Safety	4
MT-363	Mechanical Vibration	3
MT-393	Project	3
MT-393		3
	Refrigeration & Air Conditioning	
Total Credit I	SEMESTER VII	16
MT-3103	Project (Continue)	3
MT-4116	Supervised Industrial/Field Training-I	16
Total Credit	Hrs	19
	SEMESTER, VIII	
MT-4216	Supervised Industrial/Field Training-II	16
Total Credit	Ulara.	36

# BS (Electrical Engineering Technology) Course Scheme

Total Credit Hours: 137 4 Years, 8 Semesters Program

	SEMESTER I	
Code	Course Title Crec	lit Hi
ES-113	Applied Mathematics-I	3
ES-123	Applied Physics	3
ET-123	Engineering Drawing	3
ES-133	Introduction to Computer Fundamentals	3
EH-112	Islamic Studies/Professional Ethics	2
ET-114	Linear Circuits Analysis	3
Total Credit		1
	SEMESTER II	
ES-143	Applied Mathematics-II	3
ET-143	Basic Mechanical Technology	3
EH-123	Communication Skills	3
ET-153	Electrical Machines-I	3
ET-134	Electronics	4
EH-132	Pakistan Studies	2
Total Credit		1
	SEMESTER III	
ET-244	Digital Electronics	4
ET-224	Electrical Instruments Measurements	4
ET-234	Electrical Machines-II	4
ET-212	Power Generation Systems	2
EH-213	Technical Report Writing	3
Total Credit		- 1
	SEMESTER IV	
ET-254	AC Circuits Analysis	4
ET-283	Electrical Power Distribution and Utilization	3
ET-273	Electrical Power Transmission	3
ET-262	Electro-Magnetic Fields	2
ET-294	Power Electronics	4
Total Credit	t Hrs	10
	SEMESTER V	
ET-334	Communication Technology	4
ET-343	Control Technology	3
ET-353	High Voltage Technology	3
ET-313	Micro-Processor Theory & Interfacing	3
ET-323	Switch Gear & Protective Devices	3
EM-312	Total Quality Management	2
Total Credit		- 18
	SEMESTER VI	
ET-374	Data & Computer Communication	4
ET-393	Final Year Project -1	3
ET-384	Industrial Drives & PLC	4
ET-362	Power System Analysis	2
EM-323	Project Management	3
Total Credit		16
	SEMESTER, VII	
ET-3103	Final Year Project -II	3
ET-4116	Supervised Industrial/Field Training-I	1
Total Credit		-1
rotal credit	SEMESTER VIII	
		- 0
ET-4216	Supervised Industrial/Field Training-II	1
Total Credit	e I Propri	- 1

# BS (Electronics Engineering Technology) Course Scheme

Total Credit Hours: 140 4 Years, 8 Semesters Program

	SEMESTER I	
Code	A STATE OF THE PARTY OF THE PAR	lit Hrs
ELS-113 ELS-123	Applied Mathematics -I	3
	Applied Physics	3
ELT-124	Electrical Circuit Analysis	4
ELT-111	Electronics Workshop Practice (Lab)	
ELS-133	Introduction to Computer Fundamentals Islamic studies/Professional Ethics	3 2
ELH-112 Total Credit		16
Total Credit	SEMESTER II	16
ELS-143	Applied Mathematics-II	3
ELS-153	Computer Programming	3
ELT-144	Digital Logic Technology	4
ELT-134	Electrical Technology-I	4
ELT-151	PCB Design and Fabrication Workshop (Lab)	1
ELH-112	Pakistan Studies	2
Total Credit		17
	SEMESTER III	
ELH-213	Communication Skills	3
ELT-214	Electrical Technology-II	4
ELT-224	Electronic Devices & Technology	4
ELT-244	Instrumentation & Measurement	4
ELT-233	Microprocessors	3
Total Credit	Hrs	18
	SEMESTER IV	
ELT-283	Amplifier & Oscillators	3
ELT-254	Communication Systems and Techniques	4
ELT-263	Control Technology	3
ELT-272	Electromagnetic Field Theory	2
ELT-293	Power Electronics	3
ELH-223	Technical Report Writing	3
Total Credit		18
	SEMESTER V	
ELT-334	Applied Antenna & Wave Propagation	4
ELT-314	Industrial Drives	4
ELT-343	Industrial Electronics and Applications	3
ELT-353	Renewable Energy Technology	3
ELT-324	VLSI Technology	4
Total Credit	Hrs	18
	SEMESTER, VI	
ELT-384	Communication Networks	4
ELT-374	FPGA Based Systems	4
ELT-364	Industrial Automation and Robotics	4
ELT-393	Project	3
ELM-313	Project Management	3
Total Credit		18
	SEMESTER VII	
ELT-3103	Project (Continue)	3
ELT-4116	Supervised Industrial/Field Training-I	16
Total Credit		19
rotal credit	SEMESTER VIII	- 13
F1 - 101 C		100
ELT-4216	Supervised Industrial/Field Training-II	16
Total Credit		10



The Faculty of Computing and Information Technology strives to be the Centre of excellence in Computer Science & Emerging Technologies using innovative means towards realization of global standards.

### MISSION

The Faculty of Computing and Information Technology aims to achieve scholarly excellence in the domain of computing & information technology and attain national & international recognition through its teaching and research contributions. It also undertakes to maintain high standards of productivity and quality that is necessary for the realization of national development.

# **OBJECTIVES**

- To enhance the environment for research, teaching and learning by extending knowledge in the field
  of Computing & Information Technology especially in the emerging areas of AI, IoT, Machine Learning and other allied disciplines.
- To provide a balance between theory and practice, this will form the basis for students' future careers as AI, Computing and E-Commerce professionals.
- To improve the national and international standing of the faculty in terms of research, teaching and learning.
- To provide the opportunity for students in professional career development through high quality education
- To ensure quality courses that focus on current, up to date techniques and industrial practice.







### VISION

The vision behind the establishment of Department of Computing is to offer diversified programs in computing to prepare professionals in respective disciplines through experienced and qualified faculty in order to train students to deal with future challenges and contribute to the society in productive manner.

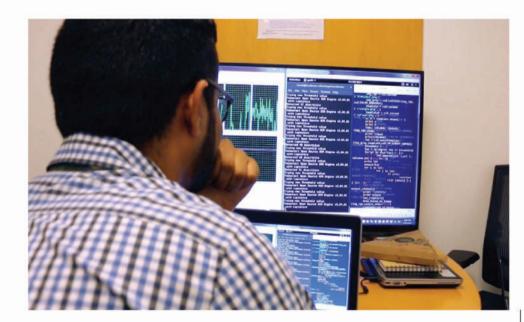
# MISSION

Our mission is multifold: creation of knowledge through research and development, dissemination of knowledge edge via teaching and scholarly publications, and to serve the society through innovative ideas of research by flexible and comprehensive curriculum keeping in view the rapidly evolving world of technology.

# **OBJECTIVES**

Following are the key objectives of Department of Computing

- To provide excellent environment for the students with best instructional delivery system and advanced equipments and labs so that they can lead the future society towards cutting edge technoogy.
- To provide a level of quality education based on which the students can serve society through excel lence in research and development.
- To educate and groom students so that they can play Vital role for the betterment of the society.
- To educate and train the students so that they can play a leading and transformational role in the industry and academia in future.
- To prepare employable professionals with multifaceted skills to excel in dynamic environment.
- To demonstrate excellence in respective disciplines of computing, individually and as a team.
- To create knowledge segments via research having worthwhile applications to serve the society by solving real issues and contribute towards raising the overall standards.





#### www.inquiry.indus.edu.pk

#### BS (Computer Science)

#### Course Scheme

Total Credit Hours: 130

4 Years, 8 Semesters Program

	SEMESTER I		
Code	Course Title	Credit Hrs	Pre-Reg.
GE-111	Introduction to Info. & Comm.	2-1	(8)
	Technologies		
CC-111	Programming Fundamentals	3-1	**
GE-113	English Composition & Comprehension	3-0	18
MS-112	Calculus & Analytical Geometry	3-0	
MS-111 GE-112	Applied Physics Pakistan Studies	3-0 2-0	1
Total Cre		18	
	SEMESTER II		100
CC-121	Object Oriented Programming	3-1	Programming
	and the second of	120	Fundamentals
CSC-121 GE-121	Digital Logic Design Islamic Studies / Ethics	3-1 3-0	3
MS-121	Differential Equations	3-0	Calculus & Anal-
			ytical Geometry
GE-122	Comm. & Presentation Skills	3-0	29 %
Total Cre		16	
	SEMESTER III		
C-211	Data Structures & Algorithm	3+1	Object Oriented
CSC-211	Computer Organ. & Assembly Language	3+1	Programming Digital Logic
30-211	Computer Organi & Assembly Language	311	Design
C-212	Discrete Structures	3+0	-
WS-211	Linear Algebra	3+0	
JE-211	University Elective - I	3+0	
Total Cre	SEMESTER IV	17	
		420040	LENGTH STATE OF
C-221	Database Systems	3+1	Data Structures
CC-222	Operating Systems	3+1	Section 1
CSC-221	Software Design & Analysis	3+0	Data Structures
VIS-221	Probability & Statics	3+0	35
JE-221	University Elective - II	3+0	
Total Cre	SEMESTER, V	17	
CSC-311	Theory of Automata	2.0	
CSS-311	Software Engineering	3+0 3+0	Software Design
	Solemare Engineering		& Analysis
CSS-312	Design & Analysis of algorithm	3+0	Data Structures
			Comm. &
GE-311	Technical & Business writing	3+0	
CSS-313	Numerical Computing	3+0	
CSS-313	Numerical Computing dit Hrs		
CSS-313 Total Cre	Numerical Computing dit Hrs SEMESTER VI	3+0 15	
CSS-313 Total Cre	Numerical Computing dit Hrs SEMESTER, VI Data Communication and Computer network	3+0 15 s 3+1	Presentation Skills
CSS-313 Total Cre CC-311 CSC-321	Numerical Computing dit Hrs SEMESTER VI Data Communication and Computer network Compiler Construction	3+0 15 s 3+1 3+0	Presentation Skills - Theory of Automati
CSS-313 Total Cre CC-311 CSC-321 CSC-322	Numerical Computing differs SEMESTER VI Data Communication and Computer network Compiler Construction Artificial Intelligence	3+0 15 s 3+1 3+0 3+1	Presentation Skills
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321	Numerical Computing  ditiFirs  SEMESTER: VI  Data Communication and Computer network  Compiler Construction  Artificial Intelligence  CS Elective I	3+0 15 s 3+1 3+0 3+1 3+0	Presentation Skills - Theory of Automati
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321	Numerical Computing dit Hrs SEMESTER VI Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I University Elective - III	3+0 15 s 3+1 3+0 3+1 3+0 3+0	Presentation Skills - Theory of Automati
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321	Numerical Computing disHrs SEMESTER VI Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I University Elective - III disHrs	3+0 15 s 3+1 3+0 3+1 3+0	Presentation Skills - Theory of Automara
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321 Total Cre	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I University Elective - III dit Hrs  SEMESTER VIII	3+0 15 s 3+1 3+0 3+1 3+0 3+0 17	Presentation Skills - Theory of Automara
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321 Total Cre	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I University Elective - III dit Hrs SEMESTER VII Final Year Project - 1	3+0 15 s 3+1 3+0 3+1 3+0 3+0 17	Presentation Skills - Theory of Automati
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321 Total Cre CSC-411 CC-411	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective 1 University: Elective - III dit Hrs  SEMESTER VII Information Security	3+0 15 3 3+1 3+0 3+1 3+0 3+0 17	Presentation Skills - Theory of Automati
CSC-411 CC-411 CSS-411	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I University Elective - III ditt Hrs SEMESTER VII Final Year Project - I Information Security Professional Practices	3+0 15 s 3+1 3+0 3+1 3+0 3+0 17 0+3 3+0 3+0	Presentation Skills Theory of Automan
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321 Total Cre CSC-411 CC-411 CSS-411	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective   University Elective - III dit Hrs SEMESTER VII Final Year Project - 1 Information Security Professional Practices Parallel & Distributing Computing	3+0 15 s 3+1 3+0 3+1 3+0 3+0 17 0+3 3+0 3+0 3+0 3+0	Presentation Skills Theory of Automan
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321 Total Cre CSC-411 CSC-411 CSC-411 CSC-412 CSE-412	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I University Elective - III dit Hrs  SEMESTER VII Final Year Project - I Information Security Professional Practices Parallel & Distributing Computing CS Elective III CS SEMESTER VIII CS SEMESTER VIIII CS SEMESTER VIII CS SEMESTER VIIII CS SEMESTER VIIII CS SEMESTER VIII CS SEMESTER VIIII CS SEMES	3+0 15 s 3+1 3+0 3+1 3+0 3+0 17 0+3 3+0 3+0 3+0 3+0 3+0	Presentation Skills Theory of Automan
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321 Total Cre CSC-411 CSC-411 CSC-411 CSC-412 CSE-412	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I  University Elective - III dite Hrs  SEMESTER VII Final Year Project - I Information Security Professional Practices Parallel & Distributing Computing CS Elective III dit Hrs	3+0 15 3 3+1 3+0 3+0 3+0 17 0+3 3+0 3+0 3+0 3+0 3+0 3+0 3+0	Presentation Skills Theory of Automan
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321 Total Cre CSC-411 CSC-411 CSS-411 CSS-412 CSC-	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I University Elective - III dit Hrs SEMESTER VII Final Year Project - I Information Security Professional Practices Parallel & Distributing Computing CS Elective III dit Hrs SEMESTER VII SEMESTER VIII SEMESTER VIII SEMESTER VIII SEMESTER VIII SEMESTER VIII SEMESTER VIII	3+0 15 s 3+1 3+0 3+0 3+0 17 0+3 3+0 3+0 3+0 3+0 3+0 3+0 3+0	Presentation Skills Theory of Automati
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321 Total Cre CSC-411 CSC-411 CSC-412 CSE-412 Total Cre	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I University Elective - III dit Hrs  SEMESTER VII Final Year Project - I Information Security Professional Practices Parallel & Distributing Computing CS Elective III dit Hrs  SEMESTER VII Final Year Project - III Final Year Project - III Final Year Project - III	3+0 15 3 3+1 3+0 3+0 3+0 17 0+3 3+0 3+0 3+0 3+0 3+0 3+0 3+0 3+0 3+0	Presentation Skills Theory of Automati
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321 Total Cre CSC-411 CSC-411 CSC-411 CSC-412 CSE-412 Total Cre CSC-421 UE-421 UE-421	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I University Elective - III ditelfits  SEMESTER VII Final Year Project - I Information Security Professional Practices Parallel & Distributing Computing CS Elective III ditelfits  SEMESTER VII Final Year Project - II University Elective - IV	3+0 15 3 3+1 3+0 3+1 3+0 3+0 17 0+3 3+0 3+0 3+0 15	Presentation Skills Theory of Automati
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321 Total Cre CSC-411 CSS-411 CSS-412 Total Cre CSC-412 Total Cre	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I University Elective - III SEMESTER VII Final Year Project - I Information Security Professional Practices Parallel & Distributing Computing CS Elective III dit Hrs SEMESTER VII Final Year Project - II University Elective - IV CS Elective - IV CS Elective - IV	3+0 15 3 3+1 3+0 3+1 3+0 3+0 17 0+3 3+0 3+0 3+0 3+0 3+0 3+0 3+0 3+0 3+0	Presentation Skills Theory of Automati
CSS-313 Total Cre CC-311 CSC-322 CSE-321 UE-321 Total Cre CSC-411 CSC-411 CSC-412 CSE-412 Total Cre CSC-421 UE-421 CSE-421 CSE-421 CSE-421 CSE-422 CSE-422	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Elective I University Elective - III dit Hrs  SEMESTER VII Final Year Project - I Information Security Professional Practices Parallel & Distributing Computing CS Elective III dit Hrs  SEMESTER VII Final Year Project - II University Elective - IV CS Elective - IV CS Elective - V	3+0 15 3 3+1 3+0 3+1 3+0 17 0+3 3+0 3+0 3+0 3+0 15	Presentation Skills Theory of Automati
CSS-313 Total Cre CC-311 CSC-321 CSC-322 CSE-321 UE-321 Total Cre CSC-411 CSC-411 CSS-412 CSC-412 Total Cre CSC-421 UE-421 UE-421 UE-421 CSC-421 UE-421 UE-421 UE-421	Numerical Computing dit Hrs  SEMESTER VI  Data Communication and Computer network Compiler Construction Artificial Intelligence CS Electrive I University Elective - III dite Hrs  SEMESTER VII Final Year Project - I Information Security Professional Practices Parallel & Distributing Computing CS Elective III University Elective - IV CS Elective - IV CS Elective - V CS Elective - VI	3+0 15 3 3+1 3+0 3+1 3+0 3+0 17 0+3 3+0 3+0 3+0 3+0 3+0 3+0 3+0 3+0 3+0	Presentation Skills - Theory of Automara

University Elective Courses		
Course Title	Credit Hrs	
Foreign Language	2-0	
Social Service	1-0	
Management Related	3-0	
Social Science Related	3-0	
Economy Related	3-0	
Total Credit Hrs	12	

Computer Science Core Courses  Course Title Credit Hrs		
Comp. Organization & Assembly Language	3-1	
Digital Logic Design	3-1	
Design & Analysis of Algorithms	3-0	
Parallel & Distributed Computing	3-0	
Artificial Intelligence	3-1	
Theory of Automata	3-0	
Total Credit Hrs	24	

Computer Science Elective courses		
Course Title	Credit Hrs	
Agent Based Software Engineering	3-0/2-1	
Artificial Intelligence	3-0/2-1	
Big Data Analytics	3-0/2-1	
Calculus & Analytical Geometry	3-0/2-1	
Compiler Construction	3-0/2-1	
Computer Graphics	3-0/2-1	
Computer Vision	3-0/2-1	
Cyber Security	3-0/2-1	
Data Encryption and Security	3-0/2-1	
Mobile Application Development	3-0/2-1	
Multimedia Communications	3-0/2-1	
Natural Language Processing	3-0/2-1	
Numerical Computing	3-0/2-1	
Programming Fundamentals	3-0/2-1	
Real Time Systems	3-0/2-1	
Semantic Web	3-0/2-1	
Simulation and Modeling	3-0/2-1	
Software Construction & Development	3-0/2-1	
Software Design & Architecture	3-0/2-1	
Software Project Management	3-0/2-1	
Software Quality Engineering	3-0/2-1	
Software Re-Engineering	3-0/2-1	
Software Requirements Engineering	3-0/2-1	
Stochastic Processes	3-0/2-1	
System and Network Administration	3-0/2-1	
Systems Programming	3-0/2-1	
Theory of Automata	3-0/2-1	
Visual Programming	3-0/2-1	
Web Engineering	3-0/2-1	
Web Technologies	3-0/2-1	
Total Credit Hrs	15	

Computer Science Supporting Courses		
Course Title	Credit Hrs	
Graph Theory	3-0	
Theory of Programming Languages	3-0	
Numerical Computing	3-0	
Total Credit Hrs	14	

**PROGRAMS** 

# BS (Software Engineering) Course Scheme Total Credit Hours: 130 4 Years, 8 Semesters Program

	SEMESTER I		
Code	Course Title	Credit H	rs Pre-Req.
GE-111	Introduction to Info. Comm. Technologies		
CC-111	Programming Fundamentals	3+1	-
MS-111	Applied Physics	3+0	
MS-112	Calculus Analytical Geometry	3+0	
GE-112	Pakistan Studies	2+0	383
GE-113	English Composition Comprehension	3+0	7.50
Total Cre		18	
	SEMESTER II		
CC-121	Object Oriented Programming	3+1	Programming Fundamentals
GE-121	Communication & Presentation Skills	3+0	-
CC-122	Discrete Structures	3+0	
SE-121	Intro to Software Engineering	3+0	
GE-122	Islamic/Ethics Studies	2+0	383
Total Cre		15	
	SEMESTER III		
CC-211	Data Structures Algorithms	3+1	Object Oriented Programming
SE-211	Software Requirement Engineering	3+0	Intro to Software Engineering
CC-212	Human Computer Interaction	3+0	277
MS-211	Linear Algebra	3+0	25
UE-211	University Elective-I	3+0	50
Total Cre		16	
	SEMESTER IV		
CC-221	Operating Systems	3+1	5
CC-222	Database Systems	3+1	Data Structures Algorithms
SE -221	Software Design & Architecture	2+1	Data Structures Algorithms
SES-221	SE Supporting - I	3+0	93
UE-221	University Elective – II	3+0	8
Total Cre	SEMESTER, V	17	
SE-311	Software Construction and Development	2+1	Software Design Architecture
CC-311	Data Communication and Networks	3+1	2
MS-311	Probability & Statistics	3+0	8
GE-311	Technical and Business Writing	3+0	
SES-311	SE Supporting - II	3+0	25
Total Cre	dit Hrs	16	
	SEMESTER VI	- 100	
	Software Quality Engineering	3+0	Intro to Softwar
SE-321			Engineering
SE-321 SE-322	Web Engineering	3+0	Engineering
	Web Engineering University Elective -III	3+0 3+0	Engineering
SE-322 UE-321		1000000000	Engineering -
SE-322 UE-321 CC-321 SEE-321	University Elective -III	3+0	Engineering
SE-322 UE-321 CC-321	University Elective -III Professional Practice	3+0 3+0	Engineering
SE-322 UE-321 CC-321 SEE-321	University Elective -III Professional Practice SE Elective – I SE Supporting - II	3+0 3+0 3+0	Engineering
SE-322 UE-321 CC-321 SEE-321 SEE-322	University Elective -III Professional Practice SE Elective – I SE Supporting - II	3+0 3+0 3+0 3+0	Engineering
SE-322 UE-321 CC-321 SEE-321 SEE-322 Total Cre	University Elective -III Professional Practice SE Elective - I SE Supporting - II dit Hrs SEMESTER VII	3+0 3+0 3+0 3+0 3+0	Engineering
SE-322 UE-321 CC-321 SEE-321 SEE-322	University Elective -III Professional Practice SE Elective - I SE Supporting - II dit Hrs	3+0 3+0 3+0 3+0	Software
SE-322 UE-321 CC-321 SEE-321 SEE-322 Total Cre	University Elective -III Professional Practice SE Elective -I SE Supporting - II dit Firs SEMESTER VII Final Year Project - I Information Security	3+0 3+0 3+0 3+0 3+0	Software Construction an Development Software Requirement
SE-322 UE-321 CC-321 SEE-321 SEE-322 Total Cre SE-412 CC-411	University Elective -III Professional Practice SE Elective - I SE Supporting - II dit Hrs SEMESTER VII Final Year Project - I Information Security  Software Project Management	3+0 3+0 3+0 3+0 3+0 18 0+3 3+0	Software Construction an Development Software
SE-322 UE-321 CC-321 SEE-321 SEE-322 Total Cre SE-412 CC-411	University Elective - III Professional Practice SE Elective - I SE Supporting - II dit Hrs SEMESTER VII Final Year Project - I Information Security  Software Project Management SE Elective - III	3+0 3+0 3+0 3+0 3+0 18 0+3 3+0 3+0	Software Construction an Development Software Requirement
SE-322 UE-321 CC-321 SEE-321 SEE-322 Total Cre SE-412 CC-411 CC-412 SEE-411 SEE-412	University Elective -III Professional Practice SE Elective - I SE Supporting - II dit Hrs SEMESTER VII Final Year Project - I Information Security Software Project Management SE Elective - III SE Elective - IV	3+0 3+0 3+0 3+0 3+0 18 0+3 3+0 3+0	Software Construction an Development Software Requirement
SE-322 UE-321 CC-321 SEE-321 SEE-322 Total Cre SE-412 CC-411	University Elective -III Professional Practice SE Elective - I SE Supporting - II dit Hrs SEMESTER VII Final Year Project - I Information Security  Software Project Management  SE Elective - III SE Elective - IV dit Hrs	3+0 3+0 3+0 3+0 3+0 18 0+3 3+0 3+0	Software Construction an Development Software Requirement
SE-322 UE-321 CC-321 SEE-322 Total Cre SE-412 CC-411 CC-412 SEE-411 SEE-412 Total Cre	University Elective -III Professional Practice SE Elective - I SE Supporting - II dit Hrs SEMESTER VII Final Year Project - I Information Security  Software Project Management SE Elective - III SE Elective - IV dit Hrs SEMESTER VIII	3+0 3+0 3+0 3+0 3+0 18 0+3 3+0 3+0 3+0 15	Software Construction an Development Software Requirement Engineering
SE-322 UE-321 CC-321 SEE-322 Total Cre SE-412 CC-412 SEE-411 SEE-412 Total Cre SE-421	University Elective -III Professional Practice SE Elective - I SE Supporting - II dit Hrs SEMESTER VII Final Year Project - I Information Security  Software Project Management  SE Elective - III SE Elective - IV dit Hrs SEMESTER VIII Final Year Project - III Final Year Project - III	3+0 3+0 3+0 3+0 18 0+3 3+0 3+0 3+0 15	Software Construction an Development Software Requirement Engineering
SE-322 UE-321 CC-321 SEE-322 Total Cre SE-412 CC-411 CC-412 SEE-411 SEE-412 Total Cre	University Elective -III Professional Practice SE Elective - I SE Supporting - II dit Hrs SEMESTER VII Final Year Project - I Information Security  Software Project Management SE Elective - III SE Elective - IV dit Hrs SEMESTER VIII	3+0 3+0 3+0 3+0 3+0 18 0+3 3+0 3+0 3+0 15	Software Construction an Development Software Requirement Engineering Final Year Project Software Requirement
SE-322 UE-321 CC-321 SEE-321 SEE-322 Total Cre SE-412 CC-411 CC-412 SEE-412 Total Cre SE-412 Total Cre SE-421 SE-422	University Elective -III Professional Practice SE Elective - I SE Supporting - II SE Supporting - II dit Hrs SEMESTER VII Final Year Project - I Information Security  Software Project Management  SE Elective - III SE Elective - IV dit Hrs SEMESTER VIII Final Year Project - II Software Re-Engineering	3+0 3+0 3+0 3+0 3+0 18 0+3 3+0 3+0 3+0 15 0+3 3+0	Software Construction an Development Software Requirement Engineering
SE-322 UE-321 CC-321 SEE-322 Total Cre SE-412 CC-411 CC-412 SEE-412 Total Cre SE-421 SEE-422 UE-421	University Elective - III Professional Practice SE Elective - I SE Supporting - II SE Supporting - II GIT Hrs SEMESTER VII Final Year Project - I Information Security  Software Project Management  SE Elective - III SE Elective - IV GIT Hrs SEMESTER VIII Final Year Project - II Software Re-Engineering  University Elective - IV	3+0 3+0 3+0 3+0 18 0+3 3+0 3+0 3+0 15 0+3 3+0	Software Construction an Development Software Requirement Engineering Final Year Project Software Requirement
SE-322 UE-321 CC-321 SEE-321 SEE-322 Total Cre SE-412 CC-411 CC-412 SEE-412 Total Cre SE-412 Total Cre SE-421 SE-422	University Elective -III Professional Practice SE Elective - I SE Supporting - II SE Supporting - II dit Hrs SEMESTER VII Final Year Project - I Information Security  Software Project Management  SE Elective - III SE Elective - IV dit Hrs SEMESTER VIII Final Year Project - II Software Re-Engineering	3+0 3+0 3+0 3+0 3+0 18 0+3 3+0 3+0 3+0 15 0+3 3+0	Software Construction an Development Software Requirement Engineering Final Year Project Software Requirement

Course Title	Credit Hrs
Agent Based Software Engineering	3-0
Big Data Analytics	3-0
Cloud Computing	3-0
Computer Graphics	3-0
Data Encryption and Security	3-0
E-Commerce	3-0
Game Application Development	3-0
Global Software Development	3-0
Information Systems Audit	3-0
Management Information Systems	3-0
Mobile Application Development	3-0
Multimedia Communication	3-0
Natural Language Processing	3-0
Real Time Systems	3-0
Semantic Web	3-0
Software Engineering Economics	3-0
Software Metrics	3-0
Systems Programming	3-0
Topics in Software Engineering	3-0
Visual Programming	3-0
Total Credit Hrs	15

Software Engineering Supporting Courses		
Course Title	Credit Hrs	
Formal Methods in Software Engineering	3-0	
Operations Research	3-0	
Simulation and Modeling	3-0	
Total Credit Hrs	9	

University Elective Courses		
Course Title	Credit Hrs	
Foreign Language	3-0	
Human Resource management	3-0	
Financial Accounting	3-0	
Introduction to Economics	3-0	
Total Credit Hrs	12	

Software Engineering Core Coursess		
Course Title	Credit Hrs	
Human Computer Interaction	3-0	
Software Construction & Development	2-1	
Software Design & Architecture	2-1	
Software Project Management	3-0	
Software Quality Engineering	3-0	
Software Re-Engineering	3-0	
Software Requirements Engineering	3-0	
Web Engineering	3-0	
Total Credit Hrs	24	

# BS (Information Technology) Course Scheme

Total Credit Hours: 130 4 Years, 8 Semesters Program

	SEMESTER I	
Code	Course Title	Credit Hr
GE-111	Introduction to Information & Communication Technologies	2-1
TCC-111	Programming Fundamentals	3-
E-111	English Composition & Comprehension	3-0
AS-111	Calculus & Analytical Geometry	3-0
AS-112	Basic Electronics	2-1
SE-112	Pakistan Studies	2-6
Total Cred		18
	SEMESTER II	
TCC-121	Object Oriented Programming	3-
SE-121	Communication & Presentation Skills	3-0
AS-121	Digital Logic Design	2-3-6
AS-121 JE-121	Probability & Statistics Introduction to Economics	3-0
JE-121 JE-122	Islamic Studies/Ethics	2-(
Total Cred		18
iotal Ciec	SEMESTER III	10
TCC-211		3-1
	Discrete Structures	3-0
	Computer Organization and Assembly Language	3-
AS-211	Linear Algebra	3-6
TCC-214	Data Communication and Computer networks	3-
Total Cred	dit Hrs	18
	SEMESTER, IV	
TCC-221		2-
TS-222	System & network Administration	3-0
TS-223	Mobile Cellular Communication	3-0
TC-224	Intro to Software Engineering	3-0
Total Cred	Python Programming	3- 16
iotai cied	SEMESTER V	7,10
TCC-311	Introduction to Database System	3-
TS-311	IT Project Management	2-0
TC-312	Management Information System	3-0
SE-311	Technical & Business Writing	3-0
	Computer Graphics And Animation	2-1
Total Cree		15
	SEMESTER, VI	
TC-321	DB administration & Management	2-
TC - 413	System Integration and Management	3-0
JE-321	Machine Learning	3-0
TCC-321	Human Computer Interaction	3-0
JE-321	Internet architecture & Protocol	2-
Total Cred	SEMESTER, VII	15
TC - 411	Final Year Project - 1	0-
	Multimedia System & Design	3-
TC - 412	Professional Practice	3-(
JE-411	Cloud Computing	3-(
	Artificial Intelligence	3-
Total Cred		17
	SEMESTER, VIII	
TC - 421	Final Year Project - II	0-3
TC - 422	Information & Cyber Security	3-
906 22669	Data Science	3-0
TS - 421		
TS - 421 TS - 422	Internet of Things	3-6

Course Title	Credit Hrs
Programming Fundamentals	3-1
Object Oriented Programming	3-1
Data Communication and Computer networks	3-1
Data Structures & Algorithms	3-1
Discrete Structures	3-0
Computer Organization and Assembly Language	3-1
Computer Graphics And Animation	2-1
Python Programming	3-1
Introduction to Database System	3-1
Operating System	2-1
Human Computer Interaction	3-0
Artificial Intelligence	3-1
Total Credit Hrs	47

Information Technology IT-Supporting Courses	
Course Title	Credit Hrs
System & network Administration	3-0
Mobile Cellular Communication	3-0
IT Project Management	2-0
Data Science	3-0
Internet of Things	3-0
Total Credit Hrs	14

University IT-Elective Courses		
Course Title	Credit Hrs	
Foreign Language	3-0	
Human Resource management	3-0	
Financial Accounting	3-0	
Introduction to Economics	3-0	
Total Credit Hrs	12	

Information Technology IT-Core Coursess		
Course Title	Credit Hi	
Intro to Software Engineering	3-0	
Management Information System	2-1	
DB administration & Management	2-1	
System Integration and Management	3-0	
Final Year Project - I	0-3	
Multimedia System & Design	3-1	
Professional Practice	3-0	
Final Year Project - II	0-3	
Information & Cyber Security	3-1	
Total Credit Hrs	29	



# MS (Computer Science) Course Scheme Total Credit Hours: 33 2 Years, 4 Semesters Program

SEMESTER I		
Code	Course Title	Credit Hrs
CS 5xx CS 5xx	Core Course - I	3
CS 5xx	Core Course - II	3
CS 5xx	Core Course - III	3
Total Credit Hrs		9

SEMESTER II			
Code	Course Title	Credit Hr	
CS 5xx	Core Course - IV	3	
CS 5xx CS 5xx	Elective - I	3	
CS 5xx	Elective – II	3	
SS 3xx	Research Methodology	3	
Total Credit Hrs		12	

Code	Course Title	Credit Hrs	
CS 5xx	Elective - III	3	
CS 5xx	MS Thesis-I OR Elective	3	
Total Credit Hrs		6	

SEMESTER IV		
Code	Course Title	Credit Hrs
CS 5xx	Elective-IV	3
CS 5xx	MS Thesis-II OR Elective OR MS Project	3
Total Credit Hrs		6

	List Elective Courses	
1.	Advanced Algorithm Analysis	
2.	Advanced Formal Methods	
3.	Advanced Human-Computer Interaction	
4.	Advanced Requirements Engineering	
5.	Advanced Software Project Management	
6.	Advanced Software System Architecture	
7.	Advanced Topics in Applied Cryptography	
8.	Agent Based Modeling	
9.	Agile Software Development	
10.	Applied Cryptography	
11.	Big Data Analytics	
12.	Complex Networks	
13.	Component Based Software Engineering	
14.	Cryptography	
15.	Database Security	
16.	Deep Learning	
17.	Distributed Data Processing	
18.	Empirical Software Engineering	
19.	Information Privacy and Security	
20.	Machine Learning	
21.	Management & Organizational Behavior	
22.	Natural Language Processing	
23.	Quantum Computing and Information security	
24.	Quantum Cryptography	
25.	Reliability Engineering	
26.	Requirements Engineering	
27.	Research Methodology	
28.	Research Methods	
29.	Securing the Internet of Things	

	List Elective Courses
0.	Security Management
1.	Security Testing
2.	Software Configuration Management
3.	Software Measurement and Metrics
4.	Software Process Management & Metrics
5.	Software Project Management
6.	Software Quality Assurance
7.	Software Risk Management
8.	Software Testing and Quality Assurance
9.	Statistical and Mathematical Methods For Data Science
0.	Tools and Techniques in Data Science
1.	Trusted Computing
2.	Wireless Security
3.	Advanced Data Sciences & Analytics
4.	Advanced DBMS
5.	Advanced Wireless and Mobile Communication Systems
6.	Agent Oriented Software Engineering
7.	Automated Reasoning
8.	Cloud Computing
9.	Computational Grid
0.	Computer Vision
1.	Data Grids
2.	Data Mining
3.	Data Warehousing
54.	Design of Intelligent Systems
5.	Formal Methods
6.	Functional Programming
7.	Genetic Algorithms
8.	Graphical User Interfaces
9.	Information Retrieval Techniques
0.	Intelligent User Interfaces
1.	Interactive-Systems Development
2.	Knowledge based systems
3.	Logic Programming
4.	Model based Verification
5.	Multimedia Systems Development
6.	Neural Networks
7.	Programming Language Design
8.	Programming Language Semantics
9.	Programming Paradigms
0.	Rich Internet Applications
1.	Robotics
2.	Semantic Web
3.	Software Design
4.	Software Engineering and Formal Specifications
5.	Software Maintenance
6.	Software Process Improvement
7.	Software Quality Engineering
8.	Spatial and Temporal Databases
9.	Symbolic Computation
0.	Text Mining

# Doctor of Philosophy in Computer Science Course Scheme Total Credit Hours: 48 3.5 Years, 7 Semesters Program

**PROGRAMS** 

SEMESTER I		
Code	Course Title	Credit Hrs
CS-9XX	Core	3
CS-9XX	Core	3
CS-9XX	Mandatory	3
Total Credit		9
	SEMESTER, II	
CS-9XX	Elective	3
CS-9XX	Elective	3
CS-9XX	Elective	3
Total Credit		9
	SEMESTER, III	
CS-931	Comprehensive Exam	0
CS-932	Supervised Research (PhD Thesis) Proposa	6
Total Credit		6
	SEMESTER IV	
CS-932	Supervised Research (PhD Thesis) Part-1	6
	SEMESTER, V	
CS-932	Supervised Research (PhD Thesis) Part-2	6
	SEMESTER VI	
CS-932	Supervised Research (PhD Thesis) Part-3	6
	SEMESTER VII	
CS-932	PhD Thesis Defense	6

Core Courses		
Code	Course Title	Credit Hr
CS-702	Advanced Computer Architecture	3
RH-929	Mathematical Modelling and Simulation	n 3
RH-930	Independent Study	3

Code	Course Title	Credit Hr
		Credit I II
	Parallel Computing	3
	Scientific Computing	3
	Numerical Simulation	3
CS-904	Advanced Distributed Computing	3
CS-905	Advanced Image Processing	3
CS-906	Information Visualization	3
CS-907	Scientific Visualization	3
CS-908	Ubiquitous and Autonomic Computing	3
CS-909	Computer Security Architecture	3
CS-910	Advanced Information Security	3
CS-911	Data Security and Privacy	3
CS-912	Cryptography and Security Mechanisms	3
CS-913	Information Assurance	3
CS-914	Advanced Requirements Engineering	3
CS-915	Component-based Software Engineering	3
CS-916	Object Oriented Analysis & Design	3
CS-917	Software Quality Engineering	3
CS-918	Advanced Software Engineering	3
CS-919	Ontology Engineering	3
CS-920	Advanced Database Concepts	3
CS-921	Distributed Databases	3
CS-922	Advance Topics in Databases	3
CS-923	Web based Databases	3
CS-924	Artificial Intelligence & Machine Learning	3
CS-935	Software Verification Tools and Techniques	3
CS-934	Research Trends in CS	3
CS-933	Research Methods in PhD Studies	3





To become the premier business school by grooming students through managerial practices and developing leadership skills

# MISSION

Impart education to meet requirement of corporate sector and to promote learning opportunities for students and faculty for the development of leadership qualities.

# **OBJECTIVES**

- · To develop logical and analytical skills.
- · To enhance effective communication in organizational environment.
- To comprehend human relationship in organizations

# **OUTCOMES**

- · Solution of complex organizational problems
- · Negotiation of organizational prospects and crisis.
- · Dealing diversity and building congenial work environment.







#### PROGRAM EDUCATIONAL OBJECTIVES (PEO)

#### **BBA 2 YEARS**

The BBA program has been designed to:

- SERVE THE NEEDS OF BRIGHT YOUNG PERSONS WHO HAVE COMPLETED FOURTEEN YEARS OF EDUCATION AND ARE LOOKING FOR A CAREER EDUCATION IN ENTREPRENEURSHIP, MANAGEMENT PROFESSION AND IN BUSINESS ADMINISTRATION.
- THIS PROGRAMME IS OPEN TO THE STUDENTS WITH DIVERSE EDUCATIONAL BACKGROUNDS INCLUDING. HUMANITIES, SCIENCE, ARTS AND COMMERCE.
- THE PROGRAMME BUILDS IN THE STUDENTS POTENTIAL FOR THE FUTURE AND ENABLES THEM TO BUILD AND MAINTAIN BALANCE BETWEEN THE TARGETS OF ECONOMIC SUCCESS AND THE LIMITATIONS OF INCREASING SOCIAL AND ENVIRONMENTAL RESPONSIBILITY

#### BBA 4 YEARS

The BBA program has been designed to:

- DEVELOP MANAGERIAL AND LEADERSHIP PROFICIENCY
- ENHANCE EFFECTIVE BUSINESS COMMUNICATION AND
- DEVELOP CRITICAL THINKING AMONG STUDENTS FOR Effective Decision-Making.

#### MBA

The MBA programs have been designed to:

- TRANSFORM STUDENTS INTO A STRATEGIC THINKER AND
- EQUIP STUDENTS WITH STATISTICAL AND MANAGERIAL TOOLS FOR EFFECTIVE DECISION MAKING
- PROVIDE STUDENTS AMPLE KNOWLEDGE OF REAL CASE STUDIES IN CORPORATE WORLD
- DEVELOP PRESENTATION AND COMMUNICATION

#### MS

THE MS PROGRAM HAS BEEN DESIGNED TO:

- DEVELOP KNOWLEDGE AND SKILLS TO CONDUCT RESEARCH IN THE FIELD OF MANAGEMENT SCIENCES
- FORMULATE AND IMPLEMENT SOLUTIONS TO PROB LEMS OF SUSTAINABLE DEVELOPMENT THROUGH RESEARCH RELATED SKILLS
- DEVELOP PROGCIENCY IN SPEECH AND SCIENTIFIC DISCUSSION, EQUIPPED WITH REPORT WRITING SKILLS

#### PROGRAM LEARNING OUTCOMES (PLO)

#### **BBA 2 YEARS**

THE BBA PROGRAM HAS BEEN DESIGNED TO:

- DEMONSTRATE A THOROUGH UNDERSTANDING OF THE INTERNAL STRUCTURES AND OPERATIONS OF BUSINESSES RANGING IN SIZE FROM SMALL TO MULTINATIONAL
- ACKNOWLEDGES AND UNDERSTANDS THE SIGNIFICANCE OF CULTURAL DIVERSITY ADAPT THEIR INTERPERSONAL BEHAVIOURS AND STYLES ACCORDINGLY
- ACKNOWLEDGES AND UNDERSTANDS THE SIGNIFICANCE OF CULTURAL DIVERSITY ADAPT THEIR INTERPERSONAL BEHAVIOURS AND STYLES ACCORDINGLY.

#### **BBA 4 YEARS**

AFTER SUCCESSFUL COMPLETION OF THE BBA PROGRAM, STUDENTS WILL BE ABLE TO:

- PRODUCE BUSINESS PLANS AND ESTABLISH IDEAS FOR GROWTH OF ORGANIZATION
- EFFECTIVE INFORMATION SHARING AND ESTABLISHING ORGANIZATIONAL LIAISON
- PREPARE STRATEGIES TO ADDRESS ORGANIZATIONAL CHALLENGES

#### MBA

AFTER SUCCESSFUL COMPLETION OF THE MBA PROGRAMS, STUDENTS WILL BE ABLE TO:

- DEVELOP AND IMPLEMENT BUSINESS PLAN AND STRATEGIES
- 2. ANALYZE COMPLEX SITUATIONS AND TAKE RATIONAL
- HANDLE CRITICAL AND CHALLENGING SITUATIONS IN ORGANIZATIONS
- COMMUNICATE AND EXPRESS EFFECTIVELY IN ORGANI

AFTER SUCCESSFUL COMPLETION OF THE MS PROGRAM STUDENTS WILL BE ABLE TO:

- ENABLE THEM TO SERVE AND PLAY THEIR ROLE IN DEVELOPMENT OF BUSINESS EQUIPPED WITH MANA GERIAL SKILLS
- DIFFERENTIATE THE INFORMATION, KNOWLEDGE AND RESEARCH BASED LEARNING.
- ENABLE THEM WORK ON SUSTAINABLE USE OF RESEARCH METHODS, CONSERVATION, EXPLORATION OF ECONOMIC RESOURCES, APPLICATIONS AND MARKETING



#### PROGRAM EDUCATIONAL OBJECTIVES (PEO)

#### DOCTOR OF PHILOSOPHY

The PhD program has been designed to:

- Provide excellent research oriented business education.
- Prepare students for writing world class scholarly publications.
- Groom students to take up the role of advi sors in industry to help executives implemen and practice new ideas
- Train students to work independently and collaboratively with other fellow doctoral students and faculty.
- Coach students to work ethically and for the prosperity of society.

#### PROGRAM LEARNING OUTCOMES (PLO)

#### DOCTOR OF PHILOSOPHY

After successfully completing the PhD program, students will be able to:

- Promote the latest research methodology and produce original and quality research work inde pendently.
- Qualified savants shall be able to devise and execute effective, practical solutions to complicated, real-world issues generally faced by business and management.
- Meet the burgeoning demand for qualified and research-oriented faculty in the country.
- Articulate with stakeholders about problem definition, assessment of situation, research approaches and results followed by solutions.
- Exert their ethical responsibilities as a member of the business community and member of global society.







Faculty of Management Sciences offers the programs that have been designed to impart business and commerce knowledge and understanding of modern management tools, leadership, and entrepreneurial skills and develop managerial, and communication competencies among the students. Indus University offers both Morning and Evening programs with specialized fields of Human Resource Management (HRM), Marketing, Finance, Supply Chain Management and Project Management under the following offered Programs:

BBA (Bachelor of Business Administration – 2 years)
BBA (Bachelor of Business Administration – 4 years)
MBA (Master of Business Administration – 2 years)
MBA (Master of Business Administration – 1.5 years)
MS (Management Sciences – 2 Years)
Ph.D (Management Sciences – 3.5 Years)

Eligibility for admissions with minimum and maximum durations

#### BBA (72 credit hours, 2 years)

The BBA program (72 credit hours) is equivalent to the candidates having Intermediate or equivalent with minimum 45% marks (14 years of Education) subject to the satisfactory performance in the University entrance test and panel interview. Candidates are required to complete 24 courses and a research project of 6 credit hours. The courses include 20 compulsory courses and 4 electives from Management, Marketing, Finance, Human Resource Management, Project Management.

#### BBA (144 credit hours, 4 years)

The BBA program (144 credit hours) is equivalent to the candidates having Intermediate or equivalent with minimum 45% marks (12 years of Education) subject to the satisfactory performance in the University entrance test and panel interview. Candidates are required to complete 46 courses and a research project of 6 credit hours. The courses include 42 compulsory courses and 4 electives from Management, Marketing, Finance, Human Resource Management, Project Management.

#### MBA (60 credit hours, 2 years)

Students with a 16 years of Education will be admitted in MBA 2 Years Program. It has been designed for the candidates having 45% marks in Masters subject to the satisfactory performance in the university entrance test and panel interview.

Candidates are required to complete 20 courses out of which 14 courses are core courses and 4 courses are electives Marketing, Finance, Human Resources and Project Management) and 1 project or 2 elective courses. Minimum duration of the program is 2 years and maximum duration is 4 years with 1 year extension from the statutory body.

#### MBA (30 credit hours, 1.5 years)

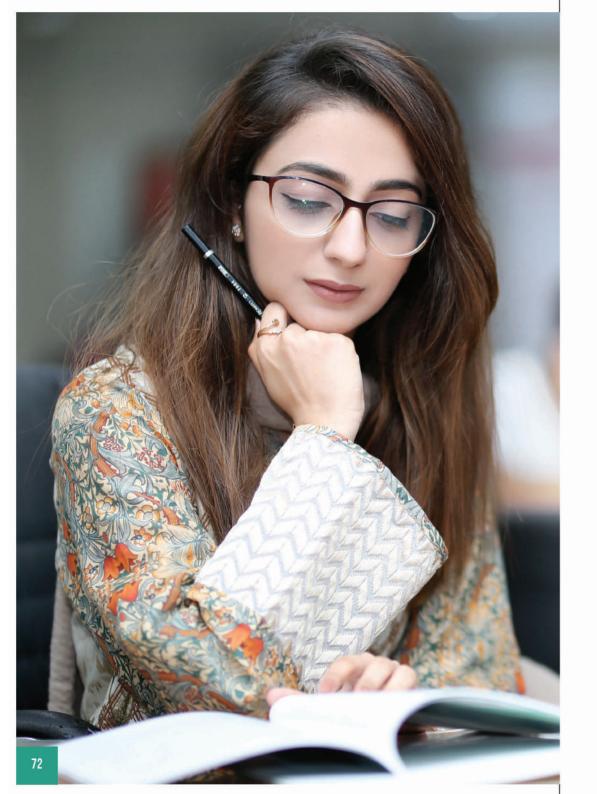
This program is tailored for students having a four years BBA/MBA (old)/B.Com degree with 2.5 CGPA/50% marks (minimum) subject to the satisfactory performance in the University entrance test and panel interview. The program comprises 8 courses (24 credit hours) and a thesis of 6 credit hours. The minimum duration to complete the program is 1.5 years and maximum is 5 years.

#### MS (30 credit hours, 2 years)

MS degree is offered in the specialized areas of Management, Human Resource Management, Marketing, Finance, Supply Chain Management and Project Management. The candidates having 4 years BBA, 2 years MBA, M.Com with minimum 60% marks or 2.5 CGPA (16 years of education) can get admission subject to the satisfactory performance in the entrance test and panel interview. The program is total of 30 credit hours consisting eight courses (24 credit hours including two Independent Studies) and a research thesis of 6 credit hours. The minimum time to complete the degree is 1/2 years and maximum time limit to complete the degree is 5 years from the date of admission as per the HEC criteria. For the admission of MS programs, other than the University's test, GRE or GAT General Test scores prescribed by the HEC is also acceptable. Note: Enrolled students will undertake the deficiency course(s) if any is identified by the university/HEC.

#### Ph.D (48 credit hours 3.5-7 Years)

For the completion of Ph.D degree, students will complete a minimum of 48 credit hours which include 4 courses, two Independent Studies (ISs) and a dissertation of 30 credit hours. The candidates having passed MBA/MS/M.Phil (17.5 to 18 years of education) with minimum 3.0 CGPA are eligible for admission subject to the clearance of University's entrance test and panel interview. The minimum duration of the degree is 3 years and maximum duration is 5 years from the date of registration. For the admission of Ph.D programs, other than the University's test, Subjective Test scores prescribed by the HEC is also acceptable. Note: Enrolled students will undertake the deficiency course(s) if any is identified by the university/HEC.



**PROGRAMS** 

BBA (Bachelor of Business Administration)
Course Scheme
Total Credit Hours: 144
4 Years, 8 Semesters Program

-	SEMESTER I	- Constitute 1
ode	Course Title	Credit H
COM 411	Freshman English 1	3
BUS 411	Introduction to Business	3
QNT 411	Basic Maths	3
SSC 412	Introduction to Psychology	3
CMP 411	IT in Business	3
SSC 411	Pakistan & Islamic Studies/Ethics	3
Total Credit H	lrs -	18
	SEMESTER, II	
QNT 422	Business Maths	3
COM 422	Freshman English 2	3
COM 421	Principles of Management	3
MKT 421	Principles of Marketing	3
ACC 421	Fundamentals of Accounting	3
ECO 421	Micro Economics	3
Fotal Credit H		18
	SEMESTER III	
COM 433	Communication Skills	3
ECO 432	Macro Economics	3
ACC 432	Financial Accounting	3
SSC 433	Introduction to Sociology	3
QNT 433	Business Statistics	3
MAN 432 Fotal Credit I	Organizational Behavior	3 18
iotal credit r	SEMESTER, IV	10
COM 444	Business Communication	3
FIN 441	Introduction to Business Finance	3
MAN 443	Human Resource Management	3
ONT 444	Statistical Inference	3
MKT 442	Marketing Management	3
MKT 443	Consumer Behavior	3
Total Credit H	frs	18
	SEMESTER, V	
LAW 451	Business and Corporate Law	3
FIN 453	Money & Banking	3
FIN 452	Financial Management	3
CMP 452	Management Information System	3
ACC 453	Cost Accounting	3
SSC 454 Total Credit H	Business Ethics	3 18
otal cledit	SEMESTER, VI	10
MAN 464	Entrepreneurship	3
MAN 466	International Business	3
MAN 465	Operations Management	3
SSC 465	Economy of Pakistan	3
BRM 461	Business Research Methods	3
SMS 467	Personal Management	3
otal Credit I		18
age as	SEMESTER VII	
FIN 478	Strategic Management	3
FIN 474	Islamic Banking and Finance	3
CMP 473	E-commerce	3
CMP 479	Total Quality Management	3
	ELECTIVE 1	3
	ELECTIVE 1	3
Total Credit H		18
	SEMESTER VIII	
RPR 482	Research Project / Two Elective Courses	6
MAN 489	Supply Chain Management	3
SSC 486	Foreign Language	3
320, 400		100
	Elective 3	3
	Elective 4	3
	Internship	

# BBA (Bachelor of Business Administration) Course Scheme

Total Credit Hours: 72 2 Years, 4 Semesters Program

	Course Title	
QNT 411	Basic Maths & Statistics	3
MAN 411	Principles of Management	3
CMP 411	IT for Managers	3
ACC 411	Financial Accounting	3 3 3 3
MKT 411	Principles of Marketing	3
ECO 411	Business Economics	3
Total Credit I		18
	SEMESTER II	
COM 421	Business Communication	3
FIN 421	Introduction to Business Finance	3
MAN 422	Human Resource Management	3 3 3
QTN 422	Statistical Inference	3
MKT 422	Marketing Management	
ACC 422	Cost & Managerial Accounting	3
Total Credit I		18
	SEMESTER. III	
CMP 432	Management Information System	3
FIN 432	Financial Management	3
MAN 433	Operations Management	3
	ELECTIVE 1	3
	ELECTIVE 2	
BRM 431	Business Research Methods	3
Total Credit I		18
	SEMESTER, IV	
MAN 444	Entrepreneurship	3
RPR 441	Research Project /Two Elective Courses	6
MAN 445	Supply Chain Management	3
	ELECTIVE 3	3
	ELECTIVE 4	3
Total Credit I	Hrs	18

**PROGRAMS** 

#### MBA (Master of Business Administration)

Course Scheme Total Credit Hours: 60 2 Years, 4 Semesters Program

	SEMESTER, I	
	Course Title	Credit H
BUS 611	Contemporary Issues in Business	3
MAN 611	Entreprenuerial Finance	3
CMP 611	E-System Management	3
ECO 611	Managerial Economics	3 3 3 3
MKT 611	Consumer Behavior	3
Total Credit I		15
	SEMESTER II	
MAN 622	Employees Health and Safety	3
SOC 622	Corporate Social Responsibility	3 3 3
MAN 623	Leadership	3
MAN 624	Corporate Governance	
MAN 625	Strategic Management	3
Total Credit I		15
	SEMESTER III	
MAN 636	Industrial Relations	3
QNT 631	Quantitative Research Tools	3
	ELECTIVE 1	3 3 3 3
	ELECTIVE 2	3
QNT 632	Econometrics	
Total Credit I		15
	SEMESTER IV	
QNT 634	Qualitative Research Tools	3
MAN 644	ELECTIVE 3	3
	ELECTIVE 4	3
RPR 631	Thesis / Research Project / Elective	6
Total Credit I	Hrs	15

MBA (Master of Business Administration)
Course Scheme
Total Credit Hours: 30
1.5 Years, 3 Semesters Program

	SEMESTER I	
Code	Course Title	Credit Hrs
ARM 811	Advanced Research Methods	3
QNT 811	Quantitative Research Tools	3
	Elective - I	3
	Elective - II	3
Total Credit		12
	SEMESTER II	
ECO 821	Econometrics	3
QNT 822	Qualitative Research Tools	3
	Elective - III	3
	Elective - IV	3
Total Credit	Hrs	12
	SEMESTER III	
RPR 831	Thesis /Two Elective Courses	6

	Electives List
Code	Course Title
	HR
HRM-503	Employee and Training Development
HRM-736	Contemporary Issues in HR
HRM-510	Performance Appraisal and Management
HRM-501	Recruitment & Selection
HRM-502	Salary Compensation and Benefits
HRM-504	Organizational Change and development
HRM-507	Strategic Human Resource Management
HRM-773	International HRM
	Marketing
MKT-507	Digital Marketing
MKT-521	Marketing Research
MKT-506	Social Marketing
MKT-504	Brand Management
MKT-506	Services Marketing
MKT-522	Strategic Marketing
MKT-603	Retail Marketing
	Finance
FIN-504	Investment Banking and Security Analysis
FIN-513	Financial Statement Analysis
FIN-508	Financial Modeling
FIN-505	Portfolio Management
FIN-501	Corporate Finance
FIN-503	Treasury and Funds Management
FIN-512	Financial Time Series Analysis
FIN-514	Islamic Finance
	scm
SCM 504	Purchasing in Supply Chain Management
SCM 508	Inventory Management
SCM 502	Logistic Management
SCM-501	Supply Chain Management

#### MS (Management Sciences) Courses

Core Subjects		
	Credit Hrs	
Applied Research Methods	3	
Advanced Quantitative Tools and Techniques	3	
Logic and Crtical Thinking	3	
Issues in Pakistan Economy	3	

#### Field of Specializations

Human Resources Managemen	Human Resources Management	
Course Title	Credit Hrs	
Case Studies in HRM	3	
Staff Compensation in Management	3	
Directed Research in Human Resources Management	3	
Conflict and Negotiation Management	3	
Consulting in Human Resource Management	3	
Change Management	3	
Decision Making Techniques for Managers	3	
Organizational Diagnosis and Transformation	3	
Managerial Leadership	3	
Strategic Human Resource Management	3	

Marketing	Marketing	
Course Title	Credit Hr	
Marketing Research	3	
Consumer Behavior	3	
Strategic product and Brand management	3	
Marketing Strategy: Concepts and Practices	3	
Consulting in Human Resource Management	3	
International Marketing Management	3	
Customer Relationship Management	3	
Supply Chain Management	3	
Marketing for Non-profit making organizations	3	
Internet Marketing	3	

Finance	
	Credit Hrs
Econometrics	3
International Financial Management	3
Strategic product and Brand management	3
Macroeconomics and Financial Markets	3
Portfolio Theories and investment Analysis	3
Financial Time series Analysis	3
Analysis of Financial Statements	3
Managerial Economics	3
Financial Risk Management	3

#### PhD (Management Sciences) Courses

Core Subjects		
Course Title	Credit Hrs	
Management Throghts and Philosophy	3	
Advanced techniques in Data Analysis	3	
Advanced Research Methods	3	

#### **Field of Specializations**

Human Resources Management			
Course Title Credit H			
Economics of Strategy and Organization	3		
Bargaining and Influence Skills	3		
Social Psychology of Organizations	3		
Reward System: Theory and Administration	3		
Strategic Management of Knowledge in Professional Service Firms	3		
Economics of Strategy and Organization	3		

Finance	
Course Title	Credit Hrs
Emerging issues in Financial Markets	3
Financial Theories and Corporate Policy Decisions	3
Advanced Topics in Financial Economics	3
Empirical Methods in Finance	3

Marketing		
Course Title	Credit Hrs	
Behavioral Research in Marketing	3	
Quantitative Research in Marketing: Empirical and Methods	3	
Marketing Data: Measurement and Analysis	3	
Marketing High-Technology Products	3	

#### INDUS UNIVERSITY RESEARCH CENTRE

Indus University Research Center is established to engage students and faculty in research activities. This center engaged in organizing research workshops and trainings to promote the knowledge creation and capacity building. It also organizes think-tank sessions and panel discussions to encourage sharing of ideas and thoughts related to the areas of business and management. Indus Journal of Management Sciences (IJMS) is issued biannually to publish quality work of local and international researchers. IURC also aims to provide training and research consultancy to the local industry. IURC team is also enthusiastically busy in producing research based case studies focusing local business and management examples to be shared in classrooms as academic curriculum.

#### VISION

IURC will become the center of promoting, creating, disseminating, and applying quality research and knowledge for academic, industrial and community development.

#### MISSION

IU-Research Centre is striving to develop research environment by engaging students and faculty in quality research and knowledge creation. It provides guidance and platform to researchers for carrying out applied and solution-oriented research in the practical areas of Business, Entrepreneurship, Management and Leadership providing solution to the issues of local industry. IURC promotes socio-economic development through community participation in academic and practical research generation.

#### **OBJECTIVES**

- To enable the faculty and students for producing quality research work
- To support practical application of research models and theories
- To organize research workshops, trainings and seminars for members of academic and corpo rate sector
- To establish a network of local and internationanal research institutions
- To provide research based services to the national and international organizations for solving their business and social issues
- To publish quality research journal



## PROF. DR. RIZWAN AHMED RAHIM

Head of Research & Publications IU-Research Centre rizwan.raheem@indus.edu.pk

Prof. Dr. Rizwan Raheem Ahmed is Professor. He holds MBA (Marketing) from PAF-KIET and MBA (Management) from IBA, Karachi, M.Phil (Management) and a PhD in Pharmaceutical Marketing from Hamdard University, Karachi. Dr. Ahmed has 19 years of professional career in diverse fields.

When it comes to students participation experiences, Use your time wisely to ensure that you'll have activities to put down. Keep in mind, however, that FMS are aware when you add a ton of extracurricular activity in your program. Try to keep your participation limited to activities you actually enjoy and will keep pursuing don't just participate to have something on your application. It's better to chose what you love, so you'll benefit from the experience in more ways than just your application word count. Here are different types of extracurricular activities that FMS actually want to see. With a little something for everyone, you're sure to find something you'll enjoy!

#### 1. IUBS (Indus University Business Society)

The objective of student's societies is to develop managerial, interpersonal, decision making, organizational and leader-ship skills required in a well rounded professional.

#### 2. Internships

IU arranges and helps you to find an internship in an appropriate company which suites your area of interest. An internship shows you're capable, dedicated and mature enough to enter the work force.

#### 3. Volunteer Work and Community Service

IU consider some form of volunteer work or community service a must-have for all students.

The best way to gain volunteer experience is to consider the activities you enjoy and find a way to apply them into your service hours. Arrange If tar for people by our students. There are so many easy ways to apply whatever you love to helping out in your community – just think creatively!

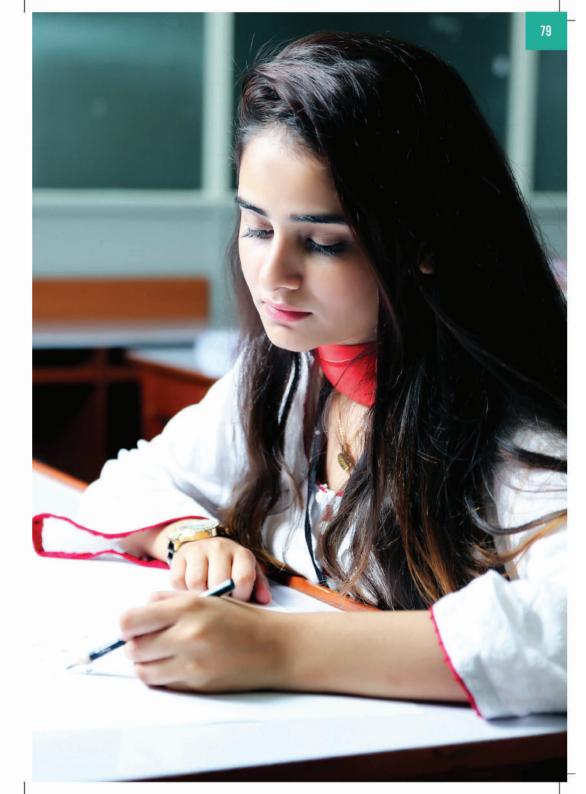
#### 4. Alumni/Guest Speaker Sessions and Seminar

This activity provides an opportunity to the students and faculty to benefit from the experience of prominent corporate executives and technology professionals. It also ensures contact between the academics and the industry. Our alumni speaker sessions have been conducted every semester, who have continued successful career have been invited to share their experience, pitfalls as well as guide the students in working and preparing for it.

#### 5. Sports

Participating in sports is a great way to showcase your teamwork, leadership skills and that you place an emphasis on athletics and physical fitness. In Indus University we have Cricket, Table Tennis, Basket ball, Badminton, Vollyball, Football, Hockey and lot of indoor games, in which you can try to choose activities from different categories of sports, so that colleges are able to see your wide range of talents and strong character traits.







# VISION

Our vision is to be one of the finest and premier institutions in the sphere of Art and Design. We are committed to transform students to be creative and dynamic professionals. We offer excellence in design education and committed in producing conceptual thinkers and attract highly creative and efficient students, faculty, staff and board members.

# MISSION

The mission of the Department of Design is to provide aspiring artists, designers and art historians with professional training and also prepare students for further study and careers in art history, graphic design, art education, Illustration, painting/drawing, printmaking, photography, media studies & related fields. Moreover, our mission is to provide excellence in education, preparing leaders for diverse, highly technological, information based global society; to engage in research and creative activities that generate new knowledge and applications for effective practice and also to meet the complex information needs of society through public and professional service.

# **OBJECTIVES**

Following are the key objectives of Department of Design

- Design and provide vibrant degree programs.
- Facilitate student involvement in events, internships, competitions and exhibitions.
- Prepare students to present their work and intellectual achievements.
- Prepare students for related employment and advances schooling.
- Expose students, faculty and community to the visual arts.
- Provide General Education in art & design.
- Encourage professional work by faculty members and provide opportunity for students and others to experience it.
- Cultivate professional and creative futuristic skills.
- Develop innovative abilities and skills to solve problems in academia, society and professional world.
- Build strong understanding & execution of research projects.
- Develop active liaison with professionals in industry.



Our aim is to produce well-oriented professionals capable of thinking logically, plan independently, design creatively and operate objectively. Your Study tenure at Indus University will be one of the most exciting experiences of your life. I further ensure you that our dedicated and talented teaching faculty will give you a warm academic welcome.

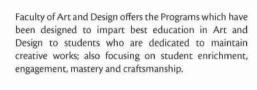
I wish you all very best of Luck for your future endeavors.

Ms. Sanam Gul









Following programs are being offered:

#### **Bachelor Programs:**

BFD Bachelor of Fashion Design (4 years-Hons)

BTD Bachelor of Textile Design (4 years-Hons)

BID Bachelor of Interior Design (4 years-Hons)

#### Diploma Programs:

DFD (Diploma in Fashion Design - 1 & 2 Year)

DTD (Diploma in Textile Design - 1 & 2 Year)

DID (Diploma in Interior Design - 1 & 2 Year)

Eligibility for Admissions with minimum and maximum durations:

#### BACHELOR OF FASHION DESIGN (BFD)

The BFD Program having 141 credit hours is of 4 years program and has been design for candidates having Intermediate or equivalent with minimum of 45% marks subject to the satisfactory performance in the test and panel interview. The candidates are required to complete 48 courses and research involving courses. The courses include 10 Compulsory, 3 Foundation and 35 Core Courses: Machine Sewing, Pattern Making, Photoshop & Illustrator, Fashion Illustration, Draping, Accessory, Print and Embellishment, Fashion Design Thesis, Fashion Design Studio, Dissertation Writing etc. Minimum course duration is 4 years and maximum duration is 7 years.

#### **BACHELOR OF TEXTILE DESIGN (BTD)**

The BTD Program (136 Credit hours) is a 4 years Degree program. It has been designed for candidates having intermediate or equivalent with minimum 45% marks subject to the satisfactory performance in the test and interview. The candidates are required to complete 46 courses and research work, Textile Thesis Design (Display) and Dissertation. The Courses includes 10 compulsory, 3 Foundation and 33 Core: Print Design, Weaving, Product& Detail Development, Photoshop & Illustrator, Textile Design Studio, Accessory Design, Research Methodology, and Textile Design. Thesis, Dissertation Writing etc. Minimum courses duration is 4 years and maximum duration is 7 years.

#### **BACHELOR OF INTERIOR DESIGN (BID)**

The BID Program (134 Credit hours) is a 4 years Degree program. It has been designed for candidates having intermediate or equivalent with minimum 45% marks subject to the satisfactory performance in the test and interview. The candidates are required to complete 44 courses and research work, The Courses includes 10 compulsory, 3 Foundation and 31 Core: Interior Design Studio, Visualization, Drafting Skills, Model Making, Building Sciences commercial and residential Design Studio, Digital Presentation Method and Portfolio etc. Minimum course duration is 4 years and maximum duration is 7 years.



# Bachelor of Fashion Design Course Scheme

Total Credit Hours: 141 4 Years, 8 Semesters Program

	SEMESTER, I	
Code	Course Title	Credit Hrs
ENG-101	English-I (Compulsory)	3(3+0)
ART-108	Basic Drawing-I	3(1+2)
FAD-104 ICS-105	Intro to Fashion Digital Communication-I	2(1+1) 3(1+2)
HAC-105	History of Art & Culture-I	2(2+0)
TED-108	Material & Models	3(1+2)
TED-105	Intro to Textile	2(2+0)
Total Cred	it Hrs	18
ENIO AAA	SEMESTER II	-/
ENG-201 ART-207	Business English	3(0+3)
ART-207	Basic Drawing-II Design History and Theory-II	3(1+2) 2(2+0)
ICS-208	Digital Communication-II	3(0+3)
FAS-208	Basic Illustration (Theory+Lab)	3(1+2)
MTH-204		3(0+3)
HAC-205	History of Art & Culture-II	2(2+0)
Total Cred	itHis	19
FAD-307	SEMESTER III Basic Sewing (Lab)	3/0+3)
FAD-305	Draping-I (Basics) (Lab)	3(0+3) 3(0+3)
TED-311	Drawing Projects	3(0+3)
FAD-308	Fashion Illustration-I (Lab)	3(0+3)
MAP-112	Material and Process (Lab)	3(0+3)
FAD-309	Pattern-I	3(0+3)
TED-307 Total Cred	Print Design-I	2(0+2)
Total Cleu	SEMESTER IV	20
FAD-407	Draping-II (Draping Techniques)	3(0+3)
FAD-409	Fashion Illustration-II	3(0+3)
FAD-411	History of Culture & Costume	3(0+3)
FAD-410	Machine Sewing-II	3(0+3)
MTP-411 TED-409	Pattern-II Print Design II	3(0+3) 3(1+2)
Total Cred		18
	SEMESTER V	
FAD-506	Draping-III (Advance Level-I)	3(0+3)
FAD-502	Fashion Design Studio-II (Theory+Lab)	3(1+2)
FAD-505	Fashion Illustration-III	3(0+3)
FAD-504 MTP-502	Machine Sewing-III Pattern-III (Mathematics of Pattern)	3(0+3)
MTP-502	Pattern-III (Mathematics of Pattern)	3(1+2)
	Pattern-III (Mathematics of Pattern) Surface Embellishment it Hrs	
MTP-502 FAD-507 Total Cred	Pattern-III (Mathematics of Pattern) Surface Embellishment it Hrs SEMESTER VI	3(1+2) 3(1+2) 18
MTP-502 FAD-507 Total Cred MAN-606	Pattern-III (Mathematics of Pattern) Surface Embellishment it Hrs SEMESTER VI Entrepreneurship	3(1+2) 3(1+2) 18 3(1+2)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607	Pattern-III (Mathematics of Pattern) Surface Embellishment ICHIS SEMESTER VI Entrepreneurship Fashion Illustration-IV	3(1+2) 3(1+2) 18 3(1+2) 3(0+3)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601	Pattern-III (Mathematics of Pattern) Surface Embellishment it Hrs SEMESTER VI Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics)	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602	Pattern-III (Mathematics of Pattern) Surface Embellishment It Hrs SEMESTER VI Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(1+2)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603	Pattern-III (Mathematics of Pattern) Surface Embellishment ICHIS SEMESTER VI Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced)	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(1+2) 3(0+3)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603 PKST-102	Pattern-III (Mathematics of Pattern) Surface Embellishment  It Hrs  SEMESTER VI Entrepreneurship Fashion III lustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(1+2) 3(0+3) 3(0+3)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603	Pattern-III (Mathematics of Pattern) Surface Embellishment  THIS SEMESTER VI Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat  THIS	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(1+2) 3(0+3)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603 PKST-102	Pattern-III (Mathematics of Pattern) Surface Embellishment  It Hrs  SEMESTER VI Entrepreneurship Fashion III lustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(1+2) 3(0+3) 3(0+3)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603 PKST-102 Total Cred	Pattern-III (Mathematics of Pattern) Surface Embellishment ICHIS SEMESTER VI Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat ICHIS SEMESTER VIII	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(1+2) 3(0+3) 3(0+3) 18
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603 PKST-102 Total Cred	Pattern-III (Mathematics of Pattern) Surface Embellishment ICHS SEMESTER VI Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat ICHS SEMESTER VII Consumer behavior	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(1+2) 3(0+3) 3(0+3) 18 3(3+0)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603 PKST-102 Total Cred MGT-701 FAD-702 FAD-703 FAD-705	Pattern-III (Mathematics of Pattern) Surface Embellishment  ICHS SEMESTER VI Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat ICHS SEMESTER VII Consumer behavior Dissertation Portfolio development Thesis-I (Collection) (Thy)	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(0+3) 3(0+3) 18 3(3+0) 2(2+0) 1(1+0)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603 PKST-102 Total Cred MGT-701 FAD-702 FAD-703 FAD-706 FAD-706	Pattern-III (Mathematics of Pattern) Surface Embellishment  THIS SEMESTER VI Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat  ICHIS SEMESTER VII Consumer behavior Dissertation Portfolio development Thesis-I (Collection) (Thy) Thesis-I (Collection) (Ltab)	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(1+2) 3(0+3) 18 3(3+0) 2(2+0) 2(2+0) 2(2+0) 6(0+6)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603 FKST-102 Total Cred MGT-701 FAD-702 FAD-703 FAD-706 FAD-706 FAD-707	Pattern-III (Mathematics of Pattern) Surface Embellishment ICHIS SEMESTER VI Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat ICHIS SEMESTER VII Consumer behavior Dissertation Portfolio development Thesis-I (Collection) (Thy) Thesis-I (Collection) (Lab) Internship	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(1+2) 3(0+3) 3(0+3) 18 3(3+0) 2(2+0) 1(1+0) 6(0+6) 2(2+0)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603 PKST-102 Total Cred MGT-701 FAD-703 FAD-703 FAD-703 FAD-706 FAD-706	Pattern-III (Mathematics of Pattern) Surface Embellishment  It Its  SEMESTER VI  Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat  It Its  SEMESTER VII  Consumer behavior Dissertation Portfolio development Thesis-I (Collection) (Thy) Thesis-I (Collection) (Lab) Internship  It Its	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(1+2) 3(0+3) 18 3(3+0) 2(2+0) 2(2+0) 2(2+0) 6(0+6)
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603 PKST-102 Total Cred MGT-701 FAD-703 FAD-703 FAD-703 FAD-703 FAD-707 Total Cred	Pattern-III (Mathematics of Pattern) Surface Embellishment  THIS  SEMESTER VI  Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat  (THIS  SEMESTER VII  Consumer behavior Dissertation Portfolio development Thesis-I (Collection) (Thy) Thesis-I (Collection) (Lab) Internship  it HIS  SEMESTER VIII	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(0+3) 18 3(3+0) 2(2+0) 2(2+0) 1(1+0) 16(0-6) 2(2+0) 16
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-607 MCT-701 Total Cred MCT-701 FAD-702 FAD-703 FAD-706 FAD-707 Total Cred	Pattern-III (Mathematics of Pattern) Surface Embellishment ICHIS SEMESTER VI Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat ICHIS SEMESTER VII Consumer behavior Dissertation Portfolio development Thesis-I (Collection) (Thy) Thesis I (Collection) (Lab) Internship ICHIS SEMESTER VIII Thesis-II (Collection) (Thy)	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(0+3) 3(0+3) 18 3(3+0) 2(2+0) 2(2+0) 1(1+0) 6(0+6) 2(2+0) 16
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603 PKST-102 Total Cred MGT-701 FAD-703 FAD-703 FAD-706 FAD-707 Total Cred	Pattern-III (Mathematics of Pattern) Surface Embellishment  EHIS  SEMESTER VI  Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat  EHIS  SEMESTER VII  Consumer behavior Dissertation Portfolio development Thesis-I (Collection) (Thy) Thesis-I (Collection) (Lab) Internship  EHIS  SEMESTER VIII Thesis-II (Collection) (Thy) Thesis-II (Collection) (Thy) Thesis-II (Collection) (Thy) Thesis-II (Collection) (Thy)	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(0+3) 3(0+3) 18 3(3+0) 2(2+0) 2(2+0) 1(1+0) 6(0+6) 2(2+0) 16 16 16 17
MTP-502 FAD-507 Total Cred MAN-606 FAD-607 MTP-601 TED-602 FAD-603 PKST-102 Total Cred MGT-701 FAD-702 FAD-703 FAD-706 FAD-707 Total Cred FAD-802	Pattern-III (Mathematics of Pattern) Surface Embellishment ICHIS SEMESTER VI Entrepreneurship Fashion Illustration-IV Pattern & Grading-IV (Mathematics) Marketing & Merchandising Machine Sewing-IV (Advanced) Pakistan Studies and Islamiat ICHIS SEMESTER VII Consumer behavior Dissertation Portfolio development Thesis-I (Collection) (Thy) Thesis I (Collection) (Lab) Internship ICHIS SEMESTER VIII Thesis-II (Collection) (Thy)	3(1+2) 3(1+2) 18 3(1+2) 3(0+3) 3(1+2) 3(0+3) 3(0+3) 18 3(3+0) 2(2+0) 2(2+0) 1(1+0) 6(0+6) 2(2+0) 16

# Bachelor of Textile Design Course Scheme

Total Credit Hours: 136 4 Years, 8 Semesters Program

2.50	SEMESTER I	V45 0/3
ode	Course Title	Credit Hrs
ENG-101	English-I (Compulsory)	3(3+0)
ART-108	Basic Drawing-I	3(1+2)
TED-105	Intro to Fashion	2(1+1s)
ICS-105	Digital Communication-I	3(1+2)
TED-105	Intro to Textile	2(2+0)
TED-108	Materials & Models	3(1+2)
HAC-105 lotal Credi	History of art and culture -I	2(2+0) 18
	SEMESTER II	- 10
TED-209	Textile Basics	3(3+0)
ART-205	Basic Drawing-II	3(3+0)
ENG-201	Business English	3(3+0)
ICS-208	Digital Communication II	3(0+3)
MTH-204	Basic Drafting (Geometry & Drafting)	3(0+3)
HAC-105 Total Credi	History of art and culture -II	2(2+0) 19
otal Cledi	SEMESTER III	12
BMD-201	Brand Image Design	3(2+1)
TED-312	Design Foundation	3(3+0)
TED-311	Drawing Projects	3(0+3)
MAP-113		3(1+2)
TED-315	Print Design-I	2(0+2)
TED-316	Weave Design Studio-I	3(1+2)
Total Credi	SEMESTER IV	17
CAD-404	Virtual design-I Advance	3(1+2)
TED-402	Weave Design Studio-II	3(1+2)
TED-403	Print Design-II	4(3+1)
TED-414	Textile Manufacturing	3(0+3)
TED-406	Material & process -II	3(0+3)
TED-405	Survey of textiles	2(0+2)
Total Credi		18
	SEMESTER, V	5. 65
PKST-102	Pakistan Studies & Islamiat	3(3+0)
TED-507	Advance Weaving	3 (1+ 2)
TED-505	Print Design Project	3 (1+2)
TED-506	Textile Design Studio	3 (0+3)
FAD-501	Fashion Illustration (Lab)	3 (3+0)
CAD-502 Total Credi	Virtual Design-II (Advance) (Lab)	3 (3+ 0)
iotai cieta	SEMESTER VI	18
TED-601	Advance Weaving-II	3(1+2)
TED-603	Design Project	3(3+0)
MAN-604	Human Resource Management	3(1+2)
TED-602	Marketing & Merchandising	3(3+0)
RMT-606	Research Methodology	2(0 + 2)
TED-605	Surface Embellishment	3(0 + 3)
lotal Credi	SEMESTER, VII	17
MGT-707	Consumer Behavior	2 (1, 2)
TED-703	Design Collection-I (Lab)	3 (1+ 2) 8 (0+ 8)
TED-703	Design Collection-I (Lab) Design Collection-I (Thy)	1 (1+0)
MAN-706	Entrepreneurship	3 (0+3)
TED-705	Internship	2 (0+ 2)
Teb-705		15
oear creur	SEMESTER VIII	13
TED-806	Design Collection-II (Lab)	4 (0+4)
TED-807	Design Collection-II (Lab)	6 (0+6)
- mar way	combination in fame)	0 (0.0)

**PROGRAMS** 

Bachelor of Interior Design Course Scheme Total Credit Hours: 134 4 Years, 8 Semesters Program

	SEMESTER I	
Code	Course Title	Credit F
BD-105	Basic Design	3(0+
ART-108	Basic Drawing-I	3(0+
ID-104	Drafting Skills-I	3(2+
TED-108	Material & Models	3(2.4
ENG-101	English-1 (Compulsory)	3(3+
ID-103	Introduction to Interior Design	3(3+
Total Credi		18
ADT and	SEMESTER II	0.60
ART-205	Basic Drawing-II	3(0 +
ID-202	History of Art & Architecture-I	2(2+
ID-207	Drafting Skills-II	3(0 +
ICS-205	Digital Communication (II)	3(2+
ID-205	Interior Design Studio-I	4(1+
ID-210 Total Credi	Introduction to Model Making	3(0 +
TOTAL CITCAL	SEMESTER III	. 10
CAD-320	Visualization-I (AutoCAD)	3(0 +
ID-316	Drafting Skills-III	3(0 +
ID-321	Human Factors	2(2 +
ID-320	Research & Development	3(1+
ID-317	History of Architecture-II	2(2+
ID-318	Interior Design Studio-II	4(1+
Total Credi		- 17
ID-425	SEMESTER IV Architectural Photography	3(1+
ID-425	Interior Design Studio-III	4(1+
ID-424	Material & Technology	2(2+
ID-424	Psychology of Spaces	3(0 +
CAD-422	Visualization-II (Sketchup3D)	3(0 +
ID-421	Textile Architecture	2(1+
Total Credi		17
	SEMESTER, V	×=400
ID-510	Day & Artificial Lightin	3(0+
ID-506	Interior Design Studio-IV (Recreational &/or Religious)	4(1+
ID-512	History of Furniture	3(3+
ID-509	Introduction to Landscape Design	3(0+
PKST-102	Pak Studies/ Islamiat	3(3+
ID-604	Visualization-III (3DS Max/Revit & Lumion)	3(2+
Total Credi		19
ID-609	SEMESTER VI	4(1+
ID-608	Furniture Design Interior Architecture Systems & Detailing I	3(1+
ID-603	Interior Design Studio-V	3(1+
MGT-609	Project Management I	
		3(2 +
ID-603 ID-607	Theory & Development of Form (Mini Thesis)	
Total Credi	Sustainable Design	2 (0+)
rotal cical	SEMESTER, VII	- 10
ID-702	Dissertation Writing	3(3+
ID-706	Interior Architecture Systems & Detailing II	3(1+
ID-704	Interior Design Studio-VI	4(1+
	Temporary Architecture & Interior Design	3(1+
	Principle of Marketing	
ID-701	COUNTRY OF A SAME STATE OF THE	3(3 +
MKT-711		3(0 -
MKT-711 ID-708	Professional Practices	
MKT-711	Professional Practices	
MKT-711 ID-708 Total Credi	Professional Practices t Hrs	19
MKT-711 ID-708 Total Credi MGT-707	Professional Practices t Hrs SEMESTER, VIII	3 (0+
MKT-711 ID-708	Professional Practices t Hrs SEMESTER, VIII Consumer Behavior	3 (0+ 3 (0-
MKT-711 ID-708 Total Credi MGT-707 ID-806	Professional Practices  CHIS  SEMESTER VIII  Consumer Behavior Portfolio	3 (0+ 3 (0+ 3 (0+ 6 (0+





# **DEPARTMENT OF MEDIA SCIENCE**

The BMS Program having 136 credit hour is of 4 years program and has been designed for candidates having Intermediate or equivalent with minimum of 45% marks subject to the satisfactory performance in the test and panel interview. The candidates are required to complete 44 courses and research involving courses.

The courses include 10 Compulsory, 3 Foundation and 35 Core Courses: Drawing & perspective, Media Psychology, Introduction to Media Industries, Photography, Image Manipulation, Basic Lighting, Set Design and Digital Illustration & Design etc. Minimum course duration is 4 years and maximum duration is 7 years.

Media Studies cover a broad range of subjects and all courses focus on the communication of information across different mediums. The ability to communicate information clearly and effectively is beneficial to every organization.

# VISION

Media Science program focuses on equipping students with strong theoretical footing along with technological practice, so they develop as media professionals who will work within the ethical framework and focus on inclusion for all.

# MISSION

To enable students learning with theoretical and practical approaches, that are recognized on national and international level for media industries. To develop a professionals who can play a positive role in evolution of media.



# PROGRAM OBJECTIVES

- To give students intense hands on training to create a media project (film, radio, TV and advertisement) from scratch.
  - To understand and learn every process involved in making a film/TV or advertisement project.
    - To help them explore their creative side and to provide them tools to shape that creative ideas into a complete project.
      - To encourage them to work as a leader as well as a follower because media projects require effective teamwork.
        - To enable them to learn the ethics, code of conduct and morals to be an accomplished media professional.
        - To provide students with opportunities to exhibit their work, enter meaningful competitions, and develop a film/design portfolio.

## Program Outcomes

- Effective training in interpersonal and communication skills through presentations, film screenings and competitions.
- Tools and approaches through which they can transfer their ideas from paper to the screen.
- Understand and measure the positive aspects as well as risks related to a project
- A clear understanding of their rights and responsibilities as media professionals.
- To master the software skills as well as professionalism required to finish and present a project.

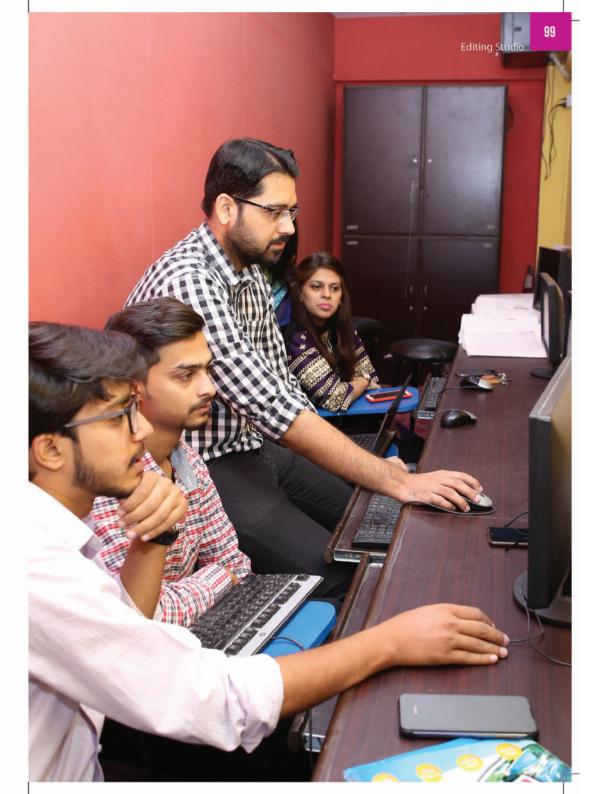




BS in Media Science Course Scheme Total Credit Hours: 136 4 Years, 8 Semesters Program Major (Advertising, Film & TV)

SEMESTER I		
Code	Course Title	Credit Hrs
ICS-104	Digital Communication	3(0+3)
MD-103	Drawing and Perspective	3(1+2)
ENG-101	English Writing Skills	3(3+0)
MD-101	Fundamentals of Design	3(3+0)
MD-102	History of Media Art	3(3+0)
MD-104	Media Psychology	3(3+0)
Total Credit Hrs	5 (a) (b) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	18
	SEMESTER II	000000000000000000000000000000000000000
MD-107	Culture, Media & Society	3(3+0) 3(1+2)
MD-108	Photography	3(1+2)
MD-109 MD-110	Advance drawing and Color theory Oral Communication	3(0+3)
MD-111	Creative writing & communication	3(0+3)
MD-112	Media laws & ethics	3(3+0)
otal Credit Hrs	The second secon	18
145 212	SEMESTER III	
MD-208	Basic Lighting	3(0+3)
QNT-411	Basic Maths	3(3+0)
MD-202 MKT-421	History of cinema Principle of marketing	3(3+0) 3(3+0)
MD-205	Image Manipulation	3(3+0)
MD-205	Personal Management	3(3+0)
otal Credit Hrs		18
	SEMESTER IV	
FTV-481	Aesthetic of Editing	3(0+3)
MD-309	Art Direction	3(0+3)
MD-209	Digital illustration & Design	3(0+3)
MD-317	Entrepreneurship	3(0+3)
MD-104 MGT-221	Islamiat and Pakistan Studies	3(1+2)
otal Credit Hrs	Marketing Management	2(2+0)
our creatern.	SEMESTER V	
MD-301	Advance Image manipulation	3(0+3)
MKT-306	Consumer Behavior	3(0+3)
MD-311	Digital Audio Video	3(0+3)
MD-313	History of Film & TV	3(0+3)
MDA-305	PR & Event Management	3(2+1)
MD-306	Production Technique	3(0+3)
MDF-302	Script Writing and Program Production	3(2+1)
MD-314 otal Credit Hrs	Social Media Internet Marketing	3(0+3)
otal Credit Fils	SEMESTER, VI	24
MDF-319	Concept & Story Telling	3(0+3)
MDA-310	Copy Writing (Elective Advertising)	3(0+3)
MDF-308	Film Distribution (Elective Film &TV)	3(0+3)
MD-401	Internship	3(0+3)
MDF-315	Lightning 2 (Elective Film & TV)	3(2+1)
MDA-315	Media Planning & Buying	3(0+3)
MD-312	Media delivery method	3(2+1)
MD-310	Motion Graphic & Animation	3(2+1)
MD-405	TVC Production	3(2+1)
otal Credit Hrs		18
MDA 224	SEMESTER, VII	2/0.25
MDA-320	Advertising Design & Layout	3(0+3)
MD-402 MDF-316	Brand Management	3(0+3)
	Documentary Vision	3(0+3)
MDA-303 MDA-317	Packaging & Design Report Writing	3(0+3) 3(2+1)
MDF-318	Screen Play for Film	3(0+3)
otal Credit Hrs		18
	SEMESTER. VIII	11000
MDF-321	Acting	3(0+3)
MDA-318	Client Servicing	3(0+3)
MDF-320	Directing for Camera	3(0+3)
MD-504	Final Thesis (Advertising)	3(0+3)
MD-503	Final Thesis (FTV)	3(Z+1)
	Final Thesis (FTV) Integrated Marketing Communication	3(2+1) 3(0+3)







# DEPARTMENT OF PHYSICAL THERAPY & REHABILITATION SCIENCE

# **MESSEGE BY THE CHAIRPERSON**

DPT program at IU is going to let our students pursue their professional degree with great dignity and best facilities on board. It will help them become an independent consultant Physical Therapist to practice as a professional.

The Department has an excellent infrastructure with fully motivated faculty focusing on best teaching methodology. Our strength is to learn through innovation and latest technology.

Wishing a wonderful campus life with Zeal and zest, not only as a Physical Therapist also as an empathetic and responsible human in person!

Thank you

Dr. Okasha Anjum (PT)

# VISION

We aspire to be amongst most distinguished academic and research center in Physical Therapy and Rehabilitation nationally and internationally through team work, excellence, diversity, integrity, innovation and ethics.

# MISSION

The Department of Physical Therapy is committed to prepare students as tomorrows leader and best clinicians in Physical Therapy and Rehabilitation through excellent education, advanced clinical training and research.

# **OBJECTIVES**

Demonstrate in-depth knowledge of the basic and clinical sciences relevant to Physical Therapy.

- Demonstrate the behaviors of the scholarly clinician by developing and utilizing the process of critical thinking and inquiry, particularly focused on the improvement of the practice of Physical Therapy and the delivery of health care.
- Engage in reflective practice through sound clinical decision making, critical self-assessment and commitment to lifelong learning.
- Demonstrate mastery of entry level professional clinical skills. Provision of these services is based on
  the best available evidence and includes Physical Therapy examination, evaluation, diagnosis, progno
  sis, intervention, prevention activities, wellness initiatives and appropriate health care utilization.
- Prepared to influence the development of human health care regulations and policies that are consistent with the needs of the patient and of the society.



#### Salient Features Of Department Of Physical Therapy

- 1. HEC recognized Syllabus/ Curriculum
- A multipurpose State of the Art centrally air conditioned Gymnasium
- 3. Fully equipped and functional labs
- 4. Use of best/ innovative teaching methodology
- 5. Qualified and experienced teaching faculty
- 6. Biometric attendance monitoring of students
- Secured area located in the heart of the city
- Extracurricular activities for personality building and student grooming
- learning resource center, Student counsel/ media society in devising
- Software based registration /results on students portal (CMS-System)

- Dedicated girls common room with proper praying area
- The creative team of designing & multimedia production solutions
- 13. University wide merit based scholarship program
- 14. Introducing anti-corruption module and The Disciplinary Committee
- 5. Dedicated faculty hours for student counseling



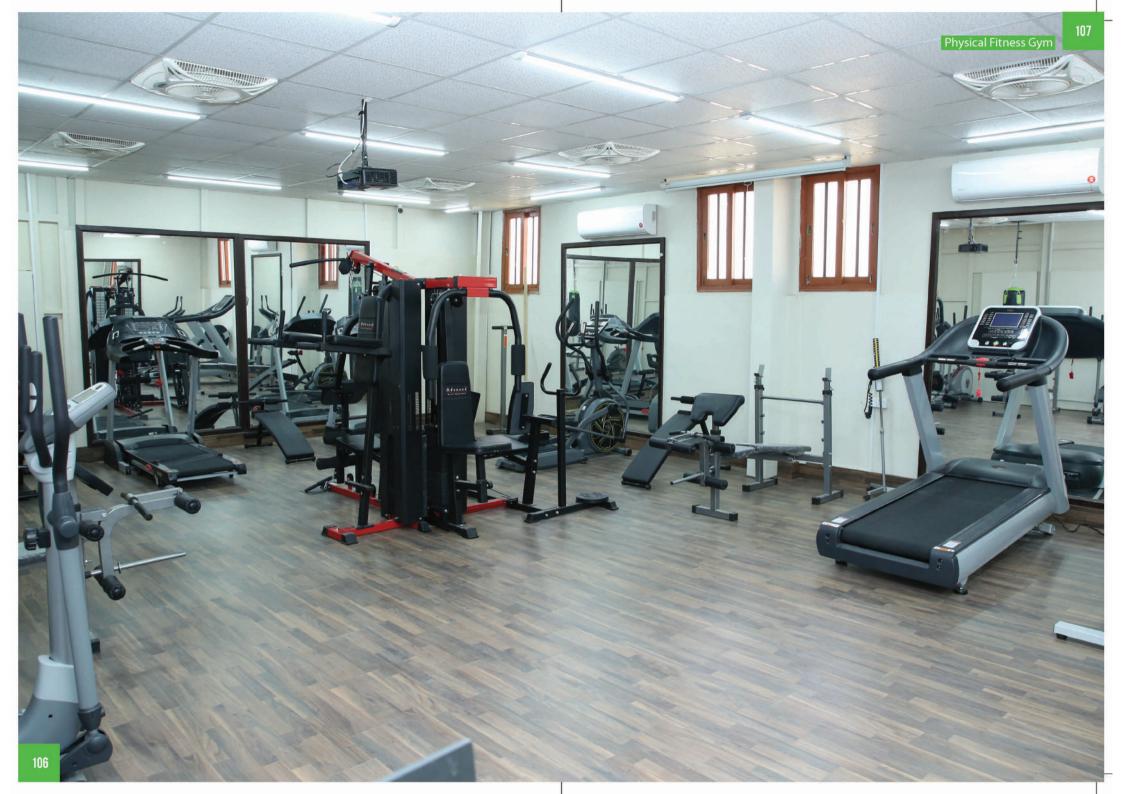
# ENTRY TEST FOR DPT PROGRAM

**ENTRY TEST** 

- The minimum admission eligibility criteria for the candidates is to score at least 60% marks in FSC (Pre Medical) examination.
- To pass an entry test examination with a score of 50% is mandatory.
- The entry test paper total marks are 100.
- Subjects and marks distribution is as follows:

S/NO	SUBJECT NAME	Marks Distribution
1	ENGLISH	5
2	GENERAL KNOWLEDGE	5
3	BIOLOGY	30
4	CHEMISTRY	30
5	PHYSICS	30





**PROGRAMS** 

#### Total Credit Hours: 174 5 Years, 10 Semesters Program

	SEMESTER, I	
ANT-301	Anatomy (I)	4(3-1)
PHY-102	Physiology (I)	3(2-1)
KIN-103	Kinesiology (I)	3(2-1)
EN -104	English I (Functional English)	3(3-0)
PS - 105	Pakistan Studies	2(2-0)
CO-106	Introduction to computer	3(2-1)
Total Credit Hrs		18
	SEMESTER II	
A2A-302	Anatomy-II	4(3-1)
CSE-308	English-II (Communication Skills)	3(3-0)
ISSE-310	Islamic Studies/Ethics	2(2-0)
KIN2-306	Kinesiology-II	3(2-1)
P2H-304	Physiology-II	3(2-1)
SOC-312	Sociology	2(2-0)
Total Credit Hrs	Services	17
	SEMESTER, III	
ANT-401	Anatomy-III	3(2-1)
BCH-407	Biochemistry I	2(2-0)
BME -405	Biomechanics & Ergonomics I (Theory)	3(3-0)
TWE -409	English III (Technical Writing & Presentation Skills)	3(3-0)
MPY-411	Medical Physics	3(2-1)
PHY -403	Physiology-III	3(2-1)
Total Credit Hrs	MOUNTE LANGE LANGE	17
	SEMESTER IV	
ANT-402	Anatomy IV (Neuro Anatomy)	3(2-1)
BCH-408	Biochemistry II	3(2-1)
BME-406	Biomechanics & Ergonomics II	3(2-1)
EPY-404	Exercise Physiology	3(2-1)
HNW-410	Health and Wellness	2(2-0)
MBG-412	Molecular Biology and Genetics	2(2-0)
Total Credit Hrs		16
	SEMESTER, V	
BSP-511	Behavioral Sciences ( Psychology & Ethics)	2(2-0)
BST-509	Biostatistics I	3(3-0)
PAM-501	Pathology & Microbiology I	2(2-0)
PHT-503	Pharmacology and Therapeutics I	2(2-0)
PAE-505	Physical Agents & Electrotherapy I	3(2-1)
SCP-513	Supervised Clinical Practice I	3(0-3)
TET-507	Therapeutic Exercises & Techniques	3(2-1)
Total Credit Hrs		18

# Doctor of Physical Therapy (DPT) Course Scheme Total Credit Hours: 174

Total Credit Hours: 174
5 Years, 10 Semesters Program

SEMESTER VI		
Tode	Course Title	Credit I
BST-510	Biostatistics II (University Optional)	3(3-0)
CMR-508	Community Medicine and Rehabilitation	3(3-0)
PAM-502	Pathology & Microbiology II	3(2-1)
PHT-504	Pharmacology and Therapeutics II	2(2-0)
PAE-506	Physical Agents & Electrotherapy II	3(2-1)
SCP-512	Supervised Clinical Practice II	3(0-3)
Total Credit Hrs	Harte Vallandina (1990)	17
	SEMESTER VII	
EBP-609	Evidence Based Practice	3(2-1)
MED-601	Medicine I	3(3-0)
MPT-607	Musculoskeletal Physical Therapy	3(2-1)
RDI-605	Radiology & Diagnostic Imaging	3(2-1)
SCP-611	Supervised Clinical Practice III	3(0-3)
SUR-603	Surgery I	3(3-0)
Total Credit Hrs		18
	SEMESTER VIII	
EPP-610	Emergency Procedures & primary care in	
	Physical Therapy	3(2-1)
MEDII-602	Medicine II	3(3-0)
NPT-606	Neurological Physical Therapy	3(2-1)
SRM-608	Scientific Inquiry and Research Methodology	3(2-1)
SCP-612	Supervised Clinical Practice IV (Lab)	3(0-3)
SURII-604	Surgery II	3(3-0)
Total Credit Hrs		18
	SEMESTER IX	
CPT-701	Cardiopulmonary Physical Therapy	3(2-1)
CMD-705	Clinical Decision Making &	
	Differential Diagnosis	3(3-0)
IGP-711	Integumentary Physical Therapy	2(2-0)
MAT-707	Manual Therapy	3(2-1)
PPLEA- 709	Professional Practice(Law, Ethics &	-,-
	Administration)	2(2-0)
POR-703	Prosthetics & Orthotics	2(2-0)
SCP-713	Supervised Clinical Practice V (Lab)	3(0-3)
Total Credit Hrs		18
	SEMESTER X	
GGP-706	Gerontology & Geriatric Physical Therapy	2(2-0)
OGP-702	Obstetrics & Gynaecological Physical Therapy	2(2-0)
PPT-704	Paediatric Physical Therapy	2(2-0)
RES-712	Research Project	6
SPPT-708	Sports Physical Therapy	2(2-0)
SCP-710	Supervised Clinical Practice VI (Lab)	4(0-4)
Total Credit Hrs	*** *** **** **** **** **** **** ******	18

# VISION

The vision of the Faculty of Social Science is envisioned to train and develop promising students and in-service teachers from various backgrounds and enable them to become competent, caring and conscious teachers thereby; meeting the socio-economic needs of the society by imparting quality education.

# MISSION

Our mission is to promote excellence in teaching and research. The program's contents have been derived from the latest research theories based on best practices and to meet the emerging issues, promote ethical values and social responsibility and last but not the least; to anticipate the future trends and issues of Educational Management.

# **OBJECTIVES**

- To prepare the teachers so they can pursue professional careers in the best possible manner.
- To promote the knowledge of a subject matter by utilizing modern teaching approaches.
- To increase the knowledge, skills and abilities (KSAs) of the teachers through practical activities including; teaching practices, assignments, class presentations, role play, etc.
- To highlight the significance of education in every day's life thereby; transforming future generations into civilized citizens.
- To broaden the horizons of the students; panel discussions, seminars, workshops are arranged regu-





# **MESSAGE BY THE ACTING DEAN, CHAIRPERSON**

As a Acting Dean of the Social Science & Chairperson, I welcome you all. The Department of Education (Faculty of Social Sciences) is deeply committed and striving to impart quality education with the help of qualified, skilled & trained teachers and also taking gigantic efforts for quality teaching methodology since 2008. We ensure a rich, exciting, challenging and students friendly environment to our valued students who want to achieve academic excellence in the offered programs. University management is also trying to develop academic relations with its national and international counterparts in order to bring global recognition for all university programs including the programs run by the Faculty of Social Sciences and avail scholarship opportunities to maximum students we believe that intellectual abilities and viable opportunities must be maximized to produce the highest academic outcomes.

Dr. Mehwish Manzoor

#### PROGRAM EDUCATIONAL OBJECTIVES

The Department of Education offers B.Ed (Hons) 4-year, Associate Degree, the programs of Education is designed to focus on the ideological, philosophical, psychological, socio-economic, and historical foundations of educa-

The Major objective of the programs is to develop prospective teachers and teacher-educators understanding of philosophical theories that affect education. The program course will also include the historical development of education in Pakistan and the emphasis will be on analyzing various sociological, political, economic, and ideological forces that influence the process of education in our cultural context.

#### PROGRAM LEARNING OUTCOMES

The Curriculum has been devised in a manner that will enhance the subject knowledge of the prospective teachers and teacher educators to produce healthy minds and sensible citizens that could play a vital role to eradicate poverty in Pakistan and understand:

- The current pedagogical language
- The fundamental concepts of education
- The influence of the disciplines that constitutes the foundations of education on educational thought and practice
- The interaction of the social, political and economic structures of Pakistani society and cultural causes that affect individual action

#### CURRICULUM DESCRIPTION

The Department of Education runs under the domain of Faculty of Social Sciences. The Faculty had started the "Department of Education" as the first Department of the University. Since its inception, the department has produced thousands of trained graduate teachers not only in Sindh but also in all over country. Following programs are offered by the university in two session Spring & fall.

- B.Ed-(Bachelor of Education 1.5 Year, 3 Semes-
- B.Ed-(Bachelor of Education 2 Year, 4 Semes-
- BS, B.Ed (Hons) (Bachelor of Education 4 Years, 8 Semesters)

#### Eligibility Criteria

Eligibility Criteria for admissions with minimum and maximum durations for the following respective courses:

BS/B.Ed (Hons) (Bachelor of Education - 4 Years)

- 1. FA/F.Sc/ A levels with minimum 2nd Division
- FA/F.Sc/ A levels with school subjects

The program is developed for students having a 12 years school certificate. Twenty four courses (67 credit hours) are required to complete the program. Admission to the course requires intermediate pass with minimum 45% marks (12 years of education) subject to satisfactory performance in the panel interview. Minimum duration of the course is 2 years and maxi**PROGRAMS** 

#### **B.Ed 4 year Degree Program** Course Scheme

Total Credit Hours: 144 4 Years, 8 Semesters Program

Code	Course Title	Credit
EDU-311	English I (Functional English)	3
EDU-311	Islamic Studies	3
EDU-331	Child Development	3
EDU-341	Urdu	3
EDU-351	General Science	3
EDU-361	General Methods of Teaching	3
Total Credit I		18
	SEMESTER II	
EDU-312	English II (Communication Skills)	3
EDU-322	Computer Literacy	3
EDU-332	Classroom Management	3
EDU-342	General Mathematics	3
EDU-352	Pakistan Studies	3
EDU-362	Methods of Teaching Islamic Studies	3
Total Credit I	lrs .	18
	SEMESTER III	
EDU-413	Teaching Literacy Skills	3
EDU-423	Art, Crafts and Calligraphy	3
EDU-433	Teaching of Urdu	3
EDU-443	Teaching of General Science	3
EDU-453	Instructional and Communication	
	Technology (ICT) in Education	3
EDU-463	Teaching Practice (Short Term)	3
Total Credit I	SEMESTER IV	18
EDU-414	Classroom Assessment	3
EDU-424	Teaching of English	3
EDU-434	Teaching of Mathematics	3
EDU-444	School, Community and Teacher	3
EDU-454	Teaching of Social Studies	3
EDU-464	Teaching Practice (Short Term)	3
Total Credit I		18
	SEMESTER V	
EDU-515	English III (Technical Writing &	
	Presentation Skills)	3
EDU-525	Foundations of Education	3
XXX-535	Content Course – I from selected	
	discipline A	3
XXX-535	Content Course - I from selected	254
12000000000	discipline B	3
	Curriculum Development	3
EDU-555 EDU-565	Educational Psychology	3

	SEMESTER VI	
Code	Course Title	Credit H
EDU-516	Contemporary Issues and Trends in	
	Education	3
XXX-526	Content Course - II from selected	
	discipline A	3
XXX-526	Content Course - II from selected	
	discipline B	3
EDU-546	Comparative Education	3
EDU-556	Elementary Education	3
EDU-566	Introduction to Guidance and Couns	eling 3
Total Credit H	Hrs	18
	SEMESTER VII	
XXX-617	Content Course - III from selected	
	discipline A	3
XXX-617	Content Course - III from selected	
	discipline B	3
XXX-637	Pedagogy - I (Methods of Teachings	
	related to selected discipline A)	3
XXX-637	Pedagogy - II (Methods of Teachings	
	related to selected discipline B)	3
EDU-657	Research Methods in Education	3
EDU-667	Teaching Practice (Short Term)	3
Total Credit F		18
	SEMESTER VIII	
EDU-618	School Management	3
EDU-628	Test Development and Evaluation	3
EDU-638	Inclusive education	3
EDU-648	Teaching Practice (Long Term)	6
EDU-658	Research Project	3
Total Credit I	lis	18

# B.Ed 1.5 year Degree Program (Secondary) Course Scheme

Total Credit Hours: 54 1.5 Years, 3 Semesters Program

	SEMESTER I	
Code	Course Title (	redit Hrs
EDU(B) 401	General Methods of Teaching	
	(Professional)	3+0
EDU(B) 402	Educational Assessment and Evaluation	
	(Professional)	3+0
EDU(B) 403	Curriculum Development (Foundation)	3+0
EDU(B) 404	Reseach Methods in Education	
	(Professional)	3+0
EDU(B) 405	Educational Leadership and	
	Management (Professional)	3+0
EDU(B) 406	Citizenship Education and Community	
	Engagement	3+0
Total Credit Hi		18
	SEMESTER II	
EDU(B) 501	Teaching Practices -I (Professional)	3+0
EDU(B) 502	Critical Thinking and Reflective	
	Practices (Professional)	3+0
EDU(B) 503	Area of Specialization	3+0
EDU(B) 504	Area of Specialization	3+0
EDU(B) 505	Area of Specialization	3+0
EDU(B) 506	Area of Specialization	3+0
Total Credit Hi		17
	SEMESTER III	
EDU(B) 601	Teaching Practices -II (Professional)	3+0
EDU(B) 602	Philosophy of Education	3+0
EDU(B) 603	Human Development and Learning	
	(Foundation)	3+0
EDU(B) 604	Professionalism in Teaching (Professional	3+0
EDU(B) 605	Reseach Project (Content Embedded)	
	(Professional)	3+0
EDU(B) 606	EducationalStatistics (Professional)	3+0

#### Specialization Area

#### Aera 1: Leadership and Management

Code	Course Title Credit	
EDU(B) 503	Management Strategies In Educational Instituition	3+0
EDU(B) 504	School Administration And Supervision	3+0
EDU(B) 505	Plan Implementation And Educational Management	3+0
EDU(B) 506	School Leadeship	3+0

#### Aera 2: Educational Teachnology and Evaluation

Code	Course Title	Credit Hrs
EDU(B) 507	Educational Technology and Evaluation	3+0
EDU(B) 508	Computer in Education	3+0
EDU(B) 509	Broadcast Media	3+0
EDU(B) 510	Non-Broadcast Media	3+0

#### Aera 3: Teacher Education

Code	Course Title	Credit Hrs
EDU(B) 511	Elementary Education	3+0
EDU(B) 512	Secondary Education	3+0
EDU(B) 513	Higher Education	3+0
EDU(B) 514	Teacher Education in Pakistan	3+0

#### Aera 4: Science Education

Code	Course Title	Credit Hrs
EDU(B) 515	Founadation of Science Education	3+0
EDU(B) 516	Assesment in Science Education	3+0
EDU(B) 517	Laboratory Organization, Management a	nd
	Safety Methods	3+0
EDU(B) 518	General Science in School	3+0

#### Aera 5: Inclusive Education

Code	Course Title	Credit Hrs
EDU(B) 519	Introducation to Inclusive Education	3+0
EDU(B) 520	Introducation to Special Education	3+0
EDU(B) 521	Inclusive Education: Adaptations in	
	Instrucation and Curriculum	3+0
EDU(B) 522	Inclusive Education: Adaptations in	
	Instrucation and Evaluation	3+0

#### Aera 6: Reading

Code	Course Title	Credit Hrs
EDU(B) 523	Foundation of Reading	3+0
EDU(B) 524	Teaching Reading	3+0
EDU(B) 525	Reading Difficulties	3+0
EDU(B) 526	Reading Assessment	3+0

# B.Ed 2 year Degree Program (Secondary) Course Scheme Total Credit Hours: 65

**PROGRAMS** 

2 Years, 4 Semesters Program

	SEMESTER I	
Code	Course Title	Credit H
EDU(B) 101	English - III (Technical Writing &	
	Presentation Skills) (Compulsory)	3
EDU(B) 102	Foundations of Education (Foundation)	3
EDU(B) 103	Content Course - I	
	(from selected discipline – I)	3
EDU(B) 104	Content Course – I	
	(from selected discipline – II)	3
EDU(B) 105	Curriculum Development (Foundation)	3
EDU(B) 106	Educational Psychology (Foundation)	3
Total Credit Hrs		18
EDU(B) 201	SEMESTER II Contemporary Issues and Trends in	
EDO(8) 201	Education (Professional)	3
EDU(B) 202	Content Course – II	3
EUU(0) 202	(from selected discipline – I)	2
EDU(B) 203	Content Course – II	2
200(0) 203	(from selected discipline – II)	3
EDU(B) 204	Comparative Education (Professional)	3
EDU(B) 205	Introduction to Guidance and	
(-/	Counseling (Professional)	3
Total Credit Hrs		14
	SEMESTER III	
EDU(B) 301	Content Course – III	
	(from selected discipline – I)	3
EDU(B) 302	Content Course – III	
	(from selected discipline – II)	3
EDU(B) 303	Pedagogy - I (Methods of Teachings	07287
N/V	related to specialization - I)	3
EDU(B) 304	Pedagogy – II (Methods of teaching	823
	related to specialization – II)	3
EDU(B) 305	Research Methods in Education (Professiona	
EDU(B) 306	Teaching Practice (Short Term)	3
Total Credit Hrs	SEMESTER IV	18
EDU(B) 401	School Management (Professional)	3
EDU(B) 402	Test Development and Evaluation	
	(Professional)	3
EDU(B) 403	Teaching Practice (Long Term)	6
EDU(B) 404	Research Project (Professional)	3

## List of Electives of Specialization Area BA & B.Com Students

Code	Course Title	Credit Hrs
EDU(B)	Teaching of Urdu	3+0
EDU(B)	Teaching of Islamiat	3+0
EDU(B)	Teaching of English	3+0
EDU(B)	Teaching of Pakistan Studies	3+0
EDU(B)	Teaching of General Science	3+0

#### **B.Sc Students**

Code	Course Title	Credit Hrs
EDU(B)	Teaching of Physics	3+0
EDU(B)	Teaching of Chemistry	3+0
EDU(B)	Teaching of Mathematics	3+0
EDU(B)	Teaching of Biology	3+0



# VISION

QEC aims to strengthen the higher education sector of Pakistan by setting up an exemplary Quality Assurance mechanism that shall be congruent with the national and international practices.

# MISSION

QEC is committed to assure and enhance the quality of higher education at Indus University with respect to good teaching strategies, sound infrastructure, outcome based education, positive students' perception, valid programs assessment tools and a learning environment conducive to research activities.

# **OBJECTIVES**

QEC Team facilitates different departments of the university in number of ways and its objectives are explicitly mentioned below:

- To collate data through feedback forms and course outlines/ plans from the respective departments.
- To conduct trainings on regular basis for the Program & Assessment Team in order to generate awareness regarding self-assessment process.
- To assess the current status of educational provision at departmental level by holding meetings with the Program & Assessment Team.
- To critically examine the data and formulate recommendations in consultation with the concerned Head/Chairperson/In-charge of the department.
- To follow the progress of the corrective actions highlighted in the Self-Assessment Report (SAR) by the respective departments.
- To affirm whether curriculum, subject and staff development, research and other scholarly activities are conducted as per the HEC criteria.
- To facilitate the respective departments in getting accreditation certificate from the councils/ bodies prescribed by Higher Education Commission.
- To acquire the membership of the international agencies working in the domain of quality assurance.
- To verify whether Institutional Performance Evaluation Standards (IPES) devised for the betterment of Higher Education Institutions (HEIs) are in accordance with the HEC guidelines.
- To make sure that the University abides by the rules & regulations set by HEC in terms of faculty appointment, admission to MS/M.Phil and Ph.D Programs and last but not the least, plagiarism detection service by utilizing turnitin software.



of success.

**Sheema Haider** 





# ORIENTATION SESSION FOR NEW STUDENTS

QEC has conducted the orientation session for the students of every discipline and they are being briefed about the Aims & Objectives of QEC. The students are acquainted with the problem areas of the education sector. The rationale behind self-assessment of programs and the motive of getting the survey forms filled by the students at different time interval is made necessary. Feedback helps to identify the actual performance that helps to improve quality.



# FEEDBACK MECHANISM

The QEC at Indus University aims to gauge the viewpoint from various stakeholders and in this context; online survey forms prescribed by HEC are filled by all stakeholders. We believe that this mechanism helps us to ensure quality education in the best possible manner and as a result, students could seize better employment opportunities in the future.

The following Survey Forms are supposed to be filled by various stakeholders as stipulated by QEC.

- · Student Course Evaluation (filled by students at the end of each semester for all registered courses)
- · Faculty course review report (filled by faculty members for each course in each semester)
- Graduating Students Survey (only for those students who are enrolled in the last semester of undergraduate/ graduate degree program)
- · Research Student Progress Review Form (to be filled by MS & Ph.D. Scholars on six monthly-basis)
- · Faculty Survey (to be filled by faculty members on annual basis)
- Survey of Department offering Ph.D. (to be filled by department offer Ph.D. program)
- Employer Survey (filled by reporting manager of graduated students to access the performance of the employees in the industry)
- · Faculty resume (faculty members are required to update their resume on prescribed format)
- · Alumni Survey (filled by students at least after 1 year of their graduation)
- · Teacher Evaluation (filled by students at the end of each semester for all registered courses)



# **INTERNATIONAL AND CORPORATE RELATIONS OFFICE**

We are proud to highlight that Indus University has arranged various international tours. We have managed successful delegation tours to Turkey, Malaysia, USA, Europe, Italy, France, Switzerland, Germany, Paris and Japan. More than 30 students have an enriching experience. These tours increase global exposure of the students, as they visit different universities and industries. We also work on building academic alliances for future growth by signing MoUs with different universities during these tours.

#### **Contact Information**

- Ms. Sheema Haider Head of International Relations Offfice Tel: +92 21 34801430 Ext. 127
- - Email: qec@indus.edu.pk / ir.executive@indus.edu.pk



# NATIONAL & INTERNATIONAL **ACADEMIC LINKAGES**

In view of its academic pursuits, Indus University, Karachi has developed collaborations with various national and international universities and linked Memorandum of Understandings (MoUs) with its counterparts of UK, USA, Turkey, France, Iraq, UAE, Bangladesh and others to broaden academic linkages.















# **EXECUTIVE DEVELOPMENT CENTER (EDC)**

The Executive Development Center (EDC) at Indus University was established in 2013 with the intention of connecting with the corporate world.

Furthermore, the department focuses on developing strong working relationships with the employers/managers and also takes timely and constructive feedback from them. EDC also serves as the gateway to the practical world.

EDC runs on the philosophy of nurturing ingenuity and entrepreneurial talent among its students and to achieve the desired objectives. We invite industry's renowned experts to deliver seminars and workshops on employability skills, thereby; equipping the students with the knowledge of socio-economic and socio-political scenario of the corporate world. Our students also quench their thirst for market knowledge through industrial visits, internships, job fairs, reunion dinner, etc.

We aim to empower our graduates with the knowledge, skills and abilities so they can make a difference in their chosen career. Apart from theoretical framework, the university recognizes the importance and relevance of following skills:

- Team building
- Effective communication
- Self-analysis
- Entrepreneurship
- Cognition (Emotional Intelligence)
- Being well-versed with the untapped market opportunities

#### Eligibility Criteria for Internship

It is pertinent to mention that six to eight week internship is mandatory for the degree requirement.

- For Undergraduate Programs, students must be enrolled in 3rd or 4th year, i.e. from 5th to 8th semester
- Graduate / Masters Programs, student must be enrolled in the 2nd year or 3rd semester

In many cases EDC assits students in acquiring internships in their relevant fields. This help them to overcome a requirement and also ensures that they have industry experience before they actually start looking for jobs.

#### Eligibility Criteria for Internship

#### FOR INTERNEE

- Internship Report (submitted in both hard & soft copy)
- Internship Certificate by the Organization
- Internee Evaluation form (must be collected from EDC department prior to the completion of internship period)

For GRADUATING STUDENT (Applicable to Final year student)

- Submission of Resume/CV as per the prescribed format. (Students enrolled in 8th semester prior to the final examination)
- Submission of graduating proforma / Survey (Student Portal)

#### Workflow

The students are facilitated in the following manner:

- Announcements are made about new job vacancies, internship opportunities, recruitment drive programs and tests via bulletin boards, social media and website.
- Student Resumes are analyzed and due assistance is provided to them so they can make improvements.
- Student's trainings are conducted to enhance their interviewing skills.
- Coordinating with Alumni who can assist in providing employment/internship opportunities for students.
- Archive of students' certificate, internship report and employers' feedback is maintained.

#### WORKSHOPS AND EVENTS

Numerous workshops and event have been organized by EDC as per the needs of students and the demand of the market.

#### Job Fair

The Executive Development Center at Indus University aims to facilitate students and alumni in their career path and job placement. For this purpose, EDC organized Job Fair annually that bring together employers, onboard students and graduates of Indus University. Through the recruitment, on-spot interviews, mentoring, counseling, and interaction with company representatives, students can be able to determine the best paths for professional growth and experience.



Dignitaries group photo on Job Fair 2020 at Indus University stands right to left H.E. Consul General of Bahrain Mr. Yaser Isa Ajlan AlHeddi, H.E. Consul General of Afghanistan Mr. Rahimullah Qatra, Chairman Hilton Pharma Hon. Gardar Yaseen Malik (SJ. & H.I), Worthy Chancellor Indus University Mr. Khalid Amin, Managing Director P2Gs Major General (Retired) Shaukat Iabal and Director QEC Indus University Ms. Sheema Haide



#### Accreditation is a process in which certification of competency, authority, or credibility is presented.

Accreditation also safeguards the future of the students and visualizes the core competency of a degree program offered by the respective university. It is a process of preparing self-assessment report of programs in order to streamline the education standards. There are Accreditation Councils formed by the Higher Education Commission of Pakistan and Pakistan Engineering Council.

#### PEC (Pakistan Engineering Council) Team Visits Indus University

PEC (Pakistan Engineering Council) Visits Indus University ensuring quality of the programs offered at institution al level. There are 9 independent processional councils while 4 councils have been established under Higher Education Commission. According to the powers and functions of the Commission as stated in Ordinance No. LIII of 2002, Para 10, Clause e, "the Higher Education Commission may set up national or regional evaluation councils or authorize any existing council or similar body to carry out accreditation of institutions including their departments, facilities and disciplines by giving them appropriate ratings.



# ACCREDITED PROGRAMS

#### **ACCREDITATION COUNCILS**

Pakistan Engineering Council (PEC)

National Computing Education Accreditation Council (NCEAC)

National Accreditation Council

National Business Education Accreditation Council (NBEAC)

#### **PROGRAMS**

BE Electrical Engineering (Electronics)

**BS** Computer Science

(1) B.Ed

(1) BBA

#### STATUS

Accreditation awarded to Batches of 2008, 2009 & 2010

Accreditation Awarded

Accreditation in progress





Convocation is a once in a lifetime event in the life of students. It is a very auspicious occasion and one which all students look forward to. It is the high lights of their academic achievements and one that marks the moment when they are ready to venture into the real world.

CONVOCATIONS	DATE	VENUE
1st Convocation	19th January 2009	Pearl Continental Hotel, KH
2nd Convocation	9th December 2009	Bahria Auditorium, KHI
3rd Convocation	15th January 2011	Bahria Auditorium, KHI
4th Convocation	24th December 2011	Expo Center, KHI
5th Convocation	31st December 2014	Expo Center, KHI
6th Convocation	15th December 2015	Expo Center, KHI
7th Convocation	22nd March 2017	Expo Center, KHI
8th Convocation	28th April 2018	Expo Center, KHI
9th Convocation	26th January 2019	Expo Center, KHI
10th Convocation	28th December 2019	Expo Center, KHI





#### Karachi City Marathon 2020

Indus University participated in the 2nd Commissioner Karachi Marathon that was held on 12th January 2020. Deputy Commissioner South, the man behind the 'Commissioner Karachi City appreciated the participant at the event, Students of Indus University participated with great zeal and enthusiasm. A brief colorful ceremony was held at the start of the event at DHA Sports Club (Moin Khan Academy).

#### **Physical Therapy Day**

Indus University, Department of Physical Therapy and Rehabilitation Sciences conducted a session to generate awareness and the day marks the unity of the physical therapy community. It is an opportunity to recognize the work that physical therapists do for their patients and community. Using Physical Therapy Day as a focus, Indus University aims to support students and faculty members in their efforts to promote the profession and advance their expertise. The worthy chancellor Mr. Khalid Amin along with deans and other officials graced the event through their kind presence and Mr. Khalid Amin appraised the faculty members and students on their hard work and announced the prizes of ten(10) thousand to the academic position holders and winners of projects that has been displayed at the events



# STUDENT SOCIETIES

IEEE

Indus University IEEE professional student chapter is dedicated to advancing technological innovation and excellence for the benefit of humanity. Indus IEEE student chapter is also working shoulder by shoulder with global community and inspires them through its highly cited publications, conferences, technology standards, professional and educational activities.

Indus University Department of Physical Therapy and Rehabilitation Student Society is motivated and determined to enhance students educational, clinical, moral and curricular abilities and make them among the world of physiotherapy, groom our students not for national but also for international levels. The more the skills they achieve the more they learn.

**IUPTRSS** 

**IUDS** 

Indus University Design Student Society (IUDS) primarily focuses on the provision of updated information to the creative minds along with fun loving activities. For this, IUDS is involved in utilizing their skills and abilities to arrange different fun-loving and knowledge-based events to enhance students' moral so they can work for the betterment of the society.

Indus University Business Student Society (IUBS) was established with an aim to organize extra-curricular activities, seminars, conferences, workshops and fundraising events for community services and provide voluntary support to faculty and management in day today university affairs.

**IUBS** 

**IUES** 

Indus University Engineering Student Society (IUES) intends to provide a platform to engineering students so they can demonstrate their ideas efficiently and organize curricular and extra-curricular activities inside and outside of the university.

Indus University Computing Student Society (ICS) was established with a prime motive to create students' friendly environment free from student politics but to keep focus on their studies and to help support in arranging interactive workshops, computing competitions and sharing ideas for better and prosperous society by utilizing computer technology.

IUCS

**IUCS** 

Indus University Civil Society (IUCS) was established to boost educational activities in the university and to provide voluntary support to faculty and students in organizing co-curricular activities in the university. IUCS is also working hard to promote community services.

ACM (Association for Computing Machinery) brings together computing educators, researchers, and professionals to inspire dialogue, share resources, and address the field's challenges. As the world's largest computing society, ACM strengthens the profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence.

**ACM** 



#### Fashionista 2019 Organized by Department of Design, Indus University

Indus University organized a mega event called "Fashionista". They presented different cultural fusion at the event. The show also Included in house singing & dancing by the talented students at Indus. The guest Including Council General of Romania, Members of Rotary club graced our event with their presence. Famous Celebrities came to encourage the hard work of our students along with VOUCH 365 as our sponsors.



Indus University emphasis on developing well rounded graduates. In this perspective, co-curricular activities are very much part of Indus programs. Under the guidance of our Sports Manager student partake in various sporting competitions. Many Laurels have been brought in by the students, which is testament to their hard work and dedication towards the Institution.



To be a successful professional in any field, social skills are imperative. To develop social skills of Indus University students, with the support and encouragement from the management, organized picnics, carnivals, and art shows.

# **INDUS UNIVERSITY STATUTORY BODIES**



The Board of Governors is an Executive Body of the University subjects to the Indus University Act 2012 with power to hold & control the property and funds of the University, Finance, Accounts & Investment, consider Annual & Revised Budget estimate manage the moveable & immoveable property internal to contacts to appoint Faculty & Non-Faculty Staff, confer Honorary Degrees & to Regulate, determine & Administer or other matters.



The Academic Council of the University is the highest Academic Body with powers to lay down proper standards of instructions, Scholarship, Research Publication, Examinations & to regulate & promote the Academic life of the University in particular to advise the Board of Governors on Academic matters, regulate the admissions to promote development of Teaching & Research and to make regulations prescribing the course of Studies.



The Board advises the authorities on all matters connected with the promotion of Advanced Studies & Research in the University, considers and report to the authorities on the Institution of Research Degree, Proposes Regulations regarding the award of Research Degrees & appoints Supervisors for Research students.



The Selection Board of the University considers all applications for Teaching & other course and recommends appointments of qualified persons for approval to the Board of Governors as well as considers recommendations to the Board the promotion of Non-Academic Staff.

# BOARD OF STUDIES

The Board of Studies advises the authorities on all Academic matters connected with instruction, Research & Examination in the subjects concerned. It proposes curricula and syllabi for all courses of studies & suggests the panel of names of paper setters and Examiners in the subjects concerned.



Each Faculty has a Board for under the General Control of the Academic Council & it coordinates the Teaching & Research in the subjects assign to the Faculty, Scrutinizes the scheme of courses proposed by the Board of Studies.

# THE FINANCE & PLANNING COMMITTER

The Finance & Planning Committee considers Annual statement of Accounts, Revised Budget estimate, review periodically financial position of the University and as well advises the Board of Governors on all matters relating to planning, development, finance, investment, Accounts of the University and short and long term development plan.

# DISCIPLINE COMMITTEE

The Discipline Committee proposes regulation for the conduct of the university students, maintenance of discipline & as well deals with cases of discipline.





































