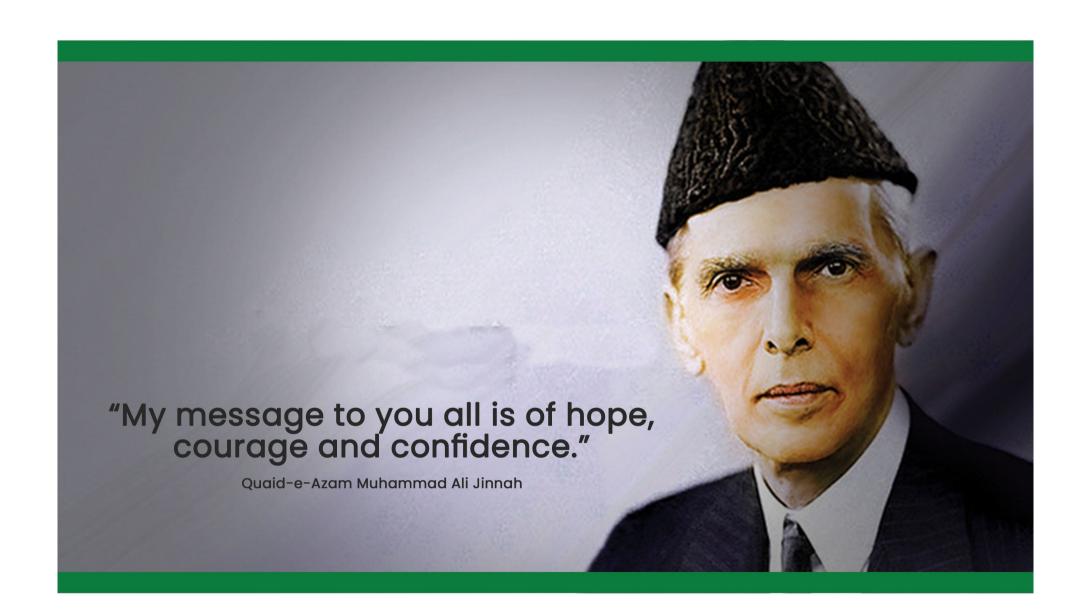








**PROSPECTUS 2024-2025** 





In the name of God, the Most Gracious, the Most Merciful.

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## **Our Vision**

To become a nationally recognized institute by providing an affordable, high-quality research and sustainable learning environment while propelling the country's economy forward through professionals.



Gujrat Institute of Management Sciences aims to inspire, prepare and empower students by providing advanced educational experience to foster critical thinking and promote modern technology for transforming individuals into competent professionals with compassionate minds and moral values



## Chairman's Commitment to Diversity and Inclusion Dr. Aamir Nabi Rana

Director General
Gujrat Institute of Management Sciences

The mission of GIMS is to "inspire, prepare, and empower students to succeed in a changing world." Our shared vision is to be recognized as "a national leader in transforming lives through an innovative, rigorous, and compassionate approach to education." It is my great privilege to work and learn alongside you each day as we strive to fulfill this mission and to live into this vision.



our creating an environment that is welcoming and accepting of differences, and in which every person's contribution and perspective is heard and valued. While we do not all share the same beliefs, experiences, and perspectives, I believe that we can honor, respect, and seek to understand one another. In fact, I expect that we as a community will do so. Our goal should not be to homogenize our community, but rather to foster deeper understanding, to build bonds, and to increase our effectiveness in working across cultures and beliefs. And we must do so within a context of trust and graciousness; not one of blame and shaming. Each of us plays an important role in creating and maintaining this environment.

As Chairman, I believe it is important for you to know that I recognize, support, and value the perspectives, experiences, and contributions of people of all Origins and Ages.

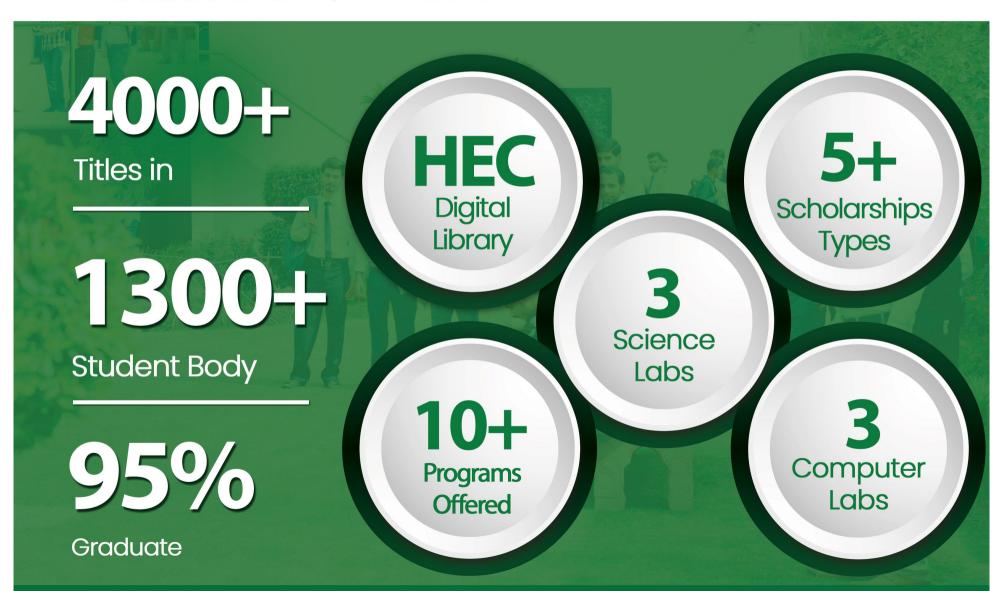
I am committed to working with you to create, maintain, and enhance an environment conducive to the learning and growth of all students, faculty and staff. I continue to actively discuss this with my administration and leaders from across the campus, and urge each of them to reflect upon how their communications and actions demonstrate their commitment to this work and impact our environment. As an educational institution we have a unique opportunity to create and nurture an environment that encourages and embraces a wide breadth of ideas and beliefs. This work belongs to us all—it is a shared responsibility. While Institute leaders must set the tone and model their commitment to this work, each of us impacts our environment through our daily interactions with our students and one another.

Please join me in working together in an open, honest, and trusting manner to build the GIMS environment where all students, faculty, and staff are valued and can thrive.





# GIMS Fact Sheet





### Management Science

Bachelor of Business Administration (BBA Hons)
(Marketing / Finance / Human Resource Management)

### **Computer Science**

BS Computer Science
(General Computing / Artificial intelligence)

**BS Software Engineering** 

### **Mathematics**

**BS Mathematics** 

### **Sciences Department**

BS Human Nutrition & Dietetics

**BS Medical Laboratory Technology** 

BSc. (Hon) Food Science & Technology

**BS Biochemistry** 

**BS Biotechnology** 

**BS Microbiology** 

"Quality is never an accident. It is always the result of intelligent effort."





## BBA (Hons.) - Bachelor of Business Administration

A minimum of 8th semester duration program after intermediate or equivalent.

### Admission eligibility:

- -A person (Male/Female) holding Intermediate Certificate, A-Level or equivalent certificate from any recognised Institute with at least 50% Marks shall be eligible for admission to BBA (Hons.) Programme.
- -Admission will be on open merit basis; based on marks obtained in last degree.
- -Age: A Cadidate must not be more than 23 Years of age on 1st October of the year of admission, provided that the Vice Chancellor may relax age limit in very exceptional cases.

### Academic standing:

1 Grade point Average:

a. Maximum grade point average

4.00

b. Minimum grade point average for obtaining the degree 2.50

To remain on the roll of the University, a student shall be required to maintain the following minimum CGPA otherwise he/she shall be ceased on the University roll.

2 A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be

promoted to the next semester.

A student who does not meet the above requirements may repeat the whole semester once only. The course grades that a student earns in the repeated semester shall replace the previously earned course grades.

4 During the specified minimum duration for completing the degree, a student may repeat those courses of the previous semesters in which he/she had secured the grade "F", provided the course load does not exceed the maximum limit of credit hours in a semester. Repetition of lowest grades will only be allowed in Summer Session

Semester	CGPA
1st	0.75
2nd	1.00
3rd	1.25
4th	1.50
5th	1.75
6th	2.00
7th	2.25
8th	2.50

## Scheme of Study for BBA (Hons.) (Semester Wise)

#### I- Semester

#### Course Code Course Title S. No Credit Hrs. **ENG-301 Functional English** 3(3-0) 2 IS-302 Islamic Studies / Ethics 2(2-0) 3 QR-401 **Quantitative Reasoning-I** 3(3-0) SOS-301 **Moral Foundation of Education** 2(2-0) 5 MGT-321 **Fundamentals of Accounting** 3(3-0) **Principles of Management** MGT-411 3(3-0) **Translation of Quran** TOQ-101 1(1-0)

#### II- Semester

S. No	Course Code	Course Title	Credit Hrs.
1	ENG-302	Expository Writing	3(3-0)
2	SSH-302	Ideology and Constitution of Pakistan	2(2-0)
3	QR-402	Quantitative Reasoning-II	3(3-0)
4	NS-402	The Science of Global Challenges	3(2-1)
5	MGT-322	Civics and Community Engagement	2(2-0)
6	MGT-351	Principles of Marketing	3(3-0)
	-		

Note: Muslim students will enroll Islamic Studies and non-Muslim will enroll ethic \*

#### III - Semester

S. No	Course Code	Course Title	Credit Hrs.
12			
1	MGT-617	Entrepreneurship	3(3-0)
2	CSC-100	Application of Information Technologies (ICT)	3(2-1)
3	ECON-302	Introduction to Microeconomics	3(3-0)
4	MGT-322	Financial Accounting	3(3-0)
5	MGT-407	Business Ethics and CSR	3(3-0)
6	TOQ-201	Translation of Quran	1(1-0)

#### **IV- Semester**

S. No	Course Code	Course Title	Credit Hrs.
1	ANTH-401	Social Psychology	3(3-0)
2	ECON-304	Introduction to Macroeconomics	3(3-0)
3	MGT-452	Marketing Management	3(3-0)
4	MGT-512	Organizational Behavior	3(3-0)
5	MGT-515	Human Resource Management	3(3-0)

# Scheme of Study for BBA (Hons.) (Semester Wise) Specializations (Marketing / Finance / Human Resource Management)

#### V - Semester

S. No	Course Code	Course Title	Cred	dit Hrs.
1	MGT-526	Money and Banking	3(3-	-0)
2	MGT-504	Managerial Accounting	3(3-	-0)
3	MGT-580	Strategic Management	3(3-	-0)
4	MGT-616	Total Quality Management	3(3-	-0)
5	ECON-405	Econometrics-I	3(3-	-0)
6	TOQ-301	Translation of Quran	3(3-	-0)

#### VI - Semester

S. No	Course Cod	le Course Title	Credit Hrs.
1	MGT-525	Financial Management	3(3-0)
2	MGT-696	Production Operations Management	3(3-0)
3	ECON-406	Econometrics-II	3(3-0)
4		Elective-I	3(3-0)
5		Elective-II	3(3-0)

#### VII - Semester

S. No	Course Code	Course Title	Credit Hrs.
1	MGT-493	Business Research Methods	3(3-0)
2	MGT-574	International Business	3(3-0)
3	MGT-661	E-Business	3(3-0)
4	MGT-698	Internship	3(0-6)
5	TOQ-401	Translation of Quran	1(1-0)
6		Elevtive-III	3(3-0)
7		Elevtive-IV	3(3-0)

#### VIII - Semester

S. No	Course Code	Course Title	Credit Hrs.
	MCT (10	6	2(2.0)
1	MGT-618	Contemporary issues in Management	3(3-0)
2	MGT-513	Business Law & Taxation	3(3-0)
3	MGT-699	Project	3(0-6)
4		Elective-V	3(3-0)
5		Elective-VI	3(3-0)

# Elective Courses for the Specializations offered in BBA (Hons.)

3(3-0)

#### **MARKETING**

S. No	Course Code	Course Title	Credit Hrs.
1	MGT-560	Consumer Behavior	3(3-0)
2	MGT-561	Advertising & Promotion	3(3-0)
3	MGT-562	Sales Management	3(3-0)
4	MGT-663	Services Marketing	3(3-0)
5	MGT-664	Strategic Brand Management	3(3-0)
6	MGT-665	International Marketing	3(3-0)
7	MGT-666	Marketing Research	3(3-0)
8	MGT-667	Marketing Channels	3(3-0)
9	MGT-668	Strategic Marketing	3(3-0)
10	MGT-669	Seminars In Marketing	3(3-0)

**Digital Marketing** 

#### **HUMAN RESOURCE MANAGEMENT**

S. No	Course Code.	Course Title	Credit Hrs.
1	MGT-581	Leadership	3(3-0)
2	MGT-582	Organizational Development	3(3-0)
3	MGT-683	Human Resource Development	3(3-0)
4	MGT-684	Learning & Management Development	3(3-0)
5	MGT-685	Collective Bargaining & Wage Policy	3(3-0)
6	MGT-686	International Human Resource Management	3(3-0)
7	MGT-687	Strategic Human Resource Management	3(3-0)
8	MGT-688	Seminars in Human Resource Management	3(3-0)
9	MGT-689	Change Management	3(3-0)
10	MGT-682	Negotiations and Conflict Management	3(3-0)

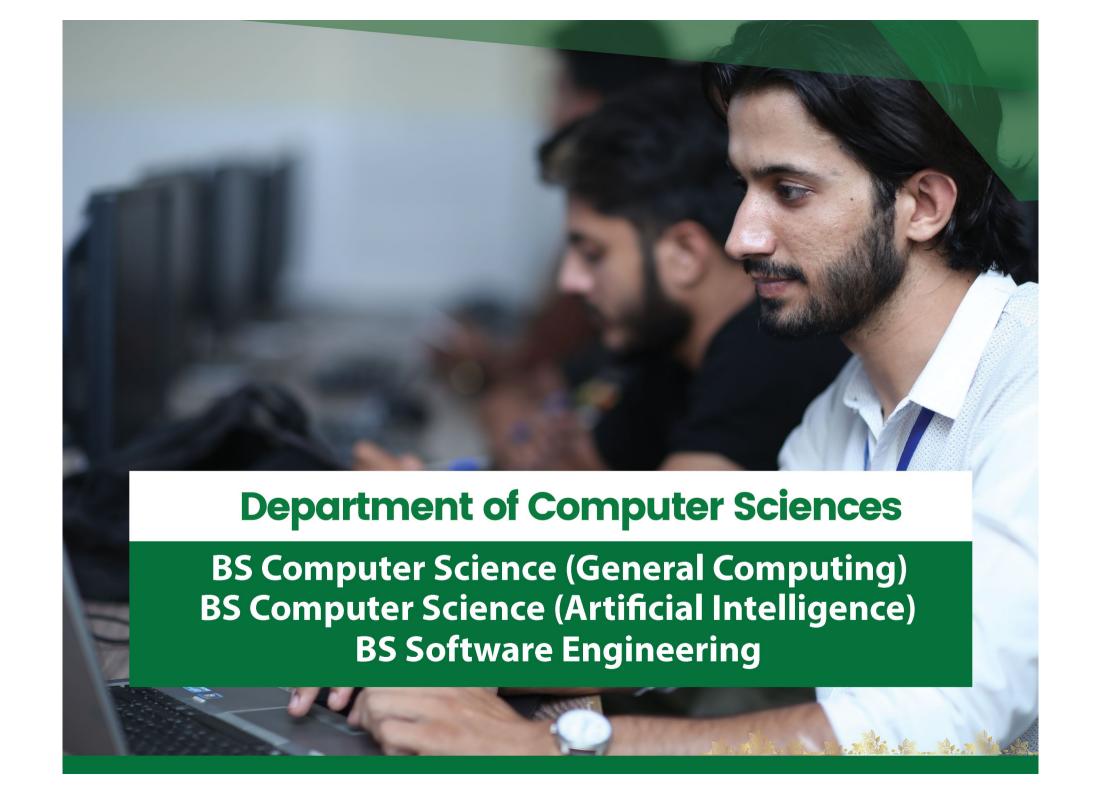
#### **FINANCE**

MGT-662

S. No	Course Code	Course Title	Credit Hrs.
1	MGT-531	Analysis of Financial Statements	3(3-0)
2	MGT-633	Corporate Finance	3(3-0)
3	MGT-635	Islamic Banking	3(3-0)
4	MGT-638	International Finance	3(3-0)
5	MGT-639	Money & Capital Markets	3(3-0)
6	MGT-631	Securities Analysis & Portfolio Management	3(3-0)
7	MGT-632	Introduction to Financial Risk Management	3(3-0)
8	MGT-636	Introduction to Behavioral Finance	3(3-0)
9	MGT-637	Financial Modeling	3(3-0)



The key to success is action, and the essential in action is perseverance.





# Bachelor of Science in Computer Science Specialized in Artificial Intelligence / General Computing

A minimum of 8th Semester duration program after Intermediate or equivalent.

### Admission eligibility:

- -A person (Male/Female) holding Intermediate Certificate, A-Level or equivalent certificate from any recognised Institute with at least 50% Marks shall be eligible for admission to BS (CS).
- -Admission will be on open merit basis; based on marks obtained in last degree.
- -Age: A Cadidate must not be more than 23 Years of age on 1st October of the year of admission, provided that the Vice Chancellor may relax age limit in very exceptional cases.

Note:- Those students who have Pre-Medical Background, must pass deficiency courses of Mathematics of 6 Credit hours within one year of their regular studies. The deficiency courses must be pass/fail basis and should not count in CGPA of the student.

### Academic standing:

1 Grade point Average:

a. Maximum grade point average 4.00

b. Minimum grade point average for obtaining the degree 2.50

To remain on the roll of the University, a student shall be required to maintain the following minimum CGPA otherwise he/she shall be ceased on the University roll.

A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be promoted to the next semester.

A student who does not meet the above requirements may repeat the whole semester once only. The course grades that a student earns in the repeated semester shall replace the previously earned course grades.

In the 8th Semester, if a student fails to achieve the 2.5 CGPA, he/she shall have to repeat the course/courses with lowest grades, so as to make CGPA of 2.5 within the maximum time period allowed for the degree.

Semester	CGPA
1st	0.75
2nd	1.00
3rd	1.25
4th	1.50
5th	1.75
6th	2.00
7th	2.25
8th	2.50

# Scheme of Study for BSCS (Semester Wise) Specializations (General Computing / Artificial Intelligence)

#### I- Semester

S. No	Course Code	· Course Title	Credit Hrs.	PreReq
1	CSC-100	Application of Information & Communication Tech	hnologies 3 (2-3)	
2	CSC-101	Programming Fundamentals	4 (3-3)	_
3	CSC-110	Discrete Structures	3 (3-0)	_
4	MTH-101	Calculus and Analytic Geometry	3 (3-0)	_
5	ENG-102	Functional English	3 (3-0)	_

#### II- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-102	Object Oriented Programming	4 (3-3)	CSC-101
2	CSC-103	Database Systems	4 (3-3)	_
3	CSC-111	Digital Logic Design	3 (2-3)	_
4	MTH-102	Multivariable Calculus	3 (3-0)	MTH-101
5	STT-101	Probability & Statistics	3 (3-0)	_

#### III - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-201	Data Structures	4 (3-3)	CSC-101
2	CSC-202	Information Security	3 (2-3)	_
3	CSC-203	Artificial Intelligence	3 (2-3)	_
4	CSC-204	Computer Networks	3 (2-3)	_
5	CSC-205	Software Engineering	3 (3-0)	_
6	MTH-103	Linear Algebra	3 (3-0)	MTH-101

#### **IV- Semester**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-211	Computer Organization & Assembly Lang	-(,	CSC-111
2		Domain Elective 1 Domain Elective 2	3(2-3) 3(2-3)	_
4	PHY-201	Natural Science (Applied Physics)	3(2-3)	_
5	ENG-201	Expository Writing	3(3-0)	ENG-102
6	IS-201	Islamic Studies	2(2-0)	_

Note: Muslim students will enroll Islamic Studies and non-Muslim will enroll ethic \*

# Scheme of Study for BSCS (Semester Wise) Specializations (General Computing / Artificial Intelligence)

#### V - Semester

S. No	Course Cod	e Course Title	Credit Hrs.	PreReq
1	CSC-301	Operating Systems	3(2-3)	
2	CSE-320	Domain Core 1 (Software Design & Archi	3(3-0)	_
3	CSE-321	Domain Core 2 (Software Const. & Develop	3(2-3)	_
4		Domain Elective 3	3(3-0)	_
5		Domain Elective 4	3(2-3)	_
6	SSH-301	Social Science (Introduction to Manageme	nt) 2(2-0)	_

#### VI - Semester

S. No	Course Code	e Course Title	Credit Hrs.	PreReq
1 2	CSE-322 CSE-323	Domain Core 3 (Software Project Mgt.)  Domain Core 4 (Software Quality Eng.)	3(2-3) 3(2-3)	-
3	CSE-324	Domain Core 5 (Software Req. Eng.)	3(2-3)	-
4	CSC-314	Domain Core 6 (Parallel & Distributed Comp	o.) 3(2-3)	CSC-301
5		Domain Elective 5	3(2-3)	_
6		Domain Elective 6	3(2-3)	_

#### VII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-498	Final Year Project – I	2(0-6)	_
2	CSC-401	Analysis of Algorithms	3(3-0)	CSC-201
3		Domain Elective 7	3(2-3)	_
4	MGT-351	Elective Supporting Course (Intro. To Mark	.) 3(3-0)	_
5	ENG-401	Technical & Business Writing	3(3-0)	ENG-201
6	SSH-401	Entrepreneurship	2(2-0)	-

#### VIII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1 2	CSC-499 SSH-402	Final Year Project – II  Arts & Humanities (Professional Practices)	_(_ 0)	CSC-498 _
3 4	SSH-403 SSH-404	Civics and Community Engagement Ideology and Constitution of Pakistan	2(2-0) 2(2-0)	_ _

# Scheme of Study for BSCS (Semester Wise) Specializations (General Computing / Artificial Intelligence)

#### **General Education Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-100	Application of Information & Communication Techn	ologies 3 (2-3)	
2	CSC-110	Discrete Structures	3 (3-0)	_
3	MTH-101	Calculus and Analytic Geometry	3 (3-0)	_
4	ENG-102	Functional English	3 (3-0)	_
5	ENG-201	<b>Expository Writing</b>	3 (3-0)	ENG-102
6	IS-201	Islamic Studies	2 (2-0)	_
7	PHY-201	Applied Physics	3 (2-3)	_
8	SSH-301	Introduction to Management	2 (2-0)	_
9	SSH-401	Entrepreneurship	2 (2-0)	_
10	SSH-402	Professional Practices	2 (2-0)	_
11	SSH-403	Civics and Community Engagement	2 (2-0)	_
12	SSH-404	Ideology and Constitution of Pakistan	2 (2-0)	_

#### **Mathematics and Science Foundation**

S. I	No Course Code	Course Title	Credit Hrs.	PreReq
1	MTH-102	Multivariable Calculus	3 (3-0)	MTH-101
2	MTH-103	Linear Algebra		MTH-101
3	STT-101	Probability & Statistics	3 (3-0)	_
4	ENG-401	Technical & Business Writing	3 (3-0)	ENG-201

#### **Computing Core Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-101	Programming Fundamentals	4 (3-3)	_
2	CSC-102	Object Oriented Programming	4 (3-3)	CSC-101
3	CSC-103	Database Systems	4 (3-3)	_
4	CSC-111	Digital Logic Design	3 (2-3)	_
5	CSC-201	Data Structures	4 (3-3)	CSC-101
6	CSC-202	Information Security	3 (2-3)	_
7	CSC-203	Artificial Intelligence	3 (2-3)	_
8	CSC-204	Computer Networks	3 (2-3)	_
9	CSC-205	Software Engineering	3 (3-0)	_
10	CSC-211	Computer Organization & Assembly Language	3 (2-3)	CSC-111
11	CSC-301	Operating Systems	3 (2-3)	_
12	CSC-401	Analysis of Algorithms	3 (3-0)	CSC-201
13	CSC-498	Final Year Project – I	2 (0-6)	_
14	CSC-499	Final Year Project – II	4 (0-12)	CSC-498

#### **Elective Supporting Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MGT-351	Social Science (Example: Intro. to Marketing)	3(3-0)	_
2	MGT-322	Social Science (Example: Financial Accounting)	3(3-0)	_

# Scheme of Study for BSCS (Semester Wise ) Specializations (General Computing / Artificial Intelligence)

#### **Domain Core Courses**

S. No	Course Cod	Credit Hrs.	PreReq	
1	CSC-301	Theory of Automata	3 (3-0)	
2	CSC-302	Advance Database Management Systems	3 (2-3)	_ CSC-103
3	CSC-311	Computer Architecture	3 (2-3)	CSC-211
4	CSC-312	Compiler Construction	3 (2-3)	CSC-302
5	CSC-313	HCI & Computer Graphics	3 (2-3)	_
6	CSC-314	Parallel & Distributed Computing	3 (2-3)	CSC-301

#### **Artificial Intelligence Electives Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CAI-261	Programming for AI	3 (2-3)	_
2	CAI-262	Machine Learning	3 (2-3)	CSC-203
3	CAI-361	Artificial Neural Networks & Deep Learning	g 3 (2-3)	CAI-261
4	CAI-362	Knowledge Representation & Reasoning	3 (2-3)	_
5	CAI-363	Computer Vision	3 (2-3)	CAI-361
6	CAI-364	Natural Language Processing	3 (2-3)	_
7	CAI-461	Reinforcement Learning	3 (2-3)	CAI-262
8	CAI-462	Fuzzy Systems	3 (2-3)	_
9	CAI-463	Swarm Intelligence	3 (2-3)	_
10	CAI-464	Agent Based Modeling	3 (2-3)	_
11	CAI-465	Speech Processing	3 (2-3)	-

#### **Domain Elective Courses**

S. No	Course Cod	e Course Title	Credit Hrs.	PreReq
1	CSC-251	Web Technologies	3 (2-3)	_
2	CSC-252	Advanced Programming	3 (2-3)	_
3	CSC-302	Theory of Automata	3 (3-0)	_
4	CSC-313	HCI & Computer Graphics	3 (2-3)	_
5	CSC-353	Mobile Application Development 1	3 (2-3)	_
6	CSE-325	Object Oriented Analysis & Design	3 (2-3)	_
7	CSE-422	Software Testing & Quality Assurance	3 (2-3)	_
8	CSE-326	Software Re-Engineering	3 (2-3)	_
9	CSC-303	Advanced Database Management Systems	3 (2-3)	_
10	CSC-311	Computer Architecture	3 (2-3)	_
11	CSC-351	Web Engineering	3 (2-3)	_

### Mathematics & Supporting Courses

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MTH-102	Multivariable Calculus	3(3-0)	MTH-101
2	MTH-103	Linear Algebra	3(3-0)	MTH-101
3	STT-101	Probability & Statistics	3(3-0)	
4	ENG-401	Technical & Business Writing	3(3-0)	ENG-201



## **Bachelor of Science in Software Engineering**

A minimum of 8th semester duration program after Intermediate or equivalent.

### Admission eligibility:

- -A person (Male/Female) holding Intermediate Certificate, A-Level or equivalent certificate from any recognised Institute with at least 50% Marks shall be eligible for admission to BS (SE).
- -Admission will be on open merit basis based on marks obtained in last degree.
- -Age: A Cadidate must not be more than 23 Years of age on 1st October of the year of admission, provided that the Vice Chancellor may relax age limit in very exceptional cases.

Note:- Those students who have Pre-Medical Background, must pass deficiency courses of Mathematics of 6 Credit hours within one year of their regular studies. The deficiency courses must be pass/fail bases

### Academic standing:

1 Grade point Average:

a. Maximum grade point average 4.00

b. Minimum grade point average for obtaining the degree 2.50

To remain on the roll of the University, a student shall be required to maintain the following minimum CGPA otherwise he/she shall be ceased on the University roll.

A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be promoted to the next semester.

A student who does not meet the above requirements may repeat the whole semester once only. The course grades that a student earns in the repeated semester shall replace the previously earned course grades.

In the 8th Semester, if a student fails to achieve the 2.5 CGPA, he/she shall have to repeat the course/courses with lowest grades, so as to make CGPA of 2.5 within the maximum time period allowed for the degree.

CGPA
0.75
1.00
1.25
1.50
1.75
2.00
2.25
2.50

#### I- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-100	Application of Information & Comm. Tech	3(2-3)	
2	CSS-101	Programming Fundamentals	4(3-3)	
3	CSC-110	Discrete Structures	3(3-0)	_
4	MTH-101	Calculus and Analytic Geometry	3(3-0)	_
5	ENG-102	Functional English	3(3-0)	_

#### II- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-102	Object Oriented Programming	4(3-3)	CSC-101_
2	CSC-103	Database Systems	4(3-3)	_
3	CSC-111	Digital Logic Design	3(2-3)	_
4	MTH-102	Multivariable Calculus	3(3-0)	MTH-101
5	STT-101	Probability & Statistics	3(3-0)	_

#### III - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-201	Data Structures	4(3-3)	CSC-101
2	CSC-202	Information Security	3(2-3)	_
3	CSC-203	Artificial Intelligence	3(2-3)	_
4	CSC-204	Computer Networks	3(2-3)	_
5	CSC-205	Software Engineering	3(3-0)	_
6	MTH-103	Linear Algebra	3(3-0)	MTH-101

#### **IV- Semester**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-211	Computer Organization & Assembly Lang	3(2-3)	CSC-111
2		Domain Elective 1	3(2-3)	_
3		Domain Elective 2	3(2-3)	_
4	PHY-201	Natural Science (Applied Physics)	3(2-3)	_
5	ENG-201	<b>Expository Writing</b>	3(3-0)	ENG-102
6	IS-201	Islamic Studies	2(2-0)	_

Note: Muslim students will enroll Islamic Studies and non-Muslim will enroll ethic \*

#### V - Semester

S. No	Course Cod	e Course Title	Credit Hrs.	PreReq
1	CSC-301	Operating Systems	2/2 2\	
2	CSE-320	Domain Core 1 (Software Design & Architec	3(2-3)	_
3	CSE-321	Domain Core 2 (Software Const. & Develop	-(,	-
4	CSL SZ I	Domain Elective 3	-(,	-
5		Domain Elective 4	3(3-0)	_
6	SSH-301	Social Science (Introduction to Manageme	3(2-3)	-
U	3311-301	Social Science (introduction to Managemen	10 2(2-0)	-

#### VII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-498	Final Year Project – I	2(0-6)	
-		•		-
2	CSS-401	Analysis of Algorithms	3(3-0)	CSC-201
3		Domain Elective 7	3(2-3)	_
4	MGT-351	Elective Supporting Course (Intro. To Mark	.) 3(3-0)	_
5	ENG-401	Technical & Business Writing	3(3-0)	ENG-201
6	SSH-401	Entrepreneurship	2(2-0)	_

#### VI - Semester

S. No	Credit Hrs.	PreReq		
1	CSE-322	Domain Core 3 (Software Project Mgt.)	3(2-3)	
2	CSE-323	Domain Core 4 (Software Quality Eng.)	3(2-3)	_
3	CSE-324	Domain Core 5 (Software Req. Eng.)	3(2-3)	_
4	CSC-314	Domain Core 6 (Parallel & Distributed Con	np.) 3(2-3)	CSC-301
5		Domain Elective 5	3(2-3)	_
6		Domain Elective 6	3(2-3)	_

#### VIII - Semester

S. N	o Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-499	Final Year Project – II	4(0-12)	CSC-498
2	SSH-402	Arts & Humanities (Professional Practices)	2(2-0)	_
3	SSH-403	Civics and Community Engagement	2(2-0)	_
4	SSH-404	Ideology and Constitution of Pakistan	2(2-0)	_

#### **General Education Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-100	Application of Information & Communication Technolog	gies 3(2-3)	_
2	CSS-110	Discrete Structures	3(3-0)	_
3	MTH-101	Calculus and Analytic Geometry	3(3-0)	_
4	ENG-102	Functional English	3(3-0)	_
5	ENG-201	<b>Expository Writing</b>	3(3-0)	ENG-102
6	IS-201	Islamic Studies	2(2-0)	_
7	PHY-201	Applied Physics	3(2-3)	_
8	SSH-301	Introduction to Management	2(2-0)	_
9	SSH-401	Entrepreneurship	2(2-0)	_
10	SSH-402	Professional Practices	2(2-0)	_
11	SSH-403	Civics and Community Engagement	2(2-0)	_
12	SSH-404	Ideology and Constitution of Pakistan	2(2-0)	_

#### **Elective Supporting Courses**

S. No	Course Cod	le Course Title	Credit Hrs.	PreReq
1	MGT-351	Social Science (Example: Intro. to Marketing	) 3(3-0)	_
2	MGT-322	Social Science (Example: Financial Account.)	3(3-0)	_

#### **Mathematics and Science Foundation Courses**

S. No	S. No Course Code Course Title			PreReq
1	MTH-102	Multivariable Calculus	3(3-0)	MTH-101
2	MTH-103	Linear Algebra	3(3-0)	MTH-101
3	STT-101	Probability & Statistics	3(3-0)	_
4	ENG-401	Technical & Business Writing	3(3-0)	ENG-201

#### **Computing Core Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	CSC-101	Programming Fundamentals	4 (3-3)	_
2	CSC-102	Object Oriented Programming	4 (3-3)	CSC-101
3	CSC-103	Database Systems	4 (3-3)	_
4	CSC-111	Digital Logic Design	3 (2-3)	_
5	CSC-201	Data Structures	4 (3-3)	CSC-101
6	CSC-202	Information Security	3 (2-3)	_
7	CSC-203	Artificial Intelligence	3 (2-3)	_
8	CSC-204	Computer Networks	3 (2-3)	_
9	CSC-205	Software Engineering	3 (3-0)	_
10	CSC-211	Computer Organization & Assembly Lang	3 (2-3)	CSC-111
11	CSC-301	Operating Systems	3 (2-3)	_
12	CSC-401	Analysis of Algorithms	3 (3-0)	CSC-201
13	CSC-498	Final Year Project – I	2 (0-6)	_
14	CSC-499	Final Year Project – II	4 (0-12)	CSC-498

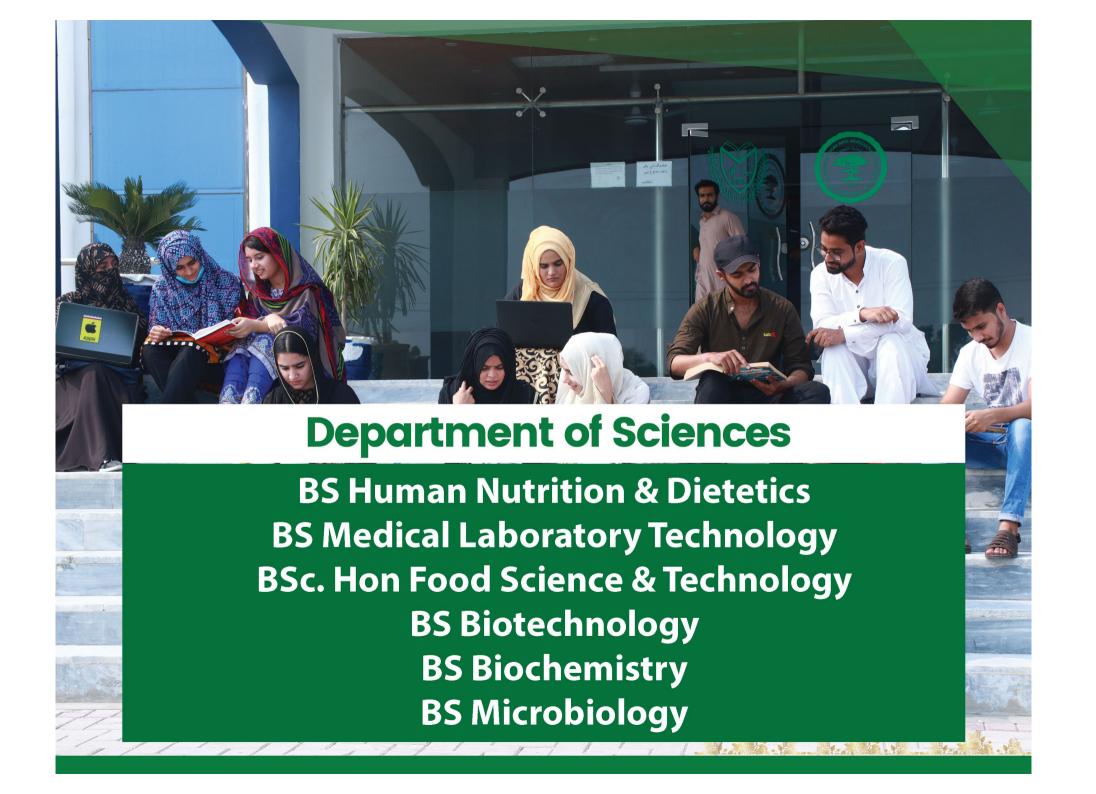
#### **Domain Core Courses**

S. No	S. No Course Code Course Title			PreReq
1	CSE-320	Software Design & Architecture	3 (3-0)	
2	CSE-321	Software Construction & Development	3 (2-3)	
3	CSE-322	Software Project Management	3 (2-3)	_
4	CSE-323	Software Quality Engineering	3 (2-3)	_
5	CSC-324	Software Requirement Engineering	3 (2-3)	_
6	CSC-314	Parallel & Distributed Computing	3 (2-3)	CSC-301

#### **Domain Elective Courses**

S. No	Course Cod	le Course Title	Credit Hrs. F	reReq
1	CSC-251	Web Technologies	3 (2-3)	
2	CSC-252	Advanced Programming	3 (2-3)	_
3	CSC-302	Theory of Automata	3 (3-0)	_
4	CSC-313	HCI & Computer Graphics	3 (2-3)	_
5	CSC-353	Mobile Application Development 1	3 (2-3)	_
6	CSE-325	Object Oriented Analysis & Design	3 (2-3)	_
7	CSE-422	Software Testing & Quality Assurance	3 (2-3)	_
8	CSE-326	Software Re-Engineering	3 (2-3)	_
9	CSC-303	Advanced Database Management Systems	3 (2-3)	_
10	CSC-311	Computer Architecture	3 (2-3)	_
11	CSC-351	Web Engineering	3 (2-3)	_

"Action is the fundamental key to success."





## **BS Human Nutrition & Dietetics**

A minimum of 8th Semester duration program after Intermediate or equivalent.

## Admission eligibility:

- -A person (male/female) holding Intermediate Certificate FSc. Pre Medical or equivalent certificate from any recognised Institute with at least 50% Marks shall be eligible for admission to BS HND Program.
- -Admission will be on open merit basis; based on marks obtained in last degree.
- -Age: A cadidate must not be more than 23 Years of age on 1st October of the year of admission, provided that the Vice Chancellor may relax age limit in very exceptional cases.

### Academic standing:

1 Grade point Average:

a. Maximum grade point average

4.00

b. Minimum grade point average for obtaining the degree 2.50

To remain on the roll of the University, a student shall be required to maintain the following minimum CGPA; otherwise he/she shall be ceased on the University roll.

2 A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be

promoted to the next semester.

A student who does not meet the above requirements may repeat the whole semester once only. The course grades that a student earns in the repeated semester shall replace the previously earned course grades.

CGPA
0.75
1.00
1.25
1.50
1.75
2.00
2.25
2.50

# Scheme of Study for BS Human Nutrition & Dietetics (Semester Wise)

#### I- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	ENG-301	Functional English	3(3-0)	_
2	SSH-301	Civic and Community Engagement	2(2-0)	_
3	SOS-301	Moral Foundation of Education	2(2-0)	_
4	BCH-310	Introductory Biochemistry	3(2-2)	_
5	HND-301	Fundamentals of Human Nutrition	3(3-0)	_
6	FST-303	Food Processing and Preservation	3(2-2)	_
7	TOQ-301	Translation of Holy Quran-I (Audit)	1(1-0)	_
8	SOS-302	Seerat Studies	1(1-0)	_

#### III - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	QR-401	Quantitative Reasoning-1	3(3-0)	-
2	HND-401	Human Physiology – II	3(3-2)	_
3	HND-403	Micro and Macronutrients in Human Nutrition	3(3-0)	_
4	HND-405	Meal Planning and Management	3(2-2)	_
5	HND-407	Food Safety and Quality Management	3(3-0)	_
6	FST-407	Food Laws and Regulations	3(3-0)	_
7	TOQ-501	Translation of Holy Quran-III	1(1-0)	_

#### II- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	ENG-302	Expository Writing	3(3-0)	_
2	SOC-301	Introduction to Sociology	2(2-0)	_
3	SSH-301	Ideology and constitution of Pakist	2(2-0)	_
4	IS-302	Islamic Studies and Ethics	2(2-0)	_
5	IT-302	Introduction to Info. and Comm. Technologies	3(2-2)	-
6	HND-302	Human Anatomy	3(2 -2)	-
7	HND-304	Human Physiology-I	3(2-2)	_
8	TOQ-401	Translation of Holy Quran-II	1(1-0)	_

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	QR-402	Quantitative Reasoning-II	3(2-2)	
2	MGT-402	Entrepreneurship	2(2-0)	_
3	HND-402	General Pathology	3(2-2)	_
4	HND-404	Metabolism of Nutrients	2(2-0)	_
5	HND-406	Assessment of Nutritional Status	3(2-2)	_
6	HND-408	Nutritional Epidemiology and Public Healt		_
7	FST-302	Food Biotechnology	3(2-2)	_
8	TOQ-601	Translation of Holy Quran-IV	1(1-0)	-

# Scheme of Study for BS Human Nutrition & Dietetics (Semester Wise)

#### V - Semester

S. No	Course Cod	e Course Title	Credit Hrs.	PreReq
1	HND-501	Dietetics-I	3(2-2)	
2	HND-503	Food Analysis and Sensory Evaluation	3(2-2)	_
3	HND-505	Functional Foods and Nutraceuticals	3(3-0)	_
4	HND-507	Nutritional Immunology	3(3-0)	-
5	HND-509	Clinical Biochemistry	3(2-2)	_
6	FST-505	Food Microbiology	3(2-2)	_

#### VI - Semester

S. No	Course Cod	e Course Title	Credit Hrs.	PreReq
1	HND-502	Dietetics-II	3(2-2)	_
2	HND-504	Diet Modelling and Counselling	3(2-2)	_
3	HND-506	Nutrition through Life Cycle	3(3-0)	_
4	HND-508	Global Food Issues	3(3-0)	_
5	HND-510	Infant and Young Child Feeding	3(3-0)	-
6	HND-512	Medical Nutrition Therapy	3(3-0)	-

#### VII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	HND-601	Nutritional Practices in Clinical Care	3(2-2)	_
2	HND-603	Nutrition Policies and Programs	3(3-0)	-
3	HND-605	Nutritional Deficiency Disorders	3(3-0)	_
4	HND-607	Sports Nutrition	3(2-2)	_
5	HND-609	Nutrient-Drug Interactions	2(2-0)	_
6	HND-611	Research Methods in Nutrition	3(3-0)	-

#### VIII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	HND-299	Internship/Project	3(0-6)	_
2	HND-399	Capstone Project	3(0-6)	

## Scheme of Study for BS Human Nutrition & Dietetics

#### General Education Requirements: (Mandatory/Core Courses)

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	ENG-301	Functional English	3(3-0)	-
2	BCH-310	Introductory Biochemistry	3(2-2)	-
3	SSH-301	Civic and Community Engagement	2(2-0)	-
4	SOS-302	Moral Foundation of Education	2(2-0)	-
5	ENG-302	<b>Expository Writing</b>	3(3-0)	_
6	SOC-301	Introduction to Sociology	2(2-0)	-
7	SSH-301	Ideology and constitution of Pakistan	2(2-0)	-
8	IS-302	Islamic Studies and Ethics	2(2-0)	-
9	IT-302	Introduction to Info. and Communication Technologic	es 3(2-2)	_
10	QR_401	Quantitative Reasoning-I	3(2-2)	-
11	QR-402	Quantitative Reasoning-II		-
12	MGT-302	Digital Entrepreneurship	2(2-0)	-
13		Translation of Holy Quran	NC	-
14		Seerat of the Holy Prophet (SAW)	1(1-0)	_

### **Single Major Course**

S. I	No Course Code	Course Title	Credit Hrs.	PreReq
1	HND-301	Fundamentals of Human Nutrition	3(3-0)	_
2	HND-302	Human Anatomy	3(2 -2)	_
3	HND-304	Human Physiology-I	3(2-2)	_
4	HND-401	Human Physiology – II	3(3-2)	_
5	HND-403	Micro and Macronutrients in Human Nutrition		_

S. No	Course Code	Course Title	Credit Hrs.	PreReq
6	HND-405	Meal Planning and Management	3(2-2)	_
7	HND-407	Food Safety and Quality Management	3(3-0)	_
8	HND-402	General Pathology	3(2-2)	_
9	HND-404	Metabolism of Nutrients	2(2-0)	_
10	HND-406	Assessment of Nutritional Status	3(2-2)	_
11	HND-408	Nutritional Epidemiology and Public Healt		_
12	HND-501	Dietetics-I	3(2-2)	_
13	HND-503	Food Analysis and Sensory Evaluation	3(2-2)	_
14	HND-505	Functional Foods and Nutraceuticals	3(3-0)	_
15	HND-507	Nutritional Immunology	3(3-0)	_
16	HND-509	Clinical Biochemistry	3(2-2)	_
17	HND-502	Dietetics-II	3(2-2)	_
18	HND-504	Diet Modelling and Counselling	3(2-2)	_
19	HND-506	Nutrition through Life Cycle	3(3-0)	_
20	HND-508	Global Food Issues	3(3-0)	_
21	HND-510	Infant and Young Child Feeding	3(3-0)	_
22	HND-512	Medical Nutrition Therapy	3(3-0)	_
23	HND-601	Nutritional Practices in Clinical Care	3(2-2)	_
24	HND-603	Nutrition Policies and Programs	3(3-0)	_
25	HND-605	Nutritional Deficiency Disorders	3(3-0)	_
26	HND-607	Sports Nutrition	3(2-2)	_
27	HND-609	Nutrient-Drug Interactions	2(2-0)	_
28	HND-611	Research Methods in Nutrition	3(3-0)	_
			. ,	

## Scheme of Study for BS Human Nutrition & Dietetics

## (Interdisciplinary Courses (IDC) Maximum 12 credit hours

S. No Cour	se Code Course Title	Credit Hrs.	PreReq
1 FST-	303 Food Processing and Preservat	tion 3(2-2)	_
2 FST-	302 Food Biotechnology	3(2-2)	-
3 FST-	407 Food Laws and Regulations	3(3-0)	_
4 FST-	505 Food Microbiology	3(2-2)	-

## Field Experience/Internship: (Maximum 03 credit hours)

S. No	Course Code	Course Title	Credit Hrs.	PreReq	
1	HND-299	Internship/Project	3(0-6)	-	
(Ca	(Capstone Project: Maximum 03 credit hours				
S. No	Course Code	Course Title	Credit Hrs.	PreReq	



# **BS Medical Laboratory Technology**

A minimum of 8th Semester duration program after Intermediate or equivalent.

## Admission eligibility:

- -A person (male/female) holding Intermediate Certificate FSc. Pre Medical/MLT or equivalent certificate from any recognised Institute with at least 50% Marks shall be eligible for admission to BS MLT (Hons.) Programme.
- -Admission will be on open merit basis; based on marks obtained in last degree.
- -Age: A Cadidate must not be more than 23 Years of age on 1st October of the year of admission, provided that the Vice Chancellor may relax age limit in very exceptional cases.

### Academic standing:

1 Grade point Average:

a. Maximum grade point average

4.00

b. Minimum grade point average for obtaining the degree 2.50

To remain on the roll of the University, a student shall be required to maintain the following minimum CGPA otherwise he/she shall be ceased on the University roll.

2 A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be

promoted to the next semester.

A student who does not meet the above requirements may repeat the whole semester once only. The course grades that a student earns in the repeated semester shall replace the previously earned course grades.

Semester	CGPA
1st	0.75
2nd	1.00
3rd	1.25
4th	1.50
5th	1.75
6th	2.00
7th	2.25
8th	2.50
8th	2.50

# Scheme of Study for BS Medical Laboratory Technologies (Semester Wise)

#### I- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MLT-301	Biochemistry-I	3(2-2)	_
2	MLT-302	General Microbiology	3(2-2)	_
3	MLT-303	Phlebotomy	3(2-2)	_
4	ENG-301	Functional English	3(3-0)	_
5	SOS-301	Moral Foundations of Education	3(3-0)	_
6	MATH-303	General Mathematics	3(3-0)	_

#### II- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MLT-304	Biochemistry – II	3(2-2)	_
2	MLT-305	Clinical Virology & Mycology	3(2-2)	_
3	MLT-306	Quality Assurance and Lab. Management		_
4	MLT-307	Anatomy & Physiology – I	3(2-2)	-
5	CS-301	Introduction to Computing	3(2-2)	-
6	STAT-301	Statistics & Biometry	3(3-0	_

#### III - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MLT-401	Clinical Biochemistry	3(2-2)	_
2	MLT-402	Bacteriology & Parasitology	3(2-2)	-
3	MLT-403	Anatomy & Physiology –II	3(2-2)	-
4	MLT-404	Laboratory Instrumentation and Techniq	ues3(2-2)	-
5	ENG-302	Communication Skills	3(3-0)	-
6	IS/ET-401	Islamic studies/Ethics	2(2-0)	_

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MLT-405	Fundamentals of Enzymology	2(2.0)	
		, , , , , , , , , , , , , , , , , , , ,	3(3-0)	_
2	MLT-406	Clinical Pathology	3 (3-0)	_
3	MLT-407	Hematology-I	3(2-2)	_
4	MLT-408	Molecular Biology	3(2-2)	_
5	SOC-301	Introduction to Sociology	3(3-0)	_
6	SSH-301	Pakistan Studies	2(2-0)	_

# Scheme of Study for BS Medical Laboratory Technologies (Semester Wise)

#### V - Semester

S. No	S. No Course Code Course Title			PreReq
1	MLT-501	Medical Genetics	3(2-2)	_
2	MLT-502	Blood Banking & Transfusion Medicine	3(2-2)	_
3	MLT-503	Hematology-II	3(2-2)	_
4	MLT-504	Bioethics	3(3-0)	_
5	MLT-505	Immunology and Serology	3(2-2)	_
6	MLT-506	Introduction to Biotechnology	3(2-2)	_

#### VII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MLT-621	Research Project/ Internship	3(0-6)	_
2	MLT-602	Public health and Epidemiology	3(3-0)	_
3	_	Optional-I	3(3-0)	-
4	MLT-603	Clinical Rotation A (Hematology)	3(0-6)	-
5	MLT-604	Clinical Rotation B (Clinical Chemistry)	3(0-6)	-
6	MLT-605	Clinical Rotation C (Microbiology)	3(0-6)	_

#### **Optional Courses**

S. No Course Code	Course Title	Credit Hrs.	PreReq
1 MLT-610	Medical Nutrition Therapy Endocrinology	3(3-0)	_
2 MLT-611 3 MLT-612	Community Medicine	3(2-2) 3(3-0)	_
4 MLT-613	General Pharmacology	3(3-0)	-

#### VI - Semester

S. No	Course Cod	e Course Title	Credit Hrs.	PreReq
1	MLT-507	Research Methodology	3(3-0)	_
2	MLT-508	Introduction to Forensic sciences	3(2-2)	-
3	MLT-509	Introduction to Bioinformatics	3(2-2)	-
4	MLT-510	Molecular Diagnostic Techniques	3(3-0)	_
5	MLT-511	Cytology and Histology Techniques	3(2-2)	_
6	MLT-512	Fundamentals of Infection Control	3(2-2)	_

#### **VIII - Semester**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	-XXX	Entrepreneurship	2(2-0)	_
2	MLT-606	Biomedical Engineering	3(3-0)	_
3	_	Optional-II	3(3-0)	_
4	MLT-607	Clinical Rotation D (Molecular Biology)	3(0-6)	
5	MLT-608	Clinical Lab Rotation E (Histopathology)	3(0-6)	
6	MLT-609	Clinical Lab Rotation F (Blood Bank)	3(0-6)	-
7	MLT-620	Seminar	1(1-0)	-

#### **Optional Courses**

5       MLT-614       Clinical Psychology       3(3-0)       -         6       MLT-615       Basis of Microscopy       3(2-2)       -         7       MLT-616       Laboratory Mathematics       3(2-2)       -	S. No	Course Code	Course Title	Credit Hrs.	PreReq
	5	MLT-614	Clinical Psychology	3(3-0)	_
7 MLT-616 Laboratory Mathematics 3(2-2) –	6	MLT-615	Basis of Microscopy	3(2-2)	-
	7	MLT-616	Laboratory Mathematics	3(2-2)	-



# BSc. (Hon) Food Science & Technology

A minimum of 8th Semester duration program after Intermediate or equivalent.

## Admission eligibility:

- -A person (male/female) holding Intermediate Certificate Fsc. Pre Medical or equivalent certificate from any recognised Institute with at least 50% Marks shall be eligible for admission to BSc. (Hon) FST Program.
- -Admission will be on open merit basis; based on marks obtained in last degree.
- -Age: A Cadidate must not be more than 23 Years of age on 1st October of the year of admission, provided that the Vice Chancellor may relax age limit in very exceptional cases.

## Academic standing:

1 Grade point Average:

a. Maximum grade point average

b. Minimum grade point average for obtaining the degree 2.50

To remain on the roll of the University, a student shall be required to maintain the following minimum CGPA otherwise he/she shall be ceased on the University roll.

4.00

2 A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be

promoted to the next semester.

A student who does not meet the above requirements may repeat the whole semester once only. The course grades that a student earns in the repeated semester shall replace the previously earned course grades.

Semester	CGPA
1st	0.75
2nd	1.00
3rd	1.25
4th	1.50
5th	1.75
6th	2.00
7th	2.25
8th	2.50

# Scheme of Study for BSc. Food Science & Technology (Semester Wise)

#### I- Semester

S. No	Course Code C	ourse Title	Credit Hrs.	PreReq
1	MATH-301 / BIOL-301	Mathematics-I / General Biology-I	3(3-0) / 3(2-2)	_
2	STAT-301	Statistics & Biometry	3(3-0)	_
3	CS-301	Introduction to Computing	3(2-2)	_
4	ENG-301	Functional English	3(3-0)	_
5	SSH-301	Pakistan Studies	2(2-0)	_
6	BCH-310	Introduction to Biochemistry	3(2-2)	_
7	FST-301	Intro. To Food Sci. & tech	3(2-2)	_

#### II- Semester

S. No	Course Code Co	ourse Title	Credit Hrs.	PreReq
1	MATH-302 / BIOL-302	Mathematics-II / General Biology-II	3(3-0) / 3(2-2)	_
2		Islamic Studies/Ethics	2(2-0)	_
3	AGRO-302	Basic Agriculture	3(2-2)	_
4	HORT-302	introduction to Horticulture	3(2-2)	_
5	FST-302	General Microbiology	3(2-2)	_
6	FST-304	Food Processing and Preservation	3(2-2)	_

#### III - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	ENT-401	Introductory Entomology	2(1-2)	-
2	PP-401	Introduction to Plant Pathogens	2(1-2)	_
3	ENG-401	Communication Skills	3(3-0)	-
4	FST-401	Food Plant Layout	2(2-0)	-
5	FST-403	Food Process Engineering-I	3(2-2)	-
6	FST-405	Food Biotechnology	3(2-2)	_
7	FST-407	Food Quality Management	2(2-0)	-

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MGT-405	Intro. To Marketing Management	3(3-0)	_
2	FST-402	Fluid Mechanics	3(2-2)	_
3	FST-404	Food Process Engineerig II	3(3-0)	_
4	FST-406	Food Product Develoment	3(3-0)	-
5	FST-408	Fruits and vegetables Processing	3(2-2)	_
6	FST-410	Food Toxicology and Safety	3(3-0)	_

# Scheme of Study for BSc. Food Science & Technology (Semester Wise)

#### V - Semester

S. No	S. No Course Code Course Title			PreReq
1	FST-501	Principles of Human Nutrition	3(3-0)	_
2	FST-503	Instrumental Techniques in Food Analysis	3(2-2)	_
3	FST-505	Food Microbiology	3(2-2)	_
4	FST-507	Technology of Fats and Oils	3(2-2)	_
5	FST-509	Beverage Technology	3(2-2)	-
6	FST-511	Extrusion Technology	3(2-2)	_

#### VI - Semester

S. No	Course Coo	de Course Title	Credit Hrs.	PreReq
1	FST-502	Sugar Technology	3(2-2)	_
2	FST-504	Dairy Technology	3(2-2)	-
3	FST-506	Post Harvest Technology	3(2-2)	_
4	FST-508	Food Chemistry	3(3-0)	-
5	FST-510	Food Safety and Food Laws	3(3-0)	-
6	FST-512	Confectionery and Snack Foods	3(2-2)	-

#### VII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	FST-601	Community Nutrition	3(2-2)	_
2	FST-603	Cereal Technology	3(2-2)	-
3	FST-605	Meat Technology	3(2-2)	-
4	FST-607	Unit operation in Food Processsing	3(3-0)	-
5	FST-609	Project Planning, Execution and Scientific Writing	g 2(1-2)	-
6	FST-611	Food Packaging	3(2-2)	_
7	FST-613	Milk and Meat Hygiene and Public Health	3(2-2)	-

#### VIII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	FST-602	Internship	10(0-20)	_



## **BS Biotechnology**

A minimum of 8th Semester duration program after Intermediate or equivalent.

## Admission eligibility:

- -A person (male/female) holding Intermediate Certificate FSc. Pre Medical or equivalent certificate from any recognised Institute with at least 50% Marks shall be eligible for admission to BS Biotechnology Program.
- -Admission will be on open merit basis; based on marks obtained in last degree.
- -Age: A Cadidate must not be more than 23 Years of age on 1st October of the year of admission, provided that the Vice Chancellor may relax age limit in very exceptional cases.

### Academic standing:

1 Grade point Average:

a. Maximum grade point average

4.00

b. Minimum grade point average for obtaining the degree 2.50

To remain on the roll of the University, a student shall be required to maintain the following minimum CGPA otherwise he/she shall be ceased on the University roll.

A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be

promoted to the next semester.

A student who does not meet the above requirements may repeat the whole semester once only. The course grades that a student earns in the repeated semester shall replace the previously earned course grades.

Semester	CGPA
1st	0.75
2nd	1.00
3rd	1.25
4th	1.50
5th	1.75
6th	2.00
7th	2.25
8th	2.50

# Scheme of Study for BS Biotechnology (Semester Wise)

#### I- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BIOT-301	Biochemistry-I	3(2-2)	_
2	BIOT-302	Cell Biology	3(2-2)	_
3	BCH-302	Organic Chemistry	3(2-2)	_
4	ENG-301	Functional English	3(3-0)	_
5	SSH-301	Pakistan Studies	2(2-0)	_
6	MATH-303	General Mathematics	3(3-0)	_

#### II- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BIOT-303	Introduction to Biotechnology	3(3-0)	_
2	BIOT-304	Molecular Biology	3(2-2)	_
3	BIOT-305	Microbiology	3(2-2)	_
4	BCH-304	Inorganic Chemistry	3(2-2)	_
5	ENG-302	Communication Skills	3(3-0)	-
6	STAT-301	Statistics and Biometry	3(3-0)	_

#### III - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BIOT-401	Classical Genetics	3(3-0)	-
2	BIOT-402	Biochemistry-II	3(2-2)	-
3	BIOT-403	Ecology, Biodiversity & Evolution-I	3(3-0)	_
4	BCH-407	Physical Chemistry	3(3-0)	-
5	CS-301	Introduction to Computing	3(3-0)	_
6	IS/ET-401	Islamic Studies/Ethics	2(2-0)	_

S. No	Course Code	Course Title	Credit Hrs.	PreReq
	DIOT 404	Analysis and Channistons O baseliness and stick	2/2 2)	
1	BIOT-404	Analytical Chemistry & Instrumentation	3(2-2)	
2	BIOT-405	Genetic Engineering	3(2-2)	-
3	BIOT-406	Bioinformatics	3(1-4)	_
4	BIOT-407	Principles of Biochemical Engineering	2(2-0)	-
5	MGT-351	Introduction to Marketing	3(3-0)	_
6	ECON-301	Introduction to Economics	2(2-0)	_

# Scheme of Study for BS Biotechnology (Semester Wise)

#### V - Semester

S. No	Course Cod	e Course Title	Credit Hrs.	PreReq
1	BIOT-501	Biological Physics	3(3-0)	_
2	BIOT-502	Cell and Tissue Culture	3(2-2)	_
3	BIOT-503	Biosafety & Bioethics	2(2-0)	_
4	BIOT-504	Microbial Biotechnology	3(3-0)	-
5	BIOT-505	Environmental Biotechnology	3(3-0)	-
6	BIOT-506	Ecology, Biodiversity & Evolution-II	3(2-2)	_
7	TOQ-301	Translation of Quran	1(1-0)	-

#### VI - Semester

S. No Co	ourse Code	Course Title	Credit Hrs.	PreReq
1 E	BIOT-507	Virology and Immunology	3(3-0)	_
2 E	BIOT-508	Health Biotechnology	3(3-0)	_
3 E	BIOT-509	Industrial Biotechnology	3(3-0)	-
4 E	BIOT-510	Agriculture Biotechnology	3(2-2)	_
5 E	BIOT-511	Research Methodology & Skill Enhancemen	t 3(2-2)	_
6 E	BIOT-520	Seminar-I	1(1-0)	_
7 1	OQ-401	Translation of Quran	1(1-0)	_

#### VII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BIOT-601	Food Biotechnology	3(3-0)	_
2	BIOT-602	Pharmaceutical Biotechnology	3(3-0)	_
3	BIOT-603	Animal Biotechnology	3(3-0)	_
4	BIOT-604	Genomics and Proteomics	3(3-0)	_
5	TOQ-501	Translation of Quran	1(1-0)	-
6	_	Optional-I	3(*-*)	-
7	_	Optional-II	3(*-*)	-

#### VIII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BIOT-605	Genetic Resources & Conservation	3(3-0)	_
2	BIOT-606	Computational Genomics	2(2-0)	_
3	BIOT-620	Seminar-II	1(0-0)	_
4	BIOT-621	Research Project/ Internship / Special Paper	er 3(0-6)	_
5	STAT-202	Biostatistics	3(2-2)	_
6	TOQ-601	Translation of Quran	1(1-0)	_
7	_	Optional-III	3(*-*)	_



## **BS Biochemistry**

A minimum of 8th semester duration program after Intermediate or equivalent.

## Admission eligibility:

- -A person (male/female) holding Intermediate Certificate FSc. Pre Medical or equivalent certificate from any recognised Institute with at least 50% Marks shall be eligible for admission to BS Biochemistry Programme.
- -Admission will be on open merit basis; based on marks obtained in last degree.
- -Age: A Cadidate must not be more than 23 Years of age on 1st October of the year of admission, provided that the Vice Chancellor may relax age limit in very exceptional cases.

### Academic standing:

1 Grade point Average:

a. Maximum grade point average 4.00

b. Minimum grade point average for obtaining the degree 2.50

To remain on the roll of the University, a student shall be required to maintain the following minimum CGPA otherwise he/she shall be ceased on the University roll.

2 A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be

promoted to the next semester.

A student who does not meet the above requirements may repeat the whole semester once only. The course grades that a student earns in the repeated semester shall replace the previously earned course grades.

Semester	CGPA
1st	0.75
2nd	1.00
3rd	1.25
4th	1.50
5th	1.75
6th	2.00
7th	2.25
8th	2.50

#### I- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BCH-301	Introductory Biochemistry	3 (2-2)	_
2	BCH-302	Organic Chemistry	3 (2-2)	_
3	BCH-303	Cell Biology	3 (2-2)	_
4	ENG-301	Functional English	3 (3-0)	_
5	SOS-301	Moral Foundation of Education	2 (2-0)	_
6	MATH-303	General Mathematics	3 (3-0)	_

#### II- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BCH-304	Inorganic Chemistry	3 (2-2)	_
2	BCH-305	Molecular Biology	3 (2-2)	_
3	BCH-306	General Microbiology	3 (2-2)	_
4	BCH-307	Introduction to Bioenergetics	2 (2-0)	-
5	CS-301	Introduction to Computing	3 (2-2)	_
6	STAT-301	Statistics and Biometery	3 (3-0)	_

#### III - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BCH-401	Nucleic Acid	2 (2-0)	-
2	BCH-402	Amino Acids and Protein	3 (2-2)	-
3	BCH-403	Carbohydrates	3 (2-2)	-
4	BCH-404	Lipids	3 (2-2)	_
5	ENG-302	Communication Skills	3 (3-0)	-
6	IS/ET-401	Islamic Studies/Ethics	2 (2-0)	_

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BCH-405	Principles of Genetics	3 (2-2)	
2	BCH-406	Fundamentals of Enzymology	3 (2-2)	_
3	BCH-407	Physical Chemistry	3 (2-2) 3 (2-2)	_
4	BCH-408	Integrated Metabolism	2 (2-0)	_
5	SSH-301	Pakistan Studies	2 (2-0)	_
6	SOC-301	Introduction to Sociology	3 (3-0)	
_			3 (3-0)	_

#### V - Semester

S. No	Course Cod	e Course Title	Credit Hrs.	PreReq
1	BCH-501	Genetic Engineering	3 (2-2)	-
2	BCH-502	Protein Chemistry	2 (2-0)	-
3	BOT-501	Plant Physiology	3 (2-2)	_
4	BCH-503	Biochemical Techniques	3 (1-4)	_
5	BCH-504	Biosafety and Ethics	2 (2-0)	_
6	BCH-505	Bioinformatics	3 (2-2)	_

#### VI - Semester

S. No	Course Code	e Course Title	Credit Hrs.	PreReq
1	BCH-506	Tissue and Cell Culture	3 (2-2)	_
2	BCH-507	Biotechnology	3 (2-2)	_
3	ZOOL-402	Human Physiology	3 (3-0)	_
4	BCH-508	Cellular Signaling	3 (3-0)	_
5	BCH-509	Biomembrances	2 (2-0)	-
6	BCH-510	Plant Biochemistry	3 (2-2)	_

#### VII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BCH-601	Industrial Biochemistry	3 (2-2)	-
2	BCH-602	Good Laboratory Practice and Quality Control	2 (2-0)	-
3	BCH-604	Research Planning and Report Writing	3 (1-4)	-
4	BCH-605	Nutritional Biochemistry	3 (2-2)	-
5		Optional-I	3 (*-*)	-
6		Optional-II	3 (*-*)	-

#### VIII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BCH-606	Immunology and Immunochemistry	3 (3-0)	_
2	BCH-607	Current Trends in Biochemistry	3 (3-0)	_
3		Optional-III	3 (*-*)	_
4		Optional-IV	3 (*-*)	
5	BCH-620	Seminar	1 (1-0)	
6	BCH-621	Research Project/Internship	3 (0-6)	_

#### **Core Course**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BCH-301	Organic Chemistry	3 (2-2)	-
2	BCH-302	Introductory Biochemistry	3 (2-2)	_
3	BCH-303	Inorganic Chemistry	3 (2-2)	_
4	BCH-304	Carbohydrates	4 (3-2)	_
5	BCH-401	Amino Acids and Proteins	3 (2-2)	_
6	BCH-402	Principles of Genetics	3 (2-2)	_
7	BCH-403	Physical Chemistry	3 (2-2)	_
8	BCH-404	Lipids	3 (2-2)	_
9	BCH-405	Cell Biology	3 (2-2)	_
10	BCH-406	Tissues and Cell Culture	3 (2-2)	_
11	BCH-407	General Microbiology	3 (2-2)	_
12	BCH-408	Plant Biochemistry	3 (2-2)	_
13	BCH-409	Biomembranes	2 (2-0)	_
14	BCH-410	Biophysics	2 (2-0)	_
15	BCH-501	Fundamentals of Enzymology	3 (2-2)	_
16	BCH-502	Biochemical Techniques	3 (1-4)	_
17	BCH-503	Biosafety and Ethics	2 (2-0)	_
18	BCH-504	Molecular Biology	3 (2-2)	_
19	BCH-505	Nucleic Acids	2 (2-0)	_
20	BCH-506	Integrated Metabolism	2 (2-0)	_
21	BCH-507	Genetic Engineering	3 (2-2)	_

#### **Core Course**

S. N	lo Course Code	Course Title	Credit Hrs.	PreReq
22	BCH-508	Protein Chemistry	2 (2-0)	_
23	BCH-509	Cellular Signaling	3 (3-0)	_
24	BCH-510	Introduction to Bioenergetics	2 (2-0)	_
25	BCH-511	Industrial Biochemistry	3 (2-2)	-
26	BCH-520	Seminar-1	1 (1-0)	-
27	BCH-601	Research Planning and Report Writing	3 (1-4)	-
28	BCH-602	Nutritional Biochemistry	3 (2-2)	-
29	BCH-603	Bioinformatics	3 (2-2)	_
30	BCH-604	Biotechnology	3 (2-2)	_
31	BCH-605	Immunology and Immunochemistry	3 (2-2)	-
32	BCH-606	Current Trends in Biochemistry	3 (3-0)	_
33	BCH-607	Good Laboratory Practices and Quality Control	2 (2-0)	-
34	BCH-619	Special Problem	1 (1-0)	_
35	BCH-620	Seminar-II	1 (1-0)	_

### **Compulsory Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	ENG-301	Functional English	3 (3-0)	_
2	SSH-301	Pakistan Studies	2 (2-0)	_
3	MATH-303	General Mathematics	3 (3-0)	_
4	SOS-301	Introduction of Sociology	3 (3-0)	-
5	ENG-302	Communication Skills	3 (3-0)	_
6	STAT-301	Statsitics and Biometry	3 (3-0)	_
7	CS-301	Introduction of Computing	3 (2-2)	_
8	IS/ET-401	Islamic Studies/Ethics	2 (2-0)	_
9	ZOOL-402	Human Physiology	3 (3-0)	_
10	BOT-501	Plant Physiology	3 (2-2)	_

### **Optional Courses**

S. No	Course Cod	e Course Title	Credit Hrs.	PreReq
1	BCH-608	Proteomics	3 (3-0)	_
2	BCH-609	Clinical Biochemistry	3 (2-2)	_
3	BCH-610	Medical Microbiology	3 (2-2)	_
4	BCH-611	Vitamins and Minerals	3 (2-2)	_
5	BCH-612	Environmental Biochemistry	3 (2-2)	_
6	BCH-613	Medical Nutrition Therapy	3 (3-0)	-
7	BCH-614	Cell Organelles	3 (3-0)	_
8	BCH-615	Nanobiotechnology	3 (3-0)	-
9	BCH-616	Agriculture Biochemistry	3 (3-0)	_
10	BCH-617	Nutrition and Deitatics	3 (2-2)	_



## **BS Microbiology**

A minimum of 8th Semester duration program after Intermediate or equivalent.

## Admission eligibility:

- -A person (male/female) holding Intermediate Certificate Fsc. Pre Medical or equivalent certificate from any recognised Institute with at least 50% Marks shall be eligible for admission to BS Microbiology Programme.
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### Academic standing:

1 Grade point Average:

a. Maximum grade point average

b. Minimum grade point average for obtaining the degree 2.50

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4.00

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promoted to the next semester.

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Semester	CGPA
1st	0.75
2nd	1.00
3rd	1.25
4th	1.50
5th	1.75
6th	2.00
7th	2.25
8th	2.50

# Scheme of Study for BS Microbiology (Semester Wise)

#### I- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MIC-301	General Microbiology-I	3 (2-2)	_
2	MIC-302	Cell Biololgy-I	3 (2-2)	_
3	MIC-303	Biochemistry-I	3 (2-2)	_
4	ENG-301	Functional English	3 (3-0)	_
5	MATH-303	General Mathematics	3 (3-0)	_

#### II- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MIC-304	General Microbiology-II	3 (2-2)	_
2	MIC-305	Cell Biology-II	3 (2-2)	_
3	BCH-305	Molecular Biology	3 (2-2)	_
4	CS-301	Introduction to Computing	3 (2-2)	_
5	STAT-301	Statistics & Biometry	3 (3-0)	-
6	ECO-301	Introduction to Economics	2 (2-0)	-

#### III - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MIC-401	General Microbiology-III	3 (2-2)	-
2	MIC-402	General Virology	3 (2-2)	-
3	MIC-403	Biochemistry-II	3 (2-2)	-
4	MIC-404	Immunobiology	3 (2-2)	-
5	ENG-304	Communication Skills	3 (3-0)	_
6	IS/ET-401	Islamic Studies/Ethics	2 (2-0)	-

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MIC-405	Human Physiology-I	3 (2-2)	_
2	MIC-406	Soil Microbiology	3 (2-2)	_
3	MIC-407	Environmental Microbiology	2 (2-0)	_
4	BCH-406	Fundamentals of Enzymology	3 (2-2)	—,
5	SOC-301	Introduction to Sociology	3 (3-0)	_
6	SSH-301	Pakistan Studies	2 (2-0)	_
7	SOS-301	Moral Foundations of Education	2 (2-0)	-

# Scheme of Study for BS Microbiology (Semester Wise )

#### V - Semester

S. No	S. No Course Code Course Title			PreReq
1	MIC-501	Food Preservation Technology	2 (2-0)	_
2	MIC-502	Medical Microbiology	3 (3-0)	_
3	MIC-503	Microbial Anatomy & Physiology	3 (2-2)	-
4	MIC-504	Biosafety and Risk Management	3 (3-0)	-
5	MIC-505	Human Physiology-II	3 (2-2)	_
6	MIC-506	Microbial Taxonomy	3 (2-2)	_

#### VI - Semester

S. No	Course Cod	le Course Title	Credit Hrs.	PreReq
1	MIC-507	Biotechnology	3 (2-2)	_
2	MIC-508	Environmental Current Issues	3 (3-0)	_
3	MIC-509	Fresh Water Microbiology	3 (2-2)	_
4	MIC-510	Research Methodology	3 (3-0)	_
5	MIC-511	Bacterial Genetics	3 (2-2)	_
6		Optional-I	3 (*-*)	_

#### VII - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MIC-601	Molecular Disease Diagnostic	3 (3-0)	_
2	MIC-602	Epidemiology of Infectious Disease	3 (3-0)	_
3	MIC-603	Good Laboratory Practices & Quality Contr	rol 2 (2-0)	-
4	MIC-604	Mycology	3 (2-2)	-
5		Optional-II	3 (*-*)	_
6		Optional-III	3 (*-*)	_

#### VIII - Semester

S. N	o Course Code	Course Title	Credit Hrs.	PreReq
1	MIC-605	Current Trends in Microbiology	3 (3-0)	-
2	MIC-606	Clinical Bacteriology	3 (2-2)	-
3	MIC-607	Molecular Mechanisms of Anti Microbial Drugs	s 3 (2-2)	-
4		Optional-IV	3 (*-*)	-
5	MIC-620	Seminar	1 (1-0)	-
6	MIC-621	Research Project /Internship	3 (0-6)	-

# Scheme of Study for BS Microbiology (Semester Wise)

#### **Optional Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	BCH-402	Principle of Genetics	3 (2-2)	_
2	BCH-406	Tissue and Cell Culture	3 (2-2)	_
3	BCH-409	Biomembrances	2 (2-0)	_
4	BCH-410	Biophysics	2 (2-0)	_
5	BCH-502	Biochemical Techniques	3 (1-4)	_

#### **Optional Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
6	BCH-505	Nucleic Acids	2 (2-0)	_
7	BCH-506	Itegrated Metabolism	2 (2-0)	_
8	BCH-507	Genetic Engineering	3 (2-2)	_
9	BCH-508	Protein Chemistry	2 (2-0)	_
10	BCH-509	Cellular Signaling	3 (3-0)	_
11	BCH-510	Introduction to Bioenergetics	2 (2-0)	_

# Scheme of Study for BS Microbiology (Semester Wise)

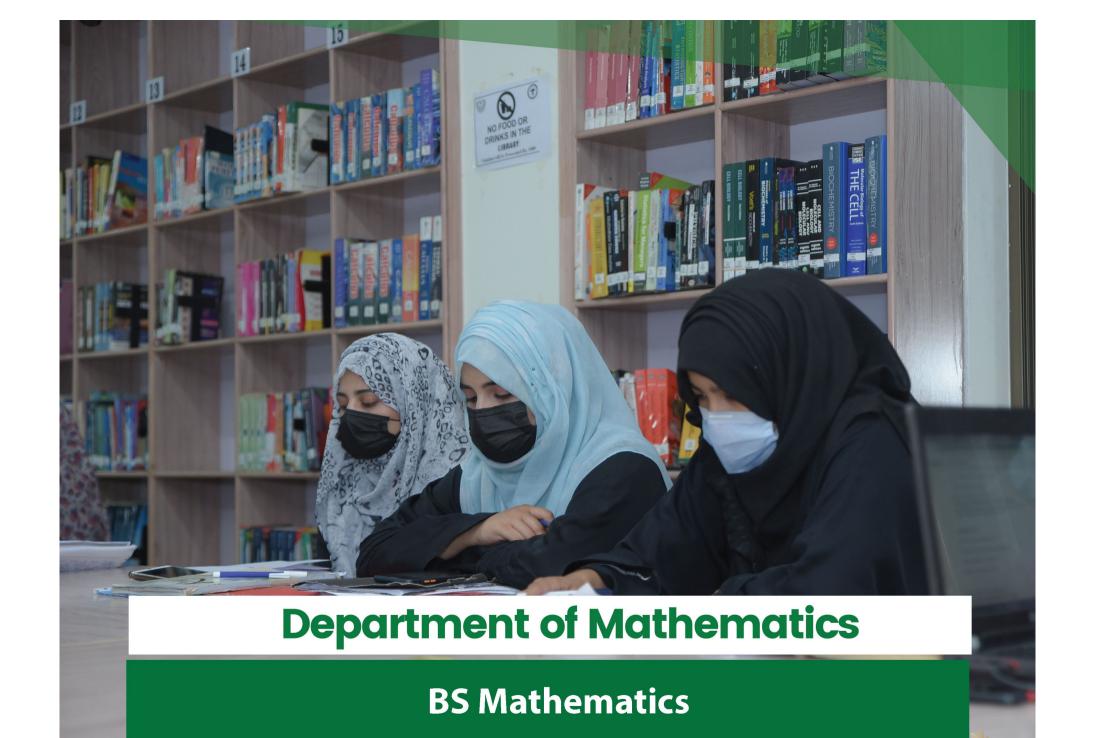
#### **Optional Courses**

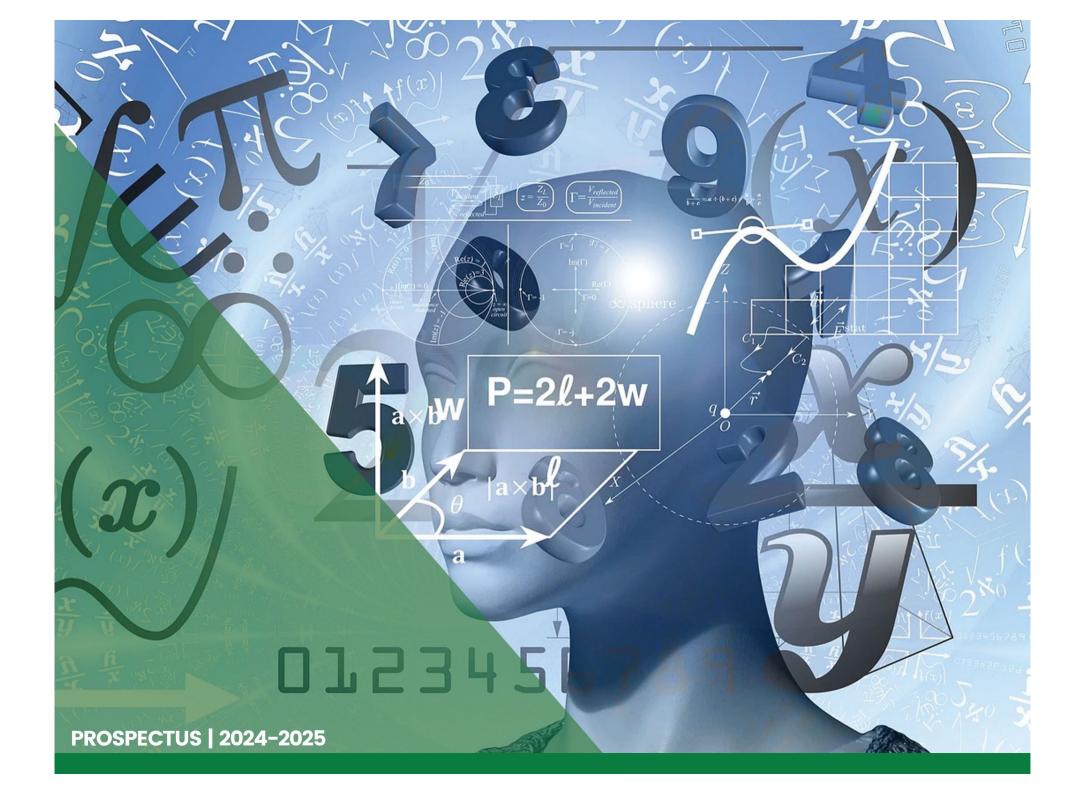
S. No	Course Cod	e Course Title	Credit Hrs.	PreReq
12	BCH-511	Industrial Biochemistry	3 (2-2)	_
13	BCH-601	Research Planning and Report Writing	3 (1-4)	
14	BCH-602	Nutritional Biochemistry	3 (2-2)	-
15	BCH-603	Bioinformatics	3 (2-2)	_
16	BCH-605	Immuneology and Immunochemistry	3 (2-2)	-
17	BCH-608	Proteomics	3 (3-0)	-

#### **Optional Courses**

S. No	Course Code	e Course Title	Credit Hrs.	PreReq
18	BCH-609	Clinical Biochemistry	3 (2-2)	-
19	BCH-612	Environmental Biochemistry	3 (2-2)	_
20	BCH-614	Cell Organeles	3 (3-0)	_
21	BCH-615	Nenobiotechnologies	3 (3-0)	-

"The key to success is action, and the essential in action is perseverance"





## **BS Mathematics**

A minimum of 8th Semester duration program after Intermediate or equivalent.

## Admission eligibility:

- -A person (male/female) holding Intermediate in relevant subject or equivalent certificate from any recognised Institute with at least 50% Marks shall be eligible for admission to BS Mathematics Programme.
- -Admission will be on open merit basis based on marks obtained in last degree.
- -Age: A Cadidate must not be more than 23 Years of age on 1st October of the year of admission, provided that the Vice Chancellor may relax age limit in very exceptional cases.

### Academic standing:

1 Grade point Average:

a. Maximum grade point average

4.00

b. Minimum grade point average for obtaining the degree 2.50

To remain on the roll of the University, a student shall be required to maintain the following minimum CGPA otherwise he/she shall be ceased on the University roll.

2 A student who maintains the minimum GPA/CGPA for promotion and meets the requirements will be

promoted to the next semester.

A student who does not meet the above requirements may repeat the whole semester once only. The course grades that a student earns in the repeated semester shall replace the previously earned course grades.

Semester	CGPA
1st	0.75
2nd	1.00
3rd	1.25
4th	1.50
5th	1.75
6th	2.00
7th	2.25
8th	2.50

# Scheme of Study for BS Mathematics (Semester Wise)

#### I- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	ENG-301	Functional English	3 (3-0)	_
2	SSH-301	Pakistan Studies	2 (2-0)	_
3	CS-300	Intro. to Communication Tech. and Computing To	ools 4 (2-2)	_
4	MATH-301	Calculus and Analytical Geometry-I	3 (3-0)	_
5	MATH-302	Set Theory and Logic	3 (3-0)	_
6	STAT-301	Introductory Statistics	3 (3-0)	_

#### II- Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	ENG-302	Communication Skills	3 (3-0)	-
2	IS/ET-302	Islamic Studies/Ethics	2 (2-0)	_
3	CS-301	Software Packages	4 (2-2)	_
4	SOS-301	Moral Foundation of Education	2 (2-0)	_
5	MATH-303	Calculus and Analytical Geometry-II	3 (3-0)	_
6	STAT-302	Intro. to Probability and Probability Distribution	on 3 (3-0)	_

#### III - Semester

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	ENG-401	Technical Writing and Presentation Skills	3 (3-0)	-
2	PHY-401	Mechanics	3 (3-0)	_
3	MATH-401	Vector Calculus and Complex Numbers	3 (3-0)	-
4	MATH-402	Discrete Mathematics	3 (3-0)	-
5	MATH-403	Algebra	3 (3-0)	-
6	MGT-391	<b>Business Mathematics</b>	3 (3-0)	-

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	SSH-305	Foreign Languages	2 (2.0)	
-		Foreign Languages	3 (3-0)	-
2	PHY-402	Waves and Oscillations	3 (3-0)	_
3	MATH-404	Vector and Tensor Analysis	3 (3-0)	_
4	MATH-405	Linear Algebra	3 (3-0)	-
5	MATH-406	Intro. to Ordinary Differential Equation	3 (3-0)	-
6	MATH-407	Number Theory	3 (3-0)	_

# Scheme of Studies for BS Mathematics (Semester Wise )

#### V - Semester

S. No	Course No.	Course Title	Credit Hrs.	PreReq
1	MATH-501	Real Analysis-I	3 (3-0)	_
2	MATH-502	Group Theory	3 (3-0)	_
3	MATH-503	Ordinary Differential Euqations	3 (3-0)	_
4	MATH-504	Analytical Mechanics	3 (3-0)	_
5	CS-323	Programming Fundamentals	4 (3-2)	-

#### VI - Semester

S. No	Course No.	Course Title	Credit Hrs.	PreReq
1	MATH-505	Real Analysis-II	3 (3-0)	-
2	MATH-506	Partial Differential Equations	3 (3-0)	-
3	MATH-507	Numerical Analysis	3 (3-0)	-
4	MATH-508	Complex Analysis	3 (3-0)	-
5	MATH-509	Topology	3 (3-0)	-
6	ECON-507	Mathematics for Economists	3 (3-0)	-

#### VII - Semester

S. No	Course No.	Course Title	Credit Hrs.	PreReq
1	MATH-601	Functional Analysis	3 (3-0)	_
2	MATH-602	Mathematical Physics	3 (3-0)	-
3	MATH-603	Differential Geometry	3 (3-0)	_
4	MATH-604	Rings and Fields	3 (3-0)	_
5	-MATH	Elective-I	3 (3-0)	_

#### VIII - Semester

S. No	Course No.	Course Title	Credit Hrs.	PreReq
1	-MATH	Elective-II	3 (3-0)	_
2	-MATH	Elective-III	3 (3-0)	-
3	-MATH	Elective-IV	3 (3-0)	-
4	MATH-618	Research Project	3 (3-0)	-
5	MATH-620	Seminar	1 (1-0)	-

# Scheme of Study for BS Mathematics (Semester Wise)

#### **Core Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MATH-301	Calculus and Analytical Geometry-I	3 (3-0)	_
2	MATH-302	Set Theory and Logic	3 (3-0)	_
3	MATH-303	Calculus and Analytical Geometry-II	3 (3-0)	_
4	MATH-401	Vector Calculus and Complex Numbers	3 (3-0)	_
5	MATH-402	Discrete Mathematics	3 (3-0)	_
6	MATH-403	Algebra	3 (3-0)	_
7	MATH-404	Vector and Tensor Analysis	3 (3-0)	_
8	MATH-405	Linear Algebra	3 (3-0)	_
9	MATH-406	Intro. to Ordinary Differential Equations	3 (3-0)	_
10	MATH-407	Number Theory	3 (3-0)	_
11	MATH-501	Real Analysis-I	3 (3-0)	_

#### **General Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	STAT-301	Introductory Statistics	3 (3-0)	_
2	STAT-302	Intro. to Probability and Probability Distribution		_
3	PHY-401	Mechanics	3 (3-0)	-
4	PHY-402	Waves and Oscillations	3 (3-0)	_
5	MGT-391	Business Mathematics	3 (3-0)	-
6	CS-323	Programming Fundamentals	4 (3-2)	_
7	ECON-507	Mathematics for Economists	3 (3-0)	-

#### **Major Courses**

S. No	Course Code	Course Title	Credit Hrs.	PreReq
1	MATH-502	Group Theory	3 (3-0)	_
2	MATH-503	Ordinary Differential Equations	3 (3-0)	_
3	MATH-504	Analytical Mechanics	3 (3-0)	-
4	MATH-505	Real Analysis-II	3 (3-0)	-
5	MATH-506	Partial Differential Equations	3 (3-0)	-
6	MATH-507	Numerical Analysis	3 (3-0)	
7	MATH-508	Complex Analysis	3 (3-0)	-
8	MATH-509	Topology	3 (3-0)	-
9	MATH-601	Functional Analysis	3 (3-0)	-
10	MATH-602	Mathematical Physics	3 (3-0)	_
11	MATH-603	Differential Geometry	3 (3-0)	_
12	MATH-604	Rings and Fields	3 (3-0)	_

# Scheme of Study for BS Mathematics (Semester Wise)

#### **Compulsory Courses**

S. No	Course Code	e Course Title	Credit Hrs.	PreReq
1	ENG-301	Functional English	3 (3-0)	
2	ENG-302	Communication Skills	3 (3-0)	_
3	SSH-301	Pakistan Studies	2 (2-0)	_
4	SSH-305	Foreign Languages	2 (2-0)	_
5	CS-300	Intro. to Communication Technologies & Computing	Tools <b>4</b> (2-2)	
6	CS-301	Software Packages	4 (2-2)	_
7	IS/ET-302	Islamic Studies	2 (2-0)	_
8	SOS-301	Moral Foundation of Education	2 (2-0)	-
9	ENG-401	Technical Writing and Presentation Skills	3 (3-0)	-

#### **Elective Courses**

S. No	Course Code	e Course Title	Credit Hrs.	PreReq
1	MATH-605	Integral Equations	3 (3-0)	_
2	MATH-606	Fluid Mechanics	3 (3-0)	_
3	MATH-607	Combinatorics	3 (3-0)	_
4	MATH-608	Special Functions	3 (3-0)	-
5	MATH-609	Modeling and Simulation	3 (2-2)	-
6	MATH-610	Optimization	3 (3-0)	-
7	MATH-611	Analytical Dynamics	3 (3-0)	-
8	MATH-612	Quantum Mechanics	3 (3-0)	-
9	MATH-613	Special Relatively	3 (3-0)	-
10	MATH-614	Galois Theory	3 (3-0)	-
11	MATH-615	Measure Theory	3 (3-0)	-
12	MATH-616	Advanced Complex Analysis	3 (3-0)	-
13	MATH-617	Operation Research	3 (3-0)	-

## Fee Structure 2024-25 Admissions

FEE STRUCTURE 2024-25 ADMISSIONS							
Fee Payab	Fee Payable one Time (Rs.)				Each Seme	ster (Rs.)	
Discipline	Admission Fee	Donation to PRCS	Total (A)	Discipline	Tution Fee	Other Fee	Total (B)
BBA (Hons)	17000	50	17050	BBA (Hons)	26450	23800	50250
BS Mathematics	10500	50	10550	BS Mathematics	35900	9750	45650
BS (CS&AI)	17000	50	17050	BS (CS&AI)	43500	21250	64750
BS SE	17000	50	17050	BS SE	43500	21250	64750
BS HND	17000	50	17050	BS HND	41400	18100	59500
BS MLT	17000	50	17050	BS MLT	41400	18100	59500
BSc. (Hons) FS&T	17000	50	17050	BSc. (Hons) FS&T	41400	18100	59500
BS Biochemistry	17000	50	17050	BS Biochemistry	41400	18100	59500
BS Biotechnology	17000	50	17050	BS Biotechnology	41400	18100	59500
BS Microbiology	17000	50	17050	BS Microbiology	41400	18100	59500

Note: The institute reserves the right to increase the fee by 10-15% when required.

#### **Procedure for Admission:**

- a) The name of category in which a candidate seeks admission must be clearly indicated in the form or apply online through University Portal.
- b) Every student admitted to the university shall be required to sign an undertaking on judicial stamp paper of the value of RS 50/- duly countersigned by parent and Oath Commissioner assuring that he /she will abide by the rules and regulations of the university and such other orders/instructions as may be issued by the administration from time to time.
- c) The list of selected candidates will be displayed on the Notice Board according to the schedule notified. No separate individual intimation shall be sent.
- d) The selected candidates have to pay the fees and complete all formalities of admission and enrollment within the dates notified. If a selected candidates fail to enroll by the fixed time, his admission shall stand canceled and seat will be offered to the next candidate on the waiting list.

#### **Selection Criteria:**

- (a) Applicants who fulfill all the requirements for admission and demonstrate the strongest academic preparation as measured by comprehensive merit will be selected for admission. They must be domiciled in the Barani areas of Punjab, except for admission on reserved provincial seats and in the programs under higher fee structure. Disciplinary suspension or dismissal from a previous educational institute will lead to rejection of admission. The students are not to allowed to enroll different programs simultaneously.
- (b) The Candidates who have been imposed a Major Penalty are not allowed to get admission for further studies.

#### **EVALUATION**

(i) The minimum pass marks for each course shall be 40% for under graduate and master degree pgd CS and pgd IT and 50% for PHD in theory and practical separatly

The marks grade required to pass a deficiency course shall be the same as the regulation relating to the examination courses concerned

(ii) Grade points will be as follows:

Marks Obtained	Grade	Grade Point	Remarks
80-100%	А	4	Excellent
65-79%	В	3	Good
50-64%	С	2	Satisfactory
40-49%	D	1	Pass
Below	F	0	Fail

(ii) The grades will be worked on the basis of percentage Of marks obtained by a student in each course separately according to conversion table quality points table And not on the percentage to total marks obtained by a student 1 credit hour shall carry 20 marks

#### Calculation of GPA CGPA

- (!) GPA CGPA will be calculated at the end of each semester in accordance to the following formula GPA CGPA sum of quality points some of the credit hours
- (ii) The quality points table given on the next page will be used for calculating the GPA CGPA

## QUALITY POINTS TABLE FOR GPA / CGPA

45 11.10 46 11.40 47 11.70 A 48 12.00

5-Cred 100-Mo			
	50 00		
47 8.	50		
48 9. 49 9.	00 50		
C50 10	.00		
51 10 52 10	.50 .50		
53 11.	00		
54 11.	50		
55 11. 56 12	.00		
57 12	.50		
58 12 59 13	.50 .00		
60 13	.50		
61 13 62 14	.50 .00		
63 14	.50		
	.50 .00		
66 15 67 15	.50		
68 16	.00		
69 16	.50 .50		
71 17.	.00		
72 17. 73 17.	.50		
74 18	.00		
75 18 76 18	.50		
77 19	.00		
78 19 79 19	.50 .50		
	.00		

A 80 20.00

	edits Marks
D32 33 34 35 36 37 38 39 C40 41 42 43 44 45	4.00 4.40 5.20 5.60 6.00 6.40 7.20 7.60 8.00 8.40 8.80 9.20 9.60 10.00
47 48 49 50 51 8 52 53 54 55 56 57 58 59 60 61 62 63 A 64	11.20 11.60 12.00 12.00 12.40 12.80 13.20 13.60 14.00 14.40 14.80 15.20 15.60

3-Credits	2-Credit
60-Marks	40-Mark
D24 3.00	D 16 2.00
25 3.60	17 2.60
26 3.90	18 3.00
27 4.50	19 3.60
28 5.10	C 20 4.00
29 5.40	21 4.40
C30 6.00	22 4.60
31 6.30	23 5.00
32 6.60	24 5.40
33 6.90	25 5.60
34 7.20	B 26 6.00
35 7.50	27 6.40
36 8.10	28 6.60
37 8.40	29 7.00
38 8.70	30 7.40
B 39 9.00	31 7.60
40 9.30	A 32 8.00
41 9.60	
42 9.90	
43 10.20	
44 10.50	

1-Credit 20-Marks

D 08 1.00 09 1.50 C 10 2.00 11 2.30 12 2.70 B 13 3.00 14 3.30 15 3.70 A 16 4.00

#### 3. EXAMINATION & WEIGHTAGE

#### (a) Theory

In theory paper, student's evaluation shall be done by mid-term examination, assignment / quizzes / term paper & final examination. Both the mid-term & final examinations shall be compulsory; a student who misses the mid term examination, he shall not be allowed a make-up examination & shall be awarded zero marks in that examination, however, he may appear in the final examination. In case a student does not appear in the final examination of a course, he shall be deemed to have failed in that course.

In theory, weight-age to each component of examination shall be as prescribed here under:

(i) B. Sc (Hons.) Agriculture/BS Agriculture Engineering/BS Economics/BS(Geo-Informatics)/BS Biochemistry/BS Forestry/BS Human Nutrition & Dietetics/DVM / B. Ed / M. Sc (Hons.) Agriculture/ M.Sc (Hons.) Poultry Science/M.Phil/MS RS & GIS/M.Sc/M. Ed/ Ph. D Agriculture & Biological Sciences, Economics, Education, Forestry & Range Management, Wildlife Management and Environmental Sciences.

Mid Examination 30%
Assignments 10%
Final Examination 60%

(ii) Programmes of Study in UIMS, UIIT, BIIT, BIMS, AIMS, BIS, GIMS, BI-KAT

Mid Examination 30%
Assignments 20%
Final Examination 50%

#### (b) Practical

For practical examination (if applicable) 100% weightage will be towards final examination.

#### (c) Mid Term

A mid-term examination for minimum of one-hour duration will be held during 8-10th weeks of the semester. The results of the examination shall be submitted to the Controller of Examinations by the 12th week. However, Chairman/Incharge of the concerned department will be responsible for timely submission of Mid and Final Examination results.

#### (d) Quizzes / Assignments

Quizzes, special home assignments &/or term papers shall be given from time to time which shall be uniformly split over the whole semester.

#### 4. Eligibility for Examination

A student shall be eligible to sit for the examination provided that he / she:

- a. has been on the roll of the university during during that semester
- b. has register himself herself for the courses of studies
- c. has attended not less than 75% of the classes in theory and practical/laboratory of each courses provided that the period of absence in the case of participation in co curricular sports activities with the permission of the competent authority concerned may not be counted.

#### 5. Comprehensive Examination

- i. All answer-books received from the Examiners after marking, shall be checked and tabulated in the office of the Controller of Examinations. The result of a particular examination will be notified by the Controller of Examinations.
- ii. After receiving the answer books, if a discrepancy of numerical nature in the marking of the scripts comes to the notice of the Controller of Examinations, he shall take action to get it rectified.
- iii. In case the result of a particular candidate or candidates be wrongly declared, and mistake is of serious nature the Vice-Chancellor shall issue orders that the mistake be rectified in a manner which appears to him to be just and proper.
- iv. The Vice-Chancellor may order with-holding the result of a particular candidate or candidates, if it is considered necessary in the interest of the University to do so.
- v. Each successful candidate at a degree examination shall be conferred the degree free of cost at the subsequent Convocation held for the purpose. These degrees shall be signed by the Controller of Examinations, Vice-Chancellor and the Chancellor.
- vi. The candidates who are not able to present/register themselves at the Convocation shall be granted the degree in absentia on request and payment of the prescribed fees.
- vii. After the notification of the result, each successful candidate at a non degree examination shall receive a certificate of passing the examination in the prescribed form signed by the Controller of Examinations and the Vice Chancellor on payment of prescribed fee.
- viii. The Controller of Examinations shall issue degree/diploma/provisional certificate and final transcripts (detailed marks certificates) on prescribed forms to the successful candidates, on request and payment of prescribed fee and on production of proof of his University clearance and identity.

### STUDENT'S SCHOLARSHIP

Gujrat institute of management sciences (GIMS) has revised various scholarship schemes from Fall-2018 to onward (only for few students) till further approval from BOG. The scholarship schemes have been classified onto two major categories:

#### Category A:

This category includes scholarships available at the time of admission.

- 1. Merit Based Scholarship
- 2. Kinship Scheme
- 3. Teacher Son Scholarship
- 1. Merit Based Scholarship:

Merit scholarship will be awarded on basis of marks gained in last degree. The criteria are given below

Program of Study	Numbers Gained in Last Degree	Award of Scholarship (Tuition Fee)
For All Programs	75% and above	35%
Offered at GIMS	70% to 74.9%	25%

#### 2. Kinship scheme:

20% Kinship Scholarship will be awarded to the 1st admitted sibling.

3. Teacher Son/Daughter:

Teacher Son/Daughter will be awarded to those students whose parents are Govt. Teacher and will be awarded 25% scholarship on tuition Fee.

#### Note:

This policy rules apply for Fall-2024 admissions only and supersede all previous rules on the subject.

#### **Continuation of Scholarship:**

- The award of Merit Scholarship is for the whole degree program.
- In the case of discipline or any other violation of the University/Institute/rules and regulations, the award of Merit scholarship shall be stand cancel

#### **FACILITIES:**

#### Library:

GIMS-ARID University has 4000+ books and has capacity to cater large groups in one go. Library has a hall and HEC E-Library with high speed 100MB dedicated internet for students. Students can access virtual library and study from vast material available in the libarary. And 4000+ books ranging from subject related to religion, literature, general information and more

#### **Computer Labs:**

The campus is equipped with three advanced computer labs, each containing 50 systems with internet access. GIMS-ARID University is committed to offering top-notch facilities to its students, enabling them to learn modern techniques and stay aligned with the rapidly changing technological environment.

#### Science Labs:

The campus is home to three state-of-the-art science laboratories, each fully equipped with advanced laboratory equipment, chemicals, and other essential resources. GIMS-ARID University is committed to offering superior facilities to its students, ensuring they acquire modern techniques and remain competitive in an ever-evolving technological environment...

#### Sports:

At GIMS-ARID University, we encourage students to participate in sports activities alongside their academic pursuits to promote health and vitality. Our goal is to foster a community where a healthy body and mind work together for success in practical life. Students have access to facilities for badminton, table tennis, volleyball, and cricket. For larger events, we utilize the district sports ground.



#### First Aid at Campus

The campus is equipped with a fully stocked first aid box to address minor injuries and medical needs. In case of on-campus injuries, the administration promptly consults with a medical practitioner to ensure proper care and guidance..

#### Parking Area

The campus provides separate parking areas for faculty and students, ensuring convenient and organized parking for everyone..

#### Office of Student Affairs

The Office of Student Affairs plays a crucial role in fostering discipline, confidence, and a sense of belonging among students both inside and outside the classroom. It offers support and guidance to students from the moment they begin their journey at the Institute

#### Girls Common Room

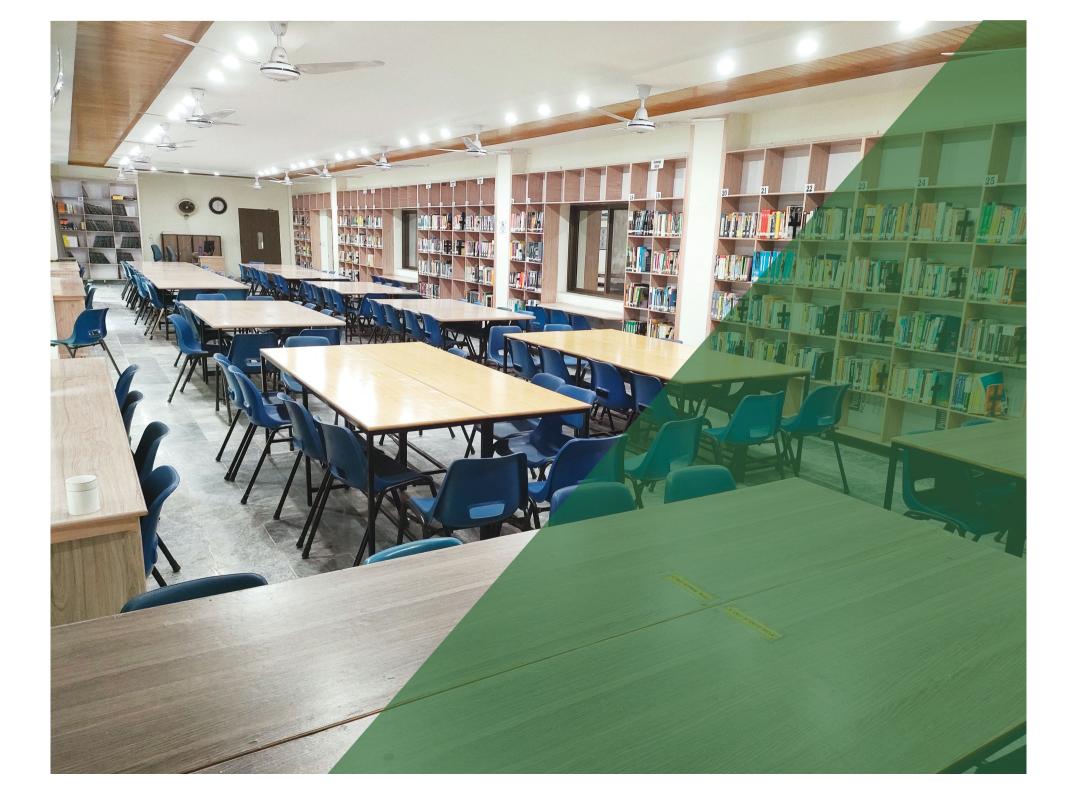
The campus provides a separate common room for girls, offering a clean and comfortable space to relax, eat, and pray. This area is exclusively accessible to girls, ensuring a peaceful and private environment.

#### Cafeteria

The campus cafeteria offers a variety of snacks, lunch options, and tea, serving as a bustling hub that fuels life on campus. Situated amidst lush surroundings with views of the lawns, it provides a relaxing sitting area for students and faculty alike.

#### Bookshop

The campus features a well-equipped stationary shop offering a range of everyday items. Students can avail printouts, photocopies, and binding services as needed. Additionally, the shop provides monogram stickers for vehicles and a variety of souvenirs for purchase



# LIFE AT GIMS



# EXTRA-CURRICULAR ACTIVITIES | MEAL PLANING BY HND DEPARTMENT

































# EXTRA-CURRICULAR ACTIVITIES | MEAL PLANNING BY HND DEPARTMENT































# **EXTRA-CURRICULAR ACTIVITIES | SPORTS GALA 2024**

































# **EXTRA-CURRICULAR ACTIVITIES | ANNUAL PRIZE DISTRIBUTION CEREMONY**

































# EXTRA-CURRICULAR ACTIVITIES | FINAL YEAR PROJECT EXPO

























# **EXTRA-CURRICULAR ACTIVITIES | UNIVERSITY CONVOCATIONS**





























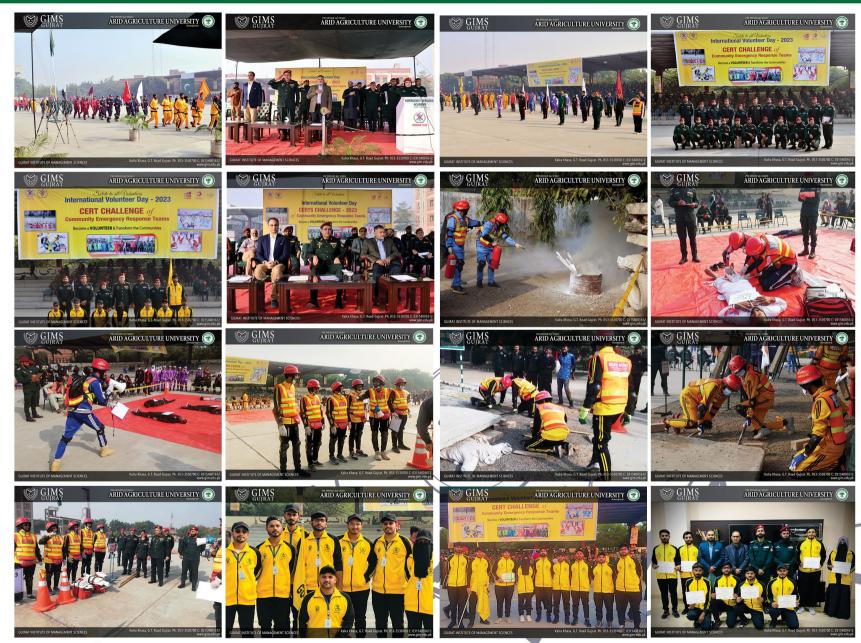




# **EXTRA-CURRICULAR ACTIVITIES | INTRA-UNIVERSITY COMPETITION**



# **EXTRA-CURRICULAR ACTIVITIES** | CERT CHALLENGE OF COMMUNITY EMERGENCY Teams



# EXTRA-CURRICULAR ACTIVITIES | Seminar on Sustainable Healthy Diet



# **EXTRA-CURRICULAR ACTIVITIES** | Project Expo Mgt. Sci. Department



# **EXTRA-CURRICULAR ACTIVITIES | Exploring Modern Tech at NSTP**















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