Gujrat Institute of Management Sciences

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Arid Agriculture University, Rawalpindi

Self-Assessment Report

Bachelor of Information Technology

2018-2020

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Preface

The Gujrat Institute of Management Sciences (GIMS) located in Gujrat, Punjab, is established with the premise of providing affordable quality education to the youth. As an affiliated institute of Pir Mehr Ali Shah Arid Agriculture University Rawalpindi (PMAS-AAUR) ranked at 8th among all Pakistani Universities and 1001+ among the world universities, GIMS aspires to excel in the field of Management Sciences, Computer Sciences, Economics and Statistics. In order to realize our mission, GIMS is committed to providing quality education through highly qualified and motivated faculty, excellent infrastructure and state-of-the-art facilities. This is a young, innovative, and enterprising business school enroots to compete with the foremost management schools of the country as well as to compete with international business schools. The Institute is dedicated to its unique approach (at least in the region) of providing management education based in cutting-edge research and comprehensive training. Unlike conventional academic institutes, GIMS broadens its educational focus in response to new trends in the developing field of management. Based on the social values of integrity, honesty, professional excellence and a broader vision of life, the Institute aims to provide an educational experience that transform its students into business leaders at par with international managers, executives, and entrepreneurs.

GIMS Vision and Mission

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.

Mission

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 to transform individuals into competent professionals with compassionate minds and moral values.

Organizational Structure

The Department of Computer science is the part of the Department of computer and Information technology whereas, GIMS is one of the affiliated institutes of Arid Agricultural University Rawalpindi. The overall organizational structure is shown in Figure 1.

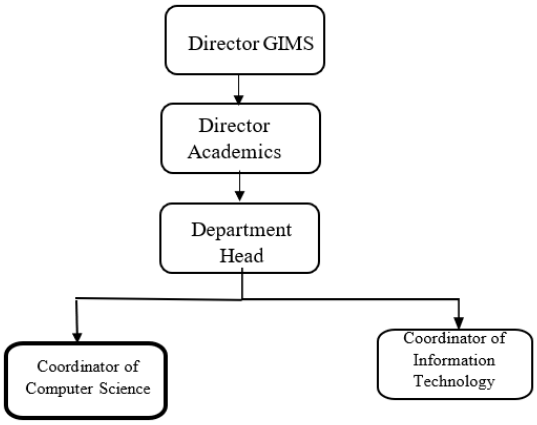


Figure 1: Organization Overall Flow

Programme Delivery Mode and Location

The Department of Computer Science offers the BSCS programme courses during the weekdays between the hours of 08:30 am and 04:30 pm at campus, Gujrat. Courses are generally offered in fall and spring semesters. Selected courses are offered during the summer semester. Most of the courses are delivered in the lecture format and there is a computing component to some core courses. In addition to the lectures, project work is also part of many courses, allowing students to solve complex and open-ended computing problems. A dedicated, six credit hour final year project, is carried out by students during the seventh and eight semesters.

Quality Enhancement Department (QED)

GIMS, as a affiliated institute, believes in high quality of education and has a stringent system of quality management in place. Several layers of quality enhancement are part of this overall system. The authorities and responsibilities of all layers of quality enhancement department are covered in GIMS statues and policies. A Quality Assurance (QA) directorate is functioning at the AAUR level and is responsible for overlooking and ensuring the quality of all programmes offered

at GIMS. GIMS has established internal Quality Enhancement Department (QED) in 2015 to carries out periodic audits of degree programmes to ensure that they meet highest standards of quality. The institute Curriculum Review Committee (ICRC) also function at the institute level and send their reports AAUR respective Department Board of Studies (DBS) are responsible for discussing and finalising matters regarding a programme's quality, necessary support and data is provided by Academics Branch of the department as well as by the Examination Cell.

Institute Curriculum Review Committee (ICRC)

The ICRC is chaired by Director Academics, GIMS. Its members include Department Head and department faculty members. ICRC is responsible for reviewing the suggested curriculum changes and may approve up to 50% changes in curriculum of a program.

CRITERION 1 PROGRAM MISSION OBJECTIVES AND OUTCOMES

Criterion 1 Program Mission Objectives and Outcomes

1.1 BSIT Program Vision and Mission

BSIT's Vision

We strive for excellence in teaching and research in the essential and applied aspects of computer science to address a wide range of challenging scientific and societal problems.

BSIT's Mission

The mission of the GIMS BSIT program is to educate our students about the need of the hour technologies as well as upcoming trends to help our students grow intellectually, professionally and personally so that they can feel enabled, empowered and motivated to make a significant impact to the organizations they serve and to society as a whole being a productive potential citizen.

Standard 1-1:The program must have documented measurable objectives that support faculty and institution vision mission statements.

1.2 BSIT Programme Educational Objective

The Computer Science and Information Technology program aims at developing the student's intellectual ability, analytical thinking and managerial skills through an appropriate blend of theory and practice. The program assists the students in understanding and developing unique leadership qualities required for a changing and dynamic business environment. The four programme educational objectives (PEOs), as given below, form the basis of the Department of the BSIT at GIMS. Within few years of graduation, the students with bachelor's in information technology and computer science are expected to attain the following.

1. Develop critical thinking, problem-solving abilities and competence in computing, resulting in successful career.
2. Develop written and oral communication skills participating in efforts to address societal and technical / business challenges.
3. Develop global awareness and appreciation for cultural diversity and decision-making skills.
4. Enhancing their professional development and technical knowledge through continuing education.

1.2.1 Strategic Plan to Work out the Measurable Objectives

1. To develop and deliver a much broader and up-to-date teaching material that is interactive, understandable and reasonable for the award of the degree.
2. Formulation and consistent revision of curriculum involving core subjects, elective subjects, specialized areas, Technical labs and study tours.
3. The conductance of general and specialized lab-work for achieving competence with industrial experience.
4. We orientate Faculty development programs to affect the learning process of students as well as faculty itself and quality of education.
5. Industry and academia collaborate to introduce our students to the practical implementation of various technologies.

1.3 Consistency of PEOs with Vision and Mission of GIMS, Mission of BSIT Programme

The PEOs of the BS Information Technology are consistent with the vision and mission of GIMS and the mission of BS Programme.

Table 1: Consistency of PEOs with Vision and Mission of GIMS, Mission of BSIT

PEO No	GIMS Vision	GIMS Mission	Programme Mission
1 (Computer Science knowledge and competence)	✓	✓	✓
2 (Interpersonal and technical competence)	✓	✓	✓
3 (Environment, society, individual and teamwork)	✓	✓	✓
4 (Research and continuous learning)	✓	✓	✓

1.4 Assessment of Programme Educational Objectives (PEOs)

A minimum attainment level for each PEO has been defined along with its method of measurement. The measurement of PEO is carried out using indirect assessment tools. A single PEO has multiple performance indicators. The details of performance indicators and their measurement methods are listed in Annexure A and B. In case, multiple survey questions are attributed to the calculation of a single KPI, equal weightage is given to each question. All KPIs related to a PEO must be attained to achieve the relevant PEO.

Table 2: Assessment of Programme Educational Objectives (PEOs)

Program Educational Objective		How Measured	When to Measured	Key Performance Indicators (KPI)	Improvement Needed
PEO 1	Develop critical thinking, problem-solving abilities and competence in computer science resulting in a successful career.	Alumni Survey (Q1) Employers Survey (Q1)	End of every academic session After 2 year of student graduation	60% or more of the graduates are employed within one year of graduation. 40% of students are self-employed or seeking higher education within one year of graduation. 60% or more of the employers are in agreement with PEO 1	Industrial linkage and career placement office should be established to increase students' employment ratio.
PEO 2	Develop written and oral communication skills participating in efforts to address societal and technical / business challenges.	Alumni Survey (Q1, Q2, Q8) Employers Survey (Q1)	End of every academic session After 1 year of student graduation	25% or more of the graduates are at middle-level management a few years after graduation 40% or more of the graduates are involved in a project related to societal, technical / business issues.	Quantifiable steps needed to enhance the students technical and critical writing skills.

				60% or more employers in agreement with PEO 2.	
PEO 3	Develop global awareness and appreciation for cultural diversity and decision-making skills.	Alumni Survey (Q3, Q6) Employers Survey (Q3)	End of every academic session After 1 year of student graduation	30% or more graduates are working with international companies and clients within a few years of graduation. 70% or more employers agreed students are good team players in decision markers in their work field.	Collaboration with international institutes for semester exchange is needed to enhance student's international exposure and working in diverse team.
PEO 4	Enhancing their professional development and technical knowledge through continuing education.	Alumni Survey (Q2, Q3, Q4) Employers Survey (Q3, Q4)	End of every academic session After 1 year of student graduation	50% or more graduates are pursuing higher education in local and international universities. 70% or more of the employers are in agreement with PEO 4	Expect the regular semester and courses, competition, conferences and seminars are needed for students learning outside the classroom.

Standard 1-2: The program must have documented outcomes for graduating students. It must be demonstrated that the outcomes support the program objectives and that graduating students are capable of performing these outcomes.

1.5 Review Process of Programme Educational Objectives

Measurement of the defined PEOs will be carried out by indirect assessment methods after 1-3 years of graduation. Surveys from employers/industry and alumni will be conducted periodically. Graduating student surveys and faculty feedback are being collected. However, the alumni and employers survey will be conducted after a period of 1-3 years of graduation of a computer science class. Since the first class of students passed out in year 2018, this data will be compiled in year 2017. Once this process starts, it will be carried out every year as a class of students is graduating every year.

The surveys will be carried out and their results will be compiled by the QED and program's coordinator. An analysis report will be presented by the Director and Director Academics to the review committee comprising Head of Department, Faculty, QED member and program coordinators. The review committee will recommend improvements/modifications/enhancements (if required) and implementation will be carried out by department. Figure 2 depicts this process in the form of a flow chart.

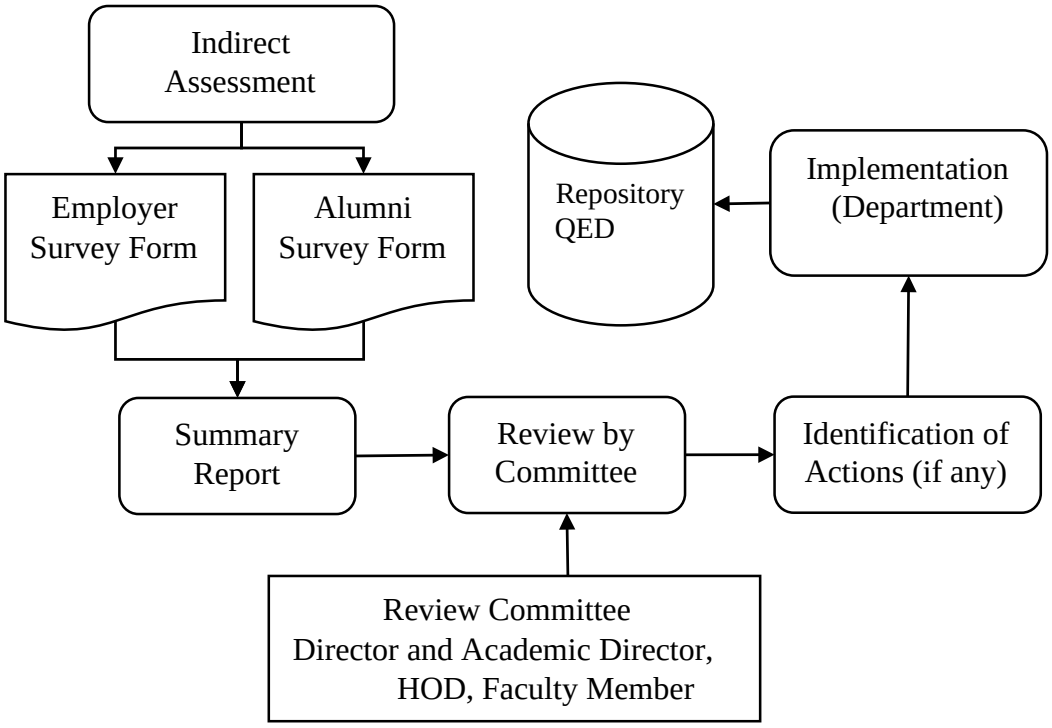


Figure 2: Flowchart of Processes Involved in Establishing and Reviewing PEO

Table 3: Relationship of Program Outcomes and Objectives

Program Objectives	Program Outcomes				
	1	**2**	**3**	**4**	**5**
1	+++	+++	+++	+++	++
2	++	++	++	+	++
3	++	++	++	+++	+++
4	+++	++	++	+++	+++

Rating Scale

+ = Moderately Satisfactory

++= Satisfactory

+++= Highly Satisfactory

1.6 Graduating Survey

The program's coordinator surveys graduating students about the quality of the program. A survey is also conducted by the department to obtain feedback from the graduates regarding the adequacy of the computer science program. The graduating students survey results are given in Annexure C. The results of alumni survey shows that the 80-85 percent of graduates are fully satisfied with their learning Outcomes

1.7 Alumni Survey

The program's coordinator conducts survey of graduating students about quality of the programme. Alumni survey is also conducted by the department to obtain feedback from the graduates regarding the adequacy of the computer science programme. The alumni feedback form is given at Annexure A.

1.8 Employer Survey

The program's coordinator conducted survey of employers about the quality of the GIMS graduates and their performance in field. The employer's feedback form is given in Annexure B.

Standard 1-3: The results of program's assessment and the extent to which they are used to improve the program must be documented.

1.9 Define and Publish Programme Learning Outcomes

Six PLOs have been defined for the bachelor's in mechanical engineering programme by keeping in mind the PEOs of the programme.

1.9.1 Programme Learning Outcomes

At the successful completion of BSIT degree, the students will be equipped with the following.

.

1. Be competent in theoretical and mathematical foundations of computer science.
2. Understand the hardware and software architecture of computer systems.
    - Understanding and implementation of algorithms and computer theories.
3. Be proficient in one programming language and have a basic knowledge of several others.
4. Demonstrate effective written and oral communication skills.
5. Understanding concepts important to the national/international market.

1.9.2 Programme's Strengths and Weaknesses

Strengths of BSIT Programme

The BS(IT) program's core strengths are its Affordability and quality and comprehensive contents, which are aligned with those of competitor institutions and universities. The current computing faculty is well-rounded, covering almost all of its specialist fields.

Weakness of BSIT Programme

The visiting faculty in the BS(IT) programme is a weakness. If a course was taught by a visiting

faculty member, students do not locate a person to continue their explorations after they have finished the course. Computer lab and library use is seen very little among BS(IT) students.

1.10 Process of Data Gathering and Results of Assessment of PLOs

PLOs of the mechanical engineering programme are evaluated for two purposes.

1. Each student has to pass all six PLOs during the four-year degree programme. This requirement is in addition to the GPA requirements of the programme. This assessment is referred to as Student PLO assessment.
2. Each PLO is also assessed to ensure the quality of the computer science programme. This assessment is referred to as Programme PLO assessment.

1.10.1 Direct Assessment

Direct assessment of PLOs is carried out from the assessment of CLOs pertaining to a particular PLO.

Indirect Assessment

Indirect assessment is carried out using graduating student survey, which is collected at the time of the graduation. Detail of annexure C. The graduating student survey results are only used in Programme PLO assessments. KPIs for student and programme PLO assessment are given in Table.

Table 4: KPIs for PLO Assessment

Programme Learning Outcomes 1 to 5	**Measurement Tool**	**Key Performance Indicator**	**Measurement time**
Programme PLO assessment	Graduating student survey form *(Indirect)*	Obtained at least 60% of average score in the graduating student survey based on a score of 3 and greater from scale of 1 to 5	At the time of graduation
	Attainment via course assessments (CLOs, FYP) *(Direct)*	60% of every cohort attains at least 50% in each PLO	At the end of each academic year and semester

Student PLO assessment	Attainment via course assessments, projects, assignments, etc. *(Direct)*	At least obtain 50% in each PLO upon graduation	At the end of each Semester

1.11 Application of Assessment Results to Develop and Improve the Programme Learning Objectives

1.11.1 Results of PLO Attainment Obtained Through Direct Assessment

1.11.1.1 PLO 1: Be Competent in Theoretical and Mathematical Foundations of Computer Science

PLO 1: Be Competent in Theoretical and Mathematical Foundations of Computer Science	
Assessment Method	**Minimum Level of Achievement**
Attainment via direct assessments	60% of the students attain at least 50% of marks
Graduating student survey	Obtained at least 60% of average score in the PO assessment survey based on a score of 3 and greater from scale of 1 to 5

Table 5: Courses in Which Student Performance on PLO 1 is Assessed

S No	Semester No.	Course Code	Course Title
1	1	MTH-310	Calculus & Analytical Geometry
2	3	MTH-435	Linear Algebra
3	2	STT-500	Statistics & Probability
4	1	ELE-401	Basic Electronics

Table 6: Summary of Assessment Results for PLO1.

S No	Cohort	Fall 2018 (%age attainment)	Spring 2019 (%age attainment)	Fall 2019 (%age attainment)	Spring 2020 (%age attainment)	Overall Average (%age attainment)
1	MTH-310	84	-	80	-	82
2	MTH-435	83	-	85	-	84
3	ELE-401	88	-	95	-	91.5
4	STT-500	-	54	-	100	77

1.11.2 PLO 2: Understand the Hardware and Software Architecture of Computer Systems

PLO 2: Understand the Hardware and Software Architecture of Computer Systems	
Assessment Method	**Minimum Level of Achievement**
Attainment via direct assessments	60% of the students attain at least 50% of marks
Graduating student survey	Obtained at least 60% of average score in the PO assessment survey based on a score of 3 and greater from scale of 1 to 5

Table 7: Courses in Which Student Performance on PLO2 is Assessed

S No	Semester No.	Course Code	Course Title
1	3	CS-583	Operating Systems
2	4	CS-400	Database Systems
3	4	CS-577	Computer Networks
4	5	CS-497	Information Security
5	5	CS-684	System Network and Administration

6	7	CS-698	Virtual System and Services
7	7	CS-601	Database system and Administration

Table 8: Summary of Assessment Results for PLO 2

S No	Cohort	Fall 2018 (%age attainment)	Spring 2019 (%age attainment)	Fall 2019 (%age attainment)	Spring 2020 (%age attainment)	Overall Average (%age attainment)
1	CS-583	-	98	90	-	94
2	CS-684	100	100	100	-	100
3	CS-577	90	-	97	87	91

1.11.3 PLO 3: Be proficient in one Programming language and have a Basic knowledge of Several others.

1.11.3.1 PLO 2: Be proficient in one Programming language and have a Basic knowledge of Several others.	
Assessment Method	**Minimum Level of Achievement**
Attainment via direct assessments	60% of the students attain at least 50% of marks
Graduating student survey	Obtained at least 60% of average score in the PO assessment survey based on a score of 3 and greater from scale of 1 to 5

Table 9: Courses in Which Student Performance on PLO 3 is Assessed

S No	Semester No.	Course Code	Course Title
1	1	CS-323	Programming Fundamentals

2	1	CS-323	Object Oreinted Programming
3	5	CS-432	Modern Programming Languages
4	4	CS-566	Web Technologies
5	4	CS-692	Visual Programming
6	5	CS-666	Web Engineering
7	6	CS-693	Mobile Application Development
8	7	CS-698	Final Year Project-I
9	8	CS-699	Final Year Project-II

Table 10: Summary of Assessment Results for PLO 3

S No	Cohort	Fall 2018 (%age attainment)	Spring 2019 (%age attainment)	Fall 2019 (%age attainment)	Spring 2020 (%age attainment)	Overall Average (%age attainment)
1	CS-323	59	-	71	-	65
2	CS-566	-	72	-	95	83
3	CS-692	90	90	-	-	90

1.11.4 PLO 4: Demonstrate Ability to Effective Written and Oral Communication Skills

PLO 4: Demonstrate the Ability to Effective Written and Oral Communication Skills	
Assessment Method	**Minimum Level of Achievement**
Attainment via direct assessments	60% of the students attain at least 50% of marks
Graduating student survey	Obtained at least 60% of average score in the PO assessment survey based on a score of 3 and greater from scale of 1 to 5

Table 11: Courses in Which Student Performance on PLO 4 is Assessed

S No	Semester No.	Course Code	Course Title
1	4	CS-453	Software Engineering
2	5	CS-556	Information Technology Project Management
3	6	CS-555	Information Technology Infrastructure

Table 12: Summary of Assessment Results for PLO 4

S No	Cohort	Fall 2018 (%age attainment)	Spring 2019 (%age attainment)	Fall 2019 (%age attainment)	Spring 2020 (%age attainment)	Overall Average (%age attainment)
1	CS-453	94	100	--	84	92
2	CS-556	96.7	60	89	100	86

1.11.5 PLO 5: Demonstrate Understanding Concepts Important to the National/International Market

PLO 5: Demonstrate Understanding Concepts Important to the National/International Market.	
Assessment Method	**Minimum Level of Achievement**
Attainment via direct assessments	60% of the students attain at least 50% of marks
Graduating student survey	Obtained at least 60% of average score in the PO assessment survey based on a score of 3 and greater from scale of 1 to 5

Table 13: Courses in Which Student Performance on PLO 6 is Assessed

S No	Semester No.	Course Code	Course Title
1	2	ENG-325	Communication & Presentation Skills
2	7	SSH-307	Professional Practices

3	3	MGT-322	Financial Accounting
4	4	MGT-351	Introduction to Marketing
5	5	MGT-411	Introduction to Management
6	7	MGT-515	Introduction to Human Resource Management
7	3	PSY-600	Psychology

Table 14: Summary of Assessment Results for PLO 6

S No	Cohort	Fall 2018 (%age attainment)	Spring 2019 (%age attainment)	Fall 2019 (%age attainment)	Spring 2020 (%age attainment)	Overall Average (%age attainment)
1	SSH-307	95	--	86	90	60
2	MGT-322	95	95	100	100	87.8
3	MGT-351	--	100	90	100	91.5

Standard 1-4: The department must access its overall performance periodically using quantifiable measures.

1.1.1 Admission Response and Percentage Admitted

Student's response towards Information Technology at GIMS has been encouraging as can be seen from the final merit list is given in Table 16.

Table 15: Student Admissions and Enrolments

Sr. No.	Intake Batch	Total Admissions offered	Total Students Admitted	Present Strength	No. of Section(s)
1	Fall 2018	100	56		1
3	Fall 2019	100	39		1

1.11.6 Intake

The student intake for the mechanical engineering programme is shown in Table 17.

Table 16: Student Intake for Information Technology Programme

Batch	Sections	No. of Students
Fall 2018 Entry	Section A	40
Fall 2019 Entry	Section A	42
Total		**82**

Table 17: Number of Students Enrolled in BS-IT in last 5 years

Year	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Students	39	81	124	172	153	156

1.12 Alumni Survey

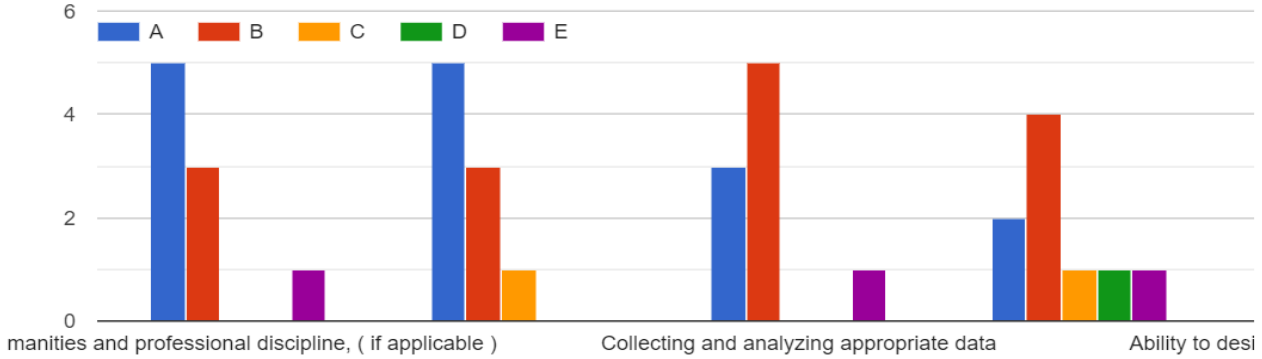
A survey has been conducted and feedback has been collected on Performa 8 from the employees where students have BSIT from GIMS are working. The results are summarized in figure given below.

Performa: 7 Alumni Survey

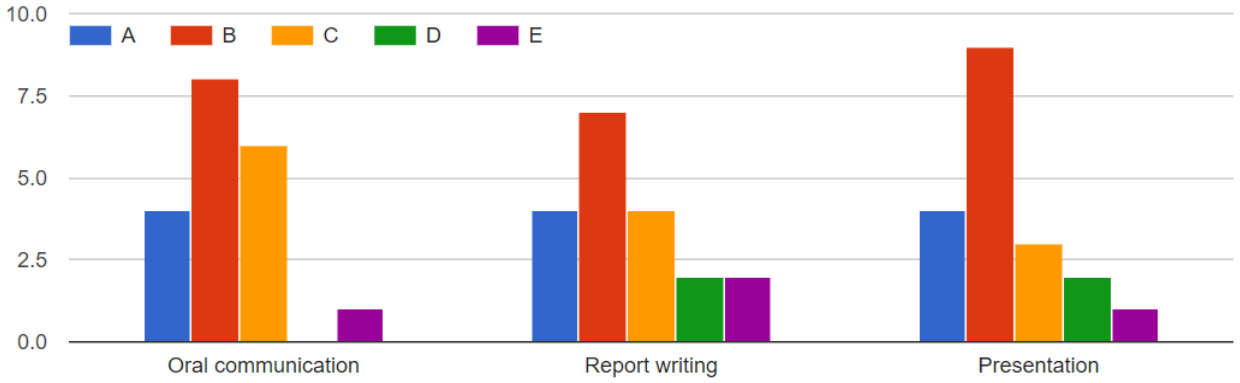
Department of Computer Science & IT

BSIT Programs Batch 2015-2019

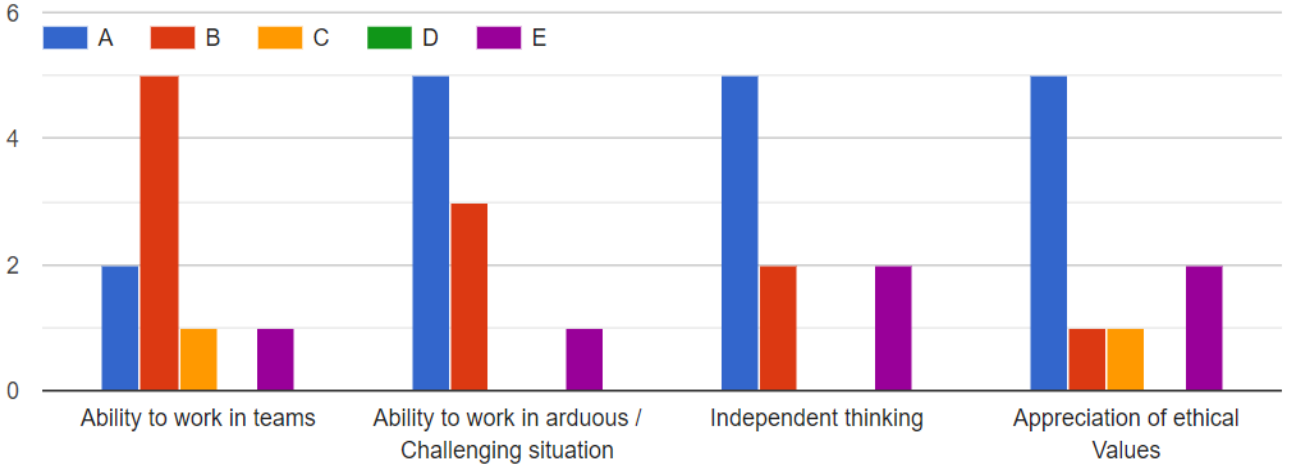
1. Knowledge



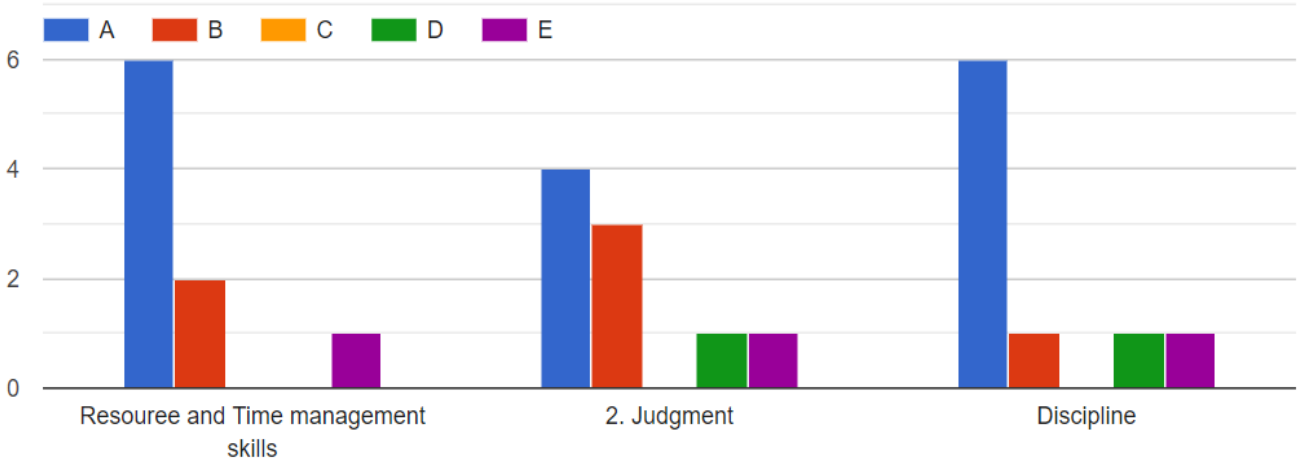
2. Communication Skills



3. Interpersonal Skills



4. Management and Leadership Skills



1.13 Teacher and Course Assessment

1.13.1 Teacher Evaluation

At the end of every semester teacher evaluation is conducted from the students to assess the teacher/ instructor performance and instructor attitude towards the student and classroom learning from students' perspective. Some of the teacher evaluation results are presented here. The results of teacher evaluation are shared with teacher and get feedback from teachers. In some case where QED and Department found unusual result and significant comment that shows the teacher and student had serious conflict regarding the fair assessment, classroom learning and teacher attitude towards students. QED had meeting with concerned teacher to address the issues.

1.13.2 Course Evaluation

At the end of every semester course evaluation is conducted from the students to assess the learning outcomes of course. Some of the course evaluation results are presented here. The results of course evaluations were shared with teacher and get feedback from teachers. The results of course evaluations help to identify how much the course learning objectives were achieved.

Instructor Name: Mr. Bilal Tariq Butt

Course: CS-584 System Administration

The student shows the positive response towards instructor which showcase the student's satisfaction towards teacher. The 94% students were agreed instructor was prepared for class. The survey results indicate that the instructor has completed whole course and also provide the additional material apart from the course textbook. The 88% and 9% were strongly agreed and agreed respectively that instructor was available during the specified office hours and for after class consultations.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	94%	6%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	94%	6%	0%	0%	0%
The instructor has completed the whole course.	88%	12%	0%	0%	0%
The instructor provides additional material apart from the textbook.	85%	15%	0%	0%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	97%	3%	0%	0%	0%
The instructor communicates the subject matter effectively.	91%	9%	0%	0%	0%
The instructor shows respect towards students and encourages class participation.	88%	9%	0%	3%	0%
The instructor maintains an environment that is conducive to learning.	94%	6%	0%	0%	0%
The instructor arrives on time.	91%	9%	0%	0%	0%
The instructor leaves on time.	85%	6%	0%	3%	6%
The instructor returns the graded scripts etc, in a reasonable amount of time.	91%	6%	3%	0%	0%
The instructor was available during the specified office hours and for after class consultations.	88%	9%	0%	0%	3%
The Subject matter presented in the course has increased your knowledge of the subject.	97%	3%	0%	0%	0%
The syllabus clearly states course objectives requirements, procedures and grading criteria.	91%	9%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	88%	12%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	94%	6%	0%	0%	0%
The course material is modern and updated	91%	9%	0%	0%	0%

Instructor Name: Mr. Farhat Mehmood
Course: CS-684 Network Management and Security

The student shows the positive response towards instructor which showcase the student's satisfaction towards teacher. The 96% students were agreed instructor was prepared for class. The survey results indicate that the instructor communicates the subject matter effectively. The 93% and 4% were strongly agreed and agreed respectively that instructor was available during the specified office hours and for after class consultations.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	96%	0%	4%	0%	0%
The instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The instructor has completed the whole course.	81%	7%	7%	4%	0%
The instructor provides additional material apart from the textbook.	93%	0%	4%	4%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	89%	4%	4%	0%	4%
The instructor communicates the subject matter effectively.	93%	4%	0%	4%	0%
The instructor shows respect towards students and encourages class participation	93%	0%	4%	0%	4%
The instructor maintains an environment that is conducive to learning.	89%	7%	4%	0%	0%
The instructor arrives on time.	100%	0%	0%	0%	0%
The instructor leaves on time.	89%	4%	0%	0%	7%
The instructor returns the graded scripts etc, in a reasonable amount of time.	93%	4%	4%	0%	0%
The instructor was available during the specified office hours and for after class consultations.	93%	4%	4%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	93%	4%	4%	0%	0%
The syllabus clearly states course objectives requirements, procedures and grading criteria.	93%	4%	0%	0%	4%
The course integrates theoretical course concepts with real-world applications.	93%	4%	4%	0%	0%
The assignments and exams covered the materials presented in the course.	89%	4%	4%	0%	4%
The course material is modern and updated	96%	0%	4%	0%	0%

Instructor Name: Mr. Faizan ul Mustafa
Course: CS-566 Web Technologies

The majority of student shows the positive response towards instructor which showcase the student's satisfaction towards teacher. However, the 9% and 3% students were uncertain and strongly disagree. The survey results indicate that the instructor communicates the subject matter effectively. The 64% and 24% were strongly agreed and agreed respectively that the assignments and exams covered the materials presented in the course.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	67%	21%	9%	0%	3%
The instructor demonstrates knowledge of the subject.	67%	30%	3%	0%	0%
The instructor has completed the whole course.	70%	12%	6%	12%	0%
The instructor provides additional material apart from the textbook.	67%	9%	9%	9%	6%
The instructor gives citations regarding current situations with reference to Pakistani context.	70%	12%	15%	0%	3%
The instructor communicates the subject matter effectively.	70%	18%	12%	0%	0%
The instructor shows respect towards students and encourages class participation	88%	9%	3%	0%	0%
The instructor maintains an environment that is conducive to learning.	73%	24%	3%	0%	0%
The instructor starts the zoom lecture/class on time.	73%	0%	12%	9%	6%
The instructor ends the zoom lecture/class on time.	73%	6%	9%	6%	6%
The instructor has completed all classes regularly.	70%	9%	6%	9%	6%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	73%	12%	6%	3%	6%
The Subject matter presented in the course has increased your knowledge of the subject.	73%	12%	12%	3%	0%
The Instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	76%	9%	12%	0%	3%
The course integrates theoretical course concepts with real-world applications.	76%	15%	6%	3%	0%
The assignments and exams covered the materials presented in the course.	64%	24%	6%	6%	0%
The course material is modern and updated	76%	15%	3%	3%	3%

Instructor Name: Mr. Shahan Arif
Course: CS-666 Web Engineering

The mixed response has been observed against the statement, the instructor is prepared for each class. The 68% and 14% were strongly agree and agreed respectively to the statement, but on other hand the 7% and 11% were uncertain and disagree. The survey results indicate that the instructor communicates the subject matter effectively. The 79% and 21% were strongly agreed and agreed respectively that the assignments and exams covered the materials presented in the course.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	68%	14%	7%	11%	0%
The instructor demonstrates knowledge of the subject.	61%	14%	18%	7%	0%
The instructor has completed the whole course.	75%	21%	0%	4%	0%
The instructor provides additional material apart from the textbook.	57%	11%	11%	11%	11%
The instructor gives citations regarding current situations with reference to Pakistani context.	61%	14%	4%	11%	11%
The instructor communicates the subject matter effectively.	57%	28%	0%	7%	14%
The instructor shows respect towards students and encourages class participation	57%	14%	7%	7%	14%
The instructor maintains an environment that is conducive to learning.	64%	14%	7%	7%	7%
The instructor starts the zoom lecture/class on time.	79%	11%	4%	7%	0%
The instructor ends the zoom lecture/class on time.	68%	18%	11%	4%	0%
The instructor has completed all classes regularly.	75%	14%	0%	7%	4%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	71%	11%	0%	14%	4%
The subject matter presented in the course has increased your knowledge of the subject.	79%	4%	4%	14%	0%
The instructor was available during the specified hours on for consultation.	71%	18%	7%	4%	0%
The course integrates theoretical course concepts with real-world applications.	68%	18%	4%	7%	4%
The assignments and exams covered the materials presented in the course.	79%	21%	0%	0%	0%
The course material is modern and updated	79%	14%	0%	7%	0%

Instructor Name: Ms. Mehwashma Amir

Course: CS-400 Database System

The student's response has been observed satisfactory towards the statement the instructor is prepared for each class. The 88% and 6% were strongly agree and agreed respectively. The survey results indicate that the instructor communicates the subject matter effectively. The 88% and 12% were strongly agreed and agreed respectively that the assignments and exams covered the materials presented in the course

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	88%	6%	6%	0%	0%
The instructor demonstrates knowledge of the subject.	85%	9%	6%	0%	0%
The instructor has completed the whole course.	88%	12%	0%	0%	0%
The instructor provides additional material apart from the textbook.	76%	12%	9%	3%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	79%	12%	9%	0%	0%
The instructor communicates the subject matter effectively.	82%	18%	0%	0%	0%
The instructor shows respect towards students and encourages class participation	91%	3%	6%	0%	0%
The instructor maintains an environment that is conducive to learning.	85%	12%	3%	0%	0%
The instructor starts the zoom lecture/class on time.	91%	6%	3%	0%	0%
The instructor ends the zoom lecture/class on time.	82%	15%	3%	0%	0%
The instructor has completed all classes regularly.	88%	6%	3%	3%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	88%	6%	6%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	85%	12%	3%	0%	0%
The Instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	85%	6%	9%	0%	0%
The course integrates theoretical course concepts with real-world applications.	85%	12%	3%	0%	0%
The assignments and exams covered the materials presented in the course.	88%	12%	0%	0%	0%
The course material is modern and updated	82%	18%	0%	0%	0%

Instructor Name: Mr. Usman Ahmad

Course: CS-471 Mobile Computing

The student's response has been observed satisfactory towards the statement the instructor is prepared for each class. The 87% and 10% were strongly agree and agreed respectively. The survey results indicate that the instructor has completed the course outline. The 90% and 7% were strongly agreed and agreed respectively that Instructor maintains an environment that is conducive to learning.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	87%	10%	3%	0%	0%
The instructor demonstrates knowledge of the subject.	87%	10%	0%	3%	0%
The instructor has completed the whole course.	93%	3%	0%	0%	3%
The instructor provides additional material apart from the textbook.	93%	3%	0%	0%	3%
The instructor gives citations regarding current situations with reference to Pakistani context.	90%	3%	0%	0%	7%
The instructor communicates the subject matter effectively.	93%	3%	0%	0%	3%
The instructor shows respect towards students and encourages class participation	90%	7%	0%	0%	3%
The instructor maintains an environment that is conducive to learning.	90%	7%	0%	3%	0%
The instructor starts the zoom lecture/class on time.	90%	3%	3%	3%	0%
The instructor ends the zoom lecture/class on time.	90%	3%	7%	0%	0%
The instructor has completed all classes regularly.	90%	7%	0%	0%	3%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	90%	7%	0%	3%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	93%	7%	0%	0%	0%
The Instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	87%	7%	3%	0%	3%
The course integrates theoretical course concepts with real-world applications.	93%	7%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	90%	7%	0%	0%	3%
The course material is modern and updated	93%	3%	3%	0%	0%

Instructor Name: Mr. Nauman Bin Nasir
Course: CS-583 Operating System

The student's response has been observed satisfactory towards the statement the instructor is prepared for each class. The 89% and 11% were strongly agree and agreed respectively. The survey results indicate that the instructor has completed the course outline. The 92% and 8% were strongly agreed and agreed respectively that instructor maintains an environment that is conducive to learning.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	89%	11%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	89%	8%	3%	0%	0%
The instructor has completed the whole course.	86%	11%	3%	0%	0%
The instructor provides additional material apart from the textbook.	84%	16%	0%	0%	0%
The instructor gives citations regarding current situations with inference to Pakistani context.	84%	14%	3%	0%	0%
The instructor communicates the subject matter effectively.	86%	14%	0%	0%	0%
The instructor shows respect towards students and encourages class participation	89%	11%	0%	0%	0%
The instructor maintains an environment that is conducive to learning.	92%	8%	0%	0%	0%
The instructor starts the zoom lecture/class on time.	89%	11%	0%	0%	0%
The instructor ends the zoom lecture/class on time.	86%	14%	0%	0%	0%
The instructor has completed all classes regularly.	92%	8%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	92%	8%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	86%	14%	0%	0%	0%
The instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	86%	14%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	89%	8%	3%	0%	0%
The assignments and exams covered the materials presented in the course.	92%	8%	0%	0%	0%
The course material is modern and updated	86%	14%	0%	0%	0%

Instructor Name: Ms. Zainab Mehmood
Course: CS-552 Software Engineering II

The student's response has been observed satisfactory towards the statement the instructor is prepared for each class and demonstrate the knowledge of the subject effectively. The survey results indicate that the instructor has completed the course outline. Majority of students said that the instructor shows respect towards students and encourages class participation during whole course.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	93%	7%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	97%	3%	0%	0%	0%
The instructor has completed the whole course.	93%	7%	0%	0%	0%
The instructor provides additional material apart from the textbook.	97%	3%	0%	0%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	93%	7%	0%	0%	0%
The instructor communicates the subject matter effectively.	93%	7%	0%	0%	0%
The instructor shows respect towards students and encourages class participation	97%	3%	0%	0%	0%
The instructor maintains an environment that is conducive to learning.	97%	3%	0%	0%	0%
The Instructor starts the zoom lecture/class on time.	93%	7%	0%	0%	0%
The Instructor ends the zoom lecture/class on time.	100%	0%	0%	0%	0%
The instructor has completed all classes regularly.	100%	0%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	97%	0%	3%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	97%	3%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	93%	7%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated.	93%	7%	0%	0%	0%

Instructor Name: Mr. Shahan Arif
Course: CS-432 Modern Programming Languages

The student's response has been observed satisfactory towards the statement the instructor is prepared for each class and demonstrate the knowledge of the subject effectively. The 86% and 14% response were strongly agreed and strongly disagreed respectively. The survey results indicate that the instructor has completed the course outline. 100% students were agreed instructor has communicated the subject matter effectively.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	86%	14%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	86%	0%	14%	0%	0%
The instructor has completed the whole course.	100%	0%	0%	0%	0%
The instructor provides additional material apart from the textbook.	100%	0%	0%	0%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	86%	0%	0%	14%	0%
The instructor communicates the subject matter effectively.	100%	0%	0%	0%	0%
The instructor shows respect towards students and encourages class participation	86%	14%	0%	0%	0%
The instructor maintains an environment that is conducive to learning.	71%	0%	0%	29%	0%
The instructor starts the zoom lecture/class on time.	86%	0%	14%	0%	0%
The instructor ends the zoom lecture/class on time.	86%	0%	14%	0%	0%
The instructor has completed all classes regularly.	100%	0%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	86%	0%	0%	14%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	86%	0%	0%	14%	0%
The instructor was available during the specified hours sfor consultation.	71%	0%	29%	0%	0%
The course integrates theoretical course concepts with real-world applications.	100%	0%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	71%	0%	0%	29%	0%
The course material is modern and updated	86%	0%	14%	0%	0%

Instructor Name: Ms. Rabia Butt
Course: CS-300 Introduction to Information and Communication Technologies

The student's response has been observed satisfactory about the completion of course, demonstration and about the provision of additional course material. The 89% and 11% were strongly agree and agreed respectively. All students were strongly agreed teacher integrates theoretical course concepts with real-world applications and maintains an environment that is conducive to learning.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	100%	0%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The instructor has completed the whole course.	96%	4%	0%	0%	0%
The instructor provides additional material apart from the textbook.	96%	4%	0%	0%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	92%	8%	0%	0%	0%
The instructor communicates the subject matter effectively.	100%	0%	0%	0%	0%
The instructor shows respect towards students and encourages class participation	100%	0%	0%	0%	0%
The instructor maintains an environment that is conducive to learning.	96%	4%	0%	0%	0%
The instructor starts the zoom lecture/class on time.	100%	0%	0%	0%	0%
The instructor ends the zoom lecture/class on time.	86%	0%	0%	0%	0%
The instructor has completed all classes regularly.	100%	0%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	100%	0%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	100%	0%	0%	0%	0%
The instructor was available during the specified hours for consultation.	96%	4%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	100%	0%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated	100%	0%	0%	0%	0%

Instructor Name: Mr. Muhammad Farooq
Course: CS-709 Web Design and Development

The survey results show satisfactory feedback from students. 64% and 29% students agreed that instructor was prepared for each class. Majority of students agreed that course was completed, demonstration was good, and the instructor provide additional course materials. 79% and 18% students were strongly agreed and agreed teacher integrates theoretical course concepts with real-world applications and maintains an environment that is conducive to learning.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	64%	29%	4%	0%	4%
The instructor demonstrates knowledge of the subject.	57%	39%	0%	4%	0%
The instructor has completed the whole course.	68%	29%	0%	0%	4%
The instructor provides additional material apart from the textbook.	57%	29%	11%	0%	4%
The instructor gives citations regarding current situations with reference to Pakistani context.	54%	29%	7%	4%	7%
The instructor communicates the subject matter effectively.	61%	32%	4%	4%	0%
The instructor shows respect towards students and encourages class participation	71%	29%	0%	0%	0%
The instructor maintains an environment that is conducive to learning.	64%	36%	0%	0%	0%
The instructor starts the zoom lecture/class on time.	75%	21%	4%	0%	0%
The instructor ends the zoom lecture/class on time.	75%	21%	0%	0%	4%
The instructor has completed all classes regularly.	64%	29%	7%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	79%	14%	4%	0%	4%
The subject matter presented in the course has increased your knowledge of the subject.	82%	14%	0%	0%	4%
The instructor was available during the specified hours for consultation.	79%	14%	4%	0%	4%
The course integrates theoretical course concepts with real-world applications.	79%	18%	4%	0%	0%
The assignments and exams covered the materials presented in the course.	86%	14%	0%	0%	0%
The course material is modern and updated	75%	21%	4%	0%	0%

Instructor Name: Mr. Gul Sher Ali
Course: CS-782 System Programming

The survey results show satisfactory feedback from students. 86% and 14% students agreed that instructor was prepared for each class. Majority of students agreed that course was completed, demonstration was good, and the instructor provide additional course materials. 100% students were strongly agreed teacher integrates theoretical course concepts with real-world applications and maintains an environment that is conducive to learning.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	86%	14%	0%	0%	0%
The instructor demonstrates knowledge of the subject.	86%	14%	0%	0%	0%
The instructor has completed the whole course.	86%	0%	14%	0%	0%
The instructor provides additional material apart from the textbook.	86%	0%	14%	0%	0%
The instructor gives citations regarding current situations with reference to Pakistani context.	86%	0%	14%	0%	0%
The instructor communicates the subject matter effectively.	86%	14%	0%	0%	0%
The instructor shows respect towards students and encourages class participation	100%	0%	0%	0%	0%
The instructor maintains an environment that is conducive to learning.	100%	0%	0%	0%	0%
The instructor starts the zoom lecture/class on time.	100%	0%	0%	0%	0%
The instructor ends the zoom lecture/class on time.	75%	0%	0%	0%	0%
The instructor has completed all classes regularly.	86%	0%	14%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	86%	0%	14%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	86%	14%	0%	0%	0%
The instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	100%	0%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	100%	0%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated	86%	0%	14%	0%	0%

Instructor Name: Ms. Maria Afzal
Course: CS-582 Operating System Concepts

The overall survey results are satisfactory. Th 60% and 13% students show positive response about provision of additional material. However, 13% students show negative response. 70% and 13% students were strongly agreed and agreed teacher integrates theoretical course concepts with real-world applications and 63% and 13% student said instructor maintains an environment that is conducive to learning.

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The instructor is prepared for each class.	67%	17%	10%	3%	3%
The instructor demonstrates knowledge of the subject.	63%	20%	10%	3%	3%
The instructor has completed the whole course.	70%	17%	7%	3%	3%
The instructor provides additional material apart from the textbook.	60%	13%	17%	7%	3%
The instructor gives citations regarding current situations with reference to Pakistani context.	63%	17%	10%	3%	7%
The instructor communicates the subject matter effectively.	53%	27%	13%	3%	3%
The instructor shows respect towards students and encourages class participation	67%	10%	17%	3%	3%
The instructor maintains an environment that is conducive to learning.	63%	13%	13%	3%	7%
The instructor starts the zoom lecture/class on time.	73%	17%	7%	0%	3%
The instructor ends the zoom lecture/class on time.	77%	7%	13%	0%	3%
The instructor has completed all classes regularly.	80%	10%	7%	0%	3%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	70%	10%	17%	0%	3%
The Subject matter presented in the course has increased your knowledge of the subject.	77%	13%	7%	0%	3%
The instructor was available during the specified hours for consultation.	73%	13%	10%	0%	3%
The course integrates theoretical course concepts with real-world applications.	70%	13%	13%	0%	3%
The assignments and exams covered the materials presented in the course.	70%	13%	10%	3%	3%
The course material is modern and updated	67%	10%	17%	3%	3%

Instructor Name: Ms. Mehvashma Amir
Course: CS-652 Software Project Management

The course evaluation results are satisfactory, and it indicate that the students were clear about the course objectives and outcomes. All students in class were agreed the course was well organized and workload was manageable. Results also indicates the students were motivated to participate in class to achieve the learning outcomes.

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear.	97%	0%	3%	0%	0%
The Course workload was manageable.	97%	0%	3%	0%	0%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	94%	3%	3%	0%	0%
Approximate level of your own attendance during the whole Course	97%	3%	0%	0%	0%
I participated actively in the Course	94%	3%	3%	0%	0%
I think I have made progress in this Course	100%	0%	0%	0%	0%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	94%	3%	3%	0%	0%
The learning and teaching methods encouraged participation.	94%	3%	3%	0%	0%
The overall environment in the class was conducive to learning.	100%	0%	0%	0%	0%
Classrooms were satisfactory	94%	3%	3%	0%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	97%	3%	0%	0%	0%
Recommended reading Books etc. were relevant and appropriate	94%	3%	3%	0%	0%
The provision of learning resources in the library was adequate and appropriate	100%	0%	0%	0%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant)	94%	3%	0%	3%	0%
The Course stimulated my interest and thought on the subject area	97%	0%	3%	0%	0%
The pace of the Course was appropriate	97%	3%	0%	0%	0%
Ideas and concepts were presented clearly	94%	3%	3%	0%	0%

The method of assessment was reasonable	97%	0%	3%	0%	0%
Feedback on assessment was timely	97%	3%	0%	0%	0%
Feedback on assessment was helpful	97%	3%	0%	0%	0%
I understood the lectures	97%	0%	0%	3%	0%
The material was well organized and presented	97%	3%	0%	0%	0%
The instructor was responsive to student needs and problems	91%	3%	6%	0%	0%
Had the instructor been regular throughout the course?	97%	3%	0%	0%	0%
The material in the tutorials was useful	97%	0%	0%	3%	0%
I was happy with the amount of work needed for tutorials	97%	3%	0%	0%	0%

Instructor Name: Mr. Gul Sher Ali
Course: Theory of Automata and Formal Languages

The course evaluation results are satisfactory, and it indicate that the students were clear about the course objectives and outcomes. All students in class were agreed the course was well organized and workload was manageable. Results also indicates the students were motivated to participate in class to achieve the learning outcomes.

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear!	81%	13%	6%	0%	0%
The Course workload was manageable!	81%	19%	0%	0%	0%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	81%	19%	0%	0%	0%
Approximate level of your own attendance during the whole Course	75%	19%	6%	0%	0%
I participated actively in the Course	81%	19%	0%	0%	0%
I think I have made progress in this Course	81%	19%	0%	0%	0%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	88%	13%	0%	0%	0%
The learning and teaching methods encouraged participation.	75%	25%	0%	0%	0%
The overall environment in the class was conducive to learning.	75%	25%	0%	0%	0%
Classrooms were satisfactory	81%	19%	0%	0%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	81%	19%	0%	0%	0%
Recommended reading Books etc. were relevant and appropriate	75%	25%	0%	0%	0%
The provision of learning resources in the library was adequate and appropriate	75%	25%	0%	0%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant)	75%	25%	0%	0%	0%
The Course stimulated my interest and thought on the subject area	75%	25%	0%	0%	0%
The pace of the Course was appropriate	75%	25%	0%	0%	0%

Ideas and concepts were presented clearly	81%	19%	0%	0%	0%
The method of assessment were reasonable	81%	19%	0%	0%	0%
Feedback on assessment was timely	81%	19%	0%	0%	0%
Feedback on assessment was helpful	81%	19%	0%	0%	0%
I understood the lectures	81%	19%	0%	0%	0%
The material was well organized and presented	75%	25%	0%	0%	0%
The instructor was responsive to student needs and problems	75%	25%	0%	0%	0%
Had the instructor been regular throughout the course?	75%	25%	0%	0%	0%
The material in the tutorials was useful	81%	19%	0%	0%	0%
I was happy with the amount of work needed for tutorials	75%	25%	0%	0%	0%

Instructor Name: Mr. Shahzad Ali
Course: CS-430 Digital Logic and Design

The course evaluation results are satisfactory, and it indicate 100% students were clear about the course objectives and outcomes. All students in class were agreed the course was well organized and workload was manageable. Results also indicates the students were satisfied the assessments were reasonable and timely.

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear.	100%	0%	0%	0%	0%
The Course workload was manageable.	81%	0%	0%	0%	0%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	100%	0%	0%	0%	0%
Approximate level of your own attendance during the whole Course	100%	0%	0%	0%	0%
I participated actively in the Course	100%	0%	0%	0%	0%
I think I have made progress in this Course	81%	0%	0%	0%	0%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	100%	0%	0%	0%	0%
The learning and teaching methods encouraged participation.	100%	0%	0%	0%	0%
The overall environment in the class was conducive to learning.	100%	0%	0%	0%	0%
Classrooms were satisfactory.	100%	0%	0%	0%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	100%	0%	0%	0%	0%
Recommended reading Books etc. were relevant and appropriate	100%	0%	0%	0%	0%
The provision of learning resources in the library was adequate and appropriate.	100%	0%	0%	0%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant) .	100%	0%	0%	0%	0%
The Course stimulated my interest and thought on the subject area.	100%	0%	0%	0%	0%
The pace of the Course was appropriate.	100%	0%	0%	0%	0%
Ideas and concepts were presented clearly.	100%	0%	0%	0%	0%

The method of assessment was reasonable.	100%	0%	0%	0%	0%
Feedback on assessment was timely.	100%	0%	0%	0%	0%
Feedback on assessment was helpful	100%	0%	0%	0%	0%
I understood the lectures	100%	0%	0%	0%	0%
The material was well organized and presented	100%	0%	0%	0%	0%
The instructor was responsive to student needs and problems	100%	0%	0%	0%	0%
Had the instructor been regular throughout the course?	100%	0%	0%	0%	0%
The material in the tutorials was useful	100%	0%	0%	0%	0%
I was happy with the amount of work needed for tutorials	100%	0%	0%	0%	0%

Instructor Name: Mr. Bilal Mazhar
Course: CS-692 Visual Programming

The overall course evaluation results are satisfactory, and it indicate 87% and 11% students were clear about the course objectives and outcomes. All students in class were agreed the course was well organized and workload was manageable. Results also indicates the students were satisfied the assessments were reasonable and timely. The majority of students were agreed that classroom was satisfactory and adequate learning resources were available.

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear.	87%	11%	0%	0%	2%
The Course workload was manageable.	87%	11%	0%	0%	2%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	87%	11%	0%	0%	2%
Approximate level of your own attendance during the whole Course	89%	9%	0%	0%	2%
I participated actively in the Course	85%	6%	4%	2%	2%
I think I have made progress in this Course	87%	4%	2%	4%	2%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	87%	9%	2%	0%	2%
The learning and teaching methods encouraged participation.	87%	9%	0%	2%	2%
The overall environment in the class was conducive to learning.	89%	6%	2%	0%	2%
Classrooms were satisfactory.	89%	9%	0%	0%	2%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	91%	4%	2%	0%	2%
Recommended reading Books etc. were relevant and appropriate.	91%	4%	0%	2%	2%
The provision of learning resources in the library was adequate and appropriate	94%	2%	0%	2%	2%
The provision of learning resources on the Web was adequate and appropriate (if relevant)	89%	6%	2%	0%	2%
The Course stimulated my interest and thought on the subject area.	89%	9%	0%	0%	2%
The pace of the course was appropriate.	89%	9%	0%	0%	2%

Ideas and concepts were presented clearly.	85%	11%	2%	0%	2%
The method of assessment were reasonable	91%	6%	0%	0%	2%
Feedback on assessment was timely	91%	4%	2%	0%	2%
Feedback on assessment was helpful	94%	4%	0%	0%	2%
I understood the lectures	94%	2%	2%	0%	2%
The material was well organized and presented	91%	6%	0%	0%	2%
The instructor was responsive to student needs and problems	94%	4%	0%	0%	2%
Had the instructor been regular throughout the course?	94%	2%	2%	0%	2%
The material in the tutorials was useful	94%	4%	0%	0%	2%
I was happy with the amount of work needed for tutorials	94%	2%	2%	0%	2%

Instructor Name: Mr. Bilal Tariq Butt
Course: CS-584 System and Network Administration

The overall course evaluation results are satisfactory, and it indicate 91% and 3% students were agreed course workload was manageable. All students in class were agreed they have participated actively in classroom. Results also indicates the students were satisfied the assessments were reasonable and timely. Most students were agreed that classroom was satisfactory and adequate learning resources were available.

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear.	91%	3%	6%	0%	0%
The course workload was manageable.	91%	3%	6%	0%	0%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	88%	3%	9%	0%	0%
Approximate level of your own attendance during the whole course.	88%	6%	6%	0%	0%
I participated actively in the course	94%	3%	3%	0%	0%
I think I have made progress in this course.	94%	3%	3%	0%	0%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	91%	3%	6%	0%	0%
The learning and teaching methods encouraged participation.	94%	3%	0%	3%	0%
The overall environment in the class was conducive to learning.	94%	3%	0%	3%	0%
Classrooms were satisfactory	94%	3%	0%	3%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	94%	3%	0%	3%	0%
Recommended reading Books etc. were relevant and appropriate	94%	3%	3%	0%	0%
The provision of learning resources in the library was adequate and appropriate	91%	6%	3%	0%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant)	94%	3%	3%	0%	0%
The Course stimulated my interest and thought on the subject area	94%	3%	3%	0%	0%
The pace of the Course was appropriate	94%	3%	3%	0%	0%

Ideas and concepts were presented clearly.	97%	0%	3%	0%	0%
The method of assessment was reasonable.	97%	0%	3%	0%	0%
Feedback on assessment was timely.	94%	0%	3%	3%	0%
Feedback on assessment was helpful.	97%	0%	0%	3%	0%
I understood the lectures.	100%	0%	0%	0%	0%
The material was well organized and presented.	100%	0%	0%	0%	0%
The instructor was responsive to student needs and problems	94%	3%	3%	0%	0%
Had the instructor been regular throughout the course?	97%	0%	0%	0%	3%
The material in the tutorials was useful	94%	3%	3%	0%	0%
I was happy with the amount of work needed for tutorials	97%	3%	0%	0%	0%

Instructor Name: Mr. Usman Ahmad
Course: CS-443 Data Structures and Algorithms

The course evaluation results are satisfactory, and it indicate that the most of students were clear about the course objectives and outcomes. All students in class were agreed the course was well organized and workload was manageable. Results also indicates the students were motivated to participate in class to achieve the learning outcomes.

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear.	78%	14%	5%	3%	0%
The Course workload was manageable.	84%	8%	8%	0%	0%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	92%	8%	0%	0%	0%
Approximate level of your own attendance during the whole Course	84%	11%	3%	0%	3%
I participated actively in the Course	81%	11%	3%	3%	3%
I think I have made progress in this Course	86%	8%	3%	0%	3%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	81%	14%	3%	0%	3%
The learning and teaching methods encouraged participation.	86%	11%	0%	3%	0%
The overall environment in the class was conducive to learning.	81%	14%	5%	0%	0%
Classrooms were satisfactory.	81%	11%	8%	0%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	86%	11%	3%	0%	0%
Recommended reading Books etc. were relevant and appropriate.	86%	11%	3%	0%	0%
The provision of learning resources in the library was adequate and appropriate	89%	5%	5%	0%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant).	92%	5%	3%	0%	0%
The Course stimulated my interest and thought on the subject area.	86%	8%	3%	3%	0%
The pace of the Course was appropriate.	89%	8%	0%	3%	0%
Ideas and concepts were presented clearly.	84%	11%	3%	3%	0%

The method of assessment was reasonable.	86%	11%	0%	3%	0%
Feedback on assessment was timely.	84%	8%	8%	0%	0%
Feedback on assessment was helpful.	86%	8%	3%	0%	3%
I understood the lectures.	92%	8%	0%	0%	0%
The material was well organized and presented.	89%	8%	3%	0%	0%
The instructor was responsive to student needs and problems.	86%	8%	5%	0%	0%
Had the instructor been regular throughout the course?	89%	8%	3%	0%	0%
The material in the tutorials was useful.	92%	5%	3%	0%	0%
I was happy with the amount of work needed for tutorials.	86%	11%	3%	0%	0%

Instructor Name: Ms. Zainab Mehmood
Course: CS-552 Software Engineering-II

The course evaluation results are satisfactory, and it indicate that 91% and 8% students were clear about the course objectives and outcomes. The 94% said the course was well organized and planned. All students in class were agreed the course was well organized and workload was manageable. Results also indicates the students were motivated to participate in class to achieve the learning outcomes. The 91% students agreed that I have made the progress in this course.

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear!	91%	8%	0%	2%	0%
The Course workload was manageable!	91%	8%	0%	2%	0%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	94%	5%	0%	2%	0%
Approximate level of your own attendance during the whole Course	91%	8%	0%	2%	0%
I participated actively in the Course	92%	6%	0%	2%	0%
I think I have made progress in this Course	91%	8%	0%	2%	0%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	92%	6%	0%	2%	0%
The learning and teaching methods encouraged participation.	92%	6%	0%	2%	0%
The overall environment in the class was conducive to learning.	92%	6%	0%	2%	0%
Classrooms were satisfactory	92%	5%	2%	2%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	91%	8%	0%	2%	0%
Recommended reading Books etc. were relevant and appropriate.	91%	8%	0%	2%	0%
The provision of learning resources in the library was adequate and appropriate.	92%	6%	0%	2%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant).	92%	6%	0%	2%	0%
The Course stimulated my interest and thought on the subject area.	92%	6%	0%	2%	0%

The pace of the Course was appropriate.	91%	8%	0%	2%	0%
Ideas and concepts were presented clearly.	91%	8%	0%	2%	0%
The method of assessment was reasonable.	92%	6%	0%	2%	0%
Feedback on assessment was timely.	92%	6%	0%	2%	0%
Feedback on assessment was helpful.	92%	6%	0%	2%	0%
I understood the lectures.	92%	6%	0%	2%	0%
The material was well organized and presented.	92%	6%	0%	2%	0%
The instructor was responsive to student needs and problems.	91%	8%	0%	2%	0%
Had the instructor been regular throughout the course?	91%	8%	0%	2%	0%
The material in the tutorials was useful.	92%	6%	0%	2%	0%
I was happy with the amount of work needed for tutorials.	91%	8%	0%	2%	0%

Instructor Name: Ch. Nauman Bin Nasir
Course: CS-583 Operating System

The course evaluation results are satisfactory, and it indicate that the students were clear about the course objectives and outcomes. All students in class were agreed the course was well organized and workload was manageable. Results also indicates the students were motivated to participate in class to achieve the learning outcomes. The most of students think provision of learning resources in the library was adequate and appropriate

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear.	97%	3%	0%	0%	0%
The course workload was manageable.	95%	5%	0%	0%	0%
The course was well organized (e.g. timely access to materials, notification of changes, etc.).	97%	3%	0%	0%	0%
Approximate level of your own attendance during the whole course.	95%	5%	0%	0%	0%
I participated actively in the course.	95%	5%	0%	0%	0%
I think I have made progress in this course	95%	5%	0%	0%	0%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.).	95%	5%	0%	0%	0%
The learning and teaching methods encouraged participation.	95%	3%	3%	0%	0%
The overall environment in the class was conducive to learning.	95%	3%	3%	0%	0%
Classrooms were satisfactory.	92%	3%	5%	0%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	95%	3%	3%	0%	0%
Recommended reading Books etc. were relevant and appropriate.	97%	3%	0%	0%	0%
The provision of learning resources in the library was adequate and appropriate	97%	3%	0%	0%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant).	97%	3%	0%	0%	0%
The Course stimulated my interest and thought on the subject area.	97%	3%	0%	0%	0%
The pace of the Course was appropriate.	95%	5%	0%	0%	0%

Ideas and concepts were presented clearly.	97%	3%	0%	0%	0%
The method of assessment was reasonable.	95%	3%	3%	0%	0%
Feedback on assessment was timely.	95%	5%	0%	0%	0%
Feedback on assessment was helpful.	95%	5%	0%	0%	0%
I understood the lectures.	97%	3%	0%	0%	0%
The material was well organized and presented.	97%	3%	0%	0%	0%
The instructor was responsive to student needs and problems.	92%	8%	0%	0%	0%
Had the instructor been regular throughout the course/	92%	8%	0%	0%	0%
The material in the tutorials was useful.	97%	3%	0%	0%	0%
I was happy with the amount of work needed for tutorials.	92%	5%	3%	0%	0%

1.14 Using Obtained Results to Improve Programme Effectiveness

1.14.1 Performance Indicators for PEOs

A minimum attainment level for each PEO has been defined along with its method of measurement. The measurement of PEO is carried out using indirect assessment tools. A single PEO has multiple performance indicators. The details of performance indicators and their measurement methods are listed in Annexure A and B. In case, multiple survey questions are attributed to the calculation of a single KPI, equal weightage is given to each question. All KPIs related to a PEO must be attained to achieve the relevant PEO.

CRITERION 2 CARRICULUM DESIGN AND ORGANIZATION

Criterion 2 Curriculum Design and Organization

2.1 Curriculum and Learning Process

The curricula of the Information Technology program developed keeping in view the guidelines provided by HEC.

2.1.1 Consistency of Programme Structure and Course Contents in Development of Intellectual and Practical Skills and Attainment of PLOs

The Information Technology programme curriculum is designed to fulfill the programme learning outcomes and course learning outcomes. Each semester is of approximately 18 weeks duration. The Bachelor of Information Technology programme's minimum duration is four years and maximum 12 semesters (7 years). The course requirements for BS Information Technology are 134 credit hours. A fulltime student is required to take courses not less than 13 credit hours if he/she qualifies the prerequisite of offered course

2.2 Curriculum Design

The curriculum of the BS Information Technology programme was devised based on the needs of all stakeholders. The curriculum is broadly divided in Computing and non-computing courses. The computing domain includes computing fundamentals, breadth and depth, and elective courses. A comprehensive final year project is also part of the curriculum. The contents of breadth and depth courses are selected to provide students with knowledge of overall as well as specialized areas of computing. A number of courses include complex computing and open ended problems that allow the students to apply their knowledge and critical thinking and gain an in depth understanding of theory. The non-computing domain contains courses are related to humanities, natural sciences, and management sciences. These courses develop skills of project management, team work, communication, entrepreneurship, ethical and moral responsibilities and sustainable development. The mix of computing and non-computing courses is in accordance with the national guidelines provided by the HEC.

Summary of the curriculum of BS Information Technology programme is given in Table 18.

The comparison shows that the engineering fundamentals and computing credit hours are in-line with the benchmarked universities, whereas the credit hours of breadth and depth engineering courses are on higher side.

Table 18: Curriculum Course Requirements

Semester	Course Number	Math and Basic Science		Core Courses	Humanities and Social Science	Technical Electives
		Math	Basic Science			
1st	6	01	01	01	03	
2nd	6	01		01	04	
3rd	6	02		02	01	01
4th	6			04		02
5th	6			03	01	02
6th	6			01	02	03
7th	5			03		02
8th	2			02		

Standard 2-1: The curriculum must be consistent and support the program's documented objectives.

2.3 Mapping of Courses to PLOs

Programme Semester-wise mapping of courses to PLOs is given in Table 20. The course to PLO mapping is only shown for the courses that are used for assessing a particular PLO.

Table 19: Mapping of Semester-wise Courses to PLOs

Semester No	Course Code	Course Title	Theoretical and mathematical foundations	Be proficient in programming language	The hardware and software architecture	Professional practices of software engineering	Communicate effectively Computing Subject ,matter
			1	2	3	4	5
1	CS-300	Introduction to Information & Communication Technologies					✓
	CS-323	Programming Fundamentals		✓			
	ENG-305	English Comprehension					✓
	MTH-310	Calculus & Analytical Geometry	✓				
	ELE-401	Basic Electronics	✓				
	IS-302	Islamic Studies/ Ethics					
2	CS-423	Object Oreinted Programming		✓			
	ENG-325	Communication & Presentation Skills					✓
	SSH-302	Pakistan Studies					
	STT-500	Statistics & Probability	✓				
		University Elective-1					
		University Elective-2					
3	CS-443	Data Structures & Algorithms		✓			
	CS-335	Discrete Structures	✓				
	SSH-307	Professional Practices					
	MTH-435	Linear Algebra	✓				
	CS-583	Operating System			✓		
		IT Supporting 1					✓
4	CS-400	Database Systems			✓		
	CS-577	Computer Networks			✓		
	CS-453	Software Engineering				✓	

	CS-566	Web Technologies		✓			
		IT Supporting 2			✓		
		IT-Elective -1					✓
5	CS-497	Information Securities			✓		
	CS-556	Information Technology Project Management				✓	
	CS-584	System & Network Administration			✓		
		IT-Elective -2			✓		
		University Elective -3					✓
		IT` Supporting 3			✓		
6	ENG-315	Technical & Business Writing					✓
	CS-555	Information Technology Infrastructure				✓	
		IT-Elective 3					✓
		IT-Elective 4		✓			
		IT-Elective 5		✓			
		University Elective -4					
7	CS-698	Final Year Project I		✓			
	CS-601	Database Administration & Management			✓		
	CS-655	Virtual Systems & Services			✓		
		IT-Elective 6			✓		
8	CS-597	Cyber Security					✓
	CS-699	Final Year Project II		✓			

Standard 2-2: Theoretical backgrounds, problem analysis and solution design must be stressed within the program's core material.

The table below shows the categorization of courses which play vital role in building theoretical background, problem analysis and designing a solution.

Table 20: Detail of Courses Representing the Theoretical Background, Problem Analysis and Solution Design.

Element	Course Code	Course Title
Theoretical Background	ENG-305	English Comprehension
	IS-302	Islamic Studies
	SSH-302	Pakistan Studies
	PHY-401	Physics I
	PHY-416	Physics II
	MGT-421	Fundamentals of Management
	CS-452	Software Engineering-I
	ENG-325	Communication Skills
	CS-301	Introduction to computing
	CS-577	Computer Communication & Networks
	CS-465	Web Engineering
	MGT-316	Introduction to Marketing
	ENG-315	Technical & Business Writing
	SSH-303	Professional Practices
	PSY-600	Psychology
	CS-582	Operating System Concepts
Problem Analytics	CS-335	Discrete Structures
	MTH-310	Calculus & Analytical Geometry
	MTH-315	Multivariable Calculus
	MGT-421	Fundamentals of Management
	CS-430	Digital Logic Design
	MTH-415	Differential Equation
	STT-500	Statistics & Probability
	MTH-435	Linear Algebra
	CS-542	Analysis of Algorithms
	CS-552	Software Engineering II

	CS-572	Numerical Analysis
	STT-510	Statistical Analysis
	CS-692	Visual Programming
	MGT-520	Human Resource Management
Solution Design	CS-323	Programming Fundamentals
	CS-423	Object Oriented Programming
	CS-400	Database Systems
	CS-443	Data Structures and Algorithms
	CS-565	Web Design & Development
	CS-432	Modern Programming Languages
	CS-665	Ecommerce
	CS-692	Visual Programming
	MGT-310	Financial Accounting
	CS-600	Distributed Database Systems
	CS-525	Multimedia Technologies
	CS-609	Software Project

Standard 2-3: The curriculum must satisfy the core requirements for the program as specified by the accreditation body.

The degree of BS (IT) comprises of sufficient courses that covers Information Technology needs. Graduates of BS (IT) go through information technology components in addition to computer science. Courses such as Web Design and Development, Software Engineering, Human Resource Management, Introduction to Marketing etc. provides information technology knowledge to the graduates. Courses division is well formulated, so that IT component follows throughout the program.

Standard 2-4: The curriculum must satisfy the major requirements for the program as specified by the accreditation body

The curriculum has number of courses to fulfill a minimum number of credit hours requirements (19 credit hours) under the category of major courses.

Standard 2-5: The curriculum must satisfy general education, arts, professional and other discipline requirements of program.

In general education category the designed curriculum offers number of courses to meet the requirement of 16 credit hours under sated category.

Table 21: Courses Categories (Core, General, Major, Supporting) and their Accumulated Credit Hours

Category	Credit Hours	Accumulated Credit Hours
Computing-Core Courses	**39**	**76**
Major (Computer Science/Software Engineering/Information Technology)-Core Courses	**19**	
Major (Computer Science/Software Engineering/Information Technology) Based Electives	**18**	
Supporting Sciences	**24**	**58**
General Electives	**16**	
University Electives	**18**	
Total Credit Hours		**134**

Standard 2-6: The information technology component of the curriculum must be integrated throughout the degree program.

To enhance the general information technology knowledge and basic skills the curriculum included three courses of 9 credit hours,

Standard 2-7: Oral and written communication skills of the student must be developed and applied in a program.

To enhance the communication skills of students, GIMS has included several general education courses as per HEC criterion.

Table 22: General Education Course

Course Code	Course Title	Credit Hours
ENG-305	English Comprehension	3(3-0)
ENG-315	Technical and business writing	3(3-0)
SSH-303	Professional ethics	3(3-0)

EMG-325	Communication skills	3(3-0)

2.4 Course Offerings

The offered courses belong to various domains of knowledge. The details of offered courses are provided in Table 23.

Table 23: Course Offering

Sem No.	Sr. No.	Course Code	Course Title	Credit Hours	Knowledge Area	Pre-requisite Courses
1	1	CS-323	Programming Fundamentals	4(3-2)	Computing Core	Nil **(if any)**
	2	CS-300	Intro to Information & Com. Tech.	3(2-2)	General Education	Nil
	3	IS-302	Islamic Studies	2(2-0)	General Education	Nil
	4	MTH-310	Calculus and Analytical Geometry	3(3-0)	Mathematics and Science Foundation	Nil
	5	ELE-401	Basic Electronics	3(2-2)	Mathematics and Science Foundation	Nil
	6	ENG-305	English Comprehension	3(3-0)	General Education	Nil
			Total Credit Hours	**18(15-6)**		

Sem No.	Sr. No.	Course Code	Course Title	Credit Hours	Knowledge Area	Pre-requisite Courses
2	1	CS-423	Object Oriented Programming	4(3-2)	Computing Core	CS-323
	2	ENG-325	Communication & Presentation Skills	3(3-0)	General Education	Nil
	3	SSH-302	Pakistan Studies	2(2-0)	General Education	Nil
	4	STT-500	Statistics & Probability	3(3-0)	Mathematics and Science Foundation	Nil

	5		University Elective-1			Nil
	6		University Elective-2			Nil
			Total Credit Hours	**18(15-6)**		
3	1	CS-443	Data Structures & Algorithms	4(3-2)	Computing Core	
	2	CS-335	Discrete Structures	3(3-0)	Computing Core	Nil
	3	SSH-307	Professional Practices	3(3-0)	Computing Core	Nil
	4	MTH-435	Linear Algebra	3(3-0)	Mathematics and Science Foundation	Nil
	5	CS-583	Operating System	4(3-2)	Computing Core	Nil
	6		IT Supporting 1			Nil
			Total Credit Hours	**18(15-6)**		
4	1	CS-400	Database Systems	4(3-2)	Computing Core	Nil
	2	CS-577	Computer Networks	4(3-2)	Computing Core	Nil
	3	CS-453	Software Engineering	3(3-0)	Computing Core	Nil
	4	CS-566	Web Technologies	3(2-2)	BSIT Core	Nil
	5		IT Supporting 2			Nil
	6		IT-Elective -1			Nil
			Total Credit Hours	**18(15-6)**		
	1	CS-497	Information Securities	3(3-0)	Computing Core	Nil

5	2	CS-556	Information Technology Project Management	3(3-0)	BSIT Core	CS-453
	3	CS-684	System & Network Administration	4(3-2)	BSIT core	CS-300
	4		IT-Elective -2			Nil
	5		University Elective -3			Nil
	6		IT` Supporting 3			Nil
			Total Credit Hours	**18(15-6)**		
6	1	ENG-315	Technical & Business Writing	3(3-0)	General Education	Nil
	2	CS-555	Information Technology Infrastructure	3(3-0)	BSIT Core	Nil
	3		IT-Elective 3			Nil
	4		IT-Elective 4			Nil
	5		IT-Elective 5			Nil
	6		University Elective -4			Nil
			Total Credit Hours	**18(15-6)**		
7	1	CS-698	Final Year Project I	2(0-4)	Computing Core	Nil
	2	CS-601	Database Administration & Management	4(3-2)	BSIT Core	Nil
	3	CS-655	Virtual Systems & Services	4(3-2)	BSIT Core	Nil
	4		IT-Elective 6			Nil
			Total Credit Hours	**18(15-6)**		

8	1	CS-597	Cyber Security	3(3-0)	Computing Core	Nil
	2	CS-699	Final Year Project II	4(0-8)	General Education	Nil
			Total Credit Hours	**18(15-6)**		Nil

2.5 Course Contents

Course contents are defined in teaching / lesson plans. Lesson plans contain detailed course contents, CLOs, teaching and assessment methods and other necessary details. Lesson plans of CS-453 Software Engineering, CS-Object Oriented Programing are provided as samples in Annexure D.

2.6 Consistency of Program Delivery and Assessment Methods and their Support in PLO Attainment

The academic calendar is prepared by the Academics Branch AAUR at the start of the semester and is forwarded to all concerned. Concerned faculty prepares the teaching/lesson plans, which are forwarded to the Academics Branch and are uploaded on the Learning Management System (LMS) before the start of the semester. A course folder is maintained during the semester for each course. Updating the course folder is the responsibility of the concerned faculty member.

2.6.1 Teaching Methods

Teaching methods are made an integral part of the teaching/lesson plan. Faculty members select an appropriate teaching method according to the learning level and desired outcomes. The teaching methods include presentations, lectures, videos, assignments, term projects. Sample lesson plans are attached as Annexure 'D'. To access the effectiveness of the teaching method, QED conduct the number of surveys to access the quality of education. The sample survey is attached in Annexure E.

2.6.2 Assessment Methods

In theory paper, students' evaluation is done by mid-term examination, assignments/ quizzes and final examination. Both the mid-term and final examinations are compulsory. A student who misses the mid-term examination is not allowed a make-up examination and is awarded zero marks in that examination.

In case a student does not appear in the final examination of a course, he/she will be deemed to have failed in that course. In theory, weightage to each component of the examination is as prescribed hereunder: The faculty course review is available in annexure J.

Table 24: Examination Weight

Credit Hours	Quiz-Assignment	Mid-Examination	Final Examination	Practical
3(3-0)	20%	30%	50%	N/A
3(2-2)	13.33%	20%	33.33%	33.33%
4(3-2)	15%	22.5%	37.50%	25.0%

The student must pass the practical final examination separately. A student is eligible to sit for the examination provided that he/she has attended not less than 75% of the classes in theory and practical, separately. The minimum pass marks for each course are 40% for undergraduates.

2.6.3 Final Year Project

The final year project is assigned to provide computing solutions for social issues/ business issues based on the knowledge and skills achieved while studying the computer science program. A comprehensive policy has been prepared to assign, track, evaluate and assess the final. The purpose of the policy is to provide a uniform system of guidelines to students and supervising faculty to realize their Bachelor of Science (BS) Final Year Projects (FYP). The FYP aims to allow each student to experience the software engineering design process in the context of a topic related to any social issue and independently experience engineering software from initial idea to requirement process and software development to software testing. The projects can be undertaken individually or in small teams of three members. In the latter case, the student must still fulfill the requirements laid out by the departmental policy. The Academic Supervisor is a faculty member of the Department of Computer Science and Information Technology.

CLOs for the final year project are defined as part of the FYP policy. The progress of FYP is monitored in various steps throughout the project duration by Project Management Office (PMO). The FYP is offered in the seventh semester and continues in the eighth semesters. PMO is responsible for schedule and monitors all FYP activities. Each group is required to prepare a project proposal report and deliver a presentation to the department evaluation team for approval towards the mid/end of the seventh

semester. In the eight-semester department conduct the midterm evaluation, each group is also required to make a presentation of their project and submit it to the project management office for evaluation. At the end of the eight-semester the final project evaluation is conducted and the evaluation committee accepts either the project or rejects it. The students are required to submit four hardbound copies of the FYP report. A standardised template has been prepared for the FYP report and shared with respective students and supervisors. A project CD is also required which must contain the following items:

- FYP report
- Software developed (if any, along with the code)
- Final defense Presentation
- All other material consulted/utilized
- Project submission certification (Annex F)

The assessment criteria is given in Table 25.

Table 25: Assessment Criteria for Final Year Project

Criteria	Weightage	Assessment Method
Project proposal		Rubric
Semester – VII Presentation	20%	
Semester – VIII Mid Evaluation Report		Rubric
Semester – II Final Presentation/Defense	80%	
Semester – II Final Report		Rubric
Semester – II Outcome Evaluation		Rubric

Rubrics required for FYP assessment were developed and are included in the FYP policy are given in Annexure F.

CRITERION 3 LABORATORIES AND COMPUTING FACILITIES

Criterion 3 Laboratories and Facilities

Standard 3-1: Laboratory manuals/documentation/instructions for experiments must be available and daily accessible to faculty and students.

3.1 Computing Lab

The details of the computing lab including staff, related course work, type of workstations, are provided in Table 27.

- Number of total core/elective/Supporting computing Courses= 32
- Number of Lab courses = 23
- Number of laboratories = 2

Standard 3-2: There must be support personal for instruction and marinating the laboratories.

Standard 3-3: The university computing infrastructure and facilities must be adequate to support the program's objectives.

Table 26: Computing Labs Details

Sr. No.	Name of Laboratory (Staff Names--Qualifications)	Lab(s) of Course(s) Conducted in the Lab.	Type(s) of Workstations (No. of each type)	Nature of Experiments	No. of Students per Workstation
1	Lab A (Muhamad Waqas BSCS, Lab Admin)	Programming Fundamentals(CS-323), Object Oriented Programming(CS-432), Data Structures & Algorithms(CS-443), Operating System(CS-583), Computer Networks(CS-577), Web Technologies(CS-566), System and Network Administration(CS-584), Virtual System and Services (CS-655)	Number of PCs-50 Multimedia-1 White Board-1 Internet Access	Hands on / Demonstrat ion	1:1

1	Lab B (Muhamad Farooq, MCS, Lab Tech	Modern Programming Languages (CS-432), Multimedia Technologies(CS-525), Computer Architecture(CS-532), Object Oriented Analysis & Design (CS-553), Computer Graphics(CS-575), E-Commerce(CS-665), Web Engineering(CS-666), System Programming(CS-682), Human Computer Interaction(CS-685), Parallel & Distributed Computing(CS-687), Visual Programming(CS-692), Mobile Application Development(CS-693), Theory of Programming Language (CS-695)	Number of PCs-50 Multimedia-1 White Board-1 Internet Access	Hands on / Demonstration	1:1

CRITERION 4 STUDENTS SUPPORT AND ADVISING

Criterion 4 Students Support and Advising

University administration has formulated centralized support and advising statues. These statues provide information regarding admission, scholarships, financial matters etc. GIMS arranges orientation to the newly admitted student in its capacity that is in addition to the central orientation session held for all students of the university. GIMS arranges curricular and extracurricular activities/events such as sports week, technical workshops and annual dinner.

Standard 4-1: Courses must be offered with sufficient frequency and number for students to complete the program in a timely manner.

Courses are taught as per HEC criteria.

- At the undergraduate level subjects/courses are offered as per the scheme of study provided by the HEC and approved by the Academic Council.
- Elective courses are offered as per the policy of HEC and the University.
- No course is offered consecutively in any two semesters.

Standard 4-2: Courses in the major area of study must be structured to ensure effective interaction between students, faculty teaching assistants.

Contents of all major courses at BS (IT) contain an application development part. This part is assigned in the early weeks of the course. Students keep close interaction throughout the course with course instructor to accomplish the development of the said application. Assignments also increase interaction between student and teacher. The teaching methodology followed for BSIT is both instructional and constructive, where students are taught and concepts and also guided to explore additional concepts of the course domain. This exploration binds students with the teacher for assistance and progression. Meetings of the Institutional Board of Studies design and improves the BSIT courses. Course instructors of any major course normally invites other sibling faculty members for evaluation of student's presentation or software applications at the end of the course. This provides interaction of students to other faculty members as well. Institute always encourages the interaction between each section of BSIT classes through software competitions held during student’s week

Standard 4-3: Guidance on how to complete the program must be available to all students and access to qualified advising must be available to make course decisions and career choices.

Several steps have been taken to guide students by different ways such as:

- Students are informed about the program requirement through the director's office.

- Through the personal communication of the teachers with the students.
- Meetings are organized by the director of the Institute for counseling of the students. Besides, students can also contact with the relevant teachers whenever they face any problem.
- Students can meet the director of the institute whenever they feel the need to meet on any serious issue.
- Realizing the need for exploring job opportunities for university graduates, the Directorate of Placement Bureau has been established.

4.1 Mechanism for Providing Guidance to Students on Academic, Career and Aspects Pertaining to Wellness

4.1.1 Academic Counselling

Several steps have been taken to provide guidance to students by different ways such as:

- Students are informed about the program requirement through the director office.
- Through the personal communication of the teachers with the students.
- Meetings are organized by the director of the institute for counseling of the students. In addition, students can also contact with the relevant teachers whenever they face any problem.
- Students can meet director of institute whenever they feel need to meet on any serious issue.
- Realizing the need for exploring job opportunities for the university graduates, Directorate of Placement Bureau has been established.

Table 27: Student Teacher Ratio

2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2020
1:11-1:14	1:16-1:17	1:32-1:34	1:28	**1:26-1:10**	**1:17**

4.2 Students Workload, Class Sizes for Theory as well as Laboratory Sessions and Completion of Courses

4.2.1 Class Size

There are 25-30 students on average per section in each batch. During lab work each, students have a separate system to perform tasks effectively.

4.2.2 Semester Academic Load

Academic load in a semester is in the range of 17-19 credit hours except final semester where 12 credit hours are taught. This has been done intentionally to provide students with maximum free time, as they have to move in the market for completion of their final year projects. Students also have to appear for the interviews conducted by the employers.

4.2.3 Completion of Course and Student Feedback

Course files are prepared for each course and are available with the academic department. Instructors are required to submit a course teaching / lesson plan. HoD ensures completion and conduct of the course as per schedule. Student feedback is taken twice every semester on learning management system (LMS). Sample teacher and Course evaluation is provided in Annexture G Faculty is counselled and corrective actions are taken where required see Annexure H.

4.3 Student Activities and Involvement in Activities Providing Experience in Management and Governance, Representation in Education and Social Activities

4.3.1 Participation in Competitions

Students are encouraged to participate in extracurricular activities. Such activities are held within GIMS as well as outside GIMS. Students are facilitated by providing them transportation. Competitions held / participated in recent past are given in following sections.

4.3.2 Competitions / Events Held

Details of recent completions held in SMME are given in Table 28.

Table 28: Recent Events Held in GIMS

List of Events- Spring 2019		
Sr. No	**Event**	**Date**
1	Pakistan Day Celebration	March 22, 2019
2	Sports Gala	March 28-30, 2019
3	GFAST (Speed Programming and E-Gaming Competition)	April 19, 2018

4	Air Nexus	May 3-7, 2019
5	E-Rozgaar	May 03, 2019
6	Islamic Lectures	May 17, 2019 and May 23, 2019
7	Luddo Competition	May 31, 2019
8	Quiz Competition	11-13 June, 2019
9	Seminar Facebook Developer Circles	June 13, 2019
10	Emotional Intelligence	June 14, 2019

4.3.3 Competitions / Events Participated

Students from SMME participated in a number of competitions as listed in Table 36.

Table 29: Competitions Participated by GIMS Students

Title	College/School	Date	Award Won
Daira'19 Olympaid	FAST Faislabad	January 3-7 2019	2nd
Air Nexus	Air University Islamabad	April 7-9, 2019	-

CRITERION 5 PROCESS CONTROL

Criterion 5 Process Control

Standard 5-1: The process by which students are admitted to the program must be based on quantitative and qualitative criteria and clearly documented. This process must be periodically evaluated to ensure that it is meeting its objectives.

5.1 Requirements and Processes for Admission of Students to the Program, Response and Annual Intake

5.1.1 Admission Criteria

i A person holding Higher Secondary Certificate, A-level, or an equivalent certificate from any recognized institute with at least second division or overall 45% marks, or any other marks specified shall be eligible to apply for admission.

ii Admission will be on open merit basis, with the following weightage for merit (Entrance test 40%, Intermediate 50%, Matric 10%).

iii Students with F.Sc. Pre-Engineering will be eligible to transfer to the BCE degree program from the BS (IT) degree program.

The admission criteria are laid out by the Arid Agriculture University and are part of GIMS statues. Admissions are handled by the Admission Office of GIMS for all programs of the GIMS.

5.1.2 Academic Standing

i Grade Point average

a) Maximum grade point average 4.00

b) Minimum grade point average for obtaining the Degree 2.50

ii To remain on the roll of the university, a student shall be required to maintain the following minimum CGPA in each semester:

Semester	CGPA
1st Semester	0.75
2nd Semester	1.00
3rd Semester	1.25
4th Semester	1.50

5th Semester	1.75
6th Semester	2.00
7th Semester	2.25
8th Semester	2.50

- A student who does not meet the above requirement for promotion shall cease to be on the university roll. However, he/she may repeat the whole semester only once.
- 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 the lowest grades, to make CGPA of 2.5 within the maximum time period allowed for the degree.
- Migration from other universities and institutes to universities will be entertained as per University migration rules.

Standard 5-2: The process by which students are registered in the program and monitoring of students' progress to ensure timely completion of the program must be documented. This process must be periodically evaluated to ensure that it is meeting its objectives.

5.2 Examination and Weightage

Theory

In theory paper, students' evaluation is done by mid-term examination, assignments/ quizzes and final examination. Both the mid-term and final examinations are compulsory. A student who misses the mid-term examination is not allowed a make-up examination and is awarded zero marks in that examination. In case a student does not appear in the final examination of a course, he/she will be deemed to have failed in that course. In theory, weightage to each component of the examination is as prescribed hereunder:

Table 30: Examination Weights

Credit Hours	Quiz-Assignment	Mid-Examination	Final Examination	Practical
3(3-0)	20%	30%	50%	N/A
3(2-2)	13.33%	20%	33.33%	33.33%

4(3-2)	15%	22.5%	37.50%	25.0%

Practical

The student must pass the practical final examination separately.

5.2.1 Eligibility for Examination

A student is eligible to sit for the examination provided that he/she has attended not less than 75% of the classes in theory and practical, separately. The minimum pass marks for each course are 40% for undergraduates.

Standard 5-3: The process of recruiting and retaining highly qualified faculty must be in place and clearly documented. Also processes and procedure for faculty evaluation, promotion must be consistent with institution mission statement.

5.3 Faculty Development, Training and Retention

5.3.1 Faculty Training and Mentoring

Following opportunities and facilities are available for faculty training and mentoring.

- The new faculty attends orientation training and methods of instruction workshop.
- GIMS sometimes conducts faculty training to enhance the educational experience.

5.3.2 Faculty Retention and Career Planning

Faculty is one of the most important parts of the SMME and hiring and retention of best-in-class faculty is the topmost priority of the school. For this purpose, the following are being offered.

- GIMS offers a competitive pay package.
- Full funding for attending National/ International conferences/ seminars/ Workshops.
- Financial support for carrying out Masters & Doctoral studies.
- Funding through government and non-profit national and international organizations is facilitated.
- Promotions are based on experience and research work.
- The teaching load is based on the guidelines provided by the HEC so faculty can spend most of their time in research.

Standard 5-4: The process and procedures used to ensure that teaching and delivery of course material to the students emphasizes active learning and that course learning outcomes are met. The process must be periodically evaluated to ensure it is meeting objective.

5.4 Strength and Competencies of Academics Staff covering all Areas of the Programme

GIMS has a mix of qualified and experienced faculty members for teaching and research. Most of the faculty member have qualifications from leading universities of the world. The pyramid of academic architecture of GIMS is shown in Figure below.

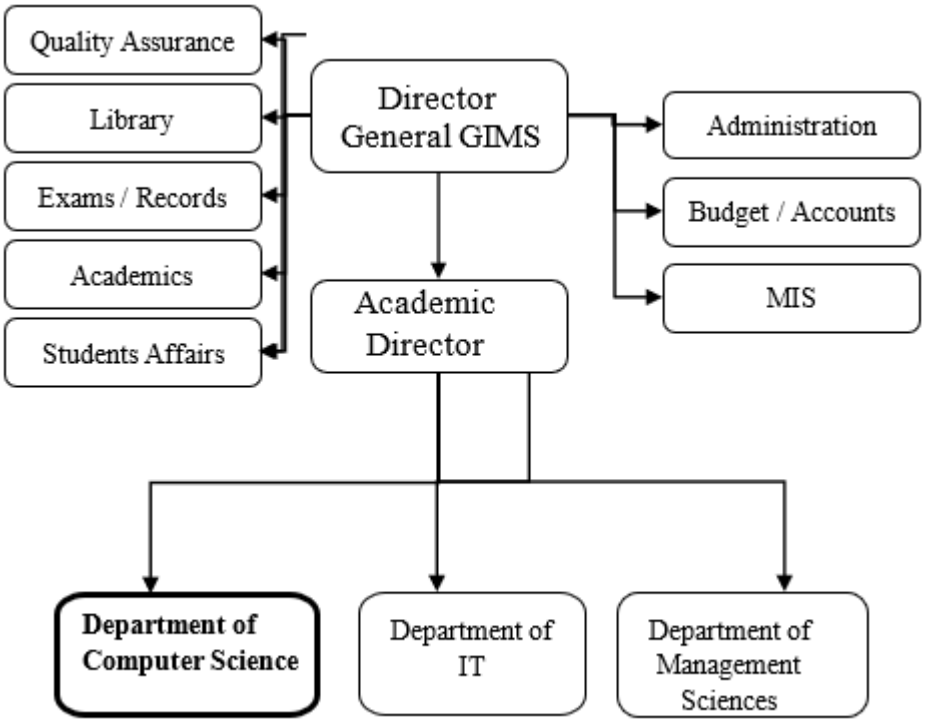


Figure 3: Academic Pyramid

CRITERION 6 FACULTY

Criterion 6 Faculty

Standard 6-1: There must be enough full-time faculty who are committed to the program to provide adequate coverage of the program.

6.1 Faculty

Details of faculty in GIMS is given below.

Present Scenario

Full-Time Faculty Size	Number of faculty members with PhD MS	Full Professors	Associate Professors	Assistant Professors	Lecturers	Teaching Assistants/Fellows
	0 10			1	10	

6.2 Faculty Distribution by Programme Area

Table 31: Faculty Distribution by Programme Area

Program Area of Specialization	Course in Area	Average Number of Section per Year	Number of Faculty Members in Each Area
Networks	1	3	1
Artificial Intelligence	1	3	1
Web/Mobile Development	1	2	1

6.2.1 Full Time Lab Engineers

Table 32: Full Time Lab Engineers

Name	Designation	Highest Degree	Date of Joining	Type of Job
Muhammad Waqas	Lab Engineer	BSCS (Hons)	October 2017	Permanent
Muhammad Farooq	Lab Engineer	MCS	January 2018	Permanent

6.2.2 Part Time Faculty Members at GIMS

Table 33: Part Time Faculty Members at GIMS

Part-Time Faculty Size	Number of Part-Time Faculty Members with		Total Number of Courses Offered by the Institute	Number of Courses Taught by Part-Time Faculty per Year	Average Teaching Load per Part-Time
	PhD	MS			
(Fall-2017)		**16**	**68**	**54**	**1:3**
(Spring-2017)		**13**	**80**	**58**	**1:4**
(Fall-2018)		**18**	**96**	**68**	**1:3**
(Spring-2018)		**19**	**94**	**60**	**1:3**
(Fall-18)		**24**	**103**	**62**	**1:3**
(Spring-19)		**25**	**91**	**49**	**1:2**
(Fall-19)		**18**	**99**	**44**	**1:2**
(Spring-2020)		**18**	**92**	**40**	**1:2**

Standard 6-2: All faculty members must remain current in the discipline and sufficient time must be provided for scholarly activities and professional development. Also, effective programs for faculty development must be in place.

6.3 Overall Staff Workload

6.3.1 Faculty Workload

Teaching load Based on 2018-2020	
Lecturer	12-16 Cr. Hr

6.4 Faculty Development, Training and Retention

6.4.1 Faculty Training and Mentoring

Following opportunities and facilities are available for faculty training and mentoring.

- The new faculty attends orientations training and methods of instruction workshop.
- GIMS sometime conduct the faculty training to enhance the educational experience.

6.4.2 Faculty Retention and Career Planning

Faculty is one of the most important part of the SMME and hiring and retention of best-in-class faculty is the top most priority of the school. For this purpose, following are being offered.

- GIMS offers a competitive pay package.
- Full funding for attending National/ International conferences/ seminars/ Workshops.
- Financial support for carrying out Masters & Doctoral studies.
- Funding through government and non-profit national and international organizations is facilitated.
- Promotions are based on experience and research work.
- Teaching load is based on the guidelines provided by the HEC so faculty can spend most of their time in research.

6.5 Sufficiency and Competency of Technical and Administrative Staff in Providing Adequate Support to the Educational Programme

6.5.1 Sufficiency and Competency of Technical Staff

The lab technicians and lab engineers are well qualified and meet the qualification requirements of their respective jobs. Lab engineers have B.Sc / M. Sc. Degrees in computer science while the lab technicians are technical diploma holders.

Standard 6-3: All faculty members should be motivated and have job satisfaction to excel in their profession.

6.5.2 Sufficiency and Competency of Administrative Staff

GIMS has adequate number of administrative staff for office and administration jobs. Administrative staff of the department is headed by Admin Manger. The staff is responsible for general upkeep of the GIMS building and offices. In case of medical emergency, a number of staff is trained to provide first aid. They are also responsible in case of a fire emergency and have been designated as fire marshals. The administrative staff is also responsible for office work,

6.6 Faculty Survey

To measure the faculty satisfaction and identifying their experience at GIMS, QED conducted faculty Survey at end of each semester. Faculty surveys help to identify faculty member level satisfaction and their experience with administrative staff and faculty members. Faculty member suggestions and feedback help to improve the department working. The faculty survey results are available in annexure H.

6.7 Annual Faculty Review

The yearly survey is a necessary part of any institute to self-evaluate its execution and to assess the performance/contribution of its employees. The academic year 2019-2020 has been ended, QED and Departments have decided to take an initiative to do yearly evaluation this year and continue to do so. Some sample examples of annual faculty review are available in annexure I.

Standard 6-4: There must be an adequate number of high-quality graduate students, research assistants and Ph.D. students.

GIMS is not accredited for a PhD Degree. Teaching Assistants positions are not available for GIMS.

CRITERION 6 INSTITUTIONAL FACILITIES

Criterion 7 Institutional Facilities

Standard 7-1: The institution must have the infrastructure to support new trends in learning such as e-learning.

7.1 Adequacy of Teaching and Learning Facilities

The adequacy of teaching and learning facilities that include classrooms, learning-support facilities, study areas, information resources, library, computing and information-technology, etc. is described in following sections.

Standard 7-2: The library must possess an up-to-date technical collection relevant to the program and must be adequately staffed with professional personnel.

7.1.1 Lecture Facilities

The GIMS building is situated within the premises of Kalra Khas Gujrat. GIMS has its own building. Construction of an additional wing is also in progress. The building has following facilities:

- Classrooms: 10
- Seating capacity of each classroom: 50
- Audio-Video facilities: Computer, multimedia projector, audio system • Seminar Hall with seating capacity of 100 shared with other departments

7.1.2 Computer Laboratories

Following dedicated computer laboratories are available.

- Computational Lab A
- Computational Lab B

The computing facilities have latest computing software including visual studio, NASAM, Dreamweaver Matlab etc.

7.1.3 Library

The GIMS Library has following facilities.

- Institute has its own library which has sufficient number of computer science related books. New books are regularly bought, but currently library contains low-cost editions. Expensive books are unavailable. A book bank is also required which provides effective support to students.
- Access to HEC Online Library via HEC.
- Reproduction facility is also available in the form of printing press in GIMS where computing and other subject books like mathematics are being printed after necessary permission.

7.1.4 Sports

At GIMS the implementation of a wholesome policy helps shape students personalities and careers in a more efficient manner. Students are, therefore, encouraged to participate in various sports competitions held as a regular feature of the campus life. The following facilities are available in NUST main campus.

- Badminton Court 12
- Table Tennis Total 4, 3 x Girls, 1 x Boys

7.1.5 Transport

GIMS maintains an organized transportation network within the campus for the students and staff. Vans provide transport from Gate 1 from 8:30 to 9:30 am. GIMS provide transportation within Gujrat city and outside Gujrat. Transportation facilities provided to students of Kharrian, Jalapur Jattan, Lalmusa.

CRITERION 8 INSTITUTIONAL SUPPORT

Criterion 8 Institutional Support

8.1 Institutional Financial Commitment and Support

Standard 8-1: The library must possess an up-to-date technical collection relevant to the program and must be adequately staffed with professional personnel.

8.1.1 Financial Resources to Acquire and Maintain Library Holdings, Laboratories and *Computing Facilities*

8.2 Income and Expenditure Details

Standard 8-2: Financial resources must be provided to acquire and maintain library holdings, laboratories and computing facilities.

Standard 8-3: Financial resources must be provided to acquire and maintain library holdings,

Table 34: Income and Expenditure Details

S No	Source of Income	Financial Year 2017-18 (July 2017 to August 2018)			Financial Year 2018-19 (July 2018 to August 2019)			Financial Year 2019-20 (July 2019 to June 20)		
		Budget	Income	Expenditure	Budget	Income	Expenditure	Budget	Income	Expenditure
1		25000000	246747735	23644527	4000000	39281610	37119271	60500000	54182899	51139207

	(July 2017 to August 2018)	July 2018 to August 2019)	(July 2019 to June 20)	(July 2020 to June 21)
Institution's yearly budget for research and faculty development for the past five years	Rs: 400000	Rs:	Rs:	Rs:
Institution's yearly budget for library	Rs: 400000	Rs: 350000	Rs: 475000	Rs:300000
Institution's yearly budget for computing facilities	Rs: 800000	Rs: 950000	Rs: 882000	Rs:125000
Department/school/ college's yearly budget for research and faculty	Rs: 1050000	Rs: 150000	Rs: 175000	Rs:130000

development for the past five years				
Fee Structure	Subsidized Fee: Rs. 19250 Regular Fee: Rs.34850	Subsidized Fee: Rs. 19250 Regular Fee: Rs. 34850	Subsidized Fee: Rs. 20450 Regular Fee: Rs.36200	Subsidized Rs. 20450 Regular Fee: Rs.36200

CONTINUOUS QUALITY IMPROVEMENT

Continuous Quality Improvement

Program Planning

Curriculum Development

The curriculum of the computer science programme was developed to meet the requirements of HEC. A comprehensive exercise was carried out among all the stakeholders to unify the curriculum. During that phase, experts from all the AAUR departments and affiliated institute were brought together and careful deliberations were carried out. The finalised unified curriculum is implemented and taught in AAUR and Affiliated institutes. A number of elective courses are available for students to choose to increase their depth and breadth of knowledge.

Curriculum Review

A comprehensive policy exits at AAUR and GIMS level for curriculum review and updating. The curriculum could be reviewed on the basis of a number of factors including HEC revision of curriculum requirements, feedback from stakeholders, etc.

Content Review

Courses are assigned to the faculty at the start of the semester. The content of each course has been defined by the department and a lesson / teaching plan is prepared by the concerned faculty based on the approved course contents. The faculty member is allowed to change 10% of the course content of a course. Sample lesson plans are provided at Annexure ‘D’. The lesson plans include detailed content breakdown, teaching methods and assessment methods.

Response to Feedback

Feedback from faculty and students is collected on regular basis through the LMS system. Students are required to provide feedback once during the course. The anonymous feedback becomes available to the concerned faculty for review and any necessary action. Faculty also provides feedback at the end of the course. The feedback provided by faculty and students is monitored by the QED, Academic Directors, HODs, .

Various type of feedbacks obtained from alumni, faculty, students, employers, etc. are addressed at various levels during the faculty meetings.

Tracking of Contribution of Individual Courses to PLOs

The course learning outcomes for each course has been defined and linked with appropriated programme learning outcomes. The assessment methods of CLOs are part of the lesson plans where a specific CLO may be evaluated using any suitable assessment method. The assessment methods include quizzes, assignments, presentations, reports, term projects, end semester exams, etc. Specific CLO is attributed to a specific question. The question papers are approved by the HOD for appropriate level of learning and difficulty. The complete record of CLO attainment is maintained in the Academics Branch.

Continuous Improvement

Observations, Implementation Plan and Actions Taken Since Last SAR

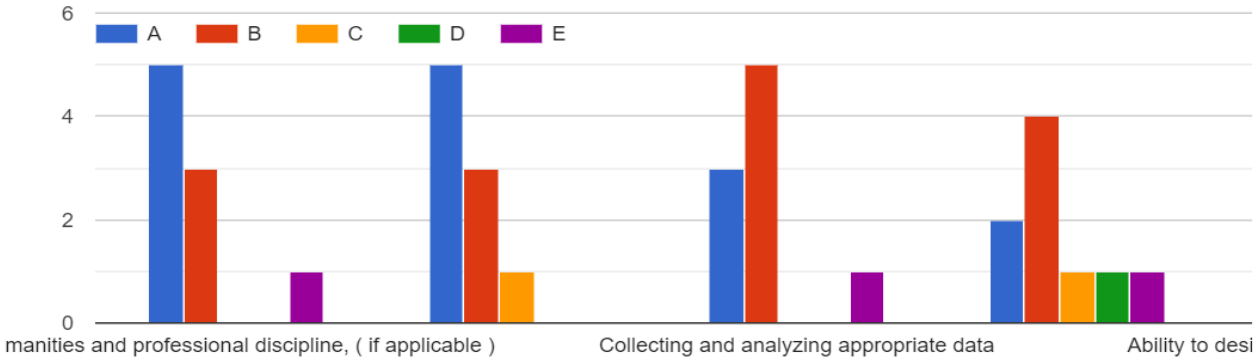
Sr. No	Observations	Action Take by Department	Status
1	Rubric was not designed for BSIT Final year project evaluation that would be used to measure program education objectives.	Department directed the Project Management office to design rubric with consultancy of faculty members. Rubric was implemented in final year project evaluation.	Achieved
2	Employer Survey was not designed in compliance to measure the program education objectives.	QED and department coordinator set together and redesign the survey which includes the statement that would help out the measuring the programme educational objective.	Achieved
3	Department has not initiated the research cultural among the undergraduate students.	Institute recruit PhD faculty member as HoD with aims to flourish the research among the faculty members and take initiative among students for review paper and research paper.	Partially Achieved

4	Scheme of study for BS IT program not adequately state which course will help to achieve program educational objective and outcomes.	The course has been mapped with program learning and educational objective and sated is Table 6 and Tables 7-17 in this SAR.	Achieved
5	Institute has not dedicated any career counseling and job placement office students.	Job placement and career counseling office establishment is in under discussion of Director GIMS and Academic Director.	In process
6	Department has no dedicated meeting and conference room.	Infrastructure of institute has been improved as dedicated campus construction is completed in Spring 2020. Meeting room, discussion room and conference rooms are available for faculty and students.	Achieved
7	Institute has not had its own student and teacher portal where student and teacher can communicate subject matter effectively.	The GIMS has launched Learning Management System in Spring 2020 for instructor and faculty members, and it is accessible for all stakeholders.	Achieved
8	Proper teacher training and faculty development programs, particularly for the newly inducted young faculty members, need to be established on priority basis.	Department had planned number of training program but due to COVID'19 no physical training was possible for a year, Meanwhile the faculty members have attended a few virtual seminar and talks.	In process

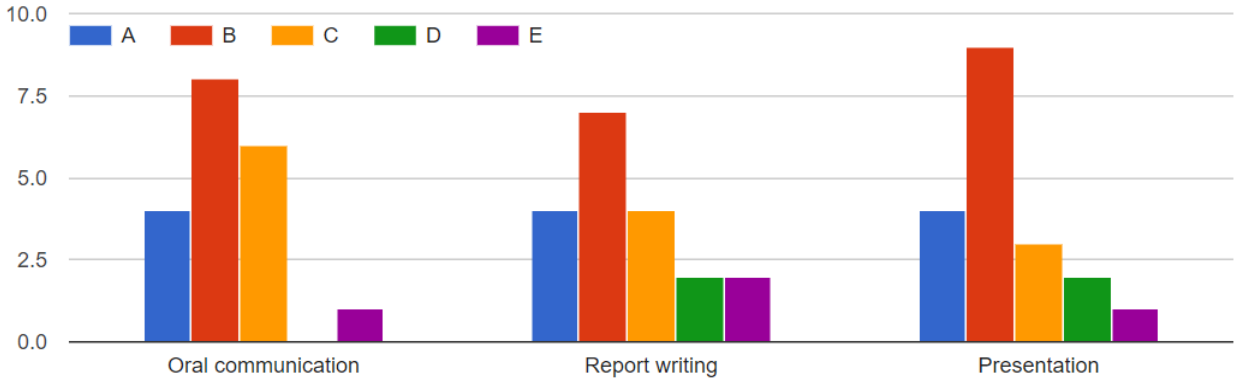
Annexure A. Alumni Survey

Performa: 7 Alumni Survey
Department of Computer Science & IT
BSIT Programs Batch 2015-2019

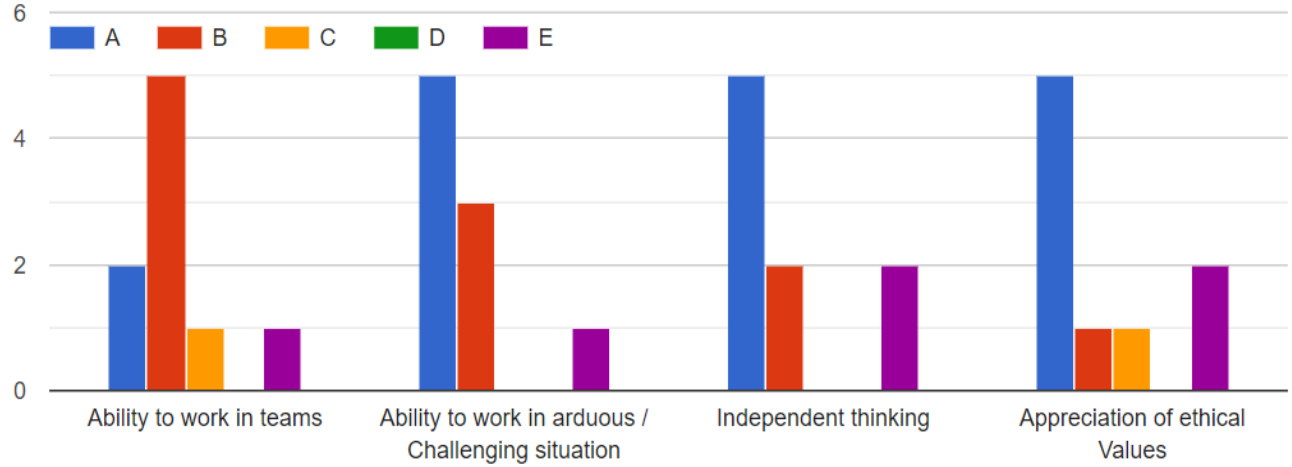
1. Knowledge



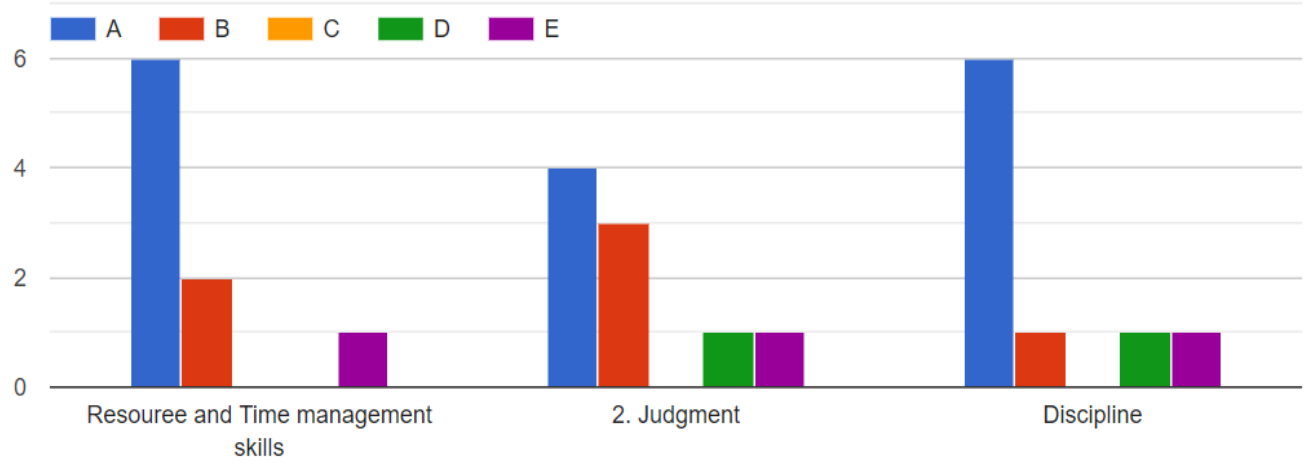
3. Communication Skills



3. Interpersonal Skills



4. Management and Leadership Skills



Gujrat Institute of Management Science
PMAS-Arid Agriculture University, RWP

Alumni Survey Questions Summery

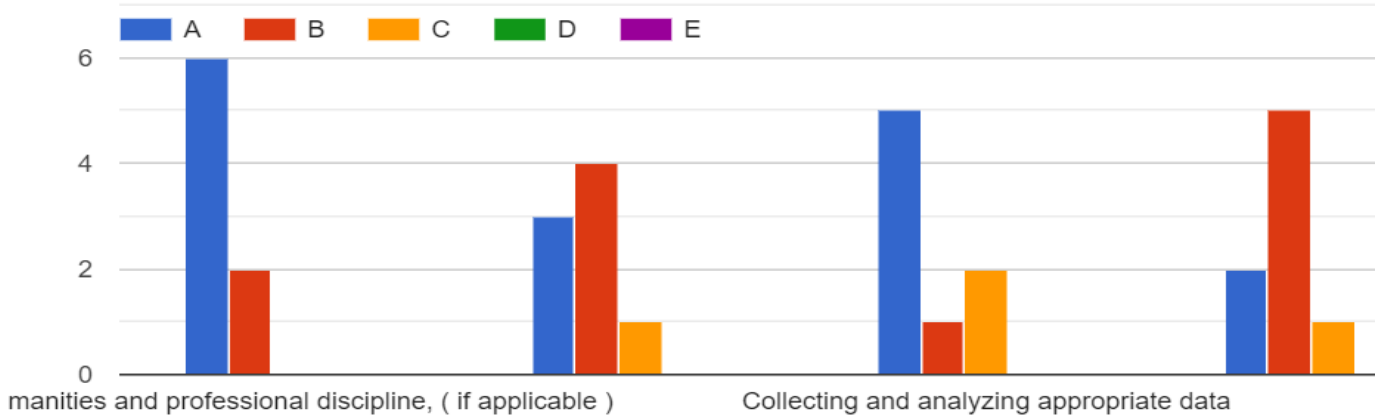
S. No	General Comments Please make any additional comments or suggestions, which you think would help strengthen our programs. (New courses that you would recommend and courses that you did not gain much from)	Career Opportunities	Name of organization (In which you are currently working)	Position in organization
1	MPL add for IT courses	internee at ibb tech	ibb tech	Internee
2	Graphic Design	Anything in which u have interest. Business or job anything	Arid Agriculture	Internee
3	--Need advancement in programs	A lot of career opportunities in it	having my own startup	-

Performa: 7 Alumni Survey

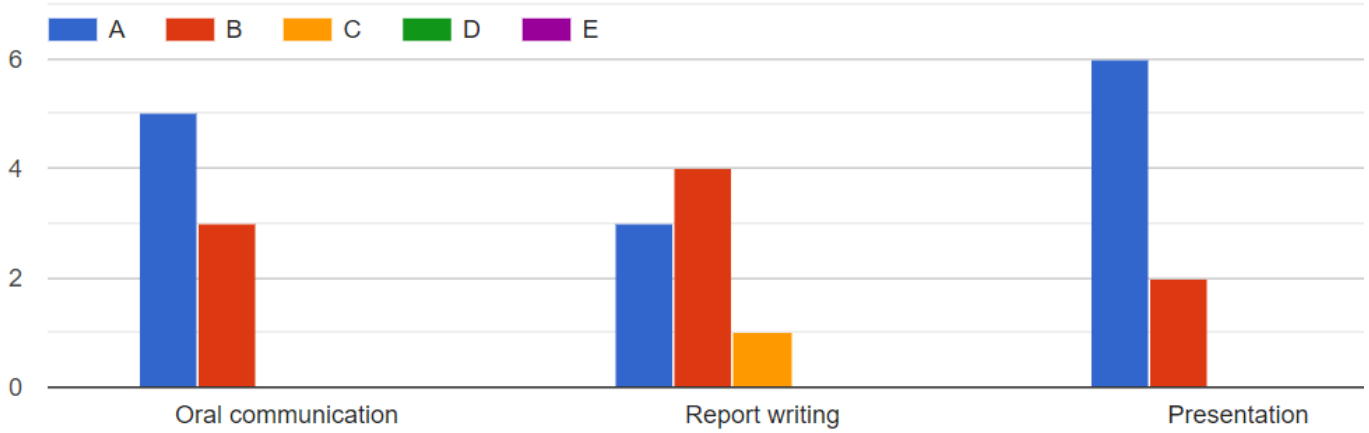
Department of Computer Science & IT

BSIT Programs Batch 2017-2019

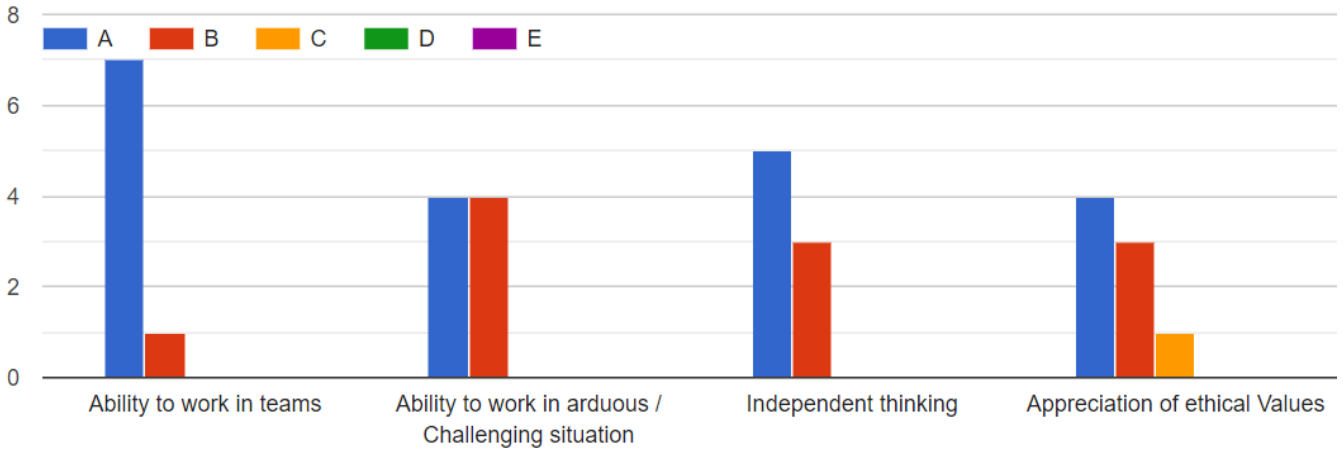
1. **Knowledge**



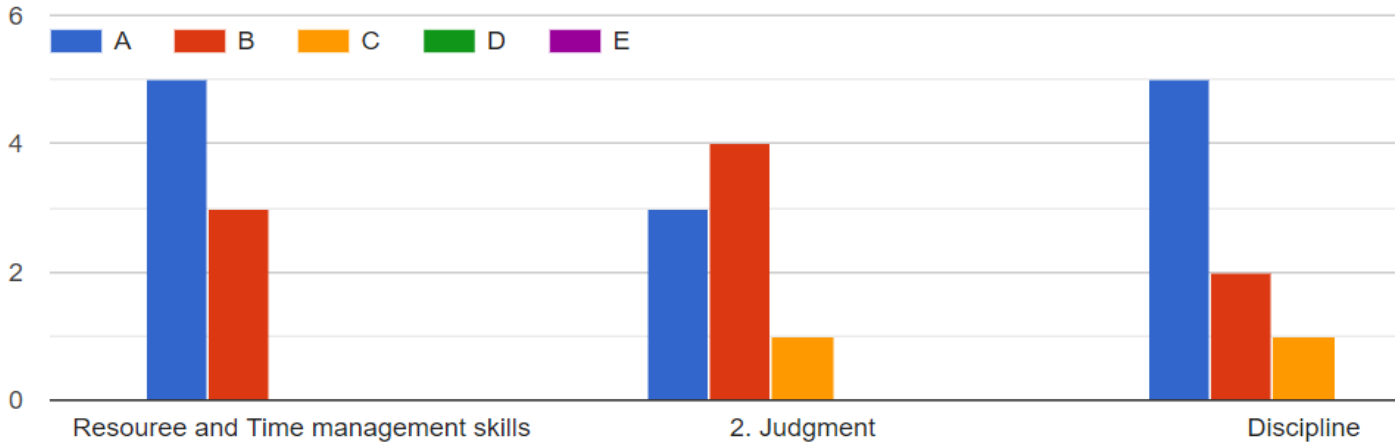
2. **Communication Skills**



4. Interpersonal Skills



5. Management and Leadership Skills



Alumni Survey Questions Summery

S. No	General Comments Please make any additional comments or suggestions, which you think would help strengthen our programs. (New courses that you would recommend and courses that you did not gain much from)	Career Opportunities	Name of organization (In which you are currently working)	Position in organization
1	work on the student behaviour	many	None	None
2	Please focus on some real problem solving scenarios and stop producing robots.. its a request	None... You should call some recruiters to hire your students.. No matter if it is a small scale institute afterall we are also having the same bachelors of IT degree as other institutes gave to the their students.	Gujrat institute of management of sciences	Office Assistant
3	--You should start new departments	GIMS provide many opportunties to bulid your career	Fresh graduate	None
4	Very Good	Alot	Freelancing	Software Developer

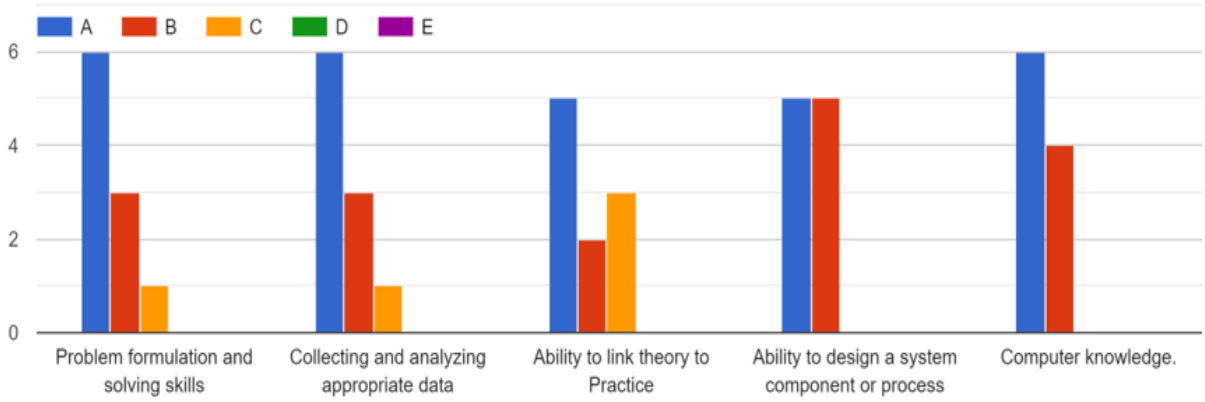
Annexure B: Employer Survey

A survey has been conducted and feedback has been collected on Performa 8 from the employees where students have BSCS from GIMS are working. The results are summarized in figure given below.

Performa: 8 Employer Survey
Department of Information Technology
(Batch: 2015-2019)

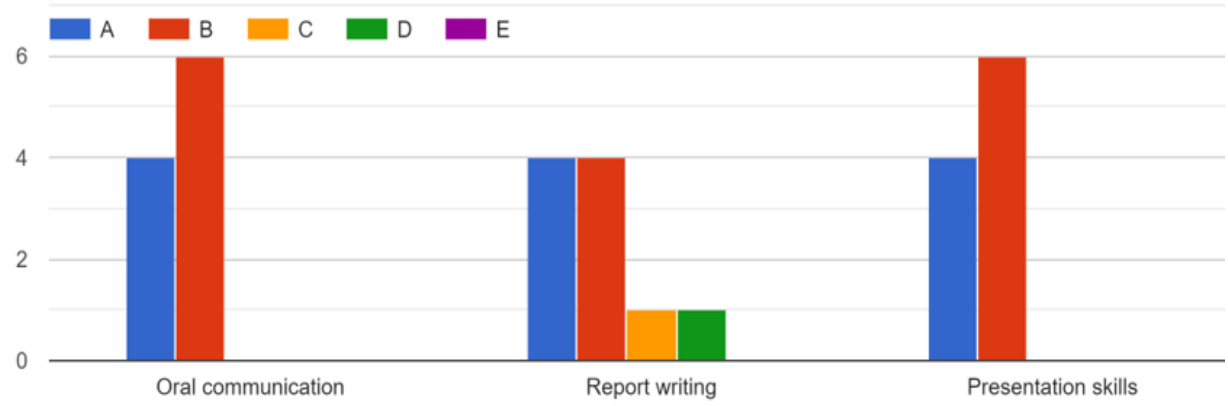
1. Rank Employee's Knowledge

   A: Excellent B: Very good C: Good D: Fair E: Poor



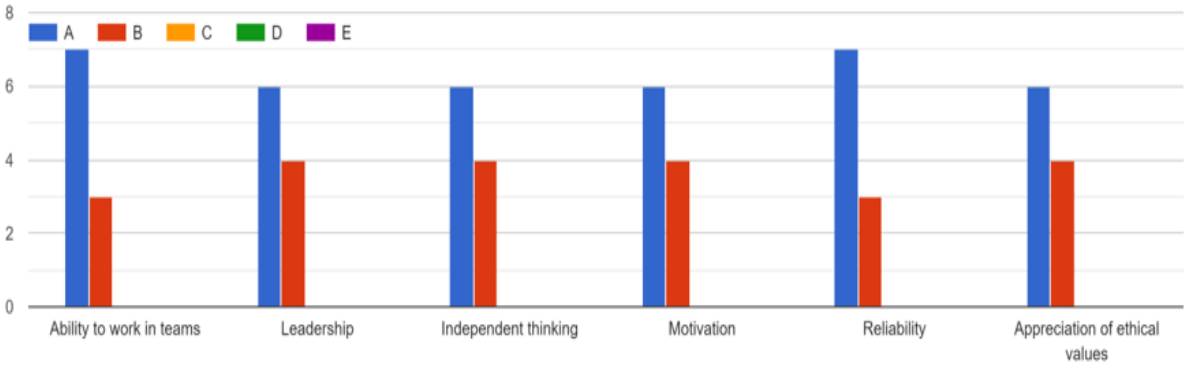
2. **Rank Employee's Communication Skills**

   A: Excellent B: Very good C: Good D: Fair E: Poor



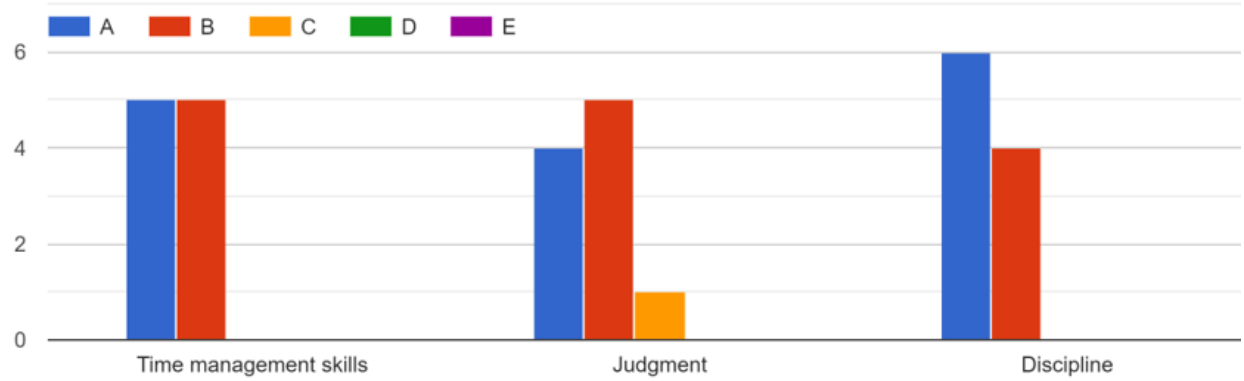
3. **Rank Employee's Interpersonal Skills**

A: Excellent B: Very good C: Good D: Fair E: Poor



4. **Rank Employee's Work skills**

A: Excellent B: Very good C: Good D: Fair E: Poor



Annexure C: Graduating Survey

Performa: 3 Survey of Graduating students

Department of Computer Science & IT

BS Batch (2015-2019)

S.no	Statements	VS	SA	UC	DS	VD
1	The work in the program is educative	0%	71.4%	14/3%	0%	14.3%
2	The program is effective in enhancing team-working abilities.	85.7%	78.6%	0%	0%	14.3%
3	The program administration is effective in supporting learning.	0%	71.4%	14.3%	0%	14.3%
4	The program is effective in developing analytical and problem solving skills.	0%	28.6%	57.1%	0%	14.3%
5	The program is effective in developing independent thinking.	0%	71.4%	14.3%	0%	14.3%
6	The program is effective in developing written communication skills.	28.6%	28.6%	28.6%	0%	14.3%
7	The program is effective in developing planning abilities	28.6%	64.3%	7.1%	0%	0%
8	The objectives of the program have been fully achieved	28.6%	28.6%	14.3%	14.3%	14.3%
9	Whether the contents of curriculum are advanced and meet program objectives	0%	42.9%	28.6%	14.3%	14.3%
10	Faculty was able to meet the program objectives	28.6%	42.9%	14.3%	0%	14.3%
11	Environment was conducive for learning	14.3%	57.1%	14.3%	14.3%	0%
12	Whether the Infrastructure of the department was good	0%	28.6%	42.9%	14.3%	14.3%
13	Whether the program was comprised of Co-curricular and extra-curricular activities	0%	71.4%	14.3%	0%	14.3%
14	Whether scholarships/ grants were available to students in case of hardship	0%	28.6%	57.1%	0%	14.3%

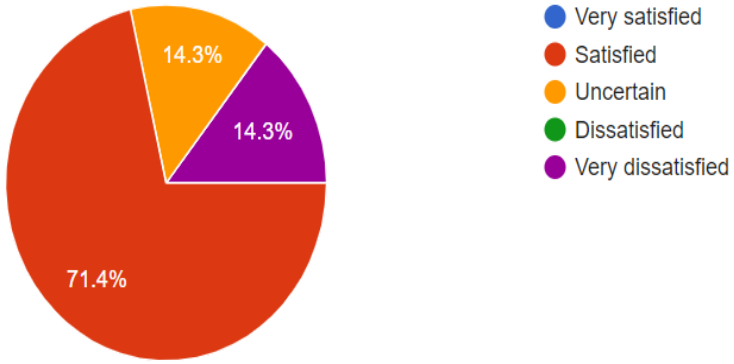
VS: Very Satisfied SA: Satisfied UC: Uncertain DS: Dissatisfied VD: Very Dissatisfied

Performa: 3 Survey of Graduating students

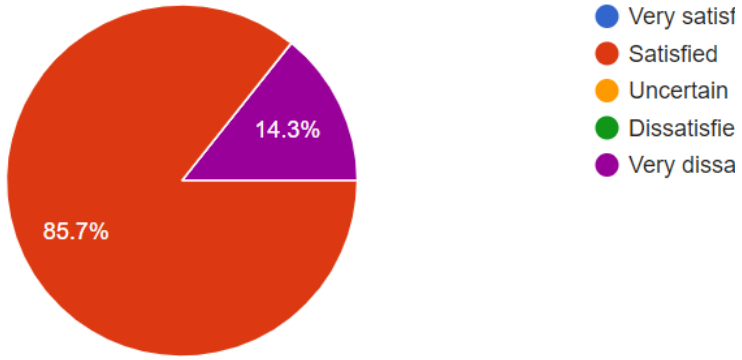
Department of Management Sciences

Batch (2015-2019)

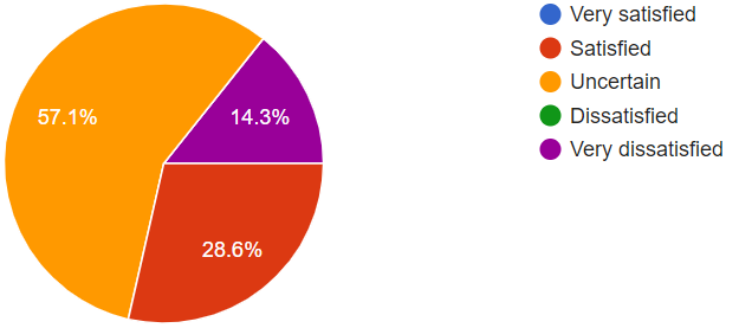
1. The work in the program is educative.



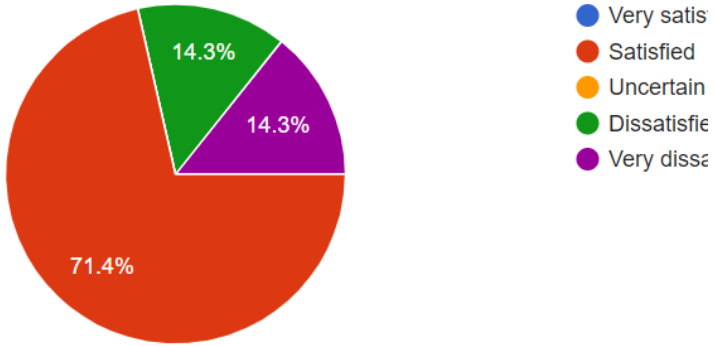
2. The program is effective in enhancing team-working abilities.



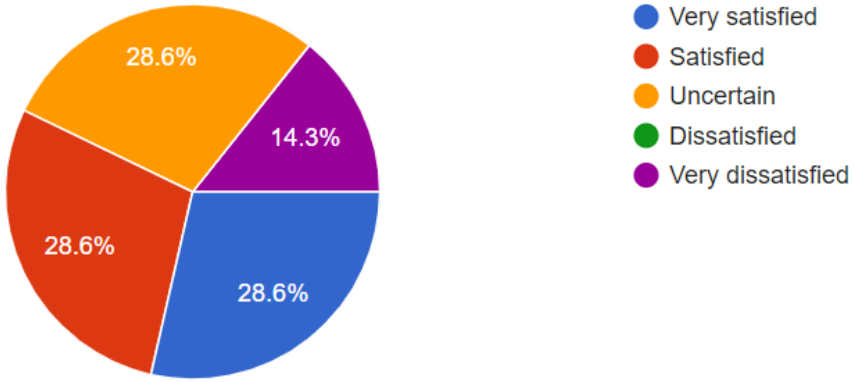
3. The program administration is effective in supporting learning.



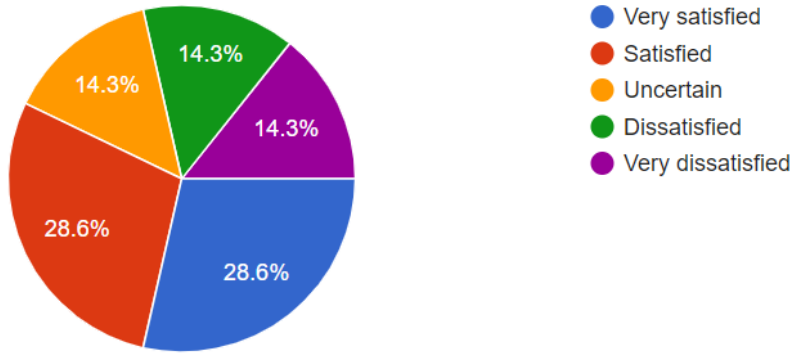
4. The program is effective in developing analytical and problem-solving skills.



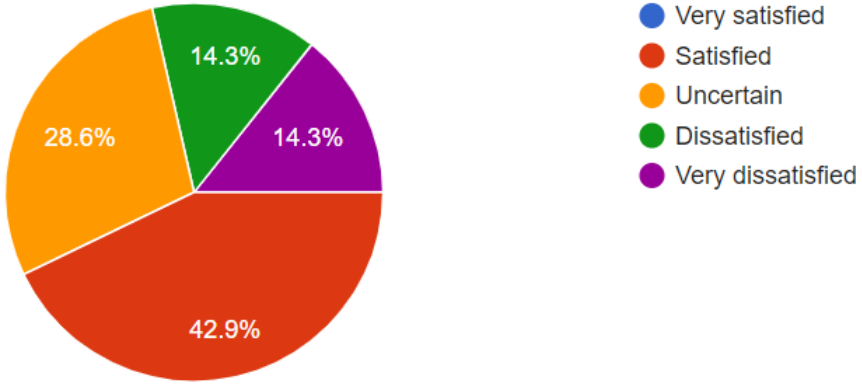
5. The program is effective in developing independent thinking.



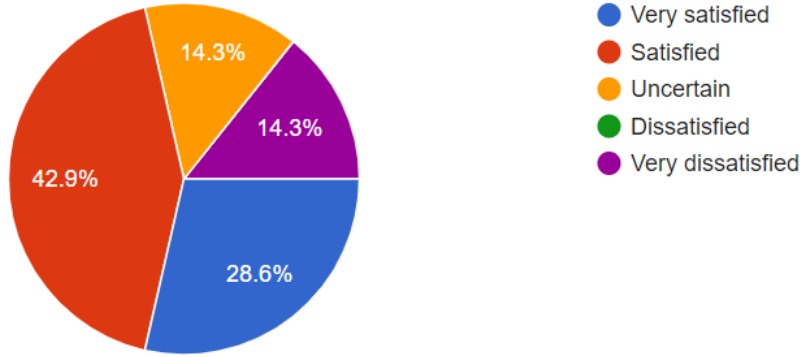
6. The program is effective in developing written communication skills.



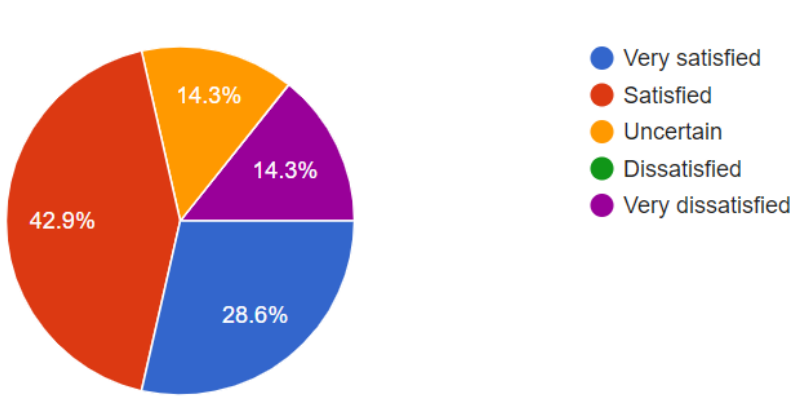
7. The program is effective in developing planning abilities



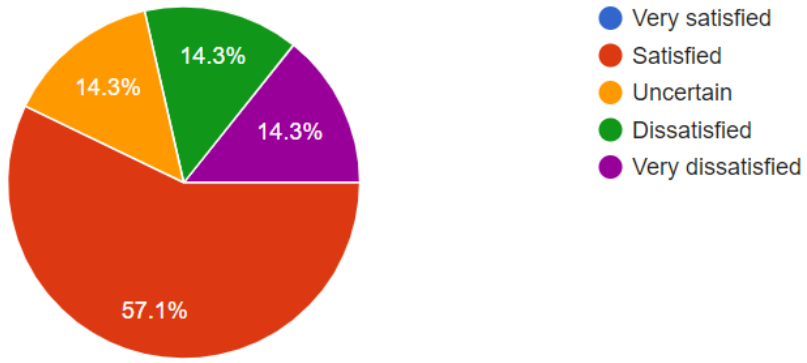
8. The objectives of the program have been fully achieved



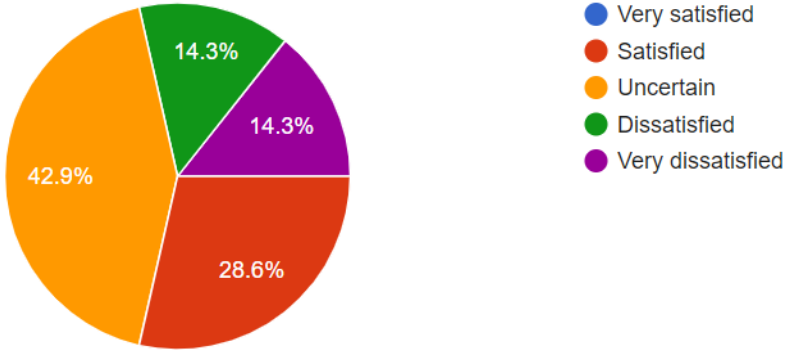
9. Whether the contents of curriculum are advanced and meet program objectives



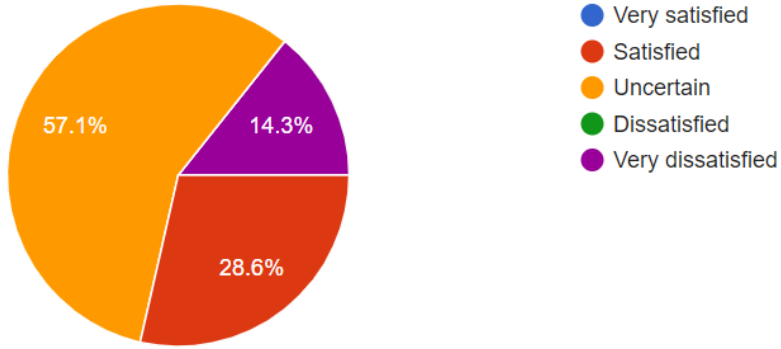
10. Faculty was able to meet the program objectives.



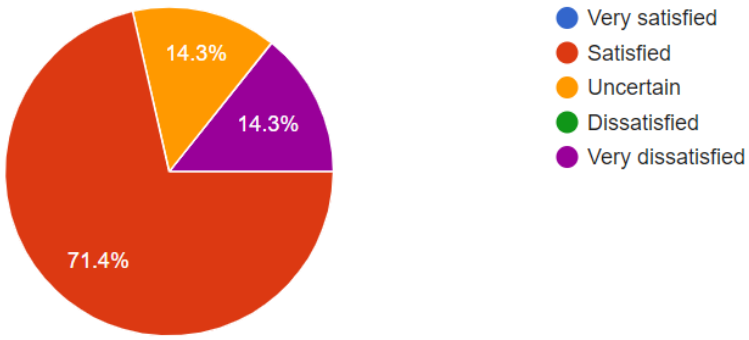
11. Environment was conducive for learning.



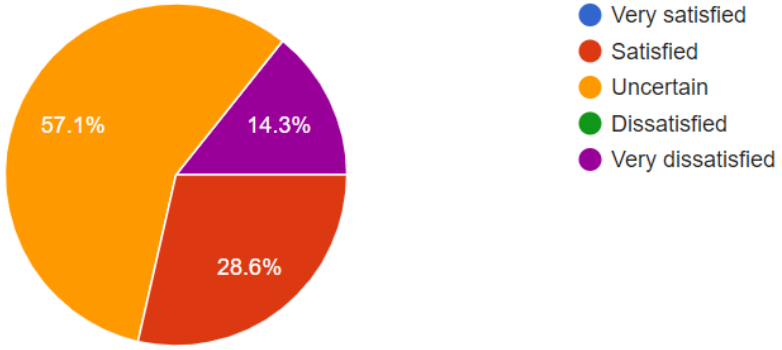
12. Whether the Infrastructure of the department was good.



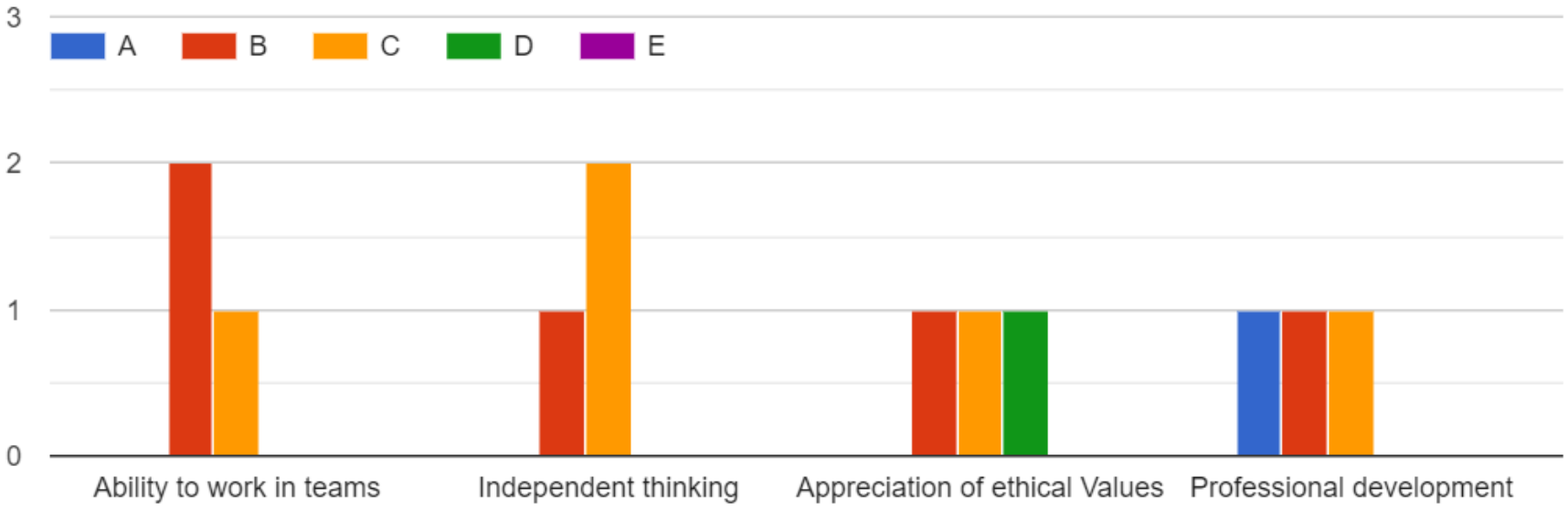
13. Whether the program was comprised of Co-curricular and extra-curricular activities.



14. Whether scholarships/ grants were available to students in case of hardship.



14. The internship experience is effective in enhancing.



Performa: 3 Survey of Graduating students

Department of Computer Science & IT

BSIT- Batch (2016-2020)

S.no	Statements	VS	SA	UC	DS	VD
1	The work in the program is educative	42.9%	57.1%	0%	0%	0%
2	The program is effective in enhancing team-working abilities.	14.3%	71.4%	14.3%	0%	0%
3	The program administration is effective in supporting learning.	85.7%	14.3%	0%	0%	0%
4	The program is effective in developing analytical and problem solving skills.	28.6%	57.1%	14.3%	0%	0%
5	The program is effective in developing independent thinking.	85.7%	14.3%	0%	0%	0%
6	The program is effective in developing written communication skills.	85.7%	14.3%	0%	0%	0%
7	The program is effective in developing planning abilities	14.3%	71.5%	0%	14.3%	0%
8	The objectives of the program have been fully achieved	28.6%	57.1%	0%	14.3%	0%
9	Whether the contents of curriculum are advanced and meet program objectives	28.6%	57.1%	0%	0%	14.3%
10	Faculty was able to meet the program objectives	28.6%	57.3%	14.3%	0%	0%
11	Environment was conducive for learning	42.9%	57.1%	0%	0%	0%
12	Whether the Infrastructure of the department was good	28.6%	57.1%	0%	0%	14.3%
13	Whether the program was comprised of Co-curricular and extra-curricular activities	42.9%	57.1%	0%	0%	0%
14	Whether scholarships/ grants were available to students in case of hardship	14.3%	71.3%	0%	14.3%	0%

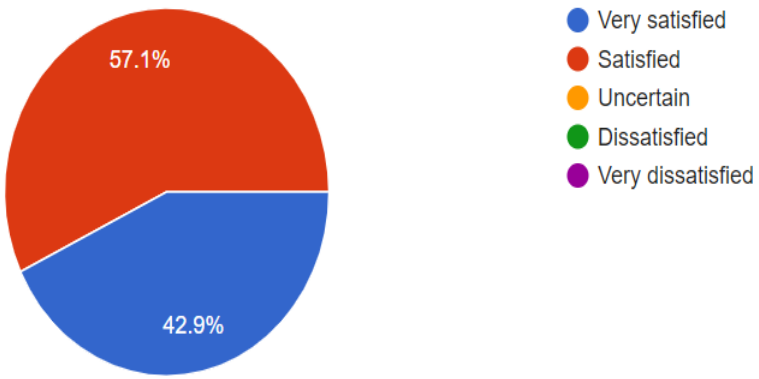
VS: Very Satisfied SA: Satisfied UC: Uncertain DS: Dissatisfied VD: Very Dissatisfied

Performa: 3 Survey of Graduating students

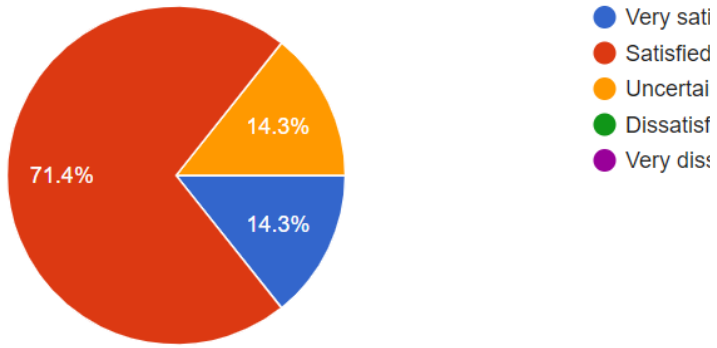
Department of Computer Science & IT

Batch (2016-2020)

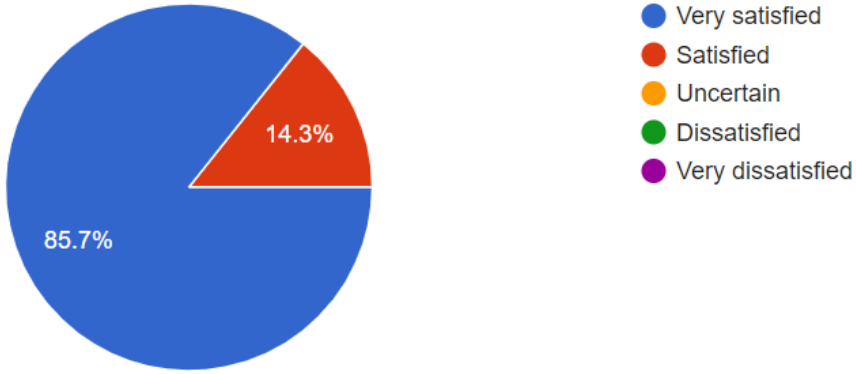
1. The work in the program is educative.



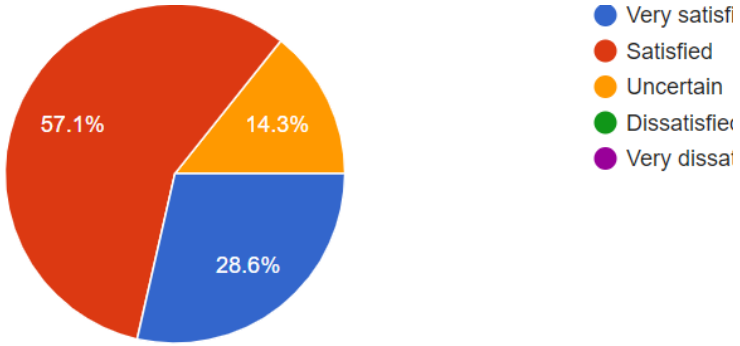
2. The program is effective in enhancing team-working abilities.



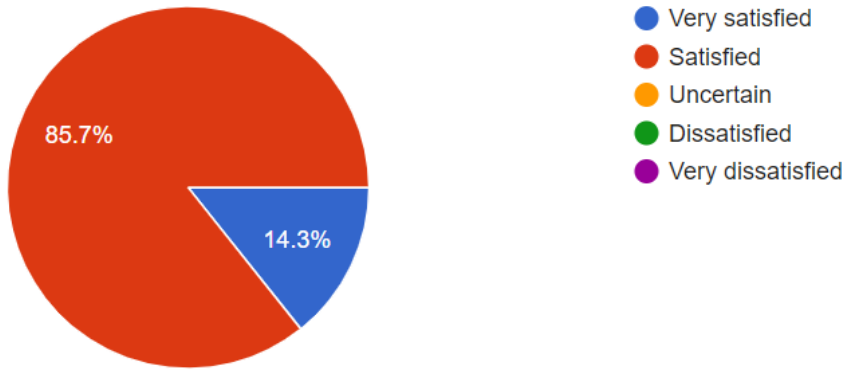
3. The program administration is effective in supporting learning.



4. The program is effective in developing analytical and problem-solving skills.



5. The program is effective in developing independent thinking.



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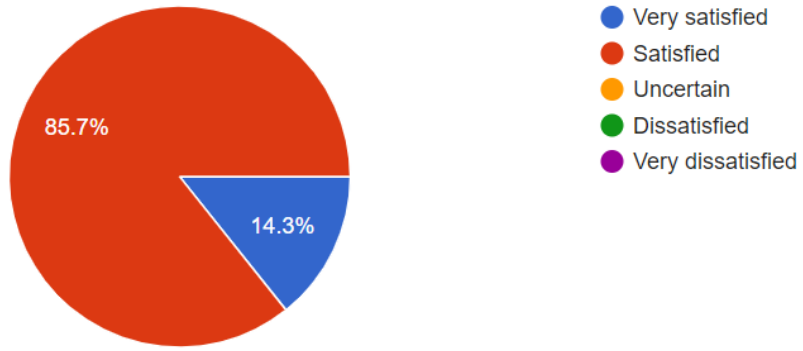
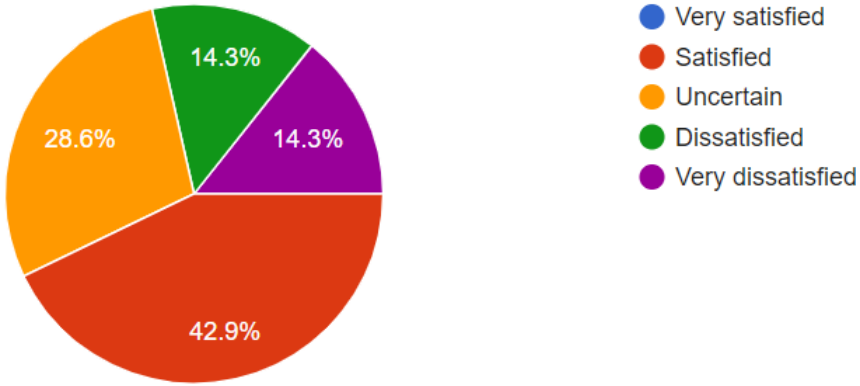
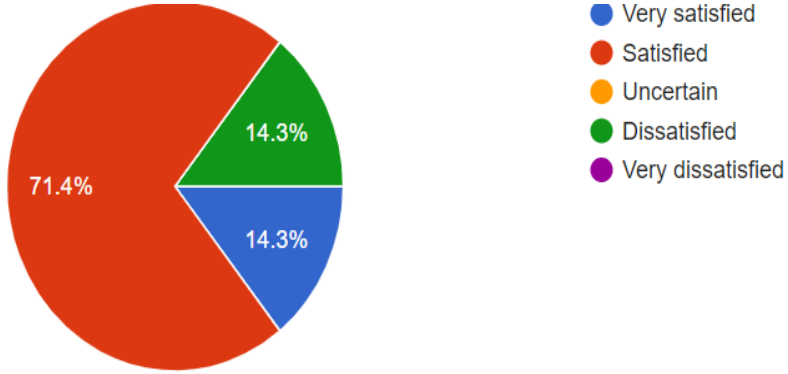


7. The program is effective in developing planning abilities.



8. The objectives of the program have been fully achieved.



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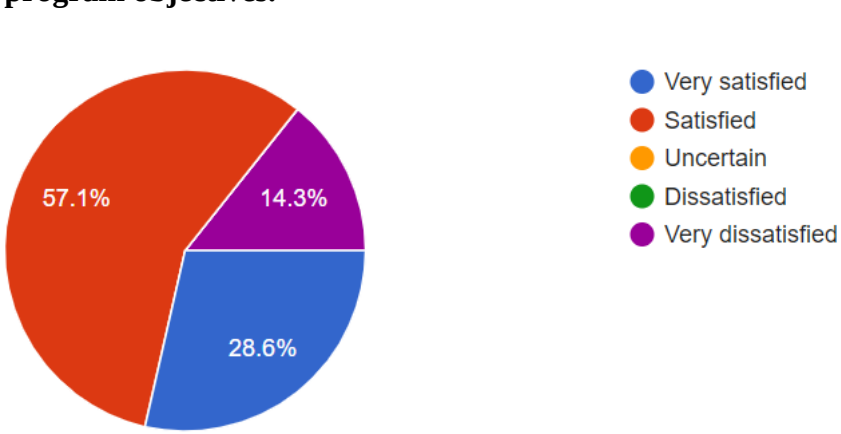
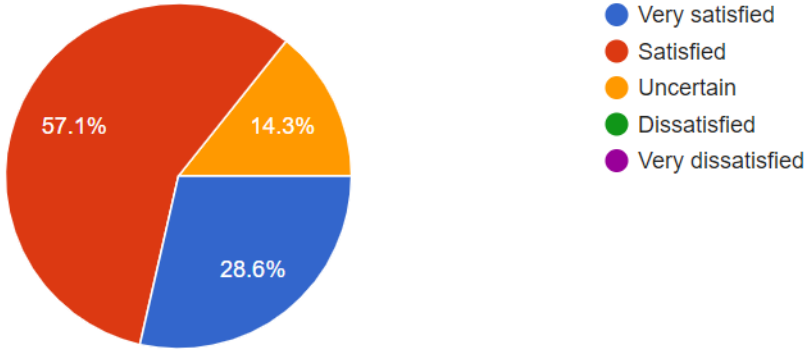
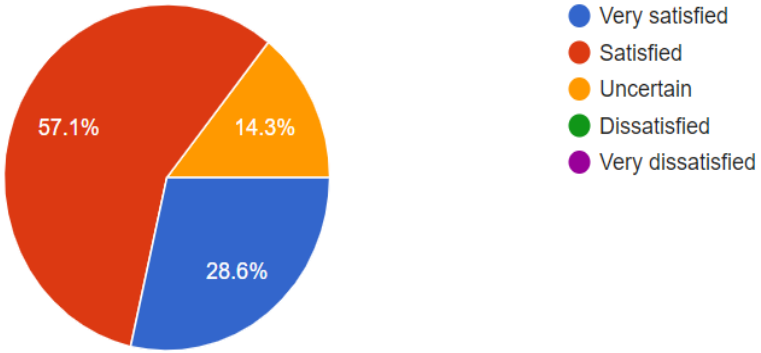


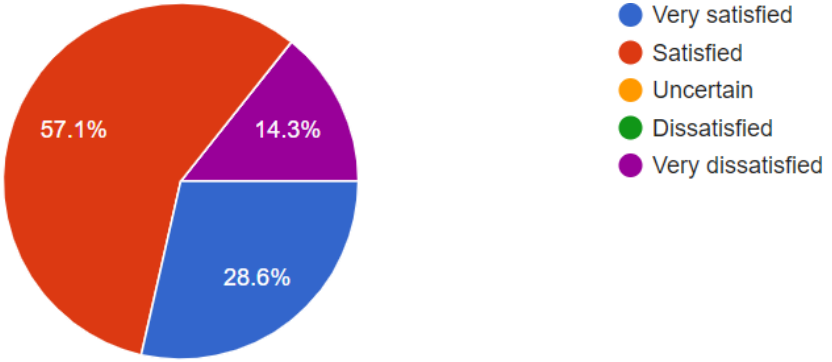
10. Faculty was able to meet the program objectives.



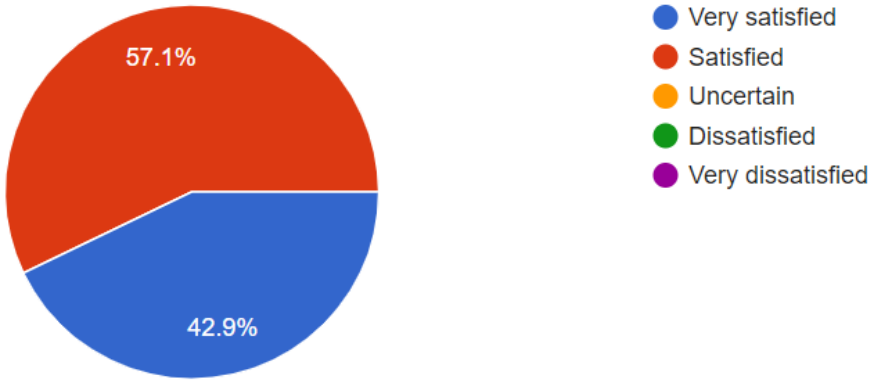
11. Environment was conducive for learning.



12. Whether the Infrastructure of the department was good.



13. Whether the program was comprised of Co-curricular and extra-curricular activities.



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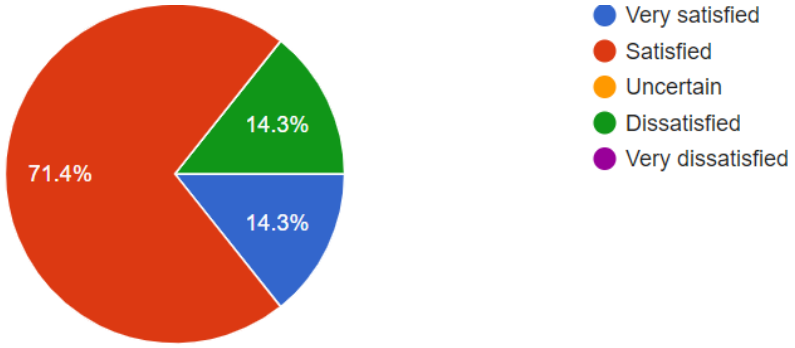
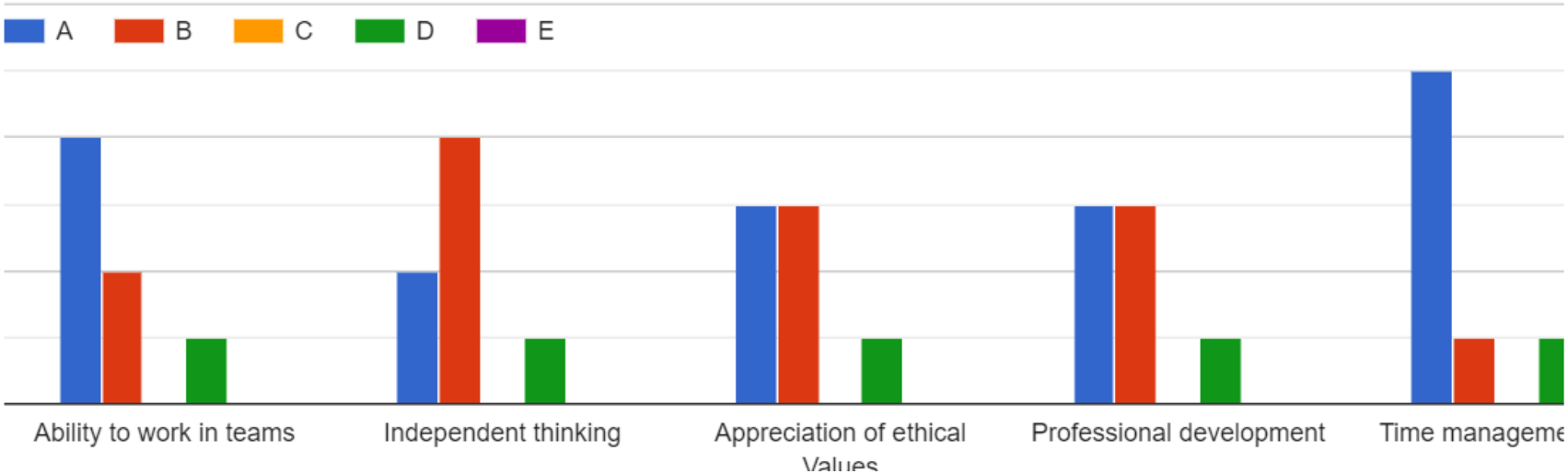


15. The internship experience is effective in enhancing.



Annexure D: Lesson Plan

<table>
<tr><th colspan="8">COURSE READINESS</th></tr>
<tr><td>Subject Title:</td><td colspan="3">Object Oriented Programming</td><td>Course code</td><td colspan="3">CS-423</td></tr>
<tr><td>Semester</td><td colspan="3">BSIT (2nd)</td><td>Department</td><td colspan="3">IT</td></tr>
<tr><td>Course Introduction</td><td colspan="7">This unit introduces C++ as an object-oriented programming language, building on existing knowledge of C and Java. The unit covers the C++ language with a focus on its object-oriented features, and how these can be implemented as part of program designs and implementation. You will also study and gain practical experience with the implementation issues related to object-oriented techniques, be able to build good quality software using object-oriented techniques and understand the role of patterns in object-oriented design.</td></tr>
<tr><td>Learning Objective</td><td colspan="7">At the completion of this unit students will be able to:
• Understand object-oriented programming features in C++
• Apply these features to program design and implementation
• Understand object-oriented concepts and how they are supported by C++
• Gain some practical experience of C++
• Understand implementation issues related to object-oriented techniques
• Build good quality software using object-oriented techniques Understand the role of patterns in object-oriented design.</td></tr>
<tr><td>Recommended Textbook</td><td colspan="7">▪ C++ How to Program, Harvey M. Deitel, Paul J. Deitel, Prentice Hall; 7th Edition, 1997, ISBN: 013528910-6.
▪ IT Series Object Oriented Programming with C++</td></tr>
<tr><td>Grading System</td><td>Assignments</td><td>5%</td><td>Projects</td><td>05%</td><td>Midterm Exam</td><td colspan="2">22.5%</td></tr>
</table>

(Weighted Percentages)	Quizzes	5%	Presentations	Nil	Final Term Exam	Theory: 37.5% Practical: 25%
Other Rules						
Logistics	Class Time	Friday: 10am-12:00pm		Consulting Hours	Mon-Fri 03:00pm-04:30pm	
	Venue	Zoom App/ Google Classroom		Contact Information	washma.amir1@gmail.com 0335-4266771 bilalmazhar88@gmail.com 0345-6931085	

Lesson Plan

WEEK-1

Lecture	TOPICS	Content delivered	Reference source	Assignments/Quiz/Class Activity)
1	**Structures** • Defining Structures • Declaring Structure Variables	**Structures** Defining Structures Declaring Structure Variables	**Recommended Book/other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, Prentice Hall **book edition: 2nd chapter no: 02 page no:**	
2	• Initializing and Accessing Members of Structures Using Nested Structures • Initializing Nested Structures	• Initializing and Accessing Members of Structures Using Nested Structures • Initializing Nested Structures	**Recommended Book/other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, Prentice Hall **book edition:**	**Assignment 01:** Structures **Due Date:** March 12, 2020

	• Passing structure as Function Parameter	• Passing structure as Function Parameter	**2nd chapter no: 02 page no:**	
LAB	*Writing programs that input data into members of structure and then print data from the members of structure.* *Writing programs that copy one structure variable to another variable.* *Writing programs that swap two structure type variables, Print the results before and after swapping.*	*Writing programs that input data into members of structure and then print data from the members of structure.* *Writing programs that copy one structure variable to another variable.* *Writing programs that swap two structure type variables, Print the results before and after swapping.*		

WEEK – 2

Lecture	TOPICS	Content delivered	Reference source	Comments
3	**Functions** • Introduction to Functions • Declaration, Calling and Definition of Functions • Passing Arguments(constants & variables) to Functions • Returning Values from Functions	**Functions** • Introduction to Functions • Declaration, Calling and Definition of Functions • Passing Arguments(constants & variables) to Functions • Returning Values from Functions	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, Prentice Hall **book edition: 7th chapter no: 06 page no:**	
4	• Passing Structure as Argument to Functions • Returning structure from functions • Passing Pointers as Arguments to Function	• Passing Structure as Argument to Functions • Returning structure from functions • Passing Pointers as Arguments to Function	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, Prentice Hall **book edition: 7th chapter no: 06**	**Assignment 02:** Functions
			page no:	**Due Date:** March 25th, 2020

LAB	*Writing programs that input data into an array and then print data using pointer notation.* *Writing programs that find out the maximum/minimum value in an array through pointer notation* *Writing program that return structure from a function.* *Writing program to swap two values by passing pointers to function.* *Writing program to copy one string to another string using pointers.*	*Writing programs that input data into an array and then print data using pointer notation.* *Writing programs that find out the maximum/minimum value in an array through pointer notation* *Writing program that return structure from a function.* *Writing program to swap two values by passing pointers to function. Writing program to copy one string to another string using pointers.*		

WEEK – 3

Lecture	TOPICS	Content delivered	Reference source	Comments
5	**Object Oriented Programming Concepts** • Object Oriented Approach • Objects and Classes	**Object Oriented Programming Concepts** • Object Oriented Approach • Objects and Classes	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book**	

			edition: 7th chapter no: 03 page no:	
6	Characteristics of OO Languages (Inheritance, Polymorphism, Reusability, Overloading), Advantages of OOP.	Characteristics of OO Languages (Inheritance, Polymorphism, Reusability, Overloading), Advantages of OOP.	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 03 page no:**	
LAB	Programming Exercise	Programming Exercise		

WEEK – 4

Lecture	TOPICS	Content delivered	Reference source	Comments
7	**Classes and Objects** • Class Encapsulation • Abstraction • Information Hiding • Access Specifier	**Classes and Objects** • Class Encapsulation • Abstraction • Information Hiding • Access Specifier	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th**	

			chapter no: 09 **page no:**	
8	• Constructors • Default Copy Constructor • Objects as Function Arguments • Functions returning Objects	• Constructors • Default Copy Constructor • Objects as Function Arguments • Functions returning Objects	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th** **chapter no: 09** **page no:**	**Assignment 03:** Classes **Due Date:**April 09th, 2020
LAB	□ Programming Exercise	□ Programming Exercise		

WEEK – 5

Lecture	TOPICS	Content delivered	Reference source	Comments
9	**Classes and Objects** • Array of Objects • Passing/Returning objects • Destructor	**Classes and Objects** • Array of Objects • Passing/Returning objects • Destructor	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th** **chapter no: 10** **page no:**	

10	• Static Class Data • Constant and Classes • Constant Member Function • Constant Objects	• Static Class Data • Constant and Classes • Constant Member Function • Constant Objects	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 10 page no:**	**Quiz 01: Classes** **Date: April 13, 2020**
LAB	□ Programming Exercise	□ Programming Exercise		

WEEK – 6

Lecture	TOPICS	Content delivered	Reference source	Comments
11	**Inheritance** • Derived and Base Classes. • Derived Class Constructors • Protected Specifier • Overriding	**Inheritance** • Derived and Base Classes. • Derived Class Constructors • Protected Specifier • Overriding	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 12**	
			page no:	
12	• Overriding with • Scope Resolution overridden function	• Overriding • Scope Resolution with overridden function	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 12 page no:**	**Assignment 04:** Inheritance **Dead Line:** April 22, 2020

LAB	Programming Exercise	Programming Exercise		

WEEK – 7

Lecture	TOPICS	Content delivered	Reference source	Comments
13	**Levels of Inheritance** • Single Inheritance • Multilevel Inheritance	**Levels of Inheritance** • Single Inheritance • Multilevel Inheritance	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 12 page no:**	
14	• Multiple Inheritance • Containership	• Multiple Inheritance • Containership	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 12 page no:**	**Assignment 05:** Inheritance **Due Date:** May 06, 2020
LAB	Programming Exercise	Programming Exercise		

WEEK – 8

Lecture	TOPICS	Content delivered	Reference source	Comments

15	Object Oriented Designing/Modeling	Object Oriented Designing/Modeling	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 18 page no:**	
16	String Classes	String Classes	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 18 page no:**	
LAB	Programming Challenge	Programming Challenge		

WEEK – 9

Lecture	TOPICS	Content delivered	Reference source	Comments
17	**Operator Overloading** Unary Operator	**Operator Overloading** Unary Operator	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th**	

			chapter no: 11 page no:	
18	Binary Operator	Binary Operator	**Recommended Book /other:**	**Assignment 06:**
			C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 11 page no:**	Operator Overloading **Due Date:** May 18, 2020
LAB	Programming Exercise	Programming Exercise		

WEEK – 10

Lecture	TOPICS	Content delivered	Reference source	Comments
19	**Polymorphism** • Virtual Function • Inline Function • Static Function	**Polymorphism** • Virtual Function • Inline Function • Static Function	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 13 page no:**	

20	• Late and Early binding • Friend Function • Abstract Classes	• Late and Early binding • Friend Function • Abstract Classes	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 13 page no:**	**Assignment 07:** Polymorphism **Due Date:** May 27, 2020
LAB	□ Programming Exercise	□ Programming Exercise		

WEEK – 11

Lecture	TOPICS	Content delivered	Reference source	Comments
21	**Memory Management** • Use of New and Delete Keyword. • Pointer to Object	**Memory Management** • Use of New and Delete Keyword. • Pointer to Object	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 08 page no:**	
22	• Pointer to pointer • Array of Pointer to string	• Pointer to pointer • Array of Pointer to string	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th**	**Assignment 08:** Memory Management **Due Date:** June 04, 2020

			chapter no: 08 **page no:**	
LAB	Programming Exercise	Programming Exercise		

WEEK – 12

Lecture	TOPICS	Content delivered	Reference source	Comments
23	**Templates** Template Functions	**Templates** Template Functions	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th** **chapter no: 14** **page no:**	
24	Class Templates	Class Templates	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 14** **page no:**	**Assignment 09:** Templates **Due Date:** June 10, 2020
LAB	Programming Exercise	Programming Exercise		

WEEK – 13

Lecture	TOPICS	Content delivered	Reference source	Comments
25	**Exception Handling** • Exceptions syntax • Simple and Multiple Exceptions	**Exception Handling** • Exceptions syntax • Simple and Multiple Exceptions	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 16 page no:**	
26	Exceptions with arguments, Programming Exercise	Exceptions with arguments, Programming Exercise	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 16 page no:**	
LAB	Programming Exercise	Programming Exercise		

WEEK – 14

Lecture	TOPICS	Content delivered	Reference source	Comments
27	**Standard Template Library** Function Templates	**Standard Template Library** Function Templates	**Recommended Book /other:**	

	Class templates Vector Least De-queue	Class templates Vector Least De-queue	C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 07 page no:**	
28	Iterator Function Objects	Iterator Function Objects	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 07 page no:**	
LAB	Programming Exercise	Programming Exercise		

WEEK – 15

Lecture	TOPICS	Content delivered	Reference source	Comments
29	**Files and Streams** • Streams, String I/O • Character I/O • Object I/O • I/O With Multiple Objects • File Pointers	**Files and Streams** • Streams, String I/O • Character I/O • Object I/O • I/O With Multiple Objects • File Pointers	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 15 page no:**	

30	• File Pointers • Disk I/O With Member Functions • Error Handling • Redirection of Input & Output • Command Line Arguments • Printer Output	• File Pointers • Disk I/O With Member Functions • Error Handling • Redirection of Input and Output • Command Line Arguments	**Recommended Book /other:** C++ How to Program, Harvey M. Deitel, Paul J. Deitel, **book edition: 7th chapter no: 15 page no:**	**Assignment 10:** File Handling **Due Date:** June 19th, 2020
		• Printer Output		
LAB	• Programming Exercise	• Programming Exercise		

WEEK – 16

Lecture	TOPICS	Content delivered	Reference source	Comments
29-30	**Project Demos and Viva**	**Project Demos and Viva**	**Recommended Book /other: book edition: chapter no: page no:**	

<table>
<tr><th colspan="7">COURSE READINESS</th></tr>
<tr><td>Subject Title:</td><td colspan="2">Software Engineering</td><td colspan="2">Course code</td><td colspan="2">CS-452</td></tr>
<tr><td>Semester</td><td colspan="2">BSIT</td><td colspan="2">Department</td><td colspan="2">IT</td></tr>
<tr><td>Course Introduction</td><td colspan="6">Software engineering is a field of study related to all aspects of the software life cycle, covering the problem analysis, design, implementation, modification and maintenance of software. This course is intended to provide the students with an overall view of Software Engineering as an engineering discipline and with insight into the processes of software development
.</td></tr>
<tr><td>Learning Objective</td><td colspan="6">• To understand the phases and activities of the software development process. □ To understand how to elicit requirements from a client and specify them.
• To create a project plan
• To create and analyze design models
• To learn various quality assurance techniques, including unit testing and functional testing.
• To apply the appropriate software methods for maintaining, restructuring available software and managing software development.</td></tr>
<tr><td>Recommended Textbook</td><td colspan="6">• Software Engineering: A Practitioner’s Approach, By R. S. Pressman, 8th Edition, 2010.
• Software Engineering, By Ian.Sommerville, 9th Edition ,2010.
Software Requirements, Wiegers K. &Beatty J., 3rd Ed. Microsoft Press, 2013</td></tr>
<tr><td rowspan="2">Grading System (Weighted Percentages) Percentage is divided based on total marks 60</td><td>Assignments</td><td>8%</td><td>Projects</td><td>5%</td><td>Midterm Exam</td><td>20%</td></tr>
<tr><td>Quizzes</td><td>5%</td><td>Presentations</td><td></td><td>Final Term Exam
Lab Practical</td><td>50%
20%</td></tr>
</table>

Other Rules	The quizzes will be unannounced and normally conduct in last 5-10 minutes. The question framed is to test the concepts involved in the last few lectures and/or reading assignments. It will be the instructor's will to choose the number of quizzes for evaluations purposes.			
	In order to give practice and comprehensive understanding of subject, home assignments will be given. The students are advised to do the assignment themselves. Copying of assignment is highly discouraged and taken as cheating case and will be forwarded for disciplinary action. The questions in assignments are more challenging to give students the confidence and extensive knowledge about the subject and enable them to prepare for the exams.			
Logistics	Class Time	Tuesday 10:00-11:30 Wednesday 10:00-11:30	Consulting Hours	3 hours
	Venue	Online classes (Google class room and zoom lecture)	Contact Information	Zainab.mehmood@gim.edu.pk 03016243297

Lesson Plan

WEEK-1

Lecture	TOPICS	Content delivered	Reference source	Assignment/Quiz/Class Activity
1	Introduction to Software	▪ Nature of Software ▪ Software Applications ▪ Problems of Software Industry Software Engineering	Chapter 1 of Book Software Engineering A Practitioner's Approach By Roger S. Pressman 8th Edition	
2	Software Engineering	Software Engineering ▪ Software Process ▪ Software Process Framework Umbrella Activities	Chapter 2 of Book Software Engineering A Practitioner's Approach By Roger S. Pressman 8th Edition	

WEEK – 2

Lecture	TOPICS	Content delivered	Reference source	Assignment/Quiz/Class Activity
3	**Software Process**	• Software Process and Structure ▪ Generic Process Model • Identifying Task Test ▪ Process Assessment and Improvements	Chapter 3 of Book Software Engineering A Practitioner's Approach By Roger S. Pressman 8th Edition	Class Quiz: Layers of Software Unique nature Mobapplications
4	Capability Maturity Model	▪ Process measurement ▪ The SEI Process Capability Maturity Model (CMMI) Process classification	**CMMI official website**	

WEEK – 3

Lecture	TOPICS	Content delivered	Reference source	Assignment/Quiz/Class Activity
5	**Software Process Model**	▪ Software Process Model ‣ Waterfall Model ‣ Prototype Model ‣ RAD Model	Chapter 4 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	

6	**Software Process Model**	▸ Evolutionary Model ▸ Unified Process Model	Chapter 4 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	

WEEK – 4

Lecture	TOPICS	Content delivered	Reference source	Assignment/Quiz/Class Activity
7	**Agile Development**	▪ Agility concepts and Models Extreme Programming Model (XP)	Chapter 5 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	
8	**Agile Development**	▪ SCRUM ▪ Adoptive software development ▪ Dynamic System Development	Chapter 5 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	Assignment: Software Process Models Comparison Due Date : 23-03-2020

WEEK – 5

Lecture	TOPICS	Content delivered	Reference source	Assignment/Quiz/Class Activity

9	Software Requirements Engineering	Software Requirements ▪ Functional and nonfunctional requirements ▪ User requirements ▪ System requirements The software Requirement document	Chapter 8 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	
10	Requirements engineering processes	▪ Feasibility Study ▪ Requirements Analysis ▪ Requirements Elicitation ▪ Requirements Specifications ▪ Requirements Validation Requirements Management	Chapter 8 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	

WEEK – 6

Lecture	TOPICS	Content delivered	Reference source	Assignment/Quiz/Class Activity
11	**Software Requirement Specification**	SRS Development	Chapter 8 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	Assignment: Vision and Scope Document Due Date 02-04-2020

12	**Software Requirement Specification**	Data Modeling ▪ Uses Case Design ▪ Use case table ▪ Use Case Diagrams	Chapter 5 of book Software engineering by Ian Sommerviille 9th edition	**Assignment:** **11-04-2020**

WEEK – 7

Lecture	TOPICS	Content delivered	Reference source	Assignment/Quiz/Class Activity
13	**State Transition Diagram**	• STD Fundamentals • Design STD,	Chapter 5 of book Software engineering by Ian Sommerviille 9th edition	
14	Data Flow Diagram	• Data Flow Diagram fundamentals • Rules of DFD • Levels of DFD • Context level DFD	Chapter 5 of book Software engineering by Ian Sommerviille 9th edition	

WEEK – 8

Lecture	TOPICS	Content delivered	Reference source	Assignment/Quiz/Class Activity
15	Data Flow Diagram	• Level of DFD • Numbering of Levels • 0—level DFD • 1-Level DFD	Chapter 5 of book Software engineering by Ian Sommerviille 9th edition	Assignment: Design DFD Due Date 27-04-2020

16	Project Management	▪ Project Planning ▪ Project Scheduling	Chapter 33 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	
		Develop Project Plan		

WEEK – 9

Lecture	TOPICS	Content delivered	Reference source	Assignment/Quiz/Class Activity
17	**Software Project estimations**	Risk Management Software Project Estimation	Chapter 35 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	
18	**Software Project estimations**	Decomposition Techniques	Chapter 34 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	Quiz : Due Date 8-052020

WEEK – 11

Lecture	TOPICS	Content delivered	Reference source	Assignment/Quiz/Class Activity

19	Setting the Requirement Priorities	Why prioritizes requirements Game play with prioritizing requirements • Techniques for prioritizing requirements (In-Out, Pair Wise Comparisons, Three level, MoSCoW, $100)	**Recommended Book/other:** *Software Requirement Engineering by Wiegers K* **book edition:** *3rd edition* **chapter no:16 page no:314-321** Attach slides copy with reference source	
20	Setting the Requirement Priorities	Prioritization Based on Value Cost And Risk	**Recommended Book/other:** *Software Requirement Engineering by Wiegers K* **book edition:** *3rd edition* **chapter no:16 page no:322-327** Attach slides copy with reference source	**Assignment : Estimate software Project Cost 22-05-2020**

WEEK – 12

Lecture	TOPICS	Content delivered	Reference source	Comments
21	Chapter 16 Setting the Requirement Priorities	• Prioritization Based on Value Cost And Risk	**Recommended Book/other:** *Software Requirement Engineering by Wiegers K* **book edition:** *3rd edition*	

			chapter no:16 page no:322-327 Attach slides copy with reference source	
22	Chapter 17 Validating the Requirements	V Model of software Development Validation Vs Verification How they V VS V is different Reviewing the requirements	**Recommended Book/other:** *Software Requirement Engineering by Wiegers K* **book edition:** *3rd edition* **chapter no:16 page no:329-336** Attach slides copy with reference source	**Quiz-** Validating the Requirements June 04-06-2020

WEEK – 13

Lecture	TOPICS	Content delivered	Reference source	Comments
23	User Interface Design	▪ Interface Importance ▪ Design Concepts ▪ Golden Rules of User Interface Interface Designing Activities	Chapter 7 of Book Human Computer Interaction by Alan Dix Book	

24	Software Testing	▪ Test Case Design ▪ White-Box Testing Basis Path Testing	Chapter 23 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	

WEEK – 14

Lecture	TOPICS	Content delivered	Reference source	Comments
25	Software Testing	▪ Control Structure Testing Black-Box Testing	Chapter 24 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	
26	Software Re-engineering	▪ Software Reengineering ▪ Source code translation Reverse engineering	Chapter 36 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	**Assignment Design** **Test Case** **24-06-2020**

WEEK – 15

Lecture	TOPICS	Content delivered	Reference source	Comments
27		▪ Program structure improvement ▪ Program modularization Data re-engineering	Chapter 36 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	
28		▪ Software Architecture Design ▸ System Structuring Control models	Chapter 36 of Book Software Engineering A Practitioner's Approach by Roger S. Pressman 8th Edition	

WEEK – 16

Lecture	TOPICS	Content delivered	Reference source	Comments

29	Revision		**Recommended Book/other: book edition: chapter no: page no:** Attach slides copy with reference source	
30	Revision		**Recommended Book/other: book edition: chapter no: page no:** Attach slides copy with reference source	

Annexure E: Survey for Teaching Method Evaluation

Online Class Report

Instructor Name:	**Department/Course:**	**Class:**

Week	**Date**	**Lecture**	**Arrival Time**			**Leave Time**		
3			On time ☐	Late ☐	Specify time:	On time ☐	Before ☐	Specify time:
Day 02			On time ☐	Late ☐	Specify time:	On time ☐	Before ☐	Specify time:
Day 03			On time ☐	Late ☐	Specify time:	On time ☐	Before ☐	Specify time:

Day: 01	**Date:**	**Class:**	
Instructor Attitude/Behavior			
Mobile Use	Once ☐	Thrice ☐	Number of times ☐	Comments:
Sitting on chair	Once ☐	Thrice ☐	Number of times ☐	Comments:
Eating	Once ☐	Thrice ☐	Number of times ☐	Comments:
Class Environment			
Students are desciplined	Never ☐	Some time ☐	All the time ☐	Comments:
Student's Group activity	Never ☐	Some time ☐	All the time ☐	Comments:
Instructor maintained formal attiude	Never ☐	Some time ☐	All the time ☐	Comments:

Day: 02		**Date:**		**Class:**
Instructor Attitude/Behavior				
Mobile Use	Once ☐	Thrice ☐	Number of times ☐	Comments:
Sitting on chair	Once ☐	Thrice ☐	Number of times ☐	Comments:
Eating	Once ☐	Thrice ☐	Number of times ☐	Comments:
Class Environment				
Students are desciplined	Never ☐	Some time ☐	All the time ☐	Comments:
Student's Group activity	Never ☐	Some time ☐	All the time ☐	Comments:
Instructor maintained formal attiude	Never ☐	Some time ☐	All the time ☐	Comments:

Day: 03		**Date:**		**Class:**
Instructor Attitude/Behavior				
Mobile Use	Once ☐	Thrice ☐	Number of times ☐	Comments:
Sitting on chair	Once ☐	Thrice ☐	Number of times ☐	Comments:
Eating	Once ☐	Thrice ☐	Number of times ☐	Comments:
Class Environment				
Students are desciplined	Never ☐	Some time ☐	All the time ☐	Comments:
Student's Group activity	Never ☐	Some time ☐	All the time ☐	Comments:
Instructor maintained formal attiude	Never ☐	Some time ☐	All the time ☐	Comments:

_____ Verified by

CMO Signature | Quality Enhancement Department (QED)

Performa for Teacher's Work Evaluation

Start Date: _____ **End Date:** _____

Instructor's Name: _____ **Course No:** _____

Class/Section: _____ **Name of Subject:** _____

Sr. No.	Percentage of Course Executed	Instructor Feedback	Reason (if not taken)	Cross Observation
1	Number of Assignments taken			
2	Number of Assignments taken			
3	Number of Presentation taken			
4	Number of Assignments marked			
5	Number of Assignments marked			
6	Number of Presentation marked			
7	Percentage of marks uploaded on sessional sheets/portal			
8	Any other activity done in the class			
9	Number of classes/labs taken			
10	Percentage of Content covered/highlighted			

Date: _____ **Verified by:** _____

Instructor Feedback:

Observer Feedback:

QED Feedback:

dback:

Date: _____ **Verified by:** _____

Survey for Enhancing Quality of Education

Instructor Name		**Department**	
subjects currently teaching			
1.	Subject in nature	□ Theoretical	□ Practical
Practical application:			
Does this subject meet the needs and expectations of industry?			
2.	Subject in nature	□ Theoretical	□ Practical
Practical application:			
Is this subject meets the need and expectations of industry?			
3.	Subject in nature	□ Theoretical	□ Practical
Practical application:			
Is this subject meets the need and expectations of industry?			
4.	Subject in nature	□ Theoretical	□ Practical
Practical application:			
Is this subject meets the need and expectations of industry?			
How quality graduates can be produced who would meet the expectations of employer in terms of the knowledge, skills, and competencies?			
Do you think, you are delivering updated knowledge?			
What mechanism do you suggest towards achieving learning outcomes of a given study program			
How do you define a good quality teacher			

What strategies do you generally use in class while teaching as how you clarify the concepts that you teach to your students?
How do you relate disciplinary knowledge to other subject areas?
Is this way working for students to make them clear?
How do you apply theoretical knowledge from discipline to practical situation?
What have you done to keep yourself up to date with developments in your subject area?
Do you plan your teaching in accordance to achieve the desire objectives?
What do you consider to be the key elements of teaching a successful lesson?
How many steps do you follow for planning a lesson? Can you give me an example of a lesson to which you consider good, and you are asked to repeat that lesson then what would you do to make that different?
What is your opinion about the use of modern instructional techniques in teaching relevant to your subject area?
Are these techniques beneficial for students?
Do you know the specific uses of technology in your discipline?
How you find technological resources specific to discipline?

Like is there any subject which you consider incomplete in teaching or learning if you do not use them?
Enlist technological tools use in your subject area
Suggestions..?

Annexure F: FYP Policy and Rubric

Gujrat Institute of Management Sciences
PMAS-Arid Agriculture University RWP
PROJECT MANAGEMENT OFFICE
Faculty of Computer Science & IT

SUPERVISOR CERTIFICATE FOR FYP PROPOSAL DEFENCE

(SUPERVISOR'S DETAIL)

SUPERVISOR NAME:		PROJECT ID: (To be filled by PMO)	
PROJECT TITLE:			
EMAIL ID:		CELL NO#	
ENTITLED AS:	☑ Permanent Visiting	DESIGNATION:	

(STUDENT'S DETAIL)

No.	NAME	ROLL NO	EMAIL	CELL	DEPT & BATCH (e.g. IT Fall-2017)
1					
2					
3					

(PROJECT'S DETAIL)

SUPERVISOR'S COMMENTS ABOUT PROJECT AND STUDENTS	

SUPERVISOR SIGNATURE

DATE:

PMO SIGNATURE

DATE:

Gujrat Institute of Management Sciences
PMAS-Arid Agriculture University RWP
PROJECT MANAGEMENT OFFICE
Faculty of Computer Science & IT

SUPERVISOR CERTIFICATE FOR FINAL EVALUATION
(SUPERVISOR'S DETAIL)

SUPERVISOR NAME:		**PROJECT ID:** (To be filled by PMO)	
PROJECT TITLE:			

(PROJECT DETAILS)

No.	Document Requirements	Progress		Your comments if any
1	Chapter 4 (Testing) of Documentation is updated and checked by your good self?	☐ Full Complete ☐ Partial Complete ☐ Not Complete		
2	Chapter 5 (User Manual) of Documentation is updated and checked by your good self?	☐ Full Complete ☐ Partial Complete ☐ Not Complete		
3	Are you satisfied that students have code the project by their own?	☐ Full Satisfied ☐ Partial Satisfied ☐ Not Satisfied		
4	What Grade do you recommend to committee according to your Evaluation of Project?	**Roll No**	**Grade**	

(STUDENTS CONTRIBUTION)

	Student's Roll #	Comments about Student
Supervisor's comments about students		
Supervisor's Comments about project's progress and general feedback		

SUPERVISOR SIGNATURE

DATE: _____

PMO SIGNATURE

DATE: _____

Gujrat Institute of Management Sciences
PMAS -Arid Agriculture University RWP
Department of Computer Science & IT

FYP Proposal Evaluation: ☑ BSCS ☐ BSIT ☐ MCS

Students	Reg.#	Name

Project ID: GIMS-BSCS-F2017
Date: _____
Time: _____
Venue: _____

Project Title	
Supervisor:	**Evaluators:**

Instructions: Please give minimum 15 minutes to each group. Use extra sheet if need to write more comments
Things to evaluate: Project Idea, Scope, Feasibility, Objectives, Proposal Documentation

Evaluation	Grade/Comment (A=excellent, B= v. good, C=good, D=average, E=poor)
Problem Identification and Understanding	
Scope	
Feasibility Study	
Objectives	
Documentation	
Committee's Q/A Defense	
Approval Decision (A=approved, B= conditionally approved*, C= Deferred**, D=Not approved***)	

**Minor changes in the proposal mentioned in the comment section are communicated to the supervisor. Supervisor is responsible for accommodating these changes.*
***If major changes are required in the proposal, proposal is deferred and students have to present formally once again before the panel.*
**** students have to present formally once again before the panel with a new proposal idea.*

Evaluator Name	Comments (mandatory, if approval decision is B,C or D)	Signature

_____
PMO CS&IT - GIMS

Gujrat Institute of Management Sciences
PMAS -Arid Agriculture University RWP
Department of Computer Science & IT
Mid Evaluation Form

☑ BSCS ☐ BSIT ☐ MCS

Project ID: _____ **Date:** _____
Time: _____ **Venue:** _____

Project Title:	
Supervisor:	**Evaluators:**

Instructions: -Please give minimum 20 minutes to each group.
-Evaluate each student individually.
-Use back sheet if need to write more comments

Things to evaluate: -UML as per accepted proposal ,Project diagrams, Presentation, Chapter 1 (Introduction) , Chapter (Req. & Analysis), Chapter 3

Sr. #	Reg.#	Name	Ch. 1 5 marks	Ch. 2 5 marks	Ch.3 10 marks	Doc. 5 marks	Total 25(5+5+10+5)
1							
2							
3							

Evaluator Name	Comments	Signature

_____
PMO | CS & IT
GIMS

Gujrat Institute of Management Sciences
PMAS -Arid Agriculture University RWP
Department of Computer Science & IT
Final Evaluation Form

☑ BSCS ☐ BSIT ☐ MCS **Status:** ☐ Passed ☐ Deferred

Project ID: **Date:**_____ **Time:** _____ **Venue:** _____

Project Title:	**Supervisor:**
	Evaluators:

Instructions: -Please give minimum 30 minutes to each group.
-Evaluate each student individually.
-Use back sheet if need to write more comments

Things to Evaluate: -Functional/Non-Functional Requirments, Test Cases (**Ch. 4**), User manual (**Ch. 5**), Doc. Formatting (**Doc**), Coding , demonstration and viva-voce

Sr. #	Student Reg.#	Student Name	Ch. 4 10	Ch. 5 5	Functional/Non Functional Requirements--80 marks			Sub-Total 95 (15+80)	Mid-Term 25	Total 120 (95+25)
			15 marks		Code (40)	Viva(30)	Demo (10)			
1										
2										
3										

Evaluator Name	Comments	Signature

_____
Campus Head
GIMS

Annexure F: Teacher and Course Evaluation

Instructor Name: Mr. Bilal Tariq Butt
Course: CS-584 System Administration

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The Instructor is prepared for each class.	94%	6%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	94%	6%	0%	0%	0%
The Instructor has completed the whole course.	88%	12%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	85%	15%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	97%	3%	0%	0%	0%
The Instructor communicates the subject matter effectively.	91%	9%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	88%	9%	0%	3%	0%
The Instructor maintains an environment that is conducive to learning.	94%	6%	0%	0%	0%
The Instructor arrives on time.	91%	9%	0%	0%	0%
The Instructor leaves on time.	85%	6%	0%	3%	6%
The Instructor returns the graded scripts etc, in a reasonable amount of time.	91%	6%	3%	0%	0%
The Instructor was available during the specified office hours and for after class consultations.	88%	9%	0%	0%	3%
The Subject matter presented in the course has increased your knowledge of the subject.	97%	3%	0%	0%	0%
The syllabus clearly states course objectives requirements, procedures and grading criteria.	91%	9%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	88%	12%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	94%	6%	0%	0%	0%
The course material is modern and updated	91%	9%	0%	0%	0%

Instructor Name: Mr. Farhat Mehmood
Course: CS-684 Network Management and Security

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The Instructor is prepared for each class.	96%	0%	4%	0%	0%
The Instructor demonstrates knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor has completed the whole course.	81%	7%	7%	4%	0%
The Instructor provides additional material apart from the textbook.	93%	0%	4%	4%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	89%	4%	4%	0%	4%
The Instructor communicates the subject matter effectively.	93%	4%	0%	4%	0%
The Instructor shows respect towards students and encourages class participation	93%	0%	4%	0%	4%
The Instructor maintains an environment that is conducive to learning.	89%	7%	4%	0%	0%
The Instructor arrives on time.	100%	0%	0%	0%	0%
The Instructor leaves on time.	89%	4%	0%	0%	7%
The Instructor returns the graded scripts etc, in a reasonable amount of time.	93%	4%	4%	0%	0%
The Instructor was available during the specified office hours and for after class consultations.	93%	4%	4%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	93%	4%	4%	0%	0%
The syllabus clearly states course objectives requirements, procedures and grading criteria.	93%	4%	0%	0%	4%
The course integrates theoretical course concepts with real-world applications.	93%	4%	4%	0%	0%
The assignments and exams covered the materials presented in the course.	89%	4%	4%	0%	4%
The course material is modern and updated	96%	0%	4%	0%	0%

Instructor Name: Mr. Faizan ul Mustafa
Course: CS-566 Web Technologies

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The Instructor is prepared for each class.	67%	21%	9%	0%	3%
The Instructor demonstrates knowledge of the subject.	67%	30%	3%	0%	0%
The Instructor has completed the whole course.	70%	12%	6%	12%	0%
The Instructor provides additional material apart from the textbook.	67%	9%	9%	9%	6%
The Instructor gives citations regarding current situations with reference to Pakistani context.	70%	12%	15%	0%	3%
The Instructor communicates the subject matter effectively.	70%	18%	12%	0%	0%
The Instructor shows respect towards students and encourages class participation	88%	9%	3%	0%	0%
The Instructor maintains an environment that is conducive to learning.	73%	24%	3%	0%	0%
The Instructor starts the zoom lecture/class on time.	73%	0%	12%	9%	6%
The Instructor ends the zoom lecture/class on time.	73%	6%	9%	6%	6%
The instructor has completed all classes regularly.	70%	9%	6%	9%	6%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	73%	12%	6%	3%	6%
The Subject matter presented in the course has increased your knowledge of the subject.	73%	12%	12%	3%	0%
The Instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	76%	9%	12%	0%	3%
The course integrates theoretical course concepts with real-world applications.	76%	15%	6%	3%	0%
The assignments and exams covered the materials presented in the course.	64%	24%	6%	6%	0%
The course material is modern and updated	76%	15%	3%	3%	3%

Instructor Name: Mr. Shahan Arif
Course: CS-666 Web Engineering

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The Instructor is prepared for each class.	68%	14%	7%	11%	0%
The Instructor demonstrates knowledge of the subject.	61%	14%	18%	7%	0%
The Instructor has completed the whole course.	75%	21%	0%	4%	0%
The Instructor provides additional material apart from the textbook.	57%	11%	11%	11%	11%
The Instructor gives citations regarding current situations with reference to Pakistani context.	61%	14%	4%	11%	11%
The Instructor communicates the subject matter effectively.	57%	14%	7%	7%	14%
The Instructor shows respect towards students and encourages class participation	57%	14%	7%	7%	14%
The Instructor maintains an environment that is conducive to learning.	64%	14%	7%	7%	7%
The Instructor starts the zoom lecture/class on time.	79%	11%	4%	7%	0%
The Instructor ends the zoom lecture/class on time.	68%	18%	11%	4%	0%
The instructor has completed all classes regularly.	75%	14%	0%	7%	4%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	71%	11%	0%	14%	4%
The Subject matter presented in the course has increased your knowledge of the subject.	79%	4%	4%	14%	0%
The Instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	71%	18%	7%	4%	0%
The course integrates theoretical course concepts with real-world applications.	68%	18%	4%	7%	4%
The assignments and exams covered the materials presented in the course.	79%	18%	0%	4%	0%
The course material is modern and updated	79%	14%	0%	7%	0%

Instructor Name: Mr./ Ms. Mehwashma Amir
Course: CS-400 Database System

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The Instructor is prepared for each class.	88%	6%	6%	0%	0%
The Instructor demonstrates knowledge of the subject.	85%	9%	6%	0%	0%
The Instructor has completed the whole course.	88%	12%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	76%	12%	9%	3%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	79%	12%	9%	0%	0%
The Instructor communicates the subject matter effectively.	82%	18%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	91%	3%	6%	0%	0%
The Instructor maintains an environment that is conducive to learning.	85%	12%	3%	0%	0%
The Instructor starts the zoom lecture/class on time.	91%	6%	3%	0%	0%
The Instructor ends the zoom lecture/class on time.	82%	15%	3%	0%	0%
The instructor has completed all classes regularly.	88%	6%	3%	3%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	88%	6%	6%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	85%	12%	3%	0%	0%
The Instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	85%	6%	9%	0%	0%
The course integrates theoretical course concepts with real-world applications.	85%	12%	3%	0%	0%
The assignments and exams covered the materials presented in the course.	88%	12%	0%	0%	0%
The course material is modern and updated	82%	18%	0%	0%	0%

Instructor Name: Mr. Usman Ahmad
Course: CS-471 Mobile Computing

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The Instructor is prepared for each class.	87%	10%	3%	0%	0%
The Instructor demonstrates knowledge of the subject.	87%	10%	0%	3%	0%
The Instructor has completed the whole course.	93%	3%	0%	0%	3%
The Instructor provides additional material apart from the textbook.	93%	3%	0%	0%	3%
The Instructor gives citations regarding current situations with reference to Pakistani context.	90%	3%	0%	0%	7%
The Instructor communicates the subject matter effectively.	93%	3%	0%	0%	3%
The Instructor shows respect towards students and encourages class participation	90%	7%	0%	0%	3%
The Instructor maintains an environment that is conducive to learning.	90%	7%	0%	3%	0%
The Instructor starts the zoom lecture/class on time.	90%	3%	3%	3%	0%
The Instructor ends the zoom lecture/class on time.	90%	3%	7%	0%	0%
The instructor has completed all classes regularly.	90%	7%	0%	0%	3%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	90%	7%	0%	3%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	93%	7%	0%	0%	0%
The Instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	87%	7%	3%	0%	3%
The course integrates theoretical course concepts with real-world applications.	93%	7%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	90%	7%	0%	0%	3%
The course material is modern and updated	93%	3%	3%	0%	0%

Instructor Name: Mr. Nauman Bin Nasir
Course: CS-583 Operating System

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The Instructor is prepared for each class.	89%	11%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	89%	8%	3%	0%	0%
The Instructor has completed the whole course.	86%	11%	3%	0%	0%
The Instructor provides additional material apart from the textbook.	84%	16%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	84%	14%	3%	0%	0%
The Instructor communicates the subject matter effectively.	86%	14%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	89%	11%	0%	0%	0%
The Instructor maintains an environment that is conducive to learning.	92%	8%	0%	0%	0%
The Instructor starts the zoom lecture/class on time.	89%	11%	0%	0%	0%
The Instructor ends the zoom lecture/class on time.	86%	14%	0%	0%	0%
The instructor has completed all classes regularly.	92%	8%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	92%	8%	0%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	86%	14%	0%	0%	0%
The Instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	86%	14%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	89%	8%	3%	0%	0%
The assignments and exams covered the materials presented in the course.	92%	8%	0%	0%	0%
The course material is modern and updated	86%	14%	0%	0%	0%

Instructor Name: Ms. Zainab Mehmood
Course: CS-552 Software Engineering II

Teacher Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The Instructor is prepared for each class.	93%	7%	0%	0%	0%
The Instructor demonstrates knowledge of the subject.	97%	3%	0%	0%	0%
The Instructor has completed the whole course.	93%	7%	0%	0%	0%
The Instructor provides additional material apart from the textbook.	97%	3%	0%	0%	0%
The Instructor gives citations regarding current situations with reference to Pakistani context.	93%	7%	0%	0%	0%
The Instructor communicates the subject matter effectively.	93%	7%	0%	0%	0%
The Instructor shows respect towards students and encourages class participation	97%	3%	0%	0%	0%
The Instructor maintains an environment that is conducive to learning.	97%	3%	0%	0%	0%
The Instructor starts the zoom lecture/class on time.	93%	7%	0%	0%	0%
The Instructor ends the zoom lecture/class on time.	100%	0%	0%	0%	0%
The instructor has completed all classes regularly.	100%	0%	0%	0%	0%
The instructor posts the assignments/quizzes on time and give reasonable time to complete the assigned assignments/quizzes.	97%	0%	3%	0%	0%
The Subject matter presented in the course has increased your knowledge of the subject.	100%	0%	0%	0%	0%
The Instructor was available during the specified hours on WhatsApp/Zoom/LMS/Google classroom for consultation.	97%	3%	0%	0%	0%
The course integrates theoretical course concepts with real-world applications.	93%	7%	0%	0%	0%
The assignments and exams covered the materials presented in the course.	100%	0%	0%	0%	0%
The course material is modern and updated	93%	7%	0%	0%	0%

Instructor Name: Ms. Mehvashma Amir
Course: CS-652 Software Project Management

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear!	97%	0%	3%	0%	0%
The Course workload was manageable!	97%	0%	3%	0%	0%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	94%	3%	3%	0%	0%
Approximate level of your own attendance during the whole Course	97%	3%	0%	0%	0%
I participated actively in the Course	94%	3%	3%	0%	0%
I think I have made progress in this Course	100%	0%	0%	0%	0%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	94%	3%	3%	0%	0%
The learning and teaching methods encouraged participation.	94%	3%	3%	0%	0%
The overall environment in the class was conducive to learning.	100%	0%	0%	0%	0%
Classrooms were satisfactory	94%	3%	3%	0%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	97%	3%	0%	0%	0%
Recommended reading Books etc. were relevant and appropriate	94%	3%	3%	0%	0%
The provision of learning resources in the library was adequate and appropriate	100%	0%	0%	0%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant)	94%	3%	0%	3%	0%
The Course stimulated my interest and thought on the subject area	97%	0%	3%	0%	0%
The pace of the Course was appropriate	97%	3%	0%	0%	0%
Ideas and concepts were presented clearly	94%	3%	3%	0%	0%
The method of assessment were reasonable	97%	0%	3%	0%	0%
Feedback on assessment was timely	97%	3%	0%	0%	0%

Feedback on assessment was helpful	97%	3%	0%	0%	0%
I understood the lectures	97%	0%	0%	3%	0%
The material was well organized and presented	97%	3%	0%	0%	0%
The instructor was responsive to student needs and problems	91%	3%	6%	0%	0%
Had the instructor been regular throughout the course?	97%	3%	0%	0%	0%
The material in the tutorials was useful	97%	0%	0%	3%	0%
I was happy with the amount of work needed for tutorials	97%	3%	0%	0%	0%

Instructor Name: Mr. Bilal Tariq Butt
Course: CS-584 System And Network Administration

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear!	91%	3%	6%	0%	0%
The Course workload was manageable!	91%	3%	6%	0%	0%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	88%	3%	9%	0%	0%
Approximate level of your own attendance during the whole Course	88%	6%	6%	0%	0%
I participated actively in the Course	94%	3%	3%	0%	0%
I think I have made progress in this Course	94%	3%	3%	0%	0%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	91%	3%	6%	0%	0%
The learning and teaching methods encouraged participation.	94%	3%	0%	3%	0%
The overall environment in the class was conducive to learning.	94%	3%	0%	3%	0%
Classrooms were satisfactory	94%	3%	0%	3%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	94%	3%	0%	3%	0%
Recommended reading Books etc. were relevant and appropriate	94%	3%	3%	0%	0%
The provision of learning resources in the library was adequate and appropriate	91%	6%	3%	0%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant)	94%	3%	3%	0%	0%
The Course stimulated my interest and thought on the subject area	94%	3%	3%	0%	0%
The pace of the Course was appropriate	94%	3%	3%	0%	0%
Ideas and concepts were presented clearly	97%	0%	3%	0%	0%
The method of assessment were reasonable	97%	0%	3%	0%	0%
Feedback on assessment was timely	94%	0%	3%	3%	0%
Feedback on assessment was helpful	97%	0%	0%	3%	0%

I understood the lectures	100%	0%	0%	0%	0%
The material was well organized and presented	100%	0%	0%	0%	0%
The instructor was responsive to student needs and problems	94%	3%	3%	0%	0%
Had the instructor been regular throughout the course?	97%	0%	0%	0%	3%
The material in the tutorials was useful	94%	3%	3%	0%	0%
I was happy with the amount of work needed for tutorials	97%	3%	0%	0%	0%

Instructor Name: Mr. Usman Ahmad
Course: CS-443 Data Structures And Algorithms

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear!	78%	14%	5%	3%	0%
The Course workload was manageable!	84%	8%	8%	0%	0%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	92%	8%	0%	0%	0%
Approximate level of your own attendance during the whole Course	84%	11%	3%	0%	3%
I participated actively in the Course	81%	11%	3%	3%	3%
I think I have made progress in this Course	86%	8%	3%	0%	3%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	81%	14%	3%	0%	3%
The learning and teaching methods encouraged participation.	86%	11%	0%	3%	0%
The overall environment in the class was conducive to learning.	81%	14%	5%	0%	0%
Classrooms were satisfactory	81%	11%	8%	0%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	86%	11%	3%	0%	0%
Recommended reading Books etc. were relevant and appropriate	86%	11%	3%	0%	0%
The provision of learning resources in the library was adequate and appropriate	89%	5%	5%	0%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant)	92%	5%	3%	0%	0%
The Course stimulated my interest and thought on the subject area	86%	8%	3%	3%	0%
The pace of the Course was appropriate	89%	8%	0%	3%	0%
Ideas and concepts were presented clearly	84%	11%	3%	3%	0%
The method of assessment were reasonable	86%	11%	0%	3%	0%
Feedback on assessment was timely	84%	8%	8%	0%	0%
Feedback on assessment was helpful	86%	8%	3%	0%	3%

I understood the lectures	92%	8%	0%	0%	0%
The material was well organized and presented	89%	8%	3%	0%	0%
The instructor was responsive to student needs and problems	86%	8%	5%	0%	0%
Had the instructor been regular throughout the course?	89%	8%	3%	0%	0%
The material in the tutorials was useful	92%	5%	3%	0%	0%
I was happy with the amount of work needed for tutorials	86%	11%	3%	0%	0%

Instructor Name: Ms. Zainab Mehmood
Course: CS-552 Software Engineering-II

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear!	91%	8%	0%	2%	0%
The Course workload was manageable!	91%	8%	0%	2%	0%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	94%	5%	0%	2%	0%
Approximate level of your own attendance during the whole Course	91%	8%	0%	2%	0%
I participated actively in the Course	92%	6%	0%	2%	0%
I think I have made progress in this Course	91%	8%	0%	2%	0%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	92%	6%	0%	2%	0%
The learning and teaching methods encouraged participation.	92%	6%	0%	2%	0%
The overall environment in the class was conducive to learning.	92%	6%	0%	2%	0%
Classrooms were satisfactory	92%	5%	2%	2%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	91%	8%	0%	2%	0%
Recommended reading Books etc. were relevant and appropriate	91%	8%	0%	2%	0%
The provision of learning resources in the library was adequate and appropriate	92%	6%	0%	2%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant)	92%	6%	0%	2%	0%
The Course stimulated my interest and thought on the subject area	92%	6%	0%	2%	0%
The pace of the Course was appropriate	91%	8%	0%	2%	0%
Ideas and concepts were presented clearly	91%	8%	0%	2%	0%
The method of assessment were reasonable	92%	6%	0%	2%	0%
Feedback on assessment was timely	92%	6%	0%	2%	0%
Feedback on assessment was helpful	92%	6%	0%	2%	0%

I understood the lectures	92%	6%	0%	2%	0%
The material was well organized and presented	92%	6%	0%	2%	0%
The instructor was responsive to student needs and problems	91%	8%	0%	2%	0%
Had the instructor been regular throughout the course?	91%	8%	0%	2%	0%
The material in the tutorials was useful	92%	6%	0%	2%	0%
I was happy with the amount of work needed for tutorials	91%	8%	0%	2%	0%

Instructor Name: Ch. Nauman Bin Nasir
Course: CS-583 Operating System

Course Evaluation Summary					
S. A:(Strongly Agree) A:(Agree) UC:(Uncertain) D:(Disagree) S. D:(Strongly Disagree)					
Questions	**S. A**	**A**	**UC**	**D**	**S. D**
The course objectives were clear!	97%	3%	0%	0%	0%
The Course workload was manageable!	95%	5%	0%	0%	0%
The Course was well organized (e.g. timely access to materials, notification of changes, etc.)	97%	3%	0%	0%	0%
Approximate level of your own attendance during the whole Course	95%	5%	0%	0%	0%
I participated actively in the Course	95%	5%	0%	0%	0%
I think I have made progress in this Course	95%	5%	0%	0%	0%
I think the Course was well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)	95%	5%	0%	0%	0%
The learning and teaching methods encouraged participation.	95%	3%	3%	0%	0%
The overall environment in the class was conducive to learning.	95%	3%	3%	0%	0%
Classrooms were satisfactory	92%	3%	5%	0%	0%
Learning materials (Lesson Plans, Course Notes etc.) were relevant and useful.	95%	3%	3%	0%	0%
Recommended reading Books etc. were relevant and appropriate	97%	3%	0%	0%	0%
The provision of learning resources in the library was adequate and appropriate	97%	3%	0%	0%	0%
The provision of learning resources on the Web was adequate and appropriate (if relevant)	97%	3%	0%	0%	0%
The Course stimulated my interest and thought on the subject area	97%	3%	0%	0%	0%
The pace of the Course was appropriate	95%	5%	0%	0%	0%
Ideas and concepts were presented clearly	97%	3%	0%	0%	0%
The method of assessment were reasonable	95%	3%	3%	0%	0%
Feedback on assessment was timely	95%	5%	0%	0%	0%
Feedback on assessment was helpful	95%	5%	0%	0%	0%

I understood the lectures	97%	3%	0%	0%	0%
The material was well organized and presented	97%	3%	0%	0%	0%
The instructor was responsive to student needs and problems	92%	8%	0%	0%	0%
Had the instructor been regular throughout the course?	92%	8%	0%	0%	0%
The material in the tutorials was useful	97%	3%	0%	0%	0%
I was happy with the amount of work needed for tutorials	92%	5%	3%	0%	0%

Annexure G: Teacher feedback on Teacher and Course Evaluation

Performa 10/1: Teacher & Course Evaluation Feedback

Fall-2019

S. no	Instructor Name	Courses	Class	Remarks
1	Ms. Maryam Mushtaq	ENG-325 Communication and Presentation Skills	BS-IT(2nd)	S.A

Note: write your remarks as per the instructions i.e.

S.A:(Strongly Agree) **A**:(Agree) **UC**:(Uncertain) **D**:(Disagree) **S.D**:(Strongly Disagree)

Feedback:

Mention area of improvement: The course content was overall satisfactory.

Please give your suggestions for academic improvements: The maintenance of the portal is very important, so that, teachers can upload the marks of assignments and quizzes on portal side by side.

Maryam Mushtaq

_____

Signature

Zainab Mahmood

Member QED | Zainab Mahmood

Date: February Aug 28 ,2020

Performa 10/1: Teacher & Course Evaluation Feedback
Fall-2019

S. no	Instructor Name	Courses	Class	Remarks
2	Ms Zainab Memhmood	CS-685 Human Computer Interaction	BS-IT(6th)	A
		CS-453 Software Engineering	BS-IT(4th)	A
		SE-454 Software Requirement Engineering	BSIT (3rd)	A

Note: write your remarks as per the instructions i.e.

S.A:(Strongly Agree) **A**:(Agree) **UC**:(Uncertain) **D**:(Disagree) **S.D**:(Strongly Disagree)

Feedback:

Mention area of improvement: Need to adopt more tools and update meterial

Please give your suggestions for academic improvements:

To take good academic environment, we need to educate our students to learn by self and make their habit to work hard.

Zainab Mehmood

Zainab Mahmood

Member QED | Zainab Mahmood

Signature

Date: Aug 31, 2020

Performa 10/1: Teacher & Course Evaluation Feedback
Fall-2019

S. no	Instructor Name	Courses	Class	Remarks
3	Ms. Kanwal Shehzadi	MGT-411 Introduction to Management	BS-IT(2nd)	S.A
		MGT-515 Introduction to Human Resource Management	BS-IT(8th)	S.A

Note: write your remarks as per the instructions i.e.

S.A:(Strongly Agree) **A**:(Agree) **UC**:(Uncertain) **D**:(Disagree) **S.D**:(Strongly Disagree)

Feedback:

Mention area of improvement: Research based studies

Please give your suggestions for academic improvements:

Need some improvements in industry learning.

Kanwal Shehzadi

_____

Signature

Zainab Mahmood

Member QED | Zainab Mahmood

Date: Aug 28, 2020

Performa 10/1: Teacher & Course Evaluation Feedback
Fall-2019

S. no	Instructor Name	Courses	Class	Remarks
4	Mr. Faizan ul Mustafa	CS-566 Web Technologies	BS-IT(4th)	A
		CS-565 Web Design and Development	BS-IT(9th)	A

Note: write your remarks as per the instructions i.e.

S.A:(Strongly Agree) **A**:(Agree) **UC**:(Uncertain) **D**:(Disagree) **S.D**:(Strongly Disagree)

Feedback:

Mention area of improvement: As we have passed through pandemic situation, we both students and me faced difficulties, but student comments are very satisfactory

Please give your suggestions for academic improvements: All is fine so far

Faizan ul Mustafa

_____

Signature

Zainab Mahmood

Member QED | Zainab Mahmood

Date: Aug 28, 2020

Performa 10/1: Teacher & Course Evaluation Feedback
Fall-2019

S. no	Instructor Name	Courses	Class	Remarks
5	Mr. Abrar	CS-532 Computer Architecture	BS-IT(6th)	A

Note: write your remarks as per the instructions i.e.

S.A:(Strongly Agree) **A**:(Agree) **UC**:(Uncertain) **D**:(Disagree) **S.D**:(Strongly Disagree)

Feedback:

Mention area of improvement: Some students didn't take course serious, Overall experience is good

Please give your suggestions for academic improvements:

Student's non seriousness is the area of improvement. I should teach them in more interesting way to make all students serious.

Abrar

_____

Signature

Zainab Mahmood

Member QED | Zainab Mahmood

Date: Sep 10 , 2020

Performa 10/1: Teacher & Course Evaluation Feedback
Fall-2019

S. no	Instructor Name	Courses	Class	Remarks
6	Ms. Mehwashma Amir	CS-400 Database System	BSIT-(4th)	A
		CS-423Object Oriented Programming	BS-IT(2nd)	A

Note: write your remarks as per the instructions i.e.

S.A:(Strongly Agree) **A**:(Agree) **UC**:(Uncertain) **D**:(Disagree) **S.D**:(Strongly Disagree)

Feedback:

Mention area of improvement:

Need Improvement in practical and research work.

Please give your suggestions for academic improvements:

Research work should be implemented.

Mehwashma Amir

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Signature

Zainab Mahmood

Member QED | Zainab Mahmood

Date: Aug 28, 2020

Annexure H: Faculty Survey

Performa: 5 Faculty Survey Report (Fall 2019)

Department of CS/IT

S.no	Statements	VS	SA	UC	DS	VD
1	Your mix of research teaching and community service	25%	58.3%	8.3%	4.2%	4.2%
2	The intellectual stimulation of your work	20.8%	70.8%	4.2%	0%	4.2%
3	Type of teaching / research you currently do	33.3%	54.2%	8.3%	0%	4.2%
4	Your interaction with students	48.5%	37.5%	8.3%	0%	8.3%
5	Cooperation you receive form colleagues	41.7%	45.8%	8.3%	0%	4.2%
6	The mentoring (guidance) available to you	33.3%	25%	29.2%	4.2%	8.3%
7	Administrative support from the department	37.5%	41.7%	8.3%	4.2%	8.3%
8	Providing clarity about the faculty promotion process	16.7%	29.2%	37.5%	12.5%	4.2%
9	Your prospects for advancement and progress through ranks	12.5%	37.5%	37.5%	8.3%	4.2%
10	Salary and compensation package	12.5%	45.8%	25%	8.3%	8.3%
11	Job security and stability at the department	16.7%	45.8%	12%	8.3%	4.2%
12	Amount of time you have for yourself and family	12.5%	58.3%	16.7%	8.3%	4.2%
13	The overall climate at the department	25%	58.3%	8.3%	0%	8.3%
14	Whether the department is utilizing your experience and knowledge	25%	45.8%	12.5%	12.5%	4.2%

VS: Very Satisfied SA: Satisfied UC: Uncertain DS: Dissatisfied VD: Very Dissatisfied

Performa: 5 Faculty Survey Report-Fall 2020

Department of CS/IT

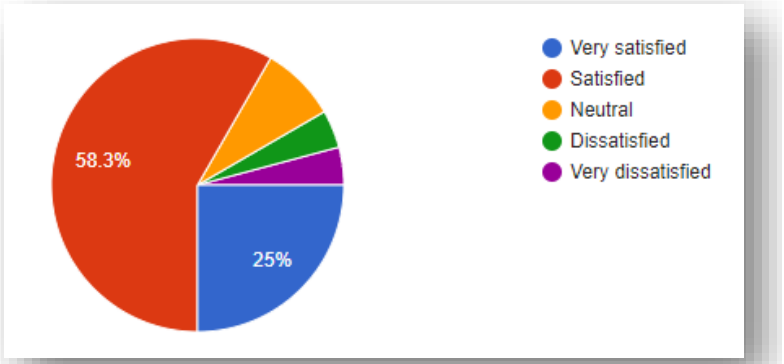
S.no	Statements	VS	SA	UC	DS	VD
1	Your mix of research teaching and community service	8.3%	66.7%	25%	0%	0%
2	The intellectual stimulation of your work	8.3%	83.3%	8.3%	0%	0%
3	Type of teaching / research you currently do	8.3%	83.3%	8.3%	0%	0%
4	Your interaction with students	25%	66.7%	8.3%	0%	0%
5	Cooperation you receive form colleagues	8.3%	66.7%	25%	0%	0%
6	The mentoring (guidance) available to you	33.3%	55.6%	5.6%	5.6%	0%
7	Administrative support from the department	8.3%	50%	41.7%	0%	0%
8	Providing clarity about the faculty promotion process	16.7%	66.7%	8.3%	8.3%	0%
9	Your prospects for advancement and progress through ranks	0%	33.3%	50%	16.7%	0%
10	Salary and compensation package	0%	58.3%	25%	16.7%	0%
11	Job security and stability at the department	0%	75%	25%	0%	0%
12	Amount of time you have for yourself and family	0%	75%	25%	0%	0%
13	The overall climate at the department	8.3%	75%	16.7%	0%	0%
14	Whether the department is utilizing your experience and knowledge	0%	83.3%	16.7%	0%	0%

VS: Very Satisfied SA: Satisfied UC: Uncertain DS: Dissatisfied VD: Very Dissatisfied

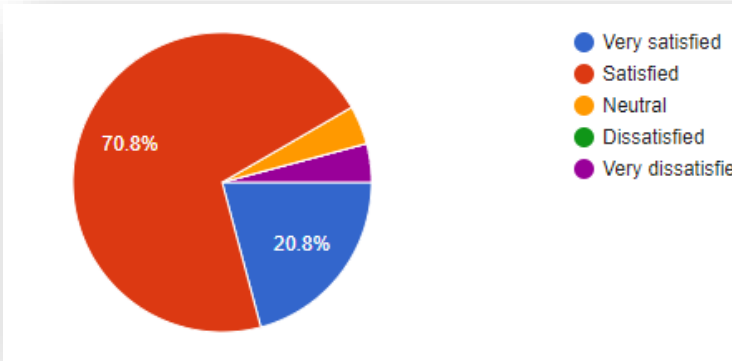
Performa: 5 Faculty Survey Report-Fall 2019

Department of CS/IT

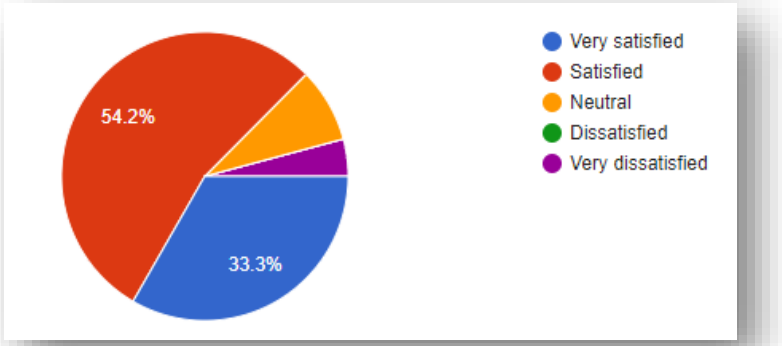
1. Your mix of research teaching and community service.



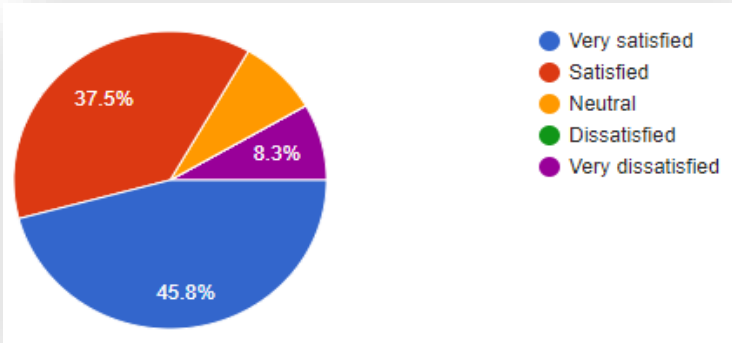
2. The intellectual stimulation of your work.



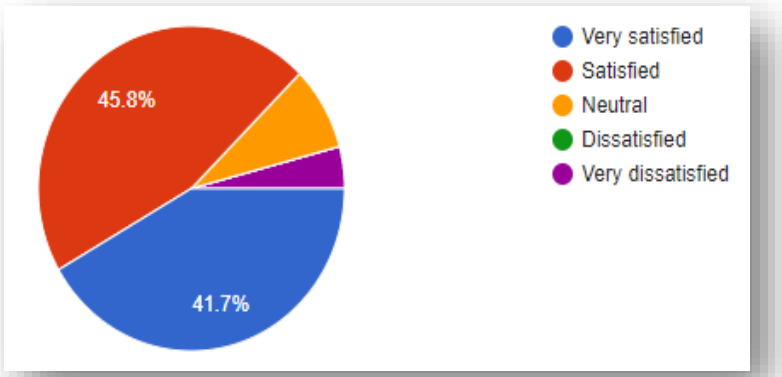
3. Type of teaching / research you currently doing.



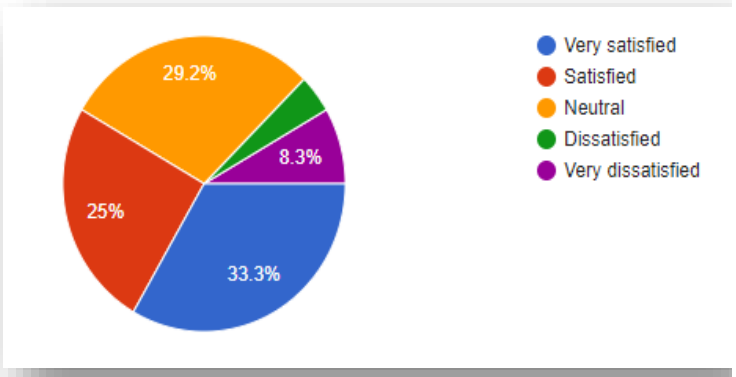
4. Your interaction with students.



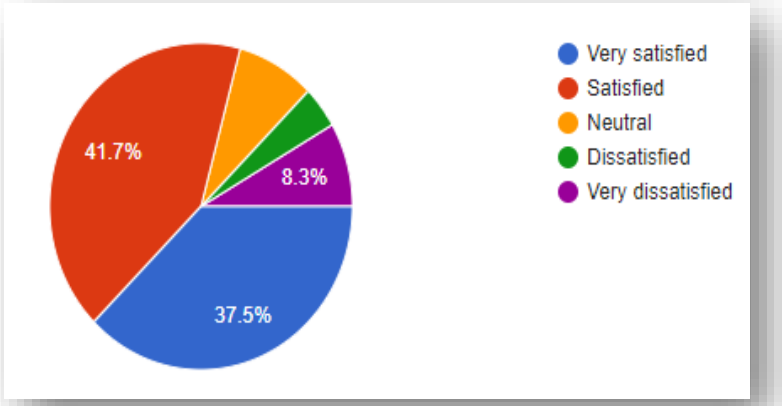
5. Cooperation you receive form colleagues.



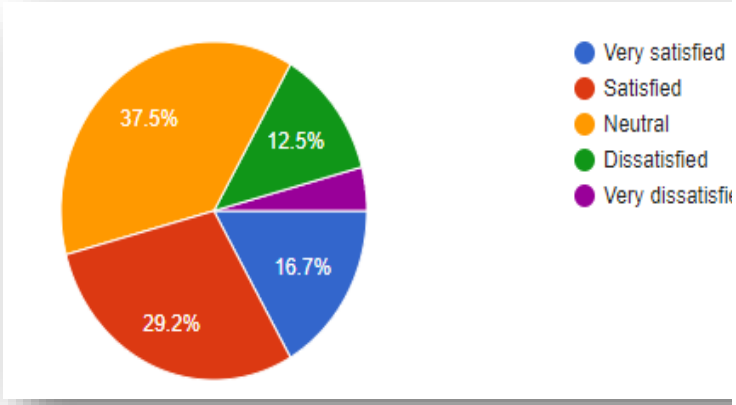
6. The mentoring (guidance) available to you.



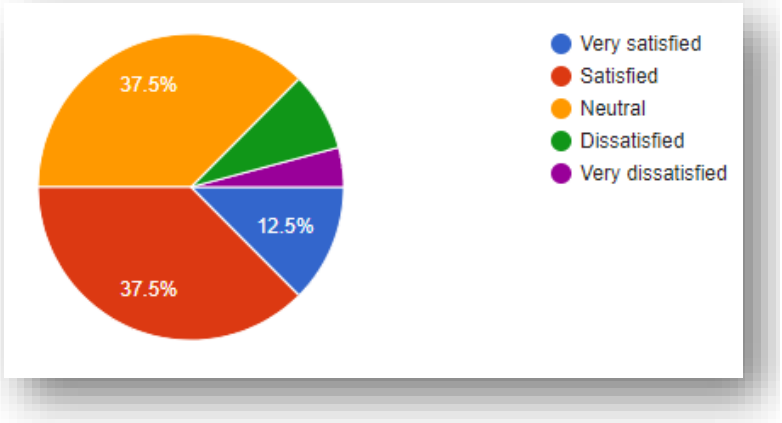
7. Administrative support from the department.



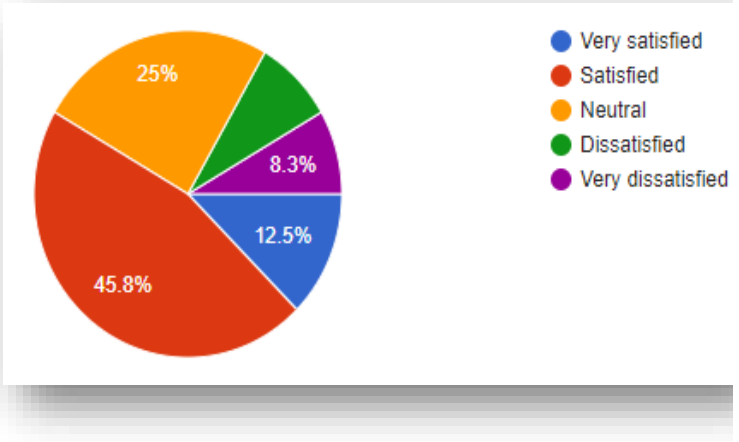
8. Providing clarity about the faculty promotion process.



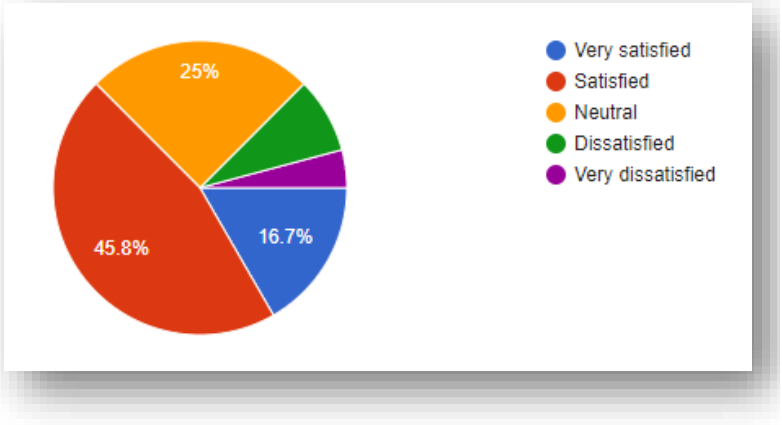
9. Your prospects for advancement and progress through ranks.



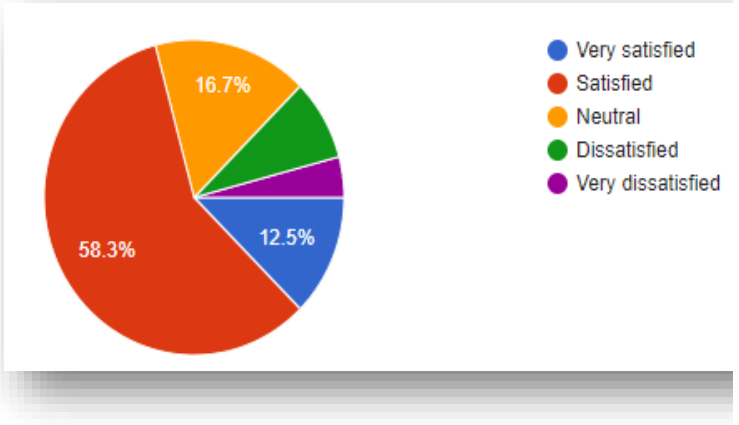
10. Salary and compensation package.



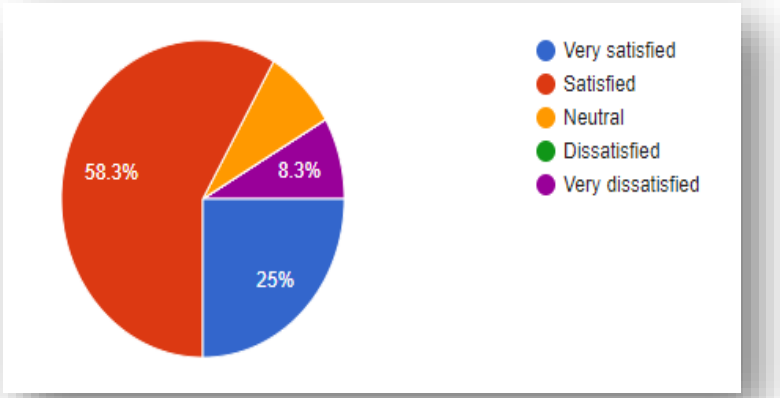
11. Job security and stability at the department.



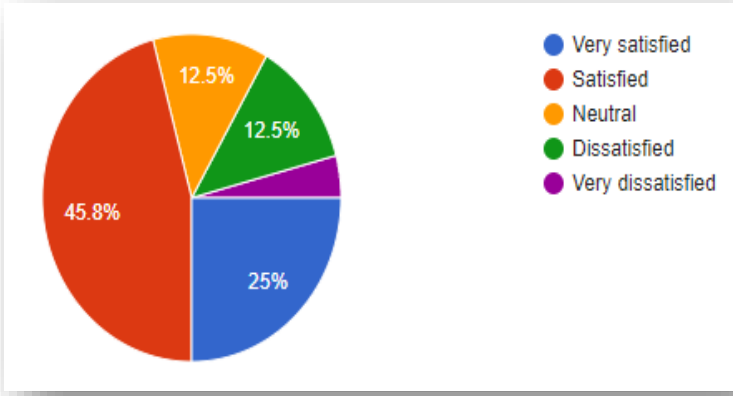
12. Amount of time you have for yourself and family.



13. The overall environment at the department.

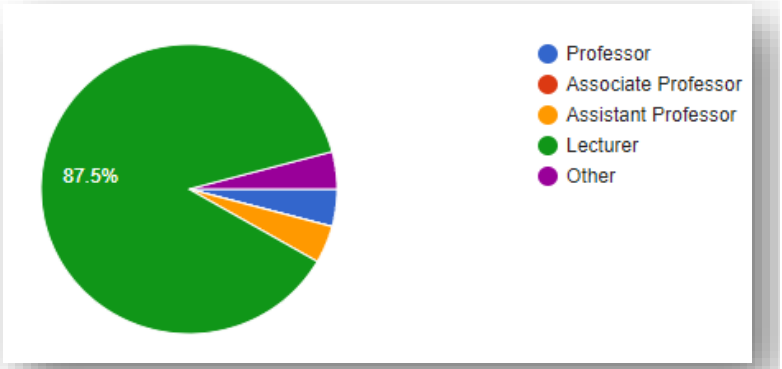


14. Whether the department is utilizing your experience and knowledge.

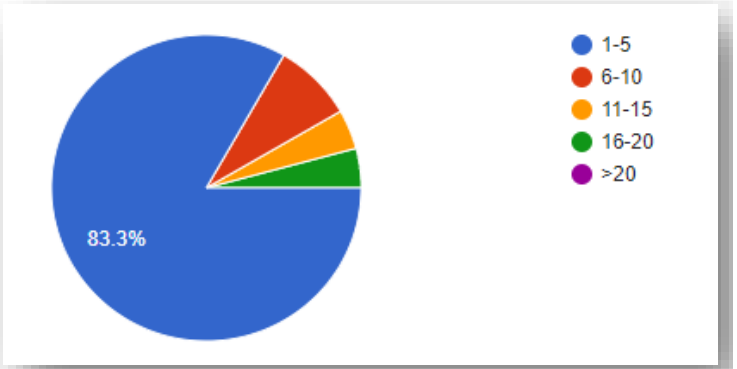


Information About Faculty

i. Academic Rank



ii. Years of Service



Performa: 5 Faculty Survey Report
Department of CS/IT

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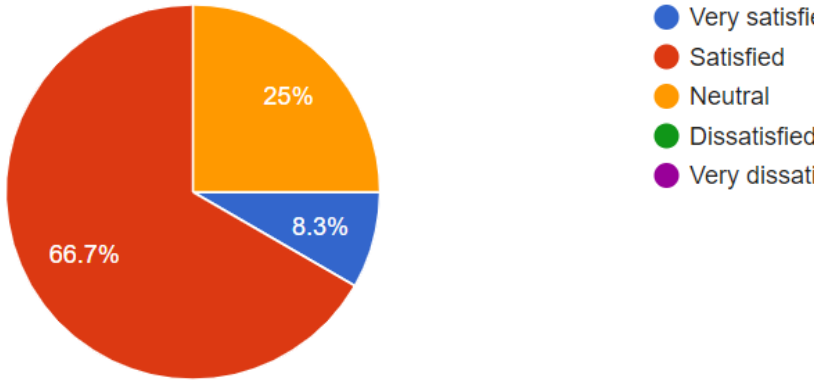

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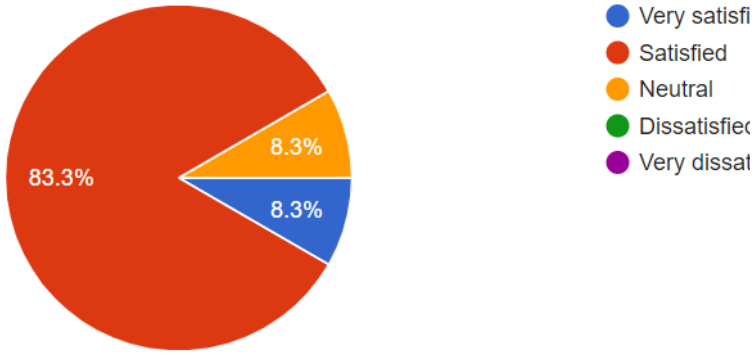

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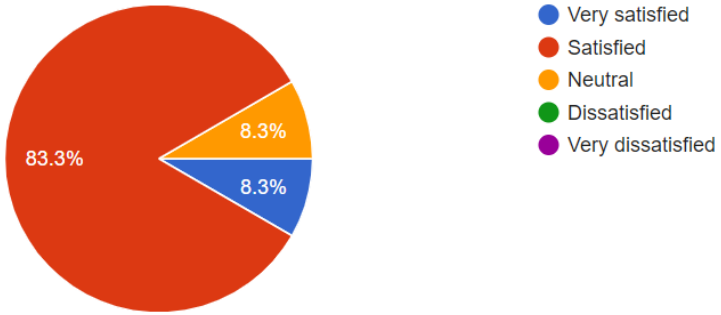

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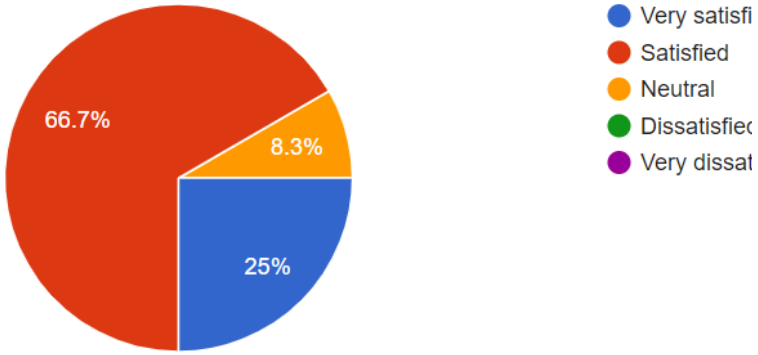

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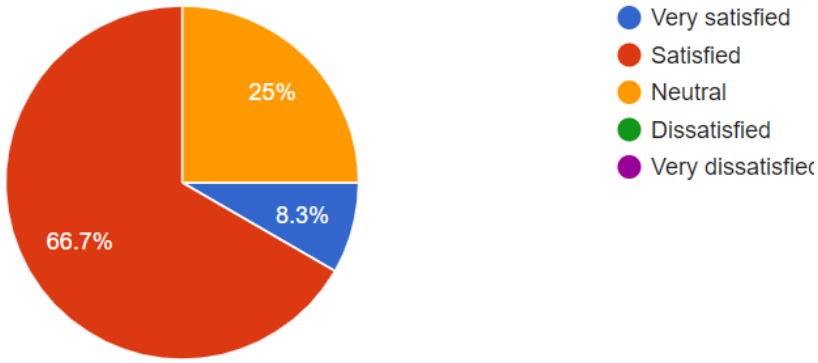

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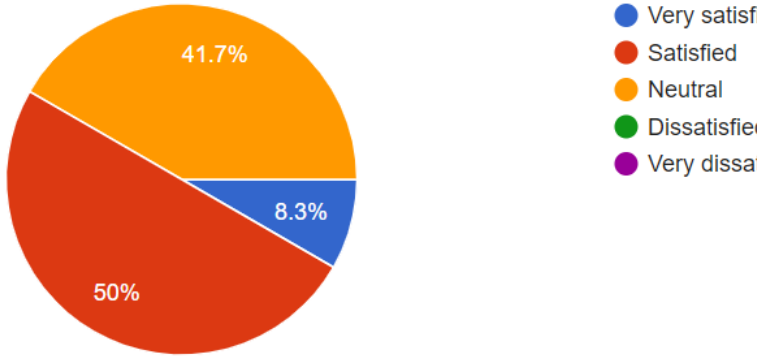

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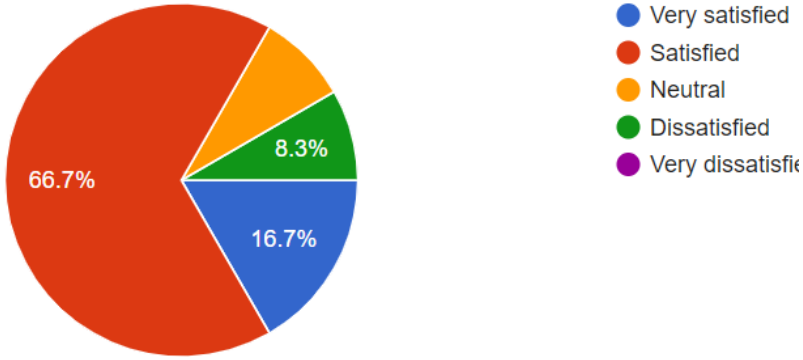

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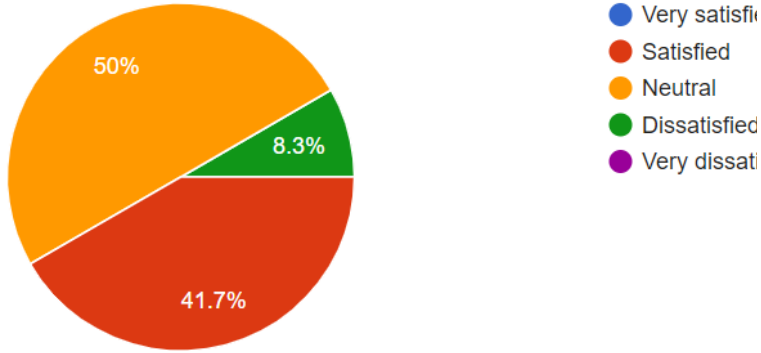

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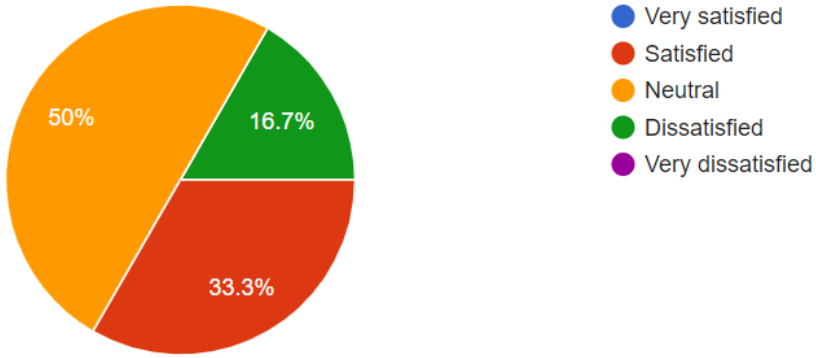

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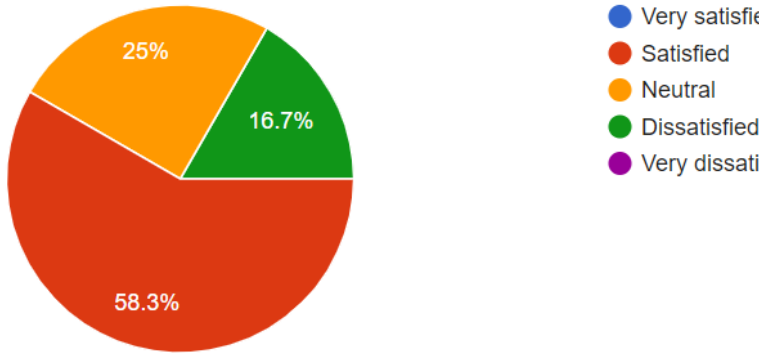

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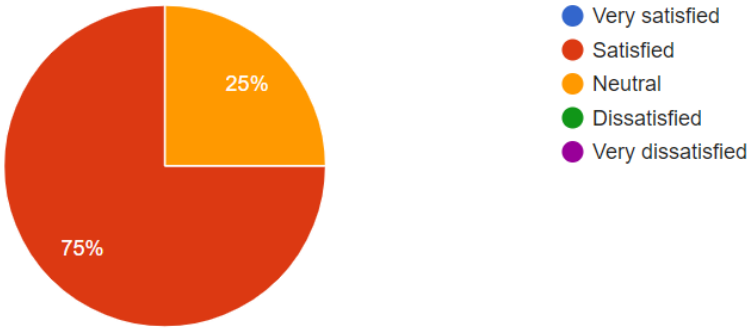

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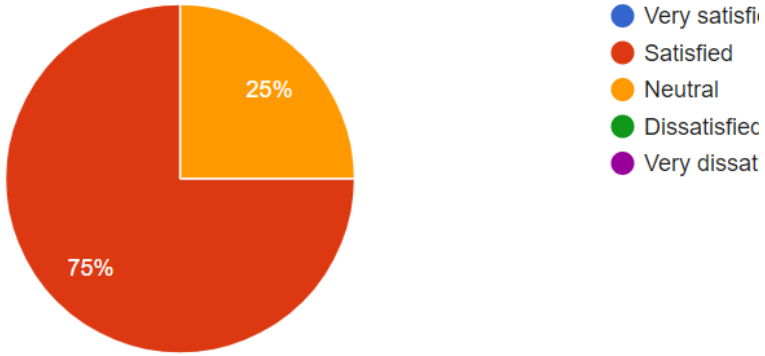

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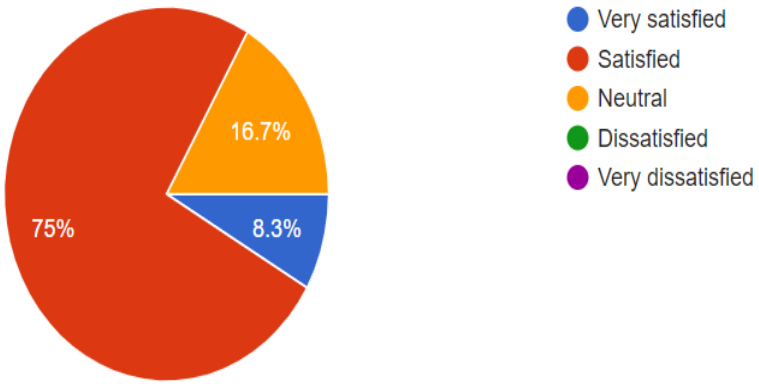

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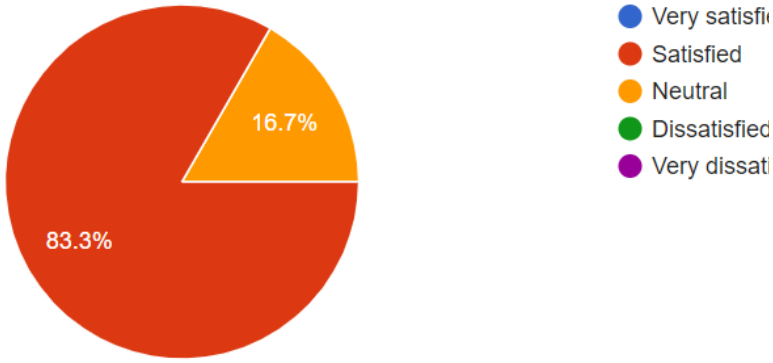
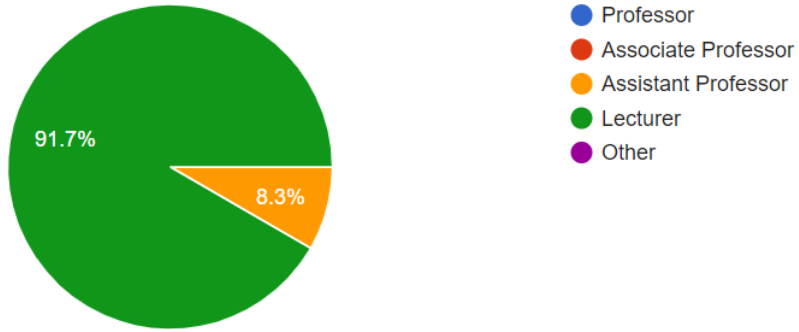
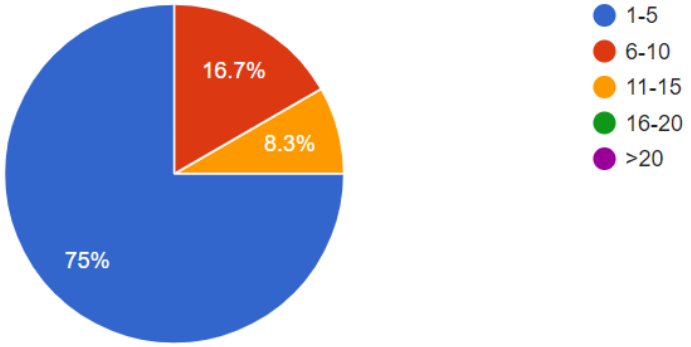


Information About Faculty

iii. Academic Rank



iv. Years of Service



Annexure I: Annual Faculty Review

Annual Review: Faculty Self Evaluation
2019-2020

Faculty Name: Maha Butt **Designation:** Lecturer

Department: Information Technology **Date:** 29 September 2020

Please answer the items below in the space provided to conduct a self-evaluation and forward it to your Department Head/QED. Typing is preferred, but you may complete in clear handwriting.

Five criteria are important in evaluating faculty performance:

- *Quality of teaching*
- *Evidence that knowledge is being updated*
- *Research and scholarly activity*
- *Service to the institution and contributions to governance*
- *Evidence that shows professional development efforts to improve as a teacher and/or advisor*

List responsibilities over the reporting period: Describe your assignment over the past two semesters or the past year in terms of courses taught, administration responsibilities, committees, advising, research, and service. Then estimate the percentage of your total effort you devoted to each type of activity. (Should total 100 %.)

Teaching load in Semester Fall 2019 (undergraduate / Postgraduate)

Course 1_____, 2___, 3___, 4___, 5___

Teaching load in Semester Spring 2020 (undergraduate / Postgraduate)

Course 1_____, 2_____, 3_____, 4___ ✓ ____, 5_____

FYP Supervisory load for the year (undergraduate / Postgraduate)

Course 1_____, 2_____, 3___ ✓ _____, 4_____, 5___

Formally Designated Administrative Role: Yes ☐ No ☐

Coordinators of Gims Student Society.

Member of QED.

Estimate of Activity (Use 40 hours work week as the basis for your estimate):
(Teaching includes lectures, time for preparation, marking quizzes, assignments)
Activity % of Effort
Teaching 70%
FYP 10%
Administration 20%
Research

Service
100%
Teaching: How effective have you been as a teacher this year? How well have your students performed as a result of your teaching? What courses and programs have you revised and proposed?

Updating Knowledge: Describe what you have done this year to increase your knowledge and to remain "up to date" in your field (seminars attended, courses taken, reading program, research).
For the advancement of my knowledge, I read many research papers and books of my field. Secondly, I have attended a seminar " how to conduct the case study" which was very helpful in the improvement of teaching method.

List any degree programs in which you are currently enrolled:

- -GIMS Funded
- - Self-Funded
- - Other Funded (Specify source)

Research: Describe your research and scholarly work over the reporting period. List proposals, papers, and publications and in-press publications. Do not list work completed before the current evaluation period or work listed in other evaluation periods other than renewed research projects.

Service to Students: Describe your involvement with students outside of the classroom. Judge the quality of your interactions with students in these informal settings. What evidence do you have that your formal and informal advising is effective?

GIMS and Community Service: Describe the service have you provided to the institute community, institute's other departments or to the broader community.

As a Coordinator of GIMS Student Society, we have conducted a lot of Sessions, Conferences and Trainings for the welfare of institute's community and broader community.

Efforts to improve as teacher/advisor: Describe what you have done this year to increase your efforts to improve as a teacher / advisor. (classroom visits, portfolios, training sessions)

I tried my best to perform well in my duties. Therefore, I have attended training session plus I have followed a lot of vloggers to learn how they teach their students. I have also analyzed student's evaluation report for the betterment of my teaching method.

_____

_____

_____

Strengths: In light of the above, assess your overall performance this year. What are your strengths as a faculty member?

_____

_____

_____

_____

_____

Areas needing improvement:

_____

_____

_____

_____

_____

Considering **ALL** aspects of your duties, in your judgment, your general performance during this academic year can be categorized as (check one):

☐ 5 Noteworthy achievement in most or all areas
☐ 4 Very good performance, with areas of especially noteworthy achievement
☐ 3 Satisfactory performance
☐ 2 Generally adequate, but with some areas of concern
☐ 1 Generally inadequate performance

22 October 2020

_____ _____

Your Signature Dat

Annexure J: Faculty Course Review

Faculty Course Review Report

(To be filled by each teacher at the time of Course Completion.)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Information Technology		Faculty:	Parament	
Course Code:	CS-423	Title:	Artificial Intelligence		
Session:	BSIT 7th	Semester:	Autumn ☒	Spring ☐	Summer ☐
Credit Value:	3(2-2)	Level:		Prerequisites:	
Name of Course Instructor:	Mr. Nouman	No. of Students Contact Hours	Lectures	Other (Please State)	
			Seminars		
Assessment Methods: give precise details (no & length of assignments, exams, weightings etc)	4 marks Assignments , 4 marks Quizzes , 4 marks Project Presentation				

Distribution of Grade/Marks and other Outcomes: (adopt the grading system as required)

Undergraduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	Withdrawal	Total
No. of Students	**19**			**1**	**8**	**10**		**19**
Post-Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	Withdrawal	Total	
No. of Students								

Overview/Evaluation (Course Co-coordinator's Comments)

1) Student (Course Evaluation) Questionnaires
2) External Examiners or Moderators (if any)

3) Student /staff Consultative Committee (SSCC) or equivalent, (if any)
4) Curriculum: comment on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved / Revised National Curriculum Guidelines
5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course objectives)
6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports
7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.
Name: Mr. Nouman Bin Nasir (Course Instructor) Date: 16-02-2019 Name: Ms. Mehwashma Amir (Coordinator of Department) Date: 16-02-2019

Faculty Course Review Report

(To be filled by each teacher at the time of Course Completion)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Information Technology		Faculty:	Permanent	
Course Code:	CS-565	Title:	Web Designing & Development		
Session:	BSIT 4th	Semester:	Autumn	Spring	Summer
Credit Value:	3(2-2)	Level:		Prerequisites:	
Name of Course Instructor:	Mr. Bilal Mazhar	No. of Students Contact Hours	Lectures	Other (Please State)	
			Seminars		
Assessment Methods: give precise details (no & length of assignments, exams, weightings etc)		2 marks Assignments , 2 marks Quizzes , 4 marks Project Presentation			

Distribution of Grade/Marks and other Outcomes: (adopt the grading system as required)

Undergraduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	Withdrawal	Total
No. of Students	**28**	**4**	**10**	**8**		**6**		**28**
Post-Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	Withdrawal		Total
No. of Students								

Overview/Evaluation (Course Co-coordinator's Comments)

1) Student (Course Evaluation) Questionnaires
2) External Examiners or Moderators (if any)
3) Student /staff Consultative Committee (SSCC) or equivalent, (if any)

4) Curriculum: comment on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved / Revised National Curriculum Guidelines
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6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports
7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.
Name: Mr. Bilal Mazhar (Course Instructor) Date: 16-02-2018 Name: Ms. Mehwashma Amir (Coordinator of Department) Date: 16-02-2018

Faculty Course Review Report

(To be filled by each teacher at the time of Course Completion.
For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Information Technology		Faculty:	Permanent	
Course Code:	CS-576	Title:	Comp. Comm. & Network		
Session:	BSIT 5th	Semester:	Autumn	Spring ☒	Summer
Credit Value:	3(2-2)	Level:		Prerequisites:	CS-452
Name of Course Instructor:	Mr Frahat	No. of Students Contact Hours	Lectures	Other (Please State)	
			Seminars		
Assessment Methods: give precise details (no & length of assignments, exams, weightings etc)		2 marks Assignments , 2 marks Quizzes , 4 marks Presentation			

Distribution of Grade/Marks and other Outcomes: (adopt the grading system as required)

Undergraduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	F	Withdrawal	Total
No. of Students	30	9	11	6	1	3		30

Post-Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	Withdrawal	Total
No. of Students							

Overview/Evaluation (Course Co-coordinator's Comments)

1) Student (Course Evaluation) Questionnaires
2) External Examiners or Moderators (if any)
3) Student /staff Consultative Committee (SSCC) or equivalent, (if any)

4) Curriculum: comment on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved / Revised National Curriculum Guidelines
5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course objectives)
6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports
7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.
Name: Ms. Rabia Butt (Course Instructor) Date: 16-02-2019 Name: Ms. Mehwashma Amir (Coordinator of Department) Date: 16-02-2019

Faculty Course Review Report

(To be filled by each teacher at the time of Course Completion.)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Information Technology		Faculty:	Visiting	
Course Code:	Course Code:	MGT-351	Title: Intro to Marketing		
Session:	BSIT 6th	Semester:	Autumn	Spring ☒	Summer
Credit Value:	3(3-0)	Level:		Prerequisites:	
Name of Course Instructor:	Ms. Hira Javaid	No. of Students Contact Hours	Lectures	Other (Please State)	
			Seminars		
Assessment Methods: give precise details (no & length of assignments, exams, weightings etc)	2 marks Assignments , 2 marks Quizzes , 4 marks Project Presentation				

Distribution of Grade/Marks and other Outcomes: (adopt the grading system as required)

Undergraduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	Withdrawal	Total
No. of Students	**17**	**13**	**4**						**17**
Post-Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	Withdrawal		Total
No. of Students									

Overview/Evaluation (Course Co-coordinator's Comments)

1) Student (Course Evaluation) Questionnaires
2) External Examiners or Moderators (if any)

3) Student /staff Consultative Committee (SSCC) or equivalent, (if any)
4) Curriculum: comment on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved / Revised National Curriculum Guidelines
5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course objectives)
6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports
7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.
Name: Ms. Hira Javed (Course Instructor) Date: 3-09-2020 Name: Ms. Mehwashma Amir (Coordinator of Department) Date: 3-09-2020

Faculty Course Review Report

(To be filled by each teacher at the time of Course Completion).

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Information Technology		Faculty:	Permanent	
Course Code:	CS-525	Title:	Multimedia Technology		
Session:	BSIT 6th	Semester:	Autumn	Spring ☒	Summer
Credit Value:	3(2-2)	Level:		Prerequisites:	
Name of Course Instructor:	Mr. Bilal Tariq	No. of Students Contact Hours	Lectures	Other (Please State)	
			Seminars		
Assessment Methods: give precise details (no & length of assignments, exams, weightings etc)		2 marks Assignments , 2 marks Quizzes , 4 marks Presentation			

Distribution of Grade/Marks and other Outcomes: (adopt the grading system as required)

Undergraduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	Withdrawal	Total
No. of Students	**17**	**1**	**11**	**5**			**1**		**17**

Post-Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	Withdrawal	Total
No. of Students								

Overview/Evaluation (Course Co-coordinator's Comments)

1) Student (Course Evaluation) Questionnaires
2) External Examiners or Moderators (if any)

3) Student /staff Consultative Committee (SSCC) or equivalent, (if any)
4) Curriculum: comment on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved / Revised National Curriculum Guidelines
5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course objectives)
6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports
7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.
Name: Mr. Bilal Tariq (Course Instructor) Date: 4-09-2020 Name: Ms. Mehwashma Amir (Coordinator of Department) Date: 4-09-2020

Faculty Course Review Report

(To be filled by each teacher at the time of Course Completion.)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Information Technology		Faculty:	Permanent	
Course Code:	CS-685	Title:	Human Computer Interaction		
Session:	BSIT 6th	Semester:	Autumn	Spring ☒	Summer
Credit Value:	3(2-2)	Level:		Prerequisites:	
Name of Course Instructor:	Ms. Zainab Mehmood	No. of Students Contact Hours	Lectures	Other (Please State)	
			Seminars		
Assessment Methods: give precise details (no & length of assignments, exams, weightings etc)		2 marks Assignments , 2 marks Quizzes , 4 marks Presentation			

Distribution of Grade/Marks and other Outcomes: (adopt the grading system as required)

Undergraduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	No Grade	Total
No. of Students	**28**	**0**	**20**	**8**					**28**

Post-Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	No Grade	Total
No. of Students								

Overview/Evaluation (Course Co-coordinator's Comments)

1) Student (Course Evaluation) Questionnaires
2) External Examiners or Moderators (if any)

3) Student /staff Consultative Committee (SSCC) or equivalent, (if any)
4) Curriculum: comment on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved / Revised National Curriculum Guidelines
5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course objectives)
6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports
7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.
Name: Ms. Zainab Mehmood (Course Instructor) Date: 04-09-2020 Name: Ms. Mehwashma Amir (Coordinator of Department) Date: 04-09-2018

Faculty Course Review Report

(To be filled by each teacher at the time of Course Completion.)

For completion by the course instructor and transmission to Head of Department of his/her nominee (Dept. Quality Officer) together with copies of the Course Syllabus outline

Department:	Information Technology		Faculty:	Visiting	
Course Code:	CS-692	Title:	Visual Programming		
Session:	BSIT 5th	Semester:	Autumn	Spring ☒	Summer
Credit Value:	3(2-2)	Level:		Prerequisites:	CS-423
Name of Course Instructor:	Mr. Bilal Mazhar	No. of Students Contact Hours	Lectures	Other (Please State)	
			Seminars		
Assessment Methods: give precise details (no & length of assignments, exams, weightings etc)	4 marks Assignments , 4 marks Quizzes , 4 marks Presentation				

Distribution of Grade/Marks and other Outcomes: (adopt the grading system as required)

Undergraduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	F	Withdrawal	Total
No. of Students	**28**	**3**	**4**	**6**					**28**

Post-Graduate	Originally Registered	%Grade A	%Grade B	%Grade C	D	E	Withdrawal	Total
No. of Students								

Overview/Evaluation (Course Co-coordinator's Comments)

1) Student (Course Evaluation) Questionnaires
2) External Examiners or Moderators (if any)

3) Student /staff Consultative Committee (SSCC) or equivalent, (if any)
4) Curriculum: comment on the continuing appropriateness of the Course curriculum in relation to the intended learning outcomes (course objectives) and its compliance with the HEC Approved / Revised National Curriculum Guidelines
5) Assessment: comment on the continuing effectiveness of method(s) of assessment in relation to the intended learning outcomes (Course objectives)
6) Enhancement: comment on the implementation of changes proposed in earlier Faculty Course Review Reports
7) Outline any changes in the future delivery or structure of the Course that this semester/term's experience may prompt.
Name: Mr. Bilal Mazhar (Course Instructor) Date: 16-09-2020 Name: Ms. Mehwashma Amir (Coordinator of Department) Date: 16-09-2020