



Annual Program Report

Program Name:	BSc. of Mathematic
Qualification Level:	6 NQF
Department:	Department of Mathematics
College:	College of Science
Institution:	Qassim University
Academic Year:	1442-1443 (2021/2022)
Main Location:	Main Campus- Mulida - Qassim Region
Branches offering the Program:	<ul style="list-style-type: none"> None

Table of Contents

A. Implementation of Previous Action Plan	3
B. Program Statistics.....	4
1. Students Statistics (in the year concerned).....	4
2 . Cohort Analysis of Current Graduate Batch	4
3. Analysis of Program Statistics	5
C. Program Learning Outcomes Assessment	10
1. Program Learning Outcomes Assessment Results.....	10
2. Analysis of Program Learning Outcomes Assessment	12
D. Summary of Course Reports	18
1. Teaching of Planned Courses / Units	18
2. Courses with Variations	18
3. Result Analysis of Course Reports.....	20
E. Program Activities.....	20
1. Student Counseling and Support	20
2. Professional Development Activities for Faculty and Other Staff.....	22
3. Research and Innovation	26
4. Community Partnership.....	27
5. Analysis of Program Activities	28
F. Program Evaluation	29
1. Evaluation of Courses	32
2. Students Evaluation of Program Quality.....	38
3. Other Evaluations.....	40
4. Key Performance Indicators (KPIs)	44
5. Analysis of Program Evaluation	45
G. Difficulties and Challenges Faced Program Management	46
H. Program Improvement Plan	47
I. Report Approving Authority	48
J. Attachments :.....	Error! Bookmark not defined.

A. Implementation of Previous Action Plan

Considering the recommendations of previous year annual report, list the planned actions and their status.

Planned Actions	Responsibility of Action	Planned Completion Date	Level of Completion		If Not Completed	
			Completed	Not Completed	Reasons	Proposed Actions
1. Student Counselling and Support activities should be enhanced such as to give more emphasis on topics related to program and course registration procedures and developing students skills that are necessary for their competency in the labour market.	Head of Student Counselling and Support committee	1/10/2022		√	under process in cooperation with students affairs deanship	
2. Adequate facilities should be available for extracurricular activities (including sporting and recreational activities) in both male and female sections	Head of Student Counselling and Support committee	1/10/2022		√	under process in cooperation with students affairs deanship and college students club	
3. Research facilities should be boosted in the female section.	Head of Department	1/10/2022	√		The female faculty members doing their best to enhance their scientific publication	
4. Regulations of access to major pieces of research equipment hosted in the male section should be introduced such as to allow for flexible and fair utilization by colleagues and post graduate students in the female section.	Head of postgraduates and research committee	1/12/2022		√	Discussed with college administration	These facilities under the deanship of students affairs

B. Program Statistics

1. Students Statistics (in the year concerned)

No.	Item	Results
1	Number of students who started the program	472
2	Number of students who graduated	126
3	Number of students who completed major tracks within the program (if applicable)	
	a. not applicable	NA
	b not applicable	NA
	c. not applicable	NA
4	a. Number of students who completed the program in the minimal time	212
5	a. Percentage of students who completed the program in the minimal time (Completion rate)	60.1%
6	Number of students who completed an intermediate award specified as an early exit point (if any)	NA
7	Percentage of students who completed an intermediate award specified as an early exit point (if any)	NA
Comment on any special or unusual factors that might have affected the completion rates: Percentage of graduated students is acceptable compared with benchmark values		

2. Cohort Analysis of Current Graduate Batch

Student Categories		Total cohort enrollment	Withdrawn	Retained till year end	Not passed	Passed	Passing rate
Years							
Three Years Ago	M	240	145	95	27	71	74.74%
	F	113	22	91	14	77	84.62%
	Total	353	167	186	41	148	79.57%
Two Years Ago	M	222	84	138	29	109	78.90%
	F	132	18	114	16	98	85.96%
	Total	354	102	252	45	207	82.14%
Last Year	M	234	96	138	33	105	76.09%
	F	136	13	123	17	106	86.18%
	Total	370	109	261	50	211	80.84%
Current Year	M	211	46	165	38	127	76.97%
	F	261	17	244	10	234	95.90%
	Total	472	63	409	48	361	88.26%
Comments on the results: <ul style="list-style-type: none"> The completion rate, as indicated by the cohort analysis above is acceptable as it is consistent with previous years actual values and is exceed to the target benchmark value (70%) for male and female sections. 							

* add more rows for further years (if needed)

3. Analysis of Program Statistics

(including strengths, areas for improvement, and priorities for improvement)

Strengths :

1. KPI-P-04: Completion rate

Percentage of undergraduate students who completed the program in minimum time in each cohort.

Prog	Year	Branch	avg. Grad. Rate	KPI-P-04
MATH_BSc	1436-1437	F	81.422	
MATH_BSc	1437-1438	F	86.63	
MATH_BSc	1438-1439	F	70.625	
MATH_BSc	1439-1440	F	73.803	
MATH_BSc	1440-1441	F	88.733	
MATH_BSc	1441-1442	F	71.007	
MATH_BSc	1442-1443	F	80.036	
MATH_BSc	1436-1437	M	72.431	
MATH_BSc	1437-1438	M	74.785	
MATH_BSc	1438-1439	M	74.476	
MATH_BSc	1439-1440	M	71.476	
MATH_BSc	1440-1441	M	86.328	
MATH_BSc	1441-1442	M	71.639	
MATH_BSc	1442-1443	M	79.875	

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-04 M :	79.88	72.36	71.64	80.68
KPI-P-04 F :	80.04	71.72	70.01	80.84

Analysis:

	Year	Branch	Q1	Success Rate (%)	Average Grade (%)
MATH_BSc	1442-1443	F	math411	79.189	74.82
MATH_BSc	1442-1443	F	math422	80.597	73.292
MATH_BSc	1442-1443	F	math451	88.551	88.471
MATH_BSc	1442-1443	F	math471	79.581	74.3
MATH_BSc	1442-1443	F	math472	64.315	73.056
MATH_BSc	1442-1443	F	math483	88.855	74.914
MATH_BSc	1442-1443	F	math484	72.727	71.751
MATH_BSc	1442-1443	F	math485	88.842	76.318
MATH_BSc	1442-1443	M	math411	80.506	73.956
MATH_BSc	1442-1443	M	math422	81.587	70.013
MATH_BSc	1442-1443	M	math444	99.107	76.918
MATH_BSc	1442-1443	M	math471	73.677	70.808
MATH_BSc	1442-1443	M	math472	79.388	70.734
MATH_BSc	1442-1443	M	math483	81.111	87.779
MATH_BSc	1442-1443	M	math484	75.003	89.162

Comment:

Male section (M): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1% .

Female section (F): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1%

In general the success rate and completion rate are satisfied and we are looking to improve them.

2. KPI-P-05: First-year students retention rate

Percentage of first-year undergraduate students who continue at the program the next year to the total number of first-year students in the same year

Prog	Year	Branch	Retention Rate	KPI-P-05
MATH_BSc	1436-1437	F		41.1
MATH_BSc	1437-1438	F		69.894
MATH_BSc	1438-1439	F		51.972
MATH_BSc	1439-1440	F		76.496
MATH_BSc	1440-1441	F		79.521
MATH_BSc	1441-1442	F		68.813
MATH_BSc	1442-1443	F		65.057
MATH_BSc	1436-1437	M		68.218
MATH_BSc	1437-1438	M		62.792
MATH_BSc	1438-1439	M		60.246
MATH_BSc	1439-1440	M		86.45
MATH_BSc	1440-1441	M		79.736
MATH_BSc	1441-1442	M		59.965
MATH_BSc	1442-1443	M		63.206

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-05 M :	63.21	60.56	59.96	63.84
KPI-P-05 F :	65.06	69.50	68.81	69.50

Comment:

Male section (M): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1% .

Female section (F): Targeted benchmark was not reached for this criterion. Therefore, the targeted benchmark value was left unchanged and should be monitored over the next year.

Analysis:

Prog	Year	Branch	Q1	Success Rate (%)	Average Grade (%)
MATH_BSc	1442-1443	F	math101	93.78	88.705
MATH_BSc	1442-1443	F	math202	85.472	70.988
MATH_BSc	1442-1443	F	math101	88.842	76.531
MATH_BSc	1442-1443	M	math101	85.97	86.15
MATH_BSc	1442-1443	M	math202	80.888	85.328
MATH_BSc	1442-1443	M	math101	73.063	82.96

From the above data and results for the courses of the 1st and 2nd semester of the 1st year student are acceptable. And we hope to be improved in the next year.

3. KPI-P-08: Average number of students in the class

Average number of students per class (in each teaching session/activity: lecture, small group, tutorial, laboratory or clinical session)

Prog	Year	Branch	Class Size	KPI-P-08
MATH_BSc	1436-1437	F		23.088
MATH_BSc	1437-1438	F		14.263
MATH_BSc	1438-1439	F		19.844
MATH_BSc	1439-1440	F		26.667
MATH_BSc	1440-1441	F		30.826
MATH_BSc	1441-1442	F		41.415
MATH_BSc	1442-1443	F		54.286
MATH_BSc	1436-1437	M		32
MATH_BSc	1437-1438	M		38.587
MATH_BSc	1438-1439	M		47.818
MATH_BSc	1439-1440	M		55.5
MATH_BSc	1440-1441	M		45.935
MATH_BSc	1441-1442	M		54.798
MATH_BSc	1442-1443	M		48.842

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-08 M :	45.84	45.94	54.79	45.94
KPI-P-08 F :	54.29	30.83	41.41	30.83











Comment:

Male section (M): Targeted benchmark was not reached for this criterion. Therefore, the targeted benchmark value was left unchanged and should be monitored over the next year.

Female section (F): Targeted benchmark was not reached for this criterion. Therefore, the targeted benchmark value was left unchanged and should be monitored over the next year.

4. KPI-P-14: Percentage of Publications of faculty members

Percentage of full-time faculty members who published at least one research during the year to total faculty members in the program

Prog	Year	Branch	N Pub. > 0	N Memb.	% Pub.	N Memb.	% Pub.	KPI-P-14
MATH	1438-1439	F	4	16	25.00	16	25.00	
MATH	1439-1440	F	3	15	20.00	15	20.00	
MATH	1440-1441	F	2	18	11.11	18	11.11	
MATH	1441-1442	F	4	13	30.77	13	30.77	
MATH	1442-1443	F	5	15	33.33	15	33.33	
MATH	1438-1439	M	17	27	62.96	27	62.96	
MATH	1439-1440	M	16	26	61.54	26	61.54	
MATH	1440-1441	M	11	17	64.71	17	64.71	
MATH	1441-1442	M	11	17	64.71	17	64.71	
MATH	1442-1443	M	14	24	58.33	24	58.33	

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-14 M :	58.33	65.36	64.71	65.36
KPI-P-14 F :	33.33	31.08	30.77	33.66











Comment:

Male section (M): Targeted benchmark was not reached for this criterion. Therefore, the targeted benchmark value was left unchanged and should be monitored over the next year.

Female section (F): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1% .

5. KPI-P-15: Rate of published research per faculty member

Rate of published research per faculty member: The average number of refereed and/or published research per each faculty member during the year (total number of refereed and/or published research to the total number of full-time or equivalent faculty members during the year)

Prog	Year	Branch	sum PubRefIntYear	N. memb.	Res Rate/Year	KPI-P-15
MATH	1438-1439	F	6	16	0.375	
MATH	1439-1440	F	6	15	0.4	
MATH	1440-1441	F	4	18	0.222	
MATH	1441-1442	F	7	13	0.538	
MATH	1442-1443	F	13	15	0.867	
MATH	1438-1439	M	59	27	2.185	
MATH	1439-1440	M	45	26	1.731	
MATH	1440-1441	M	36	17	2.118	
MATH	1441-1442	M	23	17	1.353	
MATH	1442-1443	M	64	24	2.667	

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-15 M :	2.67	1.37	1.35	2.70
KPI-P-15 F :	0.87	0.54	0.54	0.88

Comment:

Male section (M): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1% .

Female section (F): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1% .

6. KPI-P-16: Citations rate in refereed journals per faculty member

Rate of published research per faculty member: The average number of citations in refereed journals from published research per faculty member in the program (total number of citations in refereed journals from published research for full-time or equivalent faculty members to the total research published).

Prog	Year	Branch	sum Total_N_Cite	N. memb.	Avg Tot. Cit.	KPI-P-16
MATH	1438-1439	F	322	16	20.125	20.125
MATH	1439-1440	F	372	15	24.8	24.8
MATH	1440-1441	F	589	18	31.611	31.611
MATH	1441-1442	F	647	13	49.769	49.769
MATH	1442-1443	F	196	15	13.067	13.067
MATH	1438-1439	M	2,926	27	108.37	108.37
MATH	1439-1440	M	3,745	26	144.038	144.038
MATH	1440-1441	M	3,202	17	88.353	88.353
MATH	1441-1442	M	1,641	17	96.529	96.529
MATH	1442-1443	M	5,077	24	211.542	211.542

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-16 M :	211.54	97.49	96.53	213.66
KPI-P-16 F :	13.07	50.27	49.77	50.27

Comment:

Male section (M): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1% .

Female section (F): Targeted benchmark was not reached for this criterion. Therefore, the targeted benchmark value was left unchanged and should be monitored over the next year.

KPI-P-17: Satisfaction of beneficiaries with the learning resources

Average of beneficiaries' satisfaction rate with the adequacy and diversity of learning resources (references, journals, databases... etc.) on a five-point scale in an annual survey.

Prog	Year	Branch	Students Resource Satisf.	KPI-P-17
MATH_BSc	1435-1436	F	3.027	3.027
MATH_BSc	1436-1437	F	3.083	3.083
MATH_BSc	1437-1438	F	3.359	3.359
MATH_BSc	1438-1439	F	3.011	3.011
MATH_BSc	1439-1440	F	3.492	3.492
MATH_BSc	1440-1441	F	3.971	3.971
MATH_BSc	1441-1442	F	3.568	3.568
MATH_BSc	1442-1443	F	3.892	3.892
MATH_BSc	1435-1436	M	3.513	3.513
MATH_BSc	1436-1437	M	3.765	3.765
MATH_BSc	1437-1438	M	3.828	3.828
MATH_BSc	1438-1439	M	3.663	3.663
MATH_BSc	1439-1440	M	3.782	3.782
MATH_BSc	1440-1441	M	4.04	4.04
MATH_BSc	1441-1442	M	4.232	4.232
MATH_BSc	1442-1443	M	3.861	3.861

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-17 M :	3.86	4.27	4.23	4.27
KPI-P-17 F :	3.89	3.6	3.57	3.93

Comment:

Male section (M): Targeted benchmark was not reached for this criterion. Therefore, the targeted benchmark value was left unchanged and should be monitored over the next year.

Female section (F): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1% .

Areas for Improvement (Male Section):

published researches for the faculty members in the program during the year should promote their publication.

Priorities for Improvement (Male Section):

published researches for the faculty members in the program during the year should promote their publication.

Areas for Improvement (Female Section)

1- published researches for the faculty members in the program during the year should promote their publication.

2- **The average number of citations in refereed journals from published research per faculty member in the program is below targeted**

Priorities for Improvement (Female Section)

published researches for the faculty members in the program during the year should promote their publication.

C. Program Learning Outcomes Assessment

1. Program Learning Outcomes Assessment Results.

#	Program Learning Outcomes	Assessment Methods (Direct and Indirect)	Performance Target	Results		
				Direct	Indirect	
Knowledge and Understanding						
K1	On successful completion of the program, students are able to clearly state and recall scientific facts and concepts that underlie mathematics-related scientific domains.	Direct methods: Mapping CLOs to mid1, mid2 and final exam questions. Indirect methods: CLOs questionnaires	Overall	83%	75.64%	90.10%
			Male (M)	83%	72.65%	93.00%
			Female (F)	83%	78.64%	87.10%
K2	On successful completion of the program, students are able to read and recognize mathematical proofs and arguments and to judge the reasonableness of their results.	Direct methods: Mapping CLOs to mid1, mid2 and final exam questions. Indirect methods: CLOs questionnaires	Overall	83%	77.97%	87.40%
			Male (M)	82%	75.30%	89.40%
			Female (F)	83%	80.64%	85.40%
K3	On successful completion of the program, students are able to recognize and interpret numerical and graphical statistical data and to plot mathematical relations among them.	Direct methods: Mapping CLOs to mid1, mid2 and final exam questions. Indirect methods: CLOs questionnaires	Overall	80%	71.03%	89.30%
			Male (M)	81%	68.93%	92.40%
			Female (F)	81%	73.13%	86.20%
K4	On successful completion of the program, students are able to write and apply mathematical proofs in a logical scientific manner and to perform abstract mathematical reasoning.	Direct methods: Mapping CLOs to mid1, mid2 and final exam questions. Indirect methods: CLOs questionnaires	Overall	81%	68.00%	94.65%
			Male (M)	85%	70.25%	100.0%
			Female (F)	78%	66.75%	89.30%
Skills						
S1	On successful completion of the program, students are able to apply mathematical critical thinking skills and various techniques to prove or disprove mathematical arguments and to solve applied mathematical problems.	Direct methods: Mapping CLOs to mid1, mid2 and final exam questions. Indirect methods: CLOs questionnaires	Overall	80%	70.40%	89.25%
			Male (M)	80%	67.45%	92.90%
			Female (F)	79%	73.36%	85.60%
S2	On successful completion of the program, students are able to justify and construct mathematical arguments and proofs and formulating them in a logical scientific way using abstraction, generalization and prediction tests.	Direct methods: Mapping CLOs to mid1, mid2 and final exam questions. Indirect methods: CLOs questionnaires	Overall	79%	69.19%	88.30%
			Male (M)	77%	62.44%	91.90%
			Female (F)	80%	75.93%	84.70%
S3	On successful completion of the program, students are apply	Direct methods: Mapping CLOs to	Overall	73%	54.50%	90.50%

	mathematical knowledge to a practical career related to mathematical sciences or in post-baccalaureate studies.	mid1, mid2 and final exam questions. Indirect methods: CLOs questionnaires	Male (M)	77%	64.67%	90.00%
			Female (F)	68%	44.33%	91.00%
S4	On successful completion of the program, students are able to work as a cooperative team in order to facilitate finding constructive solutions for life problems	Direct methods: Mapping CLOs to mid1, mid2 and final exam questions. Indirect methods: CLOs questionnaires	Overall	70%	54.50%	85.60%
			Male (M)	76%	64.67%	87.40%
			Female (F)	64%	44.33%	83.80%
Values						
V1	On successful completion of the program, students are able to communicate effectively both orally and in writing, selecting and using forms of presentation appropriate for differing mathematics contexts and audiences.	Direct methods: Mapping CLOs to mid1, mid2 and final exam questions. Indirect methods: CLOs questionnaires	Overall	82%	75.44%	87.65 %
			Male (M)	83%	75.89%	91.00%
			Female (F)	80%	75.00%	84.30%
V2	On successful completion of the program, students are able to routinely use the most appropriate information and communications technology in gathering, interpreting and communicating mathematics-related information and ideas	Direct methods: Mapping CLOs to mid1, mid2 and final exam questions. Indirect methods: CLOs questionnaires	Overall	78%	67.58%	87.50%
			Male (M)	77%	66.50%	88.00%
			Female (F)	78%	68.67%	87.00%
V3	On successful completion of the program, students are able to identify relevant statistical or mathematical techniques and apply them creatively in interpreting information and proposing appropriate solutions to mathematics related problems.	Direct methods: Mapping CLOs to mid1, mid2 and final exam questions. Indirect methods: CLOs questionnaires	Overall	80%	73.06%	87.75%
			Male (M)	78%	75.00%	80.00%
			Female (F)	83%	71.13%	95.50%
Comments on the Program Learning Outcome Assessment results.						
<ul style="list-style-type: none">Results for CLOs assessment obtained using indirect methods (questionnaires) range from 83.3 to 100.0 %Results for CLOs assessment obtained using direct methods (mapped exam questions) range from 44.33 to 80.64 %As per each CLO, results obtained using indirect methods (questionnaires) are generally higher than those obtained using direct methods.CLOs for the female section are generally higher than their counterparts in the male section for the most Knowledge, Skills and Values domains, except in K4, S3, S4, V1 and V3.						

* Include the results of measured learning outcomes during the year of the report according to the program plan for measuring learning outcomes

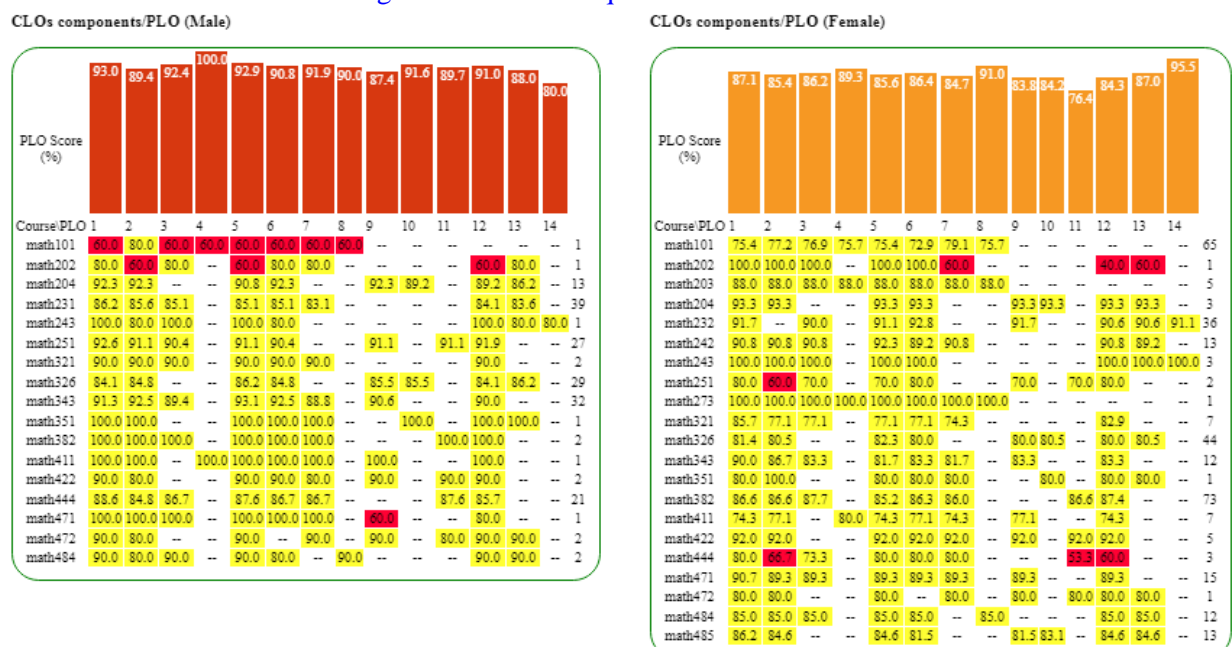
** Attach a separate report on the program learning outcomes assessment results for male and female sections and for each branch (if any)

2. Analysis of Program Learning Outcomes Assessment

- PLO's assessment Using direct mapping of exam questions to relevant CLOs for 2nd semester



- PLO's assessment using indirect students questionnaires on relevant CLOs for 2nd semester.



(including strengths, Areas for Improvement, and priorities for improvement)

Strengths : <ul style="list-style-type: none"> • In Male and Female section there are 8 out of the 11 PLOs score higher than 70% (benchmark value), using direct mapping of exam questions to relevant CLOs



- Male section and in Female section of the PLOs score higher than 70 %, based on students questionnaires (indirect methods).

Areas for Improvement:

- Some courses topics mapped to some PLO's in the male section should be reviewed in terms of teaching strategies and methods of assessment

Analysis:

PLO-1: On successful completion of the program, students are able to clearly state and recall scientific facts and concepts that underlie mathematics-related scientific domains.

PLO-1 analysis

Male Section:

The following courses score less than 70% with respect to this PLO.

math101, math202, math231, math273, math351, math411, math422, math483

In order to understand the underlying reasons behind the low performance of these courses in view of this PLO, we conduct a breakdown of the corresponding CLO scores in terms of the course topics targeted for CLO evaluation in relevant exam questions

Breakdown of the CLOs and relevant course topics that need improvement:

math101 CLO_1_ScoreFINAL::53.97	The Real number line, Functions and theirs properties, continuity and theirs properties
math202 CLO_1_ScoreFINAL::30.00	integration of square fonction, Improper integral: definitions and its properties, Trigonometric substitution:
math231 CLO_1_ScoreFINAL::45.59	Algebraic properties of operations on sets, definition and properties of mathematical sets.
math273 CLO_1_ScoreFINAL::43.89	Plane Euclidean Geometry: coordinates, transformation., reflections, translation
math351 CLO_1_ScoreMID1::46.47	Numerical methods for solving nonlinear equations, analysis of errors, convergence of iterative methods
math411 CLO_1_ScoreMID1::47.45	Laplace equation
math422 CLO_1_ScoreFINAL::51.11	Second-order linear P. D. Es.with constant coefficients- Homogeneous eqs., Non- linear first order P.D.Es., Cauchy's Problem - Integral Surfaces
math483 CLO_1_ScoreFINAL::52.38	Definition of semi-algebra, algebra and sigma-algebra and the main examples., Finite additivity and countable additivity and their principle theorems.

PLO-1: On successful completion of the program, students are able to clearly state and recall scientific facts and concepts that underlie mathematics-related scientific domains.

Female Section:

The following courses score less than 70% with respect to this PLO.

math101, math251

In order to understand the underlying reasons behind the low performance of these courses in view of this PLO, we conduct a breakdown of the corresponding CLO scores in terms of the course topics targeted for CLO evaluation in relevant exam questions

Breakdown of the CLOs and relevant course topics that need improvement:

math101 CLO_1_ScoreFINAL::48.29	Limits, Limits., Derivation and the laws of the expense of the derivative-- derivation of trigonometric functions
math251 CLO_1_ScoreMID1::48.25	Symbolic differentiation, integration, expansion and factorization of polynomials, Taylor series

PLO-2:On successful completion of the program, students are able to read and recognize mathematical proofs and arguments and to judge the reasonableness of their results.

PLO-2 analysis

Male Section:

The following courses score less than 70% with respect to this PLO.

math202, math243, math273, math321, math483

In order to understand the underlying reasons behind the low performance of these courses in view of this PLO, we conduct a breakdown of the corresponding CLO scores in terms of the course topics targeted for CLO evaluation in relevant exam questions

Breakdown of the CLOs and relevant course topics that need improvement:

math202 CLO_2_ScoreMID2::55.63 integration by parts , Application, integration of square fonction, integration of rational fractions by sin and cos
math243 CLO_2_ScoreMID2::41.67 Binomial coefficients, definition and examples, Binomial coefficients, definition and examples, Divisibility, propositions and theorems
math273 CLO_2_ScoreFINAL::42.36 isometries- similarity, theorems on triangles, circles-tangents and angles
math321 CLO_2_ScoreFINAL::39.47 Finding particular solution of second-order linear equations with constant coefficients, Finding particular solution of second-order linear equations with constant coefficients, Miscellaneous equations
math483 CLO_2_ScoreFINAL::45.83 Main extension theorem and outer measure., Measurable sets-Measure

PLO-2:On successful completion of the program, students are able to read and recognize mathematical proofs and arguments and to judge the reasonableness of their results.

Female Section:

The following courses score less than 70% with respect to this PLO.

math231, math321, math382

In order to understand the underlying reasons behind the low performance of these courses in view of this PLO, we conduct a breakdown of the corresponding CLO scores in terms of the course topics targeted for CLO evaluation in relevant exam questions

Breakdown of the CLOs and relevant course topics that need improvement:

math231 CLO_2_ScoreMID1::41.93 Proof by mathematical induction, equivalence binary relations
math321 CLO_2_ScoreMID1::55.41 Basic definitions and construction of an ordinary differential equation, First-order linear equations with variable coefficients, Separable-variable Equations, Homogeneous Equations, isobaric equations
math382 CLO_2_ScoreFINAL::49.24 Convergence and limits of real numbers' sequences

PLO-3:On successful completion of the program, students are able to recognize and interpret numerical and graphical statistical data and to plot mathematical relations among them.

PLO-3 analysis

Male Section:

The following courses score less than 70% with respect to this PLO.

math202, math231, math242, math243, math251, math273, math321, math471, oper213

In order to understand the underlying reasons behind the low performance of these courses in view of this PLO, we conduct a breakdown of the corresponding CLO scores in terms of the course topics targeted for CLO evaluation in relevant exam questions

Breakdown of the CLOs and relevant course topics that need improvement:

math202 CLO_3_ScoreMID2::30.00 integration of rational fractions by sin and cos, . integration by substitution, . integration by substitution
math231 CLO_3_ScoreFINAL::40.99 Methods of proofs: direct proof, proof by contrapositive, proof by

contradiction, Proof by mathematical induction
math242 CLO_3_ScoreFINAL::48.75 Linear mappings and its properties, Applications
math243 CLO_3_ScoreFINAL::54.17 Linear Diophantine equations, Linear Diophantine equations, Linear Diophantine equations
math251 CLO_3_ScoreFINAL::53.24 Manipulate Matrices under Matlab, Manipulate vectors under Matlab
math273 CLO_3_ScoreMID2::52.92 Functions that preserve the angles, Spherical Geometry: projection-conservative functions., Multi-faceted
math321 CLO_3_ScoreFINAL::38.01 First-order linear equations with variable coefficients, Basic definitions and construction of an ordinary differential equation, Separable-variable Equations, Homogeneous Equations, isobaric equations
math471 CLO_3_ScoreFINAL::51.95 Compact spaces and their properties with different examples.
oper213 CLO_3_ScoreFINAL::57.37 Applications: Transportation Problem

PLO-3:On successful completion of the program, students are able to recognize and interpret numerical and graphical statistical data and to plot mathematical relations among them.

Female Section:

The following courses score less than 70% with respect to this PLO.

math321, math471, stat212

In order to understand the underlying reasons behind the low performance of these courses in view of this PLO, we conduct a breakdown of the corresponding CLO scores in terms of the course topics targeted for CLO evaluation in relevant exam questions

Breakdown of the CLOs and relevant course topics that need improvement:

math321 CLO_3_ScoreMID1::49.78 Separable-variable Equations, Homogeneous Equations, isobaric equations, Second-order linear equations with constant coefficients, Separable-variable Equations, Homogeneous Equations, isobaric equations
math471 CLO_3_ScoreFINAL::44.64 Compact spaces and their properties with different examples., Some theorems on compactness and hereditary and topological properties on compact spaces.
stat212 CLO_3_ScoreMID1::27.09 Continuous probability distribution and its properties (probability density function, expectation, variance, standard deviation, cumulative distribution function)., Discrete probability distribution and its properties (mass probability function, expectation, variance, standard deviation and cumulative distribution function)., The moments and the moments generating function and its properties.

PLO-4:On successful completion of the program, students are able to write and apply mathematical proofs in a logical scientific manner and to perform abstract mathematical reasoning.

PLO-4 analysis

Male Section:

The following courses score less than 70% with respect to this PLO.

math273, math411

In order to understand the underlying reasons behind the low performance of these courses in view of this PLO, we conduct a breakdown of the corresponding CLO scores in terms of the course topics targeted for CLO evaluation in relevant exam questions

Breakdown of the CLOs and relevant course topics that need improvement:

math273 CLO_4_ScoreFINAL::41.46 polygon-polyhedra, Multi-faceted, Spherical Geometry: Sum of angle formula for spherical triangles
math411 CLO_3_ScoreMID1::57.22 Difference between P.D.E and O.D.E & Formation.

PLO-4:On successful completion of the program, students are able to write and apply mathematical proofs in a logical scientific manner and to perform abstract mathematical reasoning.

Female Section:

The following courses score less than 70% with respect to this PLO.
math101, stat101

In order to understand the underlying reasons behind the low performance of these courses in view of this PLO, we conduct a breakdown of the corresponding CLO scores in terms of the course topics targeted for CLO evaluation in relevant exam questions

Breakdown of the CLOs and relevant course topics that need improvement:

math101 CLO_4_ScoreMID1::40.79 The Real number line, Functions and their properties, Functions and their properties.
stat101 CLO_4_ScoreMID1::43.10 Organization and presentation of statistical data.

PLO-5 analysis

Male Section:

The following courses score less than 70% with respect to this PLO.

math101, math202, math231, math243, math273, math321, math343, math411, math422, math472, math483, math484

In order to understand the underlying reasons behind the low performance of these courses in view of this PLO, we conduct a breakdown of the corresponding CLO scores in terms of the course topics targeted for CLO evaluation in relevant exam questions

Breakdown of the CLOs and relevant course topics that need improvement:

math101 CLO_5_ScoreFINAL::38.33 Inequalities, trigonometric functions, Limits.
math202 CLO_4_ScoreFINAL::30.00 Primitives and process integration :, mean value theorem of integrals, applications, mean value theorem of integrals, applications
math231 CLO_4_ScoreFINAL::29.78 universal and existential quantifiers., Introcutio to mathematical logic propositional and predicate calculus
math243 CLO_4_ScoreFINAL::50.00 Basic properties of congruences, Divisibility tests, Examples and exerccies
math273 CLO_5_ScoreMID2::55.83 regular polyhedra and its classification, properties., circles-tangents and angles, theorems on triangles
math321 CLO_4_ScoreFINAL::41.52 Solving linear differential equations and linear systems by Laplace transform and Inverse Laplace transform, High-order linear equations with variable coefficients, Second-order linear equations with constant coefficients
math343 CLO_4_ScoreFINAL::32.10 Subgroups and examples, Homomorphisms
math411 CLO_4_ScoreFINAL::54.86 Laplace equation, Derivation of the mathematical model for initial and boundary value problems that appear in applied sciences:, Laplace equation
math422 CLO_3_ScoreMID2::53.89 Classification of P.D.Es. and Canonical Forms, Second-order linear P. D. Es.with variable coefficients, Non- linear P.D.Es. of second orders - Mong's Method
math472 CLO_3_ScoreFINAL::28.33 Existence theorem for space curves, Bertrand curves
math483 CLO_3_ScoreFINAL::46.76 Finite additivity and countable additivity and their principle theorems.
math484 CLO_4_ScoreFINAL::31.58 cosh, sinh, logarithm) . Complex functions of one variable: polynomials, algebraic functions, power series, rate and domain of convergence of a power series, elementary functions (exponential, sin, cos., Analytic functions and harmonic functions, some properties.

PLO-5:On successful completion of the program, students are able to apply mathematical critical thinking skills and various techniques to prove or disprove mathematical arguments and to solve applied mathematical problems.

Female Section:

The following courses score less than 70% with respect to this PLO.

math101, math202, math273, math321, math471, math483, math484, oper213, stat212

In order to understand the underlying reasons behind the low performance of these courses in view of this PLO, we conduct a breakdown of the corresponding CLO scores in terms of the course topics targeted for CLO

evaluation in relevant exam questions

Breakdown of the CLOs and relevant course topics that need improvement:

math101 CLO_5_ScoreFINAL::33.82 Inequalities, Functions and their properties

math202 CLO_4_ScoreFINAL::55.00 application, application, application

math273 CLO_5_ScoreMID2::48.66 Plane Euclidean Geometry: coordinates, transformation.

math321 CLO_4_ScoreFINAL::51.28 Exact and inexact equations, Bernoulli's equations, Miscellaneous equations

math471 CLO_4_ScoreFINAL::54.17 continuous function and some examples on continuity on different topological spaces. Definition of continuous functions and examples; Characterization of continuous functions in topological spaces., Open, closed and homeomorphism functions with their properties., More examples of topological spaces and comparison between topological spaces. Open and closed sets and their properties

math483 CLO_3_ScoreFINAL::59.33 Finite additivity and countable additivity and their principle theorems., Finite additivity and countable additivity and their principle theorems., Measurable sets-Measure

math484 CLO_4_ScoreFINAL::57.34 Derivation of complex functions: complex derivation, Cauchy-Riemann equations, derivation of power series.

oper213 CLO_4_ScoreFINAL::48.30 Graphical Method For Solving L.P.P., Formulation Mistakes In Graphical Method Infeasible Solution - Unbounded Solution, Formulation Mistakes In Graphical Method Alternative Solution - Degenerate Solution

stat212 CLO_4_ScoreMID2::54.94 Some important discrete probability distributions (Poisson, Geometric, Pascal, Negative Binomial)., Some important continuous probability distributions (Uniform, Exponential, Gamma) and their properties., Discrete conditional probability distribution and their properties (conditional probability mass function, conditional expectation, conditional variance).

Math 251, 243, 343,, 273, 321, 422, 471, 472, 483 and math 484 courses in the male section should be given more attention as their CLOs score badly over most of the PLOs (direct mapping to exam questions)

Priorities for Improvement:

- Math 251, 243, 343,, 273, 321, 422, 471, 472, 483 and math 484 courses should be given more attention as their CLOs score badly over most of the PLOs (direct methods).

D. Summary of Course Reports

1. Teaching of Planned Courses / Units

List the courses / units that were planned and not taught during the academic year, indicating the reasons and compensating actions.

Course	Units/Topics	Reasons	Compensating Actions
None	None	None	None

2. Courses with Variations

List courses with marked variations in results that are stated in the course reports, including: (completion rate, grade distribution, student results, etc.), and giving reasons for these variations and actions taken for improvement.

Course Name & Code	variation	Reasons for variation	Actions taken
math101 (49,51) math202 (47,40) math204 (53,35) math231 (48,45) math243 (5,46) Ect.	See Below table and Chart	This variation was shown in the last year due different instructors, halls environments, same references and same subjects were taught in the both male and female sections. the classical teaching methods routinely used for the program courses, students capability may this affects the results of the program courses, that makes a variation and gap in students' performance.	The Program Training Unit has been contacted with CLT in order for presenting a training courses and workshops for the program faculty members on teaching strategies and assessment methods.

1st Semester 1442-1443H

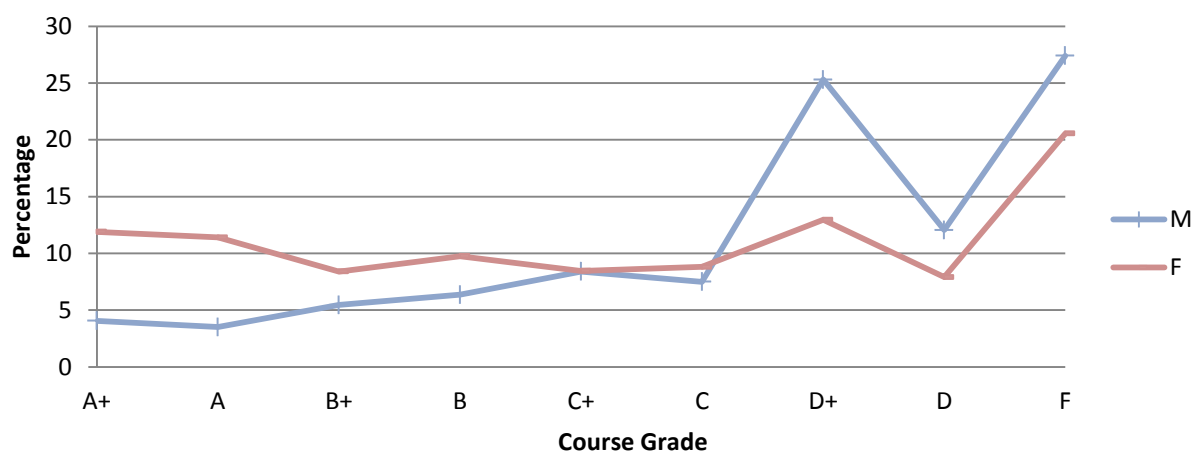
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
Course (M, F)	A+		A		B+		B		C+		C		D+		D		F	

math101 (38,54)	11.4	7.3	14.3	3.3	5.7	3.3	17.1	8.6	5.7	7.3	8.6	11.0	14.3	9.8	2.9	17.1	20.0	32.2
math204 (43,75)	4.9	10.9	4.9	5.5	9.8	0.0	0.0	3.6	14.6	3.6	9.8	3.6	17.1	3.6	4.9	21.8	34.1	47.3
math242 (34,27)	10.7	9.5	3.6	9.5	0.0	4.8	7.1	9.5	7.1	4.8	7.1	0.0	21.4	23.8	14.3	23.8	28.6	14.3
math243 (43,62)	13.2	4.0	13.2	2.0	10.5	2.0	13.2	0.0	10.5	10.0	10.5	6.0	10.5	4.0	7.9	34.0	10.5	38.0
math251 (36,60)	12.1	13.3	12.1	17.8	15.2	13.3	21.2	2.2	6.1	4.4	12.1	4.4	6.1	15.6	0.0	11.1	15.2	17.8
math273 (60,52)	13.6	7.0	33.9	5.6	6.8	4.2	13.6	16.9	5.1	8.5	10.2	7.0	1.7	5.6	5.1	22.5	10.2	22.5
math321 (58,83)	4.1	0.0	6.1	1.6	4.1	1.6	10.2	3.3	4.1	6.6	8.2	0.0	18.4	36.1	8.2	14.8	36.7	36.1
math326 (30,54)	3.7	2.1	7.4	4.3	3.7	2.1	0.0	4.3	11.1	14.9	3.7	17.0	29.6	29.8	3.7	21.3	37.0	4.3
math382 (47,45)	8.9	2.5	11.1	5.0	6.7	7.5	0.0	7.5	4.4	10.0	6.7	7.5	20.0	35.0	11.1	20.0	31.1	5.0
math444 (18,43)	9.1	2.9	18.2	5.7	9.1	2.9	9.1	2.9	9.1	8.6	18.2	8.6	0.0	2.9	18.2	45.7	9.1	20.0
math471 (29,40)	7.4	5.7	25.9	0.0	14.8	2.9	11.1	2.9	7.4	11.4	11.1	2.9	11.1	37.1	7.4	14.3	3.7	22.9
math484 (9,32)	12.5	0.0	0.0	0.0	0.0	3.1	12.5	3.1	0.0	9.4	0.0	3.1	12.5	9.4	25.0	59.4	37.5	12.5

	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
Course (M, F)	A+		A		B+		B		C+		C		D+		D		F	

math101 (46,324)	10.0	3.8	17.5	5.4	0.0	2.2	2.5	2.2	5.0	7.6	5.0	1.6	15.0	19.6	7.5	9.8	37.5	47.8
math204 (42,54)	12.2	9.8	4.9	9.8	12.2	7.3	9.8	14.6	9.8	2.4	14.6	9.8	9.8	14.6	4.9	12.2	22.0	19.5
math231 (62,104)	8.5	1.6	0.0	1.6	6.4	3.1	2.1	3.1	4.3	3.1	6.4	1.6	4.3	20.3	10.6	3.1	57.4	62.5
math242 (48,64)	6.7	5.7	11.1	0.0	4.4	5.7	22.2	5.7	2.2	9.4	20.0	5.7	2.2	28.3	4.4	9.4	26.7	30.2
math243 (47,29)	9.1	3.4	34.1	3.4	9.1	10.3	22.7	10.3	4.5	6.9	11.4	3.4	0.0	27.6	2.3	0.0	6.8	34.5
math251 (44,65)	22.5	0.0	12.5	5.1	15.0	5.1	12.5	7.7	7.5	15.4	5.0	12.8	10.0	30.8	5.0	15.4	10.0	7.7
math273 (51,88)	32.6	9.1	13.0	1.8	15.2	3.6	2.2	5.5	2.2	5.5	4.3	1.8	4.3	27.3	6.5	7.3	19.6	38.2
math326 (41,54)	7.9	6.3	7.9	8.3	10.5	8.3	18.4	4.2	0.0	10.4	13.2	6.3	5.3	31.3	13.2	8.3	23.7	16.7
math343 (54,79)	8.7	0.0	10.9	1.5	4.3	1.5	8.7	3.1	13.0	9.2	2.2	4.6	10.9	32.3	10.9	4.6	30.4	43.1
math351 (45,28)	4.8	8.0	4.8	0.0	9.5	4.0	7.1	4.0	7.1	16.0	2.4	12.0	19.0	8.0	11.9	28.0	33.3	20.0
math422 (23,39)	18.2	0.0	18.2	0.0	0.0	2.9	4.5	5.7	0.0	2.9	13.6	2.9	22.7	40.0	4.5	2.9	18.2	42.9
math444 (20,27)	5.9	4.0	0.0	0.0	11.8	0.0	0.0	4.0	0.0	4.0	0.0	12.0	5.9	8.0	11.8	52.0	64.7	16.0
math471 (35,46)	8.8	0.0	2.9	0.0	2.9	2.4	0.0	7.1	20.6	11.9	11.8	11.9	2.9	31.0	5.9	9.5	44.1	26.2
math484 (13,52)	9.1	0.0	9.1	0.0	9.1	10.0	18.2	2.0	9.1	6.0	18.2	2.0	9.1	38.0	0.0	4.0	18.2	38.0

Program Grade Distribution



3. Result Analysis of Course Reports

(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :
<ul style="list-style-type: none"> All faculty members have presented their lectures in good and healthy circumstances, in addition they overcome the difficulties that faces during academic year. All faculty members have delivered all courses specification in the specific period of the past two semesters.
Areas for Improvement:
<ul style="list-style-type: none"> Training workshops on teaching strategies and assessment methods should be arranged for the program faculty members in coming academic year.
Priorities for Improvement:
<ul style="list-style-type: none"> Training workshops on teaching strategies and assessment methods should be arranged for the program faculty members in coming academic year.

E. Program Activities

1. Student Counseling and Support

Activities Implemented	Brief Description*
Holding a meeting with the students to welcome them and get to know each other and clarify the tasks of the academic advisor.	The Academic Advising Committee of the Department of mathematics participated in the reception ceremony for new students at the university under the patronage of His Excellency the University Rector which was held in Hall A at the University's headquarters on Monday 06/09/2021, and the Academic Advising Unit, in cooperation with the Student Club, urged college students Especially the newcomers to attend the ceremony because of its importance for them to meet with His Excellency the President of the University and their Excellencies, the undersecretaries, Excellencies, Deans of Admission, Registration and Student Affairs, and benefit from their guidance instructions at the beginning of the university stage.
Familiarizing students with the college's vision, mission, and educational goals of our program, fields of work for its graduates, and the aspects of care and services it provides to students. They are also directed to choose the appropriate majors that suit their abilities and capabilities.	A meeting with the students to discuss the appropriate options for the students in the next semester (registering or deleting courses, raising the average, choosing a major) on Wednesday 29/09/2021 with Dr. Mazen Al-Howiamel Vice Dean of Educational Affairs.
communication with students to discuss everything related to the difficulties they face in their studies.	A meeting with students to discuss the main difficulties of e-learning, frequent absenteeism from lectures and exams by advancing them to use university e-mail regarding all assignments, inquiries, knowledge of course results, and other semester assignments and exams, short exams. The meeting took place on Tuesday, 18/01/2022 with Dr Jazmati Head of Academic Advising Committee
Comment on Student Counseling and Support**	

KPI-P-10: Students' satisfaction with the offered services

Average of students' satisfaction rate with the various services offered by the program (restaurants, transportation, sports facilities, academic advising, ...) on a five-point scale in an annual survey.

Prog	Year	Branch	Students Resource Satisf.	KPI-P-10
MATH_BSc	1435-1436	F	2.736	<div></div>
MATH_BSc	1436-1437	F	2.667	<div></div>
MATH_BSc	1437-1438	F	3.112	<div></div>
MATH_BSc	1438-1439	F	2.789	<div></div>
MATH_BSc	1439-1440	F	3.474	<div></div>
MATH_BSc	1440-1441	F	4.027	<div></div>
MATH_BSc	1441-1442	F	3.542	<div></div>
MATH_BSc	1442-1443	F	3.891	<div></div>
MATH_BSc	1435-1436	M	3.494	<div></div>
MATH_BSc	1436-1437	M	3.756	<div></div>
MATH_BSc	1437-1438	M	3.744	<div></div>
MATH_BSc	1438-1439	M	3.636	<div></div>
MATH_BSc	1439-1440	M	3.743	<div></div>
MATH_BSc	1440-1441	M	4.001	<div></div>
MATH_BSc	1441-1442	M	4.241	<div></div>
MATH_BSc	1442-1443	M	3.888	<div></div>

Math_BSc 1442-1443	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-10:M	3.89	4.28	4.24	4.28
KPI-P-10:F	3.89	3.58	3.54	3.93

Comment:

Male section (M): Targeted benchmark was not reached for this criterion. Therefore, the targeted benchmark value was left unchanged and should be monitored over the next year.

Female section (F): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1% .

Analysis:

	Year	Branch	Q1	Q2	Q3	Q4	Q5	Q6	Q7
MATH_BSc	1441-1442	F	3.575	3.493	3.644	3.479	3.658	3.178	3.767
MATH_BSc	1442-1443	F	3.849	3.849	3.925	3.849	3.946	3.796	4.022
MATH_BSc	1441-1442	M	4.316	4.263	4.14	4.281	4.246	4.018	4.421
MATH_BSc	1442-1443	M	3.937	3.848	3.937	3.81	3.848	3.709	4.127

Areas for Improvement (Male Section)

Q1: Classrooms (including lecture rooms, laboratories etc.) are attractive and comfortable.

Q2: Student computing facilities are sufficient for my needs.

Q4: I am satisfied with the quality and extent of materials available for me in the library.

Q5: The library is open at convenient times.

Q6: Adequate facilities are available for extra curricular activities (including sporting and recreational activities)

Q7: Adequate facilities are available at this institution for religious observances.

Priorities for Improvement (Male Section)

Q4: I am satisfied with the quality and extent of materials available for me in the library.

Areas for Improvement (Female Section)

None

Priorities for Improvement (Female Section)

None

Strengths:

- Inspection of the quality of the Student Counselling and Support (KPI-P-10) as revealed by a student questionnaire on their satisfaction rate with the various services offered by the program e.g. restaurants, sports facilities, academic advising, ..., table above, indicates that the quality of the services offered by the program needs improving in male section, approaching a value of 3.89 (out of 5.0). This is a satisfactory level of performance which indicates the program commitment to the good practices underlying its student counselling and support activities but not reach the targeted point.
- While female section score similarly for KPI-P-10, about 3.89 indicates that the quality of the services offered by the program is steadily improving in male section, approaching a value of 3.89 (out of 5.0). This is a satisfactory level of performance which indicates the program commitment to the good practices underlying its student counselling and support activities.

* including action time, number of participants, results and any other statistics.

** including performance evaluation on these activities

2. Professional Development Activities for Faculty and Other Staff

Activities Implemented	Brief Description *
Male Section	
Programs /College members	
Training course	Title: Computational and Methodological Statistics (CFE-CMStatistics 2021) Date: (18-20)-12-2021 King's College London, UK (online) Summary: Computational and Methodological Statistics and 15th International Conference on Computational and Financial Econometrics) No. of Attendances: 1
Training course	Microsoft Office Date: 27 May – 3 rd June 2021 SUN OVIT (information Technologies) (online) Summary: Word (Level 1+Level 2)+ Excel (Level 1+ Level 2) No. of Attendances: 1
Training course	Basics of Research Date: 16-02-2022

	Center of leadership and talent Development (online) Summary: about the procedures of preparing and publishing scientific researches. No. of Attendances: 2
Training course	Title: Managing ecourses via Blakboard Date: 16-02-2022 Center of leadership and talent Development (online) Summary: This training course is very important for all instuctors in different fields, which enable them to be familiar with blackboard and on line teaching, and provide them introduce their work in a suitable and professional manner No. of Attendances: 1
Training course	Title: IEEE Authorship and Open Access Symposium Date: 15-03-2021 Center of leadership and talent Development (online) Summary: Tips and best practice to get published from IEEE Editors No. of Attendances:1
Training course	Title: Use augmented reality in the courses Date: 20-02-2022 Center of leadership and talent Development (online) Summary: The term teaching skills is referred to as a teacher's ability to fulfil one of the university teacher's primary tasks: to promote students' learning and knowledge. No. of Attendances: 3
Training course	Title: Creating and Using educational 3D motion Date: 14-02-2022 Center of leadership and talent Development (online) Summary: Prepare and managing E-courses, and enable the teaching staff to explain and introduce graphical slides. No. of Attendances: 1
Programs /Employees	
Training Course	Title: 5 Electronic Exams using Blackboard Date: 08-03-2022 Centre of Leadership and Development (Online) Summary: 1- Introducing how to prepare exams 2. How to create a new transaction 3. How to respond to an incoming transaction 4. Respond to a rejected transaction 5- Common mistakes should be avoided when dealing with the completion system
Female Section	
Programs /College members	

Training course	<p>Title: Creating and Using educational 3D motion</p> <p>Date: 14-02-2022</p> <p>Center of leadership and talent Development (online)</p> <p>Summary:</p> <p>Prepare and managing E-courses, and enable the teaching staff to explain and introduce graphical slides.</p> <p>No. of Attendances: 1</p>
Training course	<p>Basics of Research</p> <p>Date: 16-02-2022</p> <p>Center of leadership and talent Development (online)</p> <p>Summary:</p> <p>about the procedures of preparing and publishing scientific researches.</p> <p>No. of Attendances: 1</p>
Training course	<p>Title: Use augmented reality in the courses</p> <p>Date: 20-02-2022</p> <p>Center of leadership and talent Development (online)</p> <p>Summary:</p> <p>The term teaching skills is referred to as a teacher's ability to fulfil one of the university teacher's primary tasks: to promote students' learning and knowledge.</p> <p>No. of Attendances: 32</p>
Training course	<p>Using blackboard in teaching</p> <p>Date: 07-03-2022</p> <p>Center of leadership and talent Development (online)</p> <p>Summary:</p> <p>Using Blackboard can be helpful to you and your students. Blackboard is a course management system that allows you to provide content to students in a central location, communicate with students quickly, and provide grades in an electronic format to students. Students can submit assignments electronically and work with a variety of built-in Web-based tools such as e-portfolios, wikis, and blogs. Students can also assess their peers and self-assess if projects are designed for such assessment.</p> <p>No. of Attendances: 3</p>
Programs /College employees	
Workshop	<p>Title: • How to manage “INGAZ” system</p> <p>Date: 14-10-2022</p> <p>Summary</p> <p>Workshop themes:</p> <ol style="list-style-type: none"> 1- Introducing the editor of INJAZ system 2. How to create a new transaction 3. How to respond to an incoming transaction 4. Respond to a rejected transaction 5 - common mistakes should be avoided when dealing with the completion system <p>No. of Attendances: 5</p>
Training courses	<p>Title: Office skills</p> <p>Date: During the year</p>

	<p>All these trainings were provided by Leadership and Development Center</p> <p>Summary:</p> <p>No. of attendances: 10</p> <ul style="list-style-type: none">• Functional word processing• Managing Windows operating systems• Event Management Program• Personal Information Management Program (Outlook)• Effective communication program at work• Administrative Communications Program• Secretarial work program• How to manage time• Reporting program• Skills of dealing with superiors• Program dealing with auditors• Correspondence preparation program• Problem solving and decision making program• Conflict management in the work environment• Electronic Spreadsheet Management Program (EXCEL)• Functional discrimination															
<hr/> Comment on Professional Development Activities for Faculty and Other Staff ^{**} <hr/>																
Strengths:																
<p>Courses and programs are evaluated and reported on annually and reports include information about the effectiveness of planned strategies and the extent to which intended learning outcomes are being achieved.</p>																
<table border="1"><tr><td>Math_BSc (1442-1443)</td><td>Actual Benchmark</td><td>Targeted Benchmark</td><td>Internal Benchmark</td><td>New Target Benchmark</td></tr><tr><td>M :</td><td>4.83</td><td>4.90</td><td>4.81</td><td>4.90</td></tr><tr><td>F :</td><td>4.43</td><td>4.55</td><td>4.33</td><td>4.55</td></tr></table>		Math_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark	M :	4.83	4.90	4.81	4.90	F :	4.43	4.55	4.33	4.55
Math_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark												
M :	4.83	4.90	4.81	4.90												
F :	4.43	4.55	4.33	4.55												
<ul style="list-style-type: none">• Both male and female section exceeded their targeted benchmark for professional development activities, 4.83 and 4.43 respectively. Such a high performance level needs to be assessed for persistence over the next year in order to pinpoint avenues for potential improvement.																

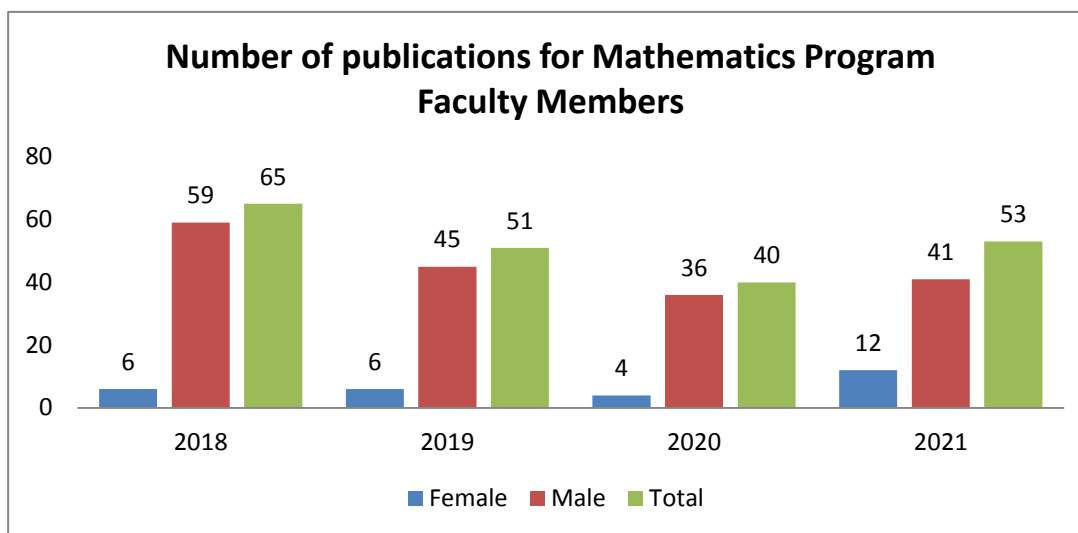
* including action time, number of participants, results and any other statistics.

** including performance evaluation on these activities

3. Research and Innovation

Activities Implemented	Brief Description*						
Scientific publications			No. of Publications				
			2018	2019	2020	2021	
		Female	6	6	4	12	
		Male	59	45	36	41	
		Total	65	51	40	53	

Comment on Research and Innovation **



- Quantity of research:** The total number of publications in the previous year (Figure above) is about 53 publications which is higher than the previous year indicating to maintain and promote the scientific efforts in the research activities in the program.
- Participation in research:** Investigation of percentage of full-time faculty members who published at least one research during the year to total faculty members in the program, KPI-P-14, Figure above, reveals that the contribution of female members is as low as 33.33% compared to the male section for which the 58.33% .

KPI-P-14: Percentage of publications of faculty members

Percentage of full-time faculty members who published at least one research during the year to total faculty members in the program

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-14 M :	58.33	65.36	64.71	65.36
KPI-P-14 F :	33.33	31.08	30.77	33.66

• Priorities for improvement

- Research facilities should be boosted in the female section.
- Regulations of access to major pieces of research equipment hosted in the male section should be introduced such as to allow for flexible and fair utilization by colleagues and post graduate students in the female section.
- Adequate safety and security procedures for prolonged/late utilization of research equipment should be introduced.

* including action time, number of participants, results and any other statistics.

** including performance evaluation on these activities

4. Community Partnership

Activities Implemented	Brief Description*			
International Publication of Scientific Research	Some of Faculty members have participated with others community institutions in the field of medical researches.			
Training courses and workshops	There are a number of faculty members in the mathematics program who participated in implementing a number of training courses and workshops in various fields of mathematics.			
Strategic planning	The mathematics program has provided consultations and support in preparing the strategic plan of science college..			
Comment on Community Partnership**				
<ul style="list-style-type: none">Investigation of stakeholders’ opinion on the fulfilment of the relevant criterion of good practice (8th criterion, 5th standard of the self-evaluation scales), through anonymous questionnaires, indicates that teaching staff are satisfied by their level of participation in community partnership activities; and their participation in these activities is considered as one of the criteria for their evaluation and promotion.				
Math_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
M :	4.53	4.52	4.50	4.55
F :	4.45	4.25	4.38	4.50
<ul style="list-style-type: none">Both male and female section exceeded their targeted benchmark for this practice, 4.53 and 4.45 respectively. Such a high performance level needs to be assessed for persistence over the next year in order to pinpoint avenues for potential improvement.				

* including action time, number of participants, results and any other statistics.

** including performance evaluation on these activities

5. Analysis of Program Activities

(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :

- The quality of the Student Counselling and Support services offered by the program is steadily increasing in both male and female sections approaching a value of 4.0 (out of 5.0).
- The quality of the professional development activities in the program is steadily increasing in both male and female sections approaching a value of 4.5 (out of 5.0).
- The total number of publications in the previous year is about 40 publications which is indicating need more efforts in research activities in the program
- Faculty members in the program are satisfied by their level of participation in community partnership activities; and their participation in these activities is considered as one of the criteria for their evaluation and promotion

Areas for Improvement:

- Adequate facilities should be available for extracurricular activities (including social and recreational activities) in both male and female sections

Priorities for Improvement:

- Research facilities in the female section should be further improved in order to enhance the quality of its research outcome

F. Program Evaluation

3. KPI-P-02: Students' Evaluation of quality learning experience in the program

Average of overall rating of final year students for the quality of learning experience in the program on a five point scale in an annual survey

Prog	Year	Branch	Students Prog. Satisf.	KPI-P-02
MATH_BSc	1435-1436	F		3.092
MATH_BSc	1436-1437	F		2.727
MATH_BSc	1437-1438	F		3.248
MATH_BSc	1438-1439	F		3.039
MATH_BSc	1439-1440	F		3.59
MATH_BSc	1440-1441	F		4.221
MATH_BSc	1441-1442	F		3.593
MATH_BSc	1442-1443	F		3.883
MATH_BSc	1435-1436	M		3.302
MATH_BSc	1436-1437	M		3.513
MATH_BSc	1437-1438	M		3.844
MATH_BSc	1438-1439	M		3.507
MATH_BSc	1439-1440	M		3.59
MATH_BSc	1440-1441	M		4.026
MATH_BSc	1441-1442	M		4.133
MATH_BSc	1442-1443	M		4.173

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-02 M :	4.17	4.17	4.13	4.17
KPI-P-02 F :	3.88	3.63	3.59	3.92

Comment:

Male section (M): Targeted benchmark was not reached for this criterion. Therefore, the targeted benchmark value was left unchanged and should be monitored over the next year.

Female section (F): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1% .

Analysis:

	Year		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11
MATH_BSc	1441-1442	F	3.69	3.68	3.53	3.51	3.59	3.54	3.48	3.51	3.59	3.65	3.53
MATH_BSc	1442-1443	F	3.88	3.96	3.91	3.77	3.96	3.82	3.95	3.81	3.90	3.77	3.87
MATH_BSc	1441-1442	M	4.00	4.08	4.11	4.00	4.24	4.10	4.10	4.19	4.18	4.03	4.18
MATH_BSc	1442-1443	M	4.23	4.18	4.14	4.19	4.14	4.18	4.23	4.11	4.18	4.20	4.20

	Year		Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22
MATH_BSc	1441-1442	F	3.33	3.80	3.46	3.68	3.66	3.63	3.65	3.63	3.64	3.64	3.68
MATH_BSc	1442-1443	F	3.66	4.01	3.85	3.83	4.03	3.80	3.93	3.97	3.90	3.95	3.90
MATH_BSc	1441-1442	M	3.92	4.36	4.08	4.27	4.15	4.21	4.08	4.05	4.15	4.31	4.15
MATH_BSc	1442-1443	M	4.16	4.20	4.15	4.18	4.15	4.13	4.16	4.14	4.21	4.18	4.20

Q1: Adequate academic and career counseling should be available for students throughout the program.

Q2: The instructors were available for consultation and advice when I needed to speak with them. (increase office hour/week in receive the students and ask their inquiry)

Q4: The instructors in the program gave me helpful feedback on my work.

Q5: The instructors in the program had thorough knowledge of the content of the

courses they taught.

Q6: The instructors were enthusiastic about the program.

Q7: The instructors cared about the progress of their students. [\(advice students to go to guidance and counseling unit\)](#)

Q8: Study materials in courses were up to date and useful

Q9: Library resources were adequate and available when I needed them.

Q10: Classroom facilities (for lectures, laboratories, tutorials etc) were of good quality.

Q11: Student computing facilities were sufficient for my needs.

Q12: Adequate facilities were available for extra curricular activities (including sporting and recreational activities).

Q13: Adequate facilities were available for religious observances.

Q14: Field experience programs (internship, practicum, cooperative training) were effective in developing my skills. (Omit this item if not applicable to your program)

Q15: What I have learned in this program will be valuable for my future.

Q16: The program has helped me to develop sufficient interest to want to continue to keep up to date with new developments in my field of study.

Q17: The program has developed my ability to investigate and solve new problems

Q18: The program has improved my ability to work effectively in groups.

Q19: The program has improved my skills in communication.

Q20: The program has helped me to develop good basic skills in using technology to investigate issues and communicate results.

Q21: I have developed the knowledge and skills required for my chosen career.

Q22: Overall I was satisfied with the quality of my learning experiences at this institution.

Areas for Improvement (Male Section)

None

Priorities for Improvement (Male Section)

None

Areas for Improvement (Female Section)

None

Priorities for Improvement (Female Section)

None

4. KPI-P-03: Students' evaluation of the quality of the courses

Average students overall rating for the quality of courses on a five-point scale in an annual survey

Prog	Year	Branch	Students Course Satisf.	KPI-P-03
MATH_BSc	1435-1436	F	3.508	
MATH_BSc	1436-1437	F	3.641	
MATH_BSc	1437-1438	F	3.85	
MATH_BSc	1438-1439	F	3.793	
MATH_BSc	1439-1440	F	4.066	
MATH_BSc	1440-1441	F	4.139	
MATH_BSc	1441-1442	F	4.068	
MATH_BSc	1442-1443	F	4.159	
MATH_BSc	1435-1436	M	3.419	
MATH_BSc	1436-1437	M	3.177	
MATH_BSc	1437-1438	M	3.705	
MATH_BSc	1438-1439	M	3.877	
MATH_BSc	1439-1440	M	4.014	
MATH_BSc	1440-1441	M	4.149	
MATH_BSc	1441-1442	M	4.083	
MATH_BSc	1442-1443	M	4.237	

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-03 M :	4.24	4.12	4.08	4.28
KPI-P-03 F :	4.16	4.11	4.07	4.20

Comment:

Male section (M): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1% .

Female section (F): Targeted benchmark was reached for this criterion. Therefore, a new benchmark value was set by incrementing the actual benchmark value by 1% .

Areas for Improvement (Male Section)

None

Priorities for Improvement (Male Section)

None

Areas for Improvement (Female Section)

None

Priorities for Improvement (Female Section)

None

5. KPI-P-09: Employers' evaluation of the program graduates proficiency

Average of overall rating of employers for the proficiency of the program graduates on a five-point scale in an annual survey

Prog	Year	Branch	Employers Satisf.	KPI-P-09
MATH_BSc	1435-1436	F	4.345	
MATH_BSc	1436-1437	F	4.5	
MATH_BSc	1439-1440	F	4.1	
MATH_BSc	1441-1442	F	3.9	
MATH_BSc	1435-1436	M	3.65	
MATH_BSc	1436-1437	M	4.1	
MATH_BSc	1439-1440	M	4.8	

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark
KPI-P-09 M :	4.25	4.85	4.8	4.85
KPI-P-09 F :	3.88	4.14	4.10	4.14

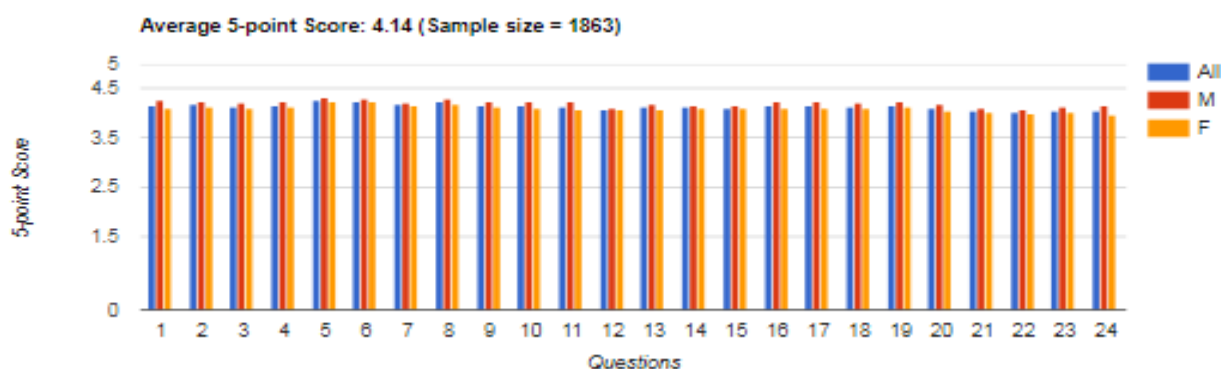
	Year	Branch	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
MATH_BSc	1439-1440	F	5	5	5	5	4	4	4	3	3	3
MATH_BSc	1441-1442	F	4	3.833	4	3.3	4	4	3.8	3.8	4	4
MATH_BSc	1439-1440	M	5	5	4	4	5	5	5	5	5	5
MATH_BSc	1441-1442	M	4.125	4.125	4.25	4.3	4.38	4.3	4.3	4.4	4.38	4.13

Comment:

Male section (M): Targeted benchmark was not reached for this criterion. Therefore, the targeted benchmark value was left unchanged and should be monitored over the next year.

Female section (F): Targeted benchmark was not reached for this criterion. Therefore, the targeted benchmark value was left unchanged and should be monitored over the next year.

1. Evaluation of Courses

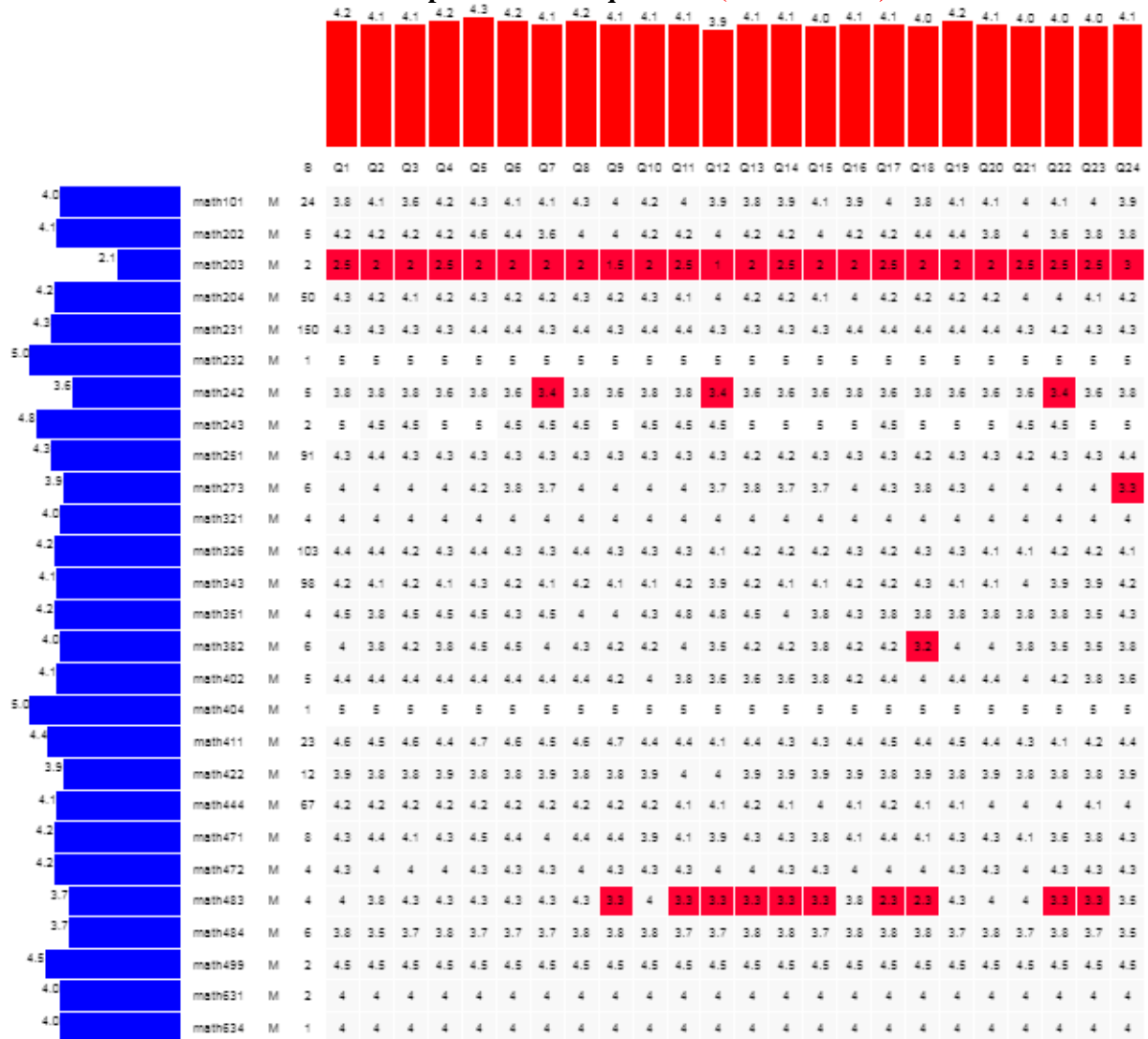


• Breakdown of Scores as per individual questions:

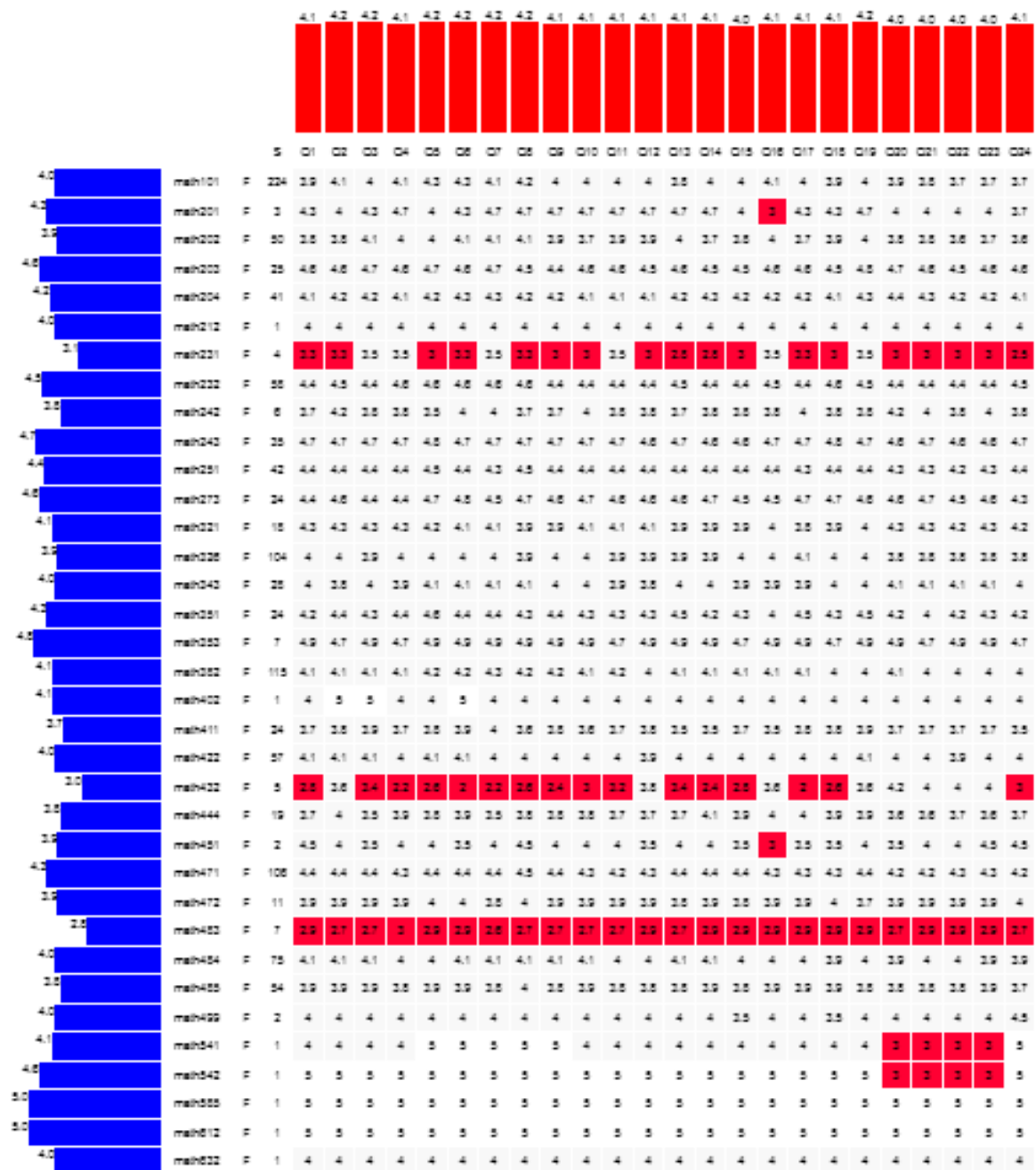
Questions	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Score
1.The course outline (including the knowledge and skills the course was designed to develop) was made clear to me.	838	673	227	55	70	4.16
2.The things I had to do to succeed in the course, including assessment tasks and criteria for assessment, were made clear to me.	835	698	217	53	60	4.18
3.Sources of help for me during the course including faculty office hours and reference material, were made clear to me.	819	667	265	50	62	4.14
4.The conduct of the course and the things I was asked to do were consistent with the course outline.	816	694	253	45	55	4.17
5.My instructor(s) were fully committed to the delivery of the course. (Eg. classes started on time, instructor always present, material well prepared, etc)	938	628	200	41	56	4.26

6. My instructor(s) had thorough knowledge of the content of the course.	912	645	220	36	50	4.25
7. My instructor(s) were available during office hours to help me.	865	629	266	53	50	4.18
8. My instructor(s) were enthusiastic about what they were teaching	912	622	222	53	54	4.23
9. My instructor(s) cared about my progress and were helpful to me.	862	634	248	55	64	4.17
10. Course materials were of up to date and useful. (texts, handouts, references etc.)	841	658	233	71	60	4.15
11. The resources I needed in this course (textbooks, library, computers etc.) were available when I needed them.	827	657	251	67	61	4.14
12. In this course effective use was made of technology to support my learning.	809	622	279	78	75	4.08
13. In this course I was encouraged to ask questions and develop my own ideas	816	664	246	66	71	4.12
14. In this course I was inspired to do my best work.	825	649	247	75	67	4.12
15. The things I had to do in this course (class activities, assignments, laboratories etc) were helpful for developing the knowledge and skills the course was intended to teach.	813	641	286	54	69	4.11
16. The amount of work I had to do in this course was reasonable for the credit hours allocated.	832	667	236	64	64	4.15
17. Marks for assignments and tests in this course were given to me within reasonable time.	858	648	226	54	77	4.16
18. Grading of my tests and assignments in this course was fair and reasonable.	834	633	269	60	67	4.13
19. The links between this course and other courses in my total program were made clear to me.	837	671	242	52	61	4.17
20. What I learned in this course is important and will be useful to me.	827	623	266	58	89	4.1
21. This course helped me to improve my ability to think and solve problems rather than just memorize information.	794	623	279	84	83	4.05
22. This course helped me to develop my skills in working as a member of a team.	799	608	261	92	103	4.02
23. This course improved my ability to communicate effectively.	811	602	284	83	83	4.06
24. Overall, I was satisfied with the quality of this course.	807	599	284	85	88	4.05

- Breakdown of Scores over courses as per individual questions (Male Section):



- Breakdown of Scores over courses as per individual questions (Female Section):



(Male Section)

Course Code	Course Title	Student Evaluation (Yes-No)	Other Evaluations (specify)	Developmental Recommendations
math101	Calculus (1)	Yes	None	
math202	Calculus (2)	Yes	None	
math203	Calculus in several variables	Yes	None	
math204	Vector Calculus	Yes	None	
math231	Basics of Mathematics	Yes	None	
math232	history of mathematics	Yes	None	
math242	Linear Algebra	Yes	None	
math243	Number Theory	Yes	None	
math251	Mathematical Applications	Yes	None	
math273	Introduction to Geometry	Yes	None	
math321	Introduction to differential Equations	Yes	None	
math326	Mathematical Methods	Yes	None	
math343	Group Theory	Yes	None	
math351	Numerical Analysis	Yes	None	
math382	Real Analysis (1)	Yes	None	
math411	Topics in Applied Mathematics	Yes	None	
math422	Introduction in Partial Differential equations	Yes	None	
math444	Rings and Fields	Yes	None	
math471	Introduction in Topology	Yes	None	
math472	Introduction to Differential Geometry	Yes	None	
math483	Real Analysis (2)	Yes	None	
math484	Complex Analysis	Yes	None	
math485	Functional Analysis	Yes	None	
math499	Project	Yes	None	

(Female Section)

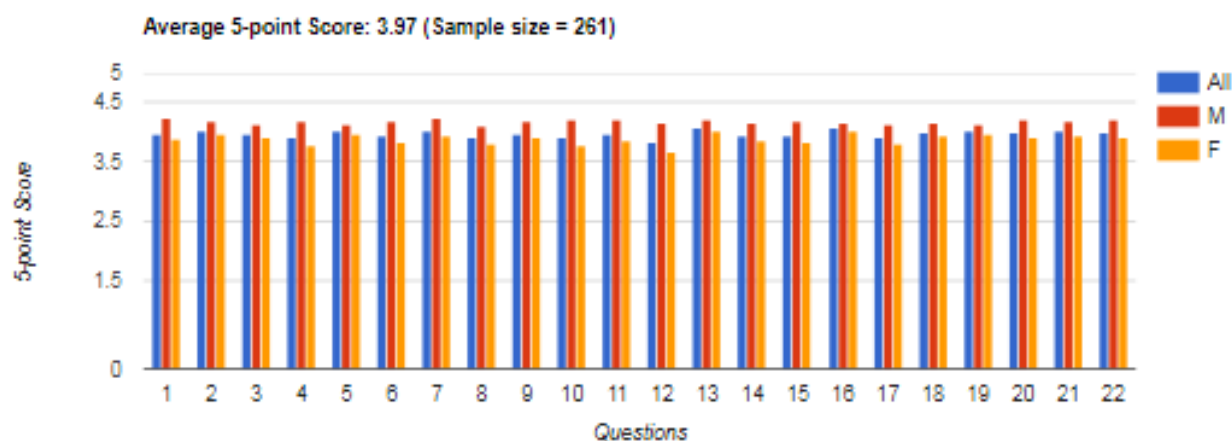
Course Code	Course Title	Student Evaluation (Yes-No)	Other Evaluations (specify)	Developmental Recommendations
math101	Calculus (1)	Yes	None	
math202	Calculus (2)	Yes	None	
math203	Calculus in several variables	Yes	None	
math204	Vector Calculus	Yes	None	
math231	Basics of Mathematics	Yes	None	
math232	history of mathematics	Yes	None	

Course Code	Course Title	Student Evaluation (Yes-No)	Other Evaluations (specify)	Developmental Recommendations
math242	Linear Algebra	Yes	None	
math243	Number Theory	Yes	None	
math251	Mathematical Applications	Yes	None	
math273	Introduction to Geometry	Yes	None	
math321	Introduction to differential Equations	Yes	None	
math326	Mathematical Methods	Yes	None	
math343	Group Theory	Yes	None	
math351	Numerical Analysis	Yes	None	
math382	Real Analysis (1)	Yes	None	
math411	Topics in Applied Mathematics	Yes	None	
math422	Introduction in Partial Differential equations	Yes	None	
math444	Rings and Fields	Yes	None	
math471	Introduction in Topology	Yes	None	
math472	Introduction to Differential Geometry	Yes	None	
math483	Real Analysis (2)	Yes	None	
math484	Complex Analysis	Yes	None	
math485	Functional Analysis	Yes	None	
math499	Project	Yes	None	

Comment:

the opinion of our students according to responses of questionnaire was satisfied and acceptable.

2. Students Evaluation of Program Quality



Questions	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Score
1.Adequate academic and career counselling was available for me throughout the program.	93	104	39	17	8	3.98
2.The instructors were available for consultation and advice when I needed to speak with them.	92	109	42	11	7	4.03
3.The instructors in the program inspired me to do my best.	88	108	46	10	9	3.98
4.The instructors in the program gave me helpful feedback on my work.	86	105	43	11	16	3.9
5.The instructors in the program had thorough knowledge of the content of the courses they taught.	93	106	44	9	9	4.02
6.The instructors were enthusiastic about the program.	95	101	36	10	19	3.93
7.The instructors cared about the progress of their students.	90	118	33	12	8	4.03
8.Study materials in courses were up to date and useful	87	106	43	6	19	3.9
9.Library resources were adequate and available when I needed them.	84	112	48	10	7	3.98
10.Classroom facilities (for lectures, laboratories, tutorials etc) were of good quality.	86	105	44	10	16	3.9
11.Student computing facilities were sufficient for my needs.	92	102	44	13	10	3.97
12.Adequate facilities were available for extra curricular activities (including sporting and recreational activities).	83	100	39	25	14	3.82
13.Adequate facilities were available for religious observances.	90	125	27	11	8	4.07
14.Field experience programs (internship, practicum, cooperative training) were effective in developing my skills. (Omit this item if not applicable to your program)	82	106	56	9	8	3.94
15.What I have learned in this program will be valuable for my future.	89	107	39	11	15	3.93

16.The program has helped me to develop sufficient interest to want to continue to keep up to date with new developments in my field of study.	99	105	40	9	8	4.07
17.The program has developed my ability to investigate and solve new problems	87	108	37	11	18	3.9
18.The program has improved my ability to work effectively in groups.	91	103	52	7	8	4
19.The program has improved my skills in communication.	88	119	32	15	7	4.02
20.The program has helped me to develop good basic skills in using technology to investigate issues and communicate results.	91	103	49	11	7	4
21.I have developed the knowledge and skills required for my chosen career.	94	104	44	12	7	4.02
22.Overall I was satisfied with the quality of my learning experiences at this institution.	93	99	51	10	8	3.99

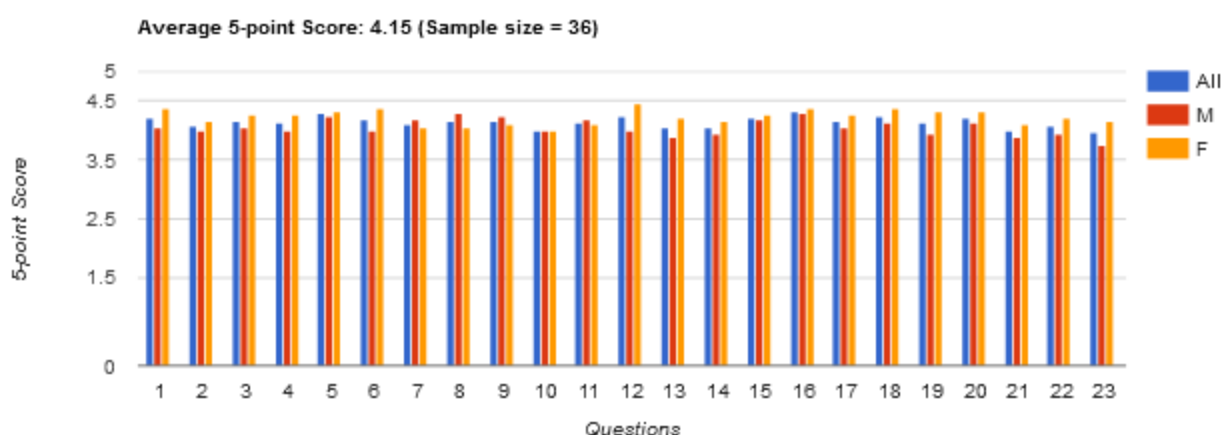
Evaluation Date :Weeks, 8-10 1st and 2nd semesters	Number of Participants: 261
Students Feedback	Program Response
Strengths: • Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22	it should be boosted.
Areas for Improvement: • None	
Suggestions for improvement: • None	

* Attach report on the students evaluation of program quality

3. Other Evaluations

(e.g. Evaluations by independent reviewer, program advisory committee, and stakeholders (e.g., faculty members, alumni, and employers))

3.1 Employees questionnaire:



	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Score
1. Graduate has high technical education level in the area of work	7	4	1	1	1	4.07
2. Graduate understands the ethical and professional liabilities in the major	6	6	0	0	2	4
3. Graduate comprehends the role and the impact of the discipline in the national context	8	4	0	0	2	4.14
4. Graduate has good English language skills (if demanded by employment)	7	2	2	2	1	3.86
5. Graduate can identify and describe the problems and recommend appropriate solutions to them	8	4	0	1	1	4.21
6. Graduate can gather and analyze information and give alternatives solutions to solve the problems	8	3	1	1	1	4.14
7. Graduate have the ability to relate theory with application in the domain of work	7	5	0	0	2	4.07
8. Graduate is able to orally communicate and converse in the field of work	8	3	1	1	1	4.14
9. Graduate is able to prepare reports in the field of work	8	4	0	1	1	4.21
10. Graduate is able participate in group discussions and work in a team	8	3	1	0	2	4.07
11. Students were briefed about the university mission which goes well with the nature of its activities	8	4	0	0	2	4.14

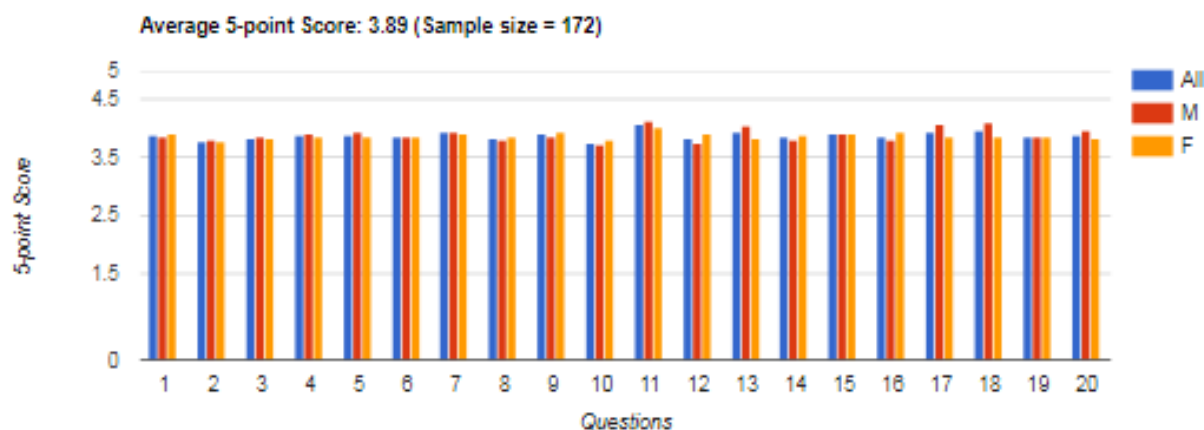
12.Students services and university resources are consistent with the university mission	8	3	1	0	2	4.07
13.Graduate has leadership skills	5	6	1	2	0	4
14.Graduate has loyalty to the institution	8	4	0	0	2	4.14
15.Graduate has the skills of understanding and grasping	8	3	1	2	0	4.21
16.Graduate enjoys the capacity of independent thinking	8	4	0	1	1	4.21
17.Graduate enjoys the capacity of critical thinking	5	6	1	2	0	4
18.Graduate has the drive to work and develop continuous learning in the domain of work	6	6	0	0	2	4
19.Graduate can adapt to modern technology	6	5	1	1	1	4
20.Students are aware of the university policies	9	3	0	1	1	4.29
21.Institution provides information about the programs, offered courses and its services to the students before registration	8	2	2	0	2	4
22.Institution provides academic advising to the students before registration	9	3	0	2	0	4.36
23.The institution takes the graduates feedback regarding university future plans	7	4	1	1	1	4.07

Average score : 4.10

Evaluation method : Employers questionnaire	Date: End of the year	Number of Participants : 36
Summary of Evaluator Review		Program Response
Strengths: Q1, Q2, Q3, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21, Q22, Q23		it should be boosted.
Points for Improvements:: None		
Suggestions for improvement None		

* Attach independent reviewer's report and stakeholders' survey reports (if any)

3.2 Student Experience questionnaire:



Breakdown of Scores as per individual questions:

Questions	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Score
1.It was easy to find information about the institution and its programs before I enrolled at this institution for the first time.	55	73	24	10	10	3.89
2.When I first started at this institution the orientation program for new students was helpful for me	51	71	28	7	15	3.79
3.There is sufficient opportunity at this institution to obtain advice on my studies and my future career.	53	69	31	8	11	3.84
4.Procedures for enrolling in courses are simple and efficient.	51	76	25	14	6	3.88
5.Classrooms (including lecture rooms, laboratories etc.) are attractive and comfortable.	53	70	33	9	7	3.89
6.Student computing facilities are sufficient for my needs.	53	69	31	9	10	3.85
7.The library staff are helpful to me when I need assistance.	52	77	28	9	6	3.93
8.I am satisfied with the quality and extent of materials available for me in the library.	53	70	28	9	12	3.83
9.The library is open at convenient times.	53	75	28	6	10	3.9
10.Adequate facilities are available for extra curricular activities (including sporting and recreational activities)	49	71	28	9	15	3.76
11.Adequate facilities are available at this institution for religious observances.	58	82	21	8	3	4.07
12.Most of the faculty with whom I work at this institution are genuinely interested in my progress	52	74	24	11	11	3.84
13.Faculty at this institution are fair in their treatment of students	59	70	24	12	7	3.94
14.My courses and assignments encourage me to investigate new ideas and express my own opinions.	56	69	24	11	12	3.85
15.As a result of my studies my ability to investigate and solve new and unusual problems is increasing	55	73	27	7	10	3.91

16. My ability to effectively communicate the results of investigations I undertake is improving as a result of my studies.	52	73	29	9	9	3.87
17. My program of studies is stimulating my interest in further learning.	50	82	27	8	5	3.95
18. The knowledge and skills I am learning will be valuable for my future career.	52	79	29	8	4	3.97
19. I am learning to work effectively in group activities.	53	71	30	8	10	3.87
20. Overall I am satisfied with my life as a student at this institution.	58	64	31	11	8	3.89

Evaluation Date : Weeks, 8-10 1st and 2nd semesters	Number of Participants: 172
Students Feedback	Program Response
Strengths: <ul style="list-style-type: none"> Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20 	it should be boosted.
Suggestions for improvement:	
<ul style="list-style-type: none"> None 	

4. Key Performance Indicators (KPIs)

List the results of the program key performance indicators (including the key performance indicators required by the National Center for Academic Accreditation and evaluation)

MATH_BSc (1442-1443)	Actual Benchmark	Targeted Benchmark	Internal Benchmark	New Target Benchmark	Analysis
KPI-P-02 M :	4.17	4.17	4.13	4.17	Target Benchmark reached
KPI-P-02 F :	3.88	3.63	3.59	3.92	Target Benchmark reached
KPI-P-03 M :	4.24	4.12	4.08	4.28	Target Benchmark reached
KPI-P-03 F :	4.16	4.11	4.07	4.2	Target Benchmark reached
KPI-P-04 M :	79.88	72.36	71.64	80.68	Target Benchmark reached
KPI-P-04 F :	80.04	71.72	71.01	80.84	Target Benchmark reached
KPI-P-05 M :	63.21	60.56	59.96	63.84	Target Benchmark reached
KPI-P-05 F :	65.06	69.5	68.81	69.5	Target Benchmark not reached
KPI-P-08 M :	48.84	45.94	54.79	45.94	Target Benchmark reached
KPI-P-08 F :	54.29	30.83	41.41	30.83	Target Benchmark reached
KPI-P-09 M :	4.25	4.85	4.8	4.85	Target Benchmark not reached
KPI-P-09 F :	3.88	4.14	4.1	4.14	Target Benchmark not reached
KPI-P-10 M :	3.89	4.28	4.24	4.28	Target Benchmark not reached
KPI-P-10 F :	3.89	3.58	3.54	3.93	Target Benchmark reached
KPI-P-14 M :	58.33	65.36	64.71	65.36	Target Benchmark reached
KPI-P-14 F :	33.33	31.08	30.77	33.66	Target Benchmark reached
KPI-P-15 M :	2.67	1.37	1.35	2.7	Target Benchmark reached
KPI-P-15 F :	0.87	0.54	0.54	0.88	Target Benchmark reached
KPI-P-16 M :	211.54	97.49	96.53	213.66	Target Benchmark reached
KPI-P-16 F :	13.07	50.27	49.77	50.27	Target Benchmark not reached
KPI-P-17 M :	3.86	4.27	4.23	4.27	Target Benchmark not reached
KPI-P-17 F :	3.89	3.6	3.57	3.93	Target Benchmark reached

Comments on the Program KPIs and Benchmarks results :

- KPI-P-05 (F), KPI-P-09 (M+F), KPI-P-10 (M), KPI-P-16 (MF) and KPI-P-17 (M) did not reach their target benchmark value.

5. Analysis of Program Evaluation

(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :

- Students' evaluation of the courses scores 4.05 (out of 5) indicating satisfactory performance of the underlying practices.
- Students' evaluation of the program quality scores 3.99 (out of 5) indicating satisfactory performance of the underlying practices.
- Employers' evaluation of the program quality scores 4.10 out of 5) indicating satisfactory performance of the underlying practices.
- Most of the program NCPAA KPIs reached their targeted benchmark value indicating commitment in the program operational practices and eagerness to improve.

Areas for Improvement:

- Students should be briefed about the university mission which goes well with the nature of its activities
- Graduates should be able to adapt to modern technology

Priorities for Improvement:

- Students should be briefed about the university mission which goes well with the nature of its activities
- Graduates should be able to adapt to modern technology

G. Difficulties and Challenges Faced Program Management

Difficulties and Challenges	Implications on the Program	Actions Taken
<ul style="list-style-type: none"> A shortage of faculty members and an excessive teaching load. Specialized training courses for faculty members in the field of teaching strategies and assessment methods are insufficient 	<ul style="list-style-type: none"> impacted on students average marks and success rate for some of the courses taught 	<ul style="list-style-type: none"> Dept head has reviewed some C.V. of new teaching staff to recruiting them. Training unit arranged with CLT to present a number of workshops on teaching strategies and assessment methods

*Internal and external difficulties and challenges

H. Program Improvement Plan

No.	Priorities for Improvement	Actions	Action Responsibility	Date		Achievement Indicators	Target Benchmark
				Start	End		
1	Research facilities should be boosted in the female section.	Discussing possible avenues to boost the research facilities in the female section with the head of Department	Dept. Head	1/09/2022	1/10/2023	Percentage of full-time faculty members in the female section who published at least one research during the year to total faculty members in the program, KPI-P-14	60%
2	Regulations of access to major pieces of research equipment hosted in the male section should be introduced such as to allow for flexible and fair utilization by colleagues and post graduate students in the female section.	Addressing the post graduates and research committee for setting out a framework to allow for flexible and fair utilization by colleagues and post graduate students in the female section.	Head of postgraduates and research committee	1/10/2021	1/10/2022	The average number of refereed and/or published research per each faculty member during the year (KPI-P-15)	4.85/5
3	A shortage of faculty members and an excessive teaching load.	Dept. head addressed a letter to college dean to assist recruiting a new specialized teaching staff.	Head of Department	1/09/2022	1/10/2023	Ratio student to faculty member, KPI-P-11	1:17
4	Specialized training courses for faculty members in the field of teaching strategies and assessment methods are insufficient	Training unit arranged with CLT to present a number of workshops on teaching strategies and assessment methods	Training unit	1/09/2022	1/10/2023	No. of attending training courses per faculty member	2

I. Report Approving Authority

Council / Committee	DEPARTMENT OF MTHEMATICS COUNCIL
Reference No.	
Date	