# Virtual University of Pakistan

## **Assessment Team Report**

## **Department of Mathematics & Statistics**

#### **MSC Mathematics**

#### **Criteria Referenced Evaluation**

	Poor performance in most of the areas.	Fair performance in most of the areas.	Good performance for most areas / No poor performance in any areas.	Good to excellent performance in all areas.	Excellent performance in all areas.	Score
Criterion 1				✓		4.00
Criterion 2				✓		15.00
Criterion 3				✓		7.33
Criterion 4				✓		8.00
Criterion 5			✓			10.09
Criterion 6			✓			13.71
Criterion 7			✓			6.67
Criterion 8			✓			7.00

Crite	rion 1 - Program Mission, Objectives and Outcomes		Weight =			0.05
Fac	tors Score					
1	Does the Program have documented measureable objectives that support faculty / college and institution mission statements?	5	✓	3	2	1
2	Does the Program have documented outcomes for graduating students?	5	✓	3	2	1
3	Do these outcomes support the Program objectives?	5	✓	3	2	1
4	Are the graduating students capable of performing these outcomes?	5	4	✓	2	1
5	Does the department assess its overall performance periodically using quantifiable measures?	5	✓	3	2	1
6	Is the result of the Program Assessment documented?	✓	4	3	2	1
	Total Encircled Value (TV)	5	16	3	0	0
	Score 1 (S1) = [TV/(No. of Questions *5)] *100 *Weight =			4.00		
Crite	rion 2 - Curriculum Design and Organization			Wei	ght =	0.20
Fac	tors Score					•
1	Is the curriculum consistent?	5	4	✓	2	1
2	Does the curriculum support the program's documented objectives?	5	✓	3	2	1
3	Are theoretical background, problem analysis and solution design stressed within the program's core material?	5	✓	3	2	1
4	Does the curriculum satisfy the core requirements laid down by respective accreditation bodies? (refer Appendix A of the Self Assessment Manual)	✓	4	3	2	1
5	Does the curriculum satisfy the major requirements laid down by HEC and the respective councils / accreditation bodies?	✓	4	3	2	1
6	Does the curriculum satisfy the general education, arts and professional and other discipline requirements as laid down by the respective / accreditation bodies / councils?	5	✓	3	2	1
7	Is the information technology component integrated throughout the program?	✓	4	3	2	1
8	Are oral and written skills of the students developed and applied in the program?	5	4	3	2	1
	Total Encircled Value (TV)	15	12	3	0	0
	Score 2 (S2) = [TV/(No. of Questions *5)] *100 *Weight =		15.00			
Crite	rion 3 - Laboratories and Computing Facilities			Wei	ght =	0.10
Fac	tors Score					
1	Are laboratory manuals / documentation / instructions etc. for experiments available and readily accessible to faculty and students?	5	4	✓	2	1
2	Are there adequate number of support personnel for instruction and maintaining the laboratories?	5	4	✓	2	1
3	Are the university's infrastructure and facilities adequate to support the program objectives?	✓	4	3	2	1
	Total Encircled Value (TV)	5	0	6	0	0
	Score 3 (S3) = [TV/(No. of Questions *5)] *100 *Weight =			7.33		
Crite	rion 4 - Student Support and Advising			Wei	ght =	0.10
Fac	tors Score					
1	Are the courses being offered in sufficient frequency and number for the students to complete the program in a timely manner?	✓	4	3	2	1
2	Are the courses in the major area structured to optimize interaction between the students, faculty and teaching assistants?	5	✓	3	2	1
3	Does the university provide academic advising on course decisions and career choices to all students?	5	4	<b>√</b>	2	1
	Total Encircled Value (TV)	5	4	3	0	0
	Score 4 (S4) = [TV/(No. of Questions *5)] *100 *Weight =			8.00		•

Factors Score  Is the process to enroll students to a program based on quantitative and qualitative				ght =	0.15			
Is the process to enroll students to a program based on quantitative and qualitative	Factors Score							
criteria?	5	4	✓	2	1			
Is the process above clearly documented and periodically evaluated to ensure that it is meeting its objectives?	5	✓	3	2	1			
3 Is the process to register students in the program and monitoring their progress documented?	✓	4	3	2	1			
4 Is the process above periodically evaluated to ensure that it is meeting its objectives?	5	4	✓	2	1			
5 Is the process to recruit and retain faculty in place and documented?	5	4	3	✓	1			
Are the processes for faculty evaluation & promotion consistent with the institution mission?	5	4	3	✓	1			
Are the processes in 5 and 6 above periodically evaluated to ensure that they are meeting their objectives?	5	4	3	✓	1			
B Do the processes and procedures ensure that teaching and delivery of course material emphasize active learning and that course learning outcomes are met?	5	✓	3	2	1			
Is the process in 8 above periodically evaluated to ensure that it is meeting its objectives?	5	✓	3	2	1			
Is the process to ensure that graduates have completed the requirements of the program base on standards and documented procedures?	✓	4	3	2	1			
Is the process in 10 above periodically evaluated to ensure that it is meeting its objectives?	5	4	✓	2	1			
Total Encircled Value (TV)	10	12	9	6	0			
Score 5 (S5) = [TV/(No. of Questions *5)] *100 *Weight =			10.09					
Criterion 6 - Faculty			Wei	ght =	0.20			
Factors Score								
Are there enough full time faculty members to provide adequate coverage of the program areas / courses with continuity and stability?	5	✓	3	2	1			
Are the qualifications and interests of faculty members sufficient to teach all courses, plan, modify and update courses and curricula?	5	✓	3	2	1			
Do the faculty members posses a level of competence that would be obtained through graduate work in the discipline?	5	✓	3	2	1			
4 Do the majority of faculty members hold a PhD degree in their discipline?	5	4	3	✓	1			
5 Do faculty members dedicate sufficient time to research to remain current in their disciplines?	5	4	✓	2	1			
6 Are there mechanisms in place for faculty development?	5	4	✓	2	1			
7 Are faculty members motivated and satisfied so as to excel in their profession?	5	✓	3	2	1			
Total Encircled Value (TV)	0	16	6	2	0			
Score 6 (S6) = [TV/(No. of Questions *5)] *100 *Weight =			13.71					
Criterion 7 - Institutional Facilities			Wei	ght =	0.10			
Factors Score								
1 Does the institution have the infrastructure to support new trends such as e-learning?	<b>✓</b>	4	3	2	1			
Does the library contain technical collection relevant to the program and is it adequately staffed?	5	4	3	✓	1			
	5	4	✓	2	1			
Are the class rooms and offices adequately equipped and capable of helping faculty carry out their responsibilities?								
Are the class rooms and offices adequately equipped and capable of helping faculty	5	0	3	2	0			

Criterion 8 - Institutional Support					Weight =	
Factors Score						
1	Is there sufficient support and finances to attract and retain high quality faculty?	5	✓	3	2	1
Are there an adequate number of high quality graduate students, teaching assistants and Ph.D students?		5	4	✓	2	1
	Total Encircled Value (TV)			3	0	0
	Score 8 (S8) = [TV/(No. of Questions *5)] *100 *Weight =			7.00		

	OVERALL ASSESSMENT SCORE =	S1 + S2 + S3 + S4 + S5 + S6 + S7 +S8
		$= \frac{4.00 + 15.00 + 7.33 + 8.00 + 10.09 + 10.09 + 10.09 + 10.09 + 10.00}{13.71 + 6.67 + 7.00}$
		<sub>=</sub> 71.81 / 100
<b>Comments:</b>		