

# Virtual University of Pakistan


## Assessment Team Report


**Department:** Department of Computer Science  
**Program Title:** Associate Degree Program in Computer Networking  
**Assessment Cycle:** Cycle-III  
**Assessment Year:** 2023-24

### Criteria Referenced Evaluation

	Excellent Performance in all areas.	Good to Excellent Performance in all areas.	Good Performance for most areas *	Fair Performance in most of the areas.	Poor Performance in most of the areas.	Score
<b>Criterion 1 – Program Mission, Objectives and Outcomes</b>		✓				3.67
<b>Criterion 2 – Curriculum Design and Organization</b>	✓					19.50
<b>Criterion 3 – Laboratories and Computing Facilities</b>	✓					8.67
<b>Criterion 4 – Student Support and Advising</b>		✓				8.00
<b>Criterion 5 – Process Control</b>	✓					13.91
<b>Criterion 6 – Faculty</b>			✓			12.57
<b>Criterion 7 – Institutional Facilities</b>			✓			6.00
<b>Criterion 8 – Institutional Support</b>				✓		5.00

\* No poor performance in any areas.

<b>Signature of AT:</b>
<b>Name &amp; Designation:</b>
Dr. Israr Ullah  Assistant Professor Department of Computer Science Virtual University of Pakistan

<b>Signature of DQE Coordinator:</b>
<b>Name &amp; Designation:</b>
Reviewed By:  Dr. Mubashar Majeed Qadri Manager Quality, DQE

**Criterion 1 – Program Mission, Objectives and Outcomes**

**Weight = 0.05**

<b>Factors Score</b>		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
1	Does the Program have documented measurable objectives that support faculty / college and institution mission statements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Does the Program have documented outcomes for graduating students?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Do these outcomes support the Program objectives?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Are the graduating students capable of performing these outcomes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Does the department assess its overall performance periodically using quantifiable measures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Is the result of the Program Assessment documented?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Total Encircled Value (TV)</b>		<b>5</b>	<b>12</b>	<b>3</b>	<b>2</b>	<b>0</b>
<b>Score 1 (S1) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>3.67</b>				

<b>Comments/Observations/Key Findings:</b>		
<b>1</b>	Employers' survey is important to assess the effectiveness of the program	<b>1</b>
<b>2</b>	A departmental program assessment team is needed to periodically evaluate the program and recommend improvements.	<b>2</b>
<b>3</b>	The method for mapping Program Objectives to Course Outcomes needs revision to enable informed decision-making. It would be beneficial to reflect this on a scale, indicating the current status and desired.	<b>3</b>
<b>4</b>	During the preparation of SAR reports, redundant and often incomplete data is collected. It is recommended to establish a central system within VIS where faculty can record developments such as training, workshops, seminars attended, and publications as soon as it happens. This data	<b>4</b>
<b>5</b>		<b>5</b>
<b>6</b>		<b>6</b>
<b>7</b>		<b>7</b>
<b>8</b>		<b>8</b>
<b>9</b>		<b>9</b>

**Criterion 2 – Curriculum Design and Organization**
**Weight = 0.20**

Factors Score		5	4	3	2	1
1	Is the curriculum consistent?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Does the curriculum support the program's documented objectives?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Are theoretical background, problem analysis and solution design stressed within the program's core material?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Does the curriculum satisfy the core requirements laid down by respective accreditation bodies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Does the curriculum satisfy the major requirements laid down by HEC and the respective councils / accreditation bodies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Does the curriculum satisfy the general education, arts and professional and other discipline requirements as laid down by the respective / accreditation bodies / councils?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Is the information technology component integrated throughout the program?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Are oral and written skills of the students developed and applied in the program?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Total Encircled Value (TV)</b>		<b>35</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Score 2 (S2) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>19.50</b>				

Comments/Observations/Key Findings:		
1	The practical components of the courses need enhancement, and assessments should also be of a practical nature to better develop the students' technical skills.	1
2		2
3		3
4		4
5		5
6		6
7		7
8		8
9		9

Criterion 3 – Laboratories and Computing Facilities					Weight = 0.10	
Factors Score		5	4	3	2	1
1	Are laboratory manuals / documentation / instructions etc. for experiments available and readily accessible to faculty and students?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Are there adequate number of support personnel for instruction and maintaining the laboratories?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Are the university's infrastructure and facilities adequate to support the program objectives?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Total Encircled Value (TV)</b>		<b>10</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>
<b>Score 3 (S3) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>8.67</b>				

Comments/Observations/Key Findings:		
1	Lab manuals and instructions, often shared in digital format, should also be physically available in the labs to ensure compliance.	1
2	A dedicated networking lab is desired for the program. A proposal for this lab is currently in the pipeline and, if approved, it is expected to meet the program's needs.	2
3		3
4		4
5		5
6		6
7		7
8		8
9		9

Criterion 4 – Student Support and Advising		Weight = 0.10				
Factors Score		5	4	3	2	1
1	Are the courses being offered in sufficient frequency and number for the students to complete the program in a timely manner?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Are the courses in the major area structured to optimize interaction between the students, faculty and teaching assistants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Does the university provide academic advising on course decisions and career choices to all students?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Total Encircled Value (TV)</b>		<b>5</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>0</b>
<b>Score 4 (S4) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>8.00</b>				

Comments/Observations/Key Findings:		
1	It would be beneficial to increase the number of elective courses, allowing students to choose based on their interests.	1
2	A career counseling center and frequent sessions are essential to better guide students in their future directions. Engaging experts from industry can provide invaluable insights and practical advice to help students make informed career decisions.	2
3		3
4		4
5		5
6		6
7		7
8		8
9		9

**Criterion 5 – Process Control**

**Weight = 0.15**

<b>Factors Score</b>		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
1	Is the process to enroll students to a program based on quantitative and qualitative criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Is the process above clearly documented and periodically evaluated to ensure that it is meeting its objectives?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Is the process to register students in the program and monitoring their progress documented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Is the process above periodically evaluated to ensure that it is meeting its objectives?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Is the process to recruit and retain faculty in place and documented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Are the processes for faculty evaluation & promotion consistent with the institution mission?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Are the processes in 5 and 6 above periodically evaluated to ensure that they are meeting their objectives?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Do the processes and procedures ensure that teaching and delivery of course material emphasize active learning and that course learning outcomes are met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Is the process in 8 above periodically evaluated to ensure that it is meeting its objectives?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Is the process to ensure that graduates have completed the requirements of the program base on standards and documented procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Is the process in 10 above periodically evaluated to ensure that it is meeting its objectives?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Total Encircled Value (TV)</b>		<b>35</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Score 5 (S5) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>13.91</b>				

**Comments/Observations/Key Findings:**

<b>1</b>	For faculty development, study leaves are currently provided but are unpaid. It would be advantageous to consider making these leaves paid, aligning with practices at other academic institutions.	<b>1</b>	
<b>2</b>	Similarly, clear and defined policies for funding research publications and participation in international conferences should be established and communicated to faculty members.	<b>2</b>	
<b>3</b>	To enhance transparency in the recruitment process, it is proposed that the quantification of candidates and their merit positions be publicly shared, aligning with practices at other academic institutions.	<b>3</b>	
<b>4</b>	LMS needs to be upgraded to include the element active learning	<b>4</b>	
<b>5</b>		<b>5</b>	
<b>6</b>		<b>6</b>	
<b>7</b>		<b>7</b>	
<b>8</b>		<b>8</b>	
<b>9</b>		<b>9</b>	
<b>10</b>		<b>10</b>	
<b>11</b>		<b>11</b>	
<b>12</b>		<b>12</b>	

Criterion 6 – Faculty		Weight = 0.20				
Factors Score		5	4	3	2	1
1	Are there enough full-time faculty members to provide adequate coverage of the program areas / courses with continuity and stability?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Are the qualifications and interests of faculty members sufficient to teach all courses, plan, modify and update courses and curricula?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Do the faculty members posses a level of competence that would be obtained through graduate work in the discipline?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Do the majority of faculty members hold a Phd degree in their discipline?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Do faculty members dedicate sufficient time to research to remain current in their disciplines?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Are there mechanisms in place for faculty development?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Are faculty members motivated and satisfied so as to excel in their profession?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Total Encircled Value (TV)</b>		<b>5</b>	<b>0</b>	<b>15</b>	<b>2</b>	<b>0</b>
<b>Score 6 (S6) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>12.57</b>				

Comments/Observations/Key Findings:		
1	The department currently lacks sufficient faculty to manage the workload of registered students, and this issue needs to be addressed promptly.	1
2	Currently, PhD faculty members are performing the same duties as junior instructors, in addition to handling extra management tasks. To maximize their expertise, a mechanism should be implemented to allocate them more time for research.	2
3		3
4		4
5		5
6		6
7		7
8		8
9		9



Criterion 7 – Institutional Facilities		Weight = 0.10				
Factors Score		5	4	3	2	1
1	Does the institution have the infrastructure to support new trends such as e-learning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Does the library contain technical collection relevant to the program and is it adequately staffed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Are the class rooms and offices adequately equipped and capable of helping faculty carry out their responsibilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Total Encircled Value (TV)</b>		<b>0</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>0</b>
<b>Score 7 (S7) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>6.00</b>				

Comments/Observations/Key Findings:		
1	Instead of relying on the frequently inaccessible HEC Digital Library, VU should establish its own digital library. This library should offer the latest resources and books, ensuring they are readily available to faculty and students on demand.	1
2	Faculty offices currently resemble call centers with numerous distractions. The office environment for faculty needs improvement to minimize disturbances and enhance productivity.	2
3		3
4		4
5		5
6		6
7		7
8		8
9		9

Criterion 8 – Institutional Support		Weight = 0.10				
Factors Score		5	4	3	2	1
1	Is there sufficient support and finances to attract and retain high quality faculty?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Are there an adequate number of high quality graduate students, teaching assistants and Ph.D. students?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Total Encircled Value (TV)</b>		<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>0</b>
<b>Score 8 (S8) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>5.00</b>				

Comments/Observations/Key Findings:		
1	VU needs to enhance the working environment for faculty to boost productivity. Currently, it resembles an office or call center rather than a university setting. Improving campus life for both students and faculty is essential.	1
2	Currently, the incoming student body is predominantly weak or average, leading to higher failure rates under strict assessment. Although there is an emphasis on quality and skills development, in practice, it feels like we are merely producing degree holders. This issue needs to be addressed	2
3		3
4		4
5		5
6		6
7		7
8		8
9		9

$$\begin{aligned}\text{OVERALL ASSESSMENT SCORE} &= S1 + S2 + S3 + S4 + S5 + S6 + S7 + S8 \\ &= 3.67 + 19.5 + 8.67 + 8.00 + 13.9 + 12.5 + 6.00 + 5.00 \\ &= 77.31 / 100\end{aligned}$$

**Overall Comments by Assessment Team:**

I appreciate the template developed by QEC to quantify the assessment score of study programs, it's a wonderful effort. I have suggested minor change in mapping of program objectives with course outcomes to better project relative coverage of each objective. I have also added some comments in the SAR report file where corrections are needed.

**Comments by DQE Coordinator:**