# Virtual University of Pakistan

**Assessment Team Report**

**Department Name: Computer Science**

**Program Name: MS (Computer Science)**

**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** |  |  | √ |  |  | **4.17** |
| **Criterion 2** |  |  |  | √ |  | **4.875** |
| **Criterion 3** |  |  |  | √ |  | **7.33** |
| **Criterion 4** |  |  | √ |  |  | **7.33** |
| **Criterion 5** |  |  |  | √ |  | **12.28** |
| **Criterion 6** |  | √ |  |  |  | **9.14** |
| **Criterion 7** |  |  |  | √ |  | **7.33** |
| **Criterion 8** |  | √ |  |  |  | **3.00** |

## Criteria Referenced Self Assessment – Methodology and Evaluation Tool

| Criterion 1 – Program Mission, Objectives and Outcomes | | Weight = 0.05 | | | |
|---|---|:---:|:---:|:---:|:---:|:---:|
| **Factors** | | | | **Score** | | |
| 1 | Does the Program have documented measureable objectives that support faculty / college and institution mission statements? | 5 | 4 | 3 | 2 | 1 |
| 2 | Does the Program have documented outcomes for graduating students? | 5 | 4 | 3 | 2 | 1 |
| 3 | Do these outcomes support the Program objectives? | 5 | 4 | 3 | 2 | 1 |
| 4 | Are the graduating students capable of performing these outcomes? | 5 | 4 | 3 | 2 | 1 |
| 5 | Does the department assess its overall performance periodically using quantifiable measures? | 5 | 4 | 3 | 2 | 1 |
| 6 | Is the result of the Program Assessment documented? | 5 | 4 | 3 | 2 | 1 |
| | **Total Encircled Value (TV)** | 5 | 20 | 0 | 0 | 0 |
| **Score 1 (S1) = [TV/(No. of Questions \*5)] \*100 \*Weight = 4.17** | | | | | | |

| Criterion 2 – Curriculum Design and Organization | | Weight = 0.05 | | | |
|---|---|:---:|:---:|:---:|:---:|:---:|
| **Factors** | | | | **Score** | | |
| 1 | Is the curriculum consistent? | 5 | 4 | 3 | 2 | 1 |
| 2 | Does the curriculum support the program's documented objectives? | 5 | 4 | 3 | 2 | 1 |
| 3 | Are theoretical background, problem analysis and solution design stressed within the program's core material? | 5 | 4 | 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) | 5 | 4 | 3 | 2 | 1 |
| 5 | Does the curriculum satisfy the major requirements laid down by HEC and the respective councils / accreditation bodies? (Refer to appendix A of the Self Assessment Manual) | 5 | 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? (Refer to Appendix A of the Self Assessment Manual) | 5 | 4 | 3 | 2 | 1 |
| 7 | Is the information technology component integrated throughout the program? | 5 | 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) | 35 | 4 | 0 | 0 | 0 |
| **Score 2 (S2) = [TV/(No. of Questions \*5)] \*100 \*Weight = 4.875** | | | | | | |

| Criterion 3 – Laboratories and Computing Facilities | | | | | Weight = 0.10 |
|---|---|---|---|---|---|
| **Factors** | | | | | **Score** |
| 1 | Are laboratory manuals / documentation / instructions etc. for experiments available and readily accessible to faculty and students? | 5 | 4 | **3** | 2 | 1 |
| 2 | Are there adequate number of support personnel for instruction and maintaining the laboratories? | 5 | **4** | 3 | 2 | 1 |
| 3 | Are the university's infrastructure and facilities adequate to support the program objectives? | 5 | **4** | 3 | 2 | 1 |
| **Total Encircled Value (TV)** | | 0 | 8 | 3 | 0 | 0 |
| Score 3 **(S3) = [TV/(No. of Questions *5)] *100 *Weight = 7.33** | | | | | | |

| Criterion 4 – Student Support and Advising | | | | | Weight = 0.10 |
|---|---|---|---|---|---|
| **Factors** | | | | | **Score** |
| 1 | Are the courses being offered in sufficient frequency and number for the students to complete the program in a timely manner? | **5** | 4 | 3 | 2 | 1 |
| 2 | Are the courses in the major area structured to optimize interaction between the students, faculty and teaching assistants? | 5 | **4** | 3 | 2 | 1 |
| 3 | Does the university provide academic advising on course decisions and career choices to all students? | 5 | 4 | 3 | **2** | 1 |
| **Total Encircled Value (TV)** | | 5 | 4 | 0 | 2 | 0 |
| Score 4 **(S4) = [TV/(No. of Questions *5)] *100 *Weight = 7.33** | | | | | | |

| Criterion 5 – Process Control | | | | | Weight = 0.15 |
|---|---|---|---|---|---|
| **Factors** | | | | | **Score** |
| 1 | Is the process to enroll students to a program based on quantitative and qualitative criteria? | **5** | 4 | 3 | 2 | 1 |
| 2 | Is the process above clearly documented and periodically evaluated to ensure that it is meeting its objectives? | **5** | 4 | 3 | 2 | 1 |
| 3 | Is the process to register students in the program and monitoring their progress documented? | **5** | 4 | 3 | 2 | 1 |
| 4 | Is the process above periodically evaluated to ensure that it is meeting its objectives? | **5** | 4 | 3 | 2 | 1 |
| 5 | Is the process to recruit and retain faculty in place and documented? | **5** | 4 | 3 | 2 | 1 |
| 6 | Are the processes for faculty evaluation & promotion consistent with the institution mission? | 5 | 4 | **3** | 2 | 1 |
| 7 | Are the processes in 5 and 6 above periodically evaluated to ensure that they are meeting their objectives? | 5 | **4** | 3 | 2 | 1 |

| 8 | Do the processes and procedures ensure that teaching and delivery of course material emphasize active learning and that course learning outcomes are met? | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|---|
| 9 | Is the process in 8 above periodically evaluated to ensure that it is meeting its objectives? | 5 | 4 | 3 | 2 | 1 |
| 10 | Is the process to ensure that graduates have completed the requirements of the program base on standards and documented procedures? | 5 | 4 | 3 | 2 | 1 |
| 11 | Is the process in 10 above periodically evaluated to ensure that it is meeting its objectives? | 5 | 4 | 3 | 2 | 1 |
| | **Total Encircled Value (TV)** | 35 | 12 | 3 | 0 | 0 |
| | Score 5 **(S5) = [TV/(No. of Questions *5)] *100 *Weight = 12.28** | | | | | |

| **Criterion 6 – Faculty** | | | | **Weight = 0.20** | | |
|---|---|---|---|---|---|---|
| **Factors** | | | | **Score** | | |
| 1 | Are there enough full time faculty members to provide adequate coverage of the program areas / courses with continuity and stability? | 5 | 4 | 3 | 2 | 1 |
| 2 | Are the qualifications and interests of faculty members sufficient to teach all courses, plan, modify and update courses and curricula? | 5 | 4 | 3 | 2 | 1 |
| 3 | Do the faculty members posses a level of competence that would be obtained through graduate work in the discipline? | 5 | 4 | 3 | 2 | 1 |
| 4 | Do the majority of faculty members hold a PhD degree in their discipline? | 5 | 4 | 3 | 2 | 1 |
| 5 | Do faculty members dedicate sufficient time to research to remain current in their disciplines? | 5 | 4 | 3 | 2 | 1 |
| 6 | Are there mechanisms in place for faculty development? | 5 | 4 | 3 | 2 | 1 |
| 7 | Are faculty members motivated and satisfied so as to excel in their profession? | 5 | 4 | 3 | 2 | 1 |
| | **Total Encircled Value (TV)** | 0 | 0 | 9 | 6 | 1 |
| | Score 6 **(S6) = [TV/(No. of Questions *5)] *100 *Weight = 9.14** | | | | | |

| Criterion 7 – Institutional Facilities | | | | | | Weight = 0.10 |
|---|---|---|---|---|---|---|
| **Factors** | | | | | **Score** | |
| 1 | Does the institution have the infrastructure to support new trends such as e-learning? | **5** | 4 | 3 | 2 | 1 |
| 2 | Does the library contain technical collection relevant to the program and is it adequately staffed? | 5 | 4 | 3 | **2** | 1 |
| 3 | Are the class rooms and offices adequately equipped and capable of helping faculty carry out their responsibilities? | 5 | **4** | 3 | 2 | 1 |
| | **Total Encircled Value (TV)** | 5 | 4 | 0 | 2 | 0 |
| | Score 7 (S7) = [TV/(No. of Questions *5)] *100 *Weight = 7.33 | | | | | |

| Criterion 8 – Institutional Support | | | | | | Weight = 0.10 |
|---|---|---|---|---|---|---|
| **Factors** | | | | | **Score** | |
| 1 | Is there sufficient support and finances to attract and retain high quality faculty? | 5 | 4 | 3 | 2 | **1** |
| 2 | Are there an adequate number of high quality graduate students, teaching assistants and Ph.D students? | 5 | 4 | 3 | **2** | 1 |
| | **Total Encircled Value (TV)** | 0 | 0 | 0 | 2 | 1 |
| | Score 8 (S8) = [TV/(No. of Questions *5)] *100 *Weight = 3.00 | | | | | |

**OVERALL ASSESSMENT SCORE** $= S1 + S2 + S3 + S4 + S5 + S6 + S7 + S8 + S9 + S10$

$= 4.17 + 4.875 + 7.33 + 7.33 + 12.28 + 9.14 + 7.33 + 3.0$

$= \underline{\textbf{55.45}}$

**Remarks:**

**The suggestion are provided in AT Report.**