NATIONAL INSTITUTIONAL RANKING FRAMEWORK

Methodology for Ranking of Academic Institutions in India

(RANKING METRICS FOR ARCHITECTURE & PLANNING)

Ministry of Human Resource Development
<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Parameter</th>
<th>Marks</th>
<th>Weightage</th>
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<tbody>
<tr>
<td>1</td>
<td>Teaching, Learning &amp; Resources</td>
<td>100</td>
<td>0.40</td>
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<td>2</td>
<td>Research and Professional Practice</td>
<td>100</td>
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<td>3</td>
<td>Graduation Outcomes</td>
<td>100</td>
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<td>4</td>
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<td>Teaching, Learning &amp; Resources (TLR)</td>
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<td><strong>Ranking weight: 0.40</strong></td>
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<td></td>
<td>A. Student Strength (SS): 20 marks</td>
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<td>B. Faculty-student ratio with emphasis on permanent faculty (FSR): 30 marks</td>
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<td>C. Combined metric for Faculty with PhD (or equivalent) and Experience (FQE): 20 marks</td>
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<td>D. Financial Resources and their Utilisation (FRU): 30 marks</td>
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<td>2.</td>
<td>Research and Professional Practice (RP)</td>
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<td><strong>Ranking weight: 0.20</strong></td>
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<td></td>
<td>A. Combined metric for Publications (PU): 60 marks</td>
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<td>B. Combined metric for Quality of Publications (QP): 20 marks</td>
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<td>C. Footprint of Projects and Professional Practice (FPPP): 20 marks</td>
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<td>A. Combined metric for Placement and Higher Studies (GPH): 40 marks</td>
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<td>B. Metric for University Examinations(GUE): 30 marks</td>
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<td>C. Median Salary(GMS): 30 marks</td>
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1. **Teaching, Learning & Resources (TLR): 100 marks**

- Ranking weight: 0.40
- Overall Assessment Metric:
  \[ TLR = SS \times 20 + FSR \times 30 + FQE \times 20 + FRU \times 30 \]

- Component metrics based on:
  A. Student Strength: SS
  B. Faculty-Student Ratio with emphasis on permanent faculty: FSR
  C. Combined metric for Faculty with PhD (or equivalent) and Experience: FQE
  D. Financial Resources and Their Utilisation: FRU
A. Student Strength (SS): 20 Marks

- \( SS = f(N_T, N_E) \times 20 \)

- The functions \( f(N_T, N_E) \) is function to be determined by NIRF.
- \( N_T: \) Total sanctioned approved intake in the institution considering all UG and PG programs of the institution.
- \( N_E: \) Total number of students enrolled in the institution considering all UG and PG Programs of the institution.

- **Primary Data: To be provided in a prescribed Format.**
B. Faculty-Student Ratio with emphasis on permanent faculty (FSR): 30 marks

- FSR = 30 × [15 × (F/N)]
- \( N = N_T \)
- F: Full time regular faculty in the institution in the previous year.
- Regular appointment means Faculty on Full time basis. *Faculty on contract basis/ad-hoc basis will be considered if the concerned faculty has taught in both the semesters of academic year 2021-22.*
- Faculty member with Ph.D., M.Arch/M.Plan and B.Arch with three years of experience will be considered and counted here.
- Expected ratio is 1:15 to score maximum marks.
- **For F/N < 1: 50, FSR will be set to zero.**
- *Primary Data: Faculty List to be provided in the Prescribed Format.*
C. Combined Metric for Faculty with PhD (or equivalent) and Experience (FQE): 20 marks

- \[ FQ = 10 \times \left( \frac{F_{RA}}{95} \right), \quad F_{RA} < 95\% ; \]
- \[ FQ = 10, \quad F_{RA} \geq 95\% . \]

Here \( F_{RA} \) is the percentage of Faculty with Ph.D. (or equivalent qualification) with respect to the total no. of faculty required or actual faculty whichever is higher, in the previous year.

F1=Fraction with Experience up to 8 years;

F2= Fraction with Experience between 8+ to 15 years;

F3=Fraction with Experience > 15 years.

- \[ FE = 3\min(3F1, 1) + 3 \min(3F2, 1) + 4 \min(3F3, 1) \]

Rationale: Full marks for a ratio of 1:1:1

- \[ FQE = FQ + FE \]

- **Primary Data: Faculty List in the Prescribed Format.**
D: Financial Resources and their Utilization (FRU): 30 Marks

• FRU = 7.5×f(BC) + 22.5×f(BO)

• BC: Average Annual Capital Expenditure per student for previous three years pertaining to architecture discipline only. (Excluding expenditure on construction of new buildings)

• BO: Average Annual Operational(or Recurring) Expenditure per student for previous three years pertaining to architecture discipline only. (Excluding maintenance of hostels and allied services)

• Primary Data: Figures in prescribed format for each.
2. Research and Professional Practice (RP): 100 marks

- Ranking weight: 0.20
- Overall Assessment Metric:
  \[ \text{RP} = \text{PU} (60) + \text{QP} (20) + \text{FPPP} (20) \]
- The component metrics explained on following pages.
  A. Combined Metric for Publications: PU
  B. Combined Metric for Quality of Publications: QP
  C. Footprint of Projects and Professional Practice: FPPP
A. Combined metric for Publications (PU): 60 marks

- PU = 60 \times f(P/F_{RQ})

- P is weighted number of publications as ascertained from suitable third party sources.

- F_{RQ} is the maximum of nominal number of faculty members as calculated on the basis of a required FSR of 1:15 or the available faculty in the institution.

- Sources: Third Party Sources.
B. Combined metric for Quality of Publications (QP): 20 Marks

- \( QP = 20 \times f(CC/P) \)
- Here CC is Total Citation Count over previous three years.
- P is as computed for PU.
- *Primary Data: Third Party Sources.*
C. Footprint of Projects and Professional Practice (FPPP): 20 marks

- \( FPPP = FPR + FPC \)

- \( FPR = 10 \times f(RF) \)

- RF is average annual research funding earnings (amount actually received in rupees) per faculty at institute level in the previous three years.

- \( FPC = 10 \times f(CF) \)

- CF is average annual consultancy amount (amount actually received in rupees) per faculty at institute level in the previous three years.

- *Primary Data: To be provided by the institution in prescribed format.*
3. Graduation Outcome (GO): 100 marks

- Ranking weight: 0.20

- Overall Assessment Metric:

  \[ \text{GO} = \text{GPH}(40) + \text{GUE}(30) + \text{GMS}(30) \]

- The component metrics are explained on the following pages:
  
  A. Combined metric for Placement and Higher Studies: GPH
  B. Metric for University Examinations: GUE
  C. Median Salary: GMS
A. Combined Metric for Placement and Higher Studies (GPH): 40 marks

- \[ \text{GPH} = 40 \times \left( \frac{N_p}{100} + \frac{N_{hs}}{100} \right) \]

- \( N_p \) = Percentage of graduating students (in UG/PG programs) placed in previous three years.
- \( N_{hs} \) = Percentage of graduating students (in UG/PG programs) who have been selected for higher studies in previous three years.

- *Primary Data: To be provided in a prescribed format*
B. Metric for University Examinations (GUE): 30 Marks

- $GUE = 30 \times \min \left[ \left( \frac{N_g}{80} \right), 1 \right]$

- $N_g$ is the percentage of Students (as a fraction of the approved intake), averaged over the previous three years, passing the respective university examinations in stipulated time for the program in which enrolled.

- Primary Data: To be provided in a prescribed format.
C. Median Salary (GMS): 30 Marks

- \[ GMS = 30 \times f(MS) \]

- \( MS = \) Median salary of graduates (in UG/PG program) in the previous three years from an institution.

- *Primary Data: To be provided in a prescribed format*
4. Outreach and Inclusivity (OI): 100 marks

- Ranking weight: 0.10

- Overall Assessment Metric: \( OI = RD(30) + WD(30) + ESCS(20) + PCS(20) \)

- The component metrics are explained on following pages:
  
  A. Percentage of Students from Other States/ Countries (Region Diversity): RD
  B. Percentage of Women (Women Diversity): WD
  C. Economically and Socially Challenged Students: ESCS
  D. Facilities for Physically Challenged Students: PCS
A. Percentage of Students from Other States/ Countries (Region Diversity RD): 30 marks

- RD = 25 \times \text{fraction of total students enrolled from other states} + 5 \times \text{fraction of students enrolled from other countries}

- Primary Data: To be provided in the prescribed format.
B. Percentage of Women (Women Diversity WD): 30 marks

- \[ WD = 15 \times (N_{WS}/50) + 15 \times (N_{WF}/20) \]

- \( N_{WS} \) are the percentage of Women students.

- \( N_{WF} \) are the percentage of Women Faculty including the women members in senior administrative positions, such as Heads of Departments, Deans or Institute Heads.

- Expectation: 50% women students and 20% women faculty.

- *Primary Data: To be provided in the prescribed format.*
C. Economically and Socially Challenged Students (ESCS) : 20 marks

- \( \text{ESCS} = 20 \times f(\text{N}_{\text{esc}}) \)

- \( \text{N}_{\text{esc}} \) is the percentage of UG students being provided full tuition fee reimbursement by the institution to pursue their degree programs.

- *Primary Data: To be provided by the institution in a prescribed format.*
D. Facilities for Physically Challenged Students (PCS): 20 marks

• PCS = 20 marks, if the Institute provides full facilities for physically challenged students, as outlined.

Else, in proportion to facilities.

• Basis: Verifiable Responses to Questions.

• *Primary Data: To be provided in a prescribed format.*
5. Perception (PR) – 100 marks

- Ranking weight: 0.1
- Overall Assessment Metric: PR = 100
- Component metrics are explained in the following pages:
  A. Peer Perception: Employers & Academic Peers (PR): 100 marks
A. Peer Perception: Employers & Academic Peer: 100 marks

- This is to be done through a survey conducted over a large category of Employers, Professionals from Reputed Organizations and a large category of Academics to ascertain their preference for graduates of different institutions.

- Comprehensive list will be prepared taking into account various sectors, regions, etc.

- Lists to be updated periodically.