

IIRF AI Rankings: Methodology

Purpose

The IIRF AI Rankings assess Indian higher-education institutions on their demonstrated capability to deliver high-quality Artificial Intelligence education, research, employability, infrastructure, interdisciplinary application, industry engagement, and innovation. The methodology is designed to reward verified outcomes, not institutional size, marketing claims, or inactive collaborations.

Eligibility and reporting period

An institution is eligible where it is a legally recognised higher-education provider in India, offers at least one active AI or AI-allied programme, submits certified information with required evidence, and agrees to data verification. AI-allied programmes may include Artificial Intelligence and Machine Learning, Data Science, Robotics, Computer Vision, Natural Language Processing, Intelligent Systems, Business Analytics, and other approved AI-related programmes.

The standard reporting period is from 1 January 2024 to the ranking submission date. AI infrastructure is assessed over the preceding three completed financial years. Only information attributable to the applicant institution and supported by documentary evidence is eligible for scoring.

Scoring framework

Parameter	Maximum marks
Quality and Volume of Core AI Research Publications	20
AI-Sector Placements and Graduate Outcomes	20
AI and Computer Science Faculty Capacity	15
Investment in AI Infrastructure	12
Interdisciplinary AI Integration	10
AI Programme Capacity and Student Intake	8
Industry Collaboration and AI Ecosystem Engagement	10
AI-Focused Intellectual Property and Innovation	5
Total IIRF AI Score	100

The final score of the institution i is:

$$\text{IIRF AI Score}_i = R_i + P_i + F_i + I_i + D_i + C_i + E_i + X_i$$

where each component is capped at the maximum marks assigned above.

Parameter methodology

1. Quality and Volume of Core AI Research Publications — 20 marks

- **Q1**-indexed core AI journal publications: **7** marks.
- **Q2**-indexed core AI journal publications: **4** marks.
- Recognised peer-reviewed AI conference publications: **3** marks.
- Citation impact, preferably field-normalised: **3** marks.
- Externally funded research, industry/international co-authorship, and validated research outcomes: **2** marks.
- Completeness and verification of submitted publication data: **1** mark.

Eligible output must be peer-reviewed, demonstrably related to core AI or an approved AI-allied field, correctly affiliated to the institution, and verifiable through a recognised database and/or publisher link. Q1 and Q2 status is assessed for the relevant publication year.

2. AI-Sector Placements and Graduate Outcomes — 20 marks

- Verified placement rate in AI and allied roles: **8** marks.
- Median compensation quality of verified AI/allied placements: **4** marks.
- Core-AI role relevance and quality of recruiting organisations: **3** marks.
- Higher education, research fellowships, doctoral progression, entrepreneurship, and AI start-up outcomes: **3** marks.
- Placement-data verification and reporting integrity: **2** marks.

$$\text{AI Placement Rate} = \frac{\text{Unique students placed in verified AI/allied roles}}{\text{Eligible AI/allied graduates}} \times 100$$

Each graduate is counted only once, based on the final verified outcome. AI/allied roles must involve substantive work in areas such as machine learning, data science, NLP, computer vision, robotics, automation, generative AI, AI research, AI product development, cloud-AI, or AI cybersecurity.

3. AI and Computer Science Faculty Capacity — 15 marks

- Full-time relevant faculty adequacy and faculty–student ratio: **5** marks.
- Doctoral qualifications, research output, funded projects, citations, patents, and post-doctoral credentials: **4** marks.
- AI-specific teaching, supervision, laboratories, projects, and doctoral guidance: **3** marks.
- Relevant industry experience and recognised AI/cloud/data certifications: **2** marks.
- Faculty-data verification: **1** mark.

$$\text{AI Faculty–Student Ratio} = \frac{\text{Full-time relevant AI/CS faculty}}{\text{Active students in AI/allied programmes}}$$

Only full-time faculty with a demonstrable teaching or research contribution in AI, computer science, data science, machine learning, robotics, computational statistics, or another approved allied area are included in the core faculty count.

4. Investment in AI Infrastructure — 12 marks

- Verified AI-specific infrastructure investment over the last three completed financial years: **4** marks.
- AI computing, GPU/HPC capacity, laboratories, robotics, and specialised equipment: **3** marks.
- Access and recorded utilisation by students, faculty, and researchers: **3** marks.
- Cloud, software, datasets, cybersecurity, data governance, and responsible-AI readiness: **1** mark.
- Operational verification of infrastructure: **1** mark.

$$\text{Adjusted AI Investment} = \text{AI Capital Expenditure} + 0.60(\text{AI Recurring Expenditure})$$

$$\text{AI Investment per Active Learner} = \frac{\text{Adjusted AI Investment over three years}}{\text{Average active AI/allied student strength over three years}}$$

Investment is assessed alongside operational capacity and actual utilisation. Unused, proposed, or non-functional facilities do not receive full *credit*. IIRF use an illustration for insufficient data input based on secondary sources source.

5. Interdisciplinary AI Integration — 10 marks

- Breadth of formal AI integration across non-core disciplines: **3** marks.
- Depth of approved, credit-bearing curriculum integration: **3** marks.
- Student participation and completion in interdisciplinary AI learning: **2** marks.
- Interdisciplinary projects, publications, patents, prototypes, centres, laboratories, or structured initiatives: **2** marks.

Only formal and assessable integration is considered, including credit courses, compulsory modules, minors, specialisations, laboratories, certifications, capstone projects, and approved domain-AI pathways. Seminars, webinars, and one-time awareness programmes do not qualify as curriculum integration.

6. AI Programme Capacity and Student Intake — 8 marks

- AI programme portfolio across undergraduate, postgraduate, doctoral, and continuing education levels: **2** marks.
- Approved intake and actual seat utilisation: **3** marks.
- Enrolment continuity, completion, and inclusion indicators: **1** mark.
- Active doctoral scholars and AI/allied Ph.D. completions: **2** marks.

$$\text{Seat } \textit{Utilisation} \text{ Rate} = \frac{\text{Actual admissions in AI/allied programmes}}{\text{Approved annual intake in AI/allied programmes}} \times 100$$

The score uses the average seat-utilisation rate across the most recent three admission cycles. Where regulatory or statutory approval is required, unapproved programme intake is not eligible for scoring.

7. Industry Collaboration and AI Ecosystem Engagement — 10 marks

- Active, outcome-based AI partnerships: **2** marks.
- Industry-supported infrastructure, Centres of Excellence, curriculum, training, and certifications: **2** marks.
- Verified AI internships, apprenticeships, live projects, hackathons, and industry exposure: **2** marks.
- Sponsored research, consultancy, and external AI funding: **2** marks.
- Product deployment, technology transfer, incubation, and AI start-up outcomes: **2** marks.

Only active collaborations with documented outcomes are considered. A signed MoU without a verified activity or outcome receives no score. Eligible outcomes include student internships, sponsored projects,

joint laboratories, curriculum engagement, research funding, consultancy, prototypes, product deployment, technology transfer, and incubation support.

8. AI-Focused Intellectual Property and Innovation — 5 marks

- AI patents filed and published: **1** mark.
- AI patents granted: **1.5** marks.
- Licensing, technology transfer, commercialisation, or documented deployment: **1.5** marks.
- AI start-ups, software copyrights, validated prototypes, products, and impact: **1** mark.

$$\textbf{AI-IP Units} = 0.20F + 0.40P + 1.00G + 1.50L + 2.00C$$

where F is eligible patents filed, P is patents published, G is patents granted, L is patents licensed or transferred, and C is patents commercialised or deployed. Each intellectual-property record is counted only at its highest achieved stage.

Normalisation and score bands

For size-sensitive numerical indicators—such as publications, research grants, infrastructure expenditure, patents, doctoral activity, and industry funding—IIRF uses capped 95th-percentile normalisation:

$$\text{Normalised Score}_i = W \times \frac{\min(X_i, P_{95})}{P_{95}}$$

where W is the maximum marks for the indicator, X_i is the institution's verified value, and P_{95} is the 95th percentile of verified values across eligible participating institutions.

This approach limits the influence of exceptional outliers and enables fairer comparison between institutions of different scale. Percentage-based indicators, including placement rate, seat utilisation, internship rate, Ph.D.-qualified faculty share, and data-verification rate, are scored through predefined performance bands.

Evidence, verification, and integrity

Institutions must provide structured data, documentary evidence, authorised certification, and public links where available. IIRF may cross-check research records through recognised bibliographic databases, patent claims through official patent databases, programme approvals and enrolments through appropriate institutional or regulatory records, and placements or collaborations through employer, student, alumni, partner, or financial verification.

At least 10 records or 10% of records, whichever is higher, may be sampled for verification under each applicable parameter. All claims supporting the highest performance band, high-value expenditure, major research funding, granted patent, technology transfer, or deployment may be subject to full verification.

Verification result	Treatment
95% or more sampled records verified	Full score eligibility
85%–94.99% verified	Score based on verified records only
70%–84.99% verified	Score based on verified records and 10% reduction in the concerned parameter
Below 70% verified	Zero score in the concerned parameter and a 5-point overall penalty
Deliberate falsification or material misrepresentation	Disqualification for the ranking cycle; further exclusion may be considered

Data-treatment rules

- Each student is counted once for the final placement or graduate-outcome measure.
- Each faculty member is counted once in the faculty-strength measure.
- A publication with multiple authors from the same institution is counted once for that institution.
- Patents are counted only at their highest achieved stage and must have verified institutional ownership or inventor affiliation.
- Collaborations are scored only when they are active and outcome based.
- Joint assets, funding, or outputs must not be double counted across institutions or parameters.
- Claims without adequate evidence, inactive MoUs, proposed facilities, unverifiable placements, duplicate records, and outputs without institutional attribution are not considered.

Ranking and tie-breaks

Institutions are ranked in descending order of their final validated score out of 100. If two institutions have the same score rounded to two decimal places, ties are resolved in this order:

1. Higher score in AI-Sector Placements and Graduate Outcomes.
2. Higher score in Quality and Volume of Core AI Research Publications.
3. Higher score in AI and Computer Science Faculty Capacity.

4. Higher score in Industry Collaboration and AI Ecosystem Engagement.
5. Higher proportion of independently verified claims.
6. Higher score for licensed, commercialised, or deployed AI intellectual property.

If a tie remains after these criteria, IIRF may assign a joint rank.

Disclaimer: IIRF reserves the right to refine benchmarks, notify eligible AI subject areas and recognised conference lists, seek additional clarification, and modify data treatment as needed to preserve fairness, transparency, comparability, and the integrity of the rankings. In case of insufficient data input from the participating institution, IIRF has the right to use the illustration based on secondary sources.