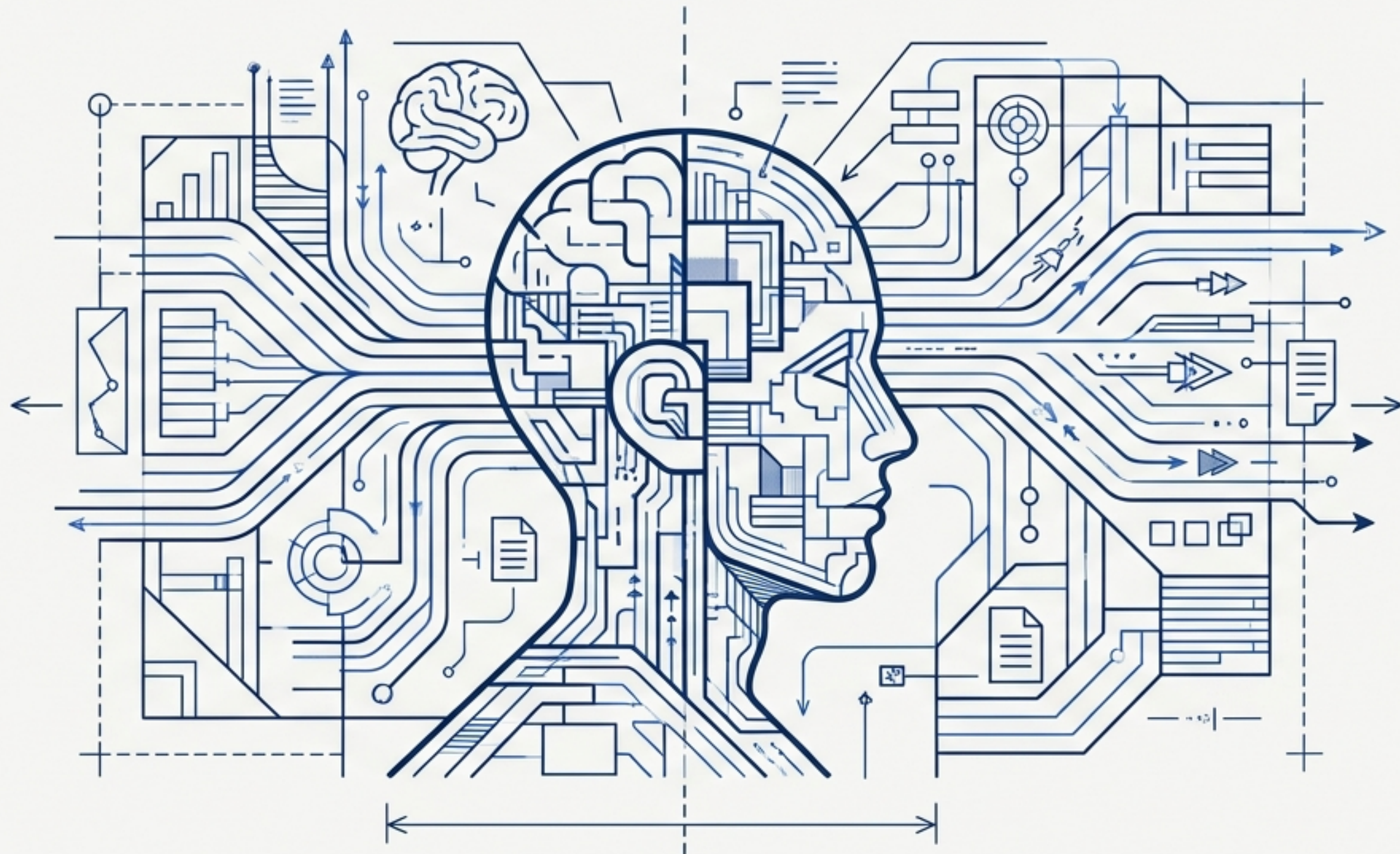


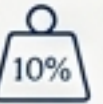
# Mastering Domain 5: Digital Competency & Future Readiness

The Official DRONĀ Certification Playbook for Higher Education Teaching Professionals



**10%**

Total Weightage



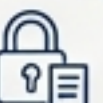
**100**

Maximum Marks



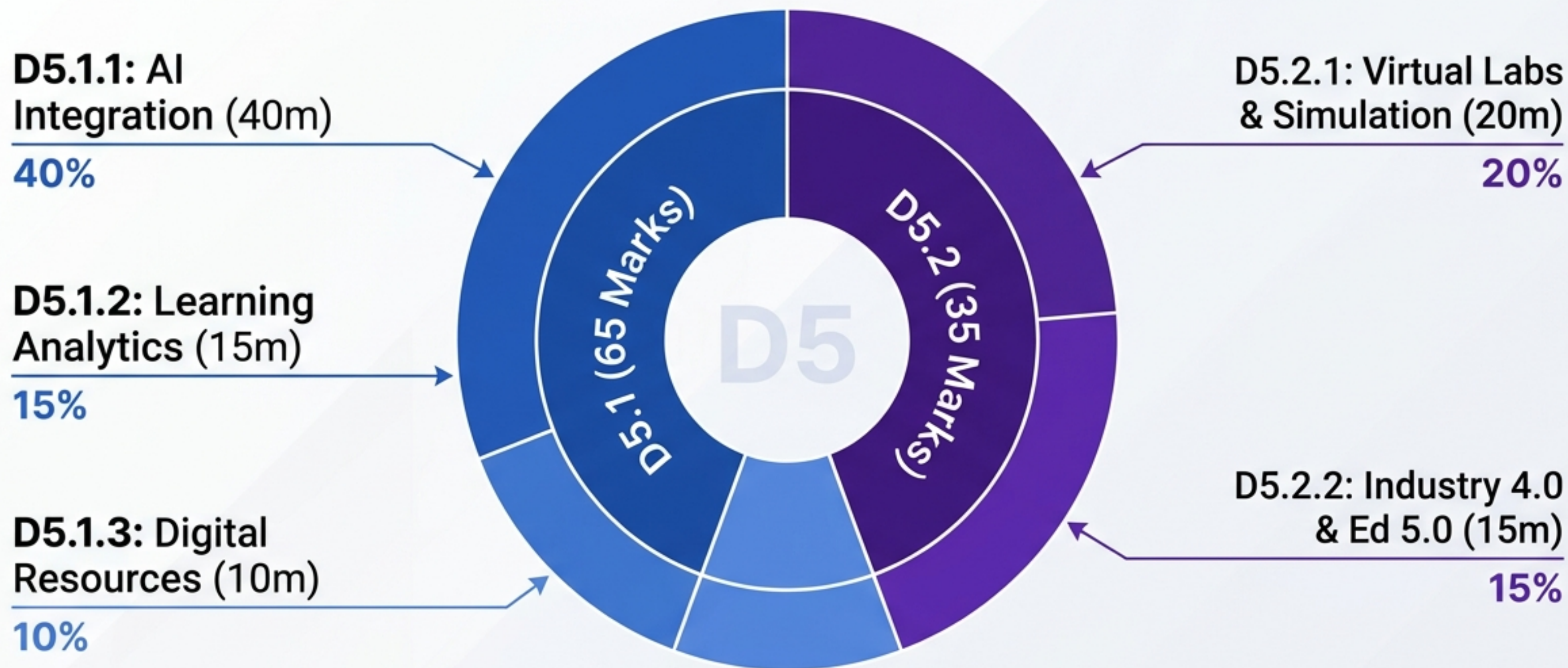
**Zero**

Ambiguity Ruleset





# The 100-Mark Domain 5 Ecosystem



**Core Takeaway:** Domain 5 is discipline-neutral. Every mark is mathematically derived from Course Coverage and Practice Diversity.



# The Universal Verification Engine



## AI-Assisted Document Analysis

Initial scan of portfolios to identify evidence of AI-generated artifacts, LMS data, and digital resource links.



## System Match

Automated matching of applicant identity and timestamp boundaries to ensure activity occurred within the assessment period.



## Duplicate Detection

Cross-referencing against anti-redundancy rules to catch overlapping claims across domains.



## Human Review

Final validation of pedagogical impact, student reach, and contextual relevance.



# The Golden Rule of Domain 5 Assessment

## Mere Participation

- Examples: Attending an AI webinar, registering for an FDP, having a ChatGPT account, observing a software demo.
- **Result: 0 Marks in Domain 5.**



## Demonstrated Implementation

- Examples: AI-generated case studies used in class, data-driven remedial coaching, virtual lab deployment with verified student access.
- **Result: Full Marks Approved.**

**Actionable student impact is the only currency accepted in Domain 5.**



# D5.1: Digital Teaching, AI Integration & Learning Analytics

## D5.1.1 AI Integration



Focus: Meaningful use of AI tools in teaching-learning practices.

## D5.1.2 Learning Analytics



Focus: Data-driven student support interventions.

## D5.1.3 Digital Resources

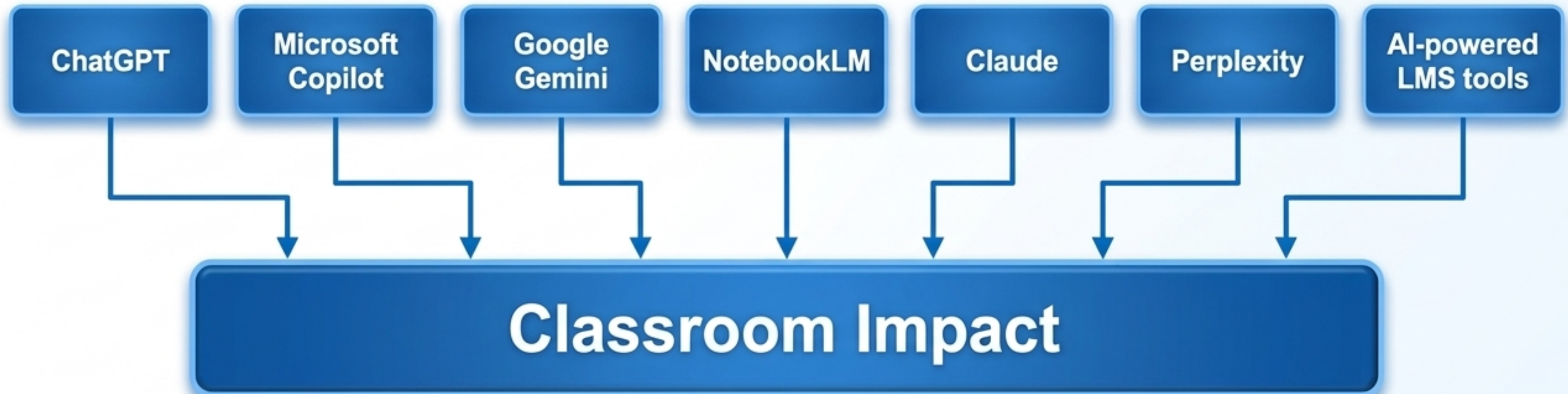


Focus: Blended learning environments and structured digital content.



# D5.1.1 AI Integration: The 40-Mark Heavyweight

**The Objective:** Meaningful integration of Generative AI into content development, assessment, personalization, and productivity.



## The Evidence Mandate:

Upload **ONE** representative evidence document demonstrating your most significant AI-enabled teaching practice. (e.g., Course materials, LMS screenshots, Lesson plans).



# The AI Integration Scoring Formula

## Course Adoption Score (Max 20)

5+ Courses = 20 Marks

3-4 Courses = 15 Marks

1-2 Courses = 10 Marks

None = 0 Marks

+

## AI Practice Diversity Score (Max 20)

5+ Categories = 20 Marks

3-4 Categories = 15 Marks

1-2 Categories = 10 Marks

None = 0 Marks

=

40  
Marks

**Strategy:** To achieve 40 marks, a faculty member must embed AI into at least 5 different courses using at least 5 distinct AI activity categories.



# The AI Practice Matrix: Boundary Rules



## Eligible Practices - 100% Valid

- Using ChatGPT to generate course-specific case studies.
- Deploying AI-generated formative quizzes in class.
- NotebookLM-based student learning activities.
- AI-assisted personalized feedback systems.

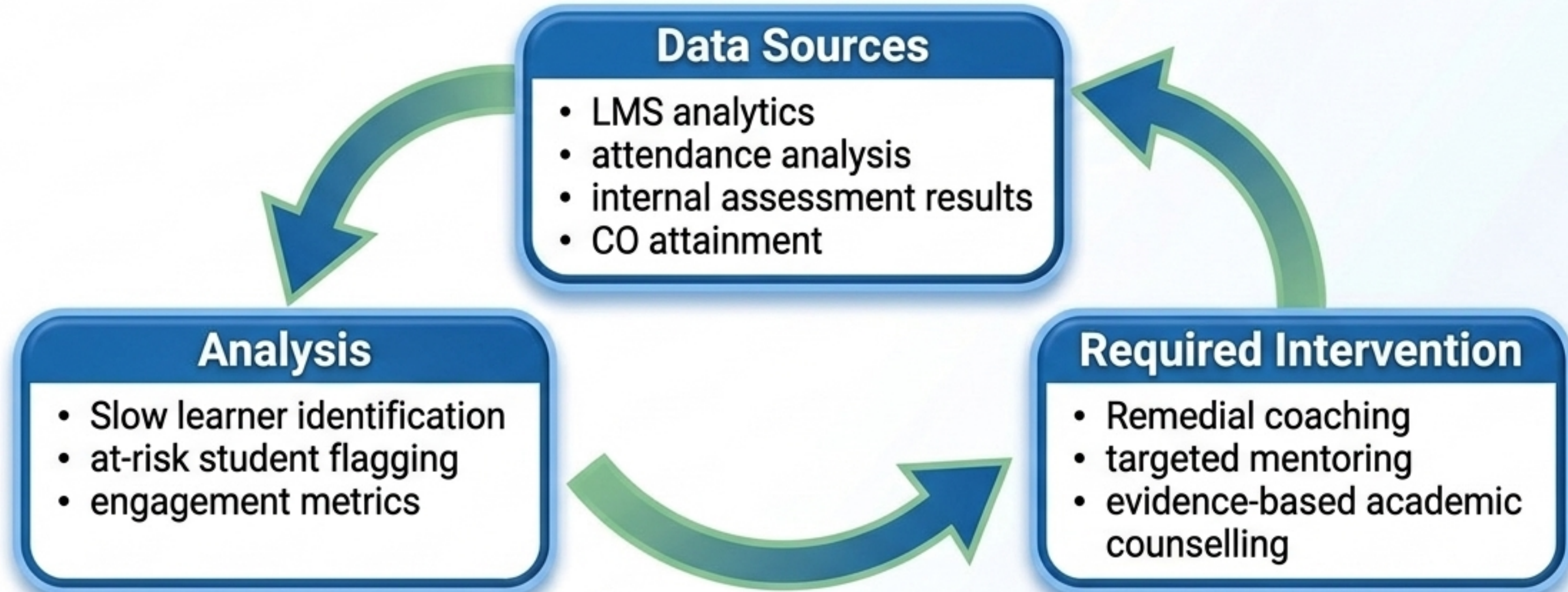


## Non-Eligible - 0 Marks in D5

- Publishing an AI research paper (Redirect to D2).
- Attending an AI FDP or Workshop (Redirect to D2.4.1).
- Mere personal awareness/use unrelated to teaching.
- AI use without evidence of direct classroom implementation.



## D5.1.2 Learning Analytics (15 Marks)



**Critical Warning:** Preparing result analysis reports without an accompanying student intervention scores ZERO. Raw data is not an outcome.



# The Learning Analytics Scoring Formula

## Course Coverage Score (Max 15)

- 5+ Courses = 15 Marks
- 3-4 Courses = 10 Marks
- 1-2 Courses = 5 Marks



## Analytics Diversity Score (Max 15)

- 5+ Analytics Types = 15 Marks
- 3-4 Types = 10 Marks
- 1-2 Types = 5 Marks

2



15  
Marks  
(LAS)

**Evidence Checklist:** Analytics reports, result analysis, slow learner identification records, intervention reports.



# D5.1.3 Digital Learning Resources (10 Marks)

**The Objective:** Development, deployment, and effective use of online/blended environments that enhance self-directed learning beyond routine classroom teaching.



**[[Course Adoption (Max 10)] + [Resource Diversity (Max 10)]] / 2 = 10 Marks**

5+ Courses & Types = 10 Marks  
3-4 Courses & Types = 7.5 Marks  
1-2 Courses & Types = 5 Marks



# Digital Resources Boundary Matrix

## Eligible Contributions

- Recorded lecture series and video demonstrations.
- Structured LMS learning modules (Moodle, Canvas, Blackboard).
- MOOCs / SWAYAM / NPTEL integration.
- Flipped classroom implementation.

## Non-Eligible Contributions

- Uploading PPT files only.
- Routine sharing of notes via WhatsApp.
- Conducting online classes without supporting digital resources.
- Activities already claimed under Virtual Labs (D5.2.1) or AI (D5.1.1).



## D5.2: Emerging Technologies, Ed 5.0 & Global Readiness



### D5.2.1 Virtual Labs & Simulation

**Focus:** Digital experimentation and computational modeling.



### D5.2.2 Industry 4.0 & Education 5.0

**Focus:** Smart manufacturing, IoT, Robotics, and systemic implementation.



## D5.2.1 Virtual Laboratory & Simulation (20 Marks)

### Eligible Practices:

- Virtual Lab (MoE) delivery, digital twin activities, computational laboratory activities, design optimization assignments.

**Scoring Formula:**  $([\text{Course Coverage (Max 20)}] + [\text{Practice Diversity (Max 20)}]) / 2 = 20 \text{ Marks}$

**Scale:** 5+ = 20 | 3-4 = 15 | 1-2 = 10





# The Simulation Boundary Rule

**The Mandate:** Simulation practices must be directly integrated into student learning.

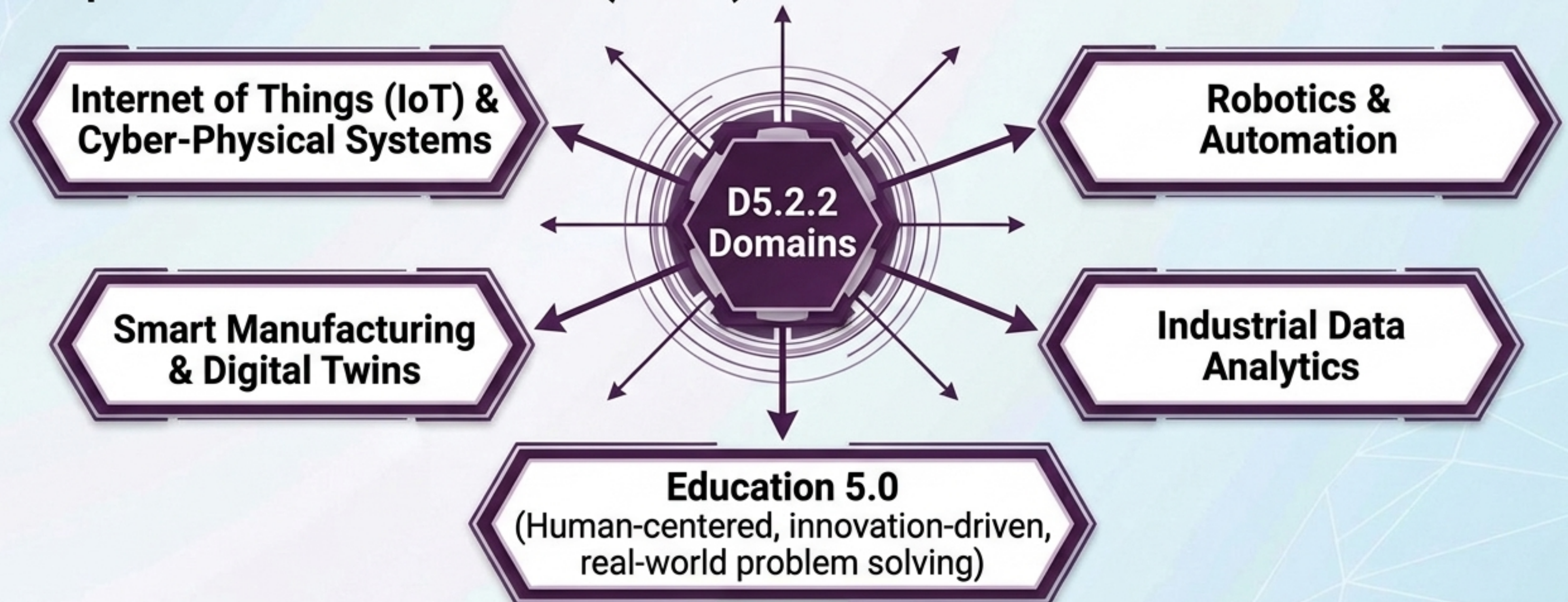
## **Non-Eligible Practices (Absolute Rejections):**

- Using simulation software only for personal research.
- Simulation work already claimed as a research output in Domain 2.
- Routine CAD drafting exercises that lack analytical or simulation components.
- Software training attended as a participant.
- Classroom demonstrations without interactive student involvement.



# D5.2.2 Industry 4.0 & Education 5.0 (15 Marks)

**The Core Metric:** Evaluated using the Future Readiness Implementation Score (FRIS).

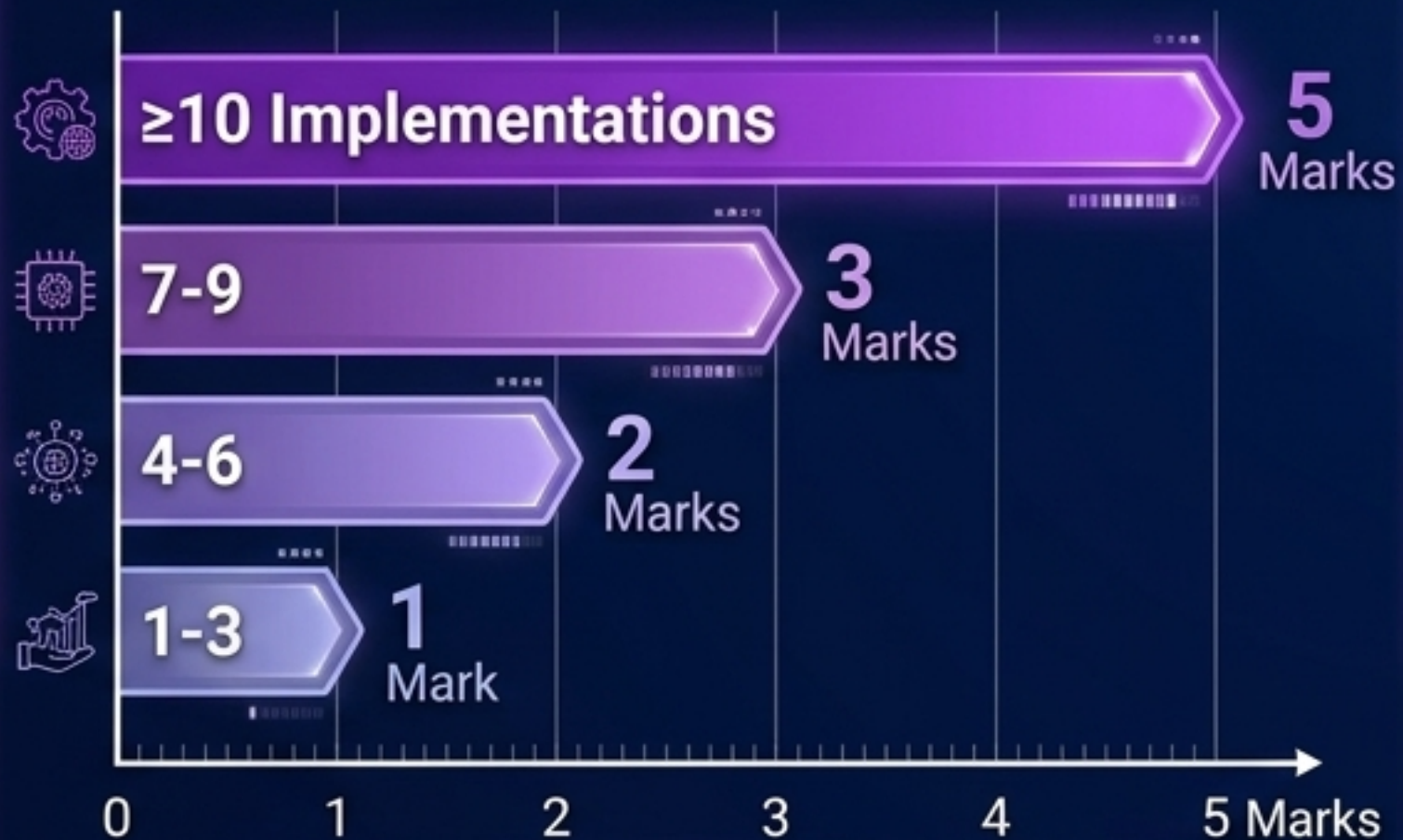




# The FRIS Framework: Components A & B

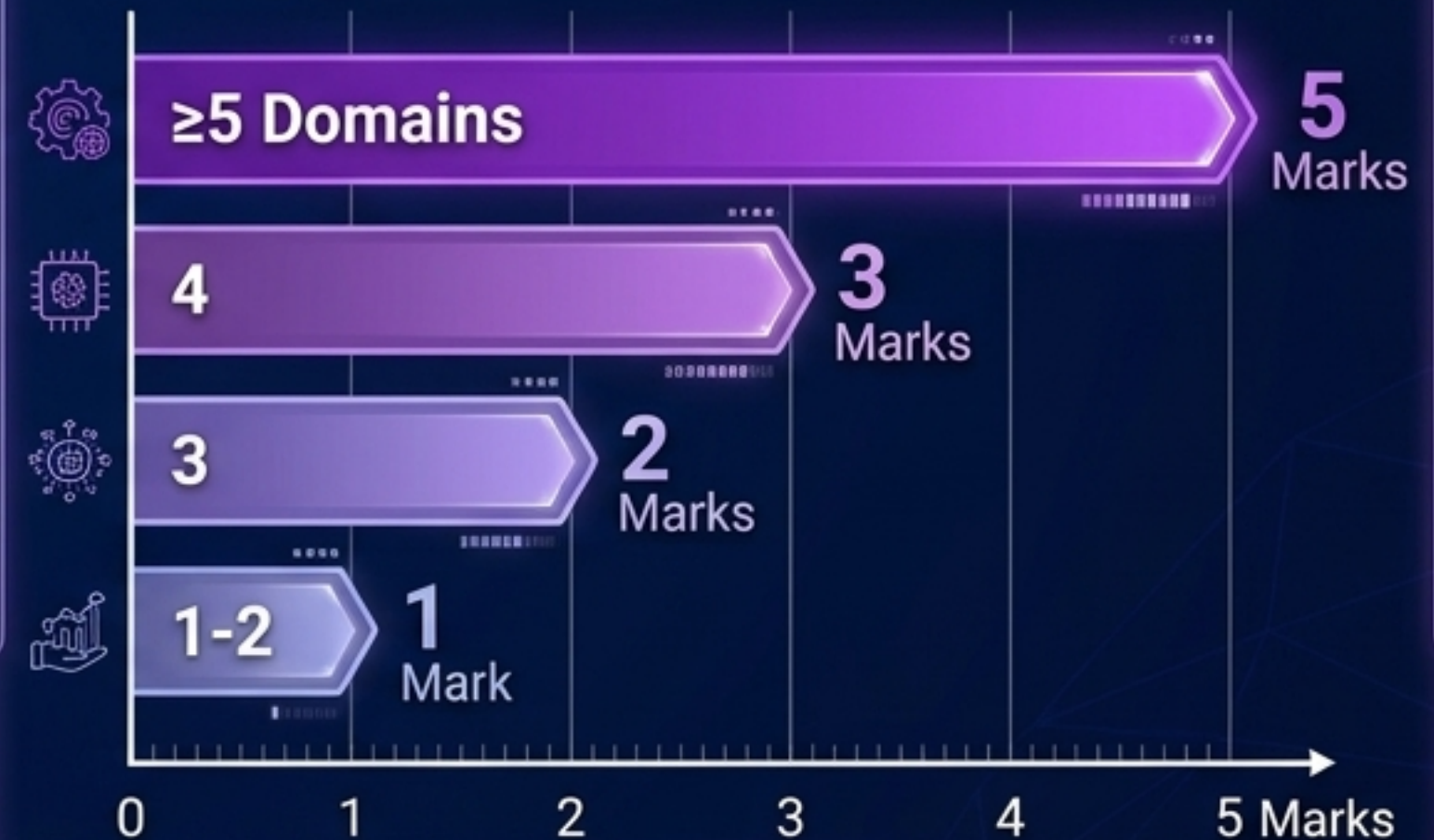
## Component A: Implementation Coverage (Max 5 Marks)

**Metric:** Number of courses, labs, or projects utilizing Industry 4.0 tech.



## Component B: Technology Diversity (Max 5 Marks)

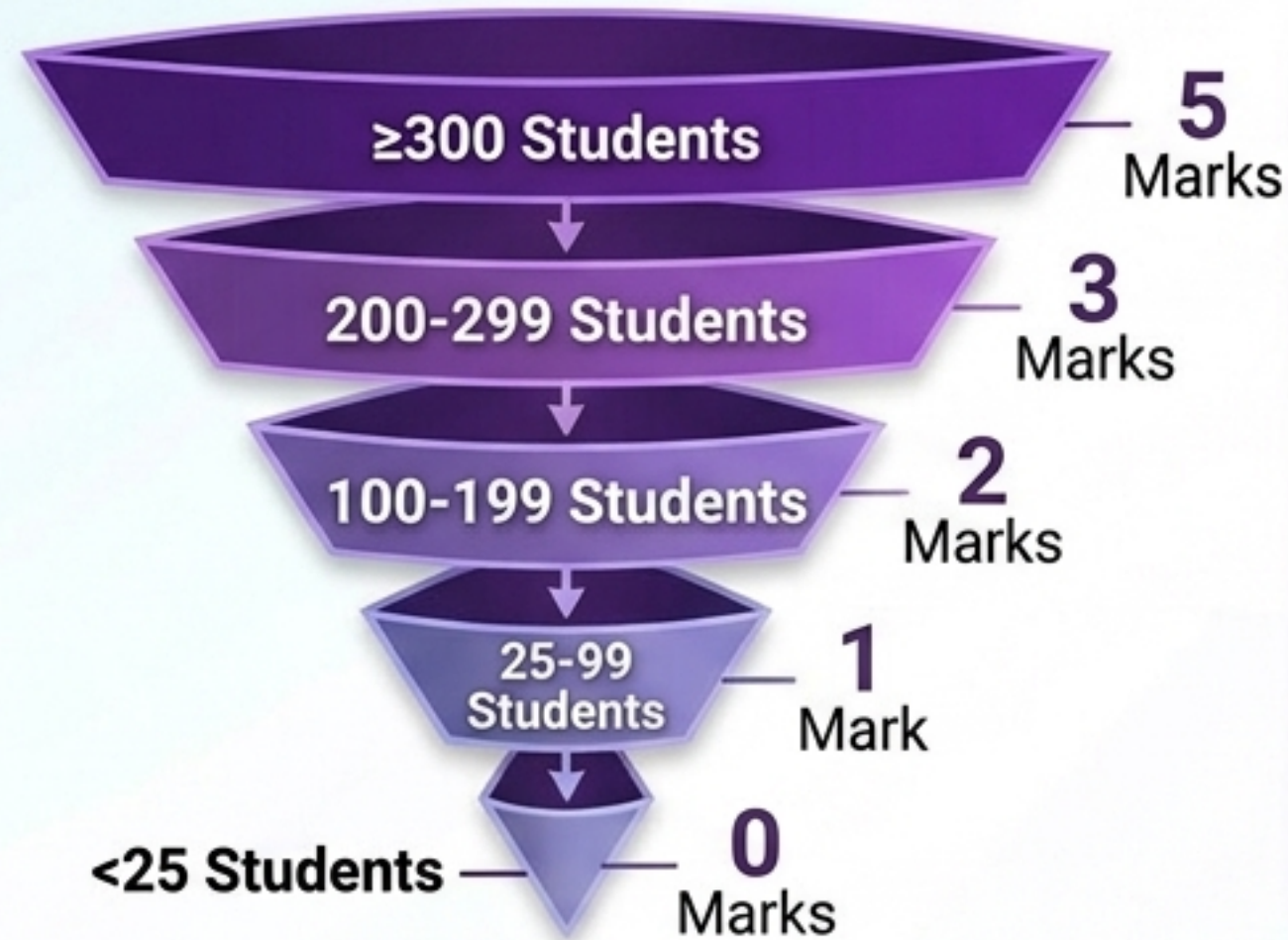
**Metric:** Distinct tech domains utilized (e.g., IoT + Robotics + AI).





# The FRIS Framework: Component C & Rejection Rules

## Component C: Student Reach (Max 5 Marks)



**FRIS Total Score = A + B + C (Max 15)**

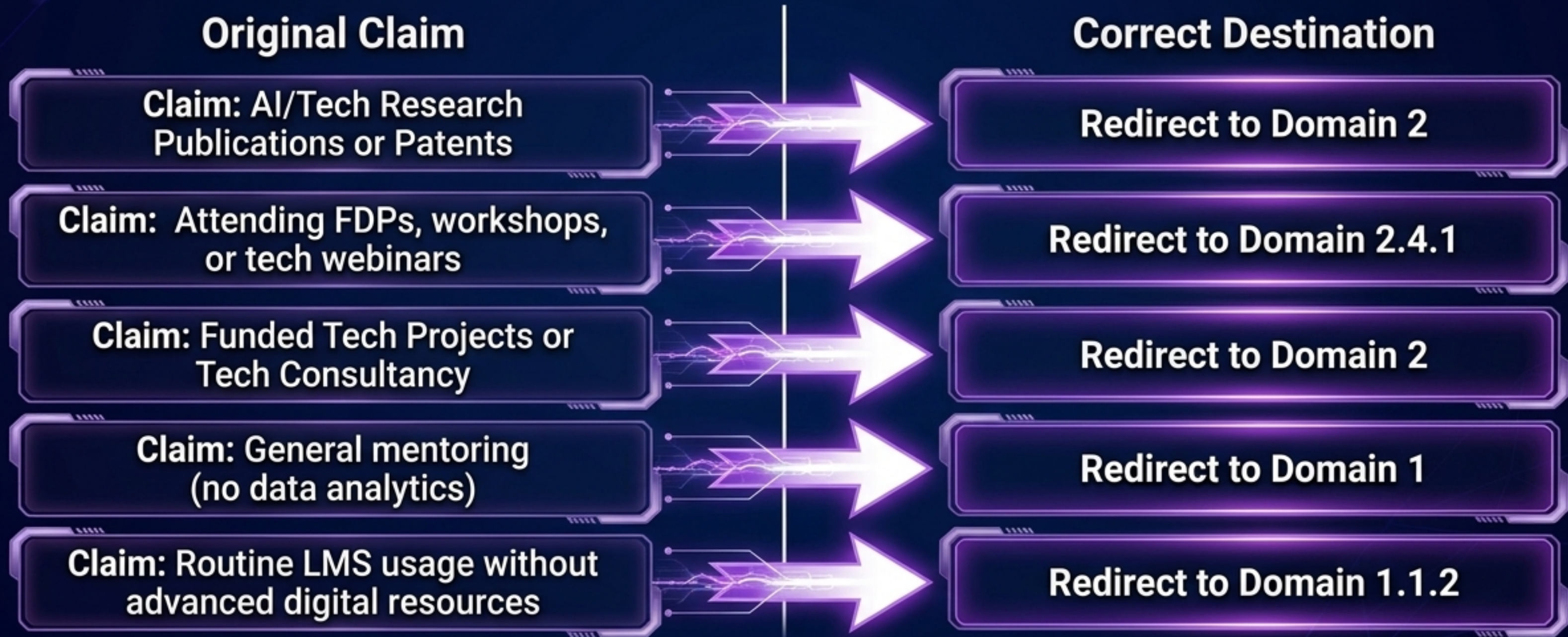
## Absolute Rejection Conditions:

- Only training participation evidence is submitted.
- No implementation evidence exists.
- Student involvement cannot be established.
- Duplicate claims are detected across other domains.



# The Anti-Redundancy Matrix

**Core Rule:** Evidence cannot be claimed in multiple domains.  
If it fits below, it does NOT belong in Domain 5.





# The Verification Protocol & Disciplinary Checks

## Automated System Checks

- Match applicant identity and metadata with official records.
- Verify timestamps (must fall within strict assessment period).
- System-wide duplicate claim detection.

## AI-Assisted Document Analysis

- Scans for presence of actual AI-generated artifacts.
- Validates course integration evidence and student accessibility.

## Human Oversight

- Ensures contextual relevance, preventing fabricated or manipulated evidence from bypassing automated filters.



# The Master Faculty Checklist: Path to 100 Marks



**[ 40 ] D5.1.1 AI Integration:** 5+ courses, 5+ AI practice categories.

**[ 15 ] D5.1.2 Learning Analytics:** 5+ courses analyzed, 5+ data types, resulting in actionable interventions.

**[ 10 ] D5.1.3 Digital Resources:** 5+ courses with structured, interactive digital assets (no routine PPTs).

**[ 20 ] D5.2.1 Virtual Labs:** 5+ courses with active student simulation/computational practices.

**[ 15 ] D5.2.2 Industry 4.0 / Ed 5.0:** FRIS optimized ( $\geq 10$  implementations,  $\geq 5$  tech domains,  $\geq 300$  students impacted).

***Domain 5 rewards the creators, the integrators, and the innovators. Implementation is the standard.***