EUREKA 2027
OFFICIAL JUDGING RUBRIC

Companion Document to the EUREKA 2027 Official Rulebook

Purpose. This public rubric defines how the 400-point evaluation framework is applied. It uses the same criteria in all four divisions, with different expectation levels appropriate to each educational stage.

Core principle: SAME RUBRIC - DIFFERENT EXPECTATION LEVEL.

1. How to Use This Rubric

- Judges evaluate the project as a whole, then score each published criterion using the criterion-specific descriptors below.
- The five performance levels are anchors, not five mandatory discrete scores. A judge may award any whole-number score within the applicable range.
- Descriptors are interpreted at the expectation level of the team's division. A Primary team is not expected to demonstrate University-level methodology or depth.
- Evidence must be appropriate to the project. Different fields may require different forms of implementation, testing and validation.
- Complexity, cost, institutional prestige and professional production quality are not scoring criteria by themselves.
- Where evidence falls between two descriptions, judges use professional judgment and the complete project context.

2. Performance Levels

Level	Range	General Anchor
Exceptional	**90-100%**	Compelling, well-supported performance at the top of the expectation level for the division; important claims are clear, credible and strongly evidenced.
Strong	**75-89%**	Clearly above the expected standard; substantial strengths with only limited weaknesses or gaps.
Competent	**50-74%**	Meets the criterion at a meaningful level but contains notable limitations, incomplete evidence or uneven execution.
Limited	**25-49%**	Some relevant work is present, but major weaknesses, unsupported claims or important gaps substantially reduce confidence.
Insufficient	**0-24%**	Little relevant evidence is demonstrated, the criterion is largely unmet, or the team cannot substantiate the claimed performance.

3. Division Expectation Lens

Aspect	PRIMARY	LOWER SECONDARY	UPPER SECONDARY	UNIVERSITY
Research / State of the Art	Basic awareness; age-appropriate search and comparison.	Purposeful research; clearer awareness of existing solutions.	Stronger research; relevant State of the Art and reasoned comparison.	Strong command of relevant existing work and credible positioning.
Development	Curiosity, making, experimentation and learning.	More structured development and visible iteration.	Mature development with reasoned technical/scientific decisions.	Advanced, independent development with robust methodology.
Evidence / Validation	Simple, relevant observations or tests.	Repeated tests and real observations/data where appropriate.	Structured testing, data analysis and credible validation.	Measurable evidence, rigorous validation and critical analysis.
Understanding	Explain the idea, what was done and what was learned.	Explain mechanisms, choices and results with increasing technical depth.	Defend choices, evidence, trade-offs and conclusions.	Advanced command of methods, results, uncertainty and limitations.
Impact / Feasibility	Explain who/what benefits and why the idea matters.	Basic but meaningful feasibility, impact and limitations.	Analytical discussion of feasibility, impact and constraints.	Realistic applicability, constraints, scalability/future path where relevant.

4. Criterion-Level Scoring Descriptors

Innovation & Originality

4.1 Originality / Novelty - 35 points

What is evaluated: The degree to which the central contribution is genuinely new or meaningfully differentiated in its relevant context.

Level	Score	Descriptor
Exceptional	**32-35**	The contribution is highly distinctive for the relevant context; novelty is clearly identified and convincingly supported against relevant existing work.
Strong	**27-31**	Clear and meaningful originality is demonstrated; comparison with existing approaches supports the novelty claim.
Competent	**18-26**	Some identifiable originality exists, but differentiation is moderate, partially developed or incompletely supported.
Limited	**9-17**	Novelty is limited, unclear or largely asserted rather than demonstrated; substantial similarity to existing approaches remains.
Insufficient	**0-8**	No meaningful original contribution is identifiable, or the claimed novelty is unsupported.

4.2 Innovative Approach - 25 points

What is evaluated: The quality of the approach used to address the Problem, Need or Opportunity.

Level	Score	Descriptor
Exceptional	**23-25**	The approach is exceptionally thoughtful and distinctive, with a strong connection between the identified opportunity and the chosen solution.
Strong	**19-22**	The approach is clearly innovative and well suited to the objective, with only minor limitations.
Competent	**13-18**	The approach contains useful innovation but is partly conventional, uneven or insufficiently justified.
Limited	**7-12**	The approach shows limited innovation or weak connection to the stated objective.
Insufficient	**0-6**	The approach is essentially conventional, undeveloped or not meaningfully connected to the stated objective.

4.3 Advancement beyond Existing Solutions - 25 points

What is evaluated: How meaningfully the project advances beyond relevant existing solutions, methods or baselines.

Level	Score	Descriptor
Exceptional	**23-25**	A clear, important advancement is demonstrated and supported by credible comparison or evidence.
Strong	**19-22**	A meaningful advancement is shown with good comparative reasoning or evidence.
Competent	**13-18**	Some advancement is plausible, but the magnitude or comparison is only partly demonstrated.
Limited	**7-12**	Advancement is minor, unclear or based mainly on unsupported comparison.
Insufficient	**0-6**	No credible advancement beyond existing solutions is demonstrated.

4.4 Creativity & Ingenuity - 15 points

What is evaluated: The resourcefulness, inventiveness and quality of creative problem solving demonstrated by the team.

Level	Score	Descriptor
Exceptional	**14-15**	Exceptional ingenuity is evident in how constraints, design problems or opportunities are addressed.
Strong	**12-13**	Strong creative thinking and resourceful problem solving are consistently visible.
Competent	**8-11**	Useful creative elements are present, though not consistently or deeply developed.
Limited	**4-7**	Limited creativity is evident; solutions are mostly obvious or weakly adapted.
Insufficient	**0-3**	Little evidence of creative or resourceful problem solving.

Technical / Scientific Excellence & Validation

5.1 Technical / Scientific Quality - 30 points

What is evaluated: The soundness and quality of the engineering, scientific, computational or methodological work.

Level	Score	Descriptor
Exceptional	**27-30**	Work is exceptionally sound and well reasoned for the division, with strong methods and technically/scientifically credible execution.
Strong	**23-26**	Work is technically/scientifically strong with sound methods and only limited weaknesses.
Competent	**15-22**	Core work is credible but contains notable methodological, technical or scientific limitations.
Limited	**8-14**	Important weaknesses reduce confidence in the technical/scientific quality.
Insufficient	**0-7**	The work lacks sufficient technical/scientific basis to support the project's central claims.

5.2 Functional Implementation - 25 points

What is evaluated: The extent to which the project has progressed from concept to a meaningful evaluatable implementation or proof.

Level	Score	Descriptor
Exceptional	**23-25**	A mature, convincing implementation/proof demonstrates the central innovation effectively.
Strong	**19-22**	A strong functional implementation/proof demonstrates most important aspects with limited gaps.
Competent	**13-18**	A meaningful implementation exists but is partial, inconsistent or limited in scope.
Limited	**7-12**	Only limited implementation/proof is available; key functions remain largely conceptual.
Insufficient	**0-6**	The project remains essentially an undeveloped idea or provides no meaningful implementation/proof.

5.3 Testing & Validation - 25 points

What is evaluated: The appropriateness, structure and credibility of testing used to support the project's claims.

Level	Score	Descriptor
Exceptional	**23-25**	Testing is highly appropriate, systematic and closely connected to claims; evidence strongly supports the conclusions.
Strong	**19-22**	Good testing and validation support the important claims with only limited gaps.
Competent	**13-18**	Relevant testing exists but coverage, controls, repetitions, sample size or analysis contain notable limitations.
Limited	**7-12**	Testing is weak, narrow or poorly connected to major claims.
Insufficient	**0-6**	Little or no meaningful validation is provided for important claims.

5.4 Reliability / Performance / Robustness - 10 points

What is evaluated: How convincingly the project demonstrates reliable or appropriate performance under relevant conditions.

Level	Score	Descriptor
Exceptional	**9-10**	Performance is convincingly demonstrated across relevant conditions, with strong awareness of reliability and robustness.
Strong	**8-8**	Good performance is demonstrated with

		reasonable reliability evidence.
Competent	**5-7**	Performance is demonstrated in a limited range of conditions or with incomplete reliability evidence.
Limited	**3-4**	Performance is inconsistent or supported by very limited evidence.
Insufficient	**0-2**	Claimed performance is not credibly demonstrated.

5.5 Technical / Scientific Depth - 10 points

What is evaluated: The depth of understanding and development appropriate to the project and educational division.

Level	Score	Descriptor
Exceptional	**9-10**	Exceptional depth for the division; the team engages confidently with important mechanisms, principles and implications.
Strong	**8-8**	Strong depth and understanding beyond the basic requirements of the project.
Competent	**5-7**	Adequate depth, with some important areas remaining superficial.
Limited	**3-4**	Understanding/development is shallow in several important areas.
Insufficient	**0-2**	Little meaningful technical/scientific depth is demonstrated.

Impact, Relevance & Applicability

6.1 Problem / Need / Opportunity & Relevance - 15 points

What is evaluated: How clearly and meaningfully the project defines what it addresses and why it is relevant.

Level	Score	Descriptor
Exceptional	**14-15**	The Problem, Need or Opportunity is exceptionally clear, well contextualized and convincingly relevant.
Strong	**12-13**	It is clearly defined and relevant, with good contextual understanding.
Competent	**8-11**	It is understandable and meaningful but incompletely framed or supported.
Limited	**4-7**	Definition or relevance is weak, vague or only partly connected to the project.
Insufficient	**0-3**	No coherent Problem, Need or Opportunity is established.

6.2 Effectiveness / Value Created - 20 points

What is evaluated: The demonstrated value created by the project relative to its intended purpose.

Level	Score	Descriptor
Exceptional	**18-20**	The project creates substantial and convincingly demonstrated value in its context.
Strong	**15-17**	Clear and meaningful value is demonstrated with good supporting evidence.
Competent	**10-14**	Some useful value is demonstrated, but effectiveness or evidence is incomplete.
Limited	**5-9**	Value is mainly claimed, weakly demonstrated or modest relative to the stated purpose.
Insufficient	**0-4**	No meaningful value or effectiveness is demonstrated.

6.3 Potential Impact - 20 points

What is evaluated: The significance of the project's demonstrated or credible potential impact within its own context.

Level	Score	Descriptor
Exceptional	**18-20**	Potential impact is highly meaningful and credibly supported within the project's context.
Strong	**15-17**	Strong potential impact is demonstrated with convincing reasoning.
Competent	**10-14**	Potential impact is plausible but only partly supported or limited in scope.
Limited	**5-9**	Impact claims are weak, speculative or poorly connected to evidence.
Insufficient	**0-4**	No credible impact is identified.

6.4 Feasibility & Practical Applicability - 15 points

What is evaluated: How realistically the project could function, be used or be developed further in its intended context.

Level	Score	Descriptor
Exceptional	**14-15**	Feasibility is convincingly addressed, including important practical constraints and requirements.
Strong	**12-13**	The project appears realistically applicable with good awareness of practical considerations.
Competent	**8-11**	Feasibility is plausible but important constraints remain insufficiently examined.
Limited	**4-7**	Major practical barriers are overlooked or applicability is largely speculative.
Insufficient	**0-3**	The proposed application is not credibly feasible in its stated form.

6.5 Scalability / Future Potential - 10 points

What is evaluated: The credibility of future development, extension or broader use where relevant to the project.

Level	Score	Descriptor
Exceptional	**9-10**	Future development is realistic, well reasoned and strongly connected to demonstrated results.
Strong	**8-8**	Good future potential is identified with a credible development path.
Competent	**5-7**	Reasonable future possibilities exist but remain partly speculative or underdeveloped.
Limited	**3-4**	Future potential is vague, unrealistic or weakly connected to current evidence.
Insufficient	**0-2**	No meaningful or credible future path is identified where one is relevant.

Team Ownership, Development Process & Understanding

7.1 Team Ownership / Original Contribution - 25 points

What is evaluated: The extent to which the substantive contribution belongs to and was genuinely developed by the team.

Level	Score	Descriptor
Exceptional	**23-25**	Ownership is exceptionally clear; contributions are transparent, verifiable and strongly supported by development evidence.
Strong	**19-22**	Strong team ownership is demonstrated; external inputs are appropriately distinguished and disclosed.
Competent	**13-18**	Meaningful ownership is evident, but some contributions or boundaries are not fully clear.
Limited	**7-12**	Significant uncertainty exists regarding who performed important parts of the work.
Insufficient	**0-6**	The team cannot demonstrate ownership of substantive work presented as its own.

7.2 Technical / Scientific Understanding - 20 points

What is evaluated: How well the team understands the important principles, mechanisms, methods and results of its project.

Level	Score	Descriptor
Exceptional	**18-20**	The team demonstrates exceptional understanding for its division and can explain and defend the important aspects confidently.
Strong	**15-17**	Strong understanding is evident across nearly all important aspects.
Competent	**10-14**	Adequate understanding is demonstrated, with notable gaps in some areas.
Limited	**5-9**	Understanding is superficial or inconsistent in important parts of the project.
Insufficient	**0-4**	The team cannot explain substantial elements central to the work it presents.

7.3 Development & Iteration Process - 15 points

What is evaluated: The quality and authenticity of the project's development, testing, learning and iteration over time.

Level	Score	Descriptor
Exceptional	**14-15**	A rich, authentic and well-evidenced development process shows purposeful iteration and learning.
Strong	**12-13**	Strong development history with clear testing, changes and learning.
Competent	**8-11**	A credible process is visible, but iteration or documentation is uneven.
Limited	**4-7**	Development appears limited, poorly documented or largely linear without meaningful learning evidence.
Insufficient	**0-3**	Little evidence of a genuine development process is available.

7.4 Problem Solving & Design Decisions - 10 points

What is evaluated: The quality of reasoning behind important decisions and the team's response to problems encountered.

Level	Score	Descriptor
Exceptional	**9-10**	Decisions are exceptionally well reasoned; the team responds intelligently to constraints, failures and trade-offs.
Strong	**8-8**	Strong reasoning supports important choices and problem-solving actions.
Competent	**5-7**	Most major decisions can be explained, though some reasoning is weak or retrospective.
Limited	**3-4**	Important choices are poorly justified or problem solving is largely ad hoc.
Insufficient	**0-2**	The team cannot explain the basis of major decisions.

7.5 Awareness of Limitations - 10 points

What is evaluated: The team's ability to identify uncertainty, constraints, weaknesses and what has not yet been demonstrated.

Level	Score	Descriptor
Exceptional	**9-10**	Limitations and uncertainty are identified precisely and interpreted with exceptional maturity for the division.
Strong	**8-8**	The team demonstrates clear and realistic awareness of important limitations.
Competent	**5-7**	Several limitations are recognized, though important issues remain underexplored.
Limited	**3-4**	Awareness is limited; the team overstates conclusions or overlooks significant weaknesses.
Insufficient	**0-2**	The team shows little recognition of material limitations or uncertainty.

Presentation & Q&A

8.1 Clarity & Structure - 10 points

What is evaluated: How clearly and coherently the team communicates the project during the formal session.

Level	Score	Descriptor
Exceptional	**9-10**	Exceptionally clear, focused and coherent; judges can readily understand the project and its central evidence.
Strong	**8-8**	Clear and well structured with only minor communication weaknesses.
Competent	**5-7**	Generally understandable but uneven, overlong, incomplete or occasionally confusing.
Limited	**3-4**	Important information is difficult to follow or poorly organized.
Insufficient	**0-2**	The presentation does not communicate the project sufficiently for meaningful evaluation.

8.2 Quality of Demonstration & Evidence - 10 points

What is evaluated: How effectively the team uses live demonstration or appropriate alternative evidence during judging.

Level	Score	Descriptor
Exceptional	**9-10**	Demonstration/evidence is highly effective, relevant and directly supports the project's important claims.
Strong	**8-8**	Strong demonstration/evidence communicates the project convincingly.
Competent	**5-7**	Useful evidence is shown but important aspects are incomplete or weakly connected to claims.
Limited	**3-4**	Demonstration/evidence is limited, unclear or largely illustrative rather than evaluative.
Insufficient	**0-2**	Little meaningful demonstration or evidence is provided.

8.3 Technical Communication - 5 points

What is evaluated: The team's ability to communicate technical/scientific content accurately and appropriately for the audience.

Level	Score	Descriptor
Exceptional	**5-5**	Precise, accessible and highly effective technical/scientific communication.
Strong	**4-4**	Clear and accurate communication with only minor weaknesses.
Competent	**3-3**	Generally understandable but sometimes imprecise or insufficiently explained.
Limited	**2-2**	Frequent ambiguity or technical communication problems reduce understanding.
Insufficient	**0-1**	Technical/scientific content cannot be communicated with sufficient accuracy.

8.4 Q&A Accuracy & Depth - 10 points

What is evaluated: The accuracy, understanding and depth demonstrated when responding to judges' questions.

Level	Score	Descriptor
Exceptional	**9-10**	Answers are consistently accurate, thoughtful and demonstrate exceptional depth for the division.

Strong	**8-8**	Answers are strong and accurate with good depth across important topics.
Competent	**5-7**	Most questions are answered adequately, but gaps or uncertainty are evident.
Limited	**3-4**	Answers are frequently incomplete, superficial or inconsistent with the project claims.
Insufficient	**0-2**	The team is largely unable to answer substantive questions about the project.

8.5 Professionalism & Time Management - 5 points

What is evaluated: The team's appropriate conduct, preparedness and effective use of the formal judging time.

Level	Score	Descriptor
Exceptional	**5-5**	Highly prepared, professional and efficient use of time without sacrificing substance.
Strong	**4-4**	Well prepared and professional with good time management.
Competent	**3-3**	Generally appropriate, with some timing or preparedness issues.
Limited	**2-2**	Significant timing, organization or conduct issues interfere with evaluation.
Insufficient	**0-1**	The session is seriously undermined by lack of preparation, inappropriate conduct or failure to manage time.

5. Scoring Summary

Dimension	Points
Innovation & Originality	100
Technical / Scientific Excellence & Validation	100
Impact, Relevance & Applicability	80
Team Ownership, Development Process & Understanding	80
Presentation & Q&A	40
TOTAL	**400**

Interpretation note. This Rubric must be read together with the EUREKA 2027 Official Rulebook. Integrity violations, eligibility decisions, normalization and sanctions are governed by the Rulebook and are not additional hidden scoring criteria.