

360+ EPQ Ideas for 2026: Fresh, Unique & Engineering Topics

360+ EPQ Ideas Across Popular Subjects

The questions below are written as starting points, not finished titles. Before committing to one, narrow the scope to a particular technology, case study, location, time period, age group or comparison that your supervisor approves.

Medicine & Healthcare EPQ Ideas

1. How far can AI-assisted imaging improve early disease detection?
2. Could phage therapy help address antibiotic-resistant infections?
3. How effective are wearable sensors for continuous health monitoring?
4. Can organoids reduce the need for animal testing in drug development?
5. What are the opportunities and limits of personalised cancer treatment?
6. Could mRNA platforms be adapted for more rapid vaccine development?
7. How useful are liquid biopsies for detecting cancer at an early stage?
8. Can digital twins improve personalised healthcare planning?
9. How might brain-computer interfaces improve communication for people with paralysis?
10. What role could exoskeletons play in rehabilitation and mobility?
11. Could focused ultrasound provide safer non-invasive treatment for selected brain disorders?
12. How effective is telemedicine for improving access to specialist care in rural areas?
13. What are the medical applications and risks of CRISPR gene editing?
14. Could gene therapy provide long-term treatment for inherited retinal disorders?
15. How does the gut microbiome influence human health?
16. Can microbiome research improve treatment of inflammatory disorders?
17. What factors affect the success of regenerative medicine for heart repair?
18. Could 3D bioprinting become practical for tissue replacement?
19. How can smart drug-delivery systems target medicines more precisely?
20. What are the potential uses of microfluidics in rapid medical diagnosis?
21. Could robotic surgery improve precision without improving every patient outcome?
22. How useful are digital health records for predicting hospital readmission?
23. Can AI support clinicians without creating unsafe over-reliance on automated decisions?
24. What is the potential of extracellular vesicles in regenerative medicine?
25. Could biodegradable electronics be used for temporary medical implants?
26. How effective are wearable devices at detecting changes in cardiovascular health?
27. Could virtual reality reduce pain or anxiety during medical procedures?
28. What engineering challenges limit artificial organs and organ-assist devices?
29. How can engineering improve the safety of home medical devices?
30. Could smart inhalers improve medication adherence in respiratory disease?
31. What are the possibilities and limitations of artificial womb technology?
32. How could point-of-care diagnostics improve healthcare in remote settings?
33. Can precision medicine reduce unnecessary treatments in chronic disease?
34. How can medical device design reduce infection risk in hospitals?
35. Could 3D-printed prosthetics improve access to affordable personalised devices?

36. How should hospitals evaluate AI tools before using them in patient care?
37. Can remote rehabilitation platforms produce measurable improvements in recovery?
38. What role could nanomaterials play in targeted drug delivery?
39. Could non-invasive neural stimulation become a practical therapy for selected disorders?
40. How can healthcare systems balance innovation with patient safety?
41. What makes a medical technology ready for real-world clinical use?

Engineering EPQ Ideas

42. Can self-healing concrete reduce the lifetime maintenance burden of infrastructure?
43. How effective are low-carbon cement alternatives at reducing construction emissions?
44. Could recycled construction materials meet structural performance requirements at scale?
45. How can engineering extend the service life of bridges and roads through predictive maintenance?
46. Could modular construction reduce waste and project time without lowering quality?
47. How useful are digital twins for monitoring buildings and infrastructure?
48. Can structural health monitoring detect bridge damage before visible failure occurs?
49. What engineering trade-offs arise when designing climate-resilient buildings?
50. Could biomimicry produce stronger and lighter structural components?
51. How can passive building design reduce cooling demand in hot climates?
52. What role can phase-change materials play in energy-efficient buildings?
53. Could robotic systems make construction sites safer and more productive?
54. How effective is 3D printing for producing low-cost construction components?
55. Could locally sourced materials reduce the environmental impact of construction?
56. How can engineering reduce water loss in urban distribution systems?
57. What design features make stormwater systems more resilient to intense rainfall?
58. Could permeable pavements reduce urban flooding?
59. How can engineers design safer infrastructure for extreme heat?
60. What are the engineering limits of carbon-capture systems for industrial facilities?
61. Could waste heat from factories be recovered for useful heating or power?
62. How can engineering improve the efficiency of desalination systems?
63. Could fog or atmospheric water harvesting work as a supplementary water source?
64. How effective are bio-based insulation materials compared with conventional insulation?
65. Can circular design principles reduce material waste in manufactured products?
66. What engineering choices most affect the life-cycle footprint of a consumer product?
67. How can topology optimisation reduce weight while retaining structural strength?
68. Could auxetic materials improve impact protection compared with conventional materials?
69. How useful are shape-memory alloys in adaptive mechanical systems?
70. Can magnetorheological dampers improve vibration control in vehicles?
71. What engineering potential do triboelectric generators have for self-powered sensors?
72. Could piezoelectric systems recover useful energy from mechanical motion?
73. How can friction stir welding improve the manufacture of lightweight structures?
74. Could thermal management with phase-change materials improve battery performance?
75. How do aerogels compare with conventional materials for thermal insulation?
76. What are the practical uses of compliant mechanisms in precision engineering?
77. Could soft robotic grippers reduce damage to fragile products?
78. How can artificial muscles improve the design of wearable robotic devices?
79. Could magnetically levitated bearings reduce friction in high-speed machinery?
80. How useful are negative-stiffness mechanisms for vibration isolation?

81. What is the engineering potential of morphing wings for efficient aircraft?
82. Could 4D-printed components adapt their shape after manufacture?
83. How can additive manufacturing reduce material waste in metal components?
84. What limits the use of functionally graded materials in thermal protection?
85. Could biomimetic adhesives reduce the need for conventional fasteners?
86. How effective are acoustic metamaterials for low-frequency noise reduction?
87. Could vortex-induced vibration be turned into a practical energy-harvesting method?
88. How can computational fluid dynamics improve the design of small wind turbines?
89. What engineering factors control the efficiency of heat pumps in different climates?
90. Could thermoacoustic devices provide useful heating or cooling without moving parts?
91. How can predictive maintenance reduce failures in rotating machinery?
92. Could self-sensing concrete help engineers monitor structural damage continuously?
93. How can earthquake-resistant building systems reduce damage in tall structures?
94. What is the potential of base isolation compared with conventional seismic strengthening?
95. Could modular pedestrian bridges provide rapid deployment after disasters?
96. How can recycled aggregates be used without compromising concrete performance?
97. Could 3D-printed houses meet the structural and thermal needs of affordable housing?
98. How can drones improve bridge and tower inspection?
99. Could autonomous construction equipment reduce worker exposure to hazardous tasks?
100. How useful are satellite and sensor data for monitoring land subsidence?
101. Can smart traffic signals reduce congestion at busy urban junctions?
102. What engineering approaches can reduce urban heat around roads and buildings?
103. Could green roofs reduce peak stormwater runoff in cities?
104. How can permeable road surfaces balance drainage, durability and maintenance?
105. Could recycled plastic be used in road construction without creating new long-term risks?
106. How can structural design respond to stronger wind loads caused by extreme weather?
107. Could underground utility mapping improve the safety of urban construction?
108. What limits the use of prefabricated modules in high-rise construction?
109. How can bridge deck design be improved for longer service life?
110. Could sensor networks enable real-time monitoring of railway tracks?
111. How can engineering reduce vibration and noise from urban rail systems?
112. Could floating infrastructure help cities adapt to rising water levels?
113. What engineering solutions can improve accessibility in older public buildings?
114. How can water treatment plants reduce energy use while maintaining reliable performance?
115. Could constructed wetlands complement conventional wastewater treatment?
116. How can engineers design drainage systems for increasingly unpredictable rainfall?
117. How can battery energy storage improve the flexibility of renewable electricity grids?
118. Could long-duration energy storage solve problems that short-duration batteries cannot?
119. What engineering trade-offs shape the design of grid-scale battery systems?
120. How can demand response reduce pressure on overloaded electricity grids?
121. Could smart transformers improve power quality in modern distribution networks?
122. How can power electronics improve the efficiency of electric vehicle charging?
123. Could vehicle-to-grid systems help balance local electricity demand?
124. What limits the use of wireless power transfer for electric vehicles?
125. How can battery thermal management improve EV safety and life?
126. Could solid-state batteries offer meaningful advantages over current lithium-ion designs?
127. How effective are battery recycling technologies at recovering valuable materials?

- 128.** Could second-life EV batteries support stationary energy storage?
- 129.** How can wide-bandgap semiconductors improve power converter efficiency?
- 130.** What role could silicon carbide devices play in future power electronics?
- 131.** Could gallium nitride reduce the size and energy loss of fast chargers?
- 132.** How useful is edge AI for real-time industrial monitoring?
- 133.** Can low-power sensors operate for years using harvested environmental energy?
- 134.** How can embedded systems be designed to fail safely when sensors become unreliable?
- 135.** Could printed electronics reduce the cost of simple sensing systems?
- 136.** How can electromagnetic compatibility be improved in densely packed electronic devices?
- 137.** Could optical or photonic links reduce data-centre energy use?
- 138.** How can thermal design improve reliability in compact computing hardware?
- 139.** What are the engineering challenges of flexible and stretchable electronics?
- 140.** Could smart textiles provide practical sensing without sacrificing comfort?
- 141.** How can engineers design safer battery packs for micro-mobility devices?
- 142.** How could autonomous robots support construction on the Moon?
- 143.** What engineering challenges must be solved before large-scale lunar infrastructure is practical?
- 144.** Could lunar regolith be used to build roads, pads or protective structures?
- 145.** How might in-situ resource utilisation reduce the mass launched from Earth?
- 146.** What power-system designs could support a long-duration lunar base?
- 147.** How can lunar dust mitigation protect seals, joints and instruments?
- 148.** Could additive manufacturing reduce the number of spare parts needed on long missions?
- 149.** How can robotic excavation be adapted to low-gravity environments?
- 150.** Could reusable launch systems reduce the cost of transporting equipment to orbit?
- 151.** What design trade-offs govern heat shields for reusable spacecraft?
- 152.** How could inflatable structures support temporary habitats in space?
- 153.** What engineering methods could protect electronics from radiation beyond low Earth orbit?
- 154.** Could autonomous docking systems improve the safety of in-space servicing?
- 155.** How can small satellites be designed for reliable power and thermal control?
- 156.** Could electric propulsion improve mission efficiency for deep-space spacecraft?
- 157.** What are the engineering constraints on space-based solar power concepts?
- 158.** Could swarm spacecraft perform useful observation tasks better than a single large satellite?
- 159.** How can engineers reduce the mass of spacecraft without reducing reliability?
- 160.** What makes a propulsion system suitable for long-duration deep-space missions?
- 161.** How could robotic systems repair or inspect satellites without human servicing?

Computer Science & AI EPQ Ideas

- 162.** How can explainable AI improve trust in high-stakes decision-support systems?
- 163.** Could edge AI reduce latency in safety-critical applications?
- 164.** How effective is federated learning for privacy-preserving machine learning?
- 165.** What are the practical limits of post-quantum cryptography for everyday systems?
- 166.** Could quantum computing change selected approaches to cryptography?
- 167.** How can adversarial examples affect computer-vision safety systems?
- 168.** What makes an AI model reliable when its training data are incomplete or biased?
- 169.** Could synthetic data improve computer-vision training without reducing performance?
- 170.** How can retrieval-augmented AI systems reduce factual errors?
- 171.** What role should human review play in AI-assisted content generation?
- 172.** Could small language models be more efficient for specific tasks than very large models?

173. How can AI systems be designed to use less computing energy?
174. What engineering trade-offs shape neuromorphic computing architectures?
175. Could event-based cameras improve machine perception for fast-moving scenes?
176. How useful are digital twins for predictive maintenance in factories?
177. Could reinforcement learning improve robotic control in changing environments?
178. How can computer vision improve road safety without excessive surveillance?
179. What are the engineering challenges of real-time 3D perception for robots?
180. Could autonomous drones safely inspect difficult-to-reach infrastructure?
181. How can cybersecurity testing prepare connected devices for supply-chain attacks?
182. What are the limits of homomorphic encryption for practical cloud workloads?
183. Could confidential computing improve privacy when processing sensitive data?
184. How can differential privacy protect data while retaining statistical value?
185. What role could graph neural networks play in scientific discovery?
186. Could DNA data storage become useful for long-term archival systems?
187. How can haptic feedback improve virtual training environments?
188. Could computer-generated holography support future displays?
189. How might AI assist software testing without replacing human review?
190. Can automated formal methods improve the reliability of safety-critical code?
191. What engineering challenges limit practical quantum error correction?
192. Could swarm intelligence improve warehouse or traffic coordination?
193. How can robots safely share workspaces with humans?
194. What design choices improve the reliability of conversational AI in customer service?
195. Could multimodal AI improve accessibility technologies?
196. How can AI help detect faults in industrial equipment before failure?
197. What are the security risks of AI-enabled autonomous devices?
198. Could neuromorphic sensors reduce energy use in always-on sensing applications?
199. How can data-centre cooling systems be engineered for rapidly increasing AI workloads?
200. What are the engineering trade-offs between local and cloud AI inference?
201. Could AI-based route planning reduce energy use in delivery fleets?
202. How can robotic perception systems remain reliable in poor lighting or bad weather?
203. What practical challenges limit fully autonomous mobile robots indoors?
204. Could AI-assisted design discover lighter engineering structures than conventional methods?
205. How can software engineers verify machine-learning components in safety-critical systems?
206. What is the potential of computational creativity in design, music or visual media?

Environment & Energy EPQ Ideas

207. How can battery storage help integrate more solar and wind power?
208. What engineering limits affect large-scale carbon capture and storage?
209. Could low-emissions hydrogen supply hard-to-electrify industrial processes?
210. How can electrolyzers be designed for flexible operation with variable renewable power?
211. What are the engineering challenges of transporting and storing hydrogen safely?
212. Could waste-to-energy plants recover more useful energy from municipal waste?
213. How can methane leakage be reduced in energy systems?
214. Could industrial heat pumps replace some fossil-fuel heating applications?
215. What materials and designs could improve solar-panel durability?
216. How can solar PV systems perform better in hot and dusty climates?
217. Could floating solar reduce land-use pressure in suitable water bodies?

- 218.** How effective are agrivoltaic systems at combining food production with solar generation?
- 219.** What engineering challenges affect offshore wind maintenance?
- 220.** Could tidal energy become useful in locations with suitable predictable currents?
- 221.** How can wind-turbine blades be designed for lower lifetime environmental impact?
- 222.** Could recyclable wind-turbine blade materials become practical?
- 223.** How can thermal energy storage reduce peak electricity demand?
- 224.** What role could green hydrogen play in seasonal energy storage?
- 225.** Could long-duration storage improve the reliability of renewable-heavy grids?
- 226.** How can electricity grids be upgraded when connection queues are growing?
- 227.** Could advanced power-flow control increase the capacity of existing transmission lines?
- 228.** How can engineering reduce energy use in data centres?
- 229.** What cooling methods are most promising for high-density computing facilities?
- 230.** Could district cooling improve energy efficiency in dense cities?
- 231.** How can desalination plants reduce electricity and membrane costs?
- 232.** Could membrane materials make water purification more energy efficient?
- 233.** What engineering approaches can reduce plastic leakage into rivers and oceans?
- 234.** Could chemical recycling complement mechanical recycling for selected plastics?
- 235.** How can product design make electronic devices easier to repair and recycle?
- 236.** Could agricultural waste become a practical feedstock for bio-based materials?
- 237.** What engineering factors determine whether a technology is truly circular over its life cycle?
- 238.** How can urban infrastructure prepare for more frequent extreme heat?
- 239.** Could nature-based drainage systems complement conventional flood infrastructure?
- 240.** What engineering solutions could improve water resilience for growing cities?
- 241.** How can life-cycle assessment influence engineering design decisions?

Economics & Business EPQ Ideas

- 242.** How could dynamic pricing change consumer behaviour in online markets?
- 243.** What are the economic effects of widespread generative AI adoption on entry-level jobs?
- 244.** Could digital currencies change how small businesses receive payments?
- 245.** How do network effects shape competition between digital platforms?
- 246.** What makes a subscription business model financially sustainable?
- 247.** Could green bonds improve access to finance for environmental infrastructure?
- 248.** How effective are carbon-pricing systems at changing investment decisions?
- 249.** What economic risks arise when companies depend heavily on a single supplier?
- 250.** Could circular-economy business models remain profitable while reducing material use?
- 251.** How does crowdfunding change financing options for early-stage firms?
- 252.** What role can fintech play in improving access to financial services?
- 253.** Could instant payment systems change the economics of small retail transactions?
- 254.** How can businesses measure the return on investment from cybersecurity spending?
- 255.** What economic factors influence adoption of electric delivery vehicles?
- 256.** Could automation change productivity differently across manufacturing sectors?
- 257.** How might AI alter the economics of software development?
- 258.** What makes a platform vulnerable to market concentration?
- 259.** Could reputation systems reduce fraud in online marketplaces?
- 260.** How do behavioural nudges affect saving and spending decisions?
- 261.** What is the economic case for investing in preventive maintenance?
- 262.** Could shared mobility reduce household transport costs?

- 263.** How does the gig economy change the distribution of risk between workers and firms?
- 264.** What makes green products competitive when customers are price sensitive?
- 265.** Could data become a core business asset without undermining customer trust?
- 266.** How can small businesses use forecasting to manage inventory more efficiently?
- 267.** What is the economic impact of AI-assisted customer service?
- 268.** Could local manufacturing shorten supply chains without raising consumer prices too much?
- 269.** How do energy-price changes affect the economics of heat pumps and solar installations?
- 270.** Could repair services become a stronger business model under right-to-repair policies?
- 271.** What factors determine the success of a social enterprise?

Psychology & Society EPQ Ideas

- 272.** How does social media use relate to sleep and academic performance in teenagers?
- 273.** What factors influence whether students trust AI-generated information?
- 274.** Could digital wellbeing tools change patterns of smartphone use?
- 275.** How does classroom design affect concentration and learning?
- 276.** What role does sleep play in memory consolidation for students?
- 277.** How can online communities affect a sense of belonging among young people?
- 278.** What factors influence participation in volunteering among young adults?
- 279.** How does fear of failure affect students' willingness to attempt difficult work?
- 280.** Could gamification improve persistence in educational tasks?
- 281.** How does multitasking affect accuracy during studying?
- 282.** What influences public attitudes toward emerging technologies?
- 283.** How does misinformation spread through peer networks online?
- 284.** Could media-literacy education improve the ability to identify misleading claims?
- 285.** How do visual reminders influence environmentally friendly behaviour?
- 286.** What makes a public-information campaign memorable?
- 287.** How does commuting time affect student or worker wellbeing?
- 288.** Could quieter school environments improve concentration?
- 289.** How does peer feedback affect revision quality?
- 290.** What factors influence career choices among students interested in STEM?
- 291.** How do students balance convenience and privacy when using digital tools?
- 292.** Could project-based learning improve engagement compared with lecture-heavy learning?
- 293.** How does background music affect different types of cognitive tasks?
- 294.** What role does goal-setting play in completing long academic projects?
- 295.** How can study environments be designed to reduce distraction?
- 296.** What makes students continue a skill after initial motivation fades?
- 297.** How does group work influence creativity and decision-making?
- 298.** Could short-form video affect sustained attention during study?
- 299.** What factors shape attitudes toward recycling in schools?
- 300.** How does local community design affect everyday physical activity?
- 301.** Could digital reminders improve punctuality and deadline management?

Humanities, History & Arts EPQ Ideas

- 302.** How did the public image of engineering change during the industrial revolution?
- 303.** How has science fiction influenced real-world ideas about future technology?
- 304.** What can the history of bridges reveal about changes in engineering practice?
- 305.** How have maps shaped our understanding of borders and places?
- 306.** What role has architecture played in expressing political power?

- 307.** How has photography changed the way societies record history?
- 308.** Could historical newspapers provide useful evidence about changing public attitudes?
- 309.** How does language change when new technologies become part of everyday life?
- 310.** What makes a historical source reliable enough for a specific research question?
- 311.** How have myths and legends influenced modern storytelling?
- 312.** How does museum design influence the way visitors interpret history?
- 313.** What can old public buildings reveal about social change?
- 314.** How has the idea of the 'future' changed from the nineteenth century to today?
- 315.** What role does visual design play in political posters across different periods?
- 316.** How have transport technologies changed the design of cities?
- 317.** How does translation affect the interpretation of classic literature?
- 318.** What makes a literary adaptation feel faithful while still being creative?
- 319.** How have robots been represented in literature and film?
- 320.** What can engineering failures teach us about decision-making in history?
- 321.** How have public memorials influenced collective memory?
- 322.** How does book cover design shape expectations before reading?
- 323.** What role has journalism played in documenting major technological change?
- 324.** How have ideas about privacy changed with the rise of digital technology?
- 325.** How does architecture influence a sense of community?
- 326.** Could oral-history interviews preserve details that formal records miss?
- 327.** How does music technology change the way music is composed and performed?
- 328.** What can the history of household appliances tell us about social change?
- 329.** How do different cultures represent machines and technology in art?
- 330.** How has industrial design shaped everyday objects?
- 331.** What makes a public exhibition effective at communicating a complex idea?

Interdisciplinary & Creative EPQ Ideas

- 332.** Could AI-supported engineering design make sustainable products easier to develop?
- 333.** What would a resilient school campus look like under more extreme weather conditions?
- 334.** Could a school microgrid combine solar generation, batteries and demand response effectively?
- 335.** How can engineering improve accessibility in public transport?
- 336.** Could smart irrigation reduce water use without reducing crop productivity?
- 337.** How might autonomous delivery systems change the design of local streets?
- 338.** What should a climate-resilient community prioritise when budgets are limited?
- 339.** Could community repair centres reduce electronic waste while building practical skills?
- 340.** How can product design encourage people to repair instead of replace?
- 341.** Could low-cost sensors improve air-quality awareness in schools?
- 342.** How might wearable technology change the way athletes monitor training?
- 343.** Could a small wind-and-solar hybrid system provide reliable power for a remote site?
- 344.** How should designers balance privacy and usefulness in smart-home devices?
- 345.** Could computer vision improve sorting accuracy in recycling facilities?
- 346.** How can data visualisation make scientific evidence easier for the public to understand?
- 347.** Could 3D printing support rapid replacement of everyday parts in remote communities?
- 348.** How might robotics change emergency response after earthquakes or floods?
- 349.** Could recycled materials be turned into high-value consumer products through better design?
- 350.** How can engineering and psychology be combined to reduce distraction in study spaces?
- 351.** Could a digital twin of a school building help reduce energy consumption?

- 352.** How might lunar construction technologies developed for space also benefit disaster recovery on Earth?
- 353.** Could smart packaging reduce food waste without creating more plastic waste?
- 354.** How can engineering help cities make heatwaves less dangerous?
- 355.** Could open-source hardware improve access to useful educational technology?
- 356.** How should engineers evaluate fairness and accessibility when designing automated systems?
- 357.** Could data-driven maintenance reduce costs for small community infrastructure?
- 358.** How can architecture and engineering work together to improve natural cooling?
- 359.** Could autonomous robots safely perform repetitive recycling or sorting tasks?
- 360.** What engineering and economic factors determine whether a clean technology scales?
- 361.** How can a student prototype be tested realistically without expensive laboratory equipment?

20 Engineering EPQ Ideas That Could Become Practical Student Projects

- 1.** Build a small passive-cooling box and compare insulation or ventilation strategies.
- 2.** Test a simple piezoelectric energy-harvesting setup under different vibration conditions.
- 3.** Compare the thermal performance of two low-cost insulation materials.
- 4.** Design a flood-resilient miniature road section and test drainage behaviour.
- 5.** Build a small solar-battery system and study how load scheduling affects battery use.
- 6.** Create a basic structural health-monitoring prototype using inexpensive sensors.
- 7.** Compare 3D-printed infill patterns for strength-to-weight performance.
- 8.** Design and test a small wind-turbine blade with different pitch angles.
- 9.** Build a simple smart irrigation system using soil-moisture sensing.
- 10.** Compare battery-pack cooling approaches using a controlled low-voltage model or simulation.
- 11.** Design an accessible public-space ramp or entrance and evaluate its geometry against design guidance.
- 12.** Create a prototype system for sorting objects by colour, shape or material category.
- 13.** Model heat loss from a small building and compare passive design options.
- 14.** Prototype a low-cost air-quality monitor and study sensor consistency.
- 15.** Compare manual and automated inspection workflows for a small physical structure.
- 16.** Design a lunar-regolith handling concept using a tabletop analogue material.
- 17.** Create a digital twin of a room or small building to estimate energy use.
- 18.** Compare two small-scale energy-storage strategies using a transparent test protocol.
- 19.** Design a lightweight mechanism inspired by a biological movement system.
- 20.** Investigate whether a simple compliant mechanism can replace a multi-part linkage in one task.