

# SAE Project Ideas For High School

Checkout SAE (Supervised Agricultural Experience) project ideas for high school students:

## **Animal Systems:**

1. Goat milk soap business
2. Backyard chicken egg production
3. Bee pollination service startup
4. Rabbit meat farming venture
5. Fish breeding for aquariums
6. Sheep wool clothing line
7. Alpaca fiber processing enterprise
8. Duck egg gourmet food
9. Quail farming for restaurants
10. Pet sitting service launch
11. Horse training for beginners
12. Cattle embryo transfer program
13. Pig waste to biogas
14. Deer antler velvet production
15. Turkey Heritage Breed Preservation
16. Miniature donkey therapy animals
17. Llama trekking adventure tours
18. Ostrich leather goods creation
19. Silkworm cultivation for fabric
20. Mealworm protein powder production

## **Plant Systems:**

21. Vertical hydroponic lettuce farm
22. Microgreens for local restaurants
23. Heirloom tomato seed saving
24. Mushroom logs inoculation business
25. Herb garden subscription boxes
26. Fruit tree grafting service
27. Pumpkin Maze agritourism venture
28. Flower bouquet delivery startup
29. Rooftop vegetable garden installation
30. Aquaponics tilapia and basil
31. Succulent propagation and sales
32. Bamboo farming for construction
33. Lavender essential oil distillation
34. Orchard pollination drone service
35. Carnivorous plant nursery business
36. Hops growing for breweries
37. Ginseng cultivation in forests
38. Hay bale gardening workshops

39. Cactus fruit jam production
40. Bonsai tree shaping classes

### **Environmental Systems:**

41. Rainwater harvesting system design
42. Composting service for neighborhoods
43. Solar-powered irrigation set up business
44. Wetland restoration project management
45. Wind energy site assessment
46. Soil erosion prevention techniques
47. Native plant restoration program
48. Eco-friendly pest control service
49. Biodegradable mulch production venture
50. Green Roof Installation Company
51. Waste oil to biodiesel
52. Algae-based water purification system
53. Invasive species removal service
54. Drought-resistant landscaping business
55. Vermicomposting bins for schools
56. Upcycled garden art creation
57. Wildlife Corridor planning service
58. Biochar production from waste
59. Phytoremediation for polluted sites
60. Passive solar greenhouse design

### **Food Products and Processing:**

61. Fruit leather snack production
62. Artisanal cheese-making classes
63. Fermented vegetable product line
64. Honey infusion flavor experiments
65. Gluten-free baking mix business
66. Dehydrated camping meals startup
67. Herbal tea blend creation
68. Gourmet pet treat bakery
69. Flavored popcorn kernel varieties
70. Fruit preserves gift baskets
71. Spice blend subscription service
72. Nut milk production facility
73. Vegetable chips manufacturing process
74. Gourmet salt infusion business
75. Fruit-based natural food coloring
76. Edible insect protein bar
77. Cold-pressed juice delivery service
78. Vegan cheese alternative development
79. Probiotic vegetable pickle production
80. Maple syrup flavor infusions

## **Natural Resources:**

81. Sustainable forestry management plan
82. Wildlife habitat improvement service
83. Groundwater recharge area protection
84. Native seed collection business
85. Firewood seasoning and delivery
86. Fishing lure from recycled materials
87. Eco-tourism guide training program
88. Trail building and maintenance
89. Nest box construction service
90. Wildflower meadow installation business
91. Butterfly Garden design service
92. Riparian buffer planting program
93. Edible forest garden planning
94. Christmas tree farm startup
95. Foraging walks and workshops
96. Natural dye from local plants
97. Bat house building service
98. Beekeeping equipment rental business
99. Soil testing and amendment
100. Integrated pest management consulting

## **Power, Structural, and Technical Systems:**

101. Drone crop monitoring service
102. Farm equipment repair business
103. Precision agriculture data analysis
104. Small-scale wind turbine installation
105. Farm building design service
106. GPS livestock tracking system
107. Robotic milking system maintenance
108. Farm safety equipment sales
109. Aquaponics system design service
110. Greenhouse automation control systems
111. Farm tool-sharing app
112. Tractor GPS guidance installation
113. Alternative energy feasibility studies
114. Farm equipment 3D printing
115. Livestock scale calibration service
116. Weather station network setup
117. Farm security system installation
118. Irrigation system efficiency audits
119. Farm vehicle electric conversion
120. Grain storage monitoring technology

## **Agribusiness:**

121. Farm-to-table app development
122. Social media for farmers
123. Community-supported agriculture management
124. Farm financial planning service
125. Agricultural grant writing assistance
126. Farmers' market booth design
127. Farm logo and branding
128. Agritourism marketing consultancy
129. Farm succession planning service
130. Value-added product development
131. Farm equipment leasing business
132. Agricultural land real estate
133. Crop insurance education workshops
134. Farm-to-school program coordinator
135. Precision ag software training
136. Farm labor hiring service
137. Direct marketing strategy consulting
138. Farm business plan writing
139. Agricultural Cooperative Formation assistance
140. Farm bookkeeping software development

### **Leadership Development:**

141. Youth agriculture mentor program
142. Farm safety workshop series
143. Public speaking for farmers
144. Agricultural Policy Youth Summit
145. Farm stress management classes
146. Agricultural Career Exploration camp
147. Farm succession leadership training
148. Food system change workshops
149. Ag literacy program development
150. Farm innovation think tank
151. Rural entrepreneurship bootcamp
152. Farmer's market manager training
153. Farm to school ambassador
154. Agricultural debate team coaching
155. Farm financial literacy program
156. Sustainable Agriculture Youth Conference
157. Farm technology adoption workshops
158. Agricultural leadership podcast production
159. Farm crisis hotline volunteer
160. Young farmer networking events

### **Research:**

161. Soil microbiome diversity study
162. Crop rotation impact analysis

163. Heritage livestock breed preservation
164. Pollinator habitat effectiveness research
165. Cover crop benefit quantification
166. Precision agriculture technology comparison
167. Farm energy use audit
168. Organic pest control trials
169. Climate change crop adaptation
170. Farm plastic recycling study
171. Livestock feed efficiency testing
172. Water conservation technique evaluation
173. Farm Biodiversity Impact Assessment
174. Food waste reduction strategies
175. Vertical farming yield analysis
176. Regenerative grazing practice study
177. Farm labor ergonomics research
178. Agricultural drone application trials
179. Soil carbon sequestration measurement
180. Farm-to-consumer supply chain analysis

### **Exploratory:**

181. Insect farming for feed
182. Seaweed cultivation for food
183. Rooftop beekeeping in cities
184. Agroforestry system design service
185. Mycelium-based packaging production
186. Aquaculture in shipping containers
187. Edible landscaping design business
188. Precision fermentation protein production
189. Vertical farming in abandoned buildings
190. Cultured meat research assistant
191. Bioplastic from agricultural waste
192. Microalgae superfood powder production
193. Indoor cricket farming startup
194. Agrivoltaics system installation service
195. Plant-based leather alternative development
196. Robotic harvesting technology trials
197. Cellular agriculture lab technician
198. Food forest design app
199. Bioengineered crop trait research
200. Smart greenhouse control systems

### **Community Service:**

201. School garden program coordinator
202. Food bank gleaning organizer
203. Community composting hub manager
204. Agriculture therapy program assistant

205. Urban fruit tree mapping
206. Seed library curator position
207. Farm animal sanctuary volunteer
208. Community kitchen garden planner
209. Agricultural Museum Docent program
210. Farmer Veteran Support network
211. Youth garden club leader
212. Farm food pantry coordinator
213. Community-supported fishery organizer
214. Peri-urban farm incubator manager
215. Ag in the classroom educator
216. Intergenerational Farming Mentorship program
217. Community seed-saving workshops
218. Farm to healthcare initiative
219. Agricultural waste upcycling classes
220. Rural community revitalization projects

### **Innovative:**

221. Floating hydroponic garden barges
222. Subterranean mushroom farm tours
223. Agri-voltaic solar grazing service
224. Edible insect cooking classes
225. Rooftop rice paddy installations
226. Therapeutic horsemanship for veterans
227. Aquaponic koi and watercress farm
228. Goat Yoga Retreat Center
229. Virtual reality farm tours

### **SAE Project Ideas for Middle School:**

1. Herb garden in recycled containers
2. Vermicomposting bin
3. Butterfly Garden
4. Backyard chicken coop (2-3 chickens)
5. Windowsill hydroponic lettuce system
6. Beehive observation frame
7. Microgreens growing station
8. Pollinator-friendly flower bed
9. Aquaponics set up with goldfish and herbs
10. Indoor mushroom growing kit

### **SAE Project Ideas for FFA:**

11. Community farmers market booth
12. Soil testing service for local gardeners

13. Livestock showmanship and exhibition
14. Agricultural equipment repair and maintenance
15. Greenhouse management and plant propagation
16. Agritourism project (e.g., corn maze, pumpkin patch)
17. Value-added product development (e.g., homemade jams, cheeses)
18. Precision agriculture technology implementation
19. Small-scale organic vegetable production
20. Agricultural social media content creation and management

## **SAE Project Ideas with Animals:**

21. Rabbit breeding and showing program
22. Goat milk soap production
23. Honey bee management and honey production
24. Poultry egg production and marketing
25. Fish farming in backyard ponds
26. Sheep wool processing and fiber arts
27. Cattle artificial insemination service
28. Dog grooming and training business
29. Pasture-raised heritage turkey production
30. Alpaca raising and fiber harvesting

## **SAE Project Ideas with Agriculture:**

31. Vertical gardening systems for urban areas
32. Drought-resistant landscaping services
33. Fruit tree grafting and propagation
34. Composting and soil amendment production
35. Heirloom seed saving and distribution
36. Sustainable pest management consulting
37. Aquaponics system design and installation
38. Specialty crop production (e.g., hops, lavender, gourmet mushrooms)
39. Agroforestry implementation on small acreage
40. Agricultural waste upcycling (e.g., creating biochar or biodegradable planters)