STE Micro Project Topics For Final Year

List of STE Micro Project Topics For Final Year:

Environmental Monitoring and Sustainability

- 1. Smart Plant Watering System Using Soil Moisture
- 2. Solar-Powered Air Quality Monitor for City Streets
- 3. Automatic Pet Feeder with Food Level Alert
- 4. Rain Collector That Measures Daily Water Amount
- 5. Wind Speed Checker for Safe Outdoor Activities
- 6. Home Energy Usage Monitor with LED Display
- 7. Smart Recycling Bin That Sorts Different Materials
- 8. Temperature Alert System for School Classrooms
- 9. Noise Level Meter for Quiet Zone Areas
- 10. Sun Tracking Solar Panel for Better Energy
- 11. Garden Light That Uses Stored Solar Power
- 12. Water Tank Level Checker with Phone Alert
- 13. Smart Window That Opens When Too Hot
- 14. Weather Station That Predicts Rain Coming Soon
- 15. Plant Growth Monitor Using Light Sensors
- 16. Trash Can That Sorts Plastic and Paper
- 17. School Bus Air Quality Warning System
- 18. Water Leak Detector for Home Pipes
- 19. Smart Compost Bin Temperature Controller
- 20. Bird Feeder That Counts Daily Visitors
- 21. River Water Cleanliness Checking Device
- 22. Tree Health Monitor Using Leaf Color
- 23. Smart Greenhouse Temperature Control System
- 24. Rainfall Collector with Digital Display Screen
- 25. Beach Water Safety Testing Device
- 26. Forest Fire Early Warning System
- 27. Smart Fish Tank Water Quality Monitor
- 28. Indoor Air Freshness Measuring Tool
- 29. School Garden Soil Health Checker
- 30. Playground Air Quality Warning Light
- 31. Smart Sprinkler for Water-Saving
- 32. Wind Direction Finder for Weather Study
- 33. Sky Darkness Meter for Star Watching
- 34. Smart Trash Sorter with Moving Parts
- 35. Farm Soil Moisture Map Maker
- 36. City Noise Pollution Warning System
- 37. Smart Street Light That Saves Energy
- 38. Park Wildlife Activity Monitor System
- 39. Beach Clean Water Testing Robot
- 40. School Playground Weather Station Kit

2. Home and Daily Life Automation

41. Smart Door Bell with Face Recognition 42. Automatic Room Light Based on Movement 43. Kitchen Timer with Visual Color Alerts 44. Smart Mirror That Shows Weather Info 45. Bedroom Temperature Control with Fan 46. Automatic Plant Watering Mini System 47. Smart Shoe Rack with Rain Alert 48. Voice Controlled Room Light Switch 49. Smart Closet with Clothes Counter 50. Kitchen Safety Gas Leak Detector 51. Bathroom Mirror Fog Prevention System 52. Smart Window Blinds That Follow Sun 53. Home Security Camera with Motion Detect 54. Voice Command TV Remote Control 55. Smart Fridge That Lists Missing Food 56. Automatic Pet Door with Timer 57. Smart Mailbox with Package Alert 58. Voice Controlled Fan Speed Controller 59. Smart Medicine Box with Time Reminder 60. Automatic Garage Door Light System 61. Smart Door Lock with Phone Control 62. Kitchen Smoke Detection Alert System 63. Smart Wall Clock with Weather Display 64. Voice Command Light Color Changer 65. Smart Doormat That Counts Steps 66. Bathroom Mirror with Time Display 67. Smart Toy Box with Item Counter 68. Voice Controlled Bedroom Fan Switch 69. Smart Chair That Checks Posture 70. Kitchen Timer with Light Signals 71. Smart Desk Lamp with Eye Protection 72. Voice Command Music Player System 73. Smart Coat Rack Weather Advisor 74. Automatic Room Air Freshener System 75. Smart Mirror with News Display 76. Voice Controlled Window Opener 77. Smart Bed with Sleep Monitor 78. Kitchen Helper Robot with Timer 79. Smart Shelf with Item Counter

80. Voice Command Room Temperature Control

3. Health and Safety Projects

- 81. Heart Rate Monitor with Warning System
- 82. Step Counter with Distance Calculator

- 83. Medicine Time Reminder with Alarm 84. Safe Distance Keeper with Light Alert 85. Hand Washing Timer with Music 86. Body Temperature Scanner at Door 87. Exercise Counter with Motion Sensor 88. Smart First Aid Kit Inventory 89. Drink Water Reminder Clock System 90. Walking Speed Monitor for Safety 91. Smart Glasses UV Protection Alert 92. Safe Lifting Position Helper Device 93. School Bag Weight Warning System 94. Smart Face Mask Filter Checker 95. Eye Strain Prevention Computer Monitor 96. Smart Bike Helmet with Light 97. Safe Food Temperature Storage Monitor 98. Smart Watch with Health Alerts 99. School Chair Posture Helper System 100. Smart Sports Safety Equipment 101. Breathing Exercise Helper Device 102. Smart Shoe Step Counter Display 103. Safe Distance Playground Monitor System 104. Smart Sport Ball Speed Checker 105. Health Check Morning Mirror Display 106. Smart Gym Equipment Safety Monitor 107. Safe Walking Path Light System 108. Smart Knee Guard with Sensors 109. Health Alert Smart Water Bottle 110. Smart Safety Vest with Lights 111. Safe Distance Social Game System 112. Smart Health Check Door Handle 113. Safe Play Area Monitor System 114. Smart Sports Timer with Display 115. Health Monitor Smart Wristband 116. Safe Distance Learning Space Monitor 117. Smart Safety Belt with Alarm 118. Health Check Smart Mirror System 119. Safe Exercise Space Monitor Device 120. Smart Health Record Keeper Watch 4. Learning and Education Tools
 - 121. Math Learning Game with Lights
 - 122. Smart Spelling Practice Board System
 - 123. Science Experiment Helper Robot
 - 124. Language Learning Voice Recognition Tool
 - 125. Music Note Learning Light System
 - 126. Smart Art Drawing Helper Board
 - 127. Geography Learning Globe with Lights

- 128. History Timeline Interactive Display Board
- 129. Chemistry Lab Safety Alert System
- 130. Smart Book Page Counter Display
- 131. Physics Learning Helper Robot
- 132. Math Problem-Solving Light Game
- 133. Smart Study Time Manager Clock
- 134. Reading Speed Helper Display Board
- 135. Science Lab Data Collector Tool
- 136. Smart Writing Practice Board System
- 137. Language Speaking Practice Robot
- 138. Music Rhythm Learning Light Game
- 139. Art Color Mixing Helper Device
- 140. Smart Geography Map Quiz Board
- 141. History Facts Learning Display
- 142. Chemistry Mix Safety Check System
- 143. Smart Homework Time Manager Clock
- 144. Reading Light Adjustment Helper Tool
- 145. Science Project Data Logger Device
- 146. Smart Math Quiz Game Board
- 147. Language Translation Helper Device
- 148. Music Note Reading Practice Board
- 149. Art Project Helper Light System
- 150. Smart Study Break Timer Device
- 151. History Date Learning Game Board
- 152. Chemistry Lab Temperature Monitor System
- 153. Smart Reading Position Helper Tool
- 154. Science Experiment Timer Display
- 155. Math Game with Moving Parts
- 156. Language Practice Recording System
- 157. Music Beat Counter Light Display
- 158. Art Color Matcher Helper Device
- 159. Smart Study Desk Light System
- 160. History Timeline Game Board

5. Entertainment and Gaming Projects

- 161. LED Dance Floor with Music
- 162. Smart Card Game Score Counter
- 163. Voice Controlled Gaming Light System
- 164. Motion Sensor Dance Game Board
- 165. Smart Board Game Move Counter
- 166. Light Up Music Beat Maker
- 167. Interactive Story Book Light Display
- 168. Smart Toy Car Race Timer
- 169. Voice Command Game Controller System
- 170. Motion Gaming Light Display Board
- 171. Smart Puzzle Helper Light System
- 172. Music Beat Light Show Maker

- 173. Interactive Gaming Score Display Board
- 174. Smart Toy Train Track Controller
- 175. Voice Activated Game Light Show
- 176. Motion Sensor Sports Game Timer
- 177. Smart Dice Roll Counter Display
- 178. Music Pattern Light Game Board
- 179. Interactive Gaming Helper Robot
- 180. Smart Toy Building Block Counter
- 181. Voice Game Score Display Board
- 182. Motion Control Light Game System
- 183. Smart Game Time Manager Clock
- 184. Music Making Light Display Board
- 185. Interactive Gaming Point Counter
- 186. Smart Toy Race Track Timer
- 187. Voice Control Game Light Board
- 188. Motion Sensor Dance Light System
- 189. Smart Game Helper Light Display
- 190. Music Beat Counter Game Board
- 191. Interactive Gaming Score Keeper
- 192. Smart Toy Car Speed Timer
- 193. Voice Gaming Light Show System
- 194. Motion Control Game Board Display
- 195. Smart Game Point Calculator
- 196. Music Light Show Game Board
- 197. Interactive Gaming Timer Display
- 198. Smart Toy Robot Controller System
- 199. Voice Command Game Score Board
- 200. Motion Gaming Light Show Maker

STE Micro Project Topics with Source Code

- 1. Automated test suite for e-commerce payment systems.
- 2. Mobile app testing tool using Selenium and Appium.
- 3. API testing framework with response verification.
- 4. Cross-browser testing for responsive website designs.
- 5. Database testing system with SQL query checking.
- 6. Load testing tool for performance and stress tests.
- 7. Security testing software for website vulnerabilities.
- 8. A test case manager with automated report generation.
- 9. GUI testing tool using Python for web applications.
- 10. REST API testing with JSON schema validation.
- 11. Regression testing with automated case generation.
- 12. Mobile game testing tool for Android devices.
- 13. Cloud application testing with AWS integration.
- 14. Test data generator for database testing needs.
- 15. Continuous integration testing with Jenkins pipeline.
- 16. Browser extension testing using Selenium WebDriver.

- 17. Network testing software for protocol analysis.
- 18. Test script generator for web app testing needs.
- 19. Bug tracking tool with automated error reporting.
- 20. Accessibility testing tool for web content standards.

STE Micro Project Topics for MSBTE

- 41. Simple calculator testing with math operation checks.
- 42. Login system testing with basic security validations.
- 43. Grade calculator testing for accurate input validations.
- 44. Contact management app testing with CRUD features.
- 45. To-do list app testing for task management systems.
- 46. Basic quiz app testing with score computation.
- 47. Chat app testing with message validation processes.
- 48. File upload system testing with format verifications.
- 49. E-commerce cart testing with price accuracy checks.
- 50. Attendance tracking software with report generation.
- 51. Simple notepad app testing for file-saving reliability.
- 52. Password manager testing for encryption security.
- 53. Weather app testing with API data integration.
- 54. Library system testing with book transaction accuracy.
- 55. Calendar app testing for event management tasks.
- 56. Music player testing for smooth playback functions.
- 57. Image gallery app testing for upload features.
- 58. Newsletter app testing with email sending validation.
- 59. BMI calculator app testing with input accuracy.
- 60. Currency converter testing with rate-update integration.

Software Testing Micro Project Topics for Diploma

- 61. Basic web form testing for input validation issues.
- 62. Login page testing for proper authentication methods.
- 63. Calculator app testing with essential math operations.
- 64. Student database testing with CRUD system.
- 65. Shopping cart testing with checkout process checks.
- 66. Address book testing for reliable contact storage.
- 67. Task manager testing with task completion validation.
- 68. Message board testing for post-verification processes.
- 69. File manager testing with data storage features.
- 70. Inventory system testing for stock update accuracy.
- 71. Time tracker testing for duration calculation efficiency.
- 72. Budget calculator testing for expense tracking.
- 73. Note-taking app testing with save and retrieval.
- 74. Timer app testing with accurate countdown functionality.
- 75. Recipe manager app testing for input validation.
- 76. Calendar testing with event scheduling accuracy.
- 77. Password generator testing for secure randomness.

- 78. BMI calculator testing with error-free calculations.
- 79. Currency converter testing with updated exchange rates.
- 80. Quiz app testing with responsive scoring features.