

STEM Applied Learning Programme

Lesson Outline

| STEM Theme | Applied Health Sciences |
|--------------------|---------------------------|
| Module | 4 (Sports Science: Basic) |
| Total Hours | 12 |

| No. | Topic |
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| 1 | Introduction to health devices (Smokelyzer, blood pressure monitor) |
| 2 | Kettlebell Physics |
| 3 | Biomechanics of TRX- fitness training |
| 4 | Plyometric Exercises |
| 5 | Sports Sensor- Fitlight |
| 6 | Reaction Belt- Agility Training |
| 7 | Introduction to robotics technology & its relevance in sports and health science |
| 8 | Changing friction of a robotic vehicle |
| 9 | Changing power of a robotic vehicle |
| 10 | Wiring of a robotic vehicle |
| 11 | Project I (Prototyping a solution to challenges presented in given scenarios) |
| 12 | Project II |