

THEME 3

How We Express Ourselves

FOCUS: How we enjoy our creativity

Theme 3 Study (up to 10 weeks)

Early Robotics & Programming, Grades K-2

Rocketry Foundations, Grades 3-5

Minecraft Education: STEAM Foundations, Grades 6-8

THEME 4

How The World Works

FOCUS: How humans use their understanding of scientific principles

Theme 4 Study (up to 10 weeks)

Upcycling, Grades K-2

Electricity & Circuitry, Grades 3-5

Minecraft STEAM II with Snap Circuits, Grades 6-8

THEME 5

How We Organize Ourselves

FOCUS: Economic activities and their impact on human science

Theme 5 Study (up to 10 weeks)

My School Community, Grades K-2

Become A Trep, Grades 3-5

Financial Literacy for Youth, Grades 6-8

THEME 2

Where We Are in Place & Time

FOCUS: The interconnectedness of individuals

Theme 3 Study (up to 10 weeks)

The Internet, Computers, & You, Grades K-2

Computer Literacy Foundations, Grades 3-5

Computer Programming Foundations, Grades 6-8

THEME 1

Who We Are

FOCUS: The nature of the self, beliefs, and values

Theme 1 Study (up to 10 weeks)

Introduction To The Engineering Design Process, Grades K-8

THEME 6

Sharing The Planet

FOCUS: Sharing finite resources with other people

Theme 6 Study (up to 10 weeks)

Community Garden, Grades K-2

LEGO Intermediate Robotics SPIKE Prime, Grades 3-5

Game Design & Development, Grades 6-8

STEM LITERACY & IB THEMES

The STEM Education program at Hempstead Union Free School District will build proficiency in STEM literacy for all students in grades K-8. The program will align with the district's IB Themes to increase students proficiency in 21st Century skills and social-emotional competencies as they engage in activities that will increase student motivation and achievement. In partnership with 21stCentEd, all STEM coursework has been designed around the Engineering Design standards, which are essential learning goals and outcomes included within the Next Generation Science Standards for grades K-8. Each course has grade level modules (i.e. Module A for grade 3; Module B for grade 4; Module C for grade 5), which will allow students to develop a deeper understanding of the course over a grade band. These modules will focus on an element within each IB theme that students will use to problem solve, develop a product or service, and grapple with real-world phenomena.