

STEM Update - Current Enrollment

Design and Drawing for Production - 96 Students, Full Year

IT Essentials - 41 Students, Full Year, 3 HVCC Credits

CCNA I, II - 9, 8 Students, Full Year, 3 HVCC Credits (15 Currently in IT Essentials for next year)

Introduction to Engineering Design - 27 Students, Full Year, 3 Rochester Institute of Technology Credits

Topics in AutoCAD - 16 Students, Full Year, 4 Credits each HVCC

Advanced AutoCAD - Will be Offered in 2016-2017 for a Full Year, 4 HVCC Credits

Project Lead the Way

STEM Engineering

Introduction to Engineering Design - 1st Year

Students apply math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work.

Project Lead the Way Course Development

Funded through a Local Partnership with 3M.

Principles of Engineering - 2nd Year

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

Future Course Development

Project Lead the Way Specialization Courses - Year 3

Civil Engineering and Architecture

Computer Integrated Manufacturing

Computer Science and Software Engineering

Digital Electronics

Environmental Sustainability

NGSS Science Standards

NERIC Training - Sarah Hoffman, Thomas Brownell, Steven Ford

Pre-kindergarten - 12th grade standards

Development of a Strategic Plan for training and rollout will be overseen through the Committee for Curriculum Studies.

Teams will attend NERIC, Questar and regional training.

Northeast Advanced Technological Education Center (NEATEC) - College for Nanoscale Science and Engineering - SUNY Polytechnic

STEM 3-5

Monroe BOCES Kits

3rd grade - Systems and Simple Machines

4th grade - Electrical Circuits

5th grade- Electromagnetism

Monroe BOCES Costs - \$18,800 Aidable at 60% Total District Costs \$7,520

STEM 3-5 Survey Results

100% reported that their students enjoyed all or some of the labs and activities.

30% reported that they had little or no experience with STEM related subjects.

85% reported that they wanted to continue with the same Monroe 2-Orleans BOCES kits and or select from other kit offerings.