

Suggested STEM Course Sequences

	9 th Grade	10 th Grade	11 th Grade	12 th Grade	Possible Career Options
Engineering					
Course Sequence I	Life Science ¹	Physics Elective(s)	Intro to Eng I Chemistry	STEM Capstone, Internship or Certification ³ Intro to Eng II Math Elective*	Engineering - manufacturing - chemical - civil - mechanical
Course Sequence II	Cellular Biology & Genetics ¹	Bio Systems & Ecology ¹ Elective(s)	Intro to Eng I Physics	STEM Capstone, Internship or Certification ³ Intro to Eng II Precalculus	Drafter Landscape Architects Surveyors
Electives	Intro to STEM Careers ² , Physics, AP Physics, AP Chemistry + Lab, CAD- Advanced CAD, Mapping Haverhill, Intro to Biotech & Forensics, Robotics, Computer-Aided Modeling, AP Computer Science, Calculus				
Physical Sciences					
Course Sequence	Life Science ¹ (or Cellular Biology & Genetics ¹)	Chemistry or Physics (Bio Systems & Ecology) Elective(s)	Physics or Chemistry Elective(s)	STEM Capstone, Internship or Certification ³ (2) Elective(s)	Chemist Forensics Teacher
Electives	Intro to STEM Careers ² , Astronomy, Computer-Aided Modeling, Probability & Statistics, Calculus, AP Statistics, AP Computer Science, AP Physics, AP Chemistry + Lab				Product Safety Specialist Energy Auditor Astronomer
Life / Health Sciences					
Course Sequence I	Life Science	Chemistry Intro to Biotech/Forensics	Anatomy & Physiology Medical Terminology	STEM Capstone, Internship or Certification ³ Elective(s) ⁴	Nurse's Aide Medical Coding Dental Assistant
Course Sequence II	Cellular Biology & Genetics ¹	Bio Systems & Ecology Elective(s)	Intro to Biotech/Forensics Medical Terminology Elective(s) ⁴	STEM Capstone, Internship or Certification ³ Anatomy & Physiology	X-Ray Technician Nurse EMT / Paramedic Veterinarian
Electives	Intro to STEM Careers ² , AP Biology, Physics, AP Physics, Calculus, AP Statistics, Probability & Statistics, Zoology				Physical Therapist Doctor
Earth & Environmental Sciences					
Course Sequence	Life Science (or Cellular Biology & Genetics ¹)	Earth Science (Bio Systems & Ecology) Elective(s)	Chemistry Environmental Science Elective(s)	STEM Capstone, Internship or Certification ³ Elective(s)	Meteorologist Environmental Scientist Oceanographer Park Ranger
Electives	Intro to STEM Careers ² , AP Environmental Science, Physics, AP Physics, Intro to Oceanography, Meteorology, Astronomy, Calculus, AP Statistics, Probability & Statistics				
Applied Mathematics					
Course Sequence	Algebra I Elective(s)	Geometry Algebra II	Precalculus Elective(s)	Calculus Elective(s)	Financial Analyst Cryptographer
Electives	Intro to STEM Careers ² , AP Statistics, AP Computer Science, Intro to Programming, Computer-Aided Modeling, Probability and Statistics				Actuarial Scientist Sports Statistician Risk Analyst
Information Technology					
Course Sequence	Life Science ¹ Principles of IT Robotics	Intro to Programming Computer Systems	3D Printing Computer Networking Internship (Summer)	STEM Capstone, Internship or Certification ³ Elective(s)	Cloud Architect Computer Forensics Health IT Specialist Web Developer Data Modeler

¹ Students will earn STEM credit after successfully completing Bio Systems & Ecology

² Highly recommended for 9th or 10th grade

³ Required for YOG 2019 and later

⁴ Physics is highly recommended