RHHS STEAM PILOT

The RHHS STEAM Pilot

- ❏ A learning model that incorporates scientific, mathematical, communication, technological and artistic design skills and knowledge which are developed simultaneously.
- ❏ Students complete projects and solve meaningful problems through collaboration, technology, ethical consideration and empathy
- ❏ A design approach with a focus on skill development and hands-on learning

Features of the STEAM Pilot

- ❏ A dedicated STEAM Classroom/Space.
- ❏ Emphasis on skills - 3D design, 2D design, Laser, CNC, 3D printing, Wood working, Electronics, Coding, Graphic and Fashion Design, Design Thinking, etc.
- ❏ Significant community connections – Field trips, Site visits, Guest speakers
- ❏ Community based problem solving projects
- ❏ A cohort of 22 students that will spend half the school day together for one year
- ❏ Students will complete 4 of their grade nine credits including Science, Mathematics, English, and a Technology/Art meeting all curriculum expectations. Students will also complete 4 non-steam courses with other students.

Who should apply?

Students who prefer working on projects with a team, are interested in science, technology and the arts, like to design and building things, and are not afraid to trying new things, take risks, make mistakes and learn new skills.

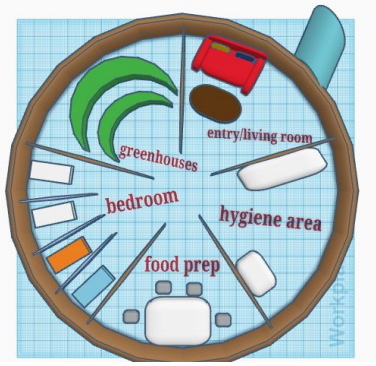
Selection Process

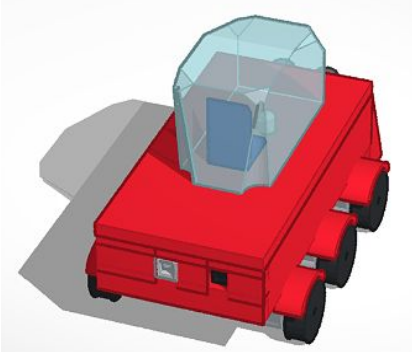
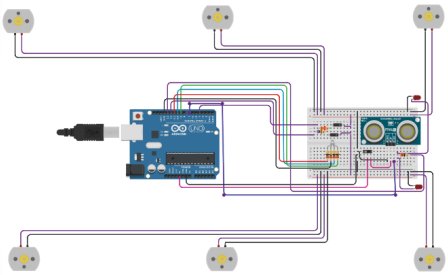
- ❏ Students must be eligible to attend RHHS (Check your address using our School Locator)
- ❏ Students may enroll in Academic, Applied or Gifted Pathway
- ❏ Complete and print an application form
- ❏ Include a copy of the applicant's grade 7 (Term 3) and grade 8 (Term 1) report cards
- ❏ Submit the application form and report cards to the RHHS main office by the deadline (see below)
- ❏ Eligibility is determined using a score based on academics (25%), learning skills (25%), and a STEAM Design Challenge (50%) based on individual and group assessment.
- ❏ Grade 7 and 8 marks and learning skills in English, Math, and Science classes are used
- ❏ The design challenge will be completed at Richmond Hill High School, no preparation necessary
- ❏ All suitable candidates (score > 70% / level 3 or higher) are entered into a pool and 22 students (and a wait list) will be randomly selected.

Example STEAM Project:

MISSION TO MARS - Students work in a team to research and plan a mission for the first habitat on Mars. They plan the design of the Mars habitat to accommodate for the necessities of living on the planet for an extended period (e.g. food supply, energy, life support, transportation, etc) and consider psychology of living with others in a small space. Other considerations include the cost of such a trip and the long term implications of colonizing another planet. Students use mathematical principles and calculations when planning costs, fuel and energy requirements, navigation, and structural design.

Skills: Students learn 3D design to create virtual models of their habitat, 3D printing to print models of their transportation vehicle, electronics to design a control system for the vehicle and air locks, and coding to make the control systems operate.



Important Dates

February 2 - DEADLINE - Printed application & report cards accepted at main office at RHHS
February 8 - Information about Design Challenge to email of applicant and parent/guardian
February 15 - Design Challenge from 5:00pm to 7:00 pm at RHHS (part of selection process)
February 21 - Email notification of selection to the STEAM Pilot OR waitlist status
February 28 - DEADLINE - Acceptance form signed and returned to main office at RHHS

RHHS STEAM PILOT

STUDENT APPLICATION

(this application is in addition to the regular registration and course selection process and does not replace them)

Student Information	
Legal name - Family Name, First Name, Middle Name	
Preferred Name - Last Name, First Name	
Date of Birth (yyyy/mm/dd)	Gender
Address (#/Street)	Unit
City/Town	PO Box or RR#
Postal Code	Township
Home Phone #	Medical/Allergies Information
Student EMail	

Parent/Guardian Information #1	
Name - Last Name, First Name, Salutation	
Relationship to Student	Gender
Address (if different from student) (#/Street)	
City/Town	PO Box or RR#
Postal Code	Township
Phone Number (primary contact number)	EMail

Parent/Guardian Information #2	
Name - Last Name, First Name, Salutation	
Relationship to Student	Gender
Address (if different from student) (#/Street)	
City/Town	PO Box or RR#
Postal Code	Township
Phone Number (primary contact number)	EMail

The next 2 sections are to be completed by the student. They will not be used in the selection criteria but will better help us understand our learners.

Why are you interested in the STEAM pilot at RHHS?

Please check the column that describes you best:

	Strongly Agree	Agree	Disagree	Strongly Disagree
I enjoy working in teams				
Teachers do not have to remind me to stay on task				
I like to do things perfectly / I try not to make mistakes				
I like to build things with my hands				
I ask questions when I don't know the answer				
I avoid trying new things because it is stressful for me				
I like when teachers give me detailed instructions				
I am in school, in class and on-time every day				
Intelligence: You are born with it, it can't be learned				

I/This student is interested in the STEAM Pilot at RHHS. We live within the RHHS attendance boundary. We agree that the student will participate in the Design Challenge on February 15th 2018. We understand that we will be contacted via email (student and parent) for all further information about the program.

_____ _____

Student Signature **Parent/Guardian Signature**