



RVS ENGINEERING FUTURES



AT CHESTERMERE HIGH SCHOOL

Do you want to change the world?

The **RVS Engineering Futures** cohort is a learning opportunity for students who are curious about how they can apply science, math and engineering knowledge as well as design principles to positively impact the world. It is a cohort with a strong Science, Technology, Engineering and Mathematics (STEM) focus and instructional design based on the principles of Inquiry and design thinking. Students look for real-world problems and will design solutions through their own innovation and creativity, with a focus on action and creation. The program is designed to run as a true cohort experience with students working throughout the school day on projects designed to help them achieve mastery of the outcomes in ELA 10-1, SS 10-1, Math 10C, Science 10 and a wide variety of CTS credits. Students in this program are set up for success in their future years of learning as they will have not only the requisite knowledge, but also the skills of a strong 21st Century learner.



The Short Version (tl;dr)

The Engineering Futures cohort is a class of Chestermere High School Grade 10 students that stay together for the entire school year. They learn all their core subjects and options through cross-curricular, collaborative inquiry projects based around solving real world problems through science, technology, and engineering.

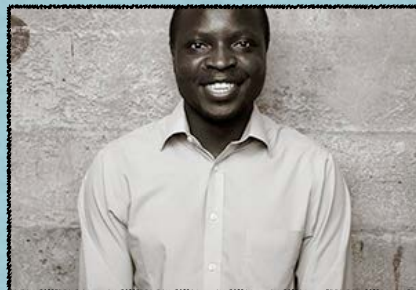
Check out our video!

<https://youtu.be/cEDyImRhOLU>



BOYAN SLAT

19 year old student who created a way to clean up the plastics in the world's oceans.



WILLIAM KAMKWAMBA

At age 14, he built a windmill to power his family's home.



THOMAS SUAREZ

12 year old, self-taught app developer who teaches others how to create apps.

Q & A

How long is the program?

The cohort of 30 students will stay together for the full grade 10 school year for all subjects.

What will a day look like?

Students usually spend half the day with their Science and Math teacher, and half the day with their English and Social Studies teacher, though activities and projects continue throughout the day. In one semester students have a block of PE and CALM.

Is there a grade 11 and 12 program?

Currently this is only a grade 10 program.

Will I be ready for grade 11 subjects?

This program gives you the opportunity to be fully prepared for English 20-1, Social Studies 20-1, Physics 20, Biology 20, Chemistry 20, Science 20, Math 20-1 and a wide variety of CTS options. Your teachers are experienced in these subjects and will ensure you are ready for whatever path you choose for grade 11 and 12.

Is there an extra cost for this program?

There are no extra fees above the standard grade 10 school, course and field trip fees. However, there is the possibility of needing to purchase supplies for projects.

Would I have the same lunch as the rest of the school?

Yes, you follow the regular bell schedule.

Can I be involved in extracurricular activities?

Yes. You are in class the same hours as all other students.

Can I take other options?

No, all your options will be done through the program.

Can I participate in the Band program?

We will do our best to accommodate band students. You will be welcome to join before and after school (J Block) ensembles.

What credits can I earn?

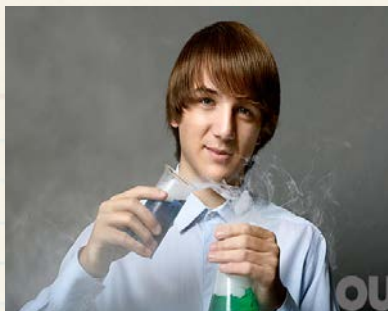
- English 10-1 (5 credits)
- Math 10C (5 credits)
- Science 10 (5 credits)
- Social Studies 10-1 (5 credits)
- Physical Education 10 (3 credits)
- CALM (3 credits)
- CTS Credits (approx. 20 credits) from Communication Technology (design, video, photography), Environmental Stewardship, Leadership, Forestry, Tourism, Drama, Creative Writing, and others as the need arises.

How will I learn and be assessed on the course material?

The learning outcomes from the grade 10 courses will be learned and/or reinforced through cross-curricular inquiry projects. Most assessment will be based on your project work, but there will be some quizzes and tests as well.

Should I apply? Ask yourself:

- Do I enjoy challenging problem solving with science and technology, addressing current issues in society?
- Do I want to help make the world a better place?
- Do I enjoy learning and working with others?
- Am I good at respecting other people's opinions and learning from them?
- Am I a self-directed learner?
- Do I want to learn and apply a broad range of hands on skills such as computer programming, 3D design and printing, wiring electric sensors and motors, carpentry, metal working, website design, photography, video production?



JACK ANDRAKA

16 year old inventor of a saliva test to detect pancreatic cancer.



HAYLEY TODESKO

Calgary student who invented a way to detoxify tailings ponds in decades instead of centuries.



YOUR NAME HERE!

What will you do?

RVS Engineering Futures - How Do I Apply?

Why is there an application process?

- * In this program, students will be working collaboratively on large and small projects throughout the year. It is very important that cohort members enjoy learning with others and respect the opinions of others.

Should I apply? Ask yourself:

- * Do I enjoy challenging problem solving with science and technology, addressing current issues in society?
- * Do I want to help make the world a better place?
- * Do I enjoy learning and working with others?
- * Am I good at respecting other people's opinions and learning from them?
- * Am I a self-directed learner?
- * Do I want to learn and apply a broad range of topics such as Communication Technology (design, video, photography), Environmental Stewardship, Leadership, Forestry, Tourism, Drama, Creative Writing, and others as the need arises.

How do I apply?

- * Submit a written letter (maximum 300 words) or short video (approximately 1 minute) explaining why you think you would do well in the Engineering Futures cohort.
- * Email this to sdouglas@rvschools.ab.ca
- * You will receive an email reply saying "Thank you for your application." If you do not receive this reply, please check the email address and try again until you do get a reply.

When do I need to have my application in?

- * Friday, May 12th

How will applicants be selected?

- * If more than 30 students apply for the program there will be a random draw of names and possibly an interview process.

Who can I contact if I or my parents/guardians have questions?

- * If you have any questions please contact
 - * Scott Seland at sseland@rvschools.ab.ca or
 - * Sara Douglas at sdouglas@rvschools.ab.ca



Contact Us

Chestermere High School
Phone: 403-272-8868
Scott Seland sseland@rvschools.ab.ca
Sara Douglas sdouglas@rvschools.ab.ca