

**EXPERIENCE
UNIVERSITY**

FOR GRADE 5-12 STUDENTS

2020

Five Six

**Enrichment Program
Course Descriptions**



esu.queensu.ca



(Alphabetical by course title)

**All courses and instructors are subject to change*

Session 1: May 31 – June 2, 2020

Engineering 101

Course Description

Are you interested in exploring different STEM technologies and projects? In this workshop, you will engineer solutions for different design challenges using a combination of technology and physical prototyping. You will explore the important intersection between engineering, sustainable technology, and innovation. STEM technologies such as Micro:bit's, virtual/augmented reality, solar-powered equipment, and robotics will be investigated in this fun and interactive course!

Instructor Biography

ESU has been collaborating with Connections: Queen's Faculty of Engineering and Applied Science Educational Outreach Program, since 2014. Instructors for this course are specially selected and supervised by the Manager of Connections.

It's in Your GENES!

Course Description

Have you ever wondered why you have blue eyes like your mom? Or why you and your siblings look alike? In this workshop, you will learn about DNA, traits, and inheritance. We will do an inventory of our traits, extract DNA from fruit, and decode a "DNA recipe" for a dog.

Instructor Biography

Dr. Mackenzie Bowman has been coordinating ESU courses since 2010, and holds a PhD in Pathology and Molecular Medicine. She is currently a Senior Scientist in the Clinical and Molecular Hemostasis Research Group at Queen's University. Instructors for this course are specially selected and supervised by Dr. Bowman.

Story Writing Made Fast, Fun, and Fabulous

Course Description

Can you create a story in an afternoon, one that is fun to read as well as fun to write? This workshop will challenge you to do just that. But don't worry! You will have friends to help you, games to stimulate your imagination, and an instructor armed with the secrets for turning simple ideas into roller-coaster plots.

Instructor Biography

Glen has been a freelance writer since 1999 and has been instructing with ESU since 2013. He is the author of the award-winning middle-grade novel, *Dancing on the Inside*, and currently teaches creative writing at St. Lawrence College in Kingston, Ontario.

Session 2: June 3 – 5, 2020

Engineering 101

Course Description

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Medieval Castle Adventure

Course Description

Join us on this adventure set 500 years ago! Come explore the French castle of Vincennes while you plan your defences. In this workshop, you will get to dive into medieval life, learn how to be a knight, and test your strength with a medieval longbow. Plus, face your enemy head-on with your own catapult. Shore up your defences and prepare for battle, the enemy is at the gates!

Instructor Biography

Sean is a graduate student in the History Department at Queen's University. His interests cover a wide range of historical topics from the Middle Ages to the present day. His PhD research focuses on espionage and diplomacy in eighteenth-century France. He enjoys exploring the wilderness and finding new places to hike.