

Discovery Western

2020 Girls Club – Grades 6-8





Welcome to Girls Club

We are very excited you have decided to participate in DW's Girls Club 2020. This 7-week club will give you the opportunity to learn about science, technology, engineering and mathematics through hands-on projects, games and guest speakers. Below is some important information to help you prepare for your adventure with us. If you have any questions or comments please feel free to contact us at 519-661-2111, ext. 88826 or discover@uwo.ca.

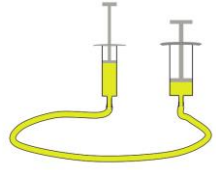


Drop-off and Pick-up Policy

Drop-off and pick-up will take place in the **Spencer Engineering Building, Room 3109** at Western University. **Drop-off is at 1:00 p.m. and pick-up is at 3:00 p.m.** Parents and/or guardians are required to sign participants in and out each session, providing Government issued photo ID at pick-up. Only those indicated on the registration form will be permitted to sign children out. Free parking is available in the Springett Lot, diagonally across from the Spencer Engineering Building. We have linked Western University's campus map here for your convenience - <http://www.geography.uwo.ca/campusmaps/images/map/westernandaffiliates.pdf>.

| Schedule | | |
|----------|--|--|
| Session | Topic | Activities |
| Jan. 11 | Chemical Engineering | With special guests, Women in Engineering Undergraduate Club, participants will get the chance to hear what it's like to be a female in engineering. From there students will participate in a chemical engineering activity where we develop and create ink from fruits and vegetables.  |
| Jan. 18 | Mechatronic System Engineering |  Students will learn about FIRST LEGO robotics and design and code their LEGO EV3 robot to take part in the city shaper challenge! They will improve infrastructure and roadways with their robots, while keeping the environment in mind. |
| Jan.25 | Electrical and Computer Engineering | Student will receive an introduction to electrical engineering and computer hardware by building several different kinds of circuits. They will create their own electrical logic gates – the building blocks for every digital device. |

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| Feb. 1 | Civil Engineering | Tunnels are incredible engineering feats! They can connect one place to another for a variety of reasons including employment, tourism, access to resources, and social and cultural interaction. In this design and build project, students will learn about the engineering principles used to design tunnels through mountains. |
| Feb. 8 | Mechanical Engineering | Students will learn the basics of hydraulic and pneumatic systems. From there, they will be challenged to design their own labyrinth game, controlled by a hydraulic or pneumatic system.  |
| Feb. 15 | Family Day Weekend –No Girls Club | |
| Feb. 22 | Software Engineering |  Using their circuit building skills, students will create an instrument that they will then code with Arduino software. With just a few hand movements, students could be the next great theremin composer. |
| Feb. 29 | Parents Week | We will investigate how engineers interact with the health care field. Students and parents will be challenged to design a prosthetic leg with some interesting constraints.  |

Please note: If you are unable to attend a particular session please contact us via email or phone.

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Spencer Engineering Building, Room 2081

Western University

London, ON N6A 5B9

Tel: 519.661.2111, ext. 88826 Email: discover@uwo.ca



Western
Engineering