



WIC Engineering Institute Certificate 2017-18

Student: _____

Module A: WIC Engineering Courses & Grade (complete any 6 courses; 1 must be an AP)

- Computer Programming & Technology 8
- Engineering Simple Models 9
- Mathematics 30-1 School mark: ____% AP mark: ____
- Mathematics 31 School mark: ____% AP mark: ____
- AP Calculus 35 School mark: ____% AP mark: ____
- Physics 30-1 School mark: ____% AP mark: ____
- AP Physics 35 School mark: ____% AP mark: ____
- Chemistry 30-1 School mark: ____% AP mark: ____
- AP Chemistry 35 School mark: ____% AP mark: ____
- Biology 30 School mark: ____% AP mark: ____
- AP Biology 35 School mark: ____% AP mark: ____

Module B: Engineering & Leadership Experience

(complete any 3 of the following; 1 must be a leadership experience)

Section 1: Interaction with Engineering Community

- Guest Speakers - Women in STEM Speaker Series – Stacey Waldal & Dr. Gina Cherkowski
- Guest Speaker – Jennifer Kaufield of Titanium
- Telus Spark Science Centre Workshops (grade 7-9)
 - Marble Machines
 - Hydraulic Challenge
 - Cultivating Technology
 - Electricity Blocks
 - Extreme Temperature
 - Action, Reaction, Contraption
 - Spectacular Reaction
 - Pipeline Challenge
 - Curious Matter
- Beakerhead – Atomic 13 Ingenuity Challenge Project (grade 7-9)
- STEM NHL Hockey Workshop (grade 7-8)
- MindFuel Project (grade 8)
- DIRT site visit (grade 10-12)
- Alberta Orthotic & Prosthetic Centre (grade 10-12)

Section 2: Participation in Leadership Opportunities

- Sailing Education Adventures (SEA)
- Duke of Edinburgh Award
- CAIS Senior Student Leadership Conference
 - Calgary 2016
 - Montreal 2017
 - Lakefield College, Ont 2018
- Shad Valley
- WIC Swiss Summer School
- WIC Prefect
- WICAA member: _____

- WIC Student Council: _____
- Other: _____

Option 3: Petroleum Engineering Experience – Calgary & Fort McMurray

- Engineering Experience – June 2015

Module C: Engineering Clubs and Activities (complete any 3 of the following activities)

- Annual Engineering Challenge (grade 7)
- Series of Engineering Challenges (grade 8)
- Tinkercad & 3D Printing (grade 8)
- PencilCase App Design (grade 9)
- Scratch Computer Programming (grade 9)
- Engineering Club (grade 9-12)
- Discover! Club (grade 7-9)
- Discover! Club – Senior Leader (grade 10-12)
- University Prep Math Club (grade 12)
- University Engineering Prep Club (grade 12)
- Senior Leadership Discover Club (grade 10-12)
- F.I.R.S.T. Lego League Robotics Club (Grades 7 to 9)
- Telus Spark Science Centre– 3D Printer Club (grade 7-9)
- Microsoft Excel 101 (grade 9-12)
 - Level I
 - Level II
- CAD Software SolidWorks & Fusion Labs (grade 9-12)
- Computer Programming & Technology Club (grade 9-12)
- Coding Seminar – Mitch Matula (grade 7-12)
- MatLab (grade 11-12)
- D. Lab (grade 9-12)
- STEM Learning Lab (grade 7-12)
 - Python Coding – Level 1
 - Python Coding – Level 2

Module D: Post-Secondary Experiences at U of Calgary (complete any 2 of the following)

- University 101 (Mandatory)
- U of C / SAIT / Mount Royal – Explore STEM Conference (grade 9 girls)
- Women in Engineering Day – Schulich School of Engineering
- SET Challenge (Science, Engineering & Technology) (grade 10-12)
- Technovation Challenge (grade 11-12)
- U of C Engineering Outreach Lab (grades 7-12)
 - October 2015
 - June 2016
 - May 2018

Module E: Project-Based Learning (complete any 1 of the following)

- STEM LipSync Buildathon Project (grade 7-12)
- AIM Engineering Group Project
 - 2015-16
 - 2016-17
 - 2017-18
- WIC Senior Engineering Challenge (grade 9-12)
 - 2017
 - 2018

Other engineering related experiences:

Which post- secondary institution do you plan on attending and the name of the program you will enter?

Institution: _____

Program: _____