# Question 1

*ENGR 121*: suggested 11 hours per week, 4 hours on lectures, 4 on reviewing, 2 on labs, one hour in tutorials

ENGR 141: suggested 10 hours per week, 4 hours on lectures, 3 on reviewing, 2 on labs, one hour in tutorials

*ENGR 101*: suggested 10 hours per week, 4 hours on lectures, 3 on reviewing, 2 on labs, one hour in tutorials

*COMP 102*: suggested 10 hours per week, 4 hours on lectures, 3 on reviewing, 2 on labs, one hour in tutorials

<u>Total:</u> at least 41 hours per week

# Question 2

	Mon	Tues	Wed	Thurs	Fri
9.00	ENGR 121	ENGR 121	ENGR 141 Lab	ENGR 121	ENGR 121
10.00		COMP 102 lab			
11.00					ENGR 101 Lab
12.00	COMP 102	ENGR 121 Tut	COMP 102	COMP 102	
13.00	ENGR 101	ENGR 101			ENGR 101
14.00					ENGR 101 Tut
15.00	ENGR 141	ENGR 121 Lab	ENGR 141	ENGR 141	
16.00				COMP 102 lab	
Hand In times	ENGR 141: 12pm ENGR 101: 12pm			COMP 102: 9am	ENGR 121: 1pm

	May	June	July	August
1	Tu	1 Fr	1 Su	1 We
2	We	2 Sa	2 Mo	2 Th
3	Th	3 Su	3 Tu	3 Fr
4	Fr	4 Mo	4 We	4 Sa
5	Sa	5 Tu	5 Th	5 Su
6	Su	6 We	6 Fr	6 Mo
7	Мо	7 Th	7 Sa	7 Tu
8	Tu	8 Fr	8 Su	8 We
9	We	9 Sa	9 Mo	9 Th
10	Th	10 Su	10 Tu	10 Fr
11	Fr	11 Mo	11 We	11 Sa
12	Sa	12 Tu	12 Th	12 Su
13	Su	13 We	13 Fr	13 Mo
14	Мо	14 Th	14 Sa	14 Tu
15	Tu	15 Fr	15 Su	15 We
16	We	16 Sa	16 Mo	16 Th
17	Th	17 Su	17 Tu	17 Fr
18	Fr	18 Mo	18 We	18 Sa
19	Sa	19 Tu	19 Th	19 Su
20	Su	20 We	20 Fr	20 Mo
21	Мо	21 Th	21 Sa	21 Tu
22	Tu	22 Fr	22 Su	22 We
23	We	23 Sa	23 Mo	23 Th
24	Th	24 Su	24 Tu	24 Fr
25	Fr	25 Mo	25 We	25 Sa
26	Sa	26 Tu	26 Th	26 Su
27	Su	27 We	27 Fr	27 Mo
28	Мо	28 Th	28 Sa	28 Tu
29	Tu	29 Fr	29 Su	29 We
30	We	30 Sa	30 Mo	30 Th
31	Th		31 Tu	31 Fr

## **Question 3**



## Question 4:

My name is Niels Clayton, I'm taking electronic and computer systems engineering.

## Question 5:

A mandatory course requirement is a part of the course that must be completed in order to pass the course. If it is not completed, you will automatically fail the course regardless of all other work.

# Question 6:

I will have the greatest difficulty with ENGR 121. This is because maths is not my strong point and I have to invest a lot of time into understanding it. To combat this I will double copy my notes, once in the lecture on paper, and again back at my hall onto my computer, I will keep a file of all resources provided, and I will set aside time and go to all the Monday 5pm tuts available.

#### Question 7:

Summer of tech if a program that helps students in fields such as computer science or engineering find internships over the summer break. As I am taking ECEN, and will require 800 hours of work experience in order to complete my Honours, The summer of tech is a good opportunity for me to accumulate these.

#### **Question 8:**

- Craig Watterson (CO253) for non-academic help: https://ecs.victoria.ac.nz/Main/CraigWatterson
- Student counselling services, for dealing with stress, unforeseen circumstances, or prior issues. https://www.victoria.ac.nz/students/support/wellness/student-counselling/locations
- Student Learning, To help structure and keep myself from falling behind. https://www.victoria.ac.nz/st\_services/slss/

## Question 9:

ENGR 101: https://www.youtube.com/channel/UCY-T 0MPO5Ste9 MmLuZXWg

This is a YouTube channel on the ENGR 101 course that gives in depth examples for all of the key skills provided by the course and how to study for the exam.

ENGR 121: https://learncoach.co.nz/

The calculus section of this site goes over every single skill required by the course, all divided into short videos allowing you to choose what is it you are unsure on and learn it.

ENGR 141: https://learncoach.co.nz/

The physics section and the chemistry sections of this page cover all of the information covered by this course, allowing me to revisit what I have learnt in class, and hear all the information from another perspective with new examples, deepening my understanding.

COMP 102: <a href="https://www.youtube.com/watch?v=Sx1-AbyHjdE&list=PLhwVAYxlh5duWK5Kj2Tuo119MuCcu7lel">https://www.youtube.com/watch?v=Sx1-AbyHjdE&list=PLhwVAYxlh5duWK5Kj2Tuo119MuCcu7lel</a>

This is a playlist of explanations of programming in java. It proves new examples for each situation allowing me to understand better what it is I am doing if I don't understand after the labs and lectures.

#### Question 10:

The requirement for ECEN is that I receive at least a B average across all 8 of my course:

- COMP102
- ENGR101
- ENGR121
- ENGR141
- ENGR110
- ENGR111
- ENGR122
- ENGR142

### Question 11:

ENGR 110: Must have completed ENGR 101 and COMP 102

**ENGR 111: No prerequisites** 

ENGR 122: Must complete ENGR 121

ENGR 142: Must complete ENGR 121, or completed NCEA level 3 physics

#### Question 12:

Yes, it is still possible for you to receive your BEHONS Part 1 if you receive a C grade in a course. Your overall average grade is what must be a B. This means that if you were to get a C (COMP 102), and then an A (ENGR 141), your overall grade would average out to a B and you would achieve your Part 1.

## Question 13:

ECEN (electronic and computer systems engineering) requires both knowledge of physics and mathematics.

Course ENGR 142 covers the physics relating to electronic and computer systems, covering electrostatics, magnetic field and force, DC and AC circuits, and electromagnetic induction. All focusing on the application of the physics to engineering. This knowledge of physics is required to precede into the second year.

Courses ENGR 121, and ENGR 122 cover basic mathematical principles, Engineering calculus. They cover the practical application of these principles to concepts involving engineering supplying a more practical basis rather than thermotical basis to the use of the mathematics. These two courses are a requirement into second year as a strong understanding of mathematics will be required not only for the engineering portions of the course, but the physics.

## Question 14:

To complete Part 2 of ECEN I must complete:

Five Part 2 professional practice courses:

- Engineering in Context (ENGR 201)
- Project Management (ENGR 301)
- Group Project (ENGR 302)
- Professional Practice (ENGR 401)
- Engineering Project (ENGR 489)

### Three Part 2 work experience courses:

- Work Experience Preparation (ENGR 291)
- Practical Work Experience (ENGR 391)
- Professional Work Experience (ENGR 491)

## Six Part 2 major courses at 200 level:

- Digital Electronics (ECEN 202)
- Analogue Circuits and Systems (ECEN 203)
- Electronic Design (ECEN 204)
- Signals and Systems (ECEN 220)
- Modelling with Differential Equations (MATH 244)

### And one course from:

- Algorithms and Data Structures (COMP 261)
- Systems Programming (NWEN 241)
- NWEN 242
- Network Applications (NWEN 243)
- Software Development (SWEN 221)

## Four Part 2 major courses at 300 level:

- Embedded Systems (ECEN 301)
- Control Systems Engineering (ECEN 315)
- Engineering Statistics (ECEN 321)

#### One course from:

- Introduction to Artificial Intelligence (COMP 307)
- Integrated Digital Electronics (ECEN 302)
- Analogue Electronics (ECEN 303)
- Communication Engineering (ECEN 310)
- Operating Systems Design (NWEN 301)
- Computer Network Design (NWEN 302)
- Advanced Network Applications (NWEN 304)
- User Interface Design (SWEN 303)

## Four Part 2 major courses at 400 level:

## Three courses from:

- ECEN 401-439
- Directed Individual Study (ENGR 440)

#### One further course from:

- Machine Learning (COMP 421)
- ECEN 401-439
- Directed Individual Study (ENGR 440)
- Directed Individual Study (ENGR 441)
- NWEN 402
- Advanced Network Engineering (NWEN 403)
- Mobile Computing (NWEN 404)

• Human Computer Interaction (SWEN 422)

Along with this selection of courses, to complete part 2 of the BEHONS you need to complete 800 hours of work experience.

### Question 15:

#### Xero

Xero is an online accounting software for small businesses. They base their business around the user-friendly nature of their software.

#### • Trade me

Trade me is a online marketplace where New Zealanders are able to buy and sell, and companies are able to set up online stores.

### Weta Workshop

Weta is a special affects and prop company. They use a vast array of software to achieve the affects that they use in current day movies and are always long for new ways to improve their processes.

## Question 16:

The CV Preparation Workshop is designed to help students produce affective CV's that are appealing to employers. It is useful to begin work on this as it will help both with summer of tech, but also in getting a part time job while currently studying at Victoria.