Lavanya Sajwan - 300381661 Assignment One

Question One (Core)

According to the course outlines for your papers, how many hours per week should you be spending on lectures, assignments, tutorials and labs etc. Tabulate your results.

For my trimester one papers I should be spending on average a total of ten hours for ENGR101; three (rounded) hours should be spent during the lectures, two hours in the lab, one hour for the tutorial, two hours for an assignments and reports, and an extra two hours for any reading, review or preparation that is needed. COMP102 also requires a minimum of ten hours for that paper; three hours for the lectures, one for the tutorial, one hour for any reading or prep that needs to be done, two hours for the lab sessions and around three/four hours on assignments. PHYS122 calls for a minimum of ten hours as well; three hours during lectures, two for the lab, two hours for the assignments and three hours a week for any prep or reading required. Unlike the others, ENGR121 requires at least twelve hours per week to be spent on it; four hours in lectures, one hour during a tutorial, two hours per week during a lab, two hours for assignments and an extra one hour on prep for the class.

LECTURES	13 hours
ASSIGNMENTS	9/10 hours
TUTORIALS	3 hours
LABS	8 hours
PREP/REVIEW/READING	7 hours

Question 2 (Core)

Make a timetable for your labs, lectures, tutorials and assignment hand-in times. Yes, there is a lecture timetable available through student records. Submitting only a screen capture of this is insufficient as it does not include assignment deadlines.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9AM				PHYS122	
10AM	ENGR121	ENGR121	ENGR101	ENGR121	ENGR121
11AM	PHYS122		ENGR101	ENGR121	
12PM	ENGR101 ENGR101 DUE		ENGR101		ENGR101
1PM	ENGR101	PHYS122	ENGR121	COMP102 DUE	PHYS122 PHYS122 DUE
2PM		PHYS122	ENGR121		
3РМ	COMP102				
4PM	COMP102	COMP102		COMP102	
5PM				COMP102	

6PM - 8PM	TUTORIAL	TUTORIAL	
		PHYS122 DUE	

LECTURES
LABS
TUTORIALS
ASSIGNMENTS

Question 3 (Core)

Make a timetable showing all in-term test dates for all your papers.

ENGR121	1st April, term test 1
COMP102	6th April, term test 1
ENGR101	15th April, term test 1
PHYS122	22nd April, term test 1
COMP102	9th May, term test 2
ENGR121	16th-20th May, term test 2
ENGR101	30th May, term test 2

Question 4 (Core)

Clearly state your name, degree and major(s).

My name is Lavanya Sajwan and I'm doing a Bachelor of Engineering Honours Degree, majoring in Software Engineering.

Question 5 (Core)

Explain in your own words what a "mandatory course requirement" is, and what the consequences are for not meeting this requirement.

Mandatory course requirements are objectives placed for students for which they have to pass with a certain level within their set degree. If they do not meet these requirements, even if they do well in the course they cannot pass and move on to the next set courses.

Question 6 (Core)

What course do you believe you will have the most difficulty completing this Trimester and why? How do you plan on getting through this course?

I believe I will have the most difficulty completing PHYS122 because the questions are more complex and abstract that what I'm use to within the NCEA curriculum. To get through this course I plan to spend time doing more physics questions and spending more time on trying to understand the more abstract part of the assignments.

Question 7 (Core)

Explain what Summer of Tech and how it is relevant to your degree in no-more than 3 sentences.

Summer of Tech is a non-profit internship programme which focuses on giving students the necessary training on what companies want and the important things you need to know to get a job. They have different events throughout the year which target your knowledge growth and centre on you meeting people in the industry. Overall, Summer of Tech pushes you to be known and for you to accelerate your career.

Question 8 (Completion)

List at least 3 specific forms of help available to you as a Victoria University student doing ENGR101. Each answer should include: (i) the name of the person or service to contact, (ii) what specific help they provide (e.g. what paper(s) the help relates to or if it's financial or emotional support) (iii) a reference URL for where to find contact information for that source of help.

- 1. Howard Lukefahr the one to go to for any tutorial and labs help. http://ecs.victoria.ac.nz/Main/HowardLukefahr
- 2. Craig Watterson the one to go to for any needed extensions for personal reasons. Will not help with math.
 - http://ecs.victoria.ac.nz/Main/CraigWatterson
- 3. Student Health In case you're medically not well and need to see a type of doctor. http://www.victoria.ac.nz/studenthealth/

Question 9 (Completion)

Find one online reference that will be helpful for each of your papers (i.e. one per paper for T1). This could be a website, a YouTube channel, an eBook etc. Your answer MUST include what paper the resource will help with, the URL of the resource and a statement about how it differs from the material presented as part of your courses.

- COMP102 I could go on codeavengers outside of uni time as it specifically tells me what's
 wrong with my code that the website has told me to type up.
 https://www.codeavengers.com/
- PHYS122 Hyperphysics is just another opinion on the basics and can be used as another source for notes.
 - http://hyperphysics.phy-astr.gsu.edu/hbase/hframe.html
- ENGR121 Also another look at how some of the content is explained.
 https://www.youtube.com/watch?v=duYhmQVVKLQ&list=PL6EA6400609BEF56B

Question 10 (Completion)

Gaining "Part 1" of the BEHONS qualification means gaining a "B average or better across the first year papers relevant to your specialization". List which papers are included in this average for your current specialisation. State whether it's possible for you to achieve your Part 1 during 2016. N.B. There is NO requirement that you achieve your Part 1 during your first year.

It is possible for you to achieve the Part 1 during 2016, and in order to do so you need to pass all the level 1 courses with a B average.

Question 11 (Completion)

List the entry requirements for all of the Trimester 2 papers you are currently enrolled in.

ENGR110- Need to have done COMP102/COMP112 and ENGR101

ENGR123- Need to have done ENGR121

COMP103- Need to have done COMP112 or have had a B- or higher in COMP102

PYSC122- No prerequisites

Question 12 (Completion)

Hypothetically, you are a BEHONS student who gained a C in COMP102 during T1 2016. Explain, referencing your answer to the above questions, whether it is possible for your too still get your BEHONS Part 1 during 2016.

No, if you were still wanting to complete part one within 2016 you'd have to strictly get a B- or higher within that course. However if you don't and still want to continue with a BEHONS in Engineering you'd have to do it again the next year.

Question 13 (Completion)

If you do not achieve a B average across your first year courses, there are certain courses that still comprise `critical pathways' (listed below) to your second year studies. By looking at the entry requirements for second year courses explain why the following courses are considered `critical' for your major.

Critical Pathway Courses:

SWEN: COMP103, ENGR123, COMP102, ENGR121, ENGR110

Those courses give a fundamental understanding of what is needed in the part 2 courses. COMP103 is a needed prerequisite for a lot of the part 2 courses and in order to gain that you need to do COMP102 if you are going through that stream. Also ENGR121 leads to next trimesters ENGR123 which give you the understanding needed to do next year's maths in the courses.

Question 14 (Completion)

Give an example of 3 courses that might be suitable as a "Part 3" for the BEHONS. You may or may not be currently enrolled in these courses.

I am currently enrolled in PSYC122 for next trimester and other options could be FREN101 or SPAN112.

Question 15 (Completion)

State what the requirements are for completing Part 2 of the BEHONS for your chosen major.

NWEN 241	Systems Programming
<u>SWEN 221</u>	Software Development
<u>SWEN 222</u>	Software Design
<u>SWEN 223</u>	Software Engineering Analysis
<u>SWEN 224</u>	Formal Foundations of Programming
SWEN 301	Structured Methods
SWEN 302	Agile Methods
SWEN 303	User Interface Design
Professional Practice	
ENGR 301	Project Management
ENGR 302	Group Project
ENGR 401	Professional Practice
ENGR 489	Engineering Project (30pts, full year)
Work Experience	
ENGR 291	Work Experience Preparation (Opts)
ENGR 391	Practical Work Experience (0pts)
ENGR 491	Professional Work Experience (Opts)

Pasted from < https://ecs.victoria.ac.nz/Main/RequirementsSWEN

Question 16 (Completion)

The 800 hours' worth of work experience required for the BEHONS is split into a minimum of 400 hours of "Professional" work and a maximum of 350 hours of "Practical" work. List 3 companies with offices in New Zealand that might employ you as a summer intern as part of the "Professional" work requirement. You should also include a sentence summarising what each company does in your answer.

Trademe - Trademe is a Wellington based, online buying and selling company.

Xero - Xero is also a Wellington based, accounting software company.

Beca - Beca is an engineering consultancy company.

Question 17 (Completion)

Having a CV is required for ENGR291 in your second year. State one opportunity in 2016 where you could get help producing or refining your CV, and why it might be useful to start working on it this year rather than waiting until ENGR291.

Summer of Tech is one opportunity that I can sign up for in 2016 that can help with refining my CV. It will be useful to start this year instead of next as then next year I can immediately start by interacting with the industry representatives in the different events.

Question 18 (Challenge)

Using pages 9-11 of this link: http://www.ieagreements.org/IEA-Grad-Attr-Prof-Competencies.pdf as a reference, explain what IPENZ accreditation means (i) for the BEHONS degree and (ii) what it means for you as a student both before and after graduation. Note that the Victoria University BEHONS program is accredited under the Washington Accord. Your answer should be no more than half a page (typed).

IPENZ accreditation for the BEHONS degree means that once you have attained the said degree, you can work internationally within the countries that partake within this accreditation. As a student aiming for this accreditation, I learn to understand such things like the ethical and environmental effects engineering has and much more. As an IPENZ member as a student, as shown on the website: https://www.ipenz.nz/home/become-a-member/student, I have the opportunity to meet future employers to gain insight into what my future job as an engineer would be like and also can add this onto my CV. As a graduate it would mean I can get a job in New Zealand and other countries within the group.

Question 19 (Challenge)

One of the key graduate attributes of a Washington Accord accredited program is: Comprehension of the role of engineering in society and identified issues in engineering practice in the discipline: ethics and the professional responsibility of an engineer to public safety; the impacts of engineering activity: economic, social, cultural, environmental and sustainability. Give a short example (i.e. no more than one sentence) illustrating each the following:

the role of engineering in society. - Engineering has helped develop online shopping websites such as Trademe and have consequently changed the "normal" way of shopping for.

an ethical issue in engineering. - Stay within your area of engineering to make sure that no one gets harmed due to your actions.

the professional responsibility of an engineer to public safety. - To thoroughly test designs so that minimal to no people are negatively affected.

a cultural impact of engineering activity. - Engineering improves human way of life, but that being said a cultural impact could be the changing of human behaviour such as more people moving to online shopping rather than actually going out to shop.

a sustainability impact of engineering activity. - The positive impact of the design and invention of solar panels on the carbon footprint and the making of solar farms.