# Course Tips and Tricks Summary:

General Tips:

* It is beneficial to take courses in SEE and not take equivalents if you don't have to because SEE has the best profs
* Doing an engineering degree in 6 years with coop and stuff is perfectly normal and all of the topics you are learning will be important later
* The workload for the SEE 230, SEE 221, SEE 241, MATH 260, MATH 251 and coop seeking is similar to the recommended schedule in the spring of first year
* There is a lot of writing that goes into coop seeking
* Courses outside of see are offered more frequently so take this into account when course planning
* Make sure to take time for yourself and support your mental and physical health
* Reach out to any of the panelists or pretty much any of the upper year see students if you have questions! We are all happy to help :)

## MATH 251 - Calc 3

* Professors:
* Randal Pyke:
  + Different people have different opinions on him as a professor
  + Recommended to **review notes/ textbook before class** (try to learn the material a bit before)
  + Gives a lot of opportunity for bonus marks, but does not scale grades
* **Write down your webassign** as if it was an assignment you are going to hand in (Randal Pkye allowed us to hand this in for bonus marks too) because it is great for studying and making sure that you actually understand the questions (and webassign is a great way to study in general)
* Crowdmark assignments can also be quite challenging but rewarding
* Make sure that you are keeping on top of the small assignments because the marks add up
* **Professor Lenoard’s youtube** channel is sooooo helpful
* Make a **formula sheet**
* Either 2 or 3 midterms in the past

## SEE 260/310 - Differential Equations

* **Repetition** is key (do as many questions as you possibly can)
  + Section by section, 10 questions for the textbook at least, go do the hardest ones and you will be 100% ready to go
  + Courses are designed to have easier questions at the beginning of the test and harder ones at the end, so make sure that your prepared for it all
  + Lots of components and techniques, but practice helps a lot
* Do the **wiley** (this is the differential equations equivalent to webassign and it takes while but some people found that this combined with practice exams was enough to do well in the course)
* Talk with your professors (but this goes for all courses especially in see because we have the best profs)
* Broken down into 2 midterms past summer but 6 tests this fall
* Professor lennard also good for the first couple units
* Creating a **summary sheet** with an overview of the types of questions was really helpful

SEE 221 - Statics and Mechanics of Materials

* **Textbook questions** are great (a lot of Professor Ahmadi’s questions are pretty much exactly the same as the textbook)
* Good to walk through a question with a friend (talk through the process)
  + Like when your talking to a TA, saying the points you understand and then you figure it out as your saying
* Visual learning for this is very helpful for this
  + Draw **free body diagrams**!
* This is a helpful youtube channel: [link](https://www.youtube.com/playlist?app=desktop&list=PLRqDfxcafc23LXGoItpkYMKtUdHaQwSDC)
* This class is one of the first “engineering courses” so it tends to be more interesting then straight math or physics courses
* Have to stay on top of the work -> if you learned about it this week then review it that week because **topics build off each other**
* Don't let the graphs scare you, you won't have to make it it just has some info for you
* Study the **assignments for exam practice**

SEE 230 - Electric Circuits

* Dr. J has fantastic **notes and tutorial questions** (often uses the same questions in exams)
* **Kahoots** are pretty short questions but writing down the question and studying them is also helpful (also encourages you to go to class) (also a good gauge for how well you are understanding the material)
* Going through the notes before lectures is so helpful
* **Labs** are a good opportunity to learn because you have to understand the material to do them

SEE 241 - Measurements, Analysis and Forecasting (aka stats)

* Manpreet Kaur typically teaches
* She goes through lectures quickly (makes sure you stay focused) but if you follow what she writes down and you will have good notes
* Has had 3 labs
  + Fairly straight forward and sse MATLAB or excel
* Some quizzes
* Class average was fairly high for the course in general and is one of the more low maintenance courses of the summer (lectures, labs and some practice questions sometimes and you are good to go)
* Hannah’s notes are on the see drive, if the link doesn't work feel free to ask (she has great notes)

SEE 310

* Project based course so make sure to check in with your teammates
* Get to work with the city of Surrey! The course involves a lot of research
* A lot of milestone steps -> can be overwhelming when you look at the course syllabus but make sure you take notes of what is actually for marks (with this being said things that are for marks are usually not just completion even if they are out of 1 (site everything you use)
* The average was high (small class last year and this year -> take advantage and get 1 on 1 help)
* Be clear and concise in your writing (this class Feels more like a technical writing/ presentation/ project class then a technical course)
* Watch the time limit for the presentation and the word count (figures that can describe what your doing are great)
* Go in with an idea of who you want to do it with (2 people per group last time)
* An okay class to have online (don't really miss out on anything but it could be difficult to communicate with someone you didn't know previously)
* Learn lots of different softwares and then get to apply the one that fits your needs (equest, excel, python, etc)
* Labs are relatively easy
* Final but no midterm
  + Wasn't too hard and worth a small amount
  + Didn't spend more than a couple hours studying
* Kind of a typical taco course

324 - Heat transfer

* Some students really liked this course (Taught by Professor McTagget-Cowan last year)
* Read the assignment as soon as you can (try to do a question a day, but he teaches the concepts as he goes so reading the assignment before can help you connect what your learning in class)
* Textbook questions are still useful but questions are more original than in other courses
* Formula sheet will have every formula you will need (when you approach a question know what you are starting with so you can apply the formulas easily)
* Make sure you are present in lectures (asking questions and building a relationship with your professors is a great idea)
* Course load: Heavy, probably should have been 4 credits
  + Midterm average was pretty low so they had a makeup assignment which made it really busy towards the end (but if you enjoy the concept it wont be bad)
  + At least 5 hours per week and one assignment for 2 weeks ish
* About the same amount of work as fluids when professor McTaggert-Cowan taught it

SEE 225 - Fluid Mechanics

* Old assignment questions are the best way to study (textbook questions are good but not as helpful as in other classes)
* Some questions on the final were written and theory based so understanding the concepts is important
* Exams are very fair and he doesn't scale (he has a lenient marking scheme)
* Just talk to gordon when you are confused or sometimes read the textbook

SEE 331 - Power electronics

* Does develop a lot on circuits 1 and 2 (intro to electric circuits and microelectronics) (It is a good idea to take them in consecutive order)
* Not an easy course, but Dr. J’s teaching style is similar to other courses (other courses prepare you)
* A lot of circuits has the same foundation

SEE 341 - Signals and Systems

* Dr. Manpreet Kaur typically teaches
* Math based course (covers a lot of very deep concepts but you only really need to know the basics of everything)
* Lecture notes tell you what you need (textbook isn't really necessary)
* This is a fundamental course for feedback control systems which is very difficult (make sure you do the prep now) (not everyone's favourite course but still important)
* Midterm, final, labs, assignments (1 every 2 weeks for assignments)