**STAGE 2**

**EUROPEAN EFY STUDENT**

File ID: SS08\_M\_EU

File Name: REC030-M-EU-Latvia

**Keys:**

I - Interviewer

SS08 - Interviewee ID

**Interview:**

**PART A**

**EFY EXAM EXPERIENCE**

I so, how was the exam?

SS08 they were fine, but comparing with the ones, previous three years they made it more difficult except the Mechanical Science. That was still pretty simple, but I wouldn’t say they’ve made substantial changes but they were definitely difficult and definitely more time consuming especially EP and Electronics

I umm

SS08 they were no way I could finish it in time

I umm, so why is difficult? How do you know it’s difficult?

SS08 I wouldn’t say very difficult, it’s more difficult in comparison with the ones they had in the previous years because we, what we did was went through all pass year papers

I umm

SS08 except the ones five years older or ten years older, I didn’t do a lot of those because I presume they would be more similar to those now

I umm

SS08 because the division of points for each question was not, a little more different like between sections like previously it could have been fifty-fifty, but now it’s like forty sixty so on

I umm

SS08 and also like I can indicate you some small changes for example in Maths there were, it was not that difficult it’s just Maths was fine but there was like new combination which I never had before like for example you had to (impulsive?) partial differentiation

I umm

SS08 although I only had regular partial differentiation or (successive?) partial differentiation, so it’s an example that I’ve never tried before

I umm

SS08 and in EE, in Electronics I would say the first hard was basically that (compulsory? 2:21.8) was the same

I umm

SS08 but the section part was a little bit more complex than the previous years plus they, like for example I would say that I presume that if like we have like a question about a transient or something

I umm

SS08 then it would be more theoretical or maybe would be just about thermal (couple? 2:48.0) or something where you have to explain like five percent question but it turned out it specifically the one topic that I did not revise was a twenty percent question (laughs)

I umm

SS08 so I lost quite a lot on that

I so, that’s Part B isn’t it?

SS08 Yeah, Part B

I umm

SS08 it was fine is just that they did try to amplify that difficulty but mostly due to the fact how much time took to do everything because the previous year’s exams, the previous years in Electronics you could do the exam in time this year’s you could not

I umm

SS08 I mean it would be possible if you knew perfectly everything and you didn’t have to like take time to remember something or to figure out how to get something, then sure you can do that in few hours but not in any other way

**PART B**

**ASSESSMENT AND CRITICAL THINKING SKILLS**

I umm, right **based on all the questions in the exam that you have attempted how many questions do you think that you needed critical thinking skills to answer?**

SS08 ah ( \_ )

I were you aware that when you look at certain questions you realised you needed critical thinking skills?

SS08 ah, I would say maybe around like forty percent required critical skills and may be half from those forty percent required them to the extent that where you really have to think on your own

I forty percent you would say?

SS08 like I would say forty percent because…

I over all?

SS08 okay, may be this year exam is a little bit higher may be fifty

I umm

SS08 fifty to sixty percent

I umm

SS08 I would say this year. May be in the previous years, the thing is in the previous year’s exam there were many repeating patterns

I umm

SS08 and post exams when I talked to the lecturers this was exactly the reason why they made the changes in EP, in Maths and in Electronics because there were repeating patterns and the questions were pretty standardised

I umm

SS08 so it wasn’t difficult for me to do them because I just targeted doing them automatically like automatically knew what cause of action that I should take when they start changing things like they change the set-up of the questions even though they are based on same knowledge, you start to question what you have to do. It means you automatically have to go through everything that you know

I umm

SS08 and you have to analyse more and you become more doubtful

I umm

SS08 so, okay…

I so, can I say the previous past questions, previous year’s past year questions you could do it mechanically, that means you know what…

SS08 after two to three examples, yeah I would be able to do it automatically

I umm, but this year it’s a bit difficult?

SS08 yeah, I would say that the, for EP the second section is more, definitely they made, the biggest differences were in EP for the second section. For the second section I just feel that they didn’t change it as much

I umm

SS08 but, even like slight changes for let’s say for its tasks it means it will be more time consuming, because the thing that I was shocked was not so much of the difficulties but how quickly the time passed

I umm

SS08 because when I reached like the end of question nine I was only left with fifteen minutes and I have at least like at least thirty five of content left

I umm

SS08 and it was impossible for me to do it in fifteen minutes, and that was like a shock to me, so every next exam is better for me

I umm

SS08 except for the very last one which was Electronics because that also required a lot of time, but I felt I was better prepared for that

I so it looks like you had more problem in time management, then?

SS08 yeah, I would say so

**ASSESSMENT - MODULE**

I umm, **so which of the modules in your opinion required more critical thinking questions?**

SS08 ah, that’s a bit difficult to answer I would say that, you’re talking specific about the exams?

I yeah

SS08 okay, they were more equalised, I think. Last year for example in EP it didn’t require critical thinking skills almost at all

I umm

SS08 this year in the second half it did, but I think In EE the most, I would personally think

I umm

SS08 in EE the most

**CRITICAL THINKING SKILLS AND ASSESSMENT**

I okay. So this is the third question, so **do you think if you have the critical thinking skills would have had helped you to answer the questions better?**

SS08slightly yes, I would say by ten percent margin I would say

I umm

SS08 but for me personally, I think the biggest issue is how long it takes me to do everything because for me it felt more like a speed test, basically

I umm

SS08 especially in Electronics when I did my revision went through a lot of things everything make more or less sense but again I went through it quite slowly

I umm

SS08 and like for example if I had circuit that has a transistor integrated to work as let’s say inverting amplifier something like that

I umm

SS08 then, like if you’ve given to me on face value

I umm

SS08 it’ll be impossible for me to explain what each of those components are but if you would put me in a room for two hours and remember the logics of the transistor, then I would figure out what the voltage is in comparison with this voltage, what the (10:34.0?) does here and what the (10:36.5?) does here and if I would see these are the in-puts and the out-puts and what they do

I umm

SS08 then I would in two hours I would be able to explain to you what it does

I right

SS08 but, this is not what an exam is for, the exam is more like a speed test like tests your already familiar with this, not if you eventually be able to figure it out the real answer, so it requires more training

I umm

SS08 it does require critical thinking skills when have to do something that you never had before

I umm

SS08 but, I think in the end it would only have like ten percent impact

I umm, ten percent impact?

SS08 I would say

I right. Critical skills is also about making decision, quick thinking based on certain criteria isn’t it?

SS08 also, yeah may be

I so, in making decision, do you think it would helped you if you had prioritised which question to do first…

SS08 in EP definitely, because I started from Section A and I regret that tremendously

I umm

SS08 I should have started from the other end, then I probably gotten at least ten to fifteen percent more

I umm

SS08 so, starting with Maths I started doing everything from the other side, like I actually checked every single questions before I started anything

I umm, so, which was the first module you try first?

SS08 EP

I so you learn from EP to prioritise which…

SS08 yes, because I was so used to the past papers that I just thought, okay I just start with this because I’ll be able to do this very quickly, but yeah I did not read the questions, especially the end questions

I umm

SS08 I did not read them before like I would say I don’t know like thirty minutes before the end

I umm

SS08 which is a very mistake

I umm

SS08 yeah

I but it did help you?

**CRITICAL THINKING SKILLS TESTED BUT NOT TAUGHT**

SS08 I mean it gave me a good lesson for the next exams

I umm, right. **Was there any questions in the exam which require specific critical skills which have not been taught or introduce in the class? It could be in any modules**

SS08 ah ( \_ )

I requires some specific skills for engineering?

SS08 I would say, I wouldn’t want to say definitely no because if you actually go through all the lecture notes

I umm

SS08 then you should be able to do all of the task, so I don’t think there’s something that, there’s something in the questions that was never covered in the lectures or in the notes

I umm

SS08 in the past papers, at least that what I think. I don’t feel it would be impossible to do a specific task unless they like extra, if you did extra ( \_ )

I practice

SS08 not practice but research

I alright. So, can I, my question was is not about the questions but the critical skills

SS08 yeah

I so, is there any critical skills when you read a question, is all about doing tasks isn’t it, they’re asking you to do something? But when you looked at the questions, is there any questions in any modules, it required critical skills but it is something that you’re not familiar with?

SS08 oh! Okay, well, there’s only actual example which I remember I could give was question nine from EE

I umm

SS08 but the fault was mine because I presumed the likelihood of me having a (thermosets 15:05.3 ?) in a numerical question would be closed to zero

I umm

SS08 but I was wrong because the only reason why I didn’t do that question was because I did not remember the characteristics of that specific transient

I umm

SS08 so what I did is that I decided to do it as the last question and I did everything after and before that but in the end I ran out of time and I did not manage to do question nine

I umm

SS08 but the reason why I pushed it back was because I did not revise for that specific transient did. I only remember like okay I understand it should react to change in the temperature but theoretically everything, every single material reacts to change in temperature and its resistivity changes but I did not know how it is different from (thermocouple? 16:03.3) or something else

I umm

SS08 so, I decided, okay I’ll do it later if I have the time

I right, so basically what you’re trying to say is, but you got to correct me okay? So the questions which you had problem is not the question itself but it’s your own personal approach…

SS08 I would say yes

I yeah

SS08 I would also say the things is that, actually this kind of circuit was from my recollection only covered in the notes and we did not like

I right

SS08 I did not remember that we had an explicit example of such a circuit during the lectures or during any assessments before, but we definitely had that in our lecture notes, so I still don’t think of it as being something that I was not prepared for. I mean if it was in the notes then I should be prepared for

I umm, okay

SS08 which was interesting, because in EE I’d prepared for, I prepared for transient, I prepared for filters or rectifiers about diodes

I umm

SS08 and lot of that stuff was not covered actually

I in?

SS08 in EE, I think like there was nothing about filters and there was nothing about rectifiers, there’s nothing about transistors

I umm

SS08 and I studied about them because I thought that there will definitely be a twenty percent question about them

I umm

SS08 but I didn’t study so much about transient it was one day before the exam so I thought I can’t like focus on this anymore

I umm

SS08 but

I that came out?

SS08 yeah, that wasn’t a pleasant surprise for me personally (laughs)

I so filters, rectifiers and transistors came out?

SS08 so there was nothing about rectifiers, transistors or filters

I oh, okay

SS08 there was typical things like transient (18:09.0 ?), all that was there but it’s expected but I did not expect that there would be absolutely nothing about the four types of filters or about rectifiers or about, yes there was one question about diodes but there was nothing about transistors

I umm, right

SS08 but I still think it’s okay fine

**PART C**

**CRITICAL ANALYSIS IN EXAM**

I right. Now **when you looked at the questions, so which questions you found they were quite simple for you? Why did you find those questions were simple for you?** For the question that you found it easy for you…

SS08 well, I think…

I could be any modules

SS08 I’ve already gave reason, that is something that I have done several times before and it feels standardised, so this automatically gives you a mind-set that you take extra (17:27.4 ?) cause of action and you’re hundred percent sure that this will give the correct result. Although, it’s a bit strange in the first question of EE. In theory I covered very thoroughly but I had the actual example I felt like I actually never got the correct answer and so, even though I understood the logics of it like for example when we use galvanometer as (19:57.0 ?) I understand what’s happening there like (20:05.0 ?) you have different voltages and for other is vice versa. But, when I was actually deriving the formula for that I felt as if I got the real answer but when I go back to the theory

I umm

SS08 it feels pretty simple, so that was only hard thing for me personally, but usually the thing is I feel it’s easy because it’s either, yeah most likely is practice. The easiest one is the one you had most practices with

I umm

SS08 or the theory is simple

I can you give example

SS08 like for example you have to explain why the current can only flow in one direction through a diode

I so question on explaining something is easy for you?

SS08 yeah, I think

I so what type of preparations you do to answer questions on explaining or describing something?

SS08 ah, can you repeat that question?

I so, for you question on explaining on something is easy for you? For example a question on explaining a specific theory?

SS08 yeah

I you personally find it easy to handle those kinds of questions?

SS08 I think so, yeah

I so for you to prepare to answer question which requires you to explain something what do you do?

SS08 the theory is not difficult for me to not memorise the most important bits of it because once you remember the most important bits of it you can easily like draw the connection between them, okay if this is dealt negatively and that dealt positively then most likely if it is positively dealt, yeah it will have (hold 23:50.8?) that is positively charge

I umm

SS08 and if you have a circuit that is positive and negative terminal, then when you remember which direction it flows then you will quickly get to the conclusion to why it would work in that way but if you switch the terminals then it wouldn’t work in that way

I umm

SS08 like it’s so simple that you cannot fail I think

I umm, right. **So, for questions which require you to explain something, the technique you’ll adopt is memorise?**

SS08 for theory I would say yes, I mean of course unless you’re, I don’t know describing, like something like (sea back? 24:40.6) effect or something like that if you’ve something related let’s say especially in EP there was a theory which was just based on a formula

I umm

SS08 if just look at the formula you can just intuitively draw the conclusion like you could basically explain the theory by just looking at the formula especially in the EP, in other modules not that much I would say

I right**, so how about difficult questions, why a particular question is difficult for you?**

**SS08** becauseespecially under pressure, I started doubt my judgement if it’s something correct or wrong because ( \_ )

I pressure on what?

SS08 time pressure

I umm

SS08 not doing in time is the biggest pressure that I could have, not doing in time

I so it affect you confidence is it?

SS08 yeah, because if you have time it means that you can actually go through two scenarios, let’s say if think this component works in this kind of way or let’s say the potential differences

I umm

SS08 in here you think they’re smaller than you think or bigger than you think like work out through both these scenarios then you can see which more, which one is more logical and then you go with the one more logical and then obviously you can make a better conclusion. Of course under time pressure you don’t have that kind of privilege

I umm

SS08 you have to right with first guess

I so, you only find the question difficult, you correct me okay because I shouldn’t use the word only, **mostly you find a question is difficult when you have time pressure?**

SS08 I would say yes…

I so how about…

SS08 of course if you know all the theories, because I believe there’s only a handful of questions that are like really difficult in the respective modules throughout the whole year like in MS there’s this specific question in the end I was not able to do and that turned out to be like the most difficult one. It was about dynamics, like a rolling board which was initially was static but it was hit…

I was this question in Part B?

SS08 no. not this was not in the exam, back in the…

I pass year’s exam?

SS08 no, it was not in the pass year’s exam it was in one of the problem sheets because I really doubt that they would have such a question in an exam because it would be a little bit too difficult and too time consuming

I right, **apart from time pressure what else you would say a question is difficult?** You said time pressure and you also mentioned you need to know some theories as well…

SS08 more or less, yeah

I that’s knowledge isn’t?

SS08 if you have gone through the theory and you have had enough practice then all of them are fine, if you, let’s say you take out the non-standard question like in B Section I would say that like for example in Electronics like twenty percent of that points that you can get were based on something that was really non-standard. And, I could say that may be this is like the average, except for the MS, MS was pretty simple, if you actually did all the tasks and you memorise how you did these tasks

I umm

SS08 you can easily get ninety or more

I so this non-standard, what do you mean by non-standard require more…

SS08 non-standard is something that you might have done may be once but not more often than that

I so this requires more thinking?

SS08 yeah, it does

I so **how about the wordings in the question itself?**

SS08 umm, it was fine

I umm

SS08 except I messed up in MS which cost me like fifteen minutes that’s one, it was about an object that was rotating around an axis but I presumed it was rotating like a vertical pendulum

I umm

SS08 but, when they gave you a question and analysing the forces that I’m working with it didn’t make sense for me. How can they ask me to give this if they work in that kind of manner like you have (29:39.4 ?) like this doesn’t add up in that sense, but then at the very end I just left it like EE

I umm

SS08 in the end I just went back to it and I realised it’s not rotating like this and it was rotating like this (hand gestures was used to show the movement), that changes everything

I umm

SS08 (laughs) it cost me like fifteen minutes like and I felt like an idiot

I is it you said a pendulum?

SS08 like a vertical pendulum, but it’s not like this (hand gestures used) it’s vertical or one rotating around the axis, and I should have, I think I read through it once or twice. But, I figure it out by the fact that it doesn’t make sense because in the end I thought okay, this also mean it’s actually rotating around a horizontal axis and then it would make sense to why it changes the velocity because you have the gravity working against it and then (30:39.5?) working in favour it at the bottom. So, it would make sense why the velocity changes

I right

SS08 so I realised that I made a mistake

I umm, okay. Right, you worksheets on the blackboard which you could practice prior to the exam?

SS08 yeah

I so, looking at the worksheets, the questions that you’ve attempted were they a mirror reflection of what came out in the exam?

SS08 I would say that for example specifically for MS, I think that it’s quite valuable because they certainly have questions that are more difficult that the ones you get in exams

I umm

SS08 so that’s quite valuable, but also at the same time it gives you like some questions are less numerical and more abstract where you just need to understand what forces are working there. For example, you have to derive a formula for …

I this question is on worksheets or exam?

SS08 in the worksheets

I yeah

SS08 but you might have to do similar tasks

I yeah

SS08 in an exam, like in the past papers I found like some examples,

I yeah

SS08 the worksheets, but the worksheets also have more difficult questions than the one you would get in exams and I also think a good thing

I so, it’s quite a good balance do you think?

SS08 yeah, for Maths

I umm

SS08 I would say that by part it’s valuable because they also have some examples that are more difficult than the ones in the exams

I umm

SS08 but at the same time I felt like, I still felt like there were somethings that were new to me

I umm

SS08 in Maths exam for some reason

I umm

SS08 I gave you one example, but I had that feeling throughout the whole exams for some reasons I don’t know

I what, Maths exam?

SS08 yeah, I had such feeling even though I went through everything, like I went through task sheets with certain amount of confident like I felt think kind of still felt unusual for me when I through the Maths exam for some reason

I umm

SS08 there were a few questions that I felt non-standard to me

I right

SS08 and I felt Maths sheets did not prepare me that well enough for something non-standard as in MS for example

I umm, so the term non-standard you use means more challenging?

SS08 ah, may be in some cases but not in all cases because non-standard might be also something that is not difficult but it was not asked from you before, like for example in the past papers you would usually like differentiate something using the first principle or something like that. But then, they just gave you something that is extremely very simple question like how you would differentiate this

I umm

SS08 but, it doesn't give you like a specific formula, like it just give you a general question and then you feel like what I’m supposed to do here?

I umm

SS08 because (laughs) you never had like give general answer or something, you just automatically deriving at something

I yeah

SS08 it not necessarily be difficult, it’s just non-standard

I so doesn't fit the standard pattern?

SS08 yeah, that’s what they try to do, they try to make non-standard as it was before because, especially EP. I would, I completely understand why they change EP because it was too easy

I umm, right. So, **as an engineering foundation year student do you think if you’ve acquired essential critical skills for engineering would have helped you to score, to perform above average?**

SS08 okay. Above average, I still, above average, I still have to wait for the results for twenty days I think? Yeah, twenty one days, ah, critical thinking skills definitely give you advantage but I would say fifteen percent at least

I fifteen?

SS08 ten to fifteen percent. Of course, I mean if you’re not going to do the revision, and you’re not going through the theory

I umm

SS08 and practice, then you obviously you’re gonna fail, but I think if you do practise and you go through the theory even without critical thinking skills you can still managed I think. But, this year it would be like, it would be a little bit uncertain whether you would be able to average out above sixty

I umm

SS08 if it would have last year then you would be able to pass without any sense of uncertainties but this year if I think it’s little bit more challenging

I umm

SS08 I think it’s a good thing

I yeah, so can I say that compared to, because you’ve had been doing lot of practice on past year exams…

SS08 I would say that, I should, I could have done more practice

I umm

SS08 to be honest, because especially for EE

I umm

SS08 and Maths may be, I think I could have taken more practice

I umm

SS08 I actually made some stupid mistakes in MS, ah like for example with the linear, conservation of liner momentum in certain vector

I umm

SS08 not just in general, because in general then you have to take into account both the vectors, but, so I made stupid mistake where I might have lost quite lot points there, but I still feel that it doesn’t matter that much because I will still pass and as long as I understand everything is there it doesn’t matter

I umm

SS08 I just need to understand everything and I need to pass because my score doesn’t matter

I umm

SS08 but in Electronics and Maths I feel that I should have taken more practice. It’s just my laziness, I started so late for revision. Like for Electronics like seriously like only four days before the exam

I umm

SS08 and I went through the theories two days I think, but I was too tired to go through transient in details because it’s like transient was like fifteen pages of theory

I umm

SS08 before that you had like, oh! No transducers like the only thing that I really too lazy to revise, I paid the price for it

I umm

SS08 if I’ve reserved like a whole week for Electronics, then I might have scored at least ten percent, ten to fifteen percent more, but it’s due to my laziness, I think

I umm, so it’s more on the preparation

SS08 yeah, definitely, the content here is definitely preparation. Just today I started to looking at the papers on the tasks that I might do for the exams next year

I umm

SS08 there gonna be more theories involved, and I think I’ll start my preparation very early. I talked to another girl just after the exam I think she’s an older student and she has been living here more than ten years and she has not studied physics I think before

I umm

SS08 and she told me that she would be preparing for this exam at the very beginning of the year, and I’m thinking that actually that could be a good idea

I umm

SS08 because it would be easier to make mistakes in next year than this year

I umm, right. So, this will be last question

SS08 okay

I if you try to recall all the questions that you might have read there might be some key words which had helped you to answer or understand the question?

SS08 yeah

I before you attempt the question, right? So, **what were the key words in the question which would actually indicated critical thinking skills in the exam papers?**

SS08 I’m not sure if I even can answer that because critical thinking skills were not that much connected to how you phrase the question

I umm

SS08 it was more about how the question was set up instead, for example let’s say finding the resonance to between two tubes instead you would have two tubes filled with materials like it’s stuffed with materials and each time it resonate it becomes, the volume that it fills become smaller and smaller

I umm

SS08 and if you have never done that before then you need to start working with your brain, so what happening there

I umm

SS08 and for example also, just a five percent question in Electronics, instead of let’s say getting the transfer function from the circuit that resulting voltage, instead they give you an equation and you’ve to draw a circuit by yourself by considering the given equation which is something that I didn’t see in the past papers

I umm

SS08 so it’s the same theory but they completely turned around the sequence of the action that you need to take, it’s reversed

I right. **So, if you were to give me some words if you find them in the question, the words are verbs, the action words, so, what words you would say they mean you got to be critical?** For example you have words in a question like describe, explain those kind of words

SS08 I think in my experience when there’s question says describe then it doesn’t require that much of critical thinking skills

I for what…

SS08 I stand corrected actually, ah, when we were talking about the five percent question, then it’s definitely simple, but when we’re talking about a more elaborate circuit, then obviously it’s more complex

I right

SS08 so, it’s always like, it’s very changeable for me I don’t look at some specific words and deciding whether it provide more critical thinking skills than the other question. It depends on the content and tasks

I right, the overall content?

SS08 yeah

I not specific words?

SS08 yeah, at least I did not notice

I okay

SS08 correlation between these two

I right, okay. I think that’s the about it

SS08 yeah

I thank you very much