

**MODELS OF ACHIEVEMENT**  
**EP4 SEG 2 AMY V8**

ANNETTE SHUN WAH: Getting behind the wheel of a big rig can be a daunting experience. Throw this together with learning the railway construction business and it's not hard to see why Amy has a passion for engineering.

AMY: My name is Amy and this is my story.

SONG: # If something's not what it's supposed to be you can make it up so easily

# Make it all work out

# Make it all work out#

AMY: So I grew up in Goulburn and the first place I lived at was sort of like on a farm. But it was a pretty good place to grow up because we were a fairly close community and all my friends had farms and stuff so it was easy to go and hang out with them whenever and have a bit of fun, play around, get dirty.

My first primary school we had 17 kids in the whole school, there was three in my year. I liked maths to start with, did art, I did music and I started to play the piano and then when I was 10 I started playing alto saxophone which was great because at the time I was at Tirana Public School and we were fortunate enough to have a lovely guy out there that coordinated our music sort of program and yeah, that was basically where it started and I think because it was nurtured so well that I just continued with it.

I guess I was big into computers back in high school so I did sort of consider going into software engineering although at that stage I wasn't really sure what engineering like really entailed.

I kind of came up to the HSC and I was like I don't want to be at school, I want out of here, I just want to work, I'm sick of it. So that's what I did. I just went to work and I

started working for Dad not long after I finished. I was exposed to everything to do with railway construction and maintenance. We did total reconstructions of track right from the foundation all the way up. We did sleeper replacements re-railing, re-sleepering on its own, welding. Once I knew all the processes and stuff I built up to supervising the work groups and looking at tendering and contracts and then managing projects in the end.

I loved the fact that everything was different that I got to go around. So we serviced everywhere in NSW basically. Spent a lot of time away doing a lot of different things. I got to operate lots of heavy machinery and drive trucks, I think it was just the variety of stuff that I got to do.

But the last sort of big project we did was a project that was sort of spread out over about six months where we replaced over 64,000 sleepers and there was just one day where I got to one point and I was like look, I'm bored of doing the same thing all the time, I need to go and do something different and it was engineering.

I couldn't decide between civil or mechanical at the time because I had a lot of experience in civil and I love mechanical things but luckily just before I clicked the submit button I clicked mechanical and now that's where I am.

I went to CIT which is the Canberra Institute of Technology and did an Advanced Diploma of Engineering Design because I'd been out of school for quite a few years by then and I thought well, you know, we're going that way which was good because it helped me bring my maths back up to the level I was going to need.

Part of our course was to learn to use a lathe, to use a mill, to weld and all that kind of stuff which is great because that's what I'm into.

I just love machines, I love big machines and I don't know, it was just - I think it came to me one day when I was doing a lab with a boiler at CIT and I was like this is just great, this is what I want to do, I want to get my hands dirty, I want to play with things, I want to make things work.

So with Dad and his heavy vehicle driver training I got my HR when I was 18, I think, that's the earliest you can get it. So I've had that until recently when I got my HC which is semi licence.

Once you've got the licence it's amazing what you can do with it and with Dad having the trucks it's easy for me to just go and borrow it and do what I have to do and take it back.

So once I decided I wanted to go to university I did my research and looked around to see which course was going to offer me the best for what I wanted to do. So the course I'm studying now is a Bachelor of Engineering Diploma in Engineering Practice and I'm doing a straight mechanical engineering degree with that so basically what that means for me is that I come out with 12 months experience in the field as well as a degree which makes me way more attractive to employers when I finish.

I'm just about to go into my fifth semester at uni. So I'm getting now more into the engineering subjects that are specific to my discipline which is mechanical.

Basically guys, has anyone heard of the six simple machines? Does anyone know what they are? No, gears aren't a simple machine.

At uni I'm pretty involved with the Women in Engineering program we've got running and we do a lot of things with high school students called mousetrap race cars.

We have two wedges for the back axle. Basically what these do are going to fix your back wheels to your back axle so for every rotation that your pulley makes your wheel will make the same amount otherwise we'll get losses and your car will essentially go nowhere.

And we build essentially a mousetrap-powered race car. The kids put it together and I teach them about the engineering principles behind it. A lot of kids really enjoy it and that's all that matters and we get some feedback that say you know, yeah, I can actually consider doing engineering now because I know what it is and it sounds

really great or my cousin's an engineer or I know an engineer, my dad's an engineer, my mum's an engineer, my sister's an engineer and it's really good.

I guess the decision to start engineering is the first thing. Just being aware of what it is and what it entails I think helps that. But for me going in via TAFE was a great way because I got to experience from the sort of basic foundation level which just kind of gave me everything I'd need to start uni.

So having a strong maths and science background is always beneficial for it but don't let it stop you if you don't have that because it's possible.

I'm really interested in what they call biomechatronics which is basically mechatronic prosthesis for amputees or people with limbs that haven't developed and they're getting really sophisticated and we don't have much of it in Australia but I'd really like to go and learn a bit more about it and get a bit more involved with that. But if I can play with trains and cranes that also makes me happy so I can quite happily do that forever.

My name is Amy and this is my story. After high school I worked in the rail construction industry. I did an engineering design course at TAFE. I drive trucks. I'm currently studying a Bachelor of Engineering. I enjoy mentoring potential engineering students. I really love my course at uni.

ANNETTE SHUN WAH: Amy continues to provide inspiration to budding high school students as she continues with her Bachelor of Engineering degree. To learn more about individual pathways to higher education and other students' stories make sure you visit our website at [modelsofachievement.com.au](http://modelsofachievement.com.au). Thanks for joining us. See you next time.

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