From being an Art
Stream student to
become a Civil Engineer

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#### Introduction

- Geotechnical Engineer with more than 25 years of experience
- Pavement & Geotechnical Hub Lead, Eastern Harbour City & Corridors, Transport for New South Wales
  - Leading a team of geotechnical engineers, pavement engineers and geoscientists to deliver the <u>largest infrastructure program</u> that Australia has ever seen
- Moved to Sydney in Term 2, Form 4
- Started engineering career in Hong Kong after graduated from University of Sydney
- Moved to Sydney after 9 years of working experience in Hong Kong

## My school experience with SPCS

- Large school area connected to the Chapel and hospital
- Large class up to 40 students
- At the end of Form 3, I was allocated to one of the 6 combination of subjects based on my academic results
- Supportive teachers gave me courage to sit for HKCEE in Form 4 – English, Chinese, Maths, English Literature, Biology and Religious Studies





#### The Move

- Continued with high school study at Santa Sabina College, celebrated 125 years in 2019 (The Dominican Order)
- Complete Year 11 and Year 12 where the assessments in Year 11 were contributing to the university entrance exam score (Higher School Certificate/Australian Tertiary Admission Rank)
- I had a wide of choice of subjects from both Science and Arts streams, not limited to the subjects I had done in Hong Kong.
- I had selected English, Advanced Maths, Biology, Economics, Society & Culture and Religious Studies
- Small classes, less than 20 students



#### On the Cross Roads

When expressing interests to University Courses, confirm preferences,

- I did not know what I like to do for my career
- Look for information
  - Career exhibition / career advisors at school
  - Role models at home Teacher VS. Civil Engineer





#### On the Cross Roads

- Considering Civil Engineering
- Received different advice from parents and friends
- Engineering IS NOT for Girls?
- Too hard for Girls?
- Convinced to enrol for Interior Design undergraduate course at University of Technology, Sydney.

#### Feminine.

Not aggressive. Dependent. Easily influenced. Submissive. Passive. Home-oriented. Easily hurt emotionally. Indecisive. Talkative. Gentle. sensitive to other's feelings. Very desirous of security. Cries a lot. Emotional. Verbal.

#### Masculine.

Aggressive. Independent. Not easily influenced. Dominant. Active. Worldly. Not easily hurt emotionall Decisive. Not at all talkative. Tough. Less sensitive to other's feeling Not very desirous of securit Rarely cries. Logical. Analytical.

### My Decision

- Do Research
- Make Informed Decision, What if?
- Listened to different perspectives
- Be Accountable of your decision
- Trust in yourself

Last minute enrolment for Civil Engineering at University of Sydney







#### Civil Engineering

Five main areas in Civil Engineering:

- Structural engineering
- Engineering construction & project management
- Geotechnical engineering
- Water engineering
- Transport engineering

Career Path: Complete Bachelor Degree in Civil Engineering, usually 4 years. Received adequate training and obtained sufficient responsible experience, minimum 3 years. Successfully completed the Institution's Professional Assessment to become a Chartered Engineer.

More information about engineering can be found at HKIE



# Civil engineering is everything you see that's been built around us

It's about roads and railways, schools, offices, hospitals, water and power supply and much more. The kinds of things we take for granted but would find life very hard to live without.

#### Geotechnical Engineering

Examine the soil and rock layers that make up the earth in order to determine their physical and chemical properties so that they can design foundations and earthworks structures for buildings, roads, and many other types of projects.

#### Designed

- Slope/retaining wall
- Natural terrain hazards mitigation
- Foundations
- Deep excavations
- Dredging and reclamation
- Ground improvement

















#### Going Back....

What would I tell my 12 year old self?

- Enjoy the secondary / high school experience
- Participate in different activities
- Put yourself forward to any opportunities of public speaking
- Learn time management skills, how to prioritise the competing deadlines
- It's OK to feel stressed, and may be unhappy, talk to others



#### Going Back....

What would I tell my 16 year old self?

- Focus on exams and assessments
- Learn the skills in preparing and organising for exams for future tests in life
- Treasure your friends and classmates
- Appreciate your teachers and school staff who walked with you and prepared you for the lifelong learning adventure
- Know yourself, <u>https://www.16personalities.com</u>



## Any Questions?

Thank you

