**CPE101 Week 1 Section#1 Short Lecture – Introduction of Engineering**

**Lecture 1** – Reflective Writing … How to write?

**Clip 1**- Engineers (Sci-show Kids)

* Make things, Find the way to solve the problem with solution
* Creative, ingenious person
* Ask question and find solution for it
* What Problem?
* Who fix?
* Why?

**Examples** – Building Golden Gate Bridges at San Francisco for transportation

\*Types of Engineering (Examples from Jessi)

-civil engineering

-electrical engineering

-software engineering

-aerospace engineering

Etc.

**Clip 2** – Jessi Has the Problem (Sci-show kids)

* Ask the problem -> what method, what steps, what materials.
* Imagine – Draw pictures
* Create a model(s) – less time/ Not work->come up with a new one.
* Improve the work, make it better or work.

**Clip 3** – Crash Course Kids, What’s an Engineer? #12.1 By Sabrina

* No matter **what kind of engineer** someone is, their job at its most basic level is problem-

solving. Each engineer just specializes in solving certain kinds of problems.

**Clip 4** – Crash Course Kids, the process of engineering #12.2 By Sabrina

* Main Step Conclusions
  + Define the problem
  + Do your research
  + Develop a possible solution
  + Design your solution
  + Build a prototype
  + Test it
  + Evaluate your solution : when an engineer examines all possible solutions to a problem

**Public Fig.1 Traffic Fondue by Chadchart Sittiphan (Bangkok Governor)**

**CPE101 Week 1 Section#2 Short Lecture – Goals & Follow up, Consensus Decisions**

**Instructor :** Tarntip Liuchalermvongs

Curriculum Vitae/Resume :

* CPE#2 KMITT (later KMUTT)
* Aeronautical Radio of Thailand
* Symbolic Animations (Jurassic Park, Founder of Pixar TH)
* UNISYS
* IMPAC Productivity Improvement Consultant
* Chevron
* HR Consultant at Slingshot Group
* AP. HR. for KMUTT
* Downstream at Caltex TH
* Freelancer

\*Note that : PM – Project Manager / OCM – Organization Change Management

Goals & Follow-up

This meets SMART goals at Goals and Plan

S Specific – What do you want to do?

M Measurable – How will you know when you’re reached it?

A Achievable – Is it in your power to accomplish it?

R Realistic – Can you realistically achieve it?

T Timely –

**Autobahn –** Highways with no speed limit in Germany, established in World War II, recommended speed at 130 km/h. The thickness of the highway is 70 cm. and doubled the standard of US street.

**\*Microsoft Planner** - Make the Planner for your Group Project, share your Planner with your TA to get point, use it and SMART goals wisely

**\*DiSC -> Dominance, Influence, Conscientious, Steadiness**

