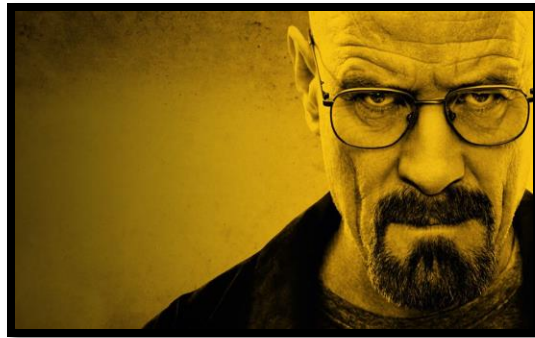


Why I studied Chemical Engineering

or the most EPIC bachelor out there at the moment



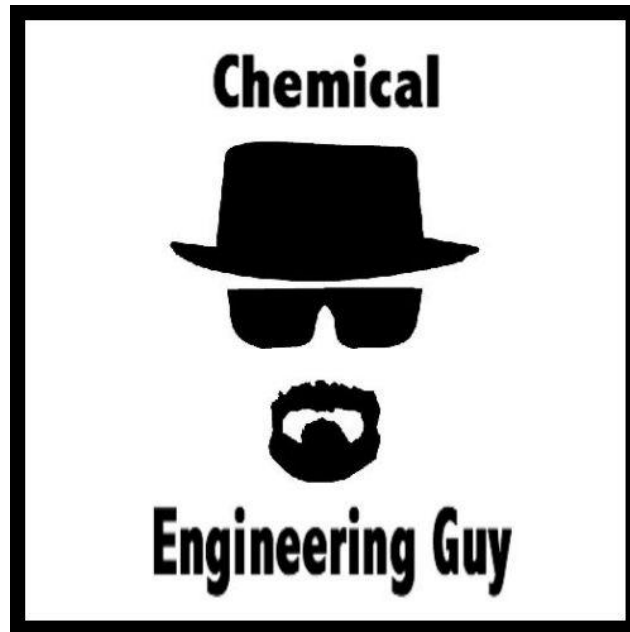
Emmanuel Ortega

a.k.a.

Chemical Engineering Guy

www.ChemicalEngineeringGuy.com





...To my bro, who always is there for me...

...To my mom, because I owe her everything...

A Brief Intro...

Hi there! I'm very happy you're reading my E-Book. This is my very first E-book!

Its about my little story on why I decided to study Chemical Engineering.

It has some serious stuff inside! But I also added some extra spice I'm hoping you like!



That's me getting my Bachelor Degree

If you study engineering or want to become one I believe you will like this!

Or if you used to be like me, totally lost and wondering what Chemical Engineering is all about, you will find some answers here!

Hope you enjoy the E-Book!

Table of Contents

F*kc table of contents

Life is too short...

to have Table of Contents



Here... Take a coconut!

Who am I?

Odds are you don't know what I do so here it goes...

I'm a Chemical Engineer graduated 2012...

Yes I'm kind of young so its ok... you don't need to address me as a Mr. or Sir!



Most creepiest pic I found...

I worked in a Petrochemical Plant in Germany on Process Design... I loved it!

Then got back to Mexico and started to work as a Process Engineer in a Polyester Yarn Production Plant, which was cool since I was able to set conditions and make a lot of mess, but more importantly, learn a lot of work and professional life.

Who am I?

After a while I wanted to start my own path!

I decided to open my new online community for Engineers, specially for Process/Chemical Engineers.

I've always loved teaching and tutoring friends and classmates so this kinda made sense to me.

I have some courses going on in YouTube. You can check them out [here](#). Or go directly to my [website](#).

I manage a [Facebook](#) page... with some nice memes :P

...You can check more about me or my CV [here](#)...

PS: Check out my brother's channel [here](#)!



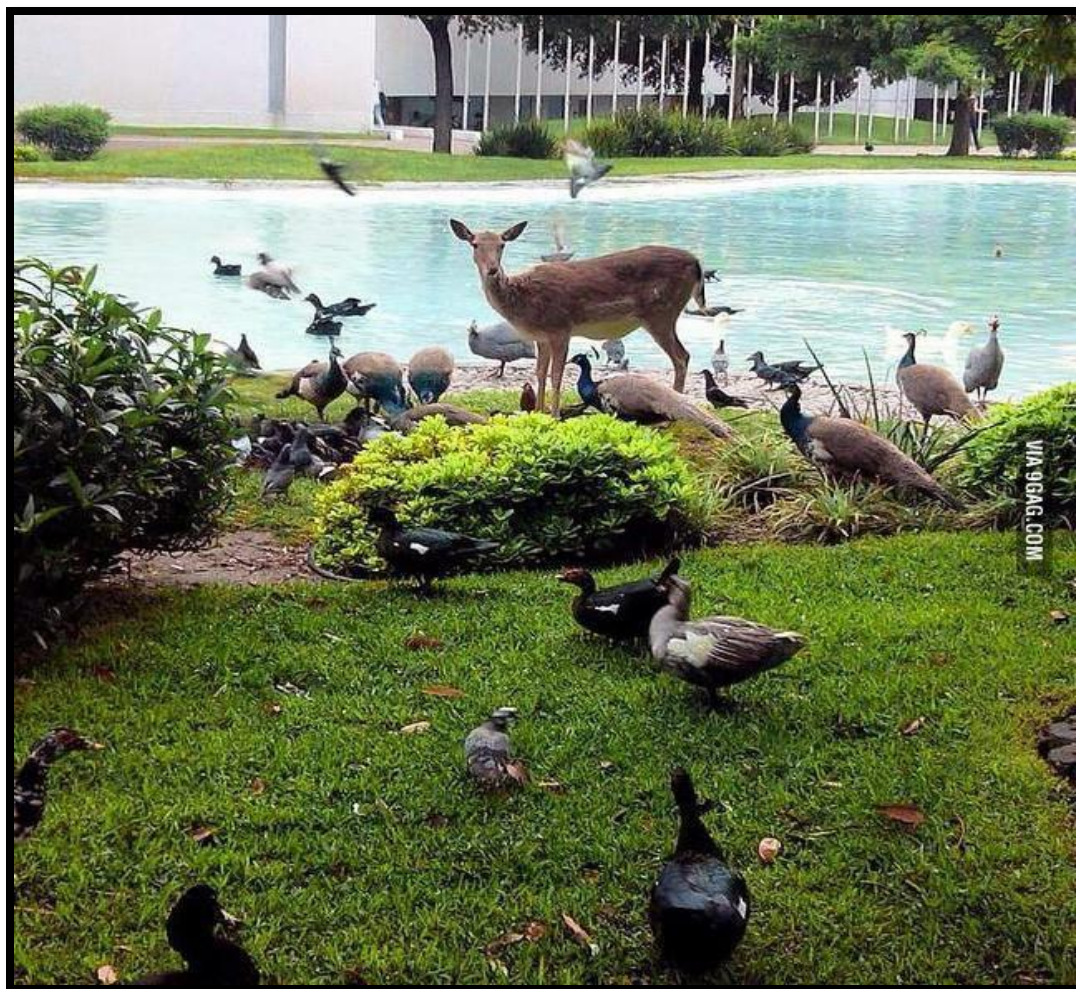
My bro and I getting drunk as usual

Btw...

I studied in [Tec de Monterrey](#), best place EVERRRR...

It even got **9gag** reviews!

Pretty awesome place to study... If you have the opportunity to go as exchange student... Do it!



So... Why ChemEng?

- † knew I always wanted a **math related subject**
 - Engineering
 - Pure & Applied Math (#YOLO)
 - Physicist (#ZeroSWAG)
 - Economist
- **Never**
 - Marketing
 - Business
 - Arts/Philosophy
 - All other random stuff



So... Why ChemEng?

Even though I knew what I didn't want... I didn't know what I wanted...

So I was really f*kced up!

Actually I changed my mind twice before embracing Chemical Engineering

→ Physicist
→ Mechatronics
→ ChemEng

Until we got this invitation on high school...



My first contact with ChemEng

We were in a huge Convention Center in the Uni. Then a volunteer told us something like “wanna see the chemical engineering lab?”

We replied just “yeah” Since we wanted to lose more time... we didn't want to get back to high school any sooner.

I actually expected a chemistry lab... Something like this:



My first contact with ChemEng

The common glassware stuff, dudes with lab coats and protection material.

Many reactants and bottles only god will know...



My first contact with ChemEng

But instead,

I saw this...



My first contact with ChemEng



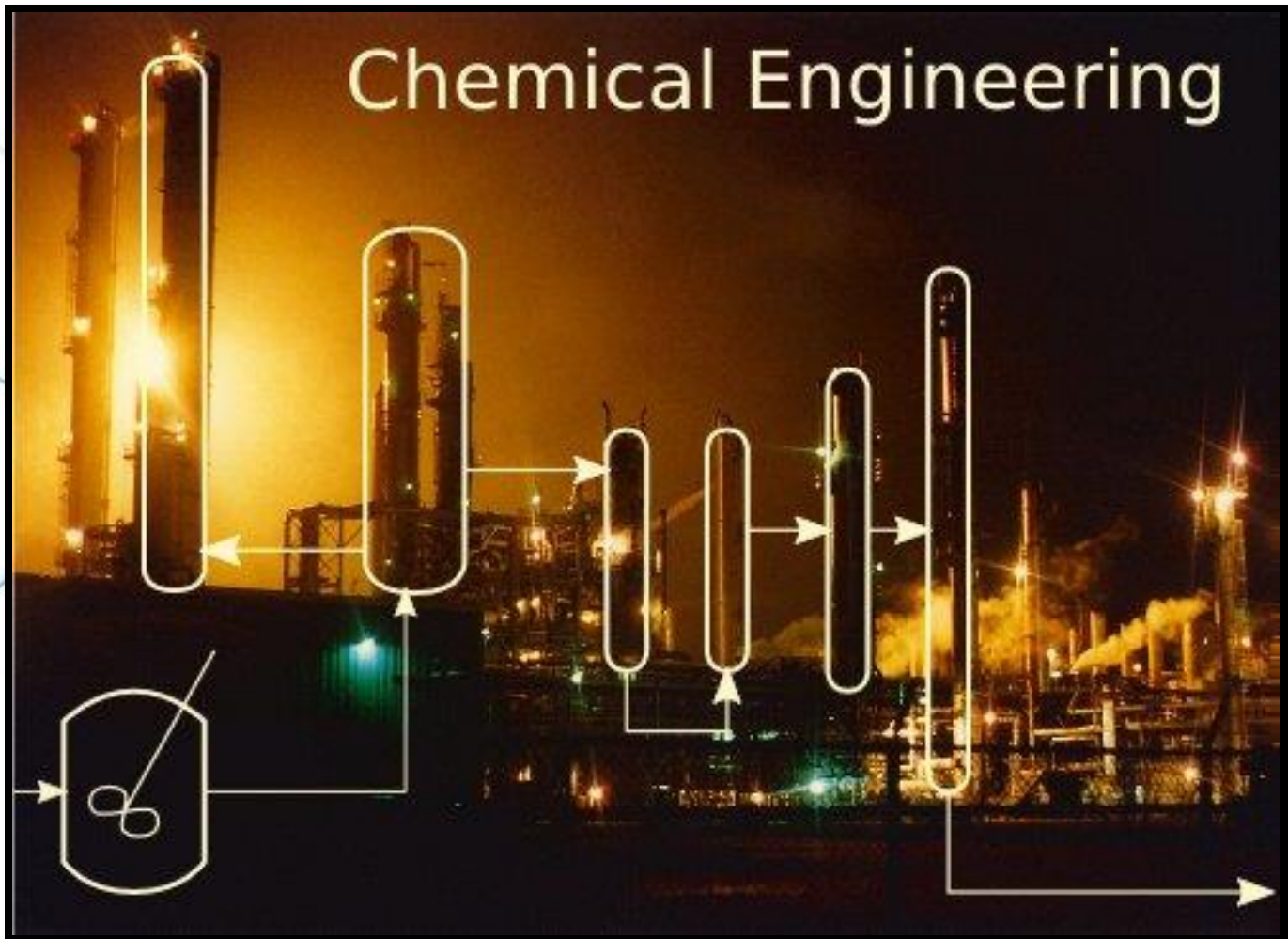
Chemical Engineering Laboratory @ ITESM Campus MTY. Please don't sue me!

Shining tubes, Pumping systems, stainless steel Reactors,
Computers with crazy Software, Pipelines everywhere!

I was in excited!

I knew in that moment what I wanted to study

The PROS of Chemical engineering



The Challenge

- Engineering per se its very challenging. Less than 1%* of the world population is an Engineer.

You gotta be good in math, analytical thinking, work-study under pressure and manage many social skills

When you add up the chemical part... well you know, people reactions is awesome.



My reaction when people tell me they don't believe I'm an Engineer

The Challenge

I wanted something difficult...
I wanted something challenging...
I wanted Engineering

I wanted to be a Chemical Engineer



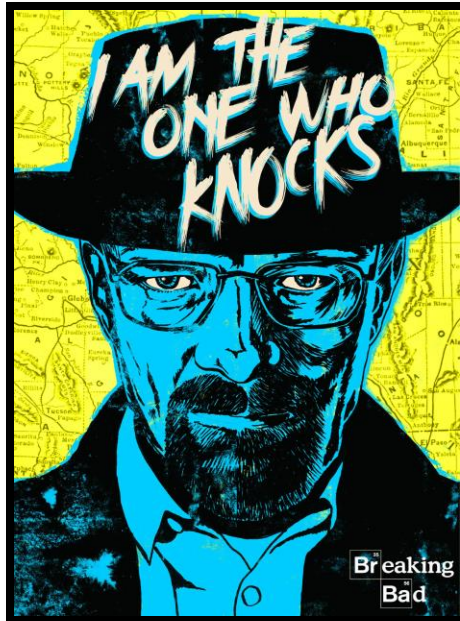
and be rich, I always wanted to be rich

Social Status

Chemical Engineering has been out there since the industrial revolution (about 1800's)

Engineers are respected everywhere, their specific characteristics and skills are unique.

Analytical thinking + Science Knowledge + Creativity = EPICNESS



We are, in fact, the one who knock

While people search for a path... We CREATE our path

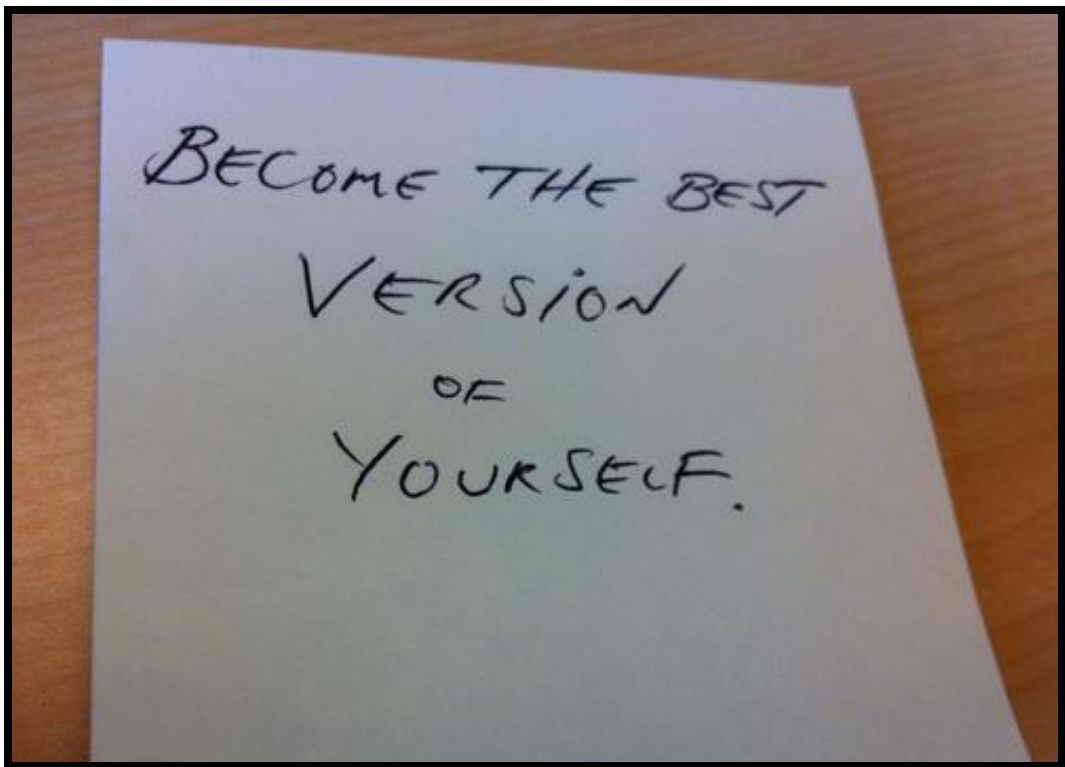
I wanted to be with the best

When I am with the best, I want to be better than the best...

If I'm with nobody. I will eventually become nobody as well...

Engineering is the perfect place to improve skills, get better as a student, professional and as a person.

Continuous Improvement is a KEY element in Engineering



Engineers Transform

We transform, not only products or processes but society and thinking...

Think about the next products or inventions in society...

Then ask yourself: Who did this? What was the impact? What do you make different in your life because of this inventions and products?



Engineers Transform



Ok... we f*kc sometimes.. We ain't perfect



Engineers are Creative

People think math and creativity don't get along...

That's not entirely true. Imagine being creative as a child, thinking nothing is impossible and all your dreams can become true.



Now imagine having the knowledge of how stuff works. Literally how everything in the world works (aka science). Mix your dreams and thinking with that.

You get a REAL LIFE *product* or *service* which will be AWESOME!

The dream comes to reality

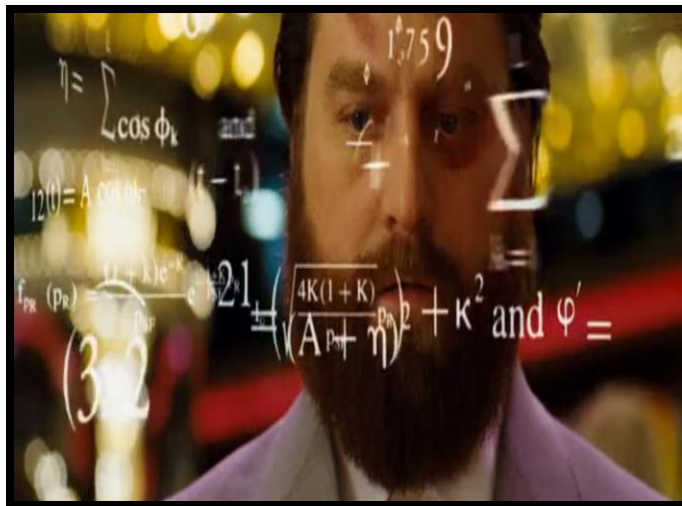
I'm good at Math...

Remember this book is on why I studied ChemEng... Not on why you should do it!

I was always good in math. Actually pumped up my skills with [Kumon](#) (totally recommended). So math was never an issue, actually improved my self-esteem.

Math is useful not because its complex to do. Its useful because you can model REAL WORLD phenomena

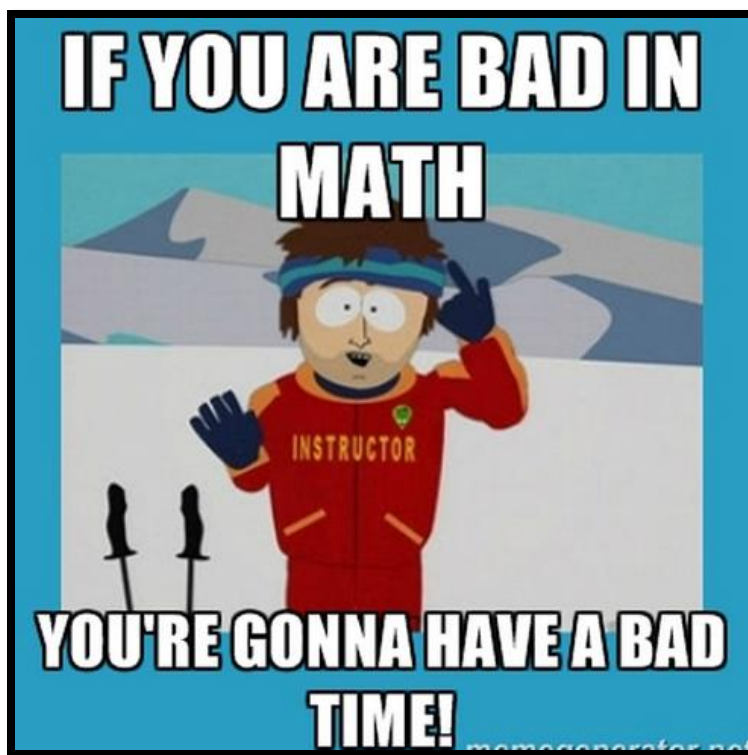
As strange as it sounds, it means you can actually model and see the future. Predict and act! Do and CREATE...



That's me at the cash register as the cashier gives me my change

But.. Are you good at math?

I love when people want so hard to become engineers... So hard that they are willing to have all math related subjects... **That is courage!**

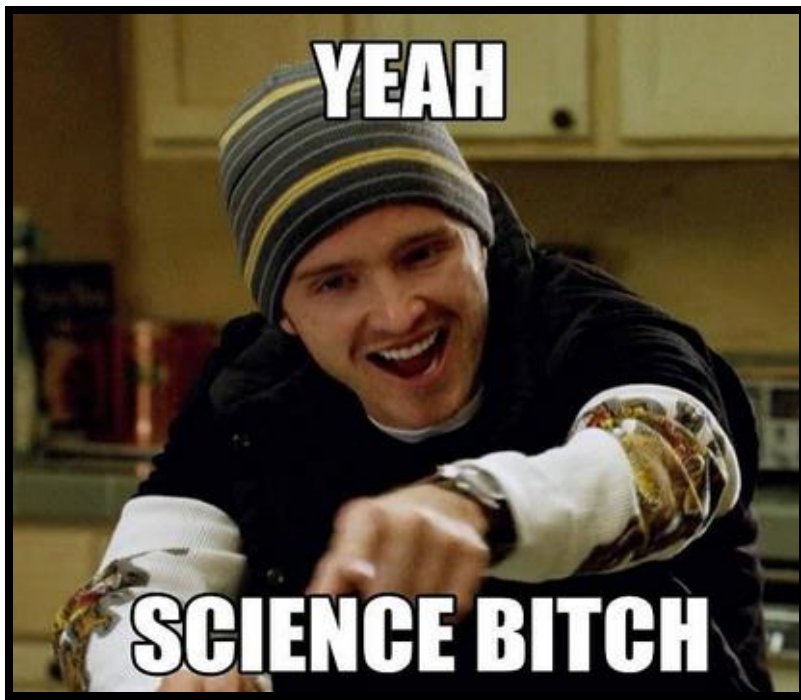


Don't hear other people's opinion. If you are not quite good in math you still **CAN DO IT**... Show them! But more importantly... Show yourself!

And I love sciences

Science is the connection of Math and the Real World.

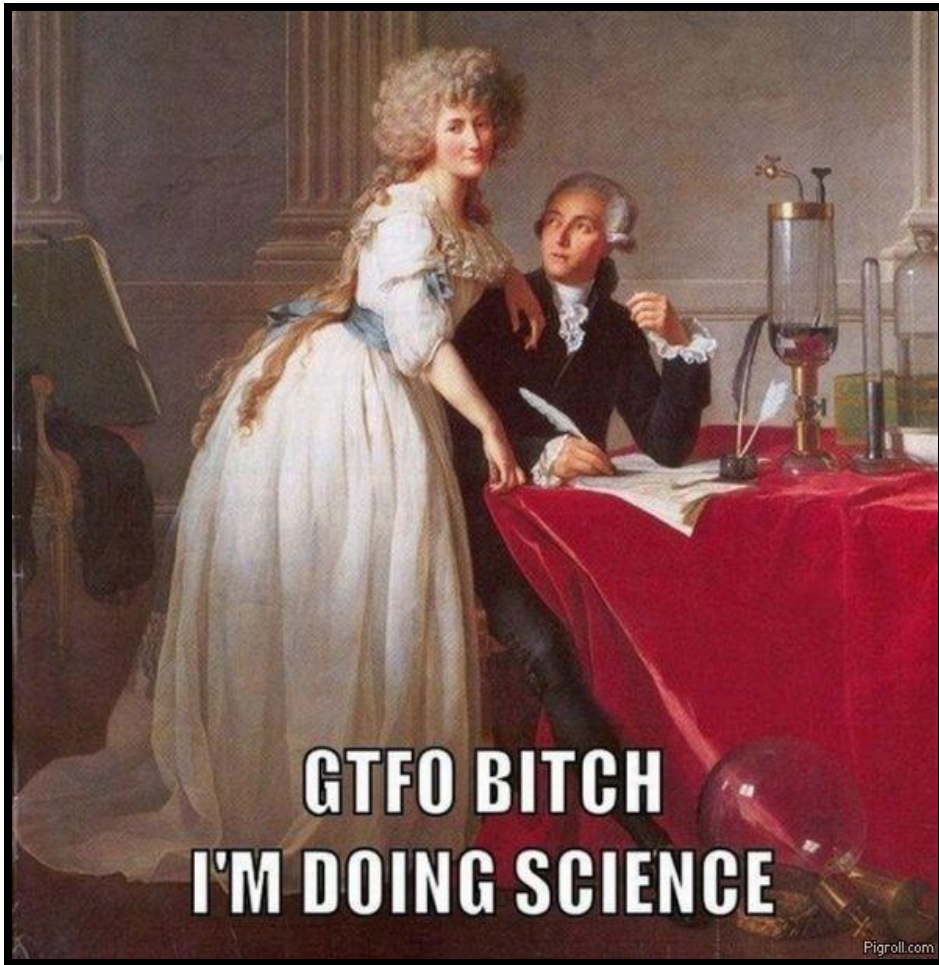
The understanding of all Phenomena



...Chemistry is the study of matter and change...

Makes sense that if you want to do CREATE stuff, you gotta know how to "change" all that "matter".

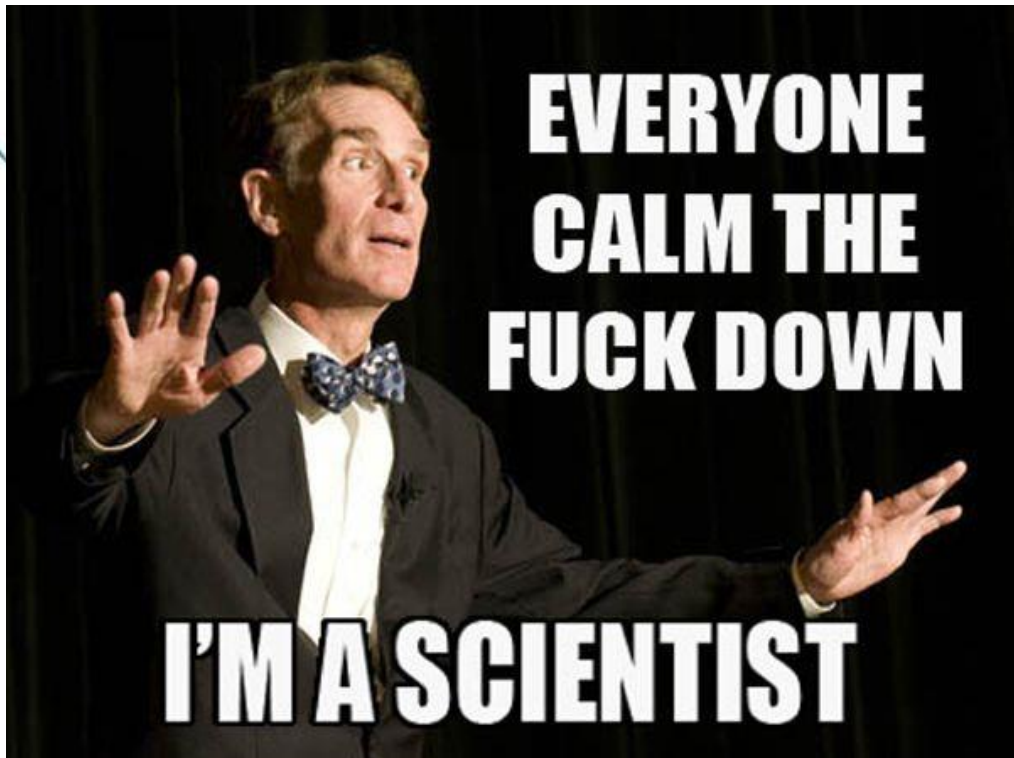
And I love sciences



That's me when my GF used to bother me while studying

And yes... **Chemistry** has something to do with **CHEMICAL** engineering! (and it's not only the name...)

And I love sciences



Odds are, that if you are good in math, you will be good in Chemistry and Physics.

Even though I know many classmates that hated Chemistry but were extremely good in Physics and mediocre in Math.

Study hard... All that you learn today, might be used tomorrow!

I could do stuff in the lab



Theory is ok... but practice makes the master.

Yet...Theory is important. Is cheap and inexpensive. Reading a book and imagine stuff will be easier/cheaper than actually doing it!

The problem with theory is that its difficult to "land it". Theory might take you to skies, but not many times those skies are real.

Practice makes it real. When you interact with reality you use all of your senses and connect many neurons and think more. It becomes REAL.

I could do stuff in the lab

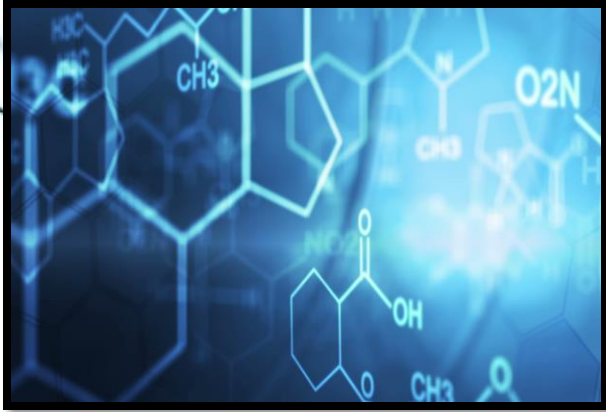
The lab is a perfect place to connect theory and practice. The more you read theory, the more you get form your practice experience.

If you just go to the lab, you will indeed learn a lot. But you will not learn as much as if you got the theory first.

Here is a summary!

Theory	Practice	Result
X	X	Nothing happens here* GTFO!
X	O	You know how to do, but not why or what happens
O	X	You know a lot, but you can't do a lot
O	O	Epic Learning for life

Chemical Engineers Know about...



There is a saying about Chemical Engineers...

We know enough **chemistry** to confuse the Mechanical Engineers...

We know enough **Mechanics** to confuse the Chemist...

And enough **mathematics** to confuse other Chemical Engineers!



More Pros...

...One of the most common reasons I hear from students and colleagues...

I wanted to be rich as f*kc



I wanted to be rich as f*kc

- **Yep...** Its true guys, when I was a kid my dream was to be rich 😊
- I read one day that Chemical Engineering was one of the Bachelor Degrees with the highest incomes per year. So that was nice to hear.



Lets face it guys... Many of us study because we want a nice future... We want to be able to live the life we want to live!

Chemical Engineering might help you with that!

But....

I wanted to be rich as f*kc

- Before continuing... take a look at this graphs, images, diagrams...

Just type in Google image search “engineering top salaries” you should get some of these!

I didn't make them!

12: TOP 10 MAJORS WITH THE HIGHEST MEDIAN EARNINGS**

	Median	Earnings at 25th Percentile	Earnings at 75th Percentile
Petroleum Engineering	120,000	82,000	189,000
Pharmacy Pharmaceutical Sciences and Administration	105,000	83,000	120,000
Mathematics and Computer Science	98,000	75,000	134,000
Aerospace Engineering	87,000	60,000	115,000
Chemical Engineering	86,000	60,000	120,000
Electrical Engineering	85,000	60,000	110,000
Naval Architecture and Marine Engineering	82,000	44,000	120,000
Mechanical Engineering	80,000	59,000	105,000
Metallurgical Engineering	80,000	50,000	106,000
Mining and Mineral Engineering	80,000	52,000	125,000

* Full-time, full-year workers with a terminal Bachelor's.

** There was a tie for last place, and we are representing some, but not all, of those majors that tied.

ChemEng direct application in Petroleum, Pharmacy and even Aerospace Engineering.

I wanted to be rich as f*kc

Figure 1: Top-Paying Majors for 2012-13 Bachelor's Degree Graduates

Major	Average Starting Salary
Petroleum Engineering	\$93,500
Computer Engineering	\$71,700
Chemical Engineering	\$67,600
Computer Science	\$64,800
Aerospace/Aeronautical/Astronautical Engineering	\$64,400
Mechanical Engineering	\$64,000
Electrical/Electronics and Communications Engineering	\$63,400
Management Information Systems/Business	\$63,100
Engineering Technology	\$62,200
Finance	\$57,400

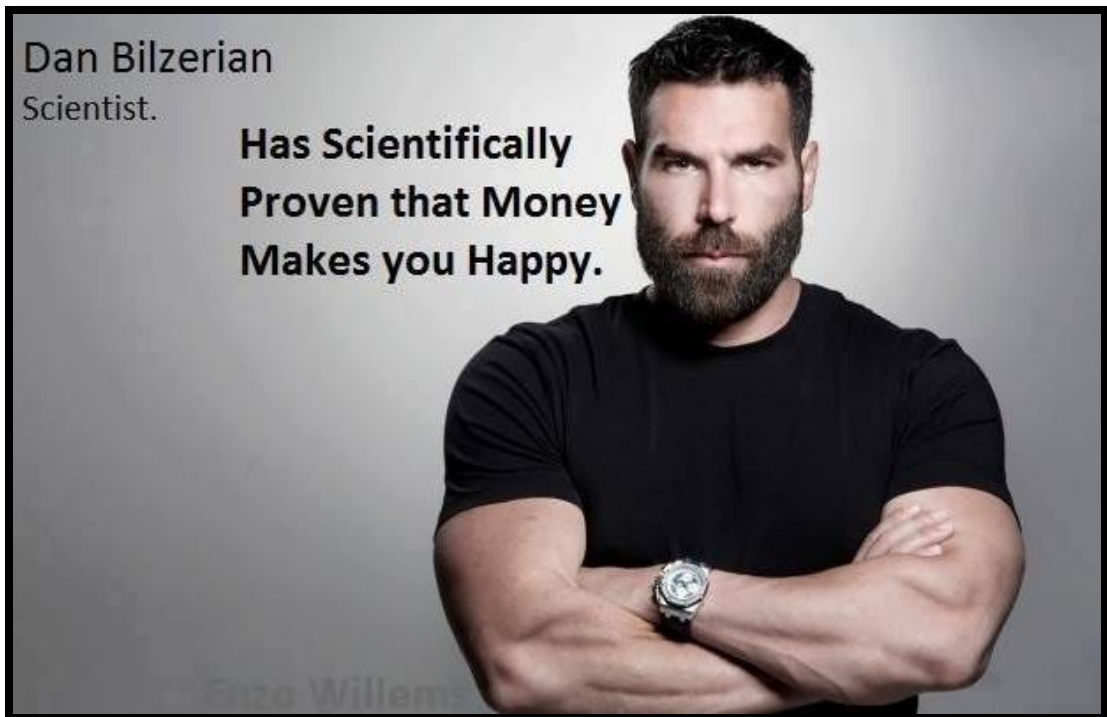
Source: April 2013 Salary Survey, National Association of Colleges and Employers

I wanted to be rich as f*kc

MONEY will not make you happy... At least not completely. So think twice. I enjoyed and love Chemical Engineering.

“I didn’t do it for the money. I did it because it was fun.”

If you don’t like it, or don’t fill passion... It will not be worth for you! Don’t force yourself to do this. Money will be there but you will feel a deep hole working the typical 9-5, Mo-Fri Job. Asking yourself why aren’t you happy!



Anyways... Its always good to know that your Degree will help you to find a good job!

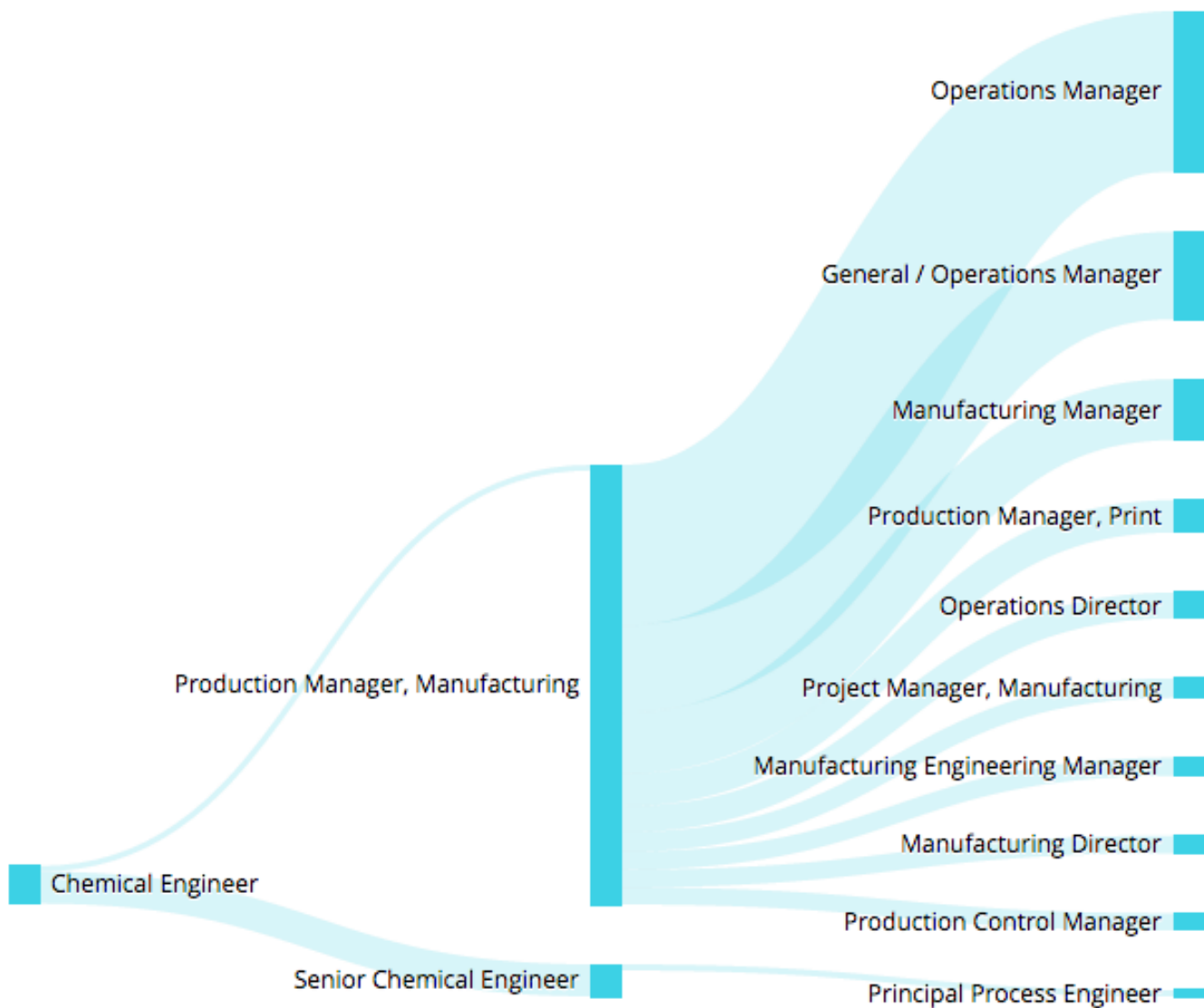
Nice Job Opportunities



Nice Job Opportunities

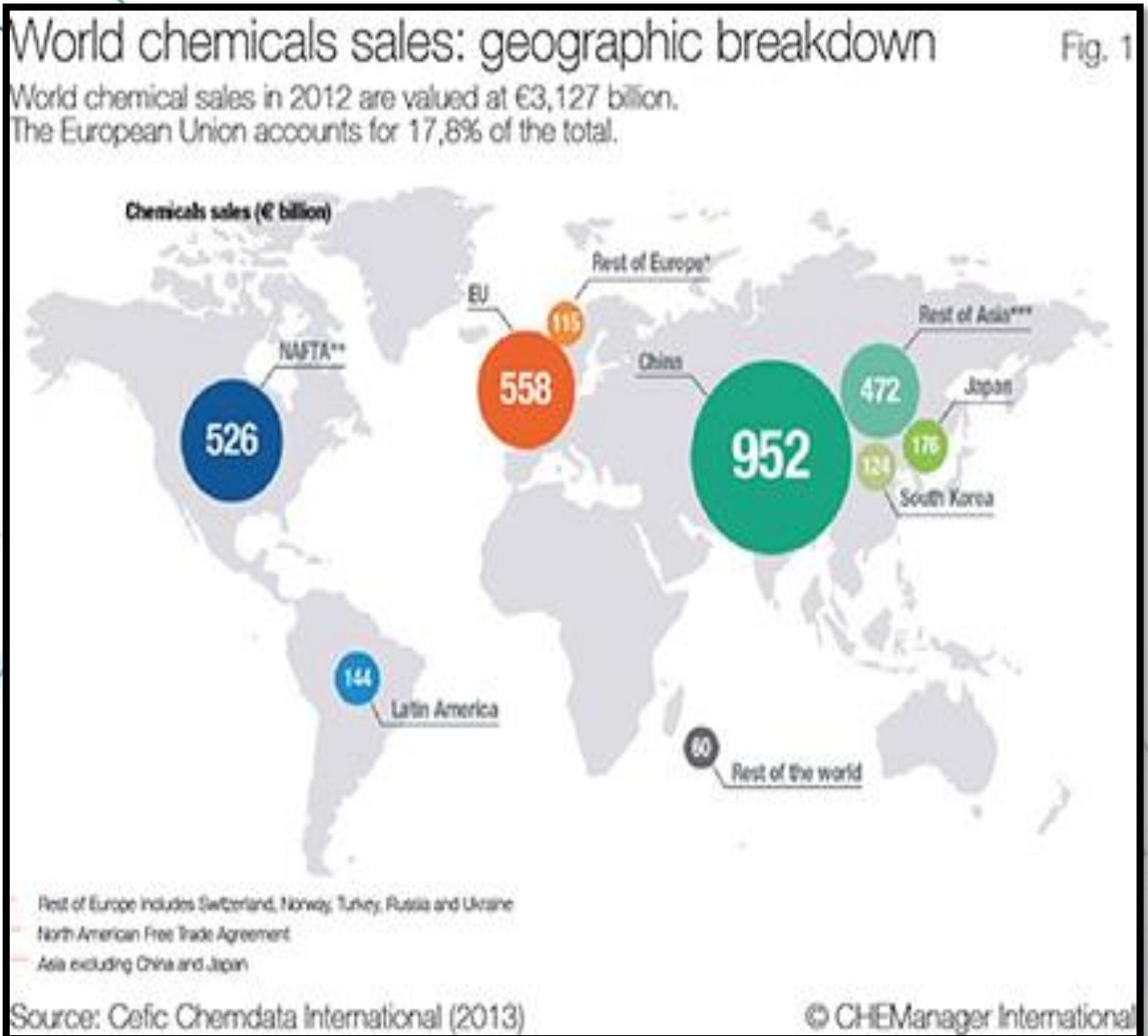
Common Paths in ChemEng that attracted me...

Common Career Paths for Chemical Engineer



Be part of a Global Industry

Its also nice to know there is a family out there in the world!



The background features abstract, flowing lines in shades of light blue and black, with small black dots scattered throughout. The lines are thin and elegant, creating a sense of movement and depth. The overall aesthetic is clean and modern.

...And the companies...

Look all those local Companies!

Many of us, locals in Monterrey, dream to work for one of the “Big” Companies here...




Monterrey is a Industrial City.



*NOTE: Mexico is South from USA. (just in case you were wondering 😊)


Look all those local Companies!

FML

Share   


In COUNTRIES, STATES, AND CITIES, MEXICO, NORTH AMERICA

Is Mexico North or South of the US?

 Answer by Eravathi CONFIDENCE VOTES 11

Mexico is south of USA. North of USA is Canada.

4 people found this useful

 Sign Up to see what your friends like. **Like us on Facebook!**

http://www.answers.com/Q/Is_Mexico_North_or_South_of_the_US

Look all those local Companies!

- CEMEX
- FEMSA
- ALFA
- Cervecería Cuauhtémoc-Montezuma

The Alfa logo consists of the word "alfa" in a bold, blue, lowercase sans-serif font. A small yellow triangle is positioned at the top right corner of the letter "a".The FEMSA logo displays the word "FEMSA" in a large, bold, red, uppercase sans-serif font. Below it, the text "Fomento Económico Mexicano S.A." is written in a smaller, red, uppercase sans-serif font.

Cuauhtémoc
Moctezuma

HEINEKEN MÉXICO

Look all those Companies!

Some other companies in Mexico...

- VITRO
- PEPSICO
- METALSA
- Allen
- PEMEX
- Mexichem

Mexichem.



And all those other Companies in the WORLD



Bayer



THE LINDE GROUP



LOTTE



AIR LIQUIDE

ExxonMobil



We create chemistry



AkzoNobel



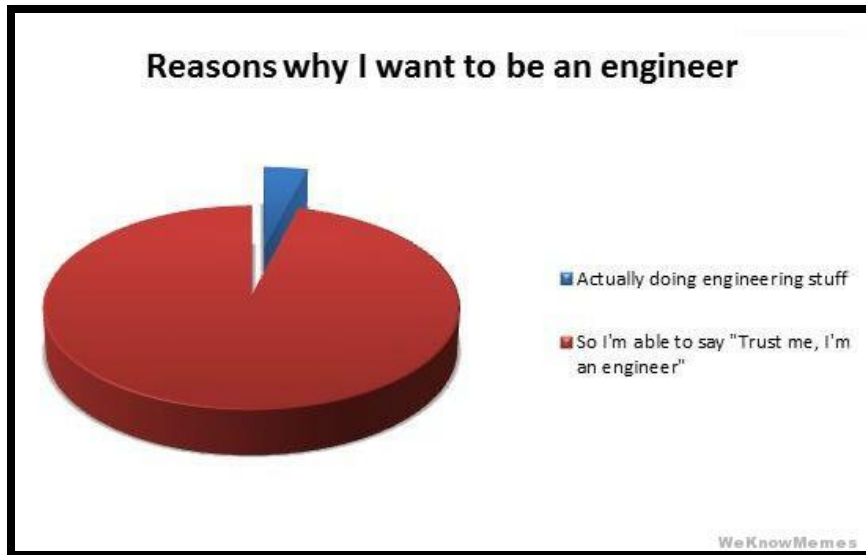
EVONIK
INDUSTRIES



EXTRAS

Some extra stuff on Why I studied ChemEng

So I could finally say “Trust me, I’m an Engineer”



Engineering of Beer Brewing

Beer is a special product in Humanity.

Beer is holy in the Chemical Engineering Realm

Beer is EPIC... I definitively write more on this beautiful topic!



Know WTF I'm consuming

You will learn how stuff is done

You will hate the way stuff is done by the Industry

You will speak about how horrible the stuff is done

Eventually you will get use to it

You will finally embrace it

At the end, you will become one of them



About Project Management

This applies many times to Real-Life Jobs



Finally the Social Networking!

- Social Networking is part of every day life, its not only in engineering...

Networking helps a lot... I'm planning to do a blog post or even an E-Book on the subject...

Keep you posted! And subscribe to my [newsletter](#)!



My 1-year-abroad Experience in Germany

I'll eventually do another E-book on that!

— Keep you posted!



Which is the land of Chemical Engineering



The background features abstract, flowing lines in shades of light blue and black, primarily concentrated in the corners of the page. The lines vary in thickness and curvature, creating a sense of movement and depth. The central text is set against a plain white background.

Conclusion

That was everything guys!

• So that's was my little story. Those are the main reasons I studied ChemEng...

• I really want to know what made/make/will make you study ChemEng or any related field!

Shoot my an [e-mail](#).



Hope you enjoy engineering... It might be hard but the end product is totally **WORTH IT!**

More stuff for FREE!

- Subscribe to my [Newsletter](#)
- Social Networks



*I don't know why I even bother using Google plus

More EPIC stuff!

I teach some courses, in case you wanted to check them, go directly [here](#)!

Since you got these from my [Newsletter](#). You might get a free trial! Check the [“Surprises!”](#) Tab

My [Courses](#)

www.ChemicalEngineeringGuy.com



Some AspenTech Courses!



Aspen Plus - Getting Started!

Emmanuel Ortega

★★★★★ 4.7 (6)



Start modeling your first Chemical Process with Aspen Plus

Emmanuel Ortega

★★★★★ 4.6 (13)



Aspen HYSYS - Basic Process Modeling

Emmanuel Ortega

★★★★★ 4.8 (7)



Aspen Plus - Basic Process Modeling

Emmanuel Ortega

★★★★★ 4.2 (97)

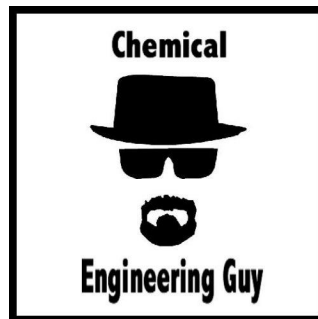
Thank you!

I hope you enjoyed this E-Book

If you really like it, or think someone might like it as well, please share it!

– Here's the [link](#)... its **FREE**

- Or copy-paste this <http://goo.gl/Uol1kb>



– Let me say hi! Send me an e-mail and I'll shoot you back!

If you got this e-mail via a friend... you can always subscribe to my newsletter [here](#)

Hi, Sorry for bad English!

I'm human... I make mistakes!

