

First you plan the work
And then you must work the plan
Then you graduate!

Real capstone projects
Give real world experience
promotes real learning



Thanks, poets!

Imagination,
Dreams become reality
Stretching bounds of minds

Time, not on my side
Teamwork is not sequential
Divide and conquer



Thanks, poets!

Best project ever
Rocket-powered dishwasher
Went over budget :(

Nerdy engineers
Trying to compose haiku
Fail miserably



Thanks, poets!

Teammates are my friends
Our project will make millions
Oops, not enough time

I hate my teammates!
Can I please switch my project?
No? Sigh. Let's do it.



Thanks, poets!

The most important
for students is ownership.
If they only knew.

I need many projects
I need more time to prepare
The students are here!



Thanks, poets!

The design leaps out
fully formed as from Zeus' head.
Don't ask for drawings

Design iterate
Begin, end. Again, again.
Will it end?



Thanks, poets!

At first not convinced
Effort and work help change minds
Instructors were right!

College professor
He is so like Confucius –
Thinks he's very wise



Thanks, poets!

Aim to inspire
Light the internal fire
Give the world their flame

Engineers are good
It takes creativity
to remake nature



Thanks, poets!

Frustrated to tears
Students and faculty too
Then Capstone Design

Problem is too tough
Not enough credits given
Want to try again



Thanks, poets!

Great practitioners
Come from great capstone projects
Thus great thoughts arise

Code is not working
In middle of the demo
Client is waiting



Thanks, poets!

Imagination,
Dreams become reality
Stretching bounds of minds

Without good design
Big planes fall from the blue sky.
Now kids, stay in school



Thanks, poets!

Pulling out my hair
Frustrated, irritated,
And finally proud

This is important
Design methodology
Let us kick some mass



Thanks, poets!

Scope creep does happen
Teams get very frustrated
Welcome to Design!

Something new
Improving our life
Better than before



Thanks, poets!

Apprehensive? Yes.
This is impossible. Yes.
Wow, that was great. Yes.

It's overwhelming
Chaos, wait . . . understood
Thanks for teaching me



Thanks, poets!

A Tribe of seven
From North, East, and South, not West
Have come together

Specifications
Used to satisfy constraints
Reflect a real need



Thanks, poets!

Design: iterate
and iterate and iter-
and iterate

Deer in the headlights
Spinning our wheels in the lab
Finally, success!



Thanks, poets!

Here we go again
Moving students to their best
Hard, rewarding work

My capstone design hell
Benefits are only clear
After I finish



Thanks, poets!

Students work slowly
Teachers want to go faster
Time to light a fire

Too many students
Where to find enough projects?
Surprising results



Thanks, poets!

Volunteered for it
For no apparent reason
Like no other class

Engineers create
We design all the time
Don't bother us!



Thanks, poets!

Things must be designed
We all know that to be true
How do you teach it?

Specifications
Teams, timelines, ideas
Documentation



Thanks, poets!

I can't believe I
Tried to design, not knowing
Fastener design

Excited and scared
Ready to work long and hard
Glad to be finished



Thanks, poets!