

# ME 370: The Mechanical Engineering Profession

Lecture 01: Develop a Career Plan

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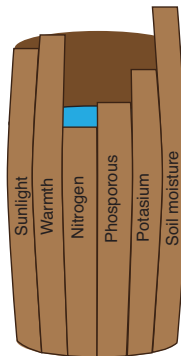
## Purpose

Develop a career plan

## Need for balance

Liebig model of plant health

- Several requirements: all must be present
- Any one component can be the limiting factor
- Imagine a rain barrel having staves of different lengths

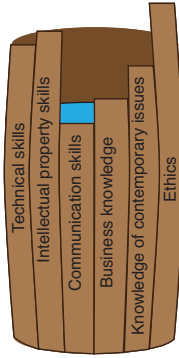


*Liebig's Law of the Minimum*: plant growth is limited by the scarcest resource, not by the total of all resources. See, e.g. [http://en.wikipedia.org/wiki/Law\\_of\\_the\\_Minimum](http://en.wikipedia.org/wiki/Law_of_the_Minimum)

# Need for balance

## Liebig model of career health

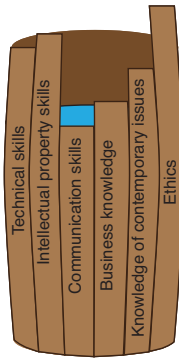
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# Need for balance

## Liebig model of career health

- Can you accurately describe your strengths and weaknesses?
- Which component is the limiting factor in your career?
- Are you working on your strengths?
- Can you manage your weaknesses?



# SMART Objectives

The SMART criteria can be used to set goals

- Specific
- Measurable
- Achievable
- Realistic
- Time-bound

This week's readings have more background

# Specific

Is the goal understandable to other people?

Is it well-defined?

- Job title(s): real positions in real companies
- Technical specialization
- Management roles?

Short term goals need to be more specific than long term goals.

# Measurable

What is your measure of success?

- Title? Salary? Location? Name of company?
- Would not achieving the goal be obvious?

*Work for some company in the northwest*

versus

*Work for Bioject in Tualatin, Oregon*

Hold yourself accountable by setting a goal that would be obvious if you missed it.

# Attainable

Can you get to the goal?

- Do you have the necessary attributes?
  - Work habits, training, grades
- Is this a competitive goal (e.g. becoming an astronaut)?
- Could others with your background achieve this goal?

Big goals can be attained, but will likely need achievable intermediate goals.

# Realistic

Are your priorities aligned with the goal

- Have you demonstrated similar commitment in the past?
- Do other commitments compete for your time?

Are resources and time frame consistent with the goal?

Unrealistic goals guarantee failure. Set goals that teach you how to succeed.

# Time-bound

Good goals have deadlines

Five-year career goal has built-in time limit

- Time limit will help determine realizability
- Set intermediate milestones

Ten and twenty year goals should also be developed

Use time to measure progress. Are you willing to keep yourself on track?

# Are goals necessary?

No.

- Many engineers have successful careers without planning.
- Career plans will change.
- One's ability to predict the future is limited.

# Are goals helpful?

No doubt.

- Setting goals can make you more conscious of choices.
- Setting goals can make you active, not passive.

Many people prefer to act willfully, and not accept what happens to fall their way.