

BUSINESS PLAN

The Know **iit** Ales will be producing a high-quality, inexpensive micro-brew beer for the Illinois Institute of Technology (IIT) population. The production will occur on campus and will be distributed to the campus food establishments. Our Black Gold altbier beers currently include Light Sweet Crude, Crude and Bitumen which cover a range of tastes from light to potent. The beers will be developed further as business proceeds.

The target market consists of IIT students, faculty and visitors. The low price of the beer and high quality will attract these consumers. The market has great potential to allow our business to thrive.

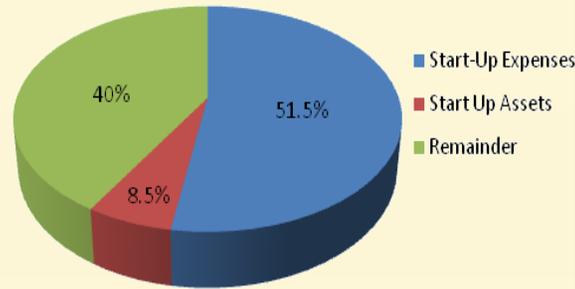
The leadership of the business consists of Dr. Vijay Ramani Board President, Ricardo Rodriguez Chief Executive Officer, Andre Colmenares Chief Marketing Officer, Kolade Adebawale Chief Technology Officer, Jaya Singh Chief Operations Officer and Faisal Alanazi Chief Financial Officer. This talented team will work toward building a strong business and providing a desirable product for IIT.

This strong business plan will provide continuity between the leadership provided by the future students who will control the business. The quick break-even point is a great motivation to move forward with this plan. The Know **iit** Ales has great potential to provide a future famous product for IIT.

FINANCIAL PLAN

Product	Cost	Price
Light Sweet Crude	\$0.95	\$2.25
Crude	\$0.92	\$2.00
Bitumen	\$0.81	\$1.75

Start Up Budget Distribution (\$3300)



Cumulative Net Profit



Know **iit** Ales



IPRO 321: Introduction to Zymurgy

Brewing towards
happiness.



Advisor **Vijay Ramani**

Team Leader **Ricardo
Rodriguez**

Know **iit** Ales

OBJECTIVES

Design and construct a beer-brewing system from scratch and employ this system to brew two batches of beer (after acquiring knowledge of the science in beer-brewing). Estimate the economics of beer-brewing and establish a robust strategy to market the beer, after thoroughly understanding the regulatory issues involved.

Goals:

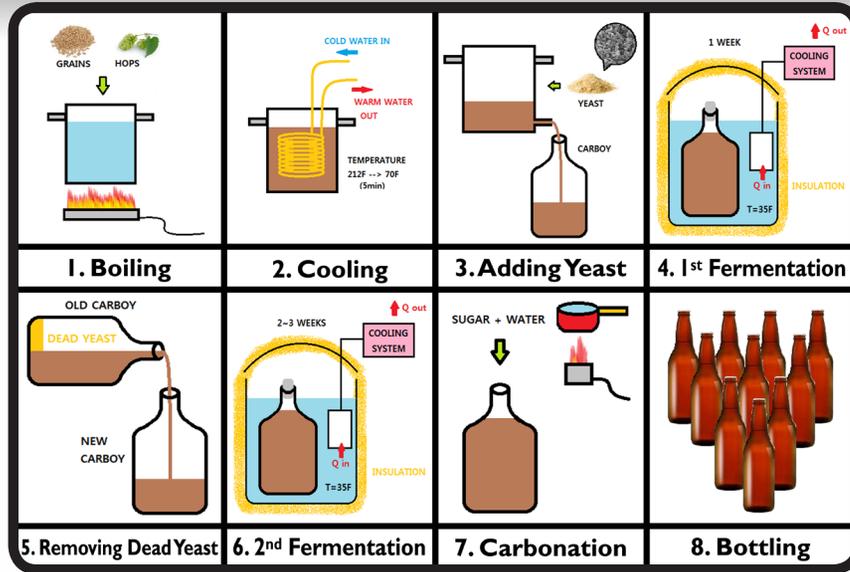
1. Conceptualize/Design Brew-Train
2. Acquire detailed knowledge of the science behind brewing
3. Select 2 different classes of beer to be brewed
4. Construct Brew-train and complete brewing
5. Carefully ferment beer after filtration
6. Store fermented beer in kegs/bottles for distribution
7. Perform economic / regulatory analysis on the cost of brewing beer
8. Market the product to IIT students and staff through offerings at the faculty club
9. Enter beer into an official contest to be judged for quality.

What sets us apart:

While the *Funky Brewsters* and the *Blood, Sweat, and Beers* brewed a Blonde Ale and a Bavarian Witzen, respectively, the Know **iit** Ales decided to brew the more complicated Altbier. An Altbier is an ale fermented with top fermenting yeast at lager brewing temperature. This required extra consideration to insure the beer staid at 50°F and provide team members with the opportunity to apply thermodynamic principles to the brewing process.

Black Gold

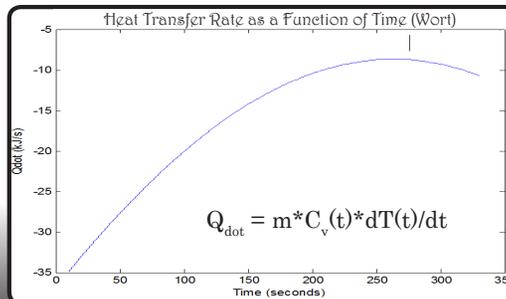
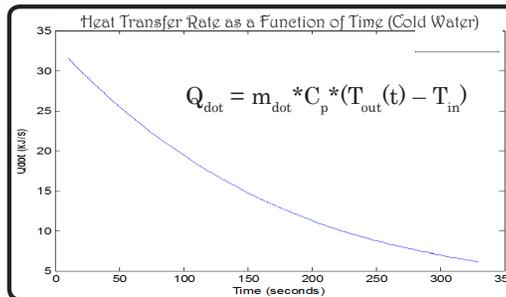
PROCESS



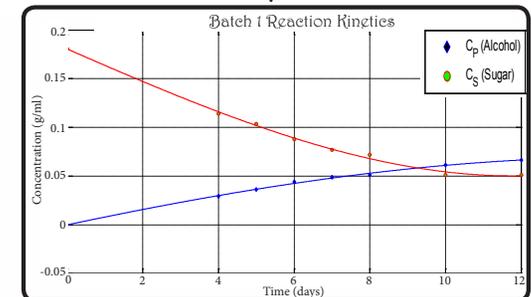
- **Batch 1:** Light Sweet Crude: Altbier, Reaction kinetic and thermodynamic data provided below...
- **Batch 2:** Bitumen: Ale Exact same recipe as Batch 1, but at room temperature. No reaction kinetic data due to quick initial fermenting time.
- **Batch 3:** Crude: Ale, Similar recipe to Batch 1, with different yeast. Reaction kinetic data provided below...

MODELS

Efficient Cooling system cools wort from 212 °F to 70 ° F in under 6 minutes.



Primary Fermentation in Batch 1 finished in 11 days.



Primary Fermentation in Batch 2 finished in 4 days.

