

Innovation Engineering Green Belt Course



Learn to ideate, test, maintain and sustain an innovation system.

The Innovation Engineering Green Belt course is designed for a small group of team members, from one company, to work and train together and apply the skills learned from the Innovation Engineering (IE) system immediately on a 'real-world' company project.

Attendees will participate in a series of exercises to learn the fundamental tools for creating, communicating and commercializing meaningfully unique ideas. Participants will then apply the IE methods to address a specific opportunity or problem within their organization while generating at least 50+ ideas that can be implemented immediately.

Who Should Attend

- Manufacturing managers
- Quality assurance managers
- Manufacturing supervisors
- Machine operators
- Chief Operations Officers
- Customer Service managers
- Marketing Managers
- Others interested in innovation

Learning Objectives:

Upon completion of this course, participants will know/understand:

1. The factors needed to create great innovations
2. How to apply Fermi estimating to define a value for your innovation pipeline
3. A better way to generate ideas that beats brainstorming
4. A systematic approach to communicate ideas internally
5. A fast way to either advance or kill ideas

Class Pre-work:

- Watch a video for each of the three focus areas - Create, Communicate and Commercialize and complete a quiz on each.
- Create a blue card prior to class. (Template and guidance to be provided prior to class)

Post Class Requirements

- Three homework assignments to demonstrate understanding of the "create, communicate and commercialize" methods. Three weeks to complete the assignment; once turned in, each assignment will be graded and returned within 24 hours.
- A written reflection of what you learned along the way.

Cost: \$6,900.00 per company

Date: August 30 – September 1

Location: Hunt Library,
NC State University Campus,
Rooms 4105 and 4107

To Learn More:

iesservices@ncsu.edu
or 800.227.0264

Agenda

Day1

Intro & Kick-off
Innovation Engineering Overview
Lunch
"Create" Exercises
Homework assignments & Day 2 preview
Day 1 wrap-up
Adjourn

Day2

Blue Card Review
"Communicate" Exercises
Create session 1
Lunch
Create session 2
Yellow Card selection
Intro to IE Labs for projects
Teams – FFFC Cycles of Learning
Team report outs
Homework assignments & Day 3 preview
Day 2 wrap-up
Adjourn

Day3

"Commercialize" exercises
Introduction to Fermi estimating
"Math" exercise
Lunch
Teams – FFFC Cycles of Learning
Team report outs
Day 3 wrap-up
Adjourn

"I was surprised about the great diversity of ideas. Some that seem ridiculous can actually spark very good and innovative ideas."

Design Engineer at Food Packaging Company.

Industry Expansion Solutions (IES) is the engineering-based, solutions-driven, client-focused unit of NC State University. Our broad portfolio and deep industry expertise help organizations grow, innovate and prosper. Our extensive partnerships with business, industry, education and government generate a unique culture of collaboration that provides access to cutting-edge expertise, research, and technology.



Does the course fee include meals?

A. We will serve lunch and breaks daily.

How large should our team be?

A. It will depend on the size of your organization, but 3-6 will be typical. Six is the maximum number.

How many companies will be part of the class?

A. The class will be limited to four companies, including your organization.

What should we bring to class?

A. Each organization should have a Blue Card that will be developed prior to class. Each participant should bring a laptop (or suitable mobile device) with Wi-fi capability.

Will we be asked to divulge any confidential/proprietary info during class?

A. No!

How should we dress?

A. Business casual. We will be moving around within the classroom so dress comfortably

"I am very encouraged about the potential culture change for our company. Currently, we do not have a system for Innovation and tend to jump directly from Idea to Development. This typically has lead us to invest heavily in resources and overlook Death threats that would eventually derail or delay progress or the project all together."

R & D Engineer