

**Wellcome to**

**42435 Knowledge based entrepreneurship**



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**Important – Important - Important**

**Submit Your ID-form**

via e-mail to [johe@man.dtu.dk](mailto:johe@man.dtu.dk)

before Tuesday, 31 August 12:00 noon  
(tomorrow)

***No ID-form received = exit from the course***

Download the ID-form from [www.entrepreneur.dk](http://www.entrepreneur.dk) – or from CampusNet

## AGENDA

### Course Introduction

#### COMMERCIALS:

13:10 – 13:25 **The Venture Cup Competition**  
Zenia Francker: zf@venturecup.dk

15:00–15:15 **Startupbootcamp – and [www.startupdenmark.dk](http://www.startupdenmark.dk)**  
Alex Farcet: af@startupbootcamp.dk

#### LECTURES:

13:30 – 13:55 **The Importance of Entrepreneurship**

14:00 – 15:25 **The course rationale, objectives, pedagogics, lecture plan etc**

14:30 – 14:55 **The project work**

Entrepreneurship is -  
**the pursuit of opportunity without regard to  
resources currently controlled, for the creation  
of new economic value**

*Howard Stevenson, Harvard Business School*

*The element of madness in entrepreneurship: readiness for risk:*

***If you think, risk can be worthwhile –***

*The element of personal drive in entrepreneurship:*

***If you want to make a difference –***

*The element of action in entrepreneurship:*

***If you want to get things done –***

***- you are an entrepreneur***

## The Importance of Entrepreneurship

### *Entrepreneurs revitalize industry after recessions*

Germany's and Japan's recession, early ninety-nineties: Massive investments in industrial development had little effect due to the lack of a vibrant entrepreneurial culture that fosters enterprising and competent entrepreneurs and intrapreneurs.

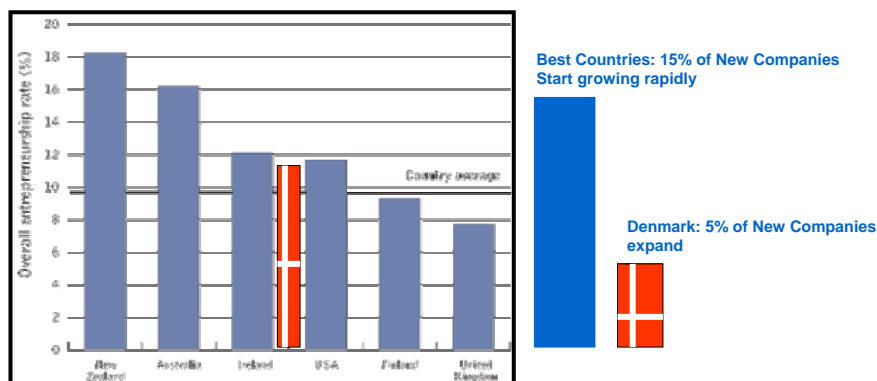
### *Entrepreneurs drive long term development*

By example: 8 out of the 25 biggest companies in **US** did not exist in 1960. In Europe all 25 biggest companies were big also in 1960  
**Germany**, 1870-ties: die Gründerzeit: French war reparations are invested in new German industry to create an economical lead that gave Germany a overwhelming competitive strength  
 Now **China** strongly encourages and promotes entrepreneurship

## The Importance of Entrepreneurship

### The Global Entrepreneurship Monitor GEM:

Variation in rates of entrepreneurship may account for as much as one-third of the variation in economic growth



**The growth-oriented start-ups create > 85% of the jobs**

## The Importance of Entrepreneurship

### Challenges 2010:

- **New industrialized nations take over classic industry.** Massive outsourcing of jobs from west to east still ongoing
- **Large companies locked in heavy investments do incremental innovation.** Radical break-through and expedient action is the entrepreneur's turf
- **The shake-out of less capable companies during the economical recession opens new opportunities when things turn to the better – and hence we need a strong and skilled community of entrepreneurs standing ready to facilitate a rapid recuperation.**  
(Change is the fuel of entrepreneurship)

## The Importance of Entrepreneurship Teaching

### Effects on National-Level High-Growth Entrepreneurship

<i>Entrepreneurial Framework Condition</i>	<i>Effect</i>
Availability of finance for entrepreneurial firms	Neutral
Policy support for entrepreneurial firms	Negative (p<0,10)
Regulatory compliance costs	Negative (p<0,05)
Entrepreneurship education (primary level)	Neutral
Availability of business services	Neutral
Market change and dynamism	Neutral
Physical infrastructure	Neutral
Entrepreneurial culture	Neutral
<b>Entrepreneurship education (universities)</b>	<b>Positive (p&lt;0,05)</b>

**Source: Levie & Autio 2007**

Notes: Random-effects panel regression in 7-year panel of 48 countries. Controls: gdp per capita, gdp per capita squared, industry structure, gdp change (t-1), population growth rate. 2-tailed significances.



## The Importance of Entrepreneurship The Role of Universities



### Massachusetts Institute of Technology

- One in four faculty involved in technology venturing
- 28.500 companies founded by graduates and faculty since 1861
- Employees at MIT- companies ~ 3.300.000
- Turn-over of MIT- companies > \$2.000Billion/yr  
(Denmark, GNP app: \$ 350 Billion/yr)
- If a nation: MIT Business Community the 11th largest in the world

Source: Mandag Morgen Aug. 2010



### From a personal perspective:

1. Chances of you setting up a business after having concluded a good e'ship course increase by X3
2. Chances that your business will survive and grow are significantly increased by good E'ship T&T.
3. In US: salaries of graduates with e'ship components in their course CV exceed those of their less entrepreneurial fellows by app. 30%
4. Basic business understanding combined with enterprising traits are highly appreciated qualifications of R&D staff in today's industries

## The Entrepreneurial Course:

### **OBJECTIVE:**

Develop your entrepreneurial  
**mindset & skillset**

### **PEDAGOGICS & DIDACTICS**

Lectures -> knowledge

Project => knowledge -> routine

## Entrepreneurial Mindset

- The Near-Entrepreneurial Experience
- Introduction to a Working Life
- Develop trust in own competencies
- Get inspiration from successful entrepreneurs

The MINDSET:

**To be an Entrepreneur, You need an Eye for Opportunities -**

*Skulle jeg ønske mig noget, da ville jeg ikke ønske mig rigdom eller magt, men mulighedernes lidenskab.*

*Det øje som overalt, evigt ungt, evigt brændende ser muligheder.*

**Søren Kirkegaard**

*Enten – Eller, Diapsalmata, SKS bind 2, s. 50*

*Were I given a wish, I would not want wealth nor power, but **the passion of opportunities.***

***The eye that** everywhere, ever young, ever passionate, identifies opportunities.*

**Søren Kierkegaard, philosopher, 1816 - 55**

The MINDSET:

**- But it is useless unless You Act!**

*Hvis Individet ikke vil handle, kan Skæbnen ikke Raade*

*Søren Kirkegaard, filosof, 1816 - 55*

*If an Individual does not Act, Destiny cannot Prevail*

*Søren Kierkegaard, philosopher, 1816 – 55*

**Luck is Earned**

*John Heebøll, e'ship teacher, 1948 –*

**The entrepreneurial mindset can be provoked**

*Prof. Tanake, Tokyo, Japan, 1992*

## SKILLSET:

High Tech Venturing is a complex, demanding and multidisciplinary process.

Success depends on multiple competencies, networks, advanced technical knowledge, business experience, etc.

<b>Multiple Competencies</b>	<b>Teaching (12 lectures)</b>
<b>Business experience</b>	<b>Training (A business plan)</b>
<b>Networks</b>	<b>Group work, Venture Cup Mentor program</b>

## Learning Objectives

A student who has met the objectives of the course will be able to:

1. Identify business opportunities
2. Develop business ideas (Opportunity driven creativity)
3. Develop business models
4. Analyze markets for technological products and services
5. Interview customers
6. Analyze customer value creation
7. Plan the establishment of a company (Business planning)
8. Determine capital requirements
9. Establish cash flow projection
10. Establish budgets on profit/loss, assets/liabilities
11. Calculate an equity investment
12. Specify management competence profiles

## COURSE DESIGN

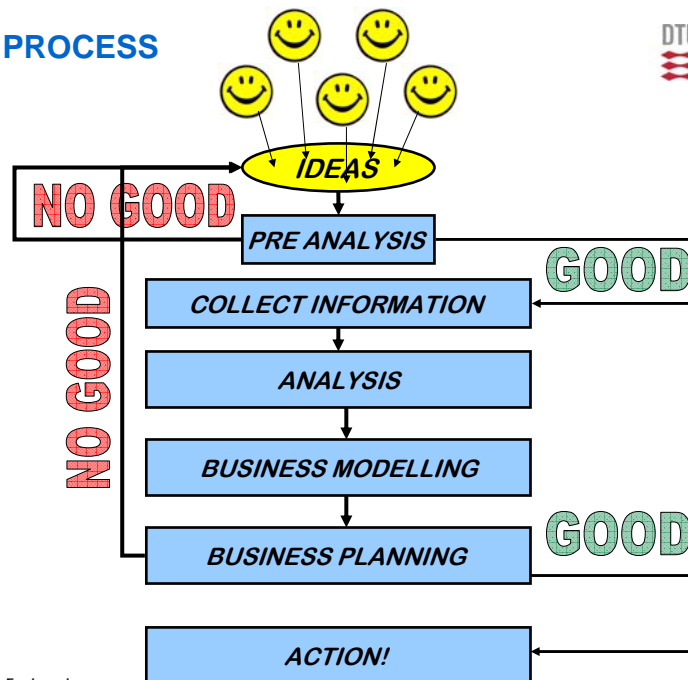


**Idea:** allow you to get started on idea generation -> business modelling -> business planning **ASAP** – and then top up the tool box. So:

- **First four lectures:**
  - **BASICs in Business Development**
    - Personal requirements
    - Opportunity recognition + idea generation
    - Success- and non-success in business formation
    - Business modelling and - planning
- **The rest of lectures:**
  - Market research & analysis
  - Sales & Marketing
  - Business management & admin.
  - Basic IP + legal stuff
  - Cases and entrepreneurs

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Technical University of Denmark

## COURSE PROCESS



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## WORK PLAN

Reference is made to the Course Manual

### Tentative time schedule:

Kick-off: Team fully operational.	Week 36	10 September
1. milestone: Product /business concept OK	Week 40	8 October
2. milestone Market research finalised	Week 43	29 October
Project deadline: Business plan completed	Week 48	3 December
Deadline for submitting business plan:	10 December 2010	12.00 noon
Exams:	15, 16, and 17 December 2010	

## COURSE MATERIALS

1. Knowledge based Entrepreneurship (textbook)
2. Overheads
3. Hand-outs
4. Start-up Handbook (McKinsey)

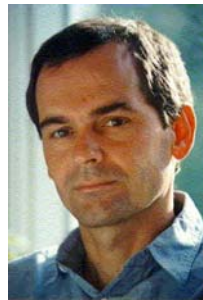
Items 2 – 4 are available at  
[www.entrepreneur.dk](http://www.entrepreneur.dk) and CampusNet

Important hand-out:

**The Course manual**

**> The Course plan**

## The Teacher



- M.Sc. CE. DTH, 1974
- Mil. service, Research Dept.
- VIP, DTH, 1976 – 1988
- DTU Incubator 1988 – 2000
- DTU Innovation 2000 – 2004
- Associate prof., E'ship, DTU Management, 1992 ->
  - CEO, Gastrotechnology, 2004 -> 2006
  - Boardmember, app 15 Start-ups
  - Chairman, Swantec ApS
  - Own company: Danish Product Development ApS