

Akademiet for Talentfulde Unge april 2013



Innovation Teknologi Business

**Bachelor of Science
in Engineering**

**Master of Science
in Engineering**

ATU, 2013
Arne Bilberg



FACULTY OF ENGINEERING
UNIVERSITY OF SOUTHERN DENMARK.DK

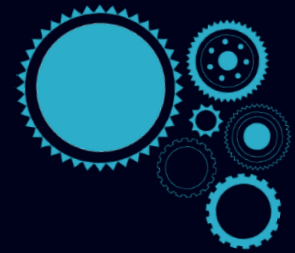
Agenda



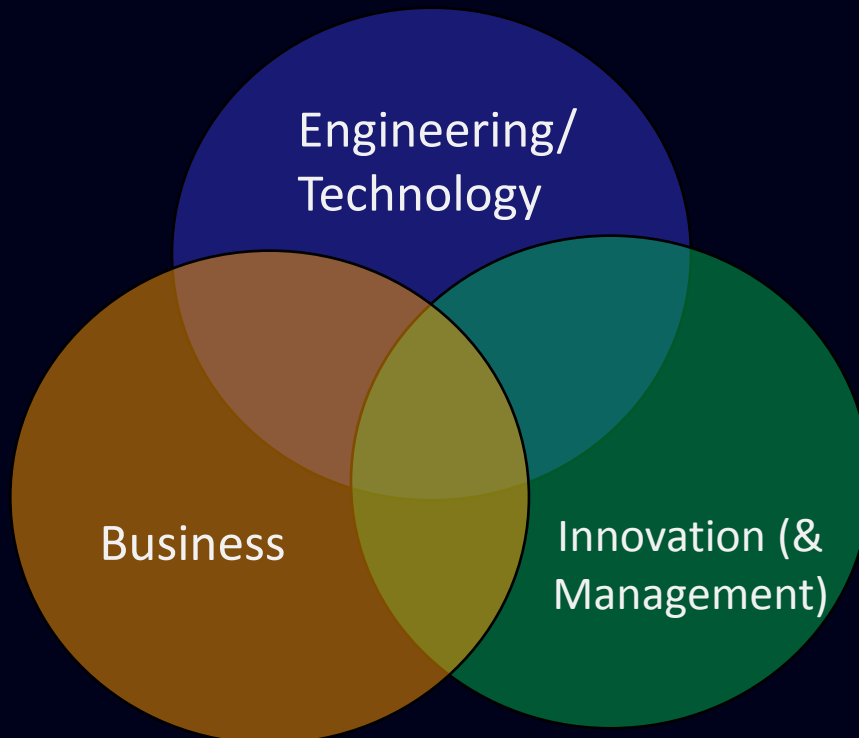
- Innovation and Business
- Studieprogram
- Projekter
- Hverdagen på I&B
- Hvorfor I&B ?
- Hvorfor Sønderborg?



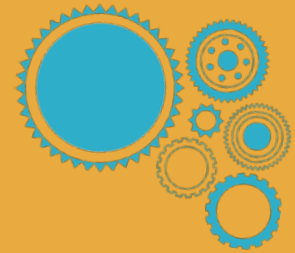
INNOVATION AND BUSINESS - 2013



Innovation and Business combines innovation, engineering/technology and business disciplines.



Innovation and Business Studieprogram



- **3 år -> Bachelor**
 - For at læse videre

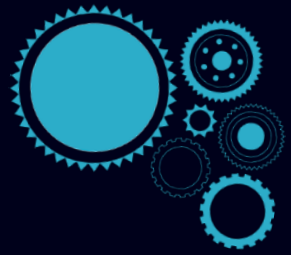
- **+ 2 år -> Master**
 - Både læse videre og komme ud på arbejdsmarkedet



Studieprogram (B.Sc.)



Innovation and Business is



Technology

Management

Use and design

Business

The practical use of
learned theory



Structure of the I&B 3 year bachelor program



- Business
- Technology
- Use and design
- Management
- Electives
- Theory in use

6. sem	Micro economics	Bachelor project		Elective	Supply chain Management
5. sem	Business models 2	Experts in teams	Science theory	Innovation Management	Operation Management
4. sem	Elective	Starting a company	User centered design	Embedded systems 2	Operation Management
3. sem	Business models	Making business	Embedded systems	Sensors & electronics	
2. sem	Market intelligence	Technology in use	Ideas & creativity	Basic Mechatronics	
1. sem	Business administration	Discover Innovation	3D Design	Basic Mechatronics	



Projekter - proces

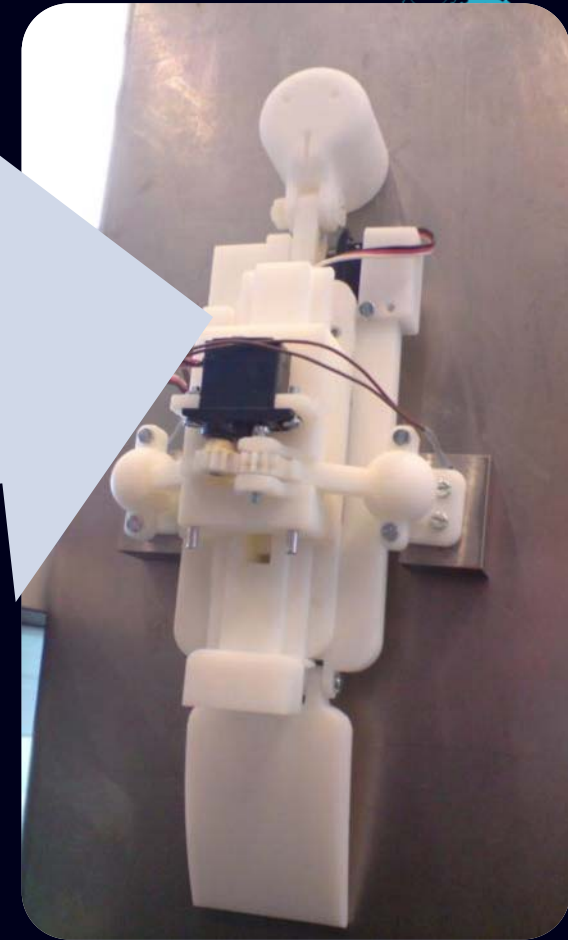


The Woodpecker

Animal

Movement

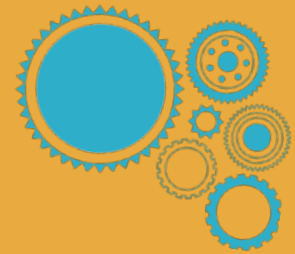
Crawler



Company contacts



Studieprogram (M.Sc.)



Civilingeniør



- Bachelordelen er grundlaget for din specialisering
- Bachelorprojekt og valgfrie studier, ofte i samarbejde med virksomhed
- Kandidatdel: Specialisering i dit valgte emne
- Kandidatdel: Speciale

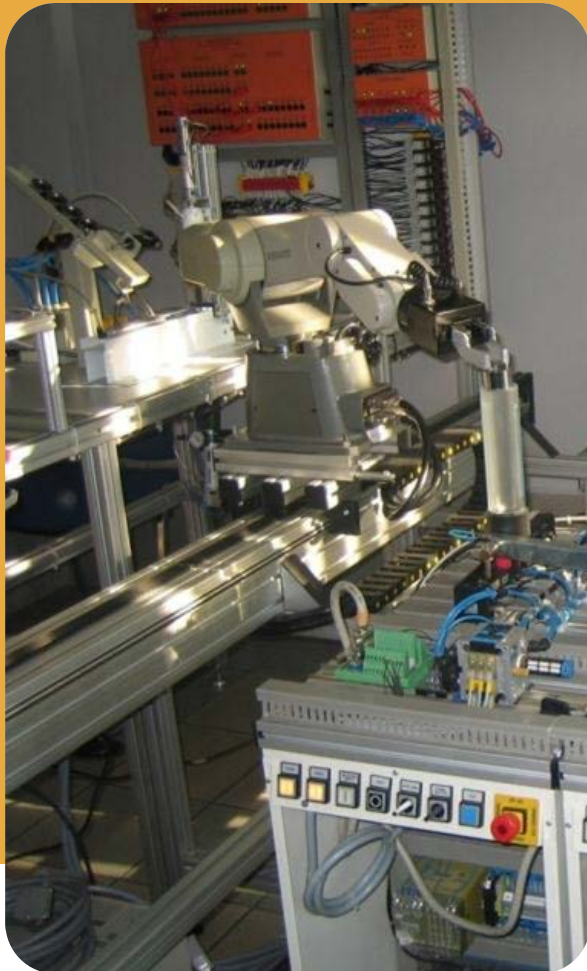


Structure of the I&B 2 year master program



	Innovation	Business		Production	Mechatronics
10. Thesis	THS Master thesis				
9. Specialisation	IBDIN Dynamics of Innovation	ELECTIVE Entrepreneurship Value Chain Analysis	ELECTIVE Thesis Prep, Internship or Entrepreneurship		ELECTIVE Microtechnology production Globalized Production Mechatronics Design & Build II
8. Innovation Practice	IBPIN Participatory Innovation		IBOIM Open Innovation Management	ELECTIVE APPS for technical applications Solar energies PTECH Production Technology	Mechatronics Design & Build I
7. Innovation, Technology And Business	IBBPR Business Practice	Advanced Business Plans Scient.Meth.	IBITB Innovation Technology and Business	IBGLIS Green logistics & innovative supply chains	IECS Introduction to Embedded Control Systems
ECTS POINTS	1				1

Studiet tilknyttets forskningsprojekter



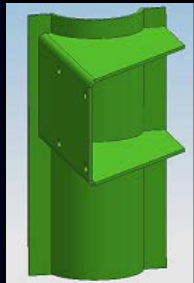
Research example Cybersailing



Mad Mads 1



MIA and Ægir



Welfare – Body sensor networks

by Fei Yu



Research example



Sensory Robot Gripper - Handyman

Advanced Robot Grasping in Industrial Production



Research example



Shadow Robot Hand

A Platform Project between a number of Danish companies and The University of Southern Denmark.



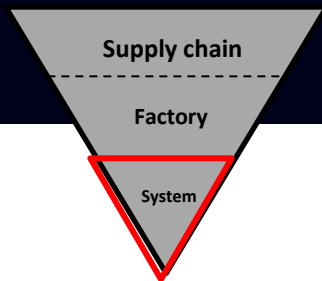
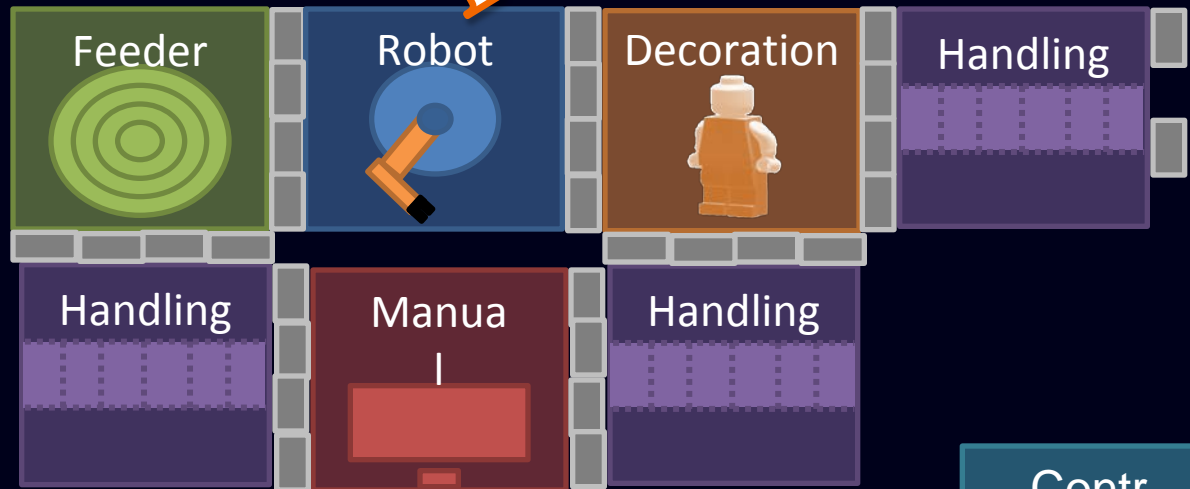
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Reconfigurable Manufacturing Systems

by Phd Ronen Hadar, LEGO

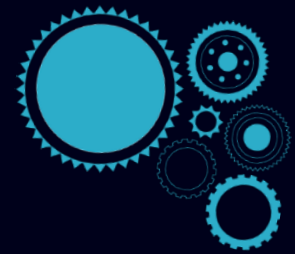
- RMS is:
 - Systems that are designed for rapid changes on both system, machine and software level
 - modularity
 - Integrability
 - customization
 - convertibility
 - Diagnosability
- Why?
 - Significant reduction in changeover time
 - Small batches
 - Customized flexibility
 - Ramp up/down
 - Changes in functionality
 - Incremental investments

Research example



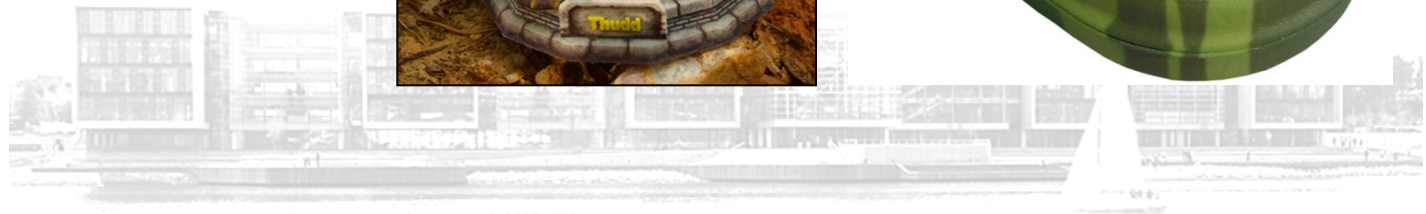
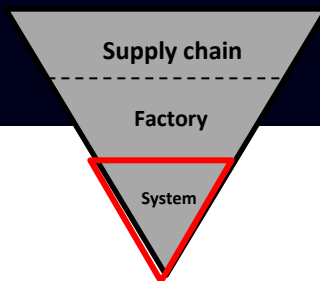
Rapid Manufacturing

by Phd Ronen Hadar, LEGO

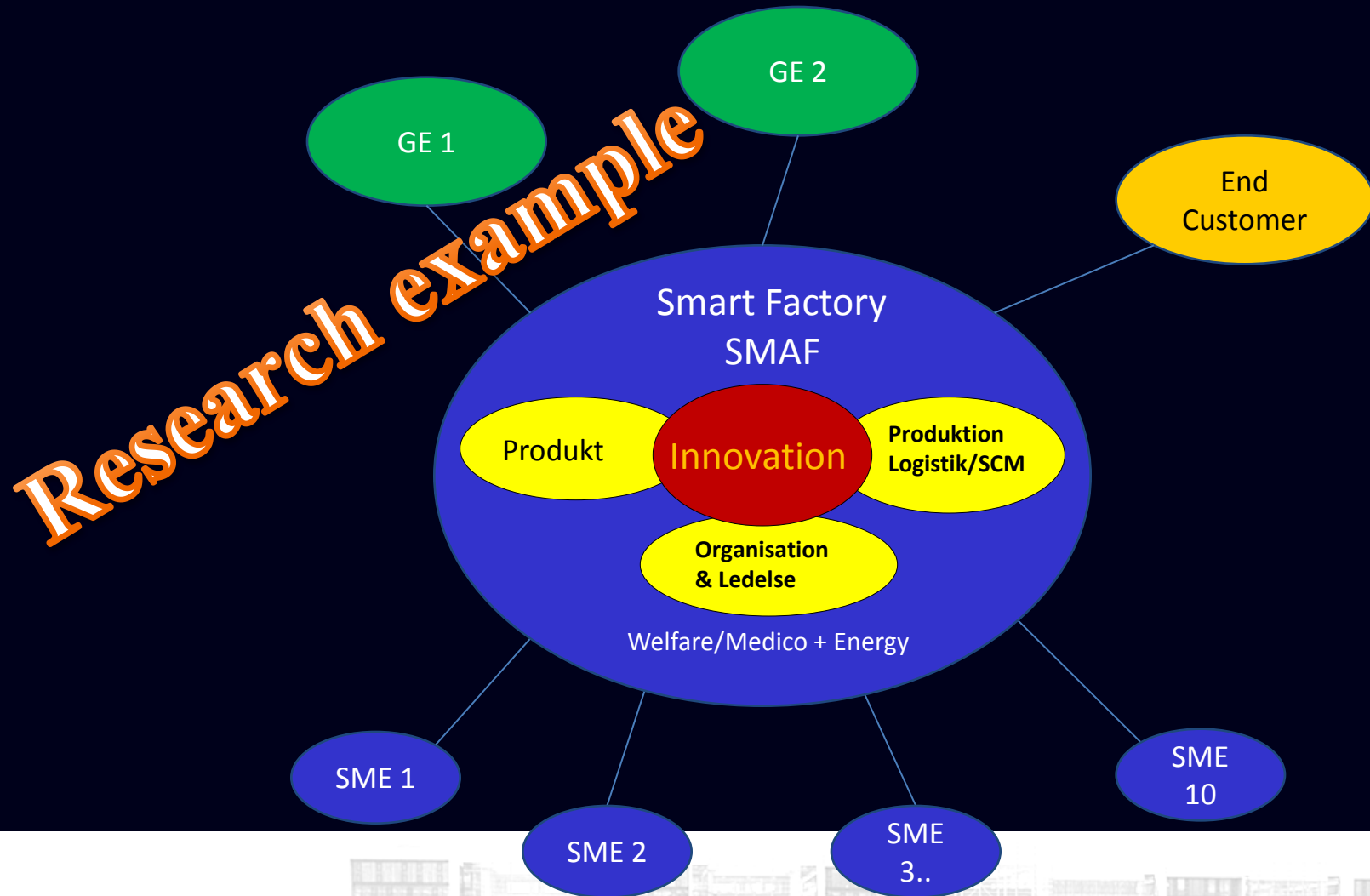
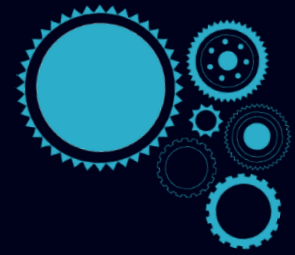


- Rapid Manufacturing
 - Using 3D technologies for internal and external production
- Why?
 - Reduce supply chain complexity on complex elements and assemblies
 - Unlimited product differentiation
 - Constant output rate (digital printer)
 - Fixed manufacturing costs

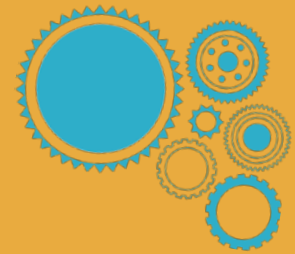
Research example



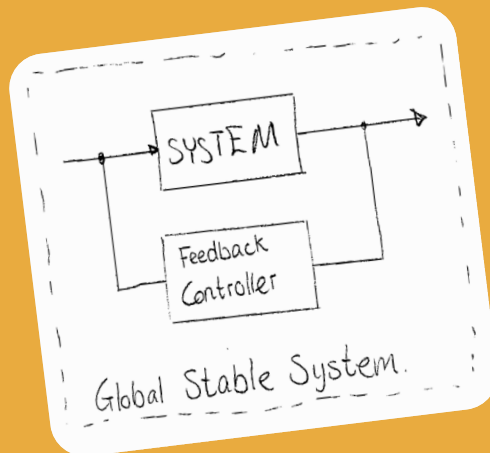
Smart Factory – Innovation in SMEs



Hverdagen som Innovation and Business



- Teori \Leftrightarrow Praksis \Leftrightarrow Leg
- Sammenhold og nærhed
- Seriøsitet og sjov



Hvorfor I&B?



- **Kombinere teknik og forretning**
- **Afslappet atmosfære**
- **Læses på engelsk**
- **Internationale jobmuligheder**
- **Hobby bliver til arbejdet**



Job profiles

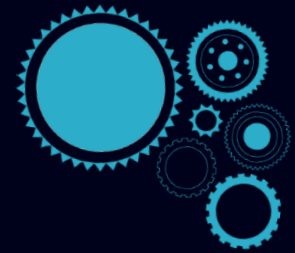


- 🍷 **Innovation Engineer** - Ronen Hadar, LEGO
- 🍷 **Innovation Manager** - Allan Larsen, Siemens Wind Power
- 🍷 **Business Developer** - Johan Henk Maarse, Grundfos China; Jesper Hansen, Viking; Michael Thiim, Danske Bank
- 🍷 **Entrepreneur** – Anita Kauer Mongia, Engineerius; Jens Lindemann, Mathias Robert
- 🍷 **System Integrator** – Bjarke Kock, Siemens Flow
- 🍷 **Operations Engineer and Manager** - Mikkel Børlum Petersen, Grundfos; Sara Kolbeinsdottir, Danfoss
- 🍷 **Researcher (ph.d.-Student)** - Kristian Petersen, Vattenfall; Fei Yu, patient@home

plus other graduate examples:

- Carina Pedersen, Project Manager Project Zero
- Anders Mathiesen, software developer Hedal Kruse Brohus A/S
- Martin Sichlau-Pedersen, graduate program Nordea
- Anders Mouritsen, graduate program Siemens Wind Power

Hvorfor Sønderborg?



- **Internationalt studiemiljø**
- **Tæt forhold til erhvervslivet**
- **Hyggelig by – flot natur**
- **Tæt på Århus og Hamborg**
- **Fester på Alsion**
- **Billige boliger**
- **Kultur og sammenhold**



ALSION in Sønderborg



Contact us



facebook.com/innovationandbusiness

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And now the fun part

