

"Business and Engineering"

Lectures and Seminar

Master Course in Systems Engineering and
Engineering Management

South Westphalia University of Applied Sciences, Soest
Division, Winter 2019/20

Rationale:

There is a strong need for engineers to deal with essential elements of management, especially in developing and marketing of technologies. Basic knowledge in this field makes interdisciplinary teamwork, negotiating and leading easier and more effective.

Aims:

To enable the student to participate in basic entrepreneurial management processes concerning planning, use and marketing of technologies.

Objectives

The goals are that the student should:

- Get to know management both as a function and an institution
- Understand management as a permanent „plan-do-check-react“-circle
- Get to know the strategic and the operational level of management
- Get used to basic management techniques and instruments
- Practice management instruments with case studies
- Understand the role of markets in developing and selling of products and technologies
- Get to know the marketing concept as „market-oriented management“

Soest,
08.08.2019

**Faculty of
Electrical Engineering**

Prof. Dr. rer.pol.
Henrik Janzen

Course Director
"Business Administration
with Informatics"

Phone
02921 378-465
Fax
02921 378-409
Mobile
0170 285 9969
E-Mail
Janzen@fh-swf.de

Campus Soest
Lübecker Ring 2
59494 Soest

Fachhochschule
Südwestfalen
Sitz: Iserlohn

**Hagen
Iserlohn
Meschede
Soest**

www.fh-swf.de

- Know the principles and instruments of „business to business“-marketing
- Be able to solve „business to business“-marketing problems (in case studies)
- Get used to technology-selling situations

Content:

- Introduction: understanding management
- The institutional view of management
- The functional view of Management: planning, organising, controlling, leading, deciding
- The strategic and the operational level of management and their connection
- Techniques and instruments of operational management
- Techniques and instruments of strategic management
- Marketing as „market-oriented management“
- Marketing of technologies: the concept of „business to business“ marketing
- Excursus: costs and benefits
- Basic principles of „business to business“ marketing
- Analyzing strengths and weaknesses, opportunities and threats in competition
- Defining the marketing-mix: product development, pricing, communication and distribution

Seite 2
zum Schreiben
vom 08.08.2019

Teaching and Learning Methods

Lectures and discussions in every topic. Case-studies to train basic management skills, especially management of technologies. Role play and case-studies to train business-to-business marketing, especially practicing of selling situations.

Working Material

Detailed structure of the course, a brief script containing also the presented figures and material introducing the marketing roleplay will be made available in the first lecture.

Schedule

Thursday, 13.00 – 17.00, Lecture dates: 10., 17., 24.
Oct., 14., 21., (28). Nov., 5., 12., 19. Dec., 9., 16. Jan.
Details about additional coursework and presentation dates
will be announced in the first lecture on the 10. Oct.

Questions ?

Any questions regarding this course? Do not hesitate to
contact me:

In-house adress: room-nr.:04.125, phone -3465
e-Mail: janzen@fh-swf.de
Mobile: 0170-2859969

Seite 3
zum Schreiben
vom 08.08.2019

Brief Outline:

- 1 Introduction: Understanding Management**
 - 1.1 Defining Management in an institutional and a functional perspective**
 - 1.2 The corporation as a system**
 - 1.3 The „classics“ of management-science**
 - 1.4 Special management functions: Setting targets and deciding**

- 2 Technical Management – Tasks and Instruments**
 - 2.2 The strategic level**
 - 2.3 The operational level**

- 3 The Marketing Concept**

- 4 Marketing of Technologies: Business-to-Business Marketing**

- 5 Roleplay, Cases**

Suggested Literature

Hill, C.W.; Schilling, M.A.; Jones, G.R.: Strategic Management – An Integrated Approach. 13. Ed., Boston (Cengage) 2019 (or one of the older editions of *Hill / Gareth* with the same title)

Hutt, M.D.; Speh, T.W.: Business Marketing Management – B2B. 11. Ed., Mason (South Western Educ Pub) 2012

Jobber, D.: Principles and Practice of Marketing. 7. Ed., London u.a.O. (Mc Graw-Hill) 2012

Seite 4
zum Schreiben
vom 08.08.2019

References (also for the reprinted figures):

Babcock, D.L.: Managing Engineering and Technology – An Introduction to Management for Engineers. 2. Ed., London (Prentice Hall) 1996

Badiru, A.B.: Project Management in Manufacturing and High Technology Operations. 2. Ed., New York u.a.O (Wiley) 1996

Bhalla, S.K.: The Effective Management of Technology – A Challenge for Corporations. Reading u.a.O. (Addison-Wesley) 1987

Burke, R.: Project Management – Planning and Control. 2. Ed., Chichester (Wiley) 1997

Dibb, S.; Simkin, L.: The marketing casebook – cases and concepts. London/New York (Routledge) 1994

Garvin, D.A.: Managing Quality – The Strategic and Competitive Edge. New York (Macmillan) 1988

Hahn, D.; Taylor, B. (Hrsg.): Strategische Unternehmensplanung – Strategische Unternehmensführung. Stand und Entwicklungstendenzen. 9. Aufl., Heidelberg (Physika) 2006 (german and english!)

Lancaster, G.; Massingham L.: Essentials of Marketing. 2. Ed., London u.a.O. (Mc Graw-Hill) 1993

Lawless, M.W.; Gomez-Mejia, L.R. (Edts.): Strategic Management in High Technology Firms. Greenwich/London (JAI Press) 1990

Lovelock, C.H.; Weinberg, C.B.: Marketing Challenges – Cases and Exercises. 3. Ed., New York u.a.O. (Mc Graw-Hill) 1993

Mahin, P.W.: Business-to-Business Marketing. Strategic Resource Management. Boston (Allyn & Bacon) 1991

Mead, R.: Cases and Projects in International Management. Oxford (Blackwell) 2000

Mintzberg, H.; Quinn, J.B.: The Strategy Process – Concepts, Contexts, Cases. 3. Ed., London u.a.O. (Prentice-Hall) 1996

Morris, M.H.: Industrial and Organizational Marketing. Columbus (Merril) 1988

Nyström, H.: Technological and Market Innovation – Strategies for Product and Company Development. Chichester u.a.O (Wiley) 1990

Skinner, R.N.: Integrated Marketing – Making Marketing Work in Industrial and Business-to-Business Companies. London u.a.O (Mc Graw-Hill) 1994

Steele, L.W.: Managing Technology – The Strategic View. New York u.a.O (Mc Graw-Hill) 1989

Woodward, J.F.: Science in Industry – Science of Industry. An Introduction to the Management of Technology-based Industry. Aberdeen (Aberdeen University Press) 1982

Seite 5
zum Schreiben
vom 08.08.2019

Roleplay:

For practising a typical B2B-marketing situation, we will carry out a roleplay.

We will imagine the following initial situation: A bigger corporation is searching for new suppliers. On a fixed date, possible new suppliers are invited to present their goods and services.

Now it's up to you: Your company desperately needs new customers. You are invited to present a good and/or service that might be useful for the customer.

You can choose goods/technologies/services which you are familiar with. They can be real or imaginative (but the last option is much more difficult, because you have to work out a lot of material).

You will have ten minutes time (this is not unusual in real business life!!) for presentation (plus some additional time for discussion).

But imagine: You should not only present your product, you should like to sell it!

So it is important, to imagine *from the customers view*, which factors will lead to a buy decision.

(These are i.e., not only cheaper prices and better quality but also trustworthiness and flexibility).