

Modul 3600 Global Customer Processes (engl.) (GCP)

zugeordnet zu: Studiengang 959 Produktionstechnik und -management

Degree programme:

[959] Produktionstechnik und - management

ECTS Credit: 5.0 Type of exam: [KB] Order written exam

Responsible Lecturer: Prof. Dr. R. Isenberg

Lecturer: Isenberg, Held, Kreutzfeldt

Recommendet Semester 1st or 2nd semester, annually

Workload: 5 CP and 3 SWS, Präsenzstudium 3h (SWS) ergibt: Gesamtzeit 150h, Präsenzzeit 48h, Selbststudium 102h

5CP and 3 SWS result in: Presence time: 48 hours, Workload self studies: 102 hours

Course language: English

Course objectives

Steadily increasing competition forces industry to accept customer order in a short term manner. If there is short before the series start a request for change from the customer then this results often in drastic influences on design, production and logistics, because processes are not optimized for these changes. This asks for highly flexible processes and high demands on the knowledge of people and the technology.

The students will be able to optimize the processes in a company so that even short term customer specific changes can be handled profitably in the company.

The competencies in detail are the ability to:

- 1) analyse the influence and risk of customer orders on technique, deadline and budget, earnings
- 2) design processes with a total process view, i.e., optimizing the whole process rather than its single parts.
- 3) handle insecure decisions in a badly structured environment
- 4) use tool of information techniques for process coordination, so that they will be able to define for the humans, organisation, technologies and information systems solutions.
- 5) To reach sensibility in the consequences of technical decision making in products or processes and its influence on inner and outer social structures with emphasis on global environment. This should finally result in a saver social environment of employees.

Contents:	<p>The lecture focuses on the influence of changes from customers on the total process from customer order over development until series production.</p> <ol style="list-style-type: none">1) Design networks in global context with internal and external customer, supplier relations management.2) Development of interfaces between design and production with concepts for efficient failure handling and prevention.3) Risk management for systematic prevention, analysis, conception and control of risks with total process view. This includes the discussion of globalisation aspects.4) Workflow methods using SAP as information system.5) Methods to improve the learning efficiency of labour force to handle changed processes.6) Cooperation with industry management for actual case studies (such as Airbus, Ferchau, Siemens, Jungheinrich)7) Laboratory-Implementation of processes using simulation tools to rebuilt the customer specific changes and their influence on project result or workflow representations.
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About didactics:	Powerpoint-Presentation with beamer, slides and blackboard
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Literature:	<ol style="list-style-type: none">1) Aalst, W. (2004): Workflow Management, MIT Press (März 2004)2) Gleißner, W. (2005): Risikomanagement. Mit CD-ROM, Umsetzung, Werkzeuge, Risikobewertung, Haufe (Mai 2005)3) Isenberg, Randolph (2011): International aspects of knowledge management and its sustainability in the quality function. In Paul Young, John Geraghty (Eds.): IMC28 - Manufacturing Sustainability. International Manufacturing Conference IMC28. Dublin, 30.8.11 bis 1.9.11. Dublin City University.4) Isenberg, Randolph; Riesselmann, Julia (2009): Sustainable structure for knowledge management in the quality department. In Garret O'Donnell, Kevin Kelly (Eds.): International Manufacturing Conference IMC26. Energy Efficient & Low Carbon Manufacturing. Trinity College Dublin.5) Isenberg, R. (2005): The customer gating concept to deal with late changes in product development accepted for publication at The International Manufacturing Conference (IMC 22) - Challenges Facing Manufacturing # The Institute of Technology Tallaght, Dublin (31st August to the 2nd September 2005)6) Isenberg, Randolph (2002): Wege zur prozeßorientierten Arbeitsvorbereitung, Workshop "Moderne Aufbau- und Ablauforganisation - Wo steht die Arbeitsvorbereitung?", NORTEC2002, Hamburg 24.1.2002
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