

Production Planning and Control (English)

Module Title		Production Planning and Control (English)			
Module Title in English		Production Planning and Control			
Module Leader		Prof. Dr.-Ing. Uwe Lesch			
Teaching Staff		Prof. Dr.-Ing. Uwe Lesch			
Courselanguage/		English			
Code	Workload	Credits	Semester	Semester Offered	Duration
WM 17: PPS	180 h	6	5th semester	Every Winter semester	1 semester
1	Type of Course Lecture: 2 h/week Exercise: 2 h/week	Scheduled Learning 4 h/week (= 60 h)	Independent Study Total: 120 h	Approx. Number of Participants Lecture max. 150 bzw. 120 Exercise max. 30	
2	Learning Outcomes / Competences <p>Upon successful completion of this module, students will have ...</p> <ul style="list-style-type: none"> acquired an understanding of the goals and challenges of production planning and control (PPS). gained detailed insight into the different steps and processes of hierarchical-sequential PPS. learned to apply these processes to production systems. understood how priorities affect deadline compliance. gathered insight into the fact that simulation can be a helpful tool in PPS. gained the ability to rank PPS in the context of MRP II and ERP. 				
3	Contents <ol style="list-style-type: none"> Goals and challenges of PPS Organisational aspects of manufacturing and assembly system Order processing and order flow Prerequisites for smooth order flow Tasks, planning horizons and steps of PPS <ul style="list-style-type: none"> Production program planning Production requirement planning Batch-size calculation, scheduling and capacity planning Material management, make or Buy Overview of PPS, MRP, MRPII and ERP 				
4	Teaching Methods Lecture with an accompanying tutorial and simulation workshop				
5	Content-Related Module Prerequisites none				
6	Formal Module Prerequisites none				
7	Type of Exams Written exam (100%, 90 minutes)				

8	<p>Prerequisite for the Granting of Credits</p> <p>Successful passing of the module exam, participation in simulation workshop</p>																						
9	<p>This Module Appears in:</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Course of Studies</th> <th style="text-align: left;">Status</th> </tr> </thead> <tbody> <tr> <td>Betriebswirtschaftslehre - Internationales Handelsmanagement und Logistik_WS2012/13</td> <td>Elective Module</td> </tr> <tr> <td>Betriebswirtschaftslehre - Internationales Handelsmanagement und Logistik_WS2013/14</td> <td>Elective Module</td> </tr> <tr> <td>Betriebswirtschaftslehre - Internationales Handelsmanagement und Logistik_WS2015/16</td> <td>Elective Module</td> </tr> <tr> <td>Maschinenbau_BPO2010</td> <td>Elective Module</td> </tr> <tr> <td>Maschinenbau_BPO2013</td> <td>Elective Module</td> </tr> <tr> <td>Maschinenbau_BPO2018</td> <td>Elective Module</td> </tr> <tr> <td>Modules in English at HRW</td> <td>Elected Specialization</td> </tr> <tr> <td>Wirtschaftsingenieurwesen - Maschinenbau_BPO2013</td> <td>Elective Module</td> </tr> <tr> <td>Wirtschaftsingenieurwesen - Maschinenbau_BPO2015</td> <td>Elective Module</td> </tr> <tr> <td>Wirtschaftsingenieurwesen - Maschinenbau_BPO2018</td> <td>Elective Module</td> </tr> </tbody> </table>	Course of Studies	Status	Betriebswirtschaftslehre - Internationales Handelsmanagement und Logistik_WS2012/13	Elective Module	Betriebswirtschaftslehre - Internationales Handelsmanagement und Logistik_WS2013/14	Elective Module	Betriebswirtschaftslehre - Internationales Handelsmanagement und Logistik_WS2015/16	Elective Module	Maschinenbau_BPO2010	Elective Module	Maschinenbau_BPO2013	Elective Module	Maschinenbau_BPO2018	Elective Module	Modules in English at HRW	Elected Specialization	Wirtschaftsingenieurwesen - Maschinenbau_BPO2013	Elective Module	Wirtschaftsingenieurwesen - Maschinenbau_BPO2015	Elective Module	Wirtschaftsingenieurwesen - Maschinenbau_BPO2018	Elective Module
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10	<p>Weighting of Grade in Relationship to Final Grade</p> <p>Weighting equals the proportion of module credits in relationship to the total number of grade-relevant credits</p>																						
11	<p>Additional Information / Literature</p> <p>G. Schuh, V. Stich; Produktionsplanung und -steuerung 1, 4. Auflage, Springer Verlag 2012</p>																						