

# 國立雲林科技大學

## 學生出國研習成果報告

研習類別：交換學生

學生姓名：李庭宜

系所年級：四工管四 A

研習期間：民國 106 年 3 月至民國 106 年 8 月

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### 一、 進修計畫摘要

本次出國交換學校為德國布蘭登堡應用科技大學(網址)的商管學系(Business Administration)，進修課程注重在人資管理、德文課以及人文體驗活動，學校提供德文與英文授課的人資管理課程供交換生可以依照能力選擇，也進行德文能力分班測驗，提供兩門以上的不同程度德文課，甚至還可至波茲坦大學的語言學校上課。人文活動體驗的課程讓我們深入德國文化，老師課程安排藉由參觀博物館、戶外划船以及到當地私房德國餐廳用餐等等，除了靜態授課外，更熱於與我們體驗德國人的日常生活。除此之外，在出國交換前計畫修習管理相關課程與德文課抵修在雲林科技大學的學分，也與教務處、系上主任、國際事務處以及任課老師聯繫好後，取得各科通過的成績單後即可辦理。

布蘭登堡應用科技大學位於布蘭登堡小鎮上 (Brandenburg)，成立於 1992 年 4 月，校園範圍小而純樸簡單，建築外觀均為紅色瓦牆，學校內推廣國際交流活動，外籍生多達一千多位，並設有商業管理、機械製造工程、經濟和資訊科技及媒體等專業科系，注入食物合作的經驗及能力。

## 二、 研修成果與返校後學習的關聯性

在德國將近半年的時間收穫很多，在學校裡面跟國際生一同上課，會發現他們不僅僅教育方式不同，讀書方法也不一樣。從這之中可以去省思自己的不足，學著效法優點，像是在大學時期，考試週與上課週是連在一起的，包括自己還有身邊其他同學都可以知道在台灣的考試前一週，大多人都熬夜為了考試；相反地，這邊的學生若不是非常困難的考科，考試前一天去參加派對都不是問題，因為他們早就把考科準備好了，成績依舊亮眼。除此之外，這邊的學期安排則是會有兩週到一個月的準備週，學生可以利用這段時間自己研讀與複習，也盛行開讀書會的風氣，有問題的話則是主動跟教授約時間。在學習方法上有很大的收穫，不僅是在學校裡，將來在職場做工作規劃或是安排旅遊，強調自發性的能力很受用。

聽課過程或是在與德國人聚會的時候，我會試著將學會的德文跟他們聊天，但最主要部份還是以英文溝通，這方面確實改變我對「說英文」的恐懼感，在台灣教育下偏重閱讀與寫作能力，一開始與外國人用英文好好聊一件事情時會發現單字在腦海中但是卻發不出音，這讓我反省自己記單字是要用念的而不是背，直到現在，很樂於與外國人主動開啟話題聊天討論了！在學習期間讓我備感珍惜的是每一位願意與我交流的人

## 三、 本次出國進修經驗與心得分享

### ■ 課程-Profiling Germany

Profiling Germany 這堂課是讓我最印象深刻的，內容為從不同角度與觀點看德國以及人文歷史演變，老師不是呆板照講義授課，而是帶我們走入德國人的日常生活，談論到德國共產主義演化至今，還有二次世界大戰東西德的雙方關係等等，他帶我們博物館並安排導覽員，讓我們更深刻明白在戰爭時期的人民避難的防空洞以及當時情況；談論到德國人享受生活的方式，老師邀請我們一起到布蘭登堡小鎮上一間私房餐廳，位於小弄裡沒有很顯眼的招牌，用餐的幾乎都是德國人，很有趣的是餐點自助並秤重計價，牛排、麵包、燉馬鈴薯等等均一價，老闆娘兼廚師直接在取餐處現場料理，感覺很特別的是我們不像是客人取餐，而是像老闆娘的朋友到他邀請的餐廳裡用餐的親切感。

另外，這堂課程裡面老師規畫「深入體驗德國文化 (Intercultural project work)」的活動，一開始在計畫階段大家先想哪一方面的體驗，全班每個人提出想法和意見後，依照各個提議討論可行性與價值，最後再投票選擇並三人一組，再依互動對象做更細的區別。我選擇的是烹飪的大主題，互動對象是國小

的學生，最後跟運動組一起合辦。一開始想說我們這組三位同學分別來自匈牙利、荷蘭和台灣，藉由跟小朋友互動一同做出不同國家的料理和了解背景，討論出匈牙利同學製作他們最常吃的甜椒左番茄特調酸奶的湯汁配義大利麵，荷蘭同學則是準備家常料理番茄湯，而我則是改良一下台灣超市買得到的花生煎餅，將餅乾表面撒上花生糖粉送入烤箱烤。小朋友憶起幫忙洗食材、將青椒、洋蔥等食材切丁，還有一起動手做餅乾，看到他們因為切洋蔥而哭笑不得的樣子真的很可愛又難忘，還有滿心期待作的造型餅乾，我們試著用簡單的德文給予讚美和溝通，他們也很有禮貌的試著用英文跟我們聊天，最後大家都很開心的享用午餐。



◎食材切丁



◎組員合照

#### ■ 交換生互動

第一場交換生互動則是在 Introductory week 結束後的 Welcome Party，在這學期所有的交換生都來參加，有來自德國、荷蘭、比利時、墨西哥、約旦、法國等等，令我最印象深刻的是他們每個人手上拿著一瓶啤酒就可以很盡興的聊天，完全不像是的一次見面的朋友，這群交換生裡面只有我們五位台灣的女生是來自東方國家，談天話題討論到比較多東西方差異間接到各個國家的不同。

平常時候我們和法國的兩位朋友比較常一起吃飯或是做甜點，他們教我們做到的法式可麗餅、鄉村餅乾、提拉米蘇還有巧克力布朗尼等等，自己動手做出道地的法式甜點真的很開心，回台灣後能自己做給家人朋友嚐嚐；而我們則是展現台灣外省家庭中每逢過年一定會有的金元寶「水餃」，他們喜歡餃子的造型五花八門，而當然在包得過程，他們也創造了屬於自己的形狀，從食物中帶出文化背景來介紹給外國朋友是一件很榮幸的事。或者是每週三我和同學會固定去參加當地活動中心開設的運動課程，為期一小時的課程，在這之中每個人都很開心地跟隨音樂和指導老師的舞步努力擺動自己的身體，進行肌力和耐力訓練，也在那邊認識到一群富有熱情的舞者們，他們帶給我們不僅僅是舞蹈而已，還有整體澎湃的氣氛，令人著迷。

與他們相處不會覺得因為我們來自不同國家甚至是東西文化的差異而造成歧視或誤會，相反地，即使他們不了解我們國家的文化，但是他們很願意去了解不同的地方，還試著主動參與關於台灣的活動，像是品茶、水餃跟廟宇慶典等等，這些都是很有感情的異鄉溫暖。



◎與法國女孩一起甜點



◎舞蹈課程與舞者們

#### ■ 慶典活動

五月初我們一群台灣女孩和一位法國女生到漢堡參加「第二一八屆漢堡港口節 (Havengeburtstag)」，通常於五月的個周末舉行，漢堡是德國北部最主要的出海運輸港口，繼柏林後為第二大城市。慶典期間白天沿著港口走道的兩側滿滿琳瑯滿目的攤販，有最常出現的國民小吃 currywurst mit pommes、炸魚漢堡、手工結繩麵包以及熱紅酒等等，整個港口人潮多到擠得水洩不通，連網路訊號也者個大崩壞，目的就為了看海上表演，到夜晚還有燦爛炫美的煙火表演。活動過程就像世界選美大會，每一艘船掛上自己國家的國旗飛舞著，神氣地一艘接著一艘魚貫駛在水道上，在眾人歡呼聲下展現最英姿的一面。

另一個是六月二號到四號在柏林舉辦的狂歡嘉年華會，為全球著名十大狂歡盛會，一大特點為來自將近八十個國家的特色文化遊街表演，輕步的舞蹈伴隨著音樂，有趣的是民眾能主動加入自己的國家或是喜歡的國家遊行，一同享受狂歡放鬆的氣氛，同時也展現柏林文化包容的特色。



◎2017 年柏林狂歡節

## ■ 旅遊

德國地理位置處於歐洲大陸正中心，加上交通發達便利，想到哪個國家玩都非常方便，尤其是多了廉價航空的選擇，只要抓準時機訂票，就有機會可以訂到單程只要 12 歐元的單程機票，比起火車或是公車都還要省錢。近年來由於觀光業蓬勃發展，巴士觀光也越來越盛行，像是 Student Agency、Flixbus 這些巴士公司都是很好的選擇，車上空間舒適還免費提供 Wifi、充電插座及報紙，而價錢往往便宜火車的一半，只是缺點是必須考慮旅途時間，若是長途五個小時以上的車程，則可依時間跟金錢去衡量其他交通工具的性價比。

這趟旅遊中令我最難忘的是瑞士，傳說中連空氣都貴的國家真的名不虛傳，但是他們什麼東西都是頂級的，包括空氣也是。其實在德國關於飲水問題，基本上冷熱水管是經過不同管線控制的，冷水管的可以直接生飲，但是因為我覺得生飲的水會有一個鐵鏽味我不喜歡，總是買礦泉水來喝，但是最驚訝的是瑞士連機場廁所裡的冷水喝起來都清爽甘甜，甚至比德國超市賣的普通礦泉水還好喝。除此之外，雖然他們主要的語言是德文，但是當地人普遍英文能力都在水準之上，而對觀光客也很友善。令我最印象深刻的是在第一天的 Paxmal 健行行程中，其中一位旅伴不慎被蜜蜂螫在脖子，紅腫發熱又發癢，忍耐到山下有一間安養中心，我們向裡面店員問說能不能給我們些許冰塊，並向他敘述旅伴被蜜蜂螫的原因，他卻二話不說直接給我們消腫的藥，還給他指示說冰敷到消腫為止，經過三十分鐘後就消腫了，深深對它們的溫暖給感動。

#### 四、 建議事項

- 現在不管在哪個國家都不安全，不僅僅是不知道下個恐怖攻擊的地點出沒在哪裡，而是每個國家都會有小偷，花招百出，除了自身注意以外，建議在出國前先至外交部登入旅外動態，即使是小小的旅遊也要填寫比較好，事情不怕一萬只怕萬一。
- 即使在歐洲生活的花費全部都能用現金，但是建議辦理一張信用卡，若是臨時遇到一筆大額花費現金不夠時能應急，還有現在不論訂房或是訂機票都需要用到信用卡，他可以讓你更方便。當然在出國前先跟信用卡公司通知再來要到國外消費，已得知有關於手續費、驗證碼設定或是各家信用卡公司優惠紅利等等，都能讓你在國外更方便又經濟。
- 出國交換的生活可以在出國前先有初步的規劃，包括旅遊、修課或是學習語言等等，就德國而言，在德國的語言學校上課是全德文授課以及德文教課書，每週上課四天一次三小時，而且學費相較於台灣是便宜一半以上，學習效果一定是更佳，再說德文的環境下學習事半功倍。或是想規劃旅遊也是很不錯，從台灣飛來歐洲任何國家至少都要十二小時以上，不是一件簡單的事，可以到幾個國家體驗民俗風情，放鬆、享受自由甚至尋找心裡的声音。

#### 五、 附件

- (一) 其他有關資料(交換生選課資料)
- (二) 成果報告檔及照片檔光碟片 1 份

所屬系所 審核意見	指導老師簽名： 系所主管核章： ( *本欄務必就報告內容填寫具體意見，不得空白)
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※ 備註：

1. 成果報告請用 A 4 紙直式橫書依規定格式撰寫 (活動照片請附簡單文字說明)。
2. 本項成果報告及活動照片應無償授權本校作為推動業務之任何利用。

**Module descriptors for English taught modules at  
Brandenburg University of Applied Sciences  
Summer semester (March – July)**

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## Department of Business and Management: Bachelor modules

Brief module label:	HR and Organization
Module description:	Human Resources and Organization
Division in teaching sessions, if applicable:	
Duration of module:	One semester
Classification in the curriculum:	BWL BA, 2nd semester, required module
Usability of the module:	The module can also be employed in other (Bachelor's) courses according to the regulations of studies and examinations applicable there.
Frequency of offering of modules:	Every academic year
Author:	Prof. Dr. Katharina Frosch
Private lecturer:	Prof. Dr. Katharina Frosch
Language of instruction:	German <u>and/or</u> English ( <i>Course language will be announced before the course starts</i> )
Prerequisites:	none
ECTS-Credits:	5
Total workload and its composition:	approx. 150 hours = 60 contact hours + 90 hours of self-study
Form of teaching/semester hours per week:	4 semester hours per week
Study and examination achievements:	Written final examination (90 min.) <u>or</u> grading of seminar paper and presentation
Weighting of the grade in the overall grade:	According to the regulations of studies and examinations or $0.7 \cdot (1/30) = 2.33\%$
Learning outcomes:	<p>Students gain a broad understanding on individual behaviour in groups and organizations.</p> <p>They acquire practical competencies in practical issues of human resource management. In this context, they can critically discuss the interplay of "hard" and "soft" factors in human resource management.</p>

	After the course, students are also able to systematically analyse organizational issues and to apply basic instruments for organizational design and development.
Contents:	<p>Topics are for example</p> <ul style="list-style-type: none"> <li>• Behaviour in groups and organizations (motivation, team work, leadership, learning)</li> <li>• Core functions of human resource management (e.g. recruitment and selection, personnel development, compensation &amp; benefits, personnel layoffs)</li> <li>• Organizational theory, design and development (e.g. structural organization and internal cooperation, power and politics, organizational learning, organizational change)</li> </ul> <p>Throughout the course, the lecturer facilitates students' own exploration. Main issues are discussed, summarized and recapitulated during the course. Based on this, students independently work on case studies, present their solutions and reflect them critically.</p>
Teaching and learning methods:	Seminar-style lecture with business examples, group work and independent work on case studies.
Literature:	<p>Berthel, J., Becker, F. (2013). Personalmanagement. 10. Auflage, Stuttgart: Schäffer-Poeschel.</p> <p>Böhmer, N.; Schinnenburg, H.; Steinert, C.: Fallstudien im Personalmanagement. Entscheidungen treffen, Konzepte entwickeln, Strategien aufbauen. München: Pearson.</p> <p>Bröckermann, R. (2012). Personalwirtschaft: Lehr- und Übungsbuch für Human Resource Management. Stuttgart: Schäffer-Poeschel.</p> <p>Clegg, S. R., Kornberger, M., &amp; Pitsis, T. (2011). Managing and organizations: An introduction to theory and practice. London: Sage.</p> <p>Jones, G. R., &amp; Bouncken, R. B. (2008). Organisation: Theorie, Design und Wandel. München: Pearson.</p> <p>Jones, G. R. (2010). Organizational theory, design, and change. Upper Saddle River: Pearson.</p> <p>Kauffeld, S. (2011, Hrsg.). Arbeits-, Organisations- und Personalpsychologie für Bachelor. Heidelberg u.a.: Springer.</p> <p>Kluckow, N., &amp; Becker, M. (2011). Fallstudien für Human Resources Management, Band I + II. München u.a.: Rainer Hampp Verlag.</p> <p>Robbins, S. (2001). Organisation der Unternehmung (9. Auflage). München: Pearson Studium.</p>

	<p>Robbins, S., Judge, T. A. (2013). Organizational Behaviour (15th ed.). Boston: Prentice Hall.</p> <p>Rowold, J. (2013, Hrsg.). Human Resource Management: Lehrbuch für Bachelor und Master. Human Resource Management. Heidelberg u.a.: Springer.</p>
Additional information:	Depending on the availability: involvement of guest speakers, excursions (e.g. labour court)

Brief module label:	Englisch
Module description:	Using English in Business Informatics
Division in teaching sessions, if applicable:	Integrated course (seminar)
Duration of module:	One semester
Classification in the curriculum:	WI Ba, 2nd semester, required module
Usability of the module:	Foundational course for participating in the elective module "Business English"
Frequency of offering of modules:	Every academic year
Author:	Dr. Annett Kitsche
Private lecturer:	Dr. Annett Kitsche
Language of instruction:	English
Prerequisites:	English language proficiency of University entrance level
ECTS-Credits:	5
Total workload and its composition:	150 hours = 60 hours of attendance and 90 hours of self-study
Form of teaching/semester hours per week:	Integrated course (seminar): 4 semester hours per week
Study and examination achievements:	Work on exercise assignments during the semester 40% Written examination 60% (or oral examination in advanced course)
Weighting of the grade in the overall grade:	1/3 of the subject grade; 7% of all subject grades; 2.33% of the final grade
Learning outcomes:	<p>The aim is to acquire and use the language skills in common Business English/English of the IT including intercultural competence.</p> <p>Develop study and profession-related skills and abilities in listening and speaking in order to successfully participate in technical lectures and discussions in English language.</p>

	<p>Further development of skills and abilities in reading and processing relevant technical texts in English.</p> <p>Development of individual profession-related forms of practice in written language.</p>
Contents:	<ul style="list-style-type: none"> <li>- Working in company groups</li> <li>- Forms of interactive oral and written linguistic activities for the purpose of demonstration, description, discussion and estimation of operations and procedures in Business and in the field of IT by utilizing intercultural knowledge.</li> </ul> <p>Dealing with adapted and listening and reading material in original</p>
Teaching and learning methods:	<p>Changing different modes of working where comprehending reading, writing and Internet searches on particular topics taken up normally in self-study, use of Moodle</p>
Literature:	<p>Simply Business English;          Books on English for IT, current newspapers/magazines like Economist, Guardian Weekly, Business Spotlight, IT/Computer magazines and from the Internet</p>
Additional information:	<p>Work in the language lab</p>

Brief module label:	Economic Integration in the EU
Module description:	Economic Integration in the EU
Division in teaching sessions, if applicable:	Seminar
Duration of module:	One semester
Classification in the curriculum:	BWL BA, 4th semester, specialization VWL
Usability of the module:	<p>Preparatory course for subsequent advanced courses, especially: "Single Market".</p> <p>The module can also be employed in other (Bachelor's) courses according to the regulations of studies and examinations applicable there.</p>
Frequency of offering of modules:	Every academic year
Author:	Prof. Dr. phil. Ulrich Brasche
Private lecturer:	Prof. Dr. phil. Ulrich Brasche
Language of instruction:	English

Prerequisites:	Basic economics
ECTS-Credits:	5
Total workload and its composition:	150 hours of workload, approx. 50 hours of attendance, approx. 40 hours of preparation and follow-up, approx. 60 hours of preparation for examination
Form of teaching/semester hours per week:	4 semester hours per week
Study and examination achievements:	Written test, 90 min.
Weighting of the grade in the overall grade:	According to the regulations of studies and examinations or $0.7 \cdot (1/30) = 2.33\%$
Learning outcomes:	<p>Students</p> <ul style="list-style-type: none"> <li>• Know and understand institutions and decision making within EU</li> <li>• Know and understand principles of economic and monetary integration</li> <li>• Analyse effects of EMU</li> <li>• Assess the forces and outcomes of integration</li> </ul>
Contents:	<p>History, institutions, power</p> <p>Single Market</p> <ul style="list-style-type: none"> <li>• Goods</li> <li>• People</li> <li>• Services             <ul style="list-style-type: none"> <li>○ Networks</li> <li>○ State owned</li> </ul> </li> <li>• Capital, FDI</li> </ul> <p>EMU (Economic and Monetary Union)</p> <ul style="list-style-type: none"> <li>• Primer: Monetary policy and exchange rates</li> <li>• Pros and cons of a common currency</li> <li>• Pitfalls and problems of the EMU</li> <li>• EMU and convergence</li> <li>• Crisis of Euro?</li> </ul>
Teaching and learning methods:	Mix of lectures and group work; presentations by students; case studies; preparation by working through a reading list
Literature:	<p>Baldwin, R. E. and C. Wyplosz (2009). Economics of European Integration. London</p> <p>Baldwin, R. E.: The EURO's trade effects, in: ECB working paper (594) 2006</p>

	<p>Brasche, U.: Europäische Integration [European Integration], Munich 2012</p> <p>DeGrauwe, P.: The economics of monetary integration, Oxford 2006</p> <p>Dierx, A., F. Ilzkovitz and K. Sekkat, Eds.: European integration and the functioning of product markets. Cheltenham [et al] 2004</p> <p>Pelkmans, J. (2006): European integration – Methods and economic analysis, Harlow et al.</p> <p>Rose, A. K.: One money, one market: The effect of common currencies on trade, in: Economic Policy (April): 9-45, 2000:</p> <p>Recent information on the institutional development of the EU (Constitution, Reform Treaty etc.)</p>
Additional information:	Student and learning centred approach

Brief module label:	Prozessmodellierung
Module description:	Fundamentals of Process modelling
Division in teaching sessions, if applicable:	Module, lecture, exercise
Duration of module:	One semester
Classification in the curriculum:	WI Ba, 2nd semester, required module
Usability of the module:	Consolidating exercises and one project on Process modelling, including exercise in practical abilities in project management.
Frequency of offering of modules:	Every academic year
Author:	Prof. Dr. Dietmar Wikarski
Private lecturer:	Prof. Dr. Dietmar Wikarski
Language of instruction:	German, for exchange students English
Prerequisites:	Systems analysis
ECTS-Credits:	5
Total workload and its composition:	150 hours = 60 hours of attendance and 90 hours of self-study

Form of teaching/semester hours per week:	Lecture: 2 semester hours per week Exercise and project: 2 semester hours per week Total: 4 semester hours per week
Study and examination achievements:	Balanced assessment of performance during the semester (exercise: 20%, involvement: 30%) and final performance (presentation: 20%, project report: 30%)
Weighting of the grade in the overall grade:	1/3 of the subject grade; 7% of all subject grades; 2.33% of the final grade
Learning outcomes:	<p>Consolidation of basics acquired in the module "Systemsanalysis" with regard to modelling, analysis and management of business and cooperation processes as well as the use of relevant software tools based on practical questions and projects.</p> <p>The students will be able to collaborate on a work-sharing basis in a project where differentiation is made between cooperation within teams, as the case may be, with role sharing, and cooperation across teams. In the latter case, the results (process models) obtained by the teams must be combined appropriately and made easily accessible on the Web through a process map.</p> <p>The students can independently conduct interviews in enterprises or organizations unknown to them previously and prepare process models from the results and improve them iteratively (through further interviews).</p>
Contents:	<p>Lecture: Repetition of process-related contents from the course Systems analysis (Graphs, Semantic nets, Bipartitegraphs, SADT, Petri nets)</p> <p>Basic concepts of object-oriented process modelling: Object-orientation in software technology; Objects and Classes in the general linguistic usage; Object-orientation as a method; Inheritance, Associations, Message passing, etc.</p> <p>Methods and software tools for modelling and analysis of business processes and organizations (BPMN, EPK, KSA , etc.)</p> <p>Software tools for modelling and analysis of business processes; class and instance scenarios; rules for process and organization modelling</p>

	Project and exercises: Distributed computer-supported object-oriented modelling and analysis of real organizations and specifications (cf. "Learning outcomes")
Teaching and learning methods:	Lecture, projects
Literature:	<p>H. Krallmann et al.: Systemanalyse im Unternehmen [System Analysis in the Enterprise], Oldenbourg-Verlag, München, Wien, 2013</p> <p>Andreas Gadatsch: Grundkurs Geschäftsprozessmanagement - Methoden und Werkzeuge für die IT-Praxis. 7. Auflage, Springer Vieweg, Wiesbaden, 2012.</p> <p><a href="http://www.semtalk.de">www.semtalk.de</a>,</p>
Additional information:	

Brief module label:	VWLS Wettbewerbspolitik
Module description:	Innovation, Market behaviour and Competition policy
Division in teaching sessions, if applicable:	
Duration of module:	One semester
Classification in the curriculum:	BWL BA, 4th semester, specialization VWL
Usability of the module:	Runs simultaneously with consolidating BWL courses and preparatory course for subsequent advanced VWL courses
Frequency of offering of modules:	Every academic year
Author:	<b>Prof. Dr. rer. pol. Bettina Burger-Menzel</b>
Private lecturer:	<b>Prof. Dr. rer. pol. Bettina Burger-Menzel</b>
Language of instruction:	German or English
Prerequisites:	Basic understanding of Economics
ECTS-Credits:	5

Total workload and its composition:	150 hours of workload, approx. 50 hours of attendance; approx. 40 hours of preparation and follow-up, approx. 60 hours of preparation for examination
Form of teaching/semester hours per week:	4 semester hours per week /lecture
Study and examination achievements:	Written examination or seminar paper with presentation
Weighting of the grade in the overall grade:	According to the regulations of studies and examinations
Learning outcomes:	The students have a technical and methodical understanding of the theory of market and competition; they are able to critically discuss about the functions of competition and its economic relevance; they can delimit a market for an analysis of the competition and its structural factors with a view on the market behaviour and results; they understand the motivation behind the governmental intervention and are able to identify and structure the conditions for a competition policy capable of action (especially to check fusions and misuse) as well as name the areas of possible target conflicts with the technology policy.
Contents:	In the module Innovations, Market power and Competition policy the fundamentals of the market and competition theory are taught in order to critically fathom the basic patterns of explanation about competition processes, to understand the functioning of various markets and to find out the intentions in the practices of competition policy in the background of a growing knowledge-based society and an environment that is characterized by technical advancement / technological fusion and globalization. The approach is divided into the following aspects: <ul style="list-style-type: none"> <li>• Market and competition theory (20%)</li> <li>• Structures, behaviour and results in the relevant market (30%)</li> <li>• Competition policy related interventions in the relevant market (50%)</li> </ul>
Teaching and learning methods:	The most important contents of knowledge are prepared by the students as much as possible and under the structuring guidance of the lecturer through self-study, consolidated through discussions and further developed and secured through overlapping questions. In this, attention is paid as much as possible to interactive and seminar-type teaching methods. In the background of the acquired knowledge or current events, the students are expected to work on individual

	<p>topics and present the outcome in a plenary session. During the teaching sessions, to supplement the same, reference literature is recommended or files and texts available on the Web are collected as working material, and multimedia applications are expressly desirable. Through the Moodle learning platform, the students have the possibility to obtain (also updated) material at flexible time and place and to work with them in workgroups or jointly.</p>
Literature:	<p>Basic reference literature of Economics in its current editions, e.g.:</p> <p>Antonelli, G.: Economics of structural and technological change: Industrial economic strategies for Europe, Routledge 1997</p> <p>Case, J.: Competition, New York 2007        Freeman, C.; Soete, L.: The Economics of Industrial Innovation, Cornwall 2004        Götting, H.-P.: Gewerblicher Rechtsschutz und Urheberrecht [Commercial Legal Protection and Copyright], Munich 2005        Hotz-Hart, B., et al.: Innovationen: Wirtschaft und Politik im globalen Wettbewerb [Innovations: Economy and Politics in the global Competition], Bern 2001</p> <p>Kling, M.; Thomas, S.: Grundkurs Wettbewerbs- und Kartellrecht [Basic Course in Competition and Cartel Law], Munich 2004</p> <p>Knottenbauer, K.: Theorien des sektoralen Strukturwandels [Theories of Sectoral Structural Changes], Marburg 2000</p> <p>Kurzlechner, W.: Fusionen, Kartelle, Skandale – Das Bundeskartellamt als Wettbewerbshüter und Verbraucherschutz [Fusions, Cartels, Scandals – The Federal Cartel Office as the Protector and Consumer’s Advocate of Competition], Munich 2008</p> <p>Lettl, T.: Das neue UWG [The New Law Against Unfair Competition], Munich 2004</p> <p>Maggioni, M. A.: Clustering Dynamics and the Location of High-tech Firms, Heidelberg 2002</p> <p>Meißner, W.; Fassing, W.: Wirtschaftsstruktur und Strukturpolitik [Economic Structure and Structural Policy], Munich 1989</p> <p>Morasch, K.: Industrie- und Wettbewerbspolitik [Industry and Competition Policy], Munich 2003</p> <p>Motta, M.: Competition Policy – Theory and Practice, Cambridge University Press, New York 2004</p> <p>Olson, M.: The Logic of Collective Action, Cambridge, Massachusetts 1971</p> <p>Richter, R.; Furubotn, E.G.: Neue Institutionenökonomik [New Institutional Economics], Tübingen 2003</p>

	<p>Rogers, E.M.: Diffusion of Innovations, London 2003</p> <p>Schmidt, I.: Wettbewerbspolitik und Kartellrecht [Competition Policy and Cartel Law], Stuttgart 2001</p> <p>Schmidt, I.; Schmidt, A.: Europäische Wettbewerbspolitik und Beihilfekontrolle [European Competition Policy and State Aid Control], Munich 2006</p> <p>Schulz, N. (2003): Wettbewerbspolitik [Competition Policy], Tübingen 2003</p> <p>Scotchmer, S.: Innovation and Incentives, Cambridge, Massachusetts 2004</p> <p>Williamson, O.E.: The Economic Institutions of Capitalism, London 1985</p>
Additional information:	

Brief module label:	Informationsmanagement
Module description:	Information Management
Division in teaching sessions, if applicable:	Module, lecture, exercise
Duration of module:	One semester
Classification in the curriculum:	WI Ba, 4th semester, required module
Usability of the module:	The module summarizes competences of some modules from the previous semester, particularly the fundamentals and effects of Business Informatics, the system analytical competences, the fundamentals of process modelling and project management. It is also the preparatory course for the subsequent advanced courses, especially the software selection and customization and the Bachelor's Thesis.
Frequency of offering of modules:	Every academic year
Author:	Prof. Dr. Andreas Johannsen
Private lecturer:	Prof. Dr. Andreas Johannsen
Language of instruction:	German, for exchange students English
Prerequisites:	None
ECTS-Credits:	5
Total workload and its composition:	150 hours = 60 hours of attendance and 90 hours of self-study

Form of teaching/semester hours per week:	Lecture: 2 semester hours per week Exercise: 2 semester hours per week Total: 4 semester hours per week
Study and examination achievements:	Presentation, other writing assignments
Weighting of the grade in the overall grade:	1/3 of the subject grade; 7% of all subject grades; 2.33% of the final grade
Learning outcomes:	<p>Lecture and exercise: The students will be able to describe the objective of Information Management in regard to its problems and tasks and be familiar with the terminology and the basics of the term Information. They know various concepts and models of Information Management and are able to evaluate them according their adaptation. They are able to explain the level model of Information Management with examples. They know the lifecycle of Information Management and are able to commute this to practical cases of application. They are able to explain the terminological aspects and differentiate the perspectives according to the need of information.</p> <p>They know the methods to ascertain the need for information and are able to apply the methods KEF and Balanced Scorecard practically. They know the tasks that are associated with the management of information sources and are able to classify them according to the lifecycle of Information Management.</p> <p>They are familiar with the methods of Information Organization and modelling and are able to demonstrate the method Semantic Web with an example.</p> <p>They know the criteria and concepts for managing the quality of information. Furthermore, they know the tasks and concepts of managing the offer of information and are able to bring this into the lifecycle of Information Management. They can critically assess the concept of value of information. They know the objective area and the tasks of management of Information Systems.</p> <p>They are able to explain and apply the tasks and methods of management of data and the processes.</p> <p>They are able to explain the terminology like Reference Model and Meta Model and differentiate them.</p>

	<p>They know the concept of application lifecycle and the tasks which are incidental to the lifecycle.</p> <p>They are able to explain, evaluate and apply the methods of software selection, of evaluation of licence models and software development.</p> <p>They know the alternatives to software introduction and are able to outline it with an example. They are able to explain the method of IS Portfolio and apply it on a concrete case.</p> <p>They know the tasks and decision leeway of the executive's responsibilities in regard to the IM, they are able to understand the meaning of Governance and the role of the CIO. They can identify sourcing alternatives in the management of performance and evaluate knowledge around the problem area of IT Controlling, and IT in terms of its value.</p>
<p>Contents:</p>	<p>Basic terminology, concepts and model of Information Management</p> <p>Information flood, lifecycle of Information Management, management of information demand</p> <p>Management of information sources and information resources</p> <p>Management of Information Offer and Information usage</p> <p>Information System Management: Management process, Data, processes</p> <p>Management of application lifecycle</p> <p>Management of application development projects</p> <p>Management of ITC: Maintenance and operation of ITC</p> <p>Acquisition of ITC</p> <p>Management of storage and communication, security</p> <p>Organization of IM, CIO, Sourcing</p> <p>Strategy and IM: enable - align</p>
<p>Teaching and learning methods:</p>	<p>Lecture using a combination of media (transparencies, blackboard work, demonstrations, etc.), accompanying exercises with home assignments and group work, Internet search, exercises on the computer</p>

Literature:	H. Krcmar: Informationsmanagement [Information Management], Springer Verlag, 5th ed., Berlin, Heidelberg, 2010.
Additional information:	The course will be supplemented by a keynote lecture by a Chief Information Officer or Chief Executive Officer from practical life and by excursion (typically to an enterprise and IT Consulting like: Cap Gemini in the Summer Semester 2012).

Brief module label:	Management und Organisation
Module description:	Management and Organization
Division in teaching sessions, if applicable:	Module, lecture, exercise
Duration of module:	One semester
Classification in the curriculum:	WI Ba, 4th semester, required module
Usability of the module:	
Frequency of offering of modules:	Every academic year
Author:	Prof. Dr. Robert U. Franz
Private lecturer:	Prof. Dr. Robert U. Franz
Language of instruction:	German, for exchange students English
Prerequisites:	None
ECTS-Credits:	5
Total workload and its composition:	150 hours = 60 hours of attendance and 90 hours of self-study
Form of teaching/semester hours per week:	Lecture: 2 semester hours per week Exercise: 2 semester hours per week Total: 4 semester hours per week
Study and examination achievements:	Oral examination or written examination
Weighting of the grade in the overall grade:	1/3 of the subject grade; 7% of all subject grades; 2.33% of the final grade

<p>Learning outcomes:</p>	<p>The participants analyse the methods, concepts and strategies by which Information Technology supports the active and targeted Corporate Governance. They are enabled to select the relevant information from available data stocks for evaluating operational decisions in terms of their value. Methods of approach are taught as to how corporate strategies can be analysed, implemented and monitored using Informatics. Through exercises with complex business-related ERP systems typical business and decision processes in the enterprise are applied.</p>
<p>Contents:</p>	<p>Strategic corporate planning</p> <p>Concepts, strategies and tools of information technology for enterprise control:</p> <p>Enterprise Resource Planning (ERP) systems</p> <p>Personnel Management Systems</p> <p>Management of Information Systems</p> <p>Business Intelligence</p> <p>Data Warehouse</p> <p>Knowledge Management</p> <p>Workflow Management Systems</p> <p>Use and selection of suitable systems</p> <p>Own development vs. Standard software</p> <p>Application purpose and operational functional areas</p> <p>Industry solutions</p> <p>Architecture of ERP systems</p> <p>Organizational structures and elements</p> <p>Access authorization concepts</p> <p>Data maintenance</p> <p>Management of complex IT system landscapes</p> <p>Organization of IT projects</p> <p>IT Governance</p>

	<p>Role of IT for achieving business objectives and support for business processes of an enterprise</p> <p>Use of IT resources (employees, systems, finances)</p> <p>Performance and Benchmarking of IT and Service</p> <p>Identification, evaluation and management of IT risks</p>
Teaching and learning methods:	Lecture using a combination of media, exercises in the lab in small groups (up to 15 people), integration of case studies and business games
Literature:	<p>C. Dorrhauer, A. Zlender: Business Software – ERP, CRM, EAI, E-Business – eine Einführung [An Introduction] (Tectum, 2004)</p> <p>N. Gronau: Enterprise Resource Planning und Supply Chain Management (Oldenbourg, 2004)</p> <p>M. Shields: ERP-Systeme und E-Business (Wiley-VCH, 2002)</p> <p>J.-P. Thommen: Management und Organsiation (Versus, 2002)</p> <p>P. Weill, J. Ross: IT Governance (Harvard, 2004)</p> <p>K. Niemann: Von der Unternehmensarchitektur zur IT-Governance [From the Enterprise Architecture to IT Governance] (Vieweg, 2005)</p> <p>J. Kaplan: Strategic IT Portfolio Management (PRTM, 2005)</p> <p>E. Monk, B. Wagner: Concepts in Enterprise Resource Planung (Course Technology, 2005)</p> <p>M. Kütz: Kennzahlen in der IT [Key Indicators in IT] (Dpunkt, 2003)</p> <p>E. Brochhausen, J. Kielisch, J. Schnerring: mySAP HR Technische Grundlagen und Programmierung [Technical Basics and Programming] (Galileo, 2005)</p> <p>H.-G. Kemper, W. Mehanna, C. Unger: Business Intelligence – Grundlagen und praktische Anwendung [Basics and Practical Application] (Vieweg, 2004)</p>
Additional information:	Depending on the availability, guest speakers will give lectures on their practical experience; company visits are organized.

Brief module label:	WPF_StratControlling
Module description:	Strategic IT Controlling
Division in teaching sessions, if applicable:	Module, lecture, exercise
Duration of module:	One semester
Classification in the curriculum:	WI Ba, 4th semester, elective module
Usability of the module:	
Frequency of offering of modules:	Every academic year
Author:	Dr. J. Scheeg
Private lecturer:	Dr. J. Scheeg
Language of instruction:	German, for exchange students English
Prerequisites:	Fundamentals of Business Administration Fundamentals of Information Management
ECTS-Credits:	5
Total workload and its composition:	150 hours = 60 hours of attendance and 90 hours of self-study
Form of teaching/semester hours per week:	Lecture: 2 semester hours per week Exercise: 2 semester hours per week Total: 4 semester hours per week
Study and examination achievements:	Project paper with presentation of results Processing case studies
Weighting of the grade in the overall grade:	1/3 of the subject grade; 7% of all subject grades; 2.33% of the final grade
Learning outcomes:	The students can solve the problems concerning Strategic IT-Controlling. They can evaluate the initial situations of an enterprise and develop options of action based on selected Strategy Instruments and assess their use.  Special focus is on the transfer of the instruments from the Corporate Governance or the General Management, particularly on the Business Informatics.

	<p>The students are familiar with selected instruments which they have processed in the course of the lectures, recalled them through their own presentations and applied them on the basis of Case Studies.</p> <p>Working on exercises, case studies and presentations in the course of group work promotes team collaboration abilities and competent presentation of subject-specific topics and approach to solutions.</p> <p>Independent processing of Case Studies supports the ability to apply theory and methodical instruments in the context of questions concerning an enterprise.</p>
<p>Contents:</p>	<p>Fundamentals and basic terminology of strategic management</p> <p>Context of the strategic Information Management</p> <p>Introduction to the basics of strategic instruments</p> <p>Competition strategies according to Porter</p> <p>Market growth–Market share-Portfolio (Boston Consulting Group) &amp; Market Attractiveness-Relative-Competition Strength-Portfolio (McKinsey)</p> <p>IT-SWOT Analysis</p> <p>IT Indicators</p> <p>IT-Target Costing</p> <p>IT-Life-Cycle Costing</p> <p>IT-Project controlling</p> <p>IT-Project Portfolio Management / Multi-project Management</p> <p>IT-Balanced Scorecard</p> <p>IT-Benchmarking</p>
<p>Teaching and learning methods:</p>	<p>Lecture</p> <p>Case Studies, presentation of results in the group and joint discussion</p>
<p>Literature:</p>	<p>Controlling: Péter Horváth (2008)</p> <p>Strategisches Kostenmanagement: Grundlagen und moderne Instrumente [Strategic Cost Management: Fundamentals and modern Instruments]: Beate Kremin-Buch (2006)</p>

	<p>IT-Controlling: Messung und Steuerung des Wertbeitrages der IT [IT-Controlling: Measuring and Controlling the Value Contribution of IT]: Ralf Kesten, Arno Müller, Hinrich Schröder Edition: 1 (2007)</p> <p>IT-Controlling realisieren: Praxiswissen für IT-Controller, CIOs und IT-Verantwortliche [Implementing IT-Controlling: Practical know-how for IT Controllers, CIOs and IT In-Charges]: Andreas Gadatsch (2005)</p> <p>Strategisches IT-Management [Strategic IT Management]: Walter Brenner, Andreas Meier, Rüdiger Zarnekow / Dpunkt Verlag (2003) S. 7-16</p> <p>Praktisches IT-Management: Controlling, Kennzahlensysteme, Konzepte [Practical IT Management: Controlling, Indicator Systems, Concepts]: Roland J. Blomer, Hartmut Mann, Martin G. Bernhard / Auflage: 1 (2006) S. 19-122 / S. 349-454</p> <p>Übungen zur Internen Unternehmensrechnung [Exercises for Internal Enterprise Accounting]: Christian Ernst, Christian Riegler, Gerald Schenk Edition: 3, revised. ed. (2007)</p> <p>IV-Controlling: Leonhard von Dobschütz, Manfred Barth, Heidi Jäger-Goy (2003)</p> <p>Target Costing für industrielle Dienstleistungen [Target Costing for Industrial Services]: Stefan Niemand Edition: 1 (1996)</p> <p>Produktionsmanagement von IT-Dienstleistungen: Grundlagen, Aufgaben und Prozesse (Business Engineering) [Production Management of IT Services: Fundamentals, Tasks and Processes]: Rüdiger Zarnekow Edition: 1 (2007) Chap. 4.2</p> <p>IV-Controlling: Leonhard von Dobschütz, Manfred Barth , Heidi Jäger-Goy (2003)</p>
Additional information:	

## Department of Business and Management: Master modules

Brief module label:	General Framework
Module description:	General International Framework
Division in teaching sessions, if applicable:	Seminar
Duration of module:	One semester
Classification in the curriculum:	BWL MA, 2nd semester, required module
Usability of the module:	-
Frequency of offering of modules:	Every academic year
Author:	Prof. Dr. phil. Ulrich Brasche
Private lecturer:	Prof. Dr. phil. Ulrich Brasche
Language of instruction:	English
Prerequisites:	Basic economics
ECTS-Credits:	5
Total workload and its composition:	150 hours of workload: approx. 50 contact hours, approx. 60 hours of self-study, approx. 40 hours of exam preparation
Form of teaching/semester hours per week:	4 semester hours per week
Study and examination achievements:	Written test (90 min.)
Weighting of the grade in the overall grade:	$0.7 \cdot (5/90) = 3.89\%$
Learning outcomes:	<p>Students</p> <ul style="list-style-type: none"> <li>• Understand different concepts towards globalisation</li> <li>• Analyse the relevance of globalisation for international business</li> <li>• Analyse the role of regulation in market building</li> <li>• Assess the viability of different theories on the impact of internationalization on development, skills, location etc.</li> </ul>
Contents:	1 Introduction to economic integration

	<p>1.1 Nations, borders, distance</p> <p>1.2 International organisations</p> <p>1.3 Modes of economic integration</p> <p>2 Regulating markets</p> <p>2.1 Economic theory of regulation</p> <p>2.2 Regulatory capture: The example of financial markets</p> <p>3 Globalisation</p> <p>3.1 History and features of globalisation</p> <p>3.2 Globalisation of production</p> <p>3.3 Globalisation of services</p>
Teaching and learning methods:	Mix of lectures and group work; presentations by students; case studies; preparation by working through a reading list
Literature:	<p>Blinder, A. S. (2007). "How Many U.S. Jobs Might Be Offshorable?" CEPS Working Paper (142), pp. 1-12, 34-35</p> <p>Fortwengel, J. (2010), Upgrading through Integration? The Case of the Central Eastern European Automotive Industry, Transcience Journal 2 (1).</p> <p>Gereffi, G. (2006). "The new offshoring and global development of jobs." ILO Social Policy Lectures, pp. 1-16</p> <p>Godart, O., Görg, H. and Görlich, D. (2009). Back to Normal? The Future of Global Production Networks. The Crisis and Beyond. Klodt, H. and Lehment, H. Kiel, IfW Kiel: 119-126.</p> <p>Haar, K., C. Christine Pohl, et al. (2009). A captive commission - the role of the financial industry in shaping EU regulation, Alliance for Lobbying Transparency and Ethics Regulation (ALTER-EU)</p> <p>Head, J. W. (2005). The future of the global economic organizations: an evaluation of criticisms leveled at the IMF, the multilateral development banks, and the WTO. Ardsley, N.Y., pp. 16-30, 46-59</p>

	<p>Hirst, P. and G. Thompson (1996). Globalization in question: The international economy and the possibilities of governance. Cambridge, pp. 1-17</p> <p>Igan, D., P. Mishra, et al. (2009). "A Fistful of Dollars: Lobbying and the Financial Crisis." IMF Working Paper (287) , pp. 4-8, 26-27</p> <p>Jovanovic, M. (2011). Globalisation: an anatomy. International handbook on the economics of integration, Vol. I: General issues and regional groups. M. Jovanovic. Cheltenham, Northampton, Edward Elgar: 239-276.</p> <p>Levy, F. and K.-H. Yu (2007). "Offshoring Radiology Services to India." Industry Studies Association Working Papers(33)</p> <p>Lloyd, P. E. (2010). "Global economic integration." Pacific Economic Review 15(1): 71–86</p> <p>Nugent, N. (2010). The Government and Politics of the European Union. Basingstoke, pp. 419-430</p> <p>Pelkmans, J. (2006). European integration - Methods and economic analysis. Harlow et al., pp. 2-13, 53-62</p> <p>Pilbeam, K. (2010), Finance and Financial Markets. Houndsmill, Basingstoke, Chapter 18, pp. 459-465</p> <p>Ricketts, M. (2008). Economic regulation: principles, history and methods. International handbook on economic regulation. M. A. Crew and D. Parker. Cheltenham, pp. 34-62</p> <p>Ritzer, G. (2009), Globalization: A Basic Text, Chichester, ch. 8</p> <p>Ritzer, G. (2011), Globalization: The Essentials, Chichester, ch. 3</p> <p>Sturgeon, T. J., J. v. Biesebroek, et al. (2008). "Value Chains, Networks, and Clusters: Reframing the Global Automotive Industry." ITEC Working Paper Series (08-02), pp. 7-27</p> <p>Most recent papers from EU and research institutes on the development and impact of EU regulation in the resp. fields</p>
Additional information:	Student and learner centred approach

Brief module label:	Special Topics in Finance
Module description:	Special Topics in Finance

Division in teaching sessions, if applicable:	Lecture
Duration of module:	One semester
Classification in the curriculum:	BWL MA, 2nd semester, elective module Dept. B
Usability of the module:	The module can also be employed in other (Master's) courses according to the regulations of studies and examinations applicable there.
Frequency of offering of modules:	Every academic year
Author:	Prof. Dr. Andreas Wilms
Private lecturer:	Prof. Dr. Andreas Wilms
Language of instruction:	English
Prerequisites:	None, basic knowledge of the module Finance and Policy
ECTS-Credits:	5
Total workload and its composition:	150 hours of workload: approx. 50 contact hours, approx. 40 hours of preparation and follow-up, 7.5 working days = 60 hours of preparation for examination
Form of teaching/semester hours per week:	4 semester hours per week/ lecture
Study and examination achievements:	Written examination (70%) and Case Study presentation (30%)
Weighting of the grade in the overall grade:	According to the regulations of studies and examinations or $0.7 \cdot (5/90) = 3.89\%$
Learning outcomes:	The students train instruments that are necessary for the management of a company's financial sphere. They are enabled to prepare a financial plan, to manage liquidity (treasury) and to calculate business cases. They can develop and monitor financial reports and interpret financial ratios. The students are able to identify financial risks and know strategies and instruments to mitigate these risks. They are to consider both aspects of value orientation and aspects of sustainability in their finance decisions. Furthermore they know how to plan and perform communication with investors.
Contents:	Financial Planning and Budgeting <ul style="list-style-type: none"> <li>- Treasury/Cash Management</li> <li>- NWC</li> </ul>

	<p>Business Case Calculation</p> <ul style="list-style-type: none"> <li>- Financial Model</li> </ul> <p>Financial Analysis and Controlling</p> <ul style="list-style-type: none"> <li>- Financial Ratios</li> <li>- Financial Reports</li> </ul> <p>Holding Management</p> <p>International Financial Management</p> <ul style="list-style-type: none"> <li>- Global Financial Markets</li> <li>- Risk Management Strategies</li> <li>- Derivatives and Hedging</li> <li>- Credit Risk</li> </ul> <p>Value Based Management</p> <p>Investor Relations</p> <p>Sustainable Finance and Investment</p>
Teaching and learning methods:	<ul style="list-style-type: none"> <li>- Lecture using a combination of media (transparencies, blackboard work, projector etc.)</li> <li>- Exercises in the lab, on the computer etc.</li> <li>- Case study discussion</li> <li>- Process a topic in groups and presentation</li> </ul>
Literature:	<ul style="list-style-type: none"> <li>- Ross, St.A.; Westerfield, R.W.; Jaffe, J.F.: Corporate Finance. 7th ed., McGraw-Hill 2005.</li> <li>- Ritter, J.; Röttgers, F.: The Definitive Guide to Getting Your Budget Approved. Solution Matrix 2008.</li> <li>- Harvard Business School Press: Developing a Business Case: Expert Solutions to Everyday Challenges. Perseus Books 2010.</li> <li>- Penman, S.H.: Financial Statement Analysis and Security Valuation. 5th ed., McGraw-Hill 2012.</li> <li>- Culp, C.L.: The Risk Management Process. John Wiley &amp; Sons 2001.</li> <li>- Hull, J.C.: Options, Futures, and Other Derivatives. 8th ed., Prentice Hall 2011.</li> <li>- Young, S. D.; O'Byrne, St.E.: EVA and Value-Based Management: A Practical Guide to Implementation. McGraw-Hill 2000.</li> </ul>
Additional information:	

Brief module label:	Kooperative Prozesse
Module description:	Cooperative Processes
Division in teaching sessions, if applicable:	Module, lecture, exercise
Duration of module:	One semester
Classification in the curriculum:	WI Ma, 2nd semester, required module
Usability of the module:	This module prepares the students for other courses, especially the elective subjects of specialization "Cooperative Systems".
Frequency of offering of modules:	Every academic year
Author:	Prof. Dr. Andreas Johannsen
Private lecturer:	Prof. Dr. Andreas Johannsen
Language of instruction:	German, for exchange students English
Prerequisites:	None
ECTS-Credits:	6
Total workload and its composition:	180 hours = 72 hours of attendance and 108 hours of self-study
Form of teaching/semester hours per week:	Lecture: 2 semester hours per week Exercise: 2 semester hours per week Total: 4 semester hours per week
Study and examination achievements:	Seminar paper with presentation (50%), written examination (50%)
Weighting of the grade in the overall grade:	1/3 of the subject grade; 14% of all subject grades; 4.66% of the final grade
Learning outcomes:	The students acquire knowledge and skills in the management of cooperative Learning, Administrative, Know-how and Production processes, including the classification, evaluation and qualified use of software systems to support the same.
Contents:	<ol style="list-style-type: none"> <li>1. Basic terminology, Concepts, Organisation, Scientific Fundamentals</li> <li>2. Ergonomics, Communication and Cooperation</li> <li>3. Environment and Human behaviour, Group behaviour</li> </ol>

	<ol style="list-style-type: none"> <li>4. Methods &amp; Theories: Ethnography, Media theories, Moderation, Organisational theory</li> <li>5. Distribution of data, database support</li> <li>6. Middleware, Internet, Web 2.0 / 3.0</li> <li>7. Cooperative scenarios: Teaching, Learning, Working, Teaching and learning methods: Leisure, play</li> <li>8. Exercise 1: Cooperative application (e.g. MS Sharepoint) in the context of a company process (e.g. "Time recording").</li> <li>9. Exercise 2: Cooperative application (e.g. MS Sharepoint) in the context of a company process (e.g. "Supporting inter-company project management through a portal server")</li> <li>10. Exercise 3: Cooperative application (e.g. MS Sharepoint) in the context of a company process (e.g. "Company document management with a document management system").</li> <li>11. Group work: scenario-based requirements definition and prototypical realisation of a cooperative system for a company's task</li> <li>12. Group presentations</li> </ol>
Teaching and learning methods:	Lecture with a combination of media (transparencies, blackboard work, demos), accompanying exercises with selected cooperative software system, group work, presentations.
Literature:	<p>Borghoff, Schlichter: Rechnergestützte Gruppenarbeit [Computer-supported Group work], Springer,</p> <p>Schwabe, Streit, Unland (Publ.): CSCW-Kompodium [CSCW Compendium], Springer,</p> <p>and other current reference works (Online Reader with approx. 20 articles on the Management of Cooperative Processes).</p>
Additional information:	Along with the course two lectures with system demo from practical scenario are held regularly.

Brief module label:	IMPLPROC
Module description:	Implementation of Processes
Division in teaching sessions, if applicable:	Module, lecture, exercise
Duration of module:	One semester

Classification in the curriculum:	WI Ma, 2nd semester, required module
Usability of the module:	
Frequency of offering of modules:	Every academic year
Author:	<b>Prof. Dr. Andreas Johannsen</b>
Private lecturer:	<b>Prof. Dr. Andreas Johannsen</b>
Language of instruction:	German or English (based on international student intake)
Prerequisites:	None
ECTS-Credits:	6
Total workload and its composition:	180 hours = 72 hours of attendance and 108 hours of self-study
Form of teaching/semester hours per week:	Lecture: 2 semester hours per week Exercise: 2 semester hours per week Total: 4 semester hours per week
Study and examination achievements:	Project work with final presentation
Weighting of the grade in the overall grade:	1/3 of the subject grade; 14% of all subject grades; 4.66% of the final grade
Learning outcomes:	Starting off from the basic business conditions of a (model) company, the participants are expected to plan and design the use of current IT technologies along business processes. For this purpose, the processes of individual departments of the company must be analysed, modelled and structured. Thereafter, suitable IT solutions must be evaluated and implemented which ensure the competitive edge of the company through innovation.
Contents:	Scientific and practical introduction to the topic of Business Engineering and Workflow Management Systems as one example for an established tool for automation of business processes.  •Study of current IT topics dealing with the company's process management (these topics change in every course and take up current trends in research and economy, for example, Green-IT, Enterprise 2.0 Platforms, mobile service scenarios, user-generated content, Cloud Computing etc.) and their implementation and integration with business

	<p>management procedures of companies and their IT landscape.</p> <p>The course broadens the premise that the complete cycle of an innovative project must be studied which includes:</p> <ul style="list-style-type: none"> <li>- Concept definition</li> <li>- Business plan</li> <li>- Analysis, modelling and optimization of business processes</li> <li>- Perspective of economy</li> <li>- Technical implementation/Prototype</li> <li>- Preparation of management and customer presentations</li> <li>- Scientific preparation of project ideas</li> </ul>
Teaching and learning methods:	Theoretical introduction to Business Engineering and WFMS and focused presentation of current trends in the environment of innovation in company processes by lecturers; support in research work and selection of subject-related elements; motivation for group formation and reflection on group work; coaching groups; practical work in implementing functional prototypes
Literature:	Manuscript, current reference works and Internet search. Furthermore, Best Practice recommendations are handed out depending on the scenario.
Additional information:	Individual project groups should confront a simulated situation of competition and face each other with their concepts and holistic approach of solutions, as the case may be, even beyond their own university

Brief module label:	R&D Project and Team Management
Module description:	R&D Project- and Team Management
Division in teaching sessions, if applicable:	
Duration of module:	One semester
Classification in the curriculum:	TIM MA, 1st semester, required module
Usability of the module:	The module can also be employed in other Master's courses according to the regulations of studies and examinations applicable there.
Frequency of offering of modules:	Every academic year

Author:	Prof. Dr. rer. pol. Jürgen Schwill
Private lecturer:	Prof. Dr. rer. pol. Jürgen Schwill
Language of instruction:	German/English
Prerequisites:	
ECTS-Credits:	5
Total workload and its composition:	150 hours of workload, approx. 50 hours of attendance; approx. 40 hours of preparation and follow-up, approx. 60 hours of preparation for examination
Form of teaching/semester hours per week:	Lecture, exercise/ 4 semester hours per week
Study and examination achievements:	<ul style="list-style-type: none"> <li>• Written project plan, including tables and graphs (network and resources scheduling)</li> <li>• Group-wise presentation of the results in public, illustrated by a slide-show</li> </ul>
Weighting of the grade in the overall grade:	According to the regulations of studies and examinations
Learning outcomes:	<p>Participants are introduced to terms, principles and selected methods of Project Management with focus on R&amp;D. They learn to apply these methods to a self-defined case in team work (making use of MS Project software). In this coherence additional focus is put on:</p> <ul style="list-style-type: none"> <li>• awareness building for intercultural team process in companies</li> <li>• mediation of influencing possibilities how to affect the improvement of intercultural team work processes</li> <li>• mediation of main "tools" for intercultural team management and intercultural communication</li> </ul>
Contents:	<p>The course programme starts with a series of lectures and supplemental exercises on:</p> <ul style="list-style-type: none"> <li>• Terms, objectives and rationale of project management</li> <li>• The Conception phase</li> <li>• The Development phase</li> <li>• The Implementation phase</li> <li>• The Close-out phase</li> <li>• Building and guiding the project team (special attention is paid to the topics of intercultural communication, management, teams and culture, as well as to the interrelation of these topics and the role of international human resource management)</li> <li>• Project management software</li> <li>• This is followed by practical training: the teams, which by then have worked out their Business Plan, do the project planning for this task in retrospective, applying the methods learnt in the introductory lectures and exercises.</li> </ul>
Teaching and learning methods:	Seminar lecture

<p>Literature:</p>	<p>Instructions and forms for the exercises</p> <p>Apfelthaler, G.: Interkulturelles Management. Die Bewältigung kultureller Differenzen in der internationalen Unternehmenstätigkeit [Intercultural Management. The Management of Cultural Differences in the International Corporate Activity], 1999</p> <p>Baumer, T.: Handbuch Interkulturelle Kompetenz [Manual of Intercultural Competence], 2002</p> <p>Bergemann, N.; Sourisseaux, A.L.J.: Interkulturelles Management [Manual of Intercultural Management], 3rd ed., 2003</p> <p>Blom, H.; Meier, H.: Interkulturelles Management. Interkulturelle Kommunikation, Internationales Personalmanagement, Diversity-Ansätze im Unternehmen [Intercultural Management. Intercultural Communication, International HR Management, Diversity Approaches in Companies], 2002</p> <p>Bolten, J. (Hrsg.): Cross Culture - Interkulturelles Handeln in der Wirtschaft [Intercultural Activity in Business], 2. Aufl., 1999</p> <p>Bolten, J.; Ehrhardt, C. (Publ.): Interkulturelle Kommunikation. Texte und Übungen zum interkulturellen Handeln [Texts and Exercises for Intercultural Activity], 2003</p> <p>Dessler, G.: Human Resource Management, 9th ed., Upper Saddle River 2003</p> <p>Götz, K. (Publ.): Interkulturelles Lernen / Interkulturelles Training [Intercultural Learning / Intercultural Training], 3<sup>rd</sup> ed., 2000</p> <p>Herbrand, F.: Fit für fremde Kulturen. Interkulturelles Training für Führungskräfte [Fit for Alien Cultures. Intercultural Training for Managers], 2002</p> <p>Krentzel, G. A.: Multinationale Arbeitsgruppen. Implikationen für die Führung [Multinational Workgroups, Implications for the Management], 2000</p> <p>Lewis, R. D.: Handbuch Interkulturelle Kompetenz. Mehr Erfolg durch den richtigen Umgang mit Geschäftspartnern weltweit [Manual of Intercultural Competence. More Success through Correct Interaction with Business Partners], 2000</p> <p>Lock, D., Project management, 2000</p> <p>Lockyer, K., Project management and project network techniques, 1996</p> <p>Pawlik, T.: Personalmanagement und Auslandseinsatz. Kulturelle und personalwirtschaftliche Aspekte [HR Management and Overseas deployment. Cultural and HR management-related aspects], 2000</p> <p>Personal. Zeitschrift für Human Resource Management: Schwerpunkt: Internationales Personalmanagement [HR, Journal for HR Management: Focus on International HR Management], 55 Vol. (2003), H. 6</p>
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	<p>           Pieper, R.: Human Resource Management: An international comparison, 1990            Reineke, R.-D.; Fussinger, C. (Publ.): Interkulturelles Management. Konzeption - Beratung – Training [Intercultural Management, Conception – Guidance - Training], 2001            Rothlauf, J.: Interkulturelles Management. Mit Beispielen aus Vietnam, China, Japan, Russland und Saudi-Arabien [Intercultural Management. With Examples from Vietnam, China, Japan, Russia and Soudi Arabia], 1999            Scherm, E.; Süß, S.: Internationales Management. Eine funktionale Perspektive [International Management. A Functional Perspective], 2001            Taylor, J. The project management workshop, 2001            MS Project Manual         </p> <p>           Trompenaars, F.; Hampden-Turner, C.: Managing peoples across cultures, 2004            Weber, W.; Festing, M.; Dowling, P.J.; Schuler, R.S.: Internationales Personalmanagement [International HR Management], 2nd ed., 2001            Zeitschrift Personalführung: Schwerpunkt: Interkulturelle Perspektiven: Führung, Kommunikation &amp; Kooperation in einer globalen Arbeitswelt [Journal for HR Management: Focus on Intercultural Perspectives: Management. Communication &amp; Cooperation in a Global World of Work], 35 Vol. (2002), No. 11         </p>
Additional information:	

## Department of Informatics and Media: Bachelor modules

<b>INFB Computer Programming II</b>		<b>Course</b>	INF
<b>Lecturers :</b>	Prof. Dr. Rolf Socher <a href="#">eMail</a> Prof. Dr. Sven Buchholz <a href="#">eMail</a>	<b>Term</b>	2
<b>Course Classification :</b>	Informatik Bachelor	<b>CH</b>	4
<b>Language :</b>	Deutsch	<b>Type</b>	VÜ
<b>Type of examination :</b>	PL	<b>Credits</b>	5

<b>Method of evaluation :</b>	written examination 120 min
<b>Requirements :</b>	<a href="#">Algorithms and Data Structures</a> <a href="#">Computer Programming I</a>
<b>Cross References :</b>	
<b>Previous knowledges :</b>	Computer Programming I Algorithms and Data Structures
<b>Aids and special features :</b>	<b>Mode of assessment</b> Pass at course examination Graded: yes Continuous Evaluation for assignments. Overall grade is the course examination grade.
<b>Teaching aims :</b>	Students will learn concepts in object orientation and object-oriented programming using the Java programming language as an example. The aim is to be able to design programs using good programming style. Students will gain competency in object-oriented programming analysis, troubleshooting and methods through practical exercises.
<b>Contents :</b>	<ul style="list-style-type: none"> <li>• Good programming and design style: the principles of capsuling, secret principle, abstract data types</li> <li>• Comprehensive introduction to object orientation: classes and objects, abstract classes and interfaces, inheritance, polymorphism</li> <li>• Programming experience necessary to solve demanding problems:</li> <li>• practical application of concepts using Java and Java API</li> </ul>
<b>Literature :</b>	<p>Java (2. Band, Fortsetzung) Fortgeschrittene Techniken und APIs, RRZN-Handbücher, Uni Hannover</p> <p>Darwin I. F. (Übersetzung L. Schulten, G.W. Selke, D.Reeder, W. Gabriel), Java Kochbuch, O Reilly</p> <p>Krüger G., Stark T.: Handbuch der Java-Programmierung, Addison-Wesley, <a href="http://www.javabuch.de">http://www.javabuch.de</a></p> <p>Sierra K., Bates B.: (Übersetzung L. Schulten, E. Buchholz), Java von Kopf bis Fuß, O Reilly</p> <p>Ulllenboom C.: Java ist auch eine Insel, Galileo Computing, <a href="http://openbook.galileocomputing.de/javainsel/">http://openbook.galileocomputing.de/javainsel/</a></p>

<b>Digital Shooting</b>		<b>Course</b>	INF
<b>Lecturers :</b>	Prof. Eberhard Hasche <a href="#">eMail</a>	<b>Term</b>	4
<b>Course Classification :</b>	Informatik Bachelor, Profil-Katalog B-INF-Profil	<b>CH</b>	4

<b>Language :</b>	Deutsch/Englisch	<b>Type</b>	VÜ
<b>Type of examination :</b>	PL	<b>Credits</b>	5
<b>Method of evaluation :</b>	term paper with oral examination		
<b>Requirements :</b>			
<b>Cross References :</b>			
<b>Previous knowledges :</b>	Basic knowledge acquired in Introduction to Audio and Video module		
<b>Aids and special features :</b>	<b>Mode of assessment</b> Coursework with oral examination Graded: yes Continuous Evaluation for assignments.		
<b>Teaching aims :</b>			
<b>Contents :</b>			
<b>Literature :</b>	Holmes P.: Hot Moves, Hollywood Camera Works, 2010, Videotutorials Kamp W.: AV-Mediengestaltung Grundwissen, Verlag Europa-Lehrmittel, 2005 Wright S.: Digital Compositing for Film and Video – Second Edition, Focal Press., 2006 Poynton C. A.: A Technical Introduction to Digital Video, John Wiley & Sons, 1996 Reisz K., Millar G.: The Technique of Film Editing, Focal Press 1953 – 2002 The Foundry: Nuke Documentation		

<b>C# and .NET-Programming</b>		<b>Course</b>	INF
<b>Lecturers :</b>	Prof. Dr. sc. techn. Harald Loose <a href="#">eMail</a>	<b>Term</b>	4
<b>Course Classification :</b>	Informatik Bachelor, Profil-Katalog B-INF-Profil	<b>CH</b>	4
<b>Language :</b>	Deutsch	<b>Type</b>	VÜ
<b>Type of examination :</b>	PL	<b>Credits</b>	5
<b>Method of evaluation :</b>	term paper with oral examination		
<b>Requirements :</b>			
<b>Cross References :</b>			
<b>Previous knowledges :</b>	Computer Programming I-III		
<b>Aids and special features :</b>	<b>Mode of assessment</b> Coursework with oral examination Graded: yes Continuous Evaluation for assignments.		

<b>Teaching aims :</b>	
<b>Contents :</b>	
<b>Literature :</b>	Geirhos M.: Professionell entwickeln mit Visual C# 2012, Das Praxisbuch, Galileo Computing, 2013. Huber T.C.: Windows Store Apps mit XAML und C#, Das umfassende Handbuch, , Galileo Computing, 2013. Doberenz W., Gewinnus, T.: Visual C# 1012. Das Kochbuch, Hanser, 2013. Nathan, A.: Windows 8 Apps

<b>English II</b>		<b>Course</b>	INF
<b>Lecturers :</b>	BA Christof Reinecke <a href="#">eMail</a> Paul Bell	<b>Term</b>	2
<b>Course Classification :</b>	Informatik Bachelor	<b>CH</b>	2
<b>Language :</b>	Deutsch	<b>Type</b>	Ü
<b>Type of examination :</b>	PL	<b>Credits</b>	4
<b>Method of evaluation :</b>	written examination 90 min		
<b>Requirements :</b>	<a href="#">English I</a>		
<b>Cross References :</b>			
<b>Previous knowledges :</b>	Abitur-level knowledge of English or equivalent level language proficiency examinations		
<b>Aids and special features :</b>	Seminar-type learning environment with varying language exercises using the language laboratories and relevant teaching materials, integrating self-study, online learning and independent Internet research.  <b>Mode of assessment</b> 1st semester: CV, application and handout in English presentation (Graded: no, must be passed)  2nd semester: Course examination (1st semester must be successfully completed beforehand) Graded: yes Overall grade is the course examination grade.		
<b>Teaching aims :</b>	Students will extend their specialist vocabulary in computing and will be able to utilise it in communicative situations. In addition, they will develop listening and speaking skills relevant to their studies and profession that will enable them to take part in English-language lectures and discussions. Their ability to read and process English-language specialist literature will be enhanced; the main focus in developing written language skills will be		

	on forms important for professional situations. In this process, soft skills and intercultural competence will also grow.
<b>Contents :</b>	Forms of interactive oral and written language on presenting, describing, discussing and evaluating situations, processes and procedures in IT and daily life influenced by IT. Engaging with authentic texts (reading and listening) in the original language. Accompanying English-language lectures (lecture preview and review)
<b>Literature :</b>	Infotech (Cambridge); English for IT (Oxford); Englisch für Computer- und IT Berufe (Klett); IT Matters (Cornelsen); aktuelle Materialien aus englischsprachigen IT- und Computerzeitschriften

<b>Formal Languages / Automata Theory</b>		<b>Course</b>	INF
<b>Lecturers :</b>	Prof. Dr. Matthias Homeister <a href="#">eMail</a>	<b>Term</b>	2
<b>Course Classification :</b>	Informatik Bachelor	<b>CH</b>	4
<b>Language :</b>	Deutsch	<b>Type</b>	VÜ
<b>Type of examination :</b>	PL	<b>Credits</b>	4
<b>Method of evaluation :</b>	written examination 120 min		
<b>Requirements :</b>	<a href="#">Introduction to Computer Science and Logic</a> <a href="#">Mathematics I</a>		
<b>Cross References :</b>			
<b>Previous knowledges :</b>	Mathematics I Programming I		
<b>Aids and special features :</b>	<b>Mode of assessment</b> Pass at course examination Graded: yes Continuous Evaluation for assignments. Overall grade is the course examination grade.		
<b>Teaching aims :</b>	Knowledge of the basic concepts and methods Ability to construct, analyze and apply automata Ability to apply transformations of automata Knowledge of the relation between the different concepts (formal languages and automata)		
<b>Contents :</b>	Theory of formal Languages (concept of formal languages, regular expressions, grammars, derivations, Chomsky hierarchy) Theory of automata: deterministic and non-deterministic finite automata, transformations between automata, push-down automata, turing machines Characterizing regular languages by automata, regular expressions, and type 3 grammars		

<b>Literature :</b>	Asteroth A., Baier Ch.: Theoretische Informatik. München: Pearson Studium 2002 Hopcroft J. E., Motwani R., Ullman J. D.: Einführung in die Automatentheorie, formale Sprachen und Komplexitätstheorie. 3. Aufl. München: Pearson Studium 2011 Socher R.: Theoretische Grundlagen der Informatik. 3. Aufl. München: Hanser Verlag 2008 Vossen G., Witt K.-U.: Grundkurs theoretische Informatik. 5. Aufl. Wiesbaden: Springer Fachmedien Wiesbaden
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<b>Introduction to Interactive Media</b>		<b>Course</b>	INF
<b>Lecturers :</b>	Prof. Alexander Urban <a href="#">eMail</a> Prof. Eberhard Hasche <a href="#">eMail</a> Julia Martin <a href="#">eMail</a>	<b>Term</b>	4
<b>Course Classification :</b>	Informatik Bachelor, Profil-Katalog B-INF-Profil	<b>CH</b>	4
<b>Language :</b>	Deutsch/Englisch	<b>Type</b>	VÜ
<b>Type of examination :</b>	PL	<b>Credits</b>	5
<b>Method of evaluation :</b>	term paper with oral examination		
<b>Requirements :</b>			
<b>Cross References :</b>			
<b>Previous knowledges :</b>			
<b>Aids and special features :</b>	<b>Mode of assessment</b> Coursework with oral examination Graded: yes Continuous Evaluation for assignments.		
<b>Teaching aims :</b>	Students will know the basics of interactive media design. They will be able to structure workflows for conceptualising media and design them with dramatic effect. Students will know the special characteristics of synchronous and asynchronous programming and will be able to guide users as regards conceptual and aesthetic demands. Students will know the differences between online and offline applications and be able to prepare and integrate external media. They will be able to use relevant software programmes (for example, Adobe Photoshop, Adobe/Macromedia Director, Adobe/Macromedia Flash, Adobe/Macromedia Dreamweaver).		
<b>Contents :</b>	<ol style="list-style-type: none"> <li>1. Screen design</li> <li>2. Interface design</li> <li>3. Introduction to usability and accessibility</li> <li>4. Dramatic effect in interactive media</li> <li>5. User guidance</li> <li>6. Features of synchronous and asynchronous programming</li> <li>7. Integrating external media</li> </ol> Differences between online and offline applications and quality assurance		

<b>Literature :</b>	Joachim Böhringer et al.: Kompendium der Mediengestaltung für Digital- und Printmedien, Berlin 2000 Steve Krug: Don't make me think!, Bonn 2002 Jakob Nielsen: Erfolg des Einfachen, München 2000 Brenda Laurel: Computers as Theatre, Reading 2000 New Masters of Flash/Vol. 3 Friends of ED Birmingham 2004 Sharp H., Rogers Y., Preece J.: Interaction Design: Beyond Human-Computer Interaction, New York 2002 Mook C.: Essential ActionScript 3.0, Sebastopol 2007
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<b>Concept of Operations for Photorealistic Media</b>		<b>Course</b>	INF
<b>Lecturers :</b>	Prof. Eberhard Hasche <a href="#">eMail</a>	<b>Term</b>	4
<b>Course Classification :</b>	Informatik Bachelor, Wahlpflicht-Katalog B-INF-Ergänzung	<b>CH</b>	2
<b>Language :</b>	Englisch	<b>Type</b>	S
<b>Type of examination :</b>	PL	<b>Credits</b>	2
<b>Method of evaluation :</b>	term paper with oral examination		
<b>Requirements :</b>			
<b>Cross References :</b>			
<b>Previous knowledges :</b>			
<b>Aids and special features :</b>	<b>Mode of assessment</b> Coursework with oral examination Graded: yes Continuous Evaluation for assignments.		
<b>Teaching aims :</b>	The students understand that for creative goals a different approach is needed. They know the most common modern operations in graphical media. They understand the term <b>Fuzzy Goal</b> and are able to set the different operations together to achieve a creative result somewhere in the angle of the desired goal. They know the basic concept of each operation and can handle the main technology. They understand the advantages and disadvantages of each operation and are able to use them to achieve outputs different from those results that appeared in the first place. They have the ability to create ideas, sort them, structure them and produce them. The students learn the use of production-proved software packages like		

	Adobe Photoshop, Adobe After Effects, The Foundation Nuke and Autodesk Maya).
<b>Contents :</b>	<ol style="list-style-type: none"> <li>1. The Basics of the Term <b>Concept of Operations</b></li> <li>2. 2D Live Action Footage Operations           <ul style="list-style-type: none"> <li>- backdrop keying</li> <li>- tracking</li> <li>- rotoscoping und planar tracking</li> </ul> </li> <li>3. 2.5D Environments Operations           <ul style="list-style-type: none"> <li>- cards and billboards</li> <li>- panorama maps</li> <li>- geometrisches 2.5d</li> <li>- camera projection</li> <li>- clean plates</li> </ul> </li> <li>4. 3D Environments           <ul style="list-style-type: none"> <li>- matchmoved greenscreen plates</li> <li>- 3d in live action footage eingefügt</li> </ul> </li> <li>5. Basics of Gamestorming</li> <li>6. Handling Ideas</li> </ol>
<b>Literature :</b>	<p>Gray D., Brown S., Macanuso J.: Gamestorming - A Playbook for Innovators, Rulebreakers, and Changemakers O Reilly July 2010</p> <p>Allen D., Connor B.: Encyclopedia of Visual Effects - Apple Pro Training Series, Berkeley 2007</p> <p>Brinkman R.: The Art and Science of Digital Compositing, San Diego 1999</p> <p>Wright S.: Digital Compositing for Film and Video, Boston 2010</p> <p>Digital Tutors – Online Library (Oklahoma USA)</p> <p>Hollywodd Camera Works - Visual Effects for Directors (DVDs)</p>

<b>Mathematics II</b>		<b>Course</b>	INF
<b>Lecturers :</b>	Prof. Dr. Roland Uhl <a href="#">eMail</a> Prof. Dr. Rolf Socher <a href="#">eMail</a>	<b>Term</b>	2
<b>Course Classification :</b>	Informatik Bachelor	<b>CH</b>	4
<b>Language :</b>	Deutsch	<b>Type</b>	VÜ
<b>Type of examination :</b>	PL	<b>Credits</b>	5
<b>Method of evaluation :</b>	written examination 120 min		
<b>Requirements :</b>	<a href="#">Mathematics I</a>		
<b>Cross References :</b>			
<b>Previous knowledges :</b>	Mathematics I		
<b>Aids and special features :</b>	<b>Mode of assessment</b> Pass at course examination Graded: yes		

	Continuous Evaluation for assignments. Overall grade is the course examination grade.
<b>Teaching aims :</b>	Ability to do matrix calculations: equivalent transformations, application of Gauß algorithm; confident complex arithmetic: arithmetic, trigonometric and Euler representation, calculation with complex numbers, ability to compute determinants, invert matrices and to determine the rank of matrices, solving of linear systems, identification of eigenvalues and eigenvectors; ability to understand and apply definitions of basic notions of vector arithmetic, ability to test n-dimensional vectors for linear independency and dependency working knowledge of definitions, properties and application of the inner product, the vector product and mixed product ability to describe lines and planes by equations and to compute meets, distances and angles knowledge of how to compute translations, rotations and scalings, how to transform one coordinate system into another one.
<b>Contents :</b>	Linear systems I: homogeneous and heterogeneous systems, matrices, equivalence of matrices, Gauß algorithm, theorems on solutions of linear systems; algebraic structures with two operations: rings and fields, complex numbers, fundamental theorem of algebra Linear systems II: determinants, Laplace rule, rank of a matrix, Cramer rule, inverse of square matrix, Determinantensatz, structure and geometrical representation of solution sets, direction angles and distances of lines and planes, meets of solution sets; Vector spaces and linear maps: definition, linear independence, bases and subspaces, representation of vectors, linear maps, transformation of bases, Eigenvalues and Eigenvectors; Euclidean spaces: inner product, dihedral angles, Gram Schmidt process for orthogonalisation
<b>Literature :</b>	Jänich K.: Lineare Algebra. 11. Aufl. Berlin: Springer Verlag 2008 Schubert M.: Mathematik für Informatiker. Wiesbaden: Vieweg und Teubner Verlag 2009 Socher R.: Mathematik für Informatiker. München: Hanser 2011 Teschl S. und Teschl G.: Mathematik für Informatiker, Band 1, Diskrete Mathematik und Lineare Algebra. 3. Aufl. Berlin, Heidelberg: Springer 2008

<b>Security of Distributed Systems</b>		<b>Course</b>	INF
<b>Lecturers :</b>	Prof. Dr. Claus Vielhauer <a href="#">eMail</a> Dipl.-Inform. Tobias Scheidat <a href="#">eMail</a>	<b>Term</b>	4
<b>Course Classification :</b>	Informatik Bachelor, Profil-Katalog B-INF-Profil	<b>CH</b>	4
<b>Language :</b>	Deutsch	<b>Type</b>	VÜ
<b>Type of examination :</b>	PL	<b>Credits</b>	5

<b>Method of evaluation :</b>	written examination 120 min
<b>Requirements :</b>	
<b>Cross References :</b>	
<b>Previous knowledges :</b>	Introduction to Security course
<b>Aids and special features :</b>	<b>Mode of assessment</b> Pass at course examination Graded: yes Continuous Evaluation for assignments. Overall grade is the course examination grade.
<b>Teaching aims :</b>	Students will know the most important protocols used in distributed systems. They will be aware of protocol weaknesses and resulting attacks. They will learn about firewalls, intrusion detection, intrusion response systems and honeynets. They will not only know protocols, such as IPSec, but also how to employ cryptographic methods to improve security. In addition, they will be knowledgeable about wireless network security.
<b>Contents :</b>	
<b>Literature :</b>	C. Eckert: IT-Sicherheit. Konzepte - Verfahren ? Protokolle. Oldenburg 2004 Fuhrberg, Dr. K.: Internet-Sicherheit. Hanser 2001 Honeynet Project: Know your enemy, 2004 Anonymous: Hackers Guide. Markt + Technik 2003 Böhmer, Wolfgang: VPN - Virtual Private Networks, Die reale Welt der virtuellen Netze. Hanser2002 Chapman, D. Brent; Zwicky, Elisabeth D.: Einrichten von Internet Firewalls. OReilly 2001 Doraswamy, Naganand; Harkins, Dan: IPSec Der neue Sicherheitsstandard für das Internet, Intranets und virtuelle private Netze. Addison Wesley 2000 Edney, Jon; Arbaugh, William., Real 802.11 security, Addison Wesley 2004

## Department of Informatics and Media: Master modules

<b>Media Security</b>		<b>Course</b>	INF
<b>Lecturers :</b>	Prof. Dr. Claus Vielhauer <a href="#">eMail</a> Dipl.-Inform. Tobias Scheidat <a href="#">eMail</a>	<b>Term</b>	2
<b>Course Classification :</b>	Informatik Master, Vertiefung Security and Forensics	<b>CH</b>	4
<b>Language :</b>	Deutsch	<b>Type</b>	VÜS
<b>Type of examination :</b>	PL	<b>Credits</b>	6

<b>Method of evaluation :</b>	term paper with oral examination
<b>Requirements :</b>	
<b>Cross References :</b>	
<b>Previous knowledges :</b>	
<b>Aids and special features :</b>	
<b>Teaching aims :</b>	
<b>Contents :</b>	
<b>Literature :</b>	<p>Dittmann J.: Digitale Wasserzeichen – Grundlagen, Verfahren, Anwendungsgebiete, Springer Verlag, ISBN 3-540-66661-3, 2000</p> <p>Kunkelmann T.: Sicherheit für Videodaten, Vieweg Verlag, ISBN 3-528-05680-0, 1998.</p> <p>Steinmetz R.: Multimediatechnology, Springer, 2. Auflage, ISBN 3-540-62060, 1999</p> <p>Cox I. J., et al.: Digital Watermarking and Steganography, Morgan Kaufmann, ISBN-13: 978-0123725851, 2007</p> <p>Johnson N. F., Duric Z., Jajodia S.: Information Hiding: Steganography and Watermarking - Attacks and Countermeasures, Springer, ISBN-10: 9780792372042, 2000</p> <p>Katzenbeisser S., et al.: Information Hiding – techniques for steganography and digital watermarking, Artech, ISBN-10: 9781580530354, 2000</p>

<b>Medienkonzepte/-theorie III</b>		<b>Course</b>	INF
<b>Lecturers :</b>	Prof. Stefan Kim <a href="#">eMail</a>	<b>Term</b>	2
<b>Course Classification :</b>	Digitale Medien Master	<b>CH</b>	4
<b>Language :</b>	Deutsch	<b>Type</b>	VÜS
<b>Type of examination :</b>	PL	<b>Credits</b>	6
<b>Method of evaluation :</b>	term paper with oral examination		
<b>Requirements :</b>			
<b>Cross References :</b>			
<b>Previous knowledges :</b>			
<b>Aids and special features :</b>			
<b>Teaching aims :</b>			
<b>Contents :</b>			

<b>Literature :</b>	ORourke M.: Principles of Three-Dimensional Computer Animation, W.W. Norton, 2003 Bender M.; Brill M.: Computergrafik. Hanser-Verlag, 2006 (2. Aufl.) Birn J.: Lighting & Rendering, Addison-Wesley, 2007 (2. Aufl.)
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<b>3D Character Animation</b>		<b>Course</b>	INF
<b>Lecturers :</b>	Prof. Alexander Urban <a href="#">eMail</a> Prof. Stefan Kim <a href="#">eMail</a> Prof. Eberhard Hasche <a href="#">eMail</a>	<b>Term</b>	2
<b>Course Classification :</b>	Digitale Medien Master, Wahlpflicht Katalog M-DM-W	<b>CH</b>	4
<b>Language :</b>	Deutsch	<b>Type</b>	VÜS
<b>Type of examination :</b>	PL	<b>Credits</b>	6
<b>Method of evaluation :</b>	term paper with oral examination		
<b>Requirements :</b>			
<b>Cross References :</b>			
<b>Previous knowledges :</b>	Knowledge of Autodesk Maya		
<b>Aids and special features :</b>			
<b>Teaching aims :</b>			
<b>Contents :</b>			
<b>Literature :</b>	Hooks, E. (2000) Acting for Animators, heineman Webster, C. (2005) Animation: The Mechanics of Motion, Focal press Muybridge, E. (2007) Muybridge's Human Figure in Motion, dover electronic Clip art Spencer, S. (2010) ZBrush Digital Sculpting Human Anatomy, John Wiley & sons; dVd edition Ritchie, R., Callery, J., Biri, K. (2007) The Art of Rigging Volume 1, CGToolkit <a href="http://www.digitaltutors.com">www.digitaltutors.com</a>		

## Department of Engineering

Brief module label:	Project Management
Module description:	Project Management
Division in teaching sessions, if applicable:	

Duration of module:	One semester
Classification in the curriculum:	Master Energy Efficiency, 1 <sup>st</sup> /2nd semester
Usability of the module:	Runs simultaneously with consolidating BWL courses and preparatory course for subsequent advanced VWL courses
Frequency of offering of modules:	Every semester
Author:	<b>Prof. Dr. Peter R. Wetzel, Dipl.-Ing</b>
Private lecturer:	<b>Prof. Dr. Peter R. Wetzel, Dipl.-Ing</b>
Language of instruction:	English
Prerequisites:	none
ECTS-Credits:	3
Total workload and its composition:	90 hours of workload, approx. 30 hours of attendance; approx. 60 hours of self study
Form of teaching/semester hours per week:	2semester hours per week /lecture
Study and examination achievements:	Written or oral examination
Weighting of the grade in the overall grade:	According to the regulations of studies and examinations
Learning outcomes:	<p>Only a project organization is able to manage new / non repetitive tasks, which are limited both in time and volume.</p> <p>Participants will receive a wide overview regarding project engineering, project steering and the close of projects.</p> <p>One highlight is team leadership and conflict management.</p> <p>Based on examples different types of projects will be discussed, e.g. investment projects, order projects, R&amp;D projects, service projects.</p> <p>Suitable tools for carrying out different sizes of projects will be explained based on examples.</p> <p>Electronic data processing is the most suitable tool for engineering, adjustment and evaluation of projects. Participants will get an overview based on examples regarding all opportunities for using computers in project management.</p>
Contents:	Introduction, Types of projects regarding applications,

	Basic concepts of project organizations, Project engineering, Realization of projects, Project adjustment, Information, Controlling, Negotiations, Project risks, Claim management, The project team, Close of Projects, International project financing, The project management profession code of ethics
Literature:	Script

### Additional Subjects

Brief module label:	DaF A1
Module description	German as a Foreign Language A 1
Type of module :	Seminar
Duration of module:	one semester
Classification in the curriculum:	Extra offer
Usability of the module	The module can be used regularly for exchange students without any knowledge of German.
Frequency:	each semester
Author:	Jutta Kunze, M.A.
Lecturer:	N.N.
Language of instruction:	English and German
Prerequisites:	None
ECTS-Credits:	3
Total workload and its composition:	75 h: 60 h contact hours, 15 h self-study
Form of teaching /semester hours per week	4 semester hours per week
Study and examination achievements	Written examination

Weighting of the grade in the overall grade:	-
Learning outcomes:	Students acquire a basic vocabulary of high frequency words and can communicate in everyday language situations by using simple grammatical structures.
Contents:	<p>Students acquire a basic knowledge of German at A-1 level. The topics are based on everyday speech acts which are relevant for getting along in everyday life. These are:</p> <ul style="list-style-type: none"> <li>- greetings</li> <li>- Talk about oneself as well as others</li> <li>- to make appointments</li> <li>- Ask for places and the way</li> <li>- to do small talk while shopping</li> <li>- to give time information</li> <li>- to talk about events</li> <li>- to order and pay at a restaurant</li> <li>- to make appointments by phone</li> </ul>
Teaching and learning methods	Teacher input, pair work, group work, learners lecture, exercises in teams, work with audio and video files.
Literature:	Netzwerk / Kurs-und Arbeitsbuch A1, Teilband 1 und 2 mit 2 Audio-CDs und DVD, Klett-Verlag 2013.

Brief module label:	DaF B1
Module description	German as a Foreign Language B 1
Type of module :	Seminar
Duration of module:	one semester
Classification in the curriculum:	Extra offer
Usability of the module	The module can be used regularly for exchange students.
Frequency:	each semester
Author:	G.Handschuck
Lecturer:	G.Handschuck
Language of instruction:	German
Prerequisites:	At least B1 level
ECTS-Credits:	3
Total workload and its composition:	75 h: 60 h contact hours, 15 h self-study

Form of teaching /semester hours per week	4 semester hours per week
Study and examination achievements	Tests, Presentation
Weighting of the grade in the overall grade:	
Learning outcomes:	<ul style="list-style-type: none"> <li>- Development of general language vocabulary (informal and formal level)</li> <li>- Development of communication skills for successful participation in discussions in everyday communication and study situations</li> <li>- Development of competences in reading, writing and listening with different types of texts</li> <li>- Intercultural findings from the comparison of culturally selected priorities (Germany - home country)</li> <li>- Improving grammatical skills (depending on the initial level)</li> </ul>
Contents:	<ul style="list-style-type: none"> <li>- Different forms of vocabulary work</li> <li>- Oral and written communication tasks and work on adapted and/or original, partly current reading and listening texts (depending on proficiency level) on various topics (for example, work/profession, sports, doping, media ...)</li> </ul>
Teaching and learning methods	Exercises, partly in the language lab, lectures, work in groups
Literature:	different books for German as a foreign language journals and newspapers, websites
Special information:	Use of Moodle Since the language level of the participating students varies from semester to semester, the design of this course needs to be frequently adjusted according to the needs of the participants.

Brief module label:	Brandenburg
Module description	History of the city of Brandenburg
Type of module :	Seminar
Duration of module:	one semester
Classification in the curriculum:	Extra offer
Usability of the module	The module can be used regularly for exchange students.
Frequency:	each semester

Author:	Dr. Hans-Georg Kohnke
Lecturer:	Dr. Hans-Georg Kohnke
Language of instruction:	German and English
Prerequisites:	None
ECTS-Credits:	2 – winter semester, 3 – summer semester
Total workload and its composition:	50 h: 50 h contact hours – winter semester 75 h: 75 h contact hours – summer semester
Form of teaching /semester hours per week	5 blocked sessions winter semester, 6-7 blocked sessions summer semester
Study and examination achievements	Oral exam
Weighting of the grade in the overall grade:	-
Learning outcomes:	The students gain knowledge about over a thousand years history of the Brandenburg city and Germany in general by visiting several museums and cultural sites
Contents:	<ul style="list-style-type: none"> <li>- Over thousand years of German history in the Town Museum and city walk</li> <li>- Brandenburg Cathedral and Cathedral Museum</li> <li>- Industrial Museum in the old Steelworks</li> <li>- Brandenburg Archaeological State Museum</li> <li>- Berlin: Parliament – Reichstag, Brandenburg gate and German Historic Museum</li> <li>- Only summer semester: Canoeing tour around Brandenburg with Olympic game winner</li> <li>- Only summer semester: additional museum</li> </ul>
Teaching and learning methods	Guided tours and discussions, presentations

#### Other Subjects (No further information available)

Subject	Course of Study	Bachelor/Master	ECTS
Partial differential equations	Photonics	Master	3