

**IPE-Modulhandbuch
zur SPO Nr. 1 | 2016
Version nach Amtsblatt Nr. 73 |
Senat 12.07.2016**

Abkürzungsverzeichnis

Laut Allgemeiner Studienprüfungsordnung der HTWG Konstanz werden in den Studien- und Prüfungsplänen der Studiengänge Abkürzungen, Bezeichnungen und Regelungen einheitlich verwendet.

Allgemeine Abkürzungen:

Sem	Semester
SWS	Semesterwochenstunden
ECTS	European Credit Transfer System
LV	Lehrveranstaltung
MO	Modul
PM	Pflichtmodul
WPM	Wahlpflichtmodul
EN	Englischsprachige Veranstaltung

Lehrveranstaltungsarten:

V	Vorlesung
Ü	Übung (mit Betreuung)
LÜ	Laborübung
W	Workshop, Seminar, Kolloquium
P	Praktikum
PJ	Projekt
E	Exkursion
X	Veranstaltungsart ist abhängig von der gewählten Veranstaltung
PSS	Integriertes praktisches Studiensemester
TSS	Theoretisches Auslandsstudiensemester

Die Angabe **Y, Z** bedeutet, dass sich die Lehrveranstaltung aus den Beiträgen Y und Z zusammensetzt.

Die Angabe **Y/Z** bedeutet, dass die Art der Lehrveranstaltung entweder Y oder Z ist. Für die Studierenden besteht kein Recht auf Wahlmöglichkeit.

Prüfungsarten:

Kx	Klausur (x = Dauer in Minuten)
Mx	Mündliche Prüfung (x = Dauer in Minuten)
R	Referat
SP	sonstige schriftliche oder praktische Arbeit
S	Studienarbeit (Siehe SPO besonderer Teil IPE)
X	Prüfungsmodus abhängig von der gewählten Veranstaltung
lvü	lehrveranstaltungsübergreifende Modul- bzw. Modulteilprüfung

Bei Modul- bzw. Modulteilprüfungen der Art SP und R legt der/die Prüfer/in die Prüfungsmodalitäten der geforderten Leistung zu Beginn des Semesters fest.

Die Angabe **Y+Z** bedeutet, dass sich die Modul- bzw. Modulteilprüfung aus den Beiträgen Y und Z zusammensetzt.

Die Angabe **Y, Z** bedeutet, dass für die Lehrveranstaltung die Modul- bzw. Modulteilprüfungen Y und Z zu erbringen sind.

Die Angabe **Y/Z** bedeutet, dass die Art der Modul- bzw. Modulteilprüfung entweder Y oder Z ist. Der/die Prüfer/in gibt die Art der Modul- bzw. Modulteilprüfung zu Beginn des Semesters bekannt. Für die Studierenden besteht kein Recht auf Wahlmöglichkeit

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Module title		International Management (EN)		
Module coordination	Start ¹	Module code/no.	ECTS–points	Workload
Prof. Dr. Päßler	<input checked="" type="checkbox"/> WS <input type="checkbox"/> SS <input checked="" type="checkbox"/> A <input type="checkbox"/> B	Mo1	6	180
Department	Duration (Semester) ¹	SWS	Contact hours	Self–Study hours
Electrical and Information Technology	<input checked="" type="checkbox"/> A <input type="checkbox"/> B	4	60	120

Usability in programs	Intended degree	Type of module (compulsory PM/ elective WPM)	Semester of study	SPO–version/year
International Project Engineering	M. Eng.	PM	A	Nr. 1 / 2016

Method of evaluation	Graded Exam	Pass/fail Exam	Pass/fail Coursework	Calculation of the final grade
Module exam (MP)	K90/S/R	–	–	
Submodule exam (MTP)	–	–	–	

Learning objectives/ qualification objectives	At the end of the unit, students will: <ul style="list-style-type: none"> • Understand and explain drivers and motives for internationalization of companies • Apply different methods analyzing the capabilities of companies • Know different internationalization and competition strategies • Have gained insights about challenges implementing internationalization strategies • Have learnt ways of organizing structures and functions of international companies • Have discussed aspects of international human resource management 		
The module conveys²: (in order of priority)	Teaching and learning methods¹	Requirements for participation	
1 Professional competence	<input checked="" type="checkbox"/> Lecture <input type="checkbox"/> Exercises <input type="checkbox"/> Laboratory <input checked="" type="checkbox"/> Self–study	Recommended in combination with	
2 Methodological comp.	<input type="checkbox"/> Term paper <input type="checkbox"/> Workshop, seminar	Prerequisite for	
3 Social and self–comp.	<input type="checkbox"/> Project work <input type="checkbox"/> Other:		

Course title/ Lecturer	Type	SWS	ECTS	Teaching content
International Management / N.N.	V	4	6	<ul style="list-style-type: none"> • Reasons for internationalization • Methods of strategy analysis • Forms of internationalization strategies • Strategic planning • Specialization and competitive advantage • Fundamentals of organizational structures and functions such as marketing of internationally operating companies • Aspects of intercultural human resource management • Critical success factors of internationalization

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Literature	<ul style="list-style-type: none"> • Holtbrügge, Dirk; Welge, Martin K.: Internationales Management: Theorien, Funktionen, Fallstudien, 6. Auflage, Stuttgart, Schäffer-Poeschel Verlag, 2015 • Kotler, Philip; Keller, Kevin, Lane: Marketing Management, 15th edition, London, Pearson Verlag, 2015 • Morschett, Dirk; Schramm-Klein, Hanna; Zentes, Joachim: Strategic International Management: Text and Cases, 3rd edition, Wiesbaden, Springer Galber Verlag, 2015 • Perlitz, Manfred; Schrank, Randolph: Internationales Management, 6. Auflage, Konstanz, UVK Verlagsgesellschaft, 2013 		
Language	English	Last update	2017-03-27

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Module title		International Markets (EN)		
Module coordination	Start ¹	Module code/no.	ECTS–points	Workload
Prof. Dr. Päßler	<input checked="" type="checkbox"/> WS <input type="checkbox"/> SS <input checked="" type="checkbox"/> A <input type="checkbox"/> B	Mo2	6	180
Department	Duration (Semester) ¹	SWS	Contact hours	Self–Study hours
Electrical and Information Technology	<input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2	4	60	120

Usability in programs	Intended degree	Type of module (compulsory PM/ elective WPM)	Semester of study	SPO–version/year
International Project Engineering	M. Eng.	PM	A	Nr. 1 / 2016

Method of evaluation	Graded Exam	Pass/fail Exam	Pass/fail Coursework	Calculation of the final grade
Module exam (MP)	K90/S/R	–	–	
Submodule exam (MTP)	–	–	–	

Learning objectives/ qualification objectives	At the end of the unit, students will: <ul style="list-style-type: none"> • Gain insights of the development of the world economy and its economic regions • Understand the main dynamics of globalization and drivers of internationalization • Get an overview of internationalization theories • Know different parameters analyzing markets • Distinguish and know differences of market entry and international collaboration forms • Get an understanding of dynamics and transformation of markets 		
------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

The module conveys ² : (in order of priority)	Teaching and learning methods ¹	Requirements for participation
1 Professional competence	<input checked="" type="checkbox"/> Lecture <input type="checkbox"/> Exercises <input type="checkbox"/> Laboratory <input checked="" type="checkbox"/> Self–study	Recommended in combination with
2 Methodological comp.	<input type="checkbox"/> Term paper <input type="checkbox"/> Workshop, seminar	Prerequisite for
3 Social and self–comp.	<input type="checkbox"/> Project work <input type="checkbox"/> Other:	

Course title/ Lecturer	Type	SWS	ECTS	Teaching content
International Markets / N.N.	V	4	6	<ul style="list-style-type: none"> • Introduction to emerging and developed markets • Market players and institutions • International trade and investments • Introduce different internationalization theories • Analyzing markets • Market entry modes and international collaborations • Managing market dynamics • Value creation and localization

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Literature	<ul style="list-style-type: none"> • Fisman, Ray; Sullivan, Tim: The Inner Lives of Markets: How People Shape Them—And They Shape Us, 1st edition, New York, PublicAffairs, 2016 • Holtbrügge, Dirk; Welge, Martin K.: Internationales Management: Theorien, Funktionen, Fallstudien, 6. Auflage, Stuttgart, Schäffer-Poeschel Verlag, 2015 • Kotler, Philip; Keller, Kevin, Lane: Marketing Management: an Asian Perspective, 6th edition, London, Pearson Verlag, 2013 • Wild, John J.; Wild, Kenneth, L.: International Business: The Challenges of Globalization, 8th edition, London, Pearson Verlag, 2015 		
Language	English	Last update	2017-03-27

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Module title		International Laws (EN)		
Module coordination	Start	Module code/no.	ECTS–points	Workload
Prof. Dr. Voigt	<input type="checkbox"/> WS <input checked="" type="checkbox"/> SS <input type="checkbox"/> A <input checked="" type="checkbox"/> B	Mo3	6	180
Department	Duration (Semester)	SWS	Contact hours	Self–Study hours
Electrical and Information Technology	<input type="checkbox"/> A <input checked="" type="checkbox"/> B	4	60	120

Used in degree program	Intended degree	Type of module (compulsory PM/ elective WPM)	Beginning at semester	SPO–version/year
International Project Engineering	M. Eng.	PM	B	Nr. 1 / 2016

Examinations	Graded	Ungraded	Proof of performance	Composition of the final grade
Module exam (MP)	K90/S/R, R			
Sub–Module exam (MTP)				

Educational objectives/ qualification objectives	Students...can combine technical, commercial and legal contractual aspects identify, allocate and manage risks along the supply chain negotiate contracts and claims with customers and suppliers prepare documentary evidence for disputes and law suits			
Imparted skills and competence (in order of priority)	Teaching and learning methods	Requirements	–	
1 Professional comp.	<input checked="" type="checkbox"/> Lecture <input type="checkbox"/> Tutorial <input type="checkbox"/> Laboratory <input checked="" type="checkbox"/> Self–study <input type="checkbox"/> Term paper <input type="checkbox"/> Workshop, seminar <input type="checkbox"/> Project work <input type="checkbox"/> Other:	To be combined with	–	
2 Methodological comp.		Prerequisite for	–	
3 Personal and social skills				

Course title/ Lecturer	Type	SWS	ECTS	Teaching contents
International Laws / Wintergerst / Schäuble	V	2	3	International business environment Public and private law Contract management Global trade Security and safety Risk management Bid and negotiation Order execution Compliance
Case Studies Laws / Wintergerst / Schäuble	V,Ü	2	3	Contract set–up and contract drafting Contract negotiations Claim management and dispute settlement Records management and burden of proof Allocation and management of contract risks Management of preferential origin Product classification (HS–code and export control)

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

				Machinery directive and industrial plants Corruption and bribery prevention
--	--	--	--	--------------------------------------------------------------------------------

Reading List	BusinessDictionary UNIDROIT principles of international commercial contracts 2010 OECD Guidelines for Multinational Enterprises WTO / GATT Agreements WCO World Customs Organization ICC Incoterms 2010 EU Private International Law (Conflict of Laws) EU Trade Agreements EU International Export Control Regimes EU New Approach to Technical Harmonization ARMA Generally Accepted Recordkeeping Principles ISO 9000 Quality Management ISO 15489 Records Management Bribery in international business		
Language	English	Last update	2017-02-13

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Module title		Management and Leadership across Cultures (EN)		
Module coordination	Start ¹	Module code/no.	ECTS–points	Workload
Prof. Dr. Voigt	<input type="checkbox"/> WS <input checked="" type="checkbox"/> SS <input type="checkbox"/> A <input checked="" type="checkbox"/> B	Mo4	6	180
Department	Duration (Semester) ¹	SWS	Contact hours	Self–Study hours
Electrical and Information Technology	<input type="checkbox"/> A <input checked="" type="checkbox"/> B	4	60	120

Usability in programs	Intended degree	Type of module (compulsory PM/ elective WPM)	Semester of study	SPO–version/year
International Project Engineering	M. Eng.	PM	B	Nr. 1 / 2016

Method of evaluation	Graded Exam	Pass/fail Exam	Pass/fail Coursework	Calculation of the final grade
Module exam (MP)	K90/S/R, R			
Submodule exam (MTP)	–			

Learning objectives/ qualification objectives	<p>Students learn the main facets and the relevance of the topic Intercultural Management and Leadership requirements in the globalized world. Students appreciate the challenges facing managers working in an international and intercultural context by increasing awareness and understanding of the soft skills in particularly those relating to cross-cultural management and leadership. Students learn how to decide what people to send abroad and how to motivate and select the right people dealing with culturally different employees. Students learn to analyze and predict situations of conflict with intercultural contact based on cultural dimensions and learn to defuse situations with intercultural contact.</p> <p>Objectives:</p> <ol style="list-style-type: none"> 1. Students understand the differences in Management and Leadership. They know about the importance of motivation and identification and can describe the concept of transformational leadership. 2. Students identify differences in communication and leadership behavior influenced by the surrounding environment of the social group. Students realize the influence on culture on their own management behavior and expectations on leading and being led. 3. Students identify the importance of people, network management and social networks in doing business internationally. 4. Students describe and analyze the impact of culture / national culture on business practices in different countries (for example US, Thailand and China). 5. Students develop an interculturally adequate business strategy to deal with cultural diverse employee and customer needs from the example of the Skytrain in Bangkok. 			
The module conveys²: (in order of priority)	Teaching and learning methods¹		Requirements for participation	<ul style="list-style-type: none"> – students need to be open minded for cultural differences and offer some ambiguity tolerance – students need to be motivated to work in groups
1 Professional competence	<input checked="" type="checkbox"/> Lecture	<input type="checkbox"/> Exercises	Recommended in combination with	
2 Methodological comp.	<input type="checkbox"/> Laboratory	<input checked="" type="checkbox"/> Self–study		
3 Social and self–comp.	<input checked="" type="checkbox"/> Term paper	<input type="checkbox"/> Workshop, seminar	Prerequisite for	
	<input type="checkbox"/> Project work	<input type="checkbox"/> Other:		

Course title/ Lecturer	Type	SWS	ECTS	Teaching content
Management and Leadership across cultures / Prof. Dr. Schreier	V	2	3	<p>1. Management and Leadership seen as results on environment, history and culture. Transactional vs. transformational leadership style as suitable decision making routines in different situations of decision making.</p> <p>2. Developing knowledge to analyses intercultural differences: Differences in Management styles and interculturally adequate business strategies</p> <p>3. Self-Test: The six value dimensions from G. Hofstede; students get aware of their own cultural patters</p> <p>4. Culture and business in different countries, market entry strategies for different cultures and countries</p>
Case Studies Leadership across cultures / Prof. Dr. Schreier	V,Ü	2	3	<p>1. Management and Leadership; Case "Wickersham Mills"</p> <p>2. Management and Leadership; Case "Bonus Distribution"</p> <p>3. Management and Leadership across cultural borders; Case "Dancing with an Elephant"</p> <p>4. Cultural differences and Business Strategy – Case "Bangkok Skytrain"</p>

Literature	<p>Main (compulsory): Hofstede G., Hofstede G. J., Minkov M.: Cultures and Organizations – Software of the Mind: Intercultural Cooperation and Its Importance for Survival. Mcgraw-Hill Education Ltd; 3., revised edition. (2010) [ISBN-13: 978-0071664189]</p> <p>Additional (on-obligatory): Molinsky, A.: Global Dexterity: How to Adapt Your Behavior Across Cultures without Losing Yourself in the Process. Harvard Business Review Press (2013) [ISBN-13: 978-1422187272]</p> <p>Hofstede, G.: Think Locally, Act Globally: Cultural Constrains in Personal Management. In: Management International Review, Vol. 38, Special Issue, 1998, S. 7 – 26.</p> <p>Further:</p> <p>Kleppesø, S.: A Quest for Social Identity – The Pragmatics of Communication in Mergers and Acquisitions. In: Gertsen, M. C. / Søderberg, A.-M. / Torp, J. E. (Eds.): Cultural Dimensions of International Mergers and Acquisitions. Berlin / New York 1998, S. 147 – 166.</p> <p>Watzlawick, P.: The Situation is Hopeless, But Not Serious: The Pursuit of Unihappiness. Norton & Company; Ed.: Reprint, 1993.</p>		
Language	English	Last update	2017-03-20

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Module title		Sustainable Management of Resources (EN)		
Module coordination	Start ¹	Module code/no.	ECTS-points	Workload
Prof. Dr. da Silva	<input type="checkbox"/> WS <input checked="" type="checkbox"/> SS <input type="checkbox"/> A <input checked="" type="checkbox"/> B	Mo5	6	180
Department	Duration (Semester) ¹	SWS	Contact hours	Self-Study hours
Civil Engineering	<input type="checkbox"/> A <input checked="" type="checkbox"/> B	4	60	120

Usability in programs	Intended degree	Type of module (compulsory PM/ elective WPM)	Semester of study	SPO-version/year
International Project Engineering	M. Eng.	PM	B	Nr. 1 / 2016

Method of evaluation	Graded Exam	Pass/fail Exam	Pass/fail Coursework	Calculation of the final grade
Module exam (MP)	K90/S/R			
Submodule exam (MTP)	-			

Learning objectives/ qualification objectives	<p>ability to choose and pre design source of renewable power considering local loads and constraints,</p> <p>capability to choose, pre-design and specify an electricity storage system,</p> <p>capability to pre design systems using locally available renewable resources,</p> <p>competence to plan an install a load monitoring,</p> <p>gain knowledge and train basic skills enabling implementation of ISO 50 001 energy management.</p> <p>to understand the water cycle and freshwater systems, and anthropogenic interventions</p> <p>to understand the purpose of dams, types, purposes, layout criteria, operations</p> <p>to understand hydropower: physical basics, types, layout, operations</p> <p>to understand sustainability of water infrastructure. Risk management and mitigation</p>
-----------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

The module conveys ² : (in order of priority)	Teaching and learning methods ¹	Requirements for participation
1 Professional competence	<input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Exercises	Recommended in combination with
2 Methodological comp.	<input type="checkbox"/> Laboratory <input checked="" type="checkbox"/> Self-study	
3 Social and self-comp.	<input type="checkbox"/> Term paper <input type="checkbox"/> Workshop, seminar	Prerequisite for
	<input type="checkbox"/> Project work <input type="checkbox"/> Other:	

Course title/ Lecturer	Type	SWS	ECTS	Teaching content
Sustainable Management of Resources / Prof. Dr. da Silva, Prof. Dr. Meng	V,Ü	4	6	<ul style="list-style-type: none"> • decentral power generation with Hydropower, photovoltaic, small wind and biomass • distribution and storage of renewable electrical energy, power2X, super caps, li-ion-Batteries • monitoring and load management • energy management following ISO 50 001 • water resources • rivers and basins • flood protection • dams • hydropower • sustainability in water infrastructure planning

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

--	--	--	--	--

Literature			
Language	English	Last update	2017-05-18

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Module title		International Project Development (EN)		
Module coordination	Start ¹	Module code/no.	ECTS–points	Workload
Prof. Dr. Haberstroh	<input checked="" type="checkbox"/> WS <input type="checkbox"/> SS <input checked="" type="checkbox"/> A <input type="checkbox"/> B	Mo6	6	180
Department	Duration (Semester) ¹	SWS	Contact hours	Self–Study hours
Electrical and Information Technology	<input checked="" type="checkbox"/> A <input type="checkbox"/> B	4	60	120

Usability in programs	Intended degree	Type of module (compulsory PM/ elective WPM)	Semester of study	SPO–version/year
International Project Engineering	M. Eng.	PM	A	Nr. 1 / 2016

Method of evaluation	Graded Exam	Pass/fail Exam	Pass/fail Coursework	Calculation of the final grade
Module exam (MP)	K90/S/R			
Submodule exam (MTP)	–			

Learning objectives/ qualification objectives	At the end of this unit, students will: <ul style="list-style-type: none"> Understand the characteristics and challenges of international projects Understand how to adapt project management to relevant project characteristics (e.g. degree of internationalization, complexity, uncertainty, time pressure) Understand the traditional and agile approach (Scrum) to the management of single projects Apply important methods (traditional and agile) for the management of single projects Understand the relationship between project and process management Understand the approach of project program management Understand the relationship between the “Module: Management and Leadership across Cultures” and the “Module: International Project Development” Know the fundamentals of project portfolio management and project–based organizations Know the characteristics of major international project management standards (e.g. IPMA, PMI, ISO) Have worked on specific topics of international project development in selected industries Know trends and future topics in project management practice and research 		
The module conveys ² : (in order of priority)	Teaching and learning methods ¹	Requirements for participation	
1 Professional competence	<input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Exercises <input type="checkbox"/> Laboratory <input checked="" type="checkbox"/> Self–study	Recommended in combination with	
2 Methodological comp.	<input checked="" type="checkbox"/> Term paper <input type="checkbox"/> Workshop, seminar <input checked="" type="checkbox"/> Project work <input type="checkbox"/> Other:		Prerequisite for
3 Social and self–comp.			

Course title/ Lecturer	Type	SWS	ECTS	Teaching content
International Project Development / N.N.	PJ	4	6	See learning objectives/qualification objectives.

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Literature	<ul style="list-style-type: none"> • Cooper, Robert G. (2011): Winning at new products: Creating value through innovation, 4th edition, New York (New York). • GPM Deutsche Gesellschaft für Projektmanagement / Gessler, Michael (Hrsg.) (2009): Kompetenzbasiertes Projektmanagement (PM3), Nürnberg. • Hoffmann, Hans-Erland; Schoper, Yvonne-Gabriele; Fitzsimons, Conor J. (Hrsg.) (2004): Internationales Projektmanagement: Interkulturelle Zusammenarbeit in der Praxis, München. • Project Management Institute (2013): A guide to the project management body of knowledge, 5th edition, Newton Square (Pennsylvania). • Shenhar, Aaron; Dvir, Dov (2007): Reinventing project management: The diamond approach to successful growth and innovation, Boston (Massachusetts). • Sutherland, Jeff; Schwaber, Ken (2016): The scrum guide, https://www.scrum.org/resources/scrum-guide (Zugriff 12.04.2017) • See lecture notes 		
Language	English	Last update	2017-04-13

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Module title	Scientific Competence (EN)			
Module coordination	Start ¹	Module code/no.	ECTS–points	Workload
Prof. Dr. Voigt	<input checked="" type="checkbox"/> WS <input checked="" type="checkbox"/> SS <input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> B	Mo7	6	180
Department	Duration (Semester) ¹	SWS	Contact hours	Self–Study hours
Electrical and Information Technology	<input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> B	4	60	120

Usability in programs	Intended degree	Type of module (compulsory PM/ elective WPM)	Semester of study	SPO–version/year
International Project Engineering	M. Eng.	PM	A / B	Nr. 1 / 2016

Method of evaluation	Graded Exam	Pass/fail Exam	Pass/fail Coursework	Calculation of the final grade
Module exam (MP)	-	-	-	
Submodule exam (MTP)	S/R, S	-	-	evaluation of the research proposal and of the project work

Learning objectives/ qualification objectives	<p>The aim of this course is to provide Master's students with the know-how for writing a research proposal in English that is well organized, idiomatically and stylistically appropriate and grammatically correct.</p> <p>At the end of the course students</p> <ul style="list-style-type: none"> - know how to structure a research proposal; - know how to produce clear and well-structured texts on complex subjects; - know how to cite sources correctly; - know how to write well-structured and coherent paragraphs; - know how to construct effective sentences; - know what collocations are and how to use them appropriately; - know what their own strengths and weaknesses are in writing. <p>Final texts may contain occasional spelling, grammatical or word choice errors, but these will not distract from the general effectiveness of the text.</p>		
-----------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

The module conveys ² : (in order of priority)	Teaching and learning methods ¹	Requirements for participation
1 Professional competence	<input type="checkbox"/> Lecture <input type="checkbox"/> Exercises	Recommended in combination with
2 Methodological comp.	<input type="checkbox"/> Laboratory <input checked="" type="checkbox"/> Self–study	
3 Social and self–comp.	<input type="checkbox"/> Term paper <input type="checkbox"/> Workshop, seminar	Prerequisite for
	<input checked="" type="checkbox"/> Project work <input checked="" type="checkbox"/> Other:	

Course title/ Lecturer	Type	SWS	ECTS	Teaching content
Seminar International Project Engineering / Prof. Dr. Rothstein (Semester B)	W	2	3	<p>The course will start with a general introduction to scientific writing in English. Topics addressed during the course include the following:</p> <ul style="list-style-type: none"> - Structuring a research proposal - Writing well-structured and coherent paragraphs - Arguing convincingly - avoiding logical fallacies - Vocabulary development: using appropriate vocabulary and collocations

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

				<ul style="list-style-type: none"> - Avoiding plagiarism
Project work / Prof. Dr. Voigt	PJ	2	3	<p>The project work serves as preparation of the master thesis but is not directly linked to it. A substantive relationship between project work and master thesis is possible.</p> <p>The students</p> <ul style="list-style-type: none"> - Can apply engineering work methods in a team - Can evaluate, summarize and present investigation results

Literature	<p>Day, R.A.; Gastel, B. (2009): How to write and publish a scientific paper. Cambridge Univ. Press. Cambridge</p> <p>Skern, T. (2009): Writing scientific English - a workbook. UTB. Wien.</p> <p>Cargill, M.; O'Connor, P. (2009): Writing scientific research articles - strategy and steps. Wiley-Blackwell. Hoboken.</p>		
Language	English	Last update	2017-04-20

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Modul-Name		Wahlpflicht-Modul 8 – 10		
Modul-Koordination	Start	Modul-Kürzel/Nr.	ECTS-Punkte	Workload
Prof. Dr. Voigt	<input checked="" type="checkbox"/> WS <input checked="" type="checkbox"/> SS <input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> B	Mo8 – Mo10	6	180
Fakultät	Dauer (Semester)	SWS	Kontaktzeit	Selbststudium
Elektro- und Informations- technik	<input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> B	4	60	120

Einsatz im Studiengang	Angestrebter Abschluss	Modul-Typ (PM/WPM)	Beginn im Studiensem.	SPO-Version/Jahr
International Project Engineering	M. Eng	WPM	A / B	Nr. 1 / 2016

Prüfungsleistungen	Benotete Prüfung	Unben. Leistungsnachweis	Zusammensetzung der Endnote
Modulprüfung (MP)	-	-	Die Modulnote errechnet sich aus dem gewichteten arithmetischen Mittel der Modulteilnoten aller zugehörigen benoteten Modulteilprüfungen. Die Gewichtung der einzelnen Modulteilnoten erfolgt proportional zu den ECTS-Punkten.
Modulteilprüfung (MTP)	X	-	

Lern-/ Qualifikationsziele	<p>Die Wahlpflichtmodule dienen zum einen der Vertiefung der Kenntnisse und der wissenschaftlichen Arbeit in einem speziellen, von den Studierenden in einem gewissen Umfang selbst zu bestimmenden Themengebiet, zum anderen aber auch zum Erwerb von Übersichtswissen über angrenzende Themengebiete.</p> <p>Studierende eines Master-Studiengangs haben in der Regel einen heterogenen Werdegang hinter sich. Dies beginnt bereits mit der Ausbildung vor der Hochschule (Schule, berufliche Bildung) und setzt sich in unterschiedlichen Schwerpunkten im Bachelor-Studium und in den davor, dazwischen oder danach liegenden beruflichen Tätigkeiten fort. Im Rahmen des Studiengangs „International Project Engineering“ wird deshalb ein individueller Ansatz zur Festlegung der Module im Wahlpflichtbereich verfolgt. Jedem/r Studierenden des Master-Programms wird ein Professor/eine Professorin der Fakultät als Mentor/in zugewiesen. In Abstimmung mit dem Mentor/der Mentorin wählt der/die Studierende basierend auf seinen/ihren individuellen Vorkenntnissen und Interessen sein/ihr persönliches Curriculum im Wahlpflichtbereich aus. Der Mentor/die Mentorin hat dabei einerseits beratende Funktion, andererseits muss er/sie das Curriculum hinsichtlich Inhalte, Abdeckung der Ausbildungsziele und Ablauf verantworten und genehmigen. Dadurch wird sowohl die Studierbarkeit als auch die Qualität des gewählten Curriculums sichergestellt. Die Einzelheiten des Mentor-Konzepts sind in der Studien- und Prüfungsordnung festgelegt. Oberste Instanz bei der Festlegung des Curriculums der Studierenden ist der Prüfungsausschuss.</p>		
-----------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

Das Modul vermittelt (Reihenfolge)	Lehr- und Lernmethoden	Teilnahme-Voraussetzung	Abhängig vom gewählten Modul
1 Fachkompetenz	<input checked="" type="checkbox"/> Vorlesung <input checked="" type="checkbox"/> Übung	Sinnvoll zu kombinieren mit	
2 Methodenkompetenz	<input checked="" type="checkbox"/> Labor <input checked="" type="checkbox"/> Selbststudium		
3 Sozial- /Selbstkompetenz	<input checked="" type="checkbox"/> Hausarbeit <input checked="" type="checkbox"/> Workshop, Seminar <input checked="" type="checkbox"/> Projektarbeit <input checked="" type="checkbox"/> Sonstiges:		Als Vorkenntnis erforderlich für

Teilmodul/ Lehrende	Art	SWS	ECTS	Lehrinhalt

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

X / Professoren /innen der Fakultät EI, BI und MA	X	X	X	-abhängig vom gewählten Modul -siehe Wahlpflichtfach-Katalog

Literatur/Medien Angaben: Nachname d. Verfassers, Vorname: Sachtitel, Untertitel, Aufl., Ort, Verlag, Jahr			
Sprache	Deutsch	Zuletzt aktualisiert	20.03.2017

Modulhandbuch des Studiengangs International Project Engineering (IPE) /M. Eng.

Module title	Masterarbeit (EN)			
Module coordination	Start	Module code/no.	ECTS–points	Workload
Prof. Dr. Voigt	<input checked="" type="checkbox"/> WS <input checked="" type="checkbox"/> SS <input type="checkbox"/> A <input type="checkbox"/> B		30	900
Department	Duration (Semester)	SWS	Contact hours	Self–Study hours
Electrical and Information Technology	<input type="checkbox"/> A <input type="checkbox"/> B		–	900

Used in degree program	Intended degree	Type of module (compulsory PM/ elective WPM)	Beginning at semester	SPO–version/year
International Project Engineering	M. Eng.	PM	C	Nr. 1 / 2016

Examinations	Graded	Ungraded	Proof of performance	Composition of the final grade
Module exam (MP)	S,R, R	–		
Sub–Module exam (MTP)		–	–	

Educational objectives/ qualification objectives	Students... –are can solve a complex technical project independently in a technical and economic environment within a given time –can explain themselves in different progress reports –can present the results –can prepare a scientific documentation			
Imparted skills and competence (in order of priority)	Teaching and learning methods	Requirements		
1 Professional comp.	<input type="checkbox"/> Lecture <input type="checkbox"/> Tutorial	To be combined with		
2 Methodological comp.	<input type="checkbox"/> Laboratory <input checked="" type="checkbox"/> Self–study	Prerequisite for		
3 Personal and social skills	<input type="checkbox"/> Term paper <input type="checkbox"/> Workshop, seminar <input type="checkbox"/> Project work <input checked="" type="checkbox"/> Other:			

Course title/ Lecturer	Type	SWS	ECTS	Teaching contents
Wissenschaftliche Arbeit/ Alle Professoren /innen der Fakultät EI und BI	PJ		28	The master thesis is an examination work. The Master thesis aims to demonstrate that students can solve a complex technical project independently in a technical and economic environment within a given time and present the results
Masterkolloquium / Alle Professoren /innen der Fakultät EI und BI			2	The students regularly report the progress of their work and present the progress for discussion.

Reading List	Project relevant literature			
Language	English	Last update	2017–02–13	