

Module Manual

Master of Science (M.Sc.)

Global Technology and Innovation Management & Entrepreneurship

Joint Master

Cohort: Winter Term 2018

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Program description

Content

The MSc. in Global Technology and Innovation Management & Entrepreneurship (G-TIME) is a unique 2-year programme offered jointly by a consortium of internationally renowned universities. The consortium consists of following partners: Aalborg University (Denmark), Kaunas University of Technology (Lithuania), Manipal University (India), Ritsumeikan Asia Pacific University (Japan), Hamburg University of Technology (Germany) and University of Strathclyde (Scotland).

The MSc. G-TIME enables graduates of first degrees in engineering, science and technology to successfully manage the innovation process across international boundaries. Students have the opportunity to study at two different universities. The program starts off in Hamburg (Germany) where all students spend the first year (1st & 2nd semester) together. During the second year (3rd & 4th semester) students deepen their G-TIME knowledge at one of the international partner institutions.

Career prospects

Graduates, supported by a network of valuable contacts, enter the international employment market working:

- with enterprises dealing with high end technological products and services
- as consultants making technology assessment and innovation /change management
- · with governmental institutes dealing with innovation policy and strategy
- · with relevant research and higher education institutions

Learning target

The program equips students with skills to transform research outputs into innovative products and services. Learning the tools and techniques for working globally, students apply this knowledge practically by working on projects with industry contacts in different countries, further enhancing their understanding of international business. G-TIME addresses new challenges in innovative global enterprise and provides:

- A practical and global perspective of Innovation Management, through industry based modules
- Skills applicable for larger multinational organisations to smaller enterprises including start-ups
- Expanded perspectives of Innovation Management including Technology Management, R&D, and Product/Service Development with focus on the interface between disciplines involved in the process;
- Increased research capability focused on activities at the periphery of the innovation process.

Program structure

The programme is fulltime over 24 months and divided into 4 semesters of study. All students take a common first year at Hamburg University of Technology. Depending on their special interests they choose one of the international partner institutions for the second year.

Semesters 1 and 2 at Hamburg University of Technology provide a strong foundation in the field of Technology and Innovation Management. They look at early and late phases of the innovation management process. It concentrates on market research for (radical) innovation, cross functional cooperation at the front end of the innovation process, managing innovation projects over geographical and functional/divisional boarders and preparing the market introduction of new products and services. In addition, they provide a foundation in the field of Entrepreneurship.

The course content of semester 3 (year 2) depends on which partner institution is chosen. Based on their



specific core competencies each partner offers courses which complement / deepen the study program of the first year.

In semester 4 all students undertake a thesis project at the institution where they spent the 3rd semester.



Core qualification

The MSc. in Global Technology and Innovation Management & Entrepreneurship (G-TIME) is a unique 2-year programme offered jointly by a consortium of internationally renowned universities. The consortium consists of following partners: Aalborg University (Denmark), Kaunas University of Technology (Lithuania), Manipal University (India), Ritsumeikan Asia Pacific University (Japan), Hamburg University of Technology (Germany) and University of Strathclyde (Scotland).

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-	Product Planning			
Courses				
Title		Тур	Hrs/wk	СР
Product Planning (L0851)		Project-/problem-based Learning	3	3
Product Planning Seminar	(L0853)	Project-/problem-based Learning	2	3
Module Responsible	Prof. Cornelius Herstatt			
Admission Requirements	None			
Recommended Previous Knowledge	Good basic-knowledge of Business	s Administration		
Educational Objectives	After taking part successfully, stude	nts have reached the following lea	arning resu	lts
Professional Competence				
Knowledge	Design trinking Process Methods User integration			
Skills	Product Planning Process-related asp Organisational-relate Human-Ressource r Working-tools, methology	ects ed aspects elated aspects		
Personal Competence				
Social Competence	Interact within a teamRaise awareness for globat	ol issues		



Autonomy	 Gain access to knowledge sources Interpret complex cases Develop presentation skills 	
Workload in Hours	Independent Study Time 110, Study Time in Lecture 70	
Credit points	6	
	Compulsory Bonus Form Description	
Course achievement	Yes 20 % Subject theoretical and practical work	
Examination	Written exam	
Examination duration and scale	90 minutes	
Assignment for the Following Curricula	Global Innovation Management: Core qualification: Compulsory Global Technology and Innovation Management & Entrepreneurship: Core qualification: Compulsory International Management and Engineering: Specialisation I. Electives Management: Elective Compulsory Mechanical Engineering and Management: Specialisation Management: Elective Compulsory Product Development, Materials and Production: Specialisation Product Development: Elective Compulsory Product Development, Materials and Production: Specialisation Production: Elective Compulsory Product Development, Materials and Production: Specialisation Materials: Elective Compulsory Theoretical Mechanical Engineering: Specialisation Product Development and Production: Elective Compulsory Theoretical Mechanical Engineering: Technical Complementary Course: Elective Compulsory	

Course L0851: Produc	t Planning
Тур	Project-/problem-based Learning
Hrs/wk	3
СР	3
Workload in Hours	Independent Study Time 48, Study Time in Lecture 42
Lecturer	Prof. Cornelius Herstatt
Language	EN
Cycle	WiSe
Content	Product Planning Process This integrated lecture is designed to understand major issues, activities and tools in the context of systematic product planning, a key activity for managing the front-end of innovation, i.e.: • Systematic scanning of markets for innovation opportunities • Understanding strengths/weakness and specific core competences of a firm as platforms for innovation • Exploring relevant sources for innovation (customers, suppliers, Lead Users, etc.) • Developing ideas for radical innovation, relying on the creativeness of employees, using techniques to stimulate creativity and creating a stimulating environment • Transferring ideas for innovation into feasible concepts which have a high market attractively
Literature	Ulrich, K./Eppinger, S.: Product Design and Development, 2nd. Edition, McGraw-Hill 2010



Course L0853: Product Planning Seminar		
Тур	Project-/problem-based Learning	
Hrs/wk	2	
СР	3	
Workload in Hours	Independent Study Time 62, Study Time in Lecture 28	
Lecturer	Prof. Cornelius Herstatt	
Language	EN	
Cycle	WiSe	
Content	Seminar is integrative part of the Module Product Planning (for content see lecture) and can not be choosen independantly	
Literature	see/siehe Vorlesung Produktplanung/Product Planning	



Module M0814: T	echnology Management			
Courses				
Title		Тур	Hrs/wk	СР
Technology Management	(L0849)	Project-/problem-based Learning	3	3
Technology Management	Seminar (L0850)	Project-/problem-based Learning	2	3
Module Responsible	Prof. Cornelius Herstatt			
Admission Requirements	INODA			
Recommended Previous Knowledge	Bachelor knowledge in business manag	ement		
Educational Objectives	After taking part successfully, students h	ave reached the following lea	arning resu	Its
Professional				
Competence	Students will gain deep insights into:			
Knowledge	Technology Timing Strategies Technology Strategies and Lifecycle Management (I/II) Technology Intelligence and Planning Technology Portfolio Management			
Skills	 Develop an understanding of the importance of Technology Management - on national as well as international level Equip students with an understanding of important elements of Technolog Management (strategic, operational, organizational and process-related aspects) Foster a strategic orientation to problem-solving within the innovation process as we as Technology Management and its importance for corporate strategy Clarify activities of Technology Management (e.g. technology sourcing, maintenanc and exploitation) Strengthen essential communication skills and a basic understanding of manageria organizational and financial issues concerning Technology-, Innovation- and R&D management. Further topics to be discussed include: Basic concepts, models and tools, relevant to the management of technology, R&I and innovation Innovation as a process (steps, activities and results) 		of Technology I aspects) rocess as well , maintenance of managerial, on- and R&D-	
Personal Competence				
Social Competence	Interact within a teamRaise awareness for globabl issu	ues		
Autonomy	 Gain access to knowledge sourc Interpret complicated cases 	es		



	Develop presentation skills
Workload in Hours	Independent Study Time 110, Study Time in Lecture 70
Credit points	6
Course achievement	None
	Written exam
Examination duration and scale	90 minutes
Assignment for the Following Curricula	Global Innovation Management: Core qualification: Compulsory Global Technology and Innovation Management & Entrepreneurship: Core qualification: Compulsory International Management and Engineering: Specialisation I. Electives Management: Elective Compulsory Mechanical Engineering and Management: Specialisation Management: Elective Compulsory Biomedical Engineering: Specialisation Artificial Organs and Regenerative Medicine: Elective Compulsory Biomedical Engineering: Specialisation Implants and Endoprostheses: Elective Compulsory Biomedical Engineering: Specialisation Medical Technology and Control Theory: Elective Compulsory Biomedical Engineering: Specialisation Management and Business Administration: Compulsory

Course L0849: Techno	ology Management
Тур	Project-/problem-based Learning
Hrs/wk	3
СР	3
Workload in Hours	Independent Study Time 48, Study Time in Lecture 42
Lecturer	Prof. Cornelius Herstatt
Language	EN
Cycle	WiSe
Content	The role of technology for the competitive advantage of the firm and industries; Basic concepts, models and tools for the management of technology; managerial decision making regarding the identification, selection and protection of technology (make or buy, keep or sell, current and future technologies). Theories, practical examples (cases), lectures, interactive sessions and group study. This lecture is part of the Module Technology Management and can not separately choosen.
Literature	Leiblein, M./Ziedonis, A.: Technology Strategy and Incovation Management, Elgar Research Collection, Northhampton (MA) 2011

Course L0850: Technology Management Seminar	
Тур	Project-/problem-based Learning
Hrs/wk	2
СР	3
Workload in Hours	Independent Study Time 62, Study Time in Lecture 28
Lecturer	Prof. Cornelius Herstatt
Language	EN
Cycle	WiSe
Content	Aspects of and Cases in combination with the content of the lecture.
Literature	see lecture Technology Management.



Courses				
Title		Тур	Hrs/wk	СР
Seminar Innovation Marke	eting (L0759)	Project Seminar	4	6
Module Responsible	Prof. Christian Lüthje			
Admission Requirements	None			
Recommended Previous Knowledge	None			
Educational Objectives	After taking part successfully, students ha	ave reached the following	learning resu	lts
Professional Competence				
Knowledge	understand the process and the potential, market growth, market explain the concepts of target cus. select the appropriate approach the explain the key market-related based business opportunities.	segmentation) stomers, market definition or leading a competitive a	and market gr analysis	rowth
Skills	 Students are capable of analyzing the market potential of inventions and innovative business ideas by using appropriate methods. investigating whether a market is still open for a given innovation and develop a first concept for the market entry strategy and the marketing mix. searching for relevant information (primary and secondary market data). analyzing, aggregating, and interpreting the gathered data and giving well founded recommendations based on the findings. writing a scientific report that includes the literature background as well as the development of their methods, their results, conclusions and recommendations. 			
Personal Competence	Students are able to			
Social Competence	 assess possible consequences of define required tasks to find a sole make elaborated decisions in an assess their own performance in 	ution for a given problem real-world innovation cor		
Autonomy	The work in teams over an entire semester and the interaction with professionals, experts and project partners outside the unviersity will support the students in their competenece to access the required information that is needed for making well-founded decisions with a high level of trust in the own capabilties.			
Workload in Hours	Independent Study Time 124, Study Time	e in Lecture 56		
Credit points	6			
Course achievement				
	Subject theoretical and practical work			
Examination duration and scale	approx. 40 pages written elaboration, pro	esentation, oral participati	ion	
Assignment for the	Global Innovation Management: Core qu	alification: Compulsory		



Following Curricula Global Technology and Innovation Management & Entrepreneurship: Core qualification: Compulsory

Course L0759: Seminar Innovation Marketing	
Тур	Project Seminar
Hrs/wk	4
СР	6
Workload in Hours	Independent Study Time 124, Study Time in Lecture 56
Lecturer	Prof. Christian Lüthje
Language	EN
Cycle	WiSe

General description of course content and course goals

The aim of the course is to give students an insight into the practice of technology exploitation and innovation marketing. The technologies and product concepts are provided by so called idea providers. These idea providers may be, among others, researchers at universities and project teams working in research institutions with a technical invention or (prospective) entrepreneurs with a business idea.

Within the course the student teams will analyze the market potential of technology-based inventions or business ideas. They will define potential target customers in the market. Another important question to answer is, whether the market is still receptive for a given invention, or whether competitors have already exploited the full market potential. Finally, the student teams will also develop first ideas for the design of the marketing mix and write a report that is also handed to the idea providers.

Summarizing the most important contents

The students will find answers to the following fundamental questions:

- What are the key features of the invention?
- What is the unique selling point?
- What is the most attractive application field?
- Who are the target customers?
- What are their needs and how can they be met?
- What is the market potential of innovations?
- What resources are necessary to exploit this market potential?
- How can/should they enter the market?

Professional Competence

Knowledge

Students can...

- understand the process and the tools of market analysis for innovations (e.g. market potential, market growth, market segmentation)
- explain the concepts of target customers, market definition and market growth
- select the appropriate approach for leading a competitive analysis
- explain the key market-related issues (strengths and weaknesses) of technologybased business opportunities

Content

Skills

Students are capable of...

- analyzing the market potential of inventions and innovative business ideas by using appropriate methods.
- investigating whether a market is still open for a given innovation and develop a first



- concept for the market entry strategy and the marketing mix.
- searching for relevant information (primary and secondary market data).
- analyzing, aggregating, and interpreting the gathered data and giving well founded recommendations based on the findings.
- writing a scientific report that includes the literature background as well as the development of their methods, their results, conclusions and recommendations.

Personal Competence

Social Competence

Students can...

- provide appropriate feedback and handle feedback on their own performance constructively.
- enter into a dialogue with formerly unknown fellow students, participate in discussions, and present well-grounded arguments.
- constructively interact with their team members and lead team sessions and group work processes.
- develop joint solutions and come to decisions in mixed teams and present the results to others.

Self-Reliance

Students are able to...

- assess possible consequences of their own decisions.
- define required tasks to find a solution for a given problem.
- make elaborated decisions in an real-world innovation context.
- assess their own performance in a team.

Gruber, Marc, Ian C. MacMillan, and James D. Thompson (2008), "Look Before You Leap: Market Opportunity Identification in Emerging Technology Firms," Management Science, 54 (September), 1652-1665.

Literature

Danneels, Erwin (2007), "The Process of Technological Competence Leveraging," Strategic Management Journal, 28 (February), 511-533



Module M0524: Nontechnical Elective Complementary Courses for Master

Module Responsible	Dagmar Richter
Admission Requirements	None
Recommended Previous Knowledge	None
Educational Objectives	
Professional	

Professional Competence

The Nontechnical Academic Programms (NTA)

imparts skills that, in view of the TUHH's training profile, professional engineering studies require but are not able to cover fully. Self-reliance, self-management, collaboration and professional and personnel management competences. The department implements these training objectives in its **teaching architecture**, in its **teaching and learning arrangements**, in **teaching areas** and by means of teaching offerings in which students can qualify by opting for **specific competences** and a **competence level** at the Bachelor's or Master's level. The teaching offerings are pooled in two different catalogues for nontechnical complementary courses.

The Learning Architecture

consists of a cross-disciplinarily study offering. The centrally designed teaching offering ensures that courses in the nontechnical academic programms follow the specific profiling of TUHH degree courses.

The learning architecture demands and trains independent educational planning as regards the individual development of competences. It also provides orientation knowledge in the form of "profiles".

The subjects that can be studied in parallel throughout the student's entire study program - if need be, it can be studied in one to two semesters. In view of the adaptation problems that individuals commonly face in their first semesters after making the transition from school to university and in order to encourage individually planned semesters abroad, there is no obligation to study these subjects in one or two specific semesters during the course of studies.

Teaching and Learning Arrangements

provide for students, separated into B.Sc. and M.Sc., to learn with and from each other across semesters. The challenge of dealing with interdisciplinarity and a variety of stages of learning in courses are part of the learning architecture and are deliberately encouraged in specific courses.

Fields of Teaching

Knowledge

are based on research findings from the academic disciplines cultural studies, social studies, arts, historical studies, communication studies, migration studies and sustainability research, and from engineering didactics. In addition, from the winter semester 2014/15 students on all Bachelor's courses will have the opportunity to learn about business management and start-ups in a goal-oriented way.

The fields of teaching are augmented by soft skills offers and a foreign language offer. Here, the focus is on encouraging goal-oriented communication skills, e.g. the skills required by outgoing engineers in international and intercultural situations.

The Competence Level



of the courses offered in this area is different as regards the basic training objective in the Bachelor's and Master's fields. These differences are reflected in the practical examples used, in content topics that refer to different professional application contexts, and in the higher scientific and theoretical level of abstraction in the B.Sc.

This is also reflected in the different quality of soft skills, which relate to the different team positions and different group leadership functions of Bachelor's and Master's graduates in their future working life.

Specialized Competence (Knowledge)

Students can

- explain specialized areas in context of the relevant non-technical disciplines,
- outline basic theories, categories, terminology, models, concepts or artistic techniques in the disciplines represented in the learning area,
- different specialist disciplines relate to their own discipline and differentiate it as well as make connections,
- sketch the basic outlines of how scientific disciplines, paradigms, models, instruments, methods and forms of representation in the specialized sciences are subject to individual and socio-cultural interpretation and historicity,
- Can communicate in a foreign language in a manner appropriate to the subject.

Professional Competence (Skills)

In selected sub-areas students can

- apply basic and specific methods of the said scientific disciplines,
- aquestion a specific technical phenomena, models, theories from the viewpoint of another, aforementioned specialist discipline,

Skills

- to handle simple and advanced questions in aforementioned scientific disciplines in a sucsessful manner,
- justify their decisions on forms of organization and application in practical questions in contexts that go beyond the technical relationship to the subject.

Personal Competence

Personal Competences (Social Skills)

Students will be able

- to learn to collaborate in different manner,
- to present and analyze problems in the abovementioned fields in a partner or group situation in a manner appropriate to the addressees,
- to express themselves competently, in a culturally appropriate and gender-sensitive manner in the language of the country (as far as this study-focus would be chosen),
- to explain nontechnical items to auditorium with technical background knowledge.

Social Competence

Personal Competences (Self-reliance)

Students are able in selected areas

to reflect on their own profession and professionalism in the context of real-life fields of



Autonomy	 application to organize themselves and their own learning processes to reflect and decide questions in front of a broad education background to communicate a nontechnical item in a competent way in writen form or verbaly to organize themselves as an entrepreneurial subject country (as far as this study-focus would be chosen)
Workload in Hours	Depends on choice of courses
Credit points	6

Courses

Information regarding lectures and courses can be found in the corresponding module handbook published separately.



Courses				
Title Corporate Entrepreneursl Entrepreneurial Finance (hip in the Digital Age (L1281) L1282)	Typ Seminar Seminar	Hrs/wk 3 2	CP 4 2
Module Responsible	Prof. Christoph Ihl			
Admission Requirements	None			
Recommended Previous Knowledge			•	•
Educational Objectives	After taking part successfully, students	have reached the followi	ng learning resu	Its
Professional Competence				
Knowledge	 understand similarities and entrepreneurship recognize the distinct nature a the context of established and if understand the different forms of understand their own manageristart-up entrepreneurship understand the pros and consolunderstand the interests of vent understand the pros and consolunderstand the pros and cons	nd specific elements of nternational organization of corporate entrepreneu al styles, attitudes and p of different valuation meth ure capital funds	corporate entreplas rship references for co	
Skills	Fertigkeiten (subject-related skills): • be able to apply an entrepre functional area within establishe • assess the environment with constraints for entrepreneurship • identify creative ways to ove companies • be able to formulate corporate behavior • evaluate entrepreneurial opported evelop concepts for new busin • value entrepreneurial opportun • apply different valuation method • evaluate the attractiveness of fine design VC term sheets • design employee contracts in tectors and contracts and con	ed organizations in established companion rcome obstacles to en objectives and strategie tunities in contexts of est nesses out of established ities in financial terms ds nancial contracts erms of financial compenionduct financial negotia	nies in terms of trepreneurship in es that support en ablished corpora I company conte	of support
Personal Competence	Sozialkompetenz (Social Competence)):		
Social Competence	team work communication and presentation	n		



	give and take criticaengaging in fruitful		
Autonomy	Selbständigkeit (Autonomy autonomous work a project managemer analytical skills	and time management	
Workload in Hours	Independent Study Time 1	10, Study Time in Lect	ure 70
Credit points	6		
Course achievement		Form Group discussion	Description
Examination	Subject theoretical and pra	actical work	
Examination duration and scale	Presentations and case stu	udy work	
Assignment for the Following Curricula	Compulsory International Production Ma International Management Compulsory	Innovation Managements Specialise and Engineering: Specialise	on: Elective Compulsory ent & Entrepreneurship: Core qualification: ation Management: Elective Compulsory ecialisation I. Electives Management: Elective cialisation Management: Elective Compulsory

Course L1281: Corpor	ate Entrepreneurship in the Digital Age
Тур	Seminar
Hrs/wk	3
СР	4
Workload in Hours	Independent Study Time 78, Study Time in Lecture 42
Lecturer	Prof. Christoph Ihl
Language	EN
Cycle	WiSe
Content	This is a 4 ECTS course as part of the module "Corporate Entrepreneurship & Growth". Emerging paradigms of digital technology, such as industrial internet of things, blockchain, artificial intelligence, digital fabrication and 3D printing, are fundamentally transforming the competitive landscape and the nature of many companies in a wide range of industries. Where digital technologies become critical to the development of new products, services and business models, incumbent corporations in traditional industries suddenly face entirely new competition from purely digital players. Building a corporate capability to master digital innovation becomes a key success factor to establish and maintain market leadership. This course places students into the role of corporate managers, who need to understand the strategic implications of new digital technology, identify organizational strengths and barriers to (re-) act, design new business models that may fundamentally clash with existing ones, and organize broader digital transformation initiatives. Upon completion of this course, students will be able to: Derive industry-specific implications of digital technologies for value creation and capture. Identify organizational sources of corporate (non-) responsiveness to digital opportunities. Contribute to the design and implementation of digitally enhanced business models. Evaluate options of organizational transformation by corporate venturing as well as open platforms and ecosystems. Contribute to organization and leadership of corporate-wide digital transformation initiatives. Course language is English. In this course, value is created interactively, that means it mainly consists of student presentations and group discussions, structured and moderated by the instructors. This in turn requires that everyone has prepared the relevant materials in advance



of each session. Please devote significant time to do so! All the great ideas relevant to this course topic cannot be found in a single textbook. Therefore, we have curated an up-to-date and colourful mix of materials in two different kinds: (1) academic & managerial papers, and (2) case studies. Please refer to the detailed course schedule for the assignment of paper presentations and case memos to specific participants. For your paper presentations you may also include additional references, whereas the case memos should only be based on the cases. Even if you are not assigned a specific paper or case, you should have prepared core materials to participate in the discussion. For the common team project, we cooperate with real companies from the Hamburg metropolitan region to contribute to their strategic intent of embracing new digital technology.

Student assessment will be based on four aspects with the following grading scheme:

- · 20%: Participation in class discussions on papers and case studies.
- · 20%: One paper presentation of 20 minutes length plus 10 minutes discussion: 20%.
- 20%: Two case memos (2 pages) that summarize in bullet points your answers to assigned questions for two case studies.
- 40%: Final project on a real digital transformation project delivered as 30 minutes presentation plus 15 minutes discussion by teams of four students.
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- Campbell, A., Birkinshaw, J., Morrison, A., & van Basten Batenburg, R. "The future of corporate venturing: companies undertake venturing for a variety of reasons." MIT Sloan Management Review 45.1 (2003): 30-38.
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- · Chesbrough, Henry W. "Making Sense of Corporate Venture Capital" Harvard Business Review, March (2002): 4-11.
- · Christensen, Clayton M. and Stephen P. Kaufman."Assessing Your Organization's Capabilities: Resources, Processes, and Priorities" Module Note: HBS 9-607-014 (2008).
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- D'Aveni, Richard. "The 3-D Printing revolution." Harvard Business Review, May (2015): 40-48.

Literature

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- Johnson, Mark W., Clayton M. Christensen, and Henning Kagermann. "Reinventing Your Business Model" Harvard Business Review December (2008): 2-10.
- · Kavadias, Stelios, Kostas Ladas, and Christoph Loch. "The Transformative Business Model: How to tell if you have one." Harvard Business Review, October (2016): 91-98.
- · King, Andrew A., and Baljir Baatartogtokh. "How Useful Is the Theory of Disruptive Innovation?." MIT Sloan Management Review, 57.1 (2015): 77-90.
- Ransbotham, Sam. "Blockchain Data Storage May (Soon) Change Your Business Model". Sloan Management Review, April (2016).
- · Shih, Willy. "Competency-Destroying Technology Transitions: Why the Transition to Digital Is Particularly Challenging" Note: HBS 9-613-024 (2013).
- Tapscott, Don, and Alex Tapscott. "The Impact of the Blockchain Goes Beyond Financial Services". Harvard Business Review, May (2016).
- · Vermeulen, Freek. "How Acquisitions Can Revitalize Companies." MIT Sloan Management Review, 46.4 (2005): 45-51.
 - Wolcott, Robert C., and Michael J. Lippitz. "The four models of corporate



entrepreneurship." MIT Sloan Management Review, 49.1 (2007): 75-82.

Zilis, Shivon, and James Cham. "The Competitive Landscape for Machine Intelligence". Harvard Business Review, November (2016).

avT	Seminar
Hrs/wk	
СР	
	Independent Study Time 32, Study Time in Lecture 28
	Prof. Christoph Ihl
Language	
Cycle	
	This course examines the elements of entrepreneurial finance, focusing on technology-bas start-up ventures and the early stages of company development. The course addresses k questions relevant to both startup and corporate entrepreneurs: How much money can a should be raised? When should it be raised and from whom? What is a reasonable valuation of the company? How should funding, employment contracts and exit decisions be structure. This course will focus on the finance principles related to the risk & return of venture capit the valuation of high growth companies, the capital structure specific to venture capital-back companies, and investment decisions under uncertainty. Three main topics will be covered: (1) New business opportunity valuation: Most time will be devoted to the understanding a application of tools to valuate early stage business opportunities and high-growth companiversus mature companies. Standard tools for financial and liquidity planning as well discounted cash flow valuation will be applied to startup situations. Furthermore, the ventucapital method, analysis of comparables and the real options approach to valuation a introduced. (2) Financing and employment contracts: We will discuss the main sources of financing the entrepreneurs can choose from. Particular emphasis will be put on venture capital funds at their fund raising process. The design of financial contracts will be analyzed in terms addressing information and incentive problems in uncertain environments. Employme contracts will be motivated as a compensation device to attract and retain key employees. (3) Growth and exit strategies: We will discuss entrepreneurs' option to grow or exit. Liquid events are considered such as initial public offering, sale or merger as compared independent growth as a private company. We also examine later stage options such mezzanine financing and buy-outs and the specifics of international growth. Guest lecturers will present the latest trends in these areas. The ideal audience for the cour
Literature	Metrick, Andrew, and Ayako Yasuda. Venture Capital and the Finance of Innovation. Wile 2010. Leach, J., and Ronald Melicher. Entrepreneurial finance. Cengage Learning, 2011. Selected cases will be made available during class.



Module M1292: N	Marketing and Communication			
Courses				
Title Business-to-Business Marketing (L0762) Case Studies of Marketing and Communication (L1760) Intercultural Management and Communication (L0846)		Typ Lecture Recitation Section (small) Lecture	Hrs/wk 2 2 2	CP 2 2 2
Module Responsible	Prof. Christian Lüthje			
Admission Requirements	None			
Recommended Previous Knowledge	Laama ingiahta into markting and intornation	_	ness admi	nistration with
Educational Objectives	After taking part successfully, students have	reached the following lea	rning resu	lts
Professional Competence				
Knowledge	Selling to organizations and industra Overview of basic strategic decisions Relevant theories, methods and tool Relevant theories for intercultural co Communication theories (verbal, interpretation of cues such as symbol The nature of "culture" is and its impole Approaches for managing cultural di	ail buyers s in B2B markets ls for operational B2B mark mmunication non-verbal communicat ols) act on human interaction iversity		
Skills	 chosing appropriate cooperation for decide about different target markets develop appropriate value-proposition place, price and communicate industrial marketing tools; interpret symbols, rituals and gesture managing cultural diversity across the communicating approprirately with communicating appropriately with comply the theoretical knowledge to be apply the theoretical knowledge to in 	s, ways of market entry, and ons to customers; ustrial products with the h es appropriately in an inter ne employees of a compan customers in different regio ousiness cases or real exam	d timingstr nelp state- cultural co y nal marke	ategies; of-the-art B2B ontex
Personal Competence				
Social Competence	The students will be able to have fruitful professional discussion: present and defend the results of the work successfully in multi-cultural ter communicate and collaborate succeintercultural basis.	eir work in a group of stude ams;		rs, also on an
Autonomy	The students will be able to acquire kno intercultural communication. This will enal decisions and to leverage this knowledge to	ble them to make indepe	ndent and	-
	Independent Study Time 96, Study Time in I	Lecture 84		
Credit points	6			



Course achievement	None
Examination	Subject theoretical and practical work
Examination duration and scale	Written elaboration, excercises, presentation, oral participation
Assignment for the Following Curricula	Global Technology and Innovation Management & Entrepreneurship: Core qualification: Compulsory Mechanical Engineering and Management: Core qualification: Elective Compulsory

ourse L0762: Business-to-Business Marketing		
Тур	Lecture	
Hrs/wk	2	
СР	2	
Workload in Hours	Independent Study Time 32, Study Time in Lecture 28	
Lecturer	Prof. Christian Lüthje	
Language	EN	
Cycle	WiSe	
	Contents Business-to-business (B2B) markets play an important role in most economies. At the same time, B2B markets differ strongly from consumer goods markets. For example, companies' buying decisions follow different rules than those of consuming individuals. Consequently, marketing mix decisions in B2B markets need to follow the specific circumstances in such markets. The aim of this lecture is to enable students to understand the specifics of marketing in B2B.	

The aim of this lecture is to enable students to understand the specifics of marketing in B2B markets. At the beginning, students learn which strategic marketing decisions may be most appropriate in industrial markets. Following that, the lecture will focus more on different options to design marketing mix elements - Pricing, Communication and Distribution - in B2B markets. We extend the student's basic knowhow in marketing and focus on the specific requirements in B2B markets.

Topics

- The importance, specific characteristics and developments of B2B markets today
- Organizational buying behavior and the corporate buying process
- B2B marketing strategies regarding modes and time of market entry with focus on innovative industrial products
- Types of project-related cooperation in the B2B project business
- Specific operational marketing methods in communication (success factors of fares and exhibitions, importance of public relations for B2B markets); pricing (measuring willingness-to-pay via auctions; value-based pricing in industrial markets, bidding models and auctioning); distribution and channel strategies for B2B markets
- Marketing in complex value chains: Solving the problem of direct customers' unwillingness to adopt innovative products by directly addressing indirect customers

Knowledge

Content The students will develop a thorough understanding of:

- How organizations and firms buy
- How marketing can be performed in complex value chains
- Promising market and competitive strategies in B2B markets
- Modes of cooperation in B2B markets
- Marketing-Mix decisions in B2B marketing (communication, pricing, distribution)

Skills

analyzing the advantages and disadvantages of different target market, market entry,



timing and allocation strategies;

- identifying and systematically address relevant partners when selling to business organizations;
- developing context-specific market-entry and timing strategies;
- making appropriate decisions for the pricing and communication of industrial products;
- applying the theoretical knowledge to business cases or real examples

Social Competence

The students will be able to

- having fruitful professional discussions;
- presenting and defending the results of their work in groupwork;

Self-reliance

 acquiring knowledge in the specific context independently and to map this knowledge onto other new complex problem fields.

Assessment

Written examination & Class participation in interactive elements (presentations, homework)

Blythe, J., Zimmerman, A. (2005) Business-to-Business Marketing: A global perspective, London, Thomson

Monroe, K. B. (2002). Pricing: Making Profitable Decisions, 3rd Edition

Literature Morris, M., Pitt, L., Honeycutt, E. (2001), Business-to-Business Marketing, New York, Sage Publishing, 3rd Edition

> Nagle, T., Hogan, J., Zale, J. (2009), Strategy and Tactics of Pricing, New York, Prentice Hall, 5th Edition



Course L1760: Case Studies of Marketing and Communication		
Тур	Recitation Section (small)	
Hrs/wk	2	
СР	2	
Workload in Hours	Independent Study Time 32, Study Time in Lecture 28	
Lecturer	Prof. Christian Lüthje	
Language	EN	
Cycle	WiSe	
Content	This course aims at deepening and applying the subjects taught in the lectures "Business-to-Business Marketing" and "Intercultural Communication". Students work on case studies in teams comprising 2-3 people. The case will enable the student teams to analyze problems, to discuss theoretical framworks and scientific results, to evaluate decisions made in companies and/or to develop own ideas for solutions. Each of these cases is related to a specific topic that has been tackled in the other two lectures of this module. The cases can comprise scientific studies or specific company examples (e.g. how company X built up a new salesforce; how company Y designed a successful communication campaign for other countries, how research study Z contributes to the understanding of intercultural differences). The student teams receive material (e.g. scientific articles, press articles) and work with this material to complete presentation documents. The results will be illustrated and discussed in a short presentation.	
Literature	Die Materialien werden jedes Semester neu zusammengestellt, um die ausgewählten Fälle aktuell zu halten. Will be newly compiled each semester to keep the cases up-to-date and fresh.	



Course L0846: Intercu	ıltural Management and Communication
Тур	Lecture
Hrs/wk	2
СР	2
Workload in Hours	Independent Study Time 32, Study Time in Lecture 28
Lecturer	Dr. Rajnish Tiwari
Language	EN
Cycle	WiSe
Content	Globalization of business processes and the revolution in information and communication technologies (ICT) have resulted in distributed workflows across geographic boundaries. These developments as well as increased immigration emanating, for example, as a consequence of a shortage of skilled labour in many industrialized nations, have led to the creation of (virtual) multi-cultural, multi-ethnic teams with diverse cultural backgrounds. Such diversity generally has a positive impact on creativity and innovativeness, as many empirical studies confirm. Nevertheless, varying cultural practices, communication styles, and contextual sensibilities have the potential to disturb or even disrupt collaborative work processes, if left unmanaged. This course focuses on inter-cultural management from both, theoretical as well as practical, points of view to provide a solid fundament to students enabling them to operate successfully in cross-cultural settings. Case studies and guest lecture(s) will be used to provide added practical relevance to the course. In addition, where practicable, student assignments will be used to foster autonomous learning. Some of the main topics covered in this course include: Understanding "culture" and its impact on human interaction Verbal and non-verbal communication High and low context communication Role of formality and non-formality in communication
	Varying interpretations of symbols, rituals & gestures Managing diversity in domestic settings
Literature	 Bartlett, C.A. / Ghoshal, S. (2002): Managing Across Borders: The Transnational Solution, 2nd edition, Boston Deresky, H. (2006): International Management: Managing Across Borders and Cultures, 3rd edition, Upper Saddle River French, R. (2010): Cross-cultural Management in Work Organisations, 2nd edition, London Hofstede, G. (2003): Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations, 2nd edition, Thousand Oaks Hofstede, G. / Hofstede, G.J. (2006): Cultures and Organizations: Software of the mind, 2nd edition, New York



Courses				
Title Marketing of Innovations (L2009)		Typ Lecture	Hrs/wk	CP 4
PBL Marketing of Innovati	ions (L0862)	Project-/problem-bas Learning	sed 1	2
Module Responsible	Prof. Christian Lüthje			
Admission Requirements	INONA			
Recommended Previous Knowledge		ess administration principles nternational business) owledge (Marketing Instrum dehavior) beweetn B2B and B2C marl nce of managing innovation	ents, Market a	nd Competito
Educational Objectives	After taking part successfully, student	s have reached the followin	g learning resu	llts
Professional Competence				
Knowledge	 Approaches and tools for enproducts and innovative service. Marketing mix elements that challenges of innovative products and innovative products. Pricing methods for new products. The organization of complex service. Communication concepts and 	marketing of innovative pore the current market situat about future customer needs integrate lead users and es suring customer-orientation ces take into consideration th ucts and services ucts and services sales forces and personal se	ion and the and requirement their needs into in the development of the specific requirement.	future marker ents to product an epment of ne- uirements an
Skills	Design and to evaluate decisi Analyze markets by applying a Conduct forecasts and develoe Translate customer needs is successfully apply advanced development Use adequate methods to fost Choose suitable pricing strate Make strategic sales decision channels) Apply methods of sales force in the conductive of the	ons regarding marketing an market and technology porting compelling scenarios as a into concepts, prototypes id methods for customer-order efficient diffusion of innovagies and communication acons for products and serv	olios a basis for strat and marketab riented product rative products tivities for inno- rices (i.e. sele	egic planning ole offers and of and services and services vations ction of sale
Personal Competence				



Social Competence	 have fruitful discussions and exchange arguments develop original results in a group present results in a clear and concise way carry out respectful team work
Autonomy	 Acquire knowledge independently in the specific context and to map this knowledge on other new complex problem fields. Consider proposed business actions in the field of marketing and reflect on them.
Workload in Hours	Independent Study Time 110, Study Time in Lecture 70
Credit points	6
Course achievement	None
	Subject theoretical and practical work
Examination duration and scale	Written elaboration, excercises, presentation, oral participation
Assignment for the Following Curricula	Global Technology and Innovation Management & Entrepreneurship: Core qualification: Compulsory International Management and Engineering: Specialisation I. Electives Management: Elective Compulsory Mechanical Engineering and Management: Specialisation Management: Elective Compulsory Biomedical Engineering: Specialisation Artificial Organs and Regenerative Medicine: Elective Compulsory Biomedical Engineering: Specialisation Implants and Endoprostheses: Elective Compulsory Biomedical Engineering: Specialisation Medical Technology and Control Theory: Elective Compulsory Biomedical Engineering: Specialisation Management and Business Administration: Compulsory



Course L2009: Marketing of Innovations		
Typ Lecture		
Hrs/wk	4	
СР	4	
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56	
	Prof. Christian Lüthje	
Language		
Cycle		
Content	V. Customer-oriented Product and Service Engineering Conjoint Analysis, Kano, QFD, Morphological Analysis, Blueprinting VII. Pricing Basics of Pricing, Value-based pricing, Pricing models VIII. Sales Management Basics of Sales Management, Assessing Customer Value, Planning Customer Visits	
	IX. Communications • Diffusion of Innovations, Communication Objectives, Communication Instruments	
	Mohr, J., Sengupta, S., Slater, S. (2014). Marketing of high-technology products and innovations, third edition, Pearson education. ISBN-10: 1292040335. Chapter 6 (188-210), Chapter 7 (227-256), Chapter 10 (352-365), Chapter 12 (419-426).	
	Crawford, M., Di Benedetto, A. (2008). New products management, 9th edition, McGrw Hill, Boston et al., 2008	
Literature	Christensen, C. M. (1997). Innovator's Dilemma: When New Technologies Cause Great Firms to Fail, Harvard Business Press, Chapter 1: How can great firms fail?,pp. 3-24.	
	Hair, J. F., Bush, R. P., Ortinau, D. J. (2009). Marketing research. 4 th edition, Boston et al., McGraw Hill	
	Tidd; J. & Hull, Frank M. (Editors) (2007) Service Innovation, London	
	Von Hippel, E.(2005). Democratizing Innovation, Cambridge: MIT Press	



Course L0862: PBL Marketing of Innovations		
Тур	Project-/problem-based Learning	
Hrs/wk	1	
СР	2	
Workload in Hours	Independent Study Time 46, Study Time in Lecture 14	
Lecturer	Prof. Christian Lüthje	
Language	EN	
Cycle	SoSe	
Content	This PBL course is seggregated into two afternoon sessions. This cours aims at enhancing the students' practical skills in (1) forecasting the future development of markets and (2) making appropriate market-related decisions (particularly segmentation, managing the marketing mix). The students will be prompted to use the knowledge gathered in the lecture of this module and will be invited to (1) Conduct a scenario analysis for an innovative product category and (2) Engage in decision making within a market simulation game.	
Literature		



Module M1358: Global Innovation Management				
Courses				
Title		Тур	Hrs/wk	СР
Managing Global Innovation (L1933)		Project-/problem-based Learning	3	3
Managing Global Innovation	on - Seminar (L1934)	Seminar	2	3
Module Responsible	Dr. Stephan Buse			
Admission Requirements				
Recommended Previous Knowledge	Basic knowledge of innovation mana	gement and globalisation		
Educational Objectives	LATTER TOKING NORT CHECACCITUIL CILIAGNIC NOVE RESCREA THE TOLIAMING LEGENING RECLITE			
Professional				
Competence				
Knowledge				
Skills				
Personal Competence				
Social Competence				
Autonomy				
	Independent Study Time 110, Study	Fime in Lecture 70		
Credit points				
Course achievement	None			
Examination	Written exam			
Examination duration and scale	90 min			
Assignment for the Following Curricula	Global Technology and Innovation Compulsory	Management & Entrepreneur	ship: Core	qualification



Course L1933: Managing Global Innovation		
Тур	Project-/problem-based Learning	
Hrs/wk	3	
СР	3	
Workload in Hours	Independent Study Time 48, Study Time in Lecture 42	
Lecturer	Dr. Stephan Buse, Dr. Rajnish Tiwari	
Language	EN	
Cycle	SoSe	
Content		
Literature	 Bartlett, C. A. and S. Ghoshal (1998). Managing across Borders: The Transnational Solution. Boston, Harvard Business School Press. Bartlett, C. A. and S. Ghoshal (1990). Managing innovation in the transnational corporation. Managing the Global Firm. C. A. Bartlett, Y. L. Doz and G. Hedlund. London, Routledge: 215-255. Chesbrough, H. (2003). Open Innovation: The New Imperative for Creating and Profiting from Technology. Boston, Harvard Business School Press. Christensen, C. M. and M. E. Raynor (2003). The innovator's solution: creating and sustaining successful growth. Boston, MA, Harvard Business School Press. Herstatt, C. and R. Tiwari, Eds. (2017). Lead Market India: Key Elements and Corporate Perspectives for Frugal Innovations. Heidelberg, Springer. Herstatt, C., R. Tiwari and S. Buse (2017). Innovating for Emerging Markets? An Assessment of German Hidden Champions' Strategies. Technologie, Strategie und Organisation. W. Burr and M. Stephan. Wiesbaden, Springer Gabler: 219-238. Tiwari, R. and C. Herstatt (2014). Aiming Big with Small Cars: Emergence of a Lead Market in India. Heidelberg, Springer. 	

Course L1934: Managing Global Innovation - Seminar		
Тур	Seminar	
Hrs/wk	2	
СР	3	
Workload in Hours	Independent Study Time 62, Study Time in Lecture 28	
Lecturer	Dr. Stephan Buse, Dr. Rajnish Tiwari	
Language	EN	
Cycle	SoSe	
Content		
Literature	Die Grundlagenliteratur ist deckungsgleich zu der gleichnamigen Vorlesungsliteratur. Hinzukommt themenspezifische Fachliteratur bezüglich der zu behandelnden Fragestellungen.	



Module M1034: T	echnology Entrepreneuship			
Courses				
Title		Тур	Hrs/wk	СР
Creation of Business Opp	portunities (L1280)	Project-/problem-based Learning	3	4
Entrepreneurship (L1279)		Lecture	2	2
Module Responsible	Prof. Christoph Ihl			
Admission Requirements	None			
Recommended Previous Knowledge	Basic knowledge in business economic interest in new technologies and the pur or startup contexts.	•	-	
Educational Objectives	After taking part successfully, students ha	ave reached the following lea	arning resu	Its
Professional Competence				
Knowledge	 develop a working knowledge ar understand the difference betwee understand the process of taki commercial opportunity understand the components of be understand the components of be 	en a good idea and scalable ng a technology idea and usiness models	business of finding a	pportunity high-potentia
Skills	entrepreneurial opportuni o formulate and test busine o conduct customer and exi o prepare business opportui o create and verify a plan fo	ess opportunities epreneurial opportunities eusiness model of how to ity ess model assumptions and he pert interviews regarding bus	ypotheses iness oppo s talent an	ortunities d capital
Personal Competence				
Social Competence	Sozialkompetenz (Social Competence): team work communication and presentation give and take critical comments engaging in fruitful discussions			
	Selbständigkeit (Autonomy):			
Autonomy	autonomous work and time manaproject management	agement		



	analytical skills
Workload in Hours	Independent Study Time 110, Study Time in Lecture 70
Credit points	6
Course achievement	None
Examination	Subject theoretical and practical work
Examination duration and scale	Three presentations on the respective project status
Assignment for the Following Curricula	Global Technology and Innovation Management & Entrepreneurship: Core qualification: Elective Compulsory International Management and Engineering: Specialisation I. Electives Management: Elective Compulsory Logistics, Infrastructure and Mobility: Core qualification: Elective Compulsory Mechanical Engineering and Management: Specialisation Management: Elective Compulsory



1	on of Business Opportunities
	Project-/problem-based Learning
Hrs/wk	
СР	
	Independent Study Time 78, Study Time in Lecture 42
	Prof. Christoph Ihl
Language	
Cycle	
Content	Important note: This course is part of an 6 ECTS module consisting of two cours "Entrepreneurship" & "Creation of Business Opportunities", which have to be taken toget in one semester. Startups are temporary, team-based organizations, which can form both within and outsi of established companies, to pursue one central objective: taking a new venture idea market by designing a business model that can be scaled to a full-grown company. In the course, students will form startup teams around self-selected ideas and run through the process just like real startups would do in the first three months of intensive work. Start Engineering takes an incremental and iterative approach, in that it favors variety a alternatives over one detailed, linear five-year business plan to reach steady state operation. From a problem solving and systems thinking perspective, student teams create differences and value capture vis-à-vis competitors. To test critical hypotheses early of student teams engage in an evidence-based, experimental trial-and-error learning process. Upon completion of this course, students will be able to: Apply a modern innovation toolkit relevant in both the corporate & startup world Analyze given business opportunities in terms of its constituent elements Design new business models by gathering and combining relevant ideas, facts a information Evaluate business opportunities and derive judgment about next steps & decisions Course language is English, but participants can decide to give their graded presentations. German. Students are invited to apply to this course module already with a startup idea are ream, but this is not a requirement! We will form teams and ideas in the beginning of tourse. Class meetings have alternate intervals of lecture inputs, teamwork, mentoring, a peer feedback. Attendance is mandatory for at least 80% of class time due to large proportion to teamwork sessions. Student same site of the presentation after 5 weeks: 30% Startup discovery presentation after 5 weeks: 30% Final
Literature	 Blank, S. & Dorf, B. (2012). The startup owner's manual. Gans, J. & Stern, S. (2016). Entrepreneurial Strategy. Osterwalder, A. & Yves, P. (2010). Business model generation. Maurya, A. (2012). Running lean: Iterate from plan A to a plan that works. Maurya, A. (2016). Scaling lean: Mastering the Key Metrics for Startup Growth. Wilcox, J. (2016). FOCUS Framework: How to Find Product-Market Fit.



Hrs/wk CP Workload in Hours Lecturer Language Cycle	2 Independent Study Time 32, Study Time in Lecture 28 Prof. Christoph IhI EN
CP Workload in Hours Lecturer Language Cycle	2 Independent Study Time 32, Study Time in Lecture 28 Prof. Christoph IhI EN
Workload in Hours Lecturer Language Cycle	Independent Study Time 32, Study Time in Lecture 28 Prof. Christoph IhI EN
Lecturer Language Cycle	Prof. Christoph IhI EN
Language Cycle	EN
Cycle	
-	
	SoSe
Content	Important note: This course is part of an 6 ECTS module consisting of two course "Entrepreneurship" & "Creation of Business Opportunities", which have to be taken togeth in one semester. Startups are temporary, team-based organizations, which can form both within and outsid of established companies, to pursue one central objective: taking a new venture idea market by designing a business model that can be scaled to a full-grown company. In the course, students will form startup teams around self-selected ideas and run throug the process just like real startups would do in the first three months of intensive work. Startt Engineering takes an incremental and iterative approach, in that it favors variety an alternatives over one detailed, linear five-year business plan to reach steady state operation. From a problem solving and systems thinking perspective, student teams create differe possible versions of a new venture and alternative hypotheses about value creation focustomers and value capture vis-à-vis competitors. To test critical hypotheses early of student teams engage in an evidence-based, experimental trial-and-error learning proce that measures real progress. Upon completion of this course, students will be able to: 'Apply a modern innovation toolkit relevant in both the corporate & startup world Analyze given business opportunities in terms of its constituent elements Design new business models by gathering and combining relevant ideas, facts an information Evaluate business opportunities and derive judgment about next steps & decisions Course language is English, but participants can decide to give their graded presentations. German. Students are invited to apply to this course module already with a startup idea and or team, but this is not a requirement! We will form teams and ideas in the beginning of the course. Class meetings have alternate intervals of lecture inputs, teamwork, mentoring, and peer feedback. Attendance is mandatory for at least 80% of class time due to large proportion of te
Litovotuvo	 Blank, S. & Dorf, B. (2012). The startup owner's manual. Gans, J. & Stern, S. (2016). Entrepreneurial Strategy. Osterwalder, A. & Yves, P. (2010). Business model generation. Maurya, A. (2012). Running lean: Iterate from plan A to a plan that works. Maurya, A. (2016). Scaling lean: Mastering the Key Metrics for Startup Growth. Wilcox, J. (2016). FOCUS Framework: How to Find Product-Market Fit.



Courses				
Fitle Agile Design Methods (L1	·	Typ Project Seminar	Hrs/wk	CP 3
Agile Design Methods (L2	Prof. Cornelius Herstatt	Lecture	2	3
Admission Requirements	None			
Recommended Previous Knowledge	None			
Educational Objectives	After taking part successfully, stud	dents have reached the followin	g learning resu	Its
Professional Competence	The students know:			
Knowledge	 their importance for agile The distinction between li Appropriate software for s The interrelation between The theoretical construmethodologies. The difference between ligital Prototyps. 	near and integrative design me	thods. esign methods. design and	its diver
Skills	the difference between management. They apply the relevant rimplementation of an idea to self-moderate the Design to use appropriate medepartmental teams. They carry out a synthampersonas. to use creativity methods to construct appropriate p	te method to approach an innovagile and iterate of methodol methods for the fuzzy front end in agile teams (e.g. Scrum). In Thinking process in their team thods to create a common ses of the use and eight throughout the generation such as differ tototypes to test the critical functions are for supporting the process.	ogies and war (e.g. Design Ti m. understanding gh appropriate	ter fall projection fall projection fall projection fall projection fall projection fall fall projection fall
Personal Competence				
Social Competence	 to reach the expected rest to engage in scientific specifically design manage 	respectfully in a multicultural tea ults within their team and to doc and practitioner discussions gement. e work to others in an understa	ument them. on the topic	
	The students are able:			
	 to carry out an innovation or in a team. 	process for any given challeng	ge independent	tly, individua



Autonomy	 to solve complex problems independently or in a team, selecting and using appropriate analog design methods and software. to gather knowledge regarding a challenge independently and apply their knowledge in problem-solving. to critically reflect on the results of the work and their own behavior in the team.
Workload in Hours	Independent Study Time 110, Study Time in Lecture 70
Credit points	6
Course achievement	None
Examination	Written elaboration
Examination duration and scale	I Written Assignment
_	Global Technology and Innovation Management & Entrepreneurship: Core qualification: Elective Compulsory



Course L1962: Agile D	esign Methods
Тур	Project Seminar
Hrs/wk	3
СР	3
Workload in Hours	Independent Study Time 48, Study Time in Lecture 42
Lecturer	Prof. Cornelius Herstatt, Sandra-Luisa Moschner
Language	EN
Cycle	SoSe
Content	The core of this projectseminar is the systematical and method - based development of individual design method skills. The course is divided into two sections: 1.) theoretical input on relevant methodologies and 2.) practical training and application of innovation methods. In the first events, basic knowledge and an overview of methodical approaches to innovation and creativity is given. In the subsequent groupwork phase, user needs are explored, solutions are developed and tested experimentally. Interim results are presented at regular intervals in the plenum. The ideas can be further developed from date to date on the basis of verified or falsified assumptions. Different design methodologies will be explained and set in context: Design Thinking, Scrum, Kanban, Simplicity, Appreciative Inquiry, Lean start-up, Business Model Canvas, Value Proposition Design. The didactical concept of the practice phase is problem-based learning. Therefore the methodological training will focus on design thinking applied to a real-world problem. In an iterative manner, the student teams go through all Design Thinking stages in a workshop style - starting from understand, to empathize, define, ideate, prototype and test, several times in projects. Agile design methods forster a new working paradim, a mindset of collaboration. The students will experience the connection between methodology and working culture and reflect on their personal develpoment on the one hand and the team dynamics on the other hand.
Literature	 "Design Thinking" (Tim Brown, 2008) Change by Design (Tim Brown, 2008) Creative Confidence (Kelley/Kelley, 2013) Value Proposition Design (Osterwalder/Pigneur, 2014) Business Model Canvas (Osterwalder/Pigneur, 2010) The Lean Startup (Eric Ries, 2011) This Is Service Design Thinking (Stickdorn/Schneider, 2012)

Course L2294: Agile Design Methods		
Тур	Lecture	
Hrs/wk	2	
СР	3	
Workload in Hours	Independent Study Time 62, Study Time in Lecture 28	
Lecturer	Dr. Stephan Buse, Sandra-Luisa Moschner	
Language	EN	
Cycle	SoSe	
Content	See interlocking course	
Literature	See interlocking course	



Module M1360: In	nnovation Management			
Courses				
Title		Тур	Hrs/wk	CP
Managing Innovations (L1	937)	Project-/problem-based Learning	3	3
Managing Innovations - S	eminar (L1938)	Seminar	2	3
Module Responsible	Prof. Cornelius Herstatt			
Admission Requirements	None			
Recommended Previous Knowledge	Basic knowledge in business administra	ation		
Educational Objectives	I Atter taking part curcecetully, etudente have reached the following learning recults			
Professional				
Competence				
Knowledge				
Skills Personal				
Competence				
Social Competence] 			
Autonomy				
Workload in Hours	Independent Study Time 110, Study Tin	ne in Lecture 70		
Credit points	6			
Course achievement	None			
Examination	Written exam			
Examination duration and scale	90 min			
Assignment for the Following Curricula	Global Technology and Innovation M Compulsory	Management & Entrepreneur	ship: Core	qualification:



Course L1937: Managi	ing Innovations			
Тур	Project-/problem-based Learning			
Hrs/wk	3			
СР	3			
Workload in Hours	Independent Study Time 48, Study Time in Lecture 42			
Lecturer	Prof. Cornelius Herstatt			
Language	EN			
Cycle	SoSe			
Content	Innovation is key to corporate growth and sustainibility. In this lecture Prof. Herstatt presents a systematic way from generating ideas to the successful implementation of innovations.			
Literature	Hauptlehrbuch der Veranstaltung: Goffin, K., Herstatt, C. and Mitchell, R. (2009): Innovationsmanagement: Strategie und effektive Umsetzung von Innovationsprozessen mit dem Pentathlon-Prinzip, München: Finanzbuch Verlag Weiterführende Literatur Innovationsmanagement (Juergen Hauschildt) F + E Management (Spcht, G. / Beckmann, Chr.) Management der frühen Innovationsphasen (Cornelius Herstatt, Birgit Verworn) (im TUHH-Intranet auch als E-Book verfügbar) Bringing Technology and Innovation Into the Boardroom			

Course L1938: Managi	ing Innovations - Seminar
Тур	Seminar
Hrs/wk	2
СР	3
Workload in Hours	Independent Study Time 62, Study Time in Lecture 28
Lecturer	Prof. Cornelius Herstatt
Language	EN
Cycle	SoSe
Content	
Literature	Die Grundlagenliteratur ist deckungsgleich zu der gleichnamigen Vorlesungsliteratur. Hinzukommt themenspezifische Fachliteratur bezüglich der zu behandelnden Fragestellungen.



Specialization Entrepreneurial Engineering (AAU)

The second year of the GTIME program in Aalborg with its specialisation in Entrepreneurial Engineering develops mind-sets and skills that enable students to create and realise new value for people and organisations. The students will bring a variety of different - mostly - technical competences into the programme, and the purpose is to creatively combine these technical competences with business savvy in order to create new value. From idea to reality - from thought to action.

Business creation and business development competences are keys to the global business arena of the future. Furthermore, such competences are a requisite for a range of knowledge-based organisations, from large to small and medium-sized private companies, start-up companies, as well as public services. Through the study programme, students have the opportunity to acquire the tools, methods, knowledge of processes, as well as an organisational and managerial understanding of innovation and entrepreneurship that will allow them to make a difference.

The semesters within the specialisation in Entrepreneurial Engineering are based on three generic activities, which are part of the process of creating new value: Discovery, Incubation and Acceleration. Discovery explores new opportunities, Incubation is about developing and testing new concepts, and Acceleration deals with realising new value. All three activities are incorporated in the GTIME students' Master's thesis as they can add whichever perspective they might find interesting to the project.

Another core competency of Aalborg University is its problem based project approach which is applied in different in group works. Students will be working closely with peers most of the time, and they are required to be present at the university on a daily basis and spend most of their day there. "The Aalborg Model for Problem Based Learning" is a method which is highly recognised internationally, and the university is host to a successful UNESCO chair in Problem Based Learning in Engineering Education and a Centre for PBL and Sustainability approved by UNESCO.

As a G-TIME graduate with a specialisation in Entrepreneurial Engineering, you have a variety of job options. Your skill profile is attractive for many types of companies and organisations in need of business development, including large private and public companies, small and medium-sized companies, start-up companies, as well as municipalities, regions and governmental agencies. Future job titles of successful graduates may be project manager, entrepreneur/CEO/CTO, business developer, process consultant, innovations manager or product and business developer.

Module M1388: E	Intrepreneurial Practice (AAL	J)		
Courses				
Title		Тур	Hrs/wk	СР
Entrepreneurial Practice (AAU) (L1967)		Project-/problem-based Learning	15	15
Module Responsible				
Admission Requirements	None			
Recommended Previous Knowledge	General business knowledge.			
Educational Objectives	I Affer taking part successiumy, students have reached the following learning results			
Professional Competence				
	The student must be able to:			
	Describe and understand general cap innovative in their business developme	_	tions to bed	come and stay



Knowledge

- Describe and understand general abilities and conditions needed for people to become and stay entrepreneurial.
- · Describe and understand tools and methods for supporting entrepreneurial processes with an emphasis on discovery processes.
- · Describe and understand theories of creative methodologies and creative mind-set (dedicated ressources will be allocated for the initiation and sustaining of the objective).

The student must be able to:

- · Identify and analyse a need or problem using various theoretical perspectives related to a business development process.
- Use creative theory and methods in discovery processes.

Skills

- Be able to assess and analyse the entrepreneurial/innovation capabilities of the unit of analysis in focus.
- The student must be able to identify possible conceptual solutions or development directions for solutions by using theory and creative skills.

Personal Competence

Social Competence

The student must be able to:

- · Approach an empirical field and identify a problem or need related to innovative and/or entrepreneurial processes and theories thereof, with an emphasis on discovery.
- Autonomy
- · Contribute to the development of a conceptual solution by relating innovation and/or entrepreneurship theories with empirical insight.
 - Critically evaluate analysis and solutions.
 - Situational application/facilitation of creative skills (dedicated ressources will be allocated to the initiation and sustaining of the objective).

Workload in Hours Independent Study Time 240, Study Time in Lecture 210

Credit points 15

Course achievement None

Examination Subject theoretical and practical work

Examination duration and scale

Examination at Aalborg University

Assignment for the Global Technology and Innovation Management & Entrepreneurship: Specialisation Following Curricula Entrepreneurial Engineering (AAU): Compulsory

Course L1967: Entrepreneurial Practice (AAU)		
Тур	Project-/problem-based Learning	
Hrs/wk	15	
СР	15	
Workload in Hours	Independent Study Time 240, Study Time in Lecture 210	
Lecturer	NN	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1389: A	Agile Business Navigation (AAU)				
Courses					
Title Agile Business Navigation	Typ (AAU) (L1968) Lecture	Hrs/wk 5	CP 5		
Module Responsible	NN				
Admission Requirements	None				
Recommended Previous Knowledge	General business knowledge.				
Educational Objectives	After taking part successfully, students have reached the following	ng learning resul	ts		
Professional					
Competence	The student will be able to understand the different positions w	rithin agile metho	ds.		
	The student will be able to understand the underlying method business processes.	dology behind in	novative agile		
Knowledge	The student will be able to navigate between agile methods related to different practical business constrains.				
	The student will be able to understand human and own preferences in order to understand group dynamic within an innovative, agile team.				
	 The student will be able to navigate with agile methods related to different business cases and related to problem areas in an organization context. 				
	The student will be able to navigate through innovative agile sustain high innovation capacity through a project cycle from ide	•	g methods to		
Skills	• The student will be able to navigate in a multidisciplinary business environment with different business drivers in order to bring most value to an innovative project cycle.				
	The student will be able to set, supply and navigate an interdisciplinary team through an innovative project cycle including the facilitation of agile processes.				
Personal Competence					
Social Competence					
·	• Reflect on the innovative, agile processes in relation to relevan	nt agile methods.			
Autonomy					
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70				
Credit points					
Course achievement	None				
Examination	Written exam	•			
Examination duration and scale	Examination at Aalborg University				
_	Global Technology and Innovation Management & Entr Entrepreneurial Engineering (AAU): Elective Compulsory	repreneurship:	Specialisation		



Course L1968: Agile B	Course L1968: Agile Business Navigation (AAU)		
Тур	Lecture		
Hrs/wk	5		
СР	5		
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70		
Lecturer	NN		
Language	EN		
Cycle	WiSe		
Content			
Literature			



Module M1392: C	Corporate Entrepreneurship (AAU)				
Courses					
Title Corporate Entrepreneurs		yp ecture	Hrs/wk 5	CP 5	
Module Responsible	NN				
Admission Requirements	None				
Recommended Previous Knowledge	General business knowledge.				
Educational Objectives	After taking part successfully, students have rea	ched the following lear	rning result	5	
Professional Competence					
	The student must be able to:				
	 Gain theoretical insight into high impace entrepreneurship, disruptive innovation, breakth 	·		•	
Knowledge	 Understand the role and impact of corporate entrepreurship/(radical) innovation in organisations. 				
	Understanding high-impact innovation processes and how to organize them in and around companies.				
Skills	Be able to identify and analyse challenges of corporate entrepreneurship/inne organizations.				
Ciuno	Be able to choose and use relevant theories, methods, and tools.				
Personal Competence					
Social Competence					
	 Be able to audit, evaluate and contribute to established organisation. 	o design of the innov	ative capa	bilities of an	
Autonomy	Be able to better navigate in contexts of corporate entrepreneurship/(radical) innovation given the complexity, politics and emergent nature of the processes.				
	Ability to develop conceptual solutions to the owner attempting to organise corporate entrepre	-		organisations	
Workload in Hours	Independent Study Time 80, Study Time in Lect	ure 70			
Credit points	5				
Course achievement					
	Written exam				
Examination duration and scale	Examination at Aalborg University				
_	Global Technology and Innovation Manag Entrepreneurial Engineering (AAU): Elective Co	•	eurship: S	pecialisation	



Course L1971: Corporate Entrepreneurship (AAU)		
Тур	Lecture	
Hrs/wk	5	
СР	5	
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70	
Lecturer	NN	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1391: U	Inderstanding Entrepreneur	rship (AAU)			
Courses					
Title Understanding Entreprene	eurship (AAU) (L1970)	Typ Lecture	Hrs/wk 5	CP 5	
Module Responsible	NN				
Admission Requirements	None				
Recommended Previous Knowledge	None				
Educational Objectives	After taking part successfully, students	s have reached the follow	ing learning resul	ts	
Professional Competence					
	During this course the students entrepreneurship as an academic fiel macroeconomic, a psychological, and	ld of research. We will di	scuss entreprene		
Knowledge	The students will acquire an understanding of entrepreneurship concepts and theories, methods and tools.				
	The student must understand theories of the entrepreneurial role at a personal, organisational as well as societal level.				
Skills	The student will continuously be required to relate the theoretical learnings to entrepreneurship as a practice. The students will thereby acquire an understanding of entrepreneurship theory, methods and tools. The student must understand the implications of the entrepreneurial role on a personal, organizational as well as societal level. The student must furthermore be able to understand and describe his or her own situation in relation to an entrepreneurial context. • The student must be able to analyse entrepreneurial problems by using relevant theory methods and tools. • The students must be able to use theory in analysing entrepreneurial challenges at the personal and organisational level.				
Personal Competence					
Social Competence					
Autonomy	The student must be able to select and and tools in relation to the planning processes.				
Workload in Hours	Independent Study Time 80, Study Tin	ne in Lecture 70			
Credit points	5				
Course achievement	None				
Examination	Written exam				
Examination duration and scale	Examination at Aalborg University				
_	Global Technology and Innovation Entrepreneurial Engineering (AAU): E	-	trepreneurship: \$	Specialisation	



Course L1970: Understanding Entrepreneurship (AAU)		
Тур	Lecture	
Hrs/wk	5	
СР	5	
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70	
Lecturer	NN	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1393: A	applied Business Modelling	(AAU)				
Courses						
Title		Тур	Hrs/wk	СР		
Applied Business Modellin	g (AAU) (L1972)	Lecture	5	5		
Module Responsible	NN					
Admission Requirements	None					
Recommended Previous Knowledge	General business knowledge.					
Educational Objectives	After taking part successfully, student	s have reached the followir	ng learning resul	ts		
Professional Competence						
Ka suda da s	The student will be able to understa as the internal connections between to		of the business	model as well		
Knowledge	The student will be able to distinguish between different business models archetypes and how their design features differ.					
	The student will be able to develop based on data collected through desk		ess model for a	new business		
Skills	The student will be able to distinguish between different archetypes of business models and describe the implications of adopting a new business model within an existing business.					
	The student will be able to use the business model as a strategic tool of communication within new business creation.					
	The student will be able to unfold different will be able to unfold will be able to unfold with the able to the abl	fferent scenarios through bu	usiness model p	rototyping.		
Personal Competence						
Social Competence						
Autonomy	The student will be able to analyse internal perspective through a busine	•	ss with both an	external and		
Workload in Hours	Independent Study Time 80, Study Ti	me in Lecture 70				
Credit points	5					
Course achievement	None					
Examination	Written exam					
Examination duration and scale	Examination at Aalborg University					
_	Global Technology and Innovation Entrepreneurial Engineering (AAU): E	_	epreneurship:	Specialisation		



Course L1972: Applied	ourse L1972: Applied Business Modelling (AAU)			
Тур	Lecture			
Hrs/wk	5			
СР	5			
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70			
Lecturer	NN			
Language	EN			
Cycle	SoSe			
Content				
Literature				



Courses						
Fitle		Тур	Hrs/wk	СР		
Design Based Innovation	(AAU) (L1969)	Lecture	5	5		
Module Responsible	NN					
Admission Requirements	None					
Recommended Previous Knowledge	Basics in design management.					
Educational Objectives	After taking part successfully, stu	dents have reached the follow	ving learning resu	Its		
Professional Competence						
	The students					
	 must understand the prototy prototyping. 	ping process and the strer	ngths and weakn	esses of fa		
Knowledge	• must understand the concept of problem framing and reframing through a rapid and iterative prototyping process for developing a product/service business concept					
	must understand the process of user-driven innovation used in a prototyping process.					
	The students					
	• must be able to use observation, interviews and other research methods to collect data on user/customer behaviour.					
Skills	must be able to transform data on user/customer behavior into specifications and demands and subsequently use this as basis for problem framing and a prototyping process.					
Skills	must be able to apply prototyping tools to problem solving, product-, service- and business development.					
	must be able to work through and document a process of design-driven innovation.					
	• must be able to frame specific p	problem-areas and/or opportu	nities.			
Personal						
Competence Social Competence						
Social Competence	The students					
	 must be able to plan and execute a prototyping process that to a large extent involves users, customers and other stakeholders. 					
Autonomy						
 must be able to reflect on the process and outcome of the prototyping process w business development context. 						
Workload in Hours	Independent Study Time 80, Stu	dy Time in Lecture 70				
Credit points	5					
Course achievement	None					
	Written exam					



I	and scale	Examin	ation at Aalbo	rg Uni	versity				
	Assignment for the	Global	Technology	and	Innovation	Management	&	Entrepreneurship:	Specialisation
	Following Curricula	Entrepr	eneurial Engir	neerin	g (AAU): Ele	ctive Compulso	ry		

Course L1969: Design	Course L1969: Design Based Innovation (AAU)			
Тур	Lecture			
Hrs/wk	5			
СР	5			
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70			
Lecturer	NN			
Language	EN			
Cycle	SoSe			
Content				
Literature				



Module M1394: N	Market, Resources and Entrep	reneurship (AAI	U)			
Courses						
Title Market, Resources and E	intrepreneurship (AAU) (L1973)	Typ Lecture	Hrs/wk 5	CP 5		
Module Responsible	NN					
Admission Requirements	None					
Recommended Previous Knowledge	None					
Educational Objectives	After taking part successfully, students ha	ave reached the follow	ring learning resul	ts		
Professional Competence						
	The student will understand theories o and implementation of strategies.	f market analysis and	market developm	ent strategies		
Knowledge	The student will understand ar financing including: lending based, equit	_		nt types of		
	The student will learn aspect of how to identify and analyse markets and how to make strategies for approaching the market.					
Skills	The student will learn how to address financing issues of the business from a resource standpoint.					
	The students will learn to identify the most suitable form of financing and resource acquirement for a specific business.					
Personal Competence						
Social Competence						
	 The student will be able to use meth strategy, and to implementing the strateg 		market, and deve	elop a market		
Autonomy	• The student will be able to identify the needs of the new business and approach potential stakeholders and key persons in order to acquire the resources to meet the needs.					
	 The student will be able to operate under the restraints of limited resources and optimize the usage of those resources. 					
Workload in Hours	Independent Study Time 80, Study Time	in Lecture 70				
Credit points	5					
Course achievement						
	Written exam					
Examination duration and scale	Examination at Aalborg University					
_	Global Technology and Innovation Entrepreneurial Engineering (AAU): Elec	-	trepreneurship: \$	Specialisation		



Course L1973: Market	Course L1973: Market, Resources and Entrepreneurship (AAU)			
Тур	Lecture			
Hrs/wk	5			
СР	5			
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70			
Lecturer	NN			
Language	EN			
Cycle	SoSe			
Content				
Literature				



Specialization Global Design Management (UoS)

The Global Design Management specialisation taught during the second year of the GTIME programme in Glasgow focuses on enabling the systematic role of design in linking creativity to innovation throughout the product development process; from conceptualisation through production and delivery to the market place. The programme aims to develop graduates with management capability who can deploy well-coordinated global product development strategies, operations and projects towards innovation within contemporary industrial settings. Graduates will understand design in innovation as a rigorous engineering process through which innovation can be driven and realised in a competitive global economy, and as a human centred approach that can discover latent societal needs and problems and develop solutions that are sensitive to the needs of all stakeholders.

Different modules introduce the students to key concepts within complex innovative design processes and management approaches, management of globally distributed creative teams at partner universities and the Postgraduate Group Project places student teams to work with an industrial client on a real world solution to client's prioritised brief. Students may integrate and apply design, manufacturing and operations management knowledge and skills to an industry based product and process development project and further develop project management skills. The latter half of the second year at the University of Strathclyde is characterised by the Global Research Project as an individual research project for which the student develops a relevant study topic of interest then executes, documents and presents critical research findings.

These taught and project based modules are supplemented by 2 modules chosen by the students from an approved list of optional modules. These include human centred design, design aesthetics, design methods, sustainable design and remanufacturing, product costing and financial management, quality management and lean six sigma, technology and innovation management, systems thinking, supply chain management and enterprise resource planning.

Module M1386: G	Global Design (UoS)			
Courses				
Title Global Design (UoS) (L19	65)	Typ Lecture	Hrs/wk 5	CP 5
Module Responsible	Dr. Andrew Wodehouse			
Admission Requirements	None			
Recommended Previous Knowledge	None			
Educational Objectives	After taking part successfully, stude	ents have reached the follow	ving learning resul	lts
Professional Competence				
Knowledge	 Demonstrate knowledge and und Demonstrate knowledge and uprojects. Demonstrate knowledge and upstributed design activity. 	understanding of the mana	agement of distri	buted design
	Explain the concepts of distributed Discuss how the benefits and iss located design. Describe management tools and t	sues related to distributed d		



	Apply these tools and techniques to carry out distributed design project work.
Skills	Show how these tools and techniques can overcome issues relating to distributed design.
	Describe appropriate technology and how it can be used to support distributed design.
	Apply the use of technology to successfully carry out distributed design project work.
	Show how appropriate technology can be used to overcome issues relating to distributed design.
Personal Competence	
Social Competence	Teamwork: virtually; collocated; synchronous and asynchronous
	Literature searching, gathering, analysis
Autonomy	Literature review
	Presentation skills
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70
Credit points	5
Course achievement	None
	Subject theoretical and practical work
Examination duration and scale	Examination at University of Strathclyde
_	Global Technology and Innovation Management & Entrepreneurship: Specialisation Global Design Management (UoS): Compulsory

Course L1965: Global	Course L1965: Global Design (UoS)			
Тур	Lecture			
Hrs/wk	5			
СР	5			
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70			
Lecturer	Dr. Andrew Wodehouse			
Language	EN			
Cycle	WiSe			
Content				
Literature				



Module M1385: D	Design Management (UoS)					
Courses						
Title Design Management (UoS	S) (L1964)	Typ Lecture	Hrs/wk 5	CP 5		
Module Responsible	Prof. Alex Duffy					
Admission Requirements	None					
Recommended Previous Knowledge	None					
Educational Objectives	After taking part successfully, stude	nts have reached the following	ng learning resul	ts		
Professional Competence						
	Appreciate and understand the r structures required for effective des Appreciate the role of design mo	sign.		organisational		
Knowledge	3. Know a variety of aspects and the	e complexities of design deve	elopment.			
	4. Appreciate the role of innovation in design and know how to measure design performance.					
	Ability to articulate the impact of early product delivery with regards to quality, cost and market sales.					
	Describe the different main organisational structures and their impact on the design activity.					
Skills	Articulation of the different types of design models, approaches and methods.					
	Appreciation of the different strengths and weaknesses of models, approaches and methods.					
	Able to describe multiple aspects of design development.					
	Articulation of complexities in design development.					
Personal Competence						
Social Competence	Teamwork					
	 - - Literature searching, gathering, ar	nalysis.				
	- Problem synthesis.					
Autonomy	- Literature review writing.					
	- Presentation skills.					
Workload in Hours	Independent Study Time 80, Study	Time in Lecture 70				
Credit points	5					
Course achievement						
	Written elaboration			,		
Examination duration and scale	Examination at University of Stratho	clyde				
_	Global Technology and Innovation Design Management (UoS): Comp	-	eurship: Speciali	sation Global		



Course L1964: Design	Course L1964: Design Management (UoS)	
Тур	Lecture	
Hrs/wk	5	
СР	5	
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70	
Lecturer	Prof. Alex Duffy	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1387: P	Postgraduate Group Project (UoS)				
Courses					
TitleTypHrs/wkPostgraduate Group Project (UoS) (L1966)Project Seminar20					
Module Responsible	Dr. Anup Nair				
Admission Requirements	INONE				
Recommended Previous Knowledge	INONE				
Educational Objectives	After taking part successfully, students have reached the following learning results				
Professional Competence					
	Demonstrate knowledge and understanding of the various elements associated with th respective course disciplines.				
	Demonstrate knowledge and understanding of products and management practices in industry.				
Knowledge	Demonstrate knowledge and ability in applying and using various analysis and modelling tools and techniques in product and process realisation.				
	Demonstrate project planning and management, data collection and analysis, presentation consulting and team working skills.				
	Ability to describe and discuss course contents relevant to the particular project and th course theme.				
Skills	Critically review and evaluate products and management practices of the particular company.				
Cruno	Critically review and evaluate analysis tools and modelling techniques.				
	Discuss and critically evaluate the implementation of analysis tools and modelling techniques				
Personal					
Competence Social Competence	To any useful to a mile a develor				
·	Ability to plan, control and lead an industrial project from inception to completion.				
Autonomy	Evidence of achieving deliverables which meet the client company requirements.				
nateriorny	Ability to work responsibly as part of a project team.				
Workload in Hours	Independent Study Time 320, Study Time in Lecture 280				
Credit points	20				
Course achievement	None				
Examination	Subject theoretical and practical work				
Examination duration and scale	LEYAMINATION AT LINIVERSITY OF STRATICIVE				
_	Global Technology and Innovation Management & Entrepreneurship: Specialisation Global Design Management (UoS): Compulsory				



Course L1966: Postgraduate Group Project (UoS)	
Тур	Project Seminar
Hrs/wk	20
СР	20
Workload in Hours	Independent Study Time 320, Study Time in Lecture 280
Lecturer	Dr. Anup Nair
Language	EN
Cycle	WiSe
Content	
Literature	



Specialization Opportunities and Challenges for Innovation Management in New Economic Powerhouses (MU)

Manipal University is synonymous with excellence in higher education. Over 28,000 students from 57 different nations live, learn and play in the sprawling university town. The university has pioneered in every sector, engineering, management, communication and humanities and management, with all its institutes being mapped on the national and international radar. The School of Management, established in 1999, has been shaping professionally competent, socially responsible and ethical management postgraduates. The School draws its strength from its team of dedicated and experienced faculty members. Many of them have industry experience and have commendable record in research and research publication.

The second year of the GTIME program offered by the School, attempts to explore the rapidly changing business landscape in India. It attempts to provide students with a platform to explore this rich developing economy and trace its journey as it emerges into a strong economic power house. The third semester would commence with a one-week cultural immersion program that will sensitize students to the rich cultural heritage of India. This cultural program will also be a birds-eye view of the business culture operational in India. The courses offered in the third semester will provide students with insights into the business models operational in India and changing contours of the business environment. A potent, powerful blend pedagogy consisting of lectures, discussions, on-site visits and case studies will be employed. The project undertaken by the students in the fourth semester will enable them to obtain a hands one experience in an organization where he/she will be able to relate the class room discussions practically.

Courses				
Title		Тур	Hrs/wk	СР
	vstem Dynamics (MU) (L1948)	Lecture	5	5
-	Prof. Lewlyn Rodrigues			
Admission Requirements	None			
Recommended Previous Knowledge	None			
Educational Objectives	After taking part successfully, studer	nts have reached the follow	ving learning resul	ts
Professional Competence				
Knowledge	 Know the importance of system thinking in an organization. Understand the importance of modelling and simulation of a dynamic system. Appreciate the wide range of applications of System Dynamics Understand the stages of modelling process. Methods for validating a System Dynamics model. 			
Skills	After completing this module, studer Identifying key parameters a Developing a System Dynar Interpretation of simulation relations.	nd its influence on the sys		roblem.
Personal Competence				



	After completing this module, students will have skills:		
Autonomy	 In predicting dynamic scenarios in business innovation. Developing business models which will be helpful in predicting the success of innovation. Applying a holistic view to business problems. 		
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70		
Credit points	5		
Course achievement	None		
Examination	Written exam		
Examination duration and scale	Prüfung abgelegt an der Manipal University		
Assignment for the Following Curricula	I (Innortunities and Challenges for Innovation Management in New Economic Powerhouses)		

Course L1948: Business Modelling and System Dynamics (MU)		
Тур	Lecture	
Hrs/wk	5	
СР	5	
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70	
Lecturer	Prof. Lewlyn Rodrigues	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1370: N	Management in Practice (MU)			
Courses				
Title Management in Practice (MU) (L1949)	Typ Lecture	Hrs/wk 6	CP 6
Module Responsible	Prof. Lakshmi Narayanan			
Admission Requirements	INANA			
Recommended Previous Knowledge	None			
Educational Objectives	After taking part successfully, students have	e reached the follo	wing learning result	ts
Professional Competence				
Knowledge	 Liaison with an MSME in India Exposure to business incubator: Manipal University Technology Business Incubator (MUTBI) Promotes innovation driven start-ups 			
Skills	 After completing this module, students will have skills in: Analyzing cultural diversity and its impact on business and analysing the various culture dynamics involved in a business. design a business proposal Design an appropriate structure that suits the Indian business practices. Designing appropriate business negotiation strategies. 			
Personal Competence				
Social Competence	Teamwork and leadership.			
Autonomy	After completing this module, students will for better coping with challenges on cultural aspects. for better understanding of the finnovation in the business venture.	of business enviror		special focus to promote
	Independent Study Time 96, Study Time in	Lecture 84		
Credit points	ļ.			
Course achievement				
	Written exam			
Examination duration and scale	i Prutung apgelegt an ger Manipal Universit	ty		
Assignment for the Following Curricula		-		•



Course L1949: Manage	Course L1949: Management in Practice (MU)	
Тур	Lecture	
Hrs/wk	6	
СР	6	
Workload in Hours	Independent Study Time 96, Study Time in Lecture 84	
Lecturer	Prof. Lakshmi Narayanan	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1371: T	echnology and Busin	ess (MU)		
Courses				
Title Technology and Business	s (MU) (L1950)	Typ Lecture	Hrs/wk 6	CP 6
Module Responsible	Prof. Pallavi Upadhyaya			
Admission Requirements	INOne			
Recommended Previous Knowledge	INOne			
Educational Objectives	I Affar taking nart eliccaeetiiiiv	students have reached the followin	g learning resul	ts
Professional Competence				
Knowledge	 Important trends in information technology and their applications in business Role of information technology in process innovation Understand various business models of electronic marketplaces in India Understand new technologies that facilitate MSMEs to market their products and services 			
Skills	After completing this module, students will have skills in: Analyzing issues in information systems implementation. Evaluate suitable e-marketplace for new product launch. Designing appropriate e-marketing strategies.			
Personal Competence				
•	Teamwork and communication	n skills		
Autonomy	- Descision making - Analysation and evaluation o	of market opportunities		
Workload in Hours	Independent Study Time 96, S	Study Time in Lecture 84		
Credit points	6			
Course achievement	None			
Examination	Written exam			
Examination duration and scale	i Prutung apgelegt an der Mani	pal University		
Assignment for the Following Curricula	Opportunities and Challenge	novation Management & Entre s for Innovation Management in N		



Course L1950: Techno	Course L1950: Technology and Business (MU)	
Тур	Lecture	
Hrs/wk	6	
СР	6	
Workload in Hours	Independent Study Time 96, Study Time in Lecture 84	
Lecturer	Prof. Pallavi Upadhyaya	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1372: T	echnology, Creativity and Inn	ovation (MU)		
Courses				
Title Technology, Creativity an	nd Innovation (MU) (L1951)	Typ Lecture	Hrs/wk 5	CP 5
Module Responsible	Prof. Shiva Prasad			
Admission Requirements	INONE			
Recommended Previous Knowledge	INONE			
Educational Objectives	After taking part successfully, students ha	ave reached the followi	ng learning resul	ts
Professional Competence				
Knowledge	 Types of creativity and innovation and its barriers. Frameworks and strategies for building an ecosystem for creativity and innovation. Managing creativity, innovation and technology. Understand the basic frameworks for assessing the technology capabilities of a business. Know the importance of facilitating the adoption of new technology. Understand the importance of creativity, innovation & technology to gain competitive advantage. 			
Skills	 After completing this module, students will have skills in: Developing framework and strategies for enabling a supportive environment for fostering creativity and innovation. Assess and audit the technology capabilities of a business. Analyse the problems related to creativity, innovation and technology management. 			
Personal Competence				
Social Competence	Teamwork and communication skills			j
Autonomy	After completing this module, students will have skills: Identify the need for innovation and apply creative solutions for the technological development. Assessing the feasibility of innovative ideas.			
Workload in Hours	Independent Study Time 80, Study Time	in Lecture 70		
Credit points	5			
Course achievement	None			
Examination	Written exam			
Examination duration and scale	I Examination at Maninal University			
Assignment for the Following Curricula	I Unnorthinities and Linallendes for Innov	_		•



Course L1951: Technology, Creativity and Innovation (MU)		
Тур	Lecture	
Hrs/wk	5	
СР	5	
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70	
Lecturer	Prof. Shiva Prasad	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1373: E	Business Research Methods (M	MU)		
Courses				
Title		Тур	Hrs/wk	СР
Business Research Metho	nods (MU) (L1952)	Lecture	5	5
Module Responsible	Dr. Rajasekharan Pillai			
Admission Requirements	INone			
Recommended Previous Knowledge	INone			
Educational Objectives	After taking part successfully, students have reached the following learning results			
Professional Competence				
Knowledge	After the completion of the module the learners will: • familiarize the way of scientific research and it characteristics. • get an orientation on sampling designs; • obtain knowledge about various measurement scales used in research and differen scaling techniques; • fully be oriented to prominent methods of data collection. • learn the tools of data processing and analysis amenable to be interpreted and inferred, with the help of SPSS. - Students can obtain knowledge about research process, research design, inter alia, practica significance of knowing RM.			
Skills	- They will be able to develop questionna - They will be able to understand various		nypotheses.	
Personal Competence				
Social Competence	Coordination and teamwork.			ļ
Autonomy	Students will gain competences in researching data and communicating it to various parties within a professional environment.			
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70			
Credit points	5			
Course achievement	None			
Examination	Written exam			
Examination duration and scale	I Examination at Manipal University			
Assignment for the Following Curricula				•



Course L1952: Business Research Methods (MU)	
Тур	Lecture
Hrs/wk	5
СР	5
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70
Lecturer	Dr. Rajasekharan Pillai
Language	EN
Cycle	WiSe
Content	
Literature	



Module M1374: Seminar Series on Innovation Management (MU)			
Courses			
Title Seminar Series on Innova	tion Management (MU) (L1953) Typ Seminar 3 3		
Module Responsible	Dr. V K Ranjith		
Admission Requirements	INone		
Recommended Previous Knowledge	I Basics in innovation Management		
Educational Objectives	After taking part successfully, students have reached the following learning results		
Professional Competence			
Knowledge	 Innovation Process in emerging economies Context of innovation Innovation and markets Innovative practices in the select industries- Healthcare, Education and FMCG Innovation and the role of incubators-A case of Manipal University 		
Skills	After completing this module, students will have skills in: understanding innovation in the emerging market process. decision making for facilitating the innovation process. methods to foster innovation.		
Personal Competence			
Social Competence	Teamwork and communication skills.		
Autonomy	- Leadership - Decision making		
Workload in Hours	Independent Study Time 48, Study Time in Lecture 42		
Credit points	3		
Course achievement	None		
Examination	Written exam		
Examination duration and scale	Examination at Manipal University		
Assignment for the Following Curricula	IL INNOTILINITIES AND L'HAILENGES TOT INNOVATION WANACHENT IN INEW ECONOMIC POWERNOLISES		



Course L1953: Seminar Series on Innovation Management (MU)	
Тур	Seminar
Hrs/wk	3
СР	3
Workload in Hours	Independent Study Time 48, Study Time in Lecture 42
Lecturer	Dr. V K Ranjith
Language	EN
Cycle	WiSe
Content	
Literature	



Module M1375: F	oreign Language Hind	di (MU)		
Courses				
Title		Тур	Hrs/wk	СР
Foreign Language Hindi (I	MU) (L1954)	Lecture	3	3
Module Responsible	NN			
Admission Requirements	None			
Recommended Previous Knowledge	None			
Educational Objectives	After taking part successfully,	students have reached the following	ng learning resul	ts
Professional Competence				
Knowledge	 To speak and familiarize themselves with Hindi as a foreign language The students will be able to identify the basic sounds, words and expressions of the Hindi language. They will be able to say or express basic ideas, sentences, and desires in simple sentences. They will learn to write the Hindi script and learn enough vocabulary to continue with the Basic 2 level course. 			
Skills Personal Competence	Students will gain basic comm	nunication skills in the Indian langu	uage.	
Social Competence	Communication skills.			-
·	The course will help students understanding of language ar	s orienting themselves in every dand culture.	y life in India thi	rough a better
Workload in Hours	Independent Study Time 48, S	Study Time in Lecture 42	_	
Credit points	3			
Course achievement	None			
Examination	Written exam			
Examination duration and scale	Examination at Manipal Unive	ersity		
Assignment for the Following Curricula	9.1	nnovation Management & Entr is for Innovation Management in		•

Course L1954: Foreign Language Hindi (MU)	
Тур	Lecture
Hrs/wk	3
СР	3
Workload in Hours	Independent Study Time 48, Study Time in Lecture 42
Lecturer	NN
Language	EN
Cycle	WiSe
Content	
Literature	



Specialization Technology and Innovation Management in Japan (APU)

Ritsumeikan University uses the second year of the GTIME program to introduce the students to innovation processes and management approaches used in Japan. Since the global success of Japanese companies, practitioners and scholars around the world have shown an increased interest in and appreciation for Japanese management principles and innovative practices. Japanese companies have for a long time adapted Western ideas of quality and innovation to the Japanese context and introduced new and innovative innovation processes and management techniques. Japan is still a leading driver in the migration toward global operations, integrating design, sourcing, manufacturing and distribution of products and services globally.

The second year in Japan adds to the global character of the master in innovation and technology management. Considering the renowned innovation process of the industry in Japan and the unique innovation processes used in Japan, it is a clear advantage to have focused course- and seminar modules about Japanese product and process innovation conduced in Japan. The students who choose Ritsumeikan University in Japan as their second year destination gain invaluable insights into the Japanese approach to innovation and the international competitiveness that arises from it.

Courses				
Title Information Technology M	anagement (APU) (L1930)	Typ Lecture	Hrs/wk 4	CP 4
Module Responsible	Prof. Yukihiko Nakata			
Admission Requirements	None			
Recommended Previous Knowledge	None			
Educational Objectives	After taking part successfully, stude	ents have reached the follow	wing learning resu	lts
Professional Competence				
Knowledge	 Subject-related knowledge and understanding: The value of IT to organizations. The role of information technology for product and process development and the val of innovations. Recognize and analyze the information-communication systems/services nexus. Understand the principles necessary to overcome the management challenges integrating IT in innovation and employing it an organization. Understanding how best practices can be implemented into the IT organizati successfully. 			
Skills	Subject-related skills: After completing this module, stude • Determining what is to be completed into product a coping with challenges of I	ontained in an IT Strategic nd service concept develop	oment	organization
Personal Competence				



	Key Qualifications:					
	After completing this module, students will have skills:					
Social Competence	 Identify the role of information for the success of innovation and competitiveness Integration of information management in all stages of product development Master total information technology management (ITM) in R&D and business processes. 					
Autonomy						
Workload in Hours	ndependent Study Time 64, Study Time in Lecture 56					
Credit points						
Course achievement	None					
Examination	Vritten exam					
Examination duration and scale	Examination at Ritsumeikan Asia Pacific University					
_	Global Technology and Innovation Management & Entrepreneurship: Specialisation Technology and Innovation Management in Japan (APU): Compulsory					



Course L1930: Informa	ation Technology Management (APU)
	Lecture
Hrs/wk	
СР	
	Independent Study Time 64, Study Time in Lecture 56
	Prof. Yukihiko Nakata
Language Cycle Content	EN WiSe The aim of this course is to demonstrate and discuss the essential role of information technology for innovation and competitive advantage of a company. Innovations of the 21st century such as Apple's iPod - and the competiveness advantage that results from it - are more and more based on information than on physical apparatus. Innovations are embedded in information networks and the value of a physical apparatus. In addition, information technologies are the core for management, manufacturing and service processes. In this sense Information Technology Management is important to accelerate innovations and strengthen competitiveness and, therefore, one of the key parts of Management of Technology (MOT), which is the management to lead R&D to business and add extra value. The course objective is to master "Total Information Technology Management (ITM)". This concepts generally aim at leading R&D and business processes to effectively utilize IT in order to strengthen competitiveness. The course is a complement to the courses "Strategy of Technology (SOT)" and "Management of Technological (MOT)". Why "Information Technology Management"? Paradigm Shift of IT Management IT in the 21st century Smartphone, Big data etc. The Role of Information in innovation Case Study of iPod: Video Case Study The iPnd Revolution"
	System of JR-Suica" Build to Order Mass customization Video Case Study; CEO exchange: Dell of Dell and Smith of FedEx Social Networking Service: Business Developing by IT
Literature	Turban, E., Volonino, L., Wood, G. R. (2005) Information Technology for Management: Digital Strategies for Insight, Action, and Sustainable Performance, John Wiley & Sons.



Module M1356: T	echnology Management (APU)				
Courses					
Title Technology Management	Typ Hrs/wk CP (APU) (L1931) Lecture 4 4				
Module Responsible	Prof. Masanori Namba				
Admission Requirements	None				
Recommended Previous Knowledge	None				
Educational Objectives	After taking part successfully, students have reached the following learning results				
Professional Competence					
Knowledge	Students will learn the basic concepts on innovation and the features of technology which enable them to understand the integrated and complex process of R&D, New Product Development, Business Operations, and the role and the effective use of Information Technology for overall management.				
Skills	 Skills in managing business and innovation processes Managing a variety of technologies Project management towards an innovative company strategy 				
Personal Competence					
Social Competence	- Teamwork and communication skills - Intercultural management skills				
Autonomy	- Leadership - Analytical decision making				
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56				
Credit points					
Course achievement	None				
Examination	Written exam				
Examination duration and scale	Examination at Ritsumeikan Asia Pacific University				
_	Global Technology and Innovation Management & Entrepreneurship: Specialisation Technology and Innovation Management in Japan (APU): Compulsory				



ourse L1931: Techno	ology Management (APU)
Тур	Lecture
Hrs/wk	
СР	4
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56
Lecturer	Prof. Masanori Namba
Language	EN
Cycle	WiSe
Content	 Part 1 Sources of Competitiveness: Linkage of R&D and Production Class 1 R&D and Production activities as Information Processing Class 2 Innovator's Dilemma and Case Study History of HDD Class 3 Pitfalls in new product development & new business development and Case Study (IBM) Class 4 Management of emerging technology and Case Study (Path to new technology) Part 2 Strategy for Creation of Core Competences Class 5 Core Competences and their evolution, and Case Study (Intel) Class 6 Market Creation: Ideation, Conceptualization and Business Model Case Study (TiVo) Class 7 Project Management for New Product Development (Stage Gates PACE method) Class 8 New Business Development (Alliance/introduction to Sel Development) Part 3 Managing of Information Technology(IT) Class 9 Information needs in an organization and role of IT Class 10 Alternative ways to match the IT function to the structure and behavior of the organization Class 11 Consideration of the ethical and organizational implication and effects of IT Part 4 Competitiveness and Production Management Class 12 Comparison of Mass Production Method & Lean System; Ford System and Toyota System Class 13 Cost, Productivity and Learning Curve Class 15 Total Innovation Management
Literature	 Leifer, Richard, McDermott, Christopher M., O'Connor, Gina Colarelli, Peters, Lois S Rice, Mark P. Veryzer Robert W. (2000) Radical Innovation: How Mature Companie Can Outsmart Upstarts, Harvard Business School Press. Day George S., Schoemaker, Paul J.H. with Robert E. Gunther (2005) Wharton of managing emerging technologies. Porter Michael E. (1998) On Competition (Harvard Business Review Book Series Harvard Business School Press Clayton, M. Christensen (2003) The Innovator's Dilemma: The Revolutionary National Book That Will Change the Way You Do Business (Harperbusiness Essentials Harperbusiness. Clayton, M. Christensen, Raynor Michael E. (2005) The innovator's solution: creating and sustaining successful growth. Tschirky, H., Jung () Technology and innovation management on the move: from managing technology to managing innovation-driven enterprises (Industriell Organisation). Simon, H. () Hidden champions of the twenty-first century: success strategies of unknown world market leaders, Springer.



Courses							
Title		Тур	Hrs/wk	СР			
Japanese Corporations and Asia Pacific (APU) (L1932) Lecture 4							
Module Responsible	Prof. Kaoru Natsuda						
Admission Requirements	None	one					
Recommended Previous Knowledge	Basic business knowledge.						
Educational Objectives	After taking part successfully, studer	nts have reached the follow	wing learning resu	lts			
Professional Competence							
Knowledge	The aim of this course is to provide knowledge of Japanese management systems and Japanese economy in relation to the Asia Pacific region. The contents of the course include Japanese domestic business and economic systems including human resource management keiretsu, general trading companies, the role of the Japanese government in the economy, as well as the internationalization strategy (or regionalization) of Japanese corporations. We will particularly examine how Japanese multinational corporations have conducted foreign direct investment in the region in the historical perspective. In addition, the course requires the students' participation through a presentation: Investment Promotion - how to attract Japanese corporations into the country, which will be selected in the Asia Pacific region						
	a good working my as well as issu d presentation ski capabilities into pra	ies in the Asi ills, which ar					
Skills	 Subject-related knowledge and understanding: Knowledge of Japanese management such as life time employment system, seniority system, enterprise unions, kaizen. Knowledge of Japanese political economy such as keiretsu system, developmenta state concept, industrial policy. Knowledge of Japanese foreign direct investment in the Asia since 1950s until receny years. Knowledge of the Asia Pacific economy and international relations in Asia. 						
Personal							
Competence	 	_					
Social Competence	Teamwork and communication skill - Management skills	S					
Autonomy	- Decision making - Presentation skills						
Workload in Hours	Independent Study Time 64, Study	Time in Lecture 56					
Credit points	4						
Course achievement	None						
Examination	Written exam						
Examination duration							



а	nd scale	Examination at Ritsumeikan Asia Pacific University							
Assignme	nt for the	Global	Technology	and	Innovation	Management	&	Entrepreneurship:	Specialisation
Following (ollowing Curricula Technology and Innovation Management in Japan (APU): Compulsory								

ourse L1932: Japanese Corporations and Asia Pacific (APU)					
Typ Lecture					
Hrs/wk	4				
СР	4				
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56				
Lecturer	Prof. Kaoru Natsuda				
Language	EN				
Cycle	WiSe				
	I. Competitive Advantages of Country				
	Porter, Michael (1990) The Competitive Advantage of Nations, New York, The Free Press. (Chapter 3) World Economic Forum (2013) The Global Competitiveness Report 2013-2014, Geneva, World Economic Forum.				
	II. Japanese Management Systems				
	Abegglen, James (2006) 21st Century Japanese Management: New Systems, lasting value, New York, Palgrave Macmillan (chapter 4) Flath, David (2005)The Japanese Economy (2nd Edition), Oxford, Oxford University Press (Chapter 15) Itagaki, Hiroshi (2011) "The Japanese Management System and the Corporate Strategies of Japanese Companies" in Kawamura, T (ed.) Hybrid Factories in the United States, Oxford Oxford University Press.				
	III. Japanese Production Management				
	Imai Masaaki (1997) Gemba Kaizen: a commonsense, low-cost approach to management New York, MacGraw-Hill. (Chapter 1) Urata Shujiro (1999) "Intrafirm Technology Transfer by Japanese Multinationals in Asia", ir Encarnation (ed.), Japanese Multinationals in Asia, Oxford, Oxford University Press.				
	IV. Industrial Organisation in Japan (Keiretsu & Sogo Shosha)				
Content	Flath, David (2005)The Japanese Economy (2nd Edition), Oxford, Oxford University Press (Chapter 12) Chen, Min (2004) Asian Management Systems (2nd edition), London, Thomson. (Chapter 12)				
	V. Government-Business Relationship in Japan and the Asia Pacific				
	Chen, Min (2004) Asian Management Systems (2nd edition), London, Thomson. (Chapter 11 Chiu, Stephen and Lui, Tai-lok (1998) "The Role of the State in Economic Development", in Thompson, G. (ed.) Economic Dynamism in the Asia-Pacific, London, Routledge.				
	VI. Japanese Foreign Economic Policies and FDI in the Asia Pacific				
	Natsuda, Kaoru (2008) "Japan's Foreign Economic Policies towards East Asia in the Pos War Era", Asian Profile, vol. 36, no.5,pp.455-468				



	Farrell, Roger (2008) Japanese Investment in the World Economy, Cheltenham, Edward Elgar.					
	VII. Japanese Production Networks in the Asia Pacific					
	Hatch, Walter and Yamamura Kozo (1996) Asia in Japan's Embrace: Creating a Regional Production, Cambridge, Cambridge University Press. (Chapter 2)					
	VIII. Investment Promotion Presentation					
	VIIII. Japanese Corporations and Future of the Asia Pacific					
Literature	 Abegglen, James (2006) 21st Century Japanese Management: New Systems, lasting value, New York, Palgrave Macmillan. Chen, Min (2004) Asian Management Systems (2nd edition), London, Thomson. Flath, David (2005)The Japanese Economy (2nd Edition), Oxford, Oxford University Press. 					



Module M1359: N	National Innovation Systems (APU)				
Courses					
Title National Innovation Syste	Typ Hrs/wk ems (APU) (L1935) Lecture 4	CP 4			
Module Responsible	Prof. Behrooz Asgari				
Admission Requirements	INONE				
Recommended Previous Knowledge	INONE				
Educational Objectives	After taking nart successium, students have reached the following learning result	is			
Professional Competence					
Knowledge	 Key concepts of national systems of innovation The nation-specific determinants of innovation The system-approach to the development of product and service innovations 				
Skills	After completing this module, students will have skills in: Ianguage and concepts of national and regional determinants of innovation for product and service development related product development issues to the national and regional				
Personal Competence Social Competence	e				
Autonomy	After completing this module, students will have skills: familiarization with the system approach of innovation ability of apply principles of national systems of innovation to decision policy makers and public administrators	problems of			
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56				
Credit points	s 4				
Course achievement	None				
Examination	Mritten exam				
Examination duration and scale	TEXAMINATION AT RITCHMEIKAN ASIA PACITIC LINIVERSITY				
_	Global Technology and Innovation Management & Entrepreneurship: Sate Technology and Innovation Management in Japan (APU): Compulsory	Specialisation			



Course L1935: National Innovation Systems (APU)					
Тур	Lecture				
Hrs/wk	4				
СР	4				
Workload in Hours	ependent Study Time 64, Study Time in Lecture 56				
Lecturer	Prof. Behrooz Asgari				
Language	EN				
Cycle	WiSe				
Content	 Why study National Innovation Systems? The Concept of National Innovation Systems National Structures and Policies framing innovations Analytical Perspectives: What is Innovation? History and Development of the NIS Concept The system nature of innovation Recent Trends in NIS Research NIS and Innovation Policy Examples of National Innovation Systems United States Japan Korea Malaysia 				
Literature	No textbook , but a journal articles and book chapters				



Module M1362: N	lajor Seminar (APU)					
	• • • • • • • • • • • • • • • • • • • •					
Courses						
Title		Тур	Hrs/wk	СР		
Major Seminar (APU) (L19	939)	Seminar	6	6		
Module Responsible	Prof. Rian Beise-Zee					
Admission Requirements	None					
Recommended Previous Knowledge	None					
Educational Objectives	After taking part successfully, students have reached the following learning results					
Professional Competence						
Knowledge	Changing programme related topics.					
Skills	Competence to be gained according to the different topics (projects in cooperation with Japanese firms).					
Personal						
Competence						
•	Teamwork and communication					
	Management and decision ma	-				
Workload in Hours	Independent Study Time 96, S	Study Time in Lecture 84				
Credit points	6					
Course achievement	None					
Examination	Written elaboration					
Examination duration and scale	Examination at Ritsumeikan A	sia Pacific University				
_		nnovation Management & Entr anagement in Japan (APU): Comp	•	Specialisation		

Course L1939: Major Seminar (APU)		
Тур	Seminar	
Hrs/wk	6	
СР	6	
Workload in Hours	Independent Study Time 96, Study Time in Lecture 84	
Lecturer	Prof. Rian Beise-Zee	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1366: N	Management in Asia and Japan (APU)
Courses	
Title Management in Asia and	TypHrs/wkCPJapan (APU) (L1945)Lecture44
Module Responsible	Prof. Ali Haidar
Admission Requirements	INONE
Recommended Previous Knowledge	Basic management subjects.
Educational Objectives	I After taking part successfully, students have reached the following learning results
Professional Competence	
Knowledge	 Learn ways of sustaining economic growth that Asian countries are currently experiencing Develop successful management career in Asia Balance the needs of the society and the objectives of corporations
Skills	Develop oral and written communication skills.
Personal Competence	
Social Competence	Be culturally sensitive Teamwork International communication skills
Autonomy	- Management skills - Leadership
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56
Credit points	
Course achievement	
	Written exam
Examination duration and scale	I Eyamination at Bitsumeikan Asia Pacitic Liniversity
_	Global Technology and Innovation Management & Entrepreneurship: Specialisation Technology and Innovation Management in Japan (APU): Elective Compulsory



Course L1945: Management in Asia and Japan (APU)		
Тур	Lecture	
Hrs/wk	4	
СР	4	
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56	
Lecturer	Prof. Ali Haidar	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1361: C	Quality and Operations Man	agement (APU)		
Courses				
Title	. (47)	Тур	Hrs/wk	СР
	anagement (APU) (L1936)	Lecture	4	4
Module Responsible	Prof. Behrooz Asgari			
Admission Requirements	None			
Recommended Previous Knowledge	None			
Educational Objectives	After taking part successfully, studen	ts have reached the following	ng learning resul	ts
Professional Competence				
Knowledge	 knowledge base for studied Management knowledge of the foundations an introduction to tools and a and products Understanding of Japanese-standing 	s of Quality and Operations approaches useful in impro	Management ving organisation	nal processes
Skills	After completing this module, studen language, concepts, and too gain competitive advantage to the students.	ols to deal with quality and	operations issu	es in order to
Personal Competence Social Competence Autonomy		ems and issues confronting	•	•
Workload in Hours	Independent Study Time 64, Study T	ime in Lecture 56		
Credit points	4			
Course achievement	None			
Examination	Written exam			
Examination duration and scale	Examination at Ritsumeikan Asia Pa	cific University		
_	Global Technology and Innovati Technology and Innovation Manage	_	•	Specialisation



Course L1936: Quality	and Operations Management (APU)
Тур	Lecture
Hrs/wk	4
СР	4
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56
Lecturer	Prof. Behrooz Asgari
Language	EN
Cycle	WiSe
Content	 Operations Strategy in a Global Environment Operations and Productivity Quality and Operations Management Lean Production Decision-Making Tools Forecasting Managing Quality Design for Quality Improvement Processes Total Quality Management Statistical Process Control Process Strategy Process View. Inventory, Thruput, Flowtime Work flow management Bottleneck Analysis, Level vs. Chase plans Control charts and Just-in-time Processes Capacity Planning Linear Programming: Objectives, Constraints Linear Programming Formulations Location Strategies Transportation Models Layout Strategy
Literature	 Russell, Roberta S., Taylor, Bernard W. (2014) Operations management, Wiley; 8t Edition International Student Version



Module M1363: P	Project Management (APU)			
Courses				
Title Project Management (APU	J) (L1940)	Typ Lecture	Hrs/wk 4	CP 4
Module Responsible	Prof. Noboyuki Yamamura			
Admission Requirements	INone			
Recommended Previous Knowledge	Basic management subjects.			
Educational Objectives	After taking part successfully, students	have reached the followir	ng learning resul	ts
Professional Competence				
Knowledge	 Practical knowledge and skills to structure manage and evaluate projects Identify project risks Apply methods for motivating teams and retaining focus Knowledge project management that combines the 3K of kakusin (innovation), kaihatsu (development), and kaizen (improvement) 			
Skills	 Identify project risks. apply methods for motivating teams and retaining focus. Use tools and techniques for planning and tracking a project. the implementation of innovative project management techniques and processes. adaptation of project management techniques to projects in developing countries including alternative planning strategies for conditions of uncertainty and organizational factors in policies, gaining acceptance, assuring implementation, and coping with unanticipated consequences. 			
Personal				
Competence	 - Teamwork and communication skills			
Social Competence		fic to Japan and Asia		
	- Leadership and decision making skill	S.		-
Autonomy	- Project management skills.			
Workload in Hours	Independent Study Time 64, Study Tim	e in Lecture 56		
Credit points	4			
Course achievement	None			
Examination	Written exam			
Examination duration and scale	I Eyamination at Ritsilmelkan Asia Pacit	ic University		
_	Global Technology and Innovation Technology and Innovation Manageme	-	•	Specialisation



Course L1940: Project Management (APU)		
Тур	Lecture	
Hrs/wk	4	
СР	4	
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56	
Lecturer	Prof. Noboyuki Yamamura	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1368: N	lanagement of Japanese Fa	mily Businesses	(APU)	
Courses				
Title		Тур	Hrs/wk	СР
Management of Japanese	e Family Businesses (APU) (L1947)	Lecture	4	4
Module Responsible	Prof. Kenji Yokoyama			
Admission Requirements	None			
Recommended Previous Knowledge	Basic management subjects.			
Educational Objectives	After taking part successfully, students	have reached the follov	ving learning resul	Its
Professional Competence				
Knowledge	 Five Models of family business Issues, such as succession, innovation, relationship with community and longebity How Japanese family business is different from those of other countries The secret of the success of Japanese Family business What are important for successful family business 			
Skills	The students will learn management a familiy businesses in Japan. This management skills as well as intercultu	incorporates genera	I communication	
Personal Competence				
Social Competence	- Teamwork and communication skills Project management skills.			
Autonomy	Leadership and decision making skills			
Workload in Hours	Independent Study Time 64, Study Tim	e in Lecture 56		
Credit points	4			
Course achievement	None			
Examination	Written exam			
Examination duration and scale	Examination at Ritsumeikan Asia Pacif	ic University		
	Global Technology and Innovation Technology and Innovation Management			Specialisation

Course L1947: Management of Japanese Family Businesses (APU)		
Тур	Lecture	
Hrs/wk	4	
СР	4	
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56	
Lecturer	Prof. Kenji Yokoyama	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1367: S	Supply Chain Manageme	nt (APU)		
Courses				
Title Supply Chain Managemen	nt (APU) (L1946)	Typ Lecture	Hrs/wk 4	CP 4
Module Responsible	Prof. Rian Beise-Zee			
Admission Requirements	None			
Recommended Previous Knowledge	Basic management subjects.			
Educational Objectives	After taking part successfully, stud	dents have reached the following	g learning resul	ts
Professional Competence				
Knowledge	 How the supply chain is designed using fundamental principles How to achieve balance and efficiency by focusing on Variety: of offerings based or operational efficiency and market demand, Velocity through all processes of the supply chain and Manage inconsistencies carefully to reduce cost and improve quality and transparency to enable continuous learning and improvement How to improve production and operations in a variety of industries, including manufacturing, banking, health care and retailing 			
Skills	- Skills to design a supply chain - Skills to improve a supply chain	using continuous improvement	approaches	
Personal Competence Social Competence		tills.		
Autonomy	- Project management skills - Analytical decision making skills	3		
Workload in Hours	Independent Study Time 64, Stud	y Time in Lecture 56		
Credit points				
Course achievement	1			
	Written exam			
Examination duration and scale	Examination at Ritsumeikan Asia	•		
_	Global Technology and Innov Technology and Innovation Mana			Specialisation



Course L1946: Supply	Course L1946: Supply Chain Management (APU)		
Тур	Lecture		
Hrs/wk	4		
СР	4		
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56		
Lecturer	Prof. Rian Beise-Zee		
Language	EN		
Cycle	WiSe		
Content			
Literature			



Module M1364: J	apanese I (APU)			
Courses				
Title Japanese I (APU) (L1943	3)	Typ Lecture	Hrs/wk	CP 4
Module Responsible	Prof. Rian Beise-Zee			
Admission Requirements	INone			
Recommended Previous Knowledge	LINONA			
Educational Objectives	After taking part successfully,	students have reached the following	ng learning resu	Its
Professional Competence				
Knowledge	 The students will be Japanese language. desires in simple ser 	dents will have learned: ize themselves with Japanese as a able to identify the basic sounds, They will be able to say or expres ntences. They will learn to write the continue with the Basic 2 level cou	words and expr s basic ideas, s ne Japanese sc	essions of the entences, and
Skills	Students will gain basic comr	munication skills in the Japanese la	inguage.	
Personal Competence Social Competence Autonomy	Communication skills.	s orienting themselves in every day nd culture.	/ life in Japan th	rough a better
Workload in Hours	Independent Study Time 64,	Study Time in Lecture 56		
Credit points	4			
Course achievement	None			
Examination	Written exam			
Examination duration and scale	i Eyamination at Rifelimelkan <i>i</i>	Asia Pacific University		
•	9,	nnovation Management & Entr Ianagement in Japan (APU): Electi	•	Specialisation

Course L1943: Japanese I (APU)		
Тур	Lecture	
Hrs/wk	4	
СР	4	
Workload in Hours	Independent Study Time 64, Study Time in Lecture 56	
Lecturer	of. Rian Beise-Zee	
Language		
Cycle	WiSe	
Content		
Literature		



Specialization Technology Venturing (KTU)

Kaunas University of Technology (KTU) in Lithuania specialises in Technology Venturing during the second year of the GTIME program. Students will gain a broad understanding of the technology venturing process within different size projects and different industrial contexts. All studied topics are pulled together to develop 'right to win' business strategies that are sustainable and differentiated.

The modules at KTU are structured around the following topics: How to initiate technology venturing and develop business model for technology driven business? How to build a successful team for venturing and create a successful start-up? What are the differences between an idea and true opportunity and how to search for promising business opportunities? How to gather the resources necessary to create a great company and leverage venture capital? How to pitch business ideas to investors and manage stakeholder relations? How to assess business value and monitor business growth? What is entrepreneurial leadership in a large company? How to take advantage of doing business within the networks? How to manage corporate intellectual property in order stay competitive in the market? How can organizations fully exploit their potential and capture maximum value for growth and success?

The second-year modules in Kaunas are designed and executed by top academic researchers, and therefore are strongly research oriented. By introducing students to the state-of-the-art in academic research, the aim is to give them necessary tools to properly understand, evaluate and solve real-life cases, and to successfully conduct their final master degree project research.

The problem-based study approach adopted at KTU is intended to disclose a full variety of the problems related to technology venturing that arise in a wide range of different contexts, including: manufacturing, services, small to large organizations and the private and public sectors.

Courses				
Title Business Models Innovat	on (KTU) (L1955)	Typ Lecture	Hrs/wk 5	CP 5
	Prof. Giedrius Jucevičius			
Admission Requirements	None			
Recommended Previous Knowledge	General management theory (nor	n-mandatory)		
Educational Objectives	After taking part successfully, stud	dents have reached the follov	ving learning resul	lts
Professional Competence	1. Knows the concepts of value in theoretical structure and is capable. 2. Knows the theoretical alternamethods of rethinking the bounds. 3. Knows the main patterns of broalue propositions. 4. Is capable of identifying the propositions in the contemporary.	le of making the projections of tives of new value creation tries of markets and industrie usiness models and is capal e opportunities of new bus	of new value creati and is capable o s ole of linking them	ion f applying th
Knowledge	5. Knows the recent trends of co- integrating them into the construct			is capable



	6. Understands the challenges underlying the practical implementation of value innovation and is capable of meeting them successfully in the organizational practice		
	7. Knows the key theories and practices in change management, related to value innovation, and is capable of applying them successfully in organizational activities		
	8. Is capable of testing the prototypes of new value propositions in the market and interpreting the obtained data		
	 Able to identify new business possibilities through profound and entrepreneurial evaluation of economic, social, and other changes 		
Skills	2. Capable of creating innovative business models, processes of innovation implementation, and business intelligence systems.		
	3. Able to think sistemically, critically, and creatively; capable of communicating and presenting the acquired knowledge.		
Personal	į		
Competence			
Social Competence	Teamwork, discussion, ideas sharing, harmonizing business development and the principles of sustainable development		
Autonomy	Presentation skills, literature research, data collection, analyses and interpretation based on gained theoretical concepts.		
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70		
Credit points	5		
Course achievement	None		
Examination	Written exam		
Examination duration and scale	Examination at Kaunas Technical University		
•	Global Technology and Innovation Management & Entrepreneurship: Specialisation Technology Venturing (KTU): Compulsory		



Course L1955: Business Models Innovation (KTU)		
Тур	Lecture	
Hrs/wk	5	
СР	5	
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70	
Lecturer	Prof. Giedrius Jucevičius	
Language	EN	
Cycle	WiSe	
Content	New competition arena: disruptive changes in technology and business Variety of innovations Disruptive innovations: markets and technologies Towards value- and business model innovation Redefinition of market boundaries What is my business? Value innovation, "blue ocean strategy", "white space" and other concepts Changes in value chains and evolving profit patterns Business model innovation Business model as dominant business logic Business model canvas Innovative business model in different industrial contexts Putting new value architecture into practice Prototyping Testing Lean business model canvas Managing organizational change to support value innovation Key concepts in change management Overcoming the barriers to implementing value innovation	
Literature	Osterwalder, A., Pigneur, Y. (2010). Business Model Generation. London: John Wiley Press. Kim, W.Ch., Mauborgne, R. (2005). Blue Ocean Strategy. Harvard Business School Press. Anthony, Scott D., (2008). "The innovator's guide to growth.: putting disruptive innovation to work". Johnson, Mark W. (2010). Seizing the white space. Boston: Harvard Business Press. Blank, S., Dorf, B. (2012). The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company Ries, E. (2011). The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses.	



Module M1377: T	echnology Venturing (KTU)			
Courses				
Title Technology Venturing (KT	⁻ U) (L1956)	Typ Lecture	Hrs/wk 5	CP 5
Module Responsible	Prof. Monika Petraite			
Admission Requirements	None			
Recommended Previous Knowledge	General management theory (non-mand	datory)		
Educational Objectives	After taking part successfully, students h	ave reached the following	learning resul	ts
Professional Competence				
	1. The student is able to initiate technological venture and develop business model for technology driven business. I.e., he (she) is able to generate business idea, and knows major business generation techniques, and is capable to build a technology venturing team corresponding to the competences desired, and team life cycle, as well as is capable to act as a business mentor for start-up. He (she) is knows the techniques of technological business opportunity search and evaluation, including market validation techniques, as well as business communication methods			
Knowledge	 The student is able to put technology venture in action, while executing technology business idea market validation, defining go-to-market strategy and taking entrepreneurial marketing decisions, combined with agile product development and business idea pivoting techniques. The student is able to carry out financial planning and deal with venture capital issues; to carry out financing modelling and metrics, plan capitalization, manage venture capitalist relations and pitch business ideas to investors. 			
Skills	Ability to solve problems, carry out financial modelling and planning, pitch ideas, communicate with stakeholders.		pitch ideas,	
Personal Competence				
Social Competence	Communication, team building, idea exc	change in social groups.		
Autonomy	Presentation and idea pitching skills, communication, business development.			
Workload in Hours	Independent Study Time 80, Study Time	in Lecture 70		
Credit points	5			
Course achievement				
	Written exam			
Examination duration and scale	Examination at Kaunas Technical Unive	ersity		
	Global Technology and Innovation Technology Venturing (KTU): Compulso		preneurship:	Specialisation



Course L1956: Technology Venturing (KTU)	
Тур	Lecture
Hrs/wk	5
СР	5
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70
Lecturer	Prof. Monika Petraite
Language	EN
Cycle	WiSe
Content	
Literature	



Module M1378: B	Business Valuation and Investor	Relations Manage	ement (K	TU)
Courses				
Title Business Valuation and In	vestor Relations Management (KTU) (L1957)	Typ Lecture	Hrs/wk 10	CP 10
Module Responsible	Prof. Lina Užienė			
Admission Requirements	None			
Recommended Previous Knowledge	General management theory (non-mandator	y)		
Educational Objectives	After taking part successfully, students have	reached the following lea	arning result	s
Professional Competence				
	To understand the essence of business within different contexts.	valuation and be able to	apply valua	tion methods
	2. To understand business financing principles and be able to reason the selection of business financing sources.			
Knowledge	3. To understand the concept of business risks taken and be able to apply risk management methods.			
	4. To understand principles of organization's with investors.	s communication and be	able to deve	elop relations
Skills	Ability to solve problems, analyse case studies, apply valuation methods, pitch ideas, communicate with stakeholders			
Personal Competence				
Social Competence	The students shall work in teams while solvi competence in teamwork, communication ar	-		they will gain
Autonomy	Presentation skills, literature research, creati	ve methods' application.		
Workload in Hours	Independent Study Time 160, Study Time in	Lecture 140		
Credit points				
Course achievement				
	Written exam			
Examination duration and scale	Examination at Kaunas Technical University			
_	Global Technology and Innovation Ma Technology Venturing (KTU): Compulsory	nagement & Entreprer	neurship: S	Specialisation



Course L1957: Business Valuation and Investor Relations Management (KTU)		
Тур	Lecture	
Hrs/wk	10	
СР	10	
Workload in Hours	Independent Study Time 160, Study Time in Lecture 140	
Lecturer	Prof. Lina Užienė	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Module M1379: C	Creative Decision Making	ı (KTU)		
Courses				
Title Creative Decision Making	(KTU) (L1958)	Typ Lecture	Hrs/wk 5	CP 5
Module Responsible	Inga Uus			
Admission Requirements	None			
Recommended Previous Knowledge	General management theory (no	n-mandatory)		
Educational Objectives	After taking part successfully, stu-	dents have reached the following	g learning resul	ts
Professional Competence				
Knowledge	The students shall know the stages of creative decision making, they will be aware of different approaches to creative decision making as well as tactics and tools applied in creative decision making.			
Skills	The students shall be able to choose appropriate ways to solve problems on individual and group levels, they shall be able to choose tactics and instruments in order the decision made could be considered creative. The students shall be able to analyse the way the decisions had been made and to recognize creative features of decisions made by others. The course attendants shall solve a real-life business problem in a creative way thus gaining practical skills in creative problem solving.			
Personal Competence				
Social Competence	The students shall work in tea competence in teamwork and ide		roblem, thus t	hey will gair
Autonomy	Presentation skills, literature rese	earch, creative methods' applicat	ion.	
Workload in Hours	Independent Study Time 80, Stud	dy Time in Lecture 70		
Credit points	5			
Course achievement	None			
Examination	Written exam			
Examination duration and scale	Examination at Kaunas Technica	I University		
	Global Technology and Inno Technology Venturing (KTU): Ele		preneurship:	Specialisation



Course L1958: Creative Decision Making (KTU)	
Тур	Lecture
Hrs/wk	5
СР	5
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70
Lecturer	Inga Uus
Language	EN
Cycle	WiSe
Content	
Literature	



Courses				
"11"		▼	11 / 1	0.0
Title nternational Management	(KTU) (L1959)	Typ Lecture	Hrs/wk 5	CP 5
Module Responsible	Prof. Jurgita Sekliuckiene			
Admission Requirements	None			
Recommended Previous Knowledge	General management theory (n	on-mandatory)		
Educational Objectives	After taking part successfully, st	udents have reached the follow	ving learning resu	lts
Professional Competence				
	Students will get knowledge in t will provide students with deep especially as far as the national diversity is linked with the innov	er understanding of the internal cultural and institutional divers	ational managements	ent processed. The nationa
	Knows the main theoretical relation between the processed diversity			-
	2. Knows the cultural and institution of organizations, and is capa organizational strategy	-	•	
	3. Knows the diversity of international companies and organizations, understands the international aspects of leadership and is capable of performing in the multicultural teams			
Knowledge	4. Understands the international applying them in organizational	•	management and	l is capable (
	5. Knows the strategies of entimanaging the international value	-	outsourcing and	the aspects
	6. Understands the functioning their potential contribution to the		-	nnovation an
	7. Knows the specifics of nation adapting accordingly the organi		nd innovation, and	d is capable
	8. Knows the main dimension cultural conflicts and synergic environments	•	•	
Skills	Case study, problem solving sea	ssions		
Personal Competence				
Social Competence	Teamwork			
Autonomy	Presentation skills, literature res	search		
	Independent Study Time 80, Stu	udv Time in Lecture 70		
Workload in Hours				
Workload in Hours Credit points				



Examination	Written exam
Examination duration and scale	Examination at Kaunas Technical University
_	Global Technology and Innovation Management & Entrepreneurship: Specialisation
Following Curricula	Technology Venturing (KTU): Elective Compulsory

Course L1959: Interna	ourse L1959: International Management (KTU)		
Тур	Lecture		
Hrs/wk	5		
СР	5		
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70		
Lecturer	Prof. Jurgita Sekliuckiene		
Language	EN		
Cycle	WiSe		
Content			
Literature			



Module M1382: Ir	ntellectual Property Manage	ment (KTU)		
Courses				
Title		Тур	Hrs/wk	СР
Intellectual Property Mana	gement (KTU) (L1960)	Lecture	5	5
Module Responsible				
Admission Requirements	None			
Recommended Previous Knowledge	General management theory (non-ma	ndatory)		
Educational Objectives	After taking part successfully, students	s have reached the follow	ving learning resul	ts
Professional Competence				
Knowledge	Intellectual property management co knowledge about the essence of IP international competitiveness of busing will know and understand main IP expressions. Student will be able protection, to define the specifics of IF of creation and usage, to model the international protection means. 1.Know and understand the intellectual property in the intellectual property objects understand the operation of possibilities in the business. 2. Know and understand specialization, applied intellectual characteristics depending on the same and international information of the same as a special sable to select valid national and international and inte	essence, importance are context of intellectual property deliperation of intellectual property objects, to evaluate property objects, with regard to the ct intellectual property pullegislations.	rotection strategies contents of the mancreasing internations of IP creation, extra search, to define ication strategies and management pall competitivenes international legal information systemational protection property objects, and per legalization, protection of the property objects.	s for creating odule studen on all business ploitation and the efficiency and to select eculiarities of s. Know the all protections and its perty object is ant their protections and to select most of the
Skills	Case study, problem solving sessions	i.		
Personal Competence				
Social Competence	Teamwork, debate, idea exchange in	social groups.		
Autonomy	Presentation skills, literature research gained theoretical concepts.	n, data collection, analys	ses and interpreta	tion based o
Workload in Hours	Independent Study Time 80, Study Tir	ne in Lecture 70		
Credit points	5			
Course achievement	None			
Examination	Written exam			
Examination duration and scale	Examination at Kaunas Technical Uni	versity		
_	Global Technology and Innovatio Technology Venturing (KTU): Elective	_	ntrepreneurship:	Specialisatio



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Course L1960: Intellectual Property Management (KTU)		
Тур	Lecture	
Hrs/wk	5	
СР	5	
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70	
Lecturer	Prof. Lina Užienė	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Courses				
Title		Тур	Hrs/wk	СР
Management of Organizat	ional Networks (KTU) (L1961)	Lecture	5	5
Module Responsible				
Admission Requirements	None			
Recommended Previous Knowledge	General management theory (non-m	andatory)		
Educational Objectives	After taking part successfully, student	ts have reached the follow	wing learning resu	Its
Professional Competence				
Knowledge	As the course is aimed at gaining the knowledge of and experience in analyzing, developing and managing organizational networks and other types of inter-organizational relationships and systems in diverse institutional contexts, upon completion of the course the students shall know core concepts and theories in analyzing and managing organizational networks. They will understand the peculiarities of designing, creating and managing such interorganizational structures. The students will also gain knowledge of specific business network structures such as clusters, national business systems, they will be able to recognize and understand the functioning of systems of social innovation, business and manufacturing.			
Skills	The course provides with knowledge contemporary organizational network development. Generally this course approaches to organizational network (inter-organizational aspects), mesorable students will be able to analyze business network, to define the form and the system of the relations. They development. The students will entrepreneurship mind-set in differer in a broader social context and preport the students will be able to under organizational clusters, they will know able to describe the processes that clusters in wider national and international and international clusters.	orks, their context and e emphasizes different rks by pointing out its context and contexts, etc.) and macro e the preconditions and soft an inter-organizational will also be able to many know and shall be not contexts, they shall be are recommendations for estand the evolution, dependent on the core concepts in contexts are going on in clusters.	d main precondict methodologies, complexity in three of (social systems). The motives of the lastructure, to definage core activities able to apply able to interpret resolving the identification wellopment and mediuster management.	evolution of e the structur in the network cusiness and esearch resulfied problem anagement ont, they will be
	The students will be able to use p networks, they will be able to be invo professional level. They will as we networks, and they will be able to r students shall be able to identify s based on smart use of key compete shall be able to communicate effect use of modern information technolog	olved in the discussions of the light of the able to analyze of manage core processes strategic challenges, an inces and absorption of e ively with people in multiple	on organizational r core concepts in in organizational d prepare adequa external resources	networks at the organization on the organization on the organization of the organizati
Personal Competence				
Social Competence	Multinational virtual team work (X-Cu	Iture project)		
Autonomy	Co-working in a multicultural virtual to	eam, project work, writing	g of an essay.	



Credit points	5
Course achievement	None
Examination	Written exam
Examination duration and scale	Examination at Kaunas Technical University
_	Global Technology and Innovation Management & Entrepreneurship: Specialisation Technology Venturing (KTU): Elective Compulsory

Course L1961: Management of Organizational Networks (KTU)		
Тур	Lecture	
Hrs/wk	5	
СР	5	
Workload in Hours	Independent Study Time 80, Study Time in Lecture 70	
Lecturer	Inga Uus	
Language	EN	
Cycle	WiSe	
Content		
Literature		



Thesis

Module M-003: M	Naster Thesis	
Module IVI 000. IVI		
Courses	Tour Historie	
Module Responsible	Typ Hrs/wk	СР
Wodule Responsible		
Admission Requirements	1	e examinations
Recommended Previous Knowledge		
Educational Objectives	I Atter taking part successfully, students have reached the following learning res	ults
Professional Competence		
Knowledge	 The students can use specialized knowledge (facts, theories, and measubject competently on specialized issues. The students can explain in depth the relevant approaches and termin or more areas of their subject, describing current developments and take position on them. The students can place a research task in their subject area in its content and critically assess the state of research. 	nologies in one ing up a critical
Skills	 The students are able: To select, apply and, if necessary, develop further methods that are suit the specialized problem in question. To apply knowledge they have acquired and methods they have learnt their studies to complex and/or incompletely defined problems in a so way. To develop new scientific findings in their subject area and subject the assessment. 	in the course of olution-oriented
Personal Competence		
Competence	Students can	
Social Competence	 Both in writing and orally outline a scientific issue for an expert audie understandably and in a structured way. Deal with issues competently in an expert discussion and answer the that is appropriate to the addressees while upholding their own as viewpoints convincingly. 	m in a manner
	Students are able:	
Autonomy	 To structure a project of their own in work packages and to work them of To work their way in depth into a largely unknown subject and information required for them to do so. 	



	To apply the techniques of scientific work comprehensively in research of their own.
Workload in Hours	Independent Study Time 900, Study Time in Lecture 0
Credit points	30
Course achievement	None
Examination	according to Subject Specific Regulations
Examination duration and scale	see specific regulations
Assignment for the Following Curricula	italonal Technology and Innovalion Manahemeni & Enifentenelifenin' Theele't Combilicory — I