

Modules Handbook

Module 1: Introduction: the content and context for innovation management

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Admission and entry requirements to the master level programme	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 1.1 3 ECTS: Practice 1.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination *
<ul style="list-style-type: none"> Definitions of innovation and entrepreneurship, innovation process models The national innovation systems 	<ul style="list-style-type: none"> Lecture 1.1: 30 h Practice 1.2: 30 h 	<ul style="list-style-type: none"> Local lecturers: Anis Allagui & Aida Besbes (ENIT) International mentor (2012-2017): Prof. Dr. John Bessant, UNEXE 	<ul style="list-style-type: none"> English (French[†]) 	<ul style="list-style-type: none"> Case-study presentation Written exam at the end of the semester, 1h30

Module content

* The calculation of the final module mark is provided and explained in Part 4 (pp. 24-25).

[†] All the students' presentations are done in English. The lectures are mainly delivered in English; however, some of the professors use French due to the lack of English skills. In either of the way, French is used for group discussions inside the class and outside the class project work and master thesis supervision.

Teaching content (lecture): Definitions of innovation and entrepreneurship, innovation process models	Teaching content (practice): The national innovation systems	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Definitions of innovation and entrepreneurship • Drivers for innovation – competition, regulation, knowledge creation. • A process model for innovation • Case-study 1 	<ul style="list-style-type: none"> • National systems of innovation • Innovation as a core business process • Project works 	<ul style="list-style-type: none"> • Knowledge: Interpreting and identifying the internal and external dynamics of innovation • Analysing the main challenges related to innovation management: organization, technology evolution and management, market dynamics, funding, ethical and legal aspects... • Skills: Analysing key success factors of innovation • Competences: Creating the individual behaviour within an organisation towards innovation activity: Motivation and Creativity 	<p>Books:</p> <ul style="list-style-type: none"> • Bessant, J. and Tidd, J. (2011) Innovation and Entrepreneurship. Second edition, John Wiley and Son Ltd • Tidd, J. and Bessant, J. Managing Innovation. 4th edition, John Wiley and Sons Ltd. • (DICAMP Library) • David Hamme, (2014), Customer Focused Process Innovation: Linking Strategic Intent to Everyday Execution • Jonas Michaneck and Andréas Breiler (2013), The idea agent: the handbook on creative processes • <u>Larry Keeley, Helen Walters, Ryan Pikkell and Brian Quinn</u>, (2013), Ten Types of Innovation: The Discipline of

			Building Breakthroughs
Weighting of Exams Written Exam 60% Personal project work 40%			

Module 2: Innovation Strategy

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Admission and entry requirements to the master level programme	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 2.1 3 ECTS: Practice 2.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> Capabilities needed by firms to manage innovation Dynamic capability of innovation 	<ul style="list-style-type: none"> Lecture 2.1: 30 h Practice 2.2: 30 h 	<ul style="list-style-type: none"> Local lecturer: Olfa Kammoun (ESSEC) International mentor (2014-2019): Prof. Dr. John Bessant (UNEXE) 	<ul style="list-style-type: none"> English (French) 	<ul style="list-style-type: none"> Case-study presentation Written exam at the end of the semester, 1h

Module content

Teaching content (lecture): Dynamic capabilities: learning to manage innovation in a dynamic pattern of change	Teaching content (practice): Tools for building innovation capabilities	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Definitions – of learning, routines, How to link innovation capabilities to innovation performance • Sources of discontinuity and pattern of change • Innovation dynamics • Tools for analysis – How to work at the innovation frontier and build capabilities in changing environment strategic positioning, by learning, routines, entrepreneurship and dynamic capabilities. 	<ul style="list-style-type: none"> • Game. Developing innovation strategy • Role-Game. Presenting innovation strategy • Case-study. The Fairmount hotel, sustainability strategy 	<ul style="list-style-type: none"> • Knowledge: Formulating and evaluating the dynamic strategies in innovation activity and the dynamic capability vocabulary. • Applying the tools to be used in developing flexibility and meeting the challenges at the innovation frontier • Skills: Analysing the innovation context • Competences: Evaluating knowledge, skills and social and methodological capacities in working or learning situations 	<p>Books:</p> <ul style="list-style-type: none"> • Bessant, J. and Tidd, J. (2011) Innovation and Entrepreneurship. Second edition, John Wiley and Son Ltd • Liisa Välikangas , Michael Gibbert (2015), Strategic Innovation: The Definitive Guide to Outlier Strategies 1st Edition • Tidd, J. and Bessant, J. Managing Innovation. 4th edition, John Wiley and Sons Ltd. • (DICAMP Library) <p>Journal papers:</p> <ul style="list-style-type: none"> • Pavitt, K. (1991): Key Characteristics of the Large Innovating Firm. British Journal of Management, 2, pp. 41-50. • Romijn H. and Albaladejo, M. (2002). Determinants of innovation capability in small

			<p>electronics and software firms in <i>Southeast England</i>. <i>Research Policy</i>, vol. 31, pp. 1053–1067.</p> <ul style="list-style-type: none"> • Kafouros, M.I., Buckley, P.J., Sharp, J.A. and Wang, C. (2008). The Role of Internationalization in Explaining Innovation Performance. <i>Technovation</i>, 28(1-2), 63-74 • Kirner, E.; Kinkel, S. and Jaeger, A. (2009). Innovation Paths and the Innovation Performance of Low-Technology Firms – An Empirical Analysis of German Industry. <i>Research Policy</i>, 38(3), pp. 447-458. • Nelson, R. and Winter, S. (1982). <i>An Evolutionary Theory of Economic Change</i>. Cambridge Mass. and London, Belnap Press of Harvard University Press. • Strategic Innovation: The Definitive Guide to Outlier Strategies (2015) <u>Liisa Välikangas</u>, <u>Michael Gibbert</u> • Strategic Management and
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			<p>Business Policy: Globalization, Innovation and Sustainability (2014) 14th Edition <u>Thomas L. Wheelen</u>, <u>J. David Hunger</u>, <u>Alan N. Hoffman</u>, <u>Chuck Bamford</u></p> <ul style="list-style-type: none"> • Innovation Management: Strategies, Concepts and Tools for Growth and Profit (Response Books), (2013) <u>Shlomo Maital</u>, <u>D V R Seshadri</u>
<p>Weighting of Exams</p> <p>Written Exam 60%</p> <p>Personal project work 40%</p>			

Module 3: Searching for innovation opportunities

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Admission and entry requirements to the master level programme	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 3.1 3 ECTS: Practice 3.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> Understanding the theoretical knowledge alongside searching opportunities of innovation. 	<ul style="list-style-type: none"> Lecture 3.1: 20 h Practice 3.2: 40 h 	<ul style="list-style-type: none"> Local lecturer: Dr. El Fidha Chokri (ESSEC) International mentor (2012-2017): Prof. Dr. Klaus Menrad (HSWT) 	<ul style="list-style-type: none"> English (French) 	<ul style="list-style-type: none"> Written exam at the end of the semester, 1h

Module content

Teaching content (Lecture): Properties and process of diffusion and adoption of innovations	Teaching content (Practice): Technological diffusion at the international level	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Assess opportunities in fast growing business environment. • Plan and manage rapid growth • Integrate interdisciplinary approaches to search innovation opportunities 	<ul style="list-style-type: none"> • Case study 1: Intermediate and capital goods imports: the case of Tunisia • Case study 2: Technological diffusion via Tunisian manufacturing exports • Case study 3: Aravind case, innovations in healthcare • Video Film: Veeder Root, a small company exploiting innovative ideas and addressing the challenge of continuous process innovation & 4P Exercise based on the Video • Game: commercialisation of overseas innovation on the Tunisian market 	<ul style="list-style-type: none"> • Knowledge: Identifying and constructing the innovation and entrepreneurship opportunities, problems and uncover assumptions using theories and information from a range of disciplines as well as from personal experience • Integrate learning across disciplines, over time and between academic, employment and personal spheres • Skills: Applying collaboration with peers • Starting new enterprises, making them grow or transforming existing businesses through innovations in product, process or business models • Analysing the degree to which an innovation can be adopted and diffused • Competences: Evaluating the opportunities in fast growing business 	<p>Books</p> <ul style="list-style-type: none"> • Paul Trott: Innovation Management and New Product Development. Prentice Hall; 5th edition; Publication Date: November 3, 2011 • Everett M. Rogers: Diffusion of innovations. Free Press. 5th edition. • Geoffrey A. Moore, <i>Crossing the Chasm: Marketing and Selling High-tech Products to Mainstream Customers</i>, (1991, revised 1999) • Von Hippel, E., <i>The democratization of innovation</i> 2005, Cambridge, Mass.: MIT Press. • Prahalad, C.K., <i>The fortune at the bottom of the pyramid</i> 2006, New Jersey: Wharton School Publishing. • Radjou, N., J. Prabhu, and S.

		<p>environment.</p> <ul style="list-style-type: none"> • Plan and manage rapid growth • Integrate interdisciplinary approaches to search innovation opportunities 	<p>Ahuja, Jugaad innovation: Think frugal, be flexible, generate breakthrough innovation 2012, San Francisco: Jossey Bass.</p> <ul style="list-style-type: none"> • Kim, W. and R. Mauborgne, Blue ocean strategy: How to create uncontested market space and make the competition irrelevant 2005, Boston, Mass.: Harvard Business School Press. • J. Bessant and B. von Stamm, 'Twelve search strategies that may help to save your organization' (www.aimresearch.org)
<p>Weighting of Exams</p> <p>Written Exam 60%</p> <p>Personal project work 40%</p>			

Module 4. Strategic selection

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Innovation management, Strategy of innovation, Strategic positioning, Life cycle theory Knowledge in management (level 1)	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 4.1 3 ECTS: Practice 4.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> • Recognize the best options in the innovative projects and identify their criteria of evaluation. • Master decision-making tools in particular the matrices of decisions, methods of financial evaluation, the scoring, 	<ul style="list-style-type: none"> • Lecture 4.1: 30 h • Practice 4.2: 30 h 	<ul style="list-style-type: none"> • Local lecturer: Prof Dr Olfa Zeribi (IHEC) • International mentor (2014-2019): Prof Dr John Bessant (UNEXE) 	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Case-study presentation • Written exam at the end of the semester, 1h

Module content

Teaching content (Lecture)	Teaching content (Practice)	Learning outcomes	Reading List
<p>Building the business model and criteria for evaluation.</p> <ul style="list-style-type: none"> • Techniques and decision support tools • Use of basic decision tools in various application areas such as finance, marketing, and economics especially under uncertainty. • Choose of multiple options for innovation projects. 	<p>Decision support tools – financial methods decision matrices – scoring systems – portfolio techniques</p> <ul style="list-style-type: none"> • Workshop 1. Innovation Audit • Workshop 2. The Boo.com: learning from the failures • Case-study 1: Low-cost airlines • Case-study 2: Finnegan’s Fish Bar 	<ul style="list-style-type: none"> • Knowledge: Synthesize and justify capabilities needed by firms to manage innovation and dynamic capability of innovation • Understand the complex environments within which innovation takes place • Skills: Applying practical abilities for which knowledge is used • Competences: Creating the innovation challenge to respond quickly to the environment and the capacity and flexibility necessary 	<p>Books:</p> <ul style="list-style-type: none"> • Freeman, C. 1989. The Economics of Industrial Innovation. MIT Press: Cambridge, Mass. (Slaughter) • Freeman, C. and L. Soete, 1997, The Economics of Innovation, 3rd Edition, (Pinter, London). • Conway and Steward (2009), Managing and shaping innovation, Oxford University Press, 1st edition • Martin Hoegland Michael Gibbert(2014), Using Thematic Thinking to Achieve Business Success, Growth, and Innovation: Finding Opportunities Where Others Don't Look, 1st edition

			<ul style="list-style-type: none"> • Christian Terwiesch, Karl Ulrich (2009), <i>Innovation Tournaments: Creating and Selecting Exceptional Opportunities</i> Hardcover <p>Journal papers:</p> <ul style="list-style-type: none"> • Affuah A. (2003), <i>Innovation Management: Strategies, implementation and profits</i>, Second Edition, Oxford University Press, New York.
<p>Weighting of Exams</p> <p>Written Exam 100%</p>			

Module 5: Implementation 1 – Managing projects under uncertainty

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Modules 1 - 4	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 5.1 3 ECTS: Practice 5.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> Provide to students practical techniques and decision support tools to help them to think clearly about objectives, attributes, alternatives, and consequences. Enable them to integrate judgments with other types of information in a logical and defensible manner. 	<ul style="list-style-type: none"> Lecture 5.1: 30 h Practice 5.2: 30 h 	<ul style="list-style-type: none"> Local lecturer: Meryem Bousrih (IHEC) International mentor (2014-2019): Dr. Anna Trifilova 	<ul style="list-style-type: none"> English (French) 	<ul style="list-style-type: none"> Case-study presentation Written exam at the end of the semester, 1h

Module content

Teaching content (Lecture): Basics of Project Management	Teaching content (Practice): Models of Risk Management	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Introduction to project management • Methods of Planification • Software used in project management 	<ul style="list-style-type: none"> • Stage gate models for risk management • Organizing project leadership and teams • Matching project structures to innovation tasks • The innovation funnel 	<ul style="list-style-type: none"> • Knowledge: Describing and managing practical techniques and decision support tools to think clearly about objectives, attributes, alternatives, consequences to integrate judgments with other types of information in a logical and defensible manner. • Skills: Applying methods of planning and project management and understanding software used in project management • Competences: Creating project teams • Matching project structures to innovation tasks • Risk management 	<ul style="list-style-type: none"> • Bazerman, M.H. 2002. Judgment in Managerial Decision Making. 5th Ed., John Wiley & Sons, New York. • Conway and Steward (2009), Managing and shaping innovation, Oxford University Press, 1st edition • Affuah A. (2003), Innovation Management: Strategies, implementation and profits, Second Edition, Oxford University Press, New York • Tushman, Michael, and Philip Anderson, eds. 1997. Managing strategic innovation and change: A collection of readings. 2d ed. New York: Oxford Univ. Press. • Michel Syrett, Marion Devine(2012), Managing Uncertainty:

			Strategies for Surviving and Thriving in Turbulent TimesHardcover
Weighting of Exams Written Exam 100%			

Module 6: Implementation 2 – adoption and diffusion

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Admission and entry requirements to the master level programme	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 6.1 3 ECTS: Practice 6.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> Presentation of the process of adoption and diffusion of innovations at the local and the international level Strategies that make innovations sustainable 	<ul style="list-style-type: none"> Lecture 6.1: 30 h Practice 6.2: 30 h 	<ul style="list-style-type: none"> Local lecturer : Dr. Khalifa Améne Ben Jamaa (ESSEC) International mentor (2011-2014) Prof. Dr. Klaus Menrad, Dr. Thomas Decker (HSWT) 	<ul style="list-style-type: none"> English (French) 	<ul style="list-style-type: none"> Written exam at the end of the semester, 2h

Module content

Teaching content (Lecture): Properties and process of diffusion and adoption of innovations	Teaching content (Practice): Technological diffusion at the international level	Learning outcomes	Reading List
<ul style="list-style-type: none"> • How ideas spread and diffuse - the elements of diffusion, the technological diffusion mechanism, the S shaped curve, the bell-shaped Gaussian curve • Innovation adoption across populations - Knowledge-Phase, Persuasion-Phase, Decision Phase, Implementation Phase, Confirmation-Phase • Key influences on adoption decisions Innovation characteristics, Innovator and adopter characteristics, Environmental factors, • Crossing the chasm and high technology marketing - The chasm concept, Crossing the chasm, Optimal strategies for high technology marketing 	<ul style="list-style-type: none"> • Case study 1: Intermediate and capital goods imports: the case of Tunisia • Case study 2 Technological diffusion via Tunisian manufacturing exports 	<ul style="list-style-type: none"> • Knowledge: Explaining and mastering the process of innovation adoption at the local and international level on one hand and the key influences on adoption decision on another hand • Knowledge-Phase, Persuasion-Phase, Decision Phase, Implementation Phase, Confirmation-Phase • Skills: Evaluating the degree to which an innovation can be adopted and diffused, • Applying methods of international technological diffusion • Competences: Applying optimal methods for innovation adoption and diffusion • Searching segments of markets where innovative firms become leaders to insure sustainability of new product 	<ul style="list-style-type: none"> • Paul Trott: Innovation Management and New Product Development. Prentice Hall; 5th edition; Publication Date: November 3, 2011 • Everett M. Rogers: Diffusion of innovations. Free Press. 5th edition. • Geoffrey A. Moore, <i>Crossing the Chasm: Marketing and Selling High-tech Products to Mainstream Customers</i>, (1991, revised 1999) • J Neiva and M F Guillen 2011 Green Products: Perspectives on Innovation and Adoption • Knowledge and Technology Adoption, Diffusion, and Transfer: International Perspectives (2012) Ali Hussein Saleh Zolait • Innovation and Use: Some

			models of technology adoption and diffusion (2010) Fidel Perez-Sebastian
Weighting of Exams Written Exam 100%			

Module 7: Building the innovative organisation

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
No requirements Every student can write the exam without having to pass other exams or attending other	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 7.1 3 ECTS: Practice 7.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
Organisation Behaviour is concerned with the study of what people do in an organisation and how that behaviour affects the innovation	<ul style="list-style-type: none"> • Lecture 7.1: 30 h • Practice 7.2: 30 h 	<ul style="list-style-type: none"> • Local lecturer : Zeineb Ben Ammar Mamlouk (ESSEC) • International mentor : Anna Trifilova (UL) 	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Case-study presentation • Written exam at the end of the semester, 2h

Module content

Teaching content (Lecture): Innovation strategy: strategic planning and portfolio management	Teaching content (Practice): Tools for innovation strategic analysis	Learning outcomes	Reading List
<ul style="list-style-type: none"> • The context: Diversity, Quality, Technology, International Ethics and behaviour, Organisational culture • Individual Processes: Perceptions, Attitudes, Personality, Organisational socialization, Motivation, Intrinsic Rewards and job design, • Group and interpersonal processes: i)- Group and intergroup processes, ii)- Conflict in organisations and iii)-Leadership and management. • Organisational processes: Communication processes, Decision making, Power and political behaviour, Stress in organizations. • Organisational design, • Organisational change : Future directions of organizations and management 	<ul style="list-style-type: none"> • Workshop 1. Innovation challenges of organisations, but now as we know it • Workshop 2. The future of innovation: what do we know about it • Case-study 1. Kodak: where is failure, where is success • Case-study 2. NSN: innovation in place 	<ul style="list-style-type: none"> • Knowledge: Recognising and comparing organisation behaviour and how that behaviour affects the innovation: ethics and behaviour • Organisational, culture, organisational socialization, leadership • Skills: Analysing individual and collective behaviour • Competences: Creating the individual behaviour within an organisation towards innovation activity: Motivation and Creativity 	<ul style="list-style-type: none"> • Champoux, J. (2010) Organizational Behavior: Integrating Individuals, Groups, and Organizations • Stamm, B., Trifilova, A. (2009) The Future of Innovation, Gower, UK • Majharul Talukder (2014)Managing Innovation Adoption: From Innovation to Implementation , New edition • Arun Vishwanath and George A. Barnett (2011), The Diffusion of Innovations: A Communication Science Perspective • Building an Innovative Learning Organization: A Framework to Build a Smarter Workforce,

			<p>Adapt to Change, and Drive, (2016) Russell Sarder</p> <ul style="list-style-type: none"> • Building the Innovative Organization: Management Systems that Encourage Innovation, (2000) James A. Christiansen
<p>Weighting of Exams</p> <p>Written Exam 60%</p> <p>Personal project work 40%</p>			

Module 8: Capturing Value and Knowledge Management

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Module 1: Introduction to Management Innovation English Skills	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 8.1 3 ECTS: Practice 8.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> • Recognize the value of knowledge and intellectual capital in decision-making and innovation. • Learn about the knowledge creation process, modes of knowledge conversion and knowledge deployment • Explore the knowledge management methods (informal events, experience workshops, Communities of practice, Project briefing, Expert interview, Best practice cases. 	<ul style="list-style-type: none"> • Lecture 8.1: 30 h • Practice 8.2: 30 h 	<ul style="list-style-type: none"> • Local lecturer: Dr. Wafa Belkahla, Dr. Hayfa Grira (ENIT) • International mentor: Dr. Nizar Abdelkafi (MOEZ) 	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Written exam at the end of the course, 2h

Module content

Teaching content (Lecture)	Teaching content (Practice)	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Basics of Knowledge • Production and Reproduction of Knowledge • Knowledge Spillovers • Knowledge as a Public Good • Intellectual Property Rights • Knowledge Openness and Economic Incentives • Uneven Development of Knowledge across Sectors 	<ul style="list-style-type: none"> • Education and Health • Organizational Capability: Knowledge Management • Innovation contests 	<ul style="list-style-type: none"> • Knowledge: Discussing and estimating the value of knowledge and intellectual capital in decision making and innovation • Comprehending and managing about the knowledge creation process, modes of knowledge conversion and knowledge deployment • Analysing and evaluating the forms of knowledge generation and the knowledge dilemma • Skills: Evaluating and distinguishing knowledge from information • for transform explicit/tacit knowledge toward new products/services • Competences: Applying the knowledge management methods (informal events, experience workshops, Communities of practice, Project briefing, Expert interview, Best practice cases) 	<ul style="list-style-type: none"> • The Economics of Knowledge Dominique Foray (2004) • Knowledge Management: Systems and Processes 2nd Edition (2014) Irma Becerra-Fernandez, Rajiv Sabherwal • Knowledge Management: Value Creation Through Organizational Learning (Springer Texts in Business and Economics) (2014) Klaus North, Gita Kumta
<p>Weighting of Exams Written Exam 60%</p>			

Personal project work 40%			
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Module 9: Dynamic capability and changing context for innovation

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
English skills Statistics level 1	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 9.1 3 ECTS: Practice 9.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board,

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> • Improve the students' knowledge about how firms can strategically cope with fast-changing environments. • Develop some generic skills, namely, those related to strategic thinking, critical thinking, creative thinking, and scientific research analysis. 	<ul style="list-style-type: none"> • Lecture 9.1: 30 h • Practice 9.2: 30 h 	<ul style="list-style-type: none"> • Local lecturer: Olfa Kamoun (ESSEC) • International mentor (2012-2017): Prof. Dr. John Bessant (UNEXE) 	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Power Point text book and software

Module content

Teaching content (Lecture): Organizational capabilities and strategic management	Teaching content (Practice): Empirical analysis	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Resource-based view • The dynamic capability • Entrepreneurial network • The market uncertainty • The types of strategic changes • Market virtualization and changing context for innovation • Propensity to sense opportunities and threats, to make timely decisions, to make market-oriented decisions and to change the resource base 	<ul style="list-style-type: none"> • Software SPSS • Sphinx 	<ul style="list-style-type: none"> • Knowledge: Defining and applying the knowledge about how firms can strategically cope with fast-changing environments. • Arguing about the different concepts of innovation. • Explaining and comparing key success factors of innovation and the different components of The National innovation system. • Interpret the concept of dynamic. • Skills: Applying strategic thinking, critical thinking, creative thinking, and scientific research analysis • Competences: Analysing internal and external competencies in a firm to address rapidly innovation environment and to develop innovation capabilities. 	<p>Books:</p> <ul style="list-style-type: none"> • Barreto, I. (2010). Dynamic capabilities: A review of past research and an agenda for the future, <i>Journal of Management (Review Issue)</i>, 36(1): 256-280. • Barreto, I. (2011). Solving the entrepreneurial puzzle: The role of entrepreneurial interpretation in opportunity formation and related processes, <i>Journal of Management Studies</i>, forthcoming. • Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? <i>Strategic Management Journal</i>, 22: 1105-1121. • Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. <i>Strategic Management Journal</i>, 28: 1319-

			<p>1350.</p> <ul style="list-style-type: none"> • Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. <i>Strategic Management Journal</i>, 18: 509-533. • Winter, S. G. (2003). Understanding dynamic capabilities. <i>Strategic Management Journal</i>, 24: 991-995) • Riccardo Leoncini and Sandro Montresor (2014), <i>Dynamic Capabilities Between Firm Organisation and Local Systems of Production</i> (Routledge Studies in Global Competition)
<p>Weighting of Exams</p> <p>Written Exam 60%</p> <p>Personal project work 40%</p>			

Module 10: Creating New Ventures

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 10.1 3 ECTS: Practice 10.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board,

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> • Definition of opportunities to create new ventures. • Assessing Market Potential and the use of benchmarking of an innovation (product, service) 	<ul style="list-style-type: none"> • Lecture 10.1: 30 h • Practice 10.2: 30 h 	<ul style="list-style-type: none"> • Local lecturer: Olfa. Kammoun (ESSEC) • International mentor (2014-2019): Prof. Dr. Vivek K. Velamuri (HHL, CLIC) 	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Case-study presentation • Written exam at the end of the semester: 2h

Module content

Teaching content (Lecture): Creating New Ventures: Assessing market Potentials and process and stages of creating new ventures	Teaching content (Practice):	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Definitions: how to identify opportunities and to understand business models • Assessing market potential and the use of benchmarking • Targeting innovation new ventures – exploring financial constraints • Tools for analysis – Evaluating Business plans, marketing and financing start-ups... 	<ul style="list-style-type: none"> • Workshop: Tools for creating new businesses assessing market potentialities 	<ul style="list-style-type: none"> • Knowledge: Discussing definition of opportunities for creating new ventures • Assessing market potential and the use of benchmarking of an innovation (product, service) • Modulating value levers and value innovation strategy Understanding strategies to marketing and financing start-ups, the tools of identifying opportunities and of distinguishing the challenges of each of the stages of new ventures development. • Skills: Evaluating adequate funding options for a new venture • Competences: Applying the ability to design a new firm and to develop personal capabilities of creating new innovative 	Books: <ul style="list-style-type: none"> • (DICAMP Library) • Osterwalde and Y. Pignem Business model generation Journal papers: <ul style="list-style-type: none"> • Kanter, R. (1985) Supporting innovation and venture development in established companies. Journal of Business Venturing, 1, 47-60 • Madaique, M. (1980) Entrepreneurs, champions and technological innovation . Sloan Management Review, 21 (2) ,59-76 • Gans ,J. and S. Stern (2003) The product and the market for ideas . Commercialisation strategies for technology entrepreneurs. Research Policy, 32, 333-50. Online resources: <p style="text-align: center;"> http://vimeo.com/25380454 http://www.youtube.com/watch?v=VShmtsLh </p>

		business	kQg
Weighting of Exams Written Exam 60% Personal project work 40%			

Module 11: Open Innovation

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Module 1: Introduction to innovation Management Module 12: user-led Innovation	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 3 ECTS: Practice	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board,

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> • Understanding of why and how open innovation works • General Overview of all contributors to open innovation (Cooperation for innovation and co-creation with customer) • Getting the trends in open innovation 	<ul style="list-style-type: none"> • Lecture 11.1: 30 h • Practice 11.2: 30 h 	<ul style="list-style-type: none"> • Local lecturer: Dr wafa Belkahla, Dr Hayfa Grira (ENIT) • International mentor (2014-2019): Kathrin M. Möslein (HHL, CLIC) 	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Book Summary presentation • Written exam at the end of the course, 2h

Module content

Teaching content (Lecture)	Teaching content (Practice)	Learning outcomes	Reading List
<p>Why and how open innovation works:</p> <ul style="list-style-type: none"> • Introduction to open innovation • Example of an open innovation in a company (Siemens) • Fostering Strategic agility for renewed growth • Leading innovation • Open innovation: actors, tools and tensions <p>Trends in open innovation</p> <ul style="list-style-type: none"> • Educating open innovation ambassadors • The future of crowdsourcing • Open manufacturing 	<p>Who contributes to open innovation:</p> <ul style="list-style-type: none"> • Opening organization for innovation • Cooperation for innovation • Development of products by lead users • Co-creation with customer • Contributions by developers • Strategic crowdsourcing 	<ul style="list-style-type: none"> • Knowledge: Contrasting of why and how open innovation works • General Overview of all contributors to open innovation (Cooperation for innovation and co-creation with customer) • Getting the trends in open innovation • Skills: Evaluating the role of the different partners in open innovation • Competences: Co-creation with customer and cooperation for innovation • Analyse the changing external landscape for innovation 	<p>Books:</p> <ul style="list-style-type: none"> • Leading Open Innovation Anne Sigismund Huff, Kathrin M. Möslein, Ralf Reichwald • R. Culpan 2014, Open Innovation through Strategic Alliances: Approaches for Product, Technology, and Business Model Creation • Chesbrough, H. (2003) Open Innovation. The New Imperative for Creating and Profiting from Technology. Harvard Business School Press: Boston. • Chesbrough, H. (2006) Open Business Model: How to Thrive in the New Innovative Landscape. Harvard Business School

			<p>Press: Boston.</p> <ul style="list-style-type: none">• Chesbrough, H., Vanhaverbeke, W., West, J. (2006) Open Innovation : Researching a New Paradigm. Oxford University Press. <p>Articles:</p> <ul style="list-style-type: none">• Chesbrough, H. (2000) 'Designing corporate ventures in the shadow of private venture capital', California Management Review, 42 (3): 31 – 49.• Chesbrough, H. (2003) 'The era of open innovation', Sloan Management Review, 44 (3): 35 – 41.• Chesbrough, H. (2003) 'The logic og open innovation: managing intellectual property', California Management Review, 45 (3): 33 – 58.• Chesbrough, H. (2003) 'The governance and performance of Xerox's
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			<p>technology spinoff companies', Research Policy, 32 (3): 403 – 421.</p> <ul style="list-style-type: none">• Chesbrough, H., Crowther, A. (2006) 'Beyond high tech: early adopters of open innovation in other industries', R&D Management, 36, 229–236.• New Frontiers in Open Innovation Hardcover, (2015) Henry William Chesbrough• Open Innovation: New Product Development Essentials from the PDMA, (2014) Abbie Griffin and Charles Noble• Open Innovation through Strategic Alliances: Approaches for Product, Technology, and Business Model Creation, (2013) R.
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			<p>Culpan</p> <ul style="list-style-type: none">• The Experimental Nature of New Venture Creation: Capitalizing on Open Innovation 2.0 (Innovation, Technology, and Knowledge Management), (2013) Martin Curley, Piero Formica
Weighting of Exams			
Written Exam 100%			

Module 12: User-led innovation

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
English skills Innovation management	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 3 ECTS: Practice	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board,

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> • Apply empathic skills with user involved in the design development process • Create customer-centred innovations • Design user-innovation complain • Plan and carry out user testing, contest, challenges...etc. • Communicate 	<ul style="list-style-type: none"> • Lecture 12.2: 30 h • Practice 12.2: 30 h 	<ul style="list-style-type: none"> • Local lecturer: Dr wafa Belkahla, Dr Hayfa Grira, Aida Besbes (ENIT) • International mentor (2014-2019): Hagen Habicht (HHL, CLIC) 	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Case-study presentation • Written exam at the end of the semester, 2h

<p>test/contests findings that will inform and improve project development</p> <ul style="list-style-type: none">• Identify and apply different tools for user-centred innovation.• Execute a lead-user analysis with the goals of developing innovative products and services.				
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Module content

Teaching content (Lecture)	Teaching content (Practice)	Learning outcomes	Reading List
<p>It aims to give insights on main concepts and notions related to user-led innovation:</p> <ul style="list-style-type: none"> • Types of innovation processes • Differentiating product and service innovations • The importance of user-driven innovation (customer focus, frequently used sources of innovation) • Tools applied for user-led innovations • Knowledge and skills for innovation • Overview of international case studies 	<p>Students are asked to:</p> <ul style="list-style-type: none"> • Form groups of three to four students • Develop a sophisticated plan for a user innovation campaign designed to boost the innovation performance of the company they work in. • Present their plan in front of the company's board of directors (teacher and other students) • Rate the other's plan (using the model of the Eurovision Song Contest) <p>• Students are asked to answer the following tasks:</p> <ul style="list-style-type: none"> • What innovation problem is being tackled? • What method will you use to approach which potential innovators? • What do you expect them to submit? 	<ul style="list-style-type: none"> • Knowledge: Reviewing insights on main concepts and notions related to user-led innovation: • Types of innovation processes • Differentiating product and service innovations • The importance of user-driven innovation • Skills: Applying empathic skills with user involved in the design development process • Plan and carry out user testing, contest, challenges...etc. • Competences: Applying tools for user-led innovations • Mobilize cross-functional 	<ul style="list-style-type: none"> • Lettl C., Herstatt C. and Gemuenden H. G., (2006), "Users' contributions to radical innovation: evidence from four cases in the field of medical equipment technology", R&D Management 36, 3. • Baldwin C. and Von Hippel E. (2011), "Modeling a Paradigm Shift: From Producer Innovation to User and Open Collaborative Innovation", Organization Science, Vol. 22, No. 6, November–December ., pp. 1399–1417. • Habicht, Hagen; Oliveira, Pedro, Shcherbatiuk, Viktoriia (2012): User Innovators: When Patients Set Out to Help Themselves and End Up Helping Many. In: Die Unternehmung, Vol. 66, Issue 3, pp. 277-294. • Max Mckeown 2014 The Innovation Book: How to

	<ul style="list-style-type: none"> • How will you motivate contributors? • How do you ensure that the project will be a success? (Market definition, value proposition, IP issues, value creation plan, revenue plan, resources needed) 	knowledge in integrated fashion to create value from ideas	Manage Ideas and Execution for Outstanding Results Paperback
Weighting of Exams Written Exam 60% Personal project work 40%			

Module 13. Service Innovation

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points	Media employed
Admission and entry requirements to the master level programme; Fulfilment of Year1	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 3 ECTS: Practice	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board,

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> Understanding the theoretical knowledge regarding specifics in services and the challenges in the service innovation process. <p><i>“Gaining insights into Services”</i></p>	<ul style="list-style-type: none"> Lecture 13.1: 30 h Practice 13.1: 30 h 	<ul style="list-style-type: none"> Local lecturer: Norchene Ben Dahmene (IHEC) International mentor (2014-2019): Sandra Dijk (UL) 	<ul style="list-style-type: none"> English (French) 	<ul style="list-style-type: none"> Field Research presentation Written exam at the end of the course, 2h

Module content

Teaching content (Lecture):	Teaching content (Practice):	Learning outcomes	Reading List
<p>13.1 Basics in Services and Service Innovation:</p> <ul style="list-style-type: none"> • Introduction into services and service innovation • Definitions • Specifics in services • The service economy <p>13.2 Consolidation:</p> <ul style="list-style-type: none"> • Co-creation in services • Diffusion of service innovation • Best practice for service innovation 	<ul style="list-style-type: none"> • Group work activities • Paper Seminar , Case studies • Home assignment (8-10 pages) • Presentations in groups or single 	<p>Understanding the importance of services.</p> <p>Identifying innovation opportunities in services.</p> <p>Apply best practices in service management (service development) in order to organize projects, align resources and monitor outcomes.</p>	<ul style="list-style-type: none"> • H. Chesbrough: Open Service Innovation: Rethinking your Business to grow and compete in a new Era. • L. A. Bettencourt: Service Innovation: How to go from Customers Needs to Breakthrough Services. • Lusch, R., Vargo, S., O'Brien, M (2007): Competing through service: Insights from service-dominant logic, Journal of Retailing (83), p. 5-18. • Lucy Kimbell, The Service Innovation Handbook: Action-oriented Creative Thinking Toolkit for Service Organizations, Broché –

janvier 2015

- Everett M. Rogers: Diffusion of innovations. Free Press. 5th edition, 2005.
- Lance Bettencourt, Service Innovation: How to Go from Customer Needs to Breakthrough Services, juillet 2010
- Case studies in service innovation, produced by centre for service research, Manchester Business School, The university of Manchester in collaboration with SRII service innovation SIG, June 2010
- Joseph H. Hancock, Strategic Design Thinking: Innovation in Products, Services, Experiences, and Beyond, décembre 2015

Journals:

Journal of Service Management
Journal of Service Research

Weighting of Exams Written Exam 60% Personal project work 40%			
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Module 14: Design-driven Innovation

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Module 14. Design Theory and Methods for Innovation	Compulsory	60h teaching 120h self-study	3 ECTS: Lecture 3 ECTS: Practice	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> • Gain a clear understanding of the strategic contribution of design in the innovation process • Understand the importance of a strategy for design-led innovation • Introduction to design Tools and methods • Give to students organization of design activities bringing together technical, scientific and managerial expertise's 	<ul style="list-style-type: none"> • Lecture 14.1: 30 h • Practice 14.1: 30 h 	<ul style="list-style-type: none"> • Local lecturer: Helmi Ben Rejeb, • International mentor (2014-2019): Prof. Dr. Pascal Le Masson and Marine Agogu� 	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Case-study presentation • Written exam at the end of the semester, 1h

Module content

Teaching content (Lecture)	Teaching content (Practice)	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Specificities of design reasoning • Systematic design methods (Pahl & Beitz, functional analysis, Zwicky Matrix) • A mathematical approach, Bauhaus methods • Introducing C-K theory • Implementing C-K theory in industrial contexts • The origins of creativity 	<ul style="list-style-type: none"> • History of design: Case study: the railway industry • Axiomatic Design (Suh) • Problem solving (Simon) • Decision making under uncertainty (Raïffa) • Creativity techniques, creative thinking, creativity tools, design space, prototyping, line of products, TRIZ 	<ul style="list-style-type: none"> • Knowledge: Appraising the role of design innovation design in business • focusing the frameworks and tools for its implementation • Employing the power of design and for acquiring competence on design • Managing the process to create breakthrough innovations based on design • Skills: Applying design processes for providing breakthrough products and services • Creating scenario-building projects, targeted at understanding the evolution of design • Competences: Creating breakthrough designs and know how to profit from design • Creating new strategies compatible with identity of a 	<p>Books:</p> <ul style="list-style-type: none"> • Le Masson, P., Weil, B., & Hatchuel, A. (2010). Strategic Management of Design and Innovation. Cambridge: Cambridge University Press • Pahl, G., and Beitz, W. (2006). Engineering design, a systematic approach, K. Wallace, L. Blessing, et F. Bauert, translator, Springer, Berlin • Utterback, J. M., Vedin, B.-A., Alvarez, E., Ekman, S., Walsh Sanderson, S., Tether, B., and Verganti, R. (2006). Design-inspired innovation, W. S. P. Company • Kees Dorst (2015), Framelnnovation: Create New Thinking by Design (Design Thinking, Design Theory) Hardcover • Vijay Kumar, (2012), 101

		<p>firm brand, products and services</p>	<p>Design Methods: A Structured Approach for Driving Innovation in Your Organization</p> <ul style="list-style-type: none"> • Utterback, J. M., Vedin, B.-A., Alvarez, E., Ekman, S., Walsh Sanderson, S., Tether, B., and Verganti, R. (2006). Design-inspired innovation, W. S. P. Company • Design Driven Innovation: Changing the Rules of Competition by Radically Innovating What Things Mean, (2009) Verganti, Roberto • Design for Executives: How the World's Top Designers Build Organizations and Drive Innovation, (2016) <p>Mariya Yao</p>
<p>Weighting of Exams</p> <p>Personal project work 100%</p>			

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Module 15 (Elective): Leadership

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Admission and entry requirements to the master level programme	elective	60h teaching 120 h self-study	3 ECTS: Lecture 15.1 3 ECTS: Practice 15.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> • Defining leadership, • Leadership and management • Leadership quality • Style of leadership 	<ul style="list-style-type: none"> • Lecture 15.1: 30 h • Practice 15.2: 30 h 	<ul style="list-style-type: none"> • Aida Besbes 	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Written exam at the end of the semester, 1h30

Module content

Teaching content (Lecture 1.1) Definitions leadership	Teaching content (Practice 2.2) The national innovation systems	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Definitions of leadership 	<ul style="list-style-type: none"> • Style of Leadership 	<ul style="list-style-type: none"> • Knowledge: identify their 	Books:

<ul style="list-style-type: none"> • Leadership quality • Difference between leadership and management 	<ul style="list-style-type: none"> • Leadership behaviour • Play role • Case study 	<p>strengths and weaknesses and learn strategies to tap into the strengths of others,</p> <ul style="list-style-type: none"> • Skills: explore and apply the principles and practices of servant leadership in serving the organization • Competences: compare and contrast the principles of leadership with management • build capacity that sustains and propels the organization into the future 	<ul style="list-style-type: none"> • Joseph C. Rost. Leadership for the twenty-first century, ISBN 0-275-94610, 1991. • James G. March, Thierry Weil, Le leadership dans les organistaions, collection science économique et sociales, 2003. • Robert N. Lussier, Cristopher F. Achua; Leadership : “theory, application and skills development”, Edition South Western cengage learning, 2010. • John Harvey-Jones, Leadership for innovation, how to organize teams creating and harvest ideas, edition John ADAIR, 2007. • Jill Hender, Innovation leadership : roles and key imperatives , Edition HENLEY, 2003.
<p>Weighting of Exams</p> <p>Personal project work 100%</p>			

Module 15 (Elective): Innovation financing

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Admission and entry requirements to the master level programme	elective	60h teaching 120 h self-study	3 ECTS: Lecture 15.1 3 ECTS: Practice 15.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board, Lectures online

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> • To emphasize on the financial feature of innovation process • To make students aware of the different modalities of innovation financing • To describe the Tunisian financial system 	<ul style="list-style-type: none"> • Lecture 15.1: 30 h • Practice 15.2: 30 h 	<ul style="list-style-type: none"> • Local lecturer : Khalifa Améne (ESSEC) 	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Case-study presentation • Written exam at the end of the semester, 1h

Module content

Teaching content (Lecture 2.1)	Teaching content (Practice 2.2)	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Topic 1. The innovation financing issues • Topic 2. The modalities of innovation financing [internal resources, public support, external resources (banks, venture capital and corporate venture)] • Topic 3. The Tunisian financial system 	<ul style="list-style-type: none"> • Case-study 1: the pharmaceutical industry financial problematic • Case study 2: the corporate venture's experience in Tunisia • Case study 3: The public support for French innovators • Case study 4: The public support for Tunisian innovators 	<ul style="list-style-type: none"> • Knowledge: <ol style="list-style-type: none"> 1) The innovation financing difficulties met by small innovative firms 2) The relevance of different innovation financing ways in relation to product life cycle 3) The different modalities of innovation financing 4) The characteristics of Tunisian financial system • Skills: <ol style="list-style-type: none"> 1) Targeting the suitable ways of innovation financing according to the firm's situation and to the development phase of the innovative product. 2) Applying appropriate methods to solicit for public financial support or for financial intervention of external financial resources • Competences: <ol style="list-style-type: none"> 1) Juridico-financial manipulation of firms facing financial difficulties 2) The conception of strategies insuring the equilibrium and the financial sustainability of 	<p>Books:</p> <ul style="list-style-type: none"> - Lachman Jean (2010): stratégie et financement de l'innovation, Economica. - Mehri Hella et al (2002): Economie monétaire, La maghrébine pour l'impression. - Jones Charles I (2000): Théorie de la croissance endogène, De Boeck University <p>Journal papers</p> <ul style="list-style-type: none"> - Rivera Batiz L and Romer P (1991): Economic integration and growth, The Quarterly Journal of Economics, Oxford University Press.

		innovation activity	
Weighting of Exams Personal project work 100%			

Module 15 (Elective): Culture and Digital Identity

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Admission and entry requirements to the master level programme	elective	60h teaching 120 h self-study	3 ECTS: Lecture 15.1 3 ECTS: Practice 15.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> Give basics to be able to stand back with regard to the use of the digital technologies. To have different viewing angles and have more elements to arrest the perimeter that the technologies of internet in intended can take. This course is concentrated on the identity and the digital 	<ul style="list-style-type: none"> Lecture 15.1: 20h Practice 15.2: 40 h 	Thouraya Daouas (IHEC)	<ul style="list-style-type: none"> English (French) 	<ul style="list-style-type: none"> Exercises per week Online exam at the end of the semester

<p>culture in companies and so personal, seen the importance of the latter in the professional, academic and personal world.</p>				
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Module content

Teaching content (Lecture 2.1)	Teaching content (Practice 2.2)	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Introduction to Culture and Digital Identity • Test your Digital Identity • Knowing the Web • Understand your Digital Identity • Facets of Digital Identity • Digital Identity Tracks • eReputation • Social Networks 	<ul style="list-style-type: none"> • Case studies • Serious games • Play Role • Practicing new collaborative tools • Practicing online tools 	<ul style="list-style-type: none"> • Knowledge: Knowing the Digital Identity and its characteristics. Having a clear idea about Internet Culture, • Skills: Practice collaborative and online tools, • Competences: Preventing personal identity working on Internet and Social Networks 	<p>Books:</p> <ul style="list-style-type: none"> • Corneliussen, H., Rettberg, J. (2011) Digital Culture, Play, and Identity: A World of Warcraft Reader, MIT Press. • Jenkins, H. (2008) Convergence Culture: Where Old and New Media Collide, New York University Press. • MYTHES ET RÉALITÉS DE L'IDENTITÉ CULTURELLE

			<p>AFRICAINNE, André Julien Mbem, Pensée Africaine</p> <p>ANTHROPOLOGIE, ETHNOLOGIE, CIVILISATION PHILOSOPHIE AFRIQUE NOIRE</p> <ul style="list-style-type: none">• IDENTITÉ, CULTURE ET CHANGEMENT SOCIAL, Fernand Ouellet Fernand Ouellet, M. Lavalée, F. Larose Association ARIC, Espaces interculturels• IMMIGRATION, INTERCULTUREL, Actes du troisième colloque de l'ARIC.• Digital Online Culture, Identity, and Schooling in the Twenty-First Century (New Frontiers in Education, Culture and Politics), (2015) K. Rosenfeld• Digital Identities: Creating and Communicating the Online Self, (2015) Rob
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			Cover
Weighting of Exams Personal project work 100%			

Module 15 (Elective): Evaluation of innovation

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Admission and entry requirements to the master level programme	elective	60h teaching 120 h self-study	3 ECTS: Lecture 15.1 3 ECTS: Practice 15.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> Identify the different aspects to evaluate in an innovative / business project Discover & analyse the different indicators that measure the performance of countries in terms of innovation 	<ul style="list-style-type: none"> Lecture 15.1: 20h Practice 15.2: 40 h 	Hana Jegham (ENIT)	<ul style="list-style-type: none"> English (French) 	<ul style="list-style-type: none"> Written exam at the end of the semester, 1h30

Module content

Teaching content (Lecture 2.1)	Teaching content (Practice 2.2)	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Why evaluating innovation? • Different approaches for evaluating innovation • Grids of innovation assessments 	<ul style="list-style-type: none"> • Case study: Philips Lighting • Exercises with the tool of Risk Assessment Matrix • Indicators of innovation: workshop • External & internal surveys: field research 	<ul style="list-style-type: none"> • Knowledge: identify the best procedures to design an evaluation survey • Skills: apply the practices of innovation diagnostic within an organization • Competences: design, evaluate and report innovation amelioration practises 	<p>Books:</p> <ul style="list-style-type: none"> • The Innovator's Dilemma: The Revolutionary Book That Will Change the Way You Do Business, Clayton M. Christensen • The Art of Innovation: Lessons in Creativity from IDEO, America's Leading Design Firm, Tom Kelley • The Myths of Innovation, Scott Berkun • The Other Side of Innovation: Solving the Execution Challenge, Vijay Govindarajan • Westland, J.C. Global Innovation Management: A Strategic Approach, Palgrave Macmillan, Basingstoke <p>Implementation Monitoring and Process Evaluation (2015)</p> <p>Ruth P. Saunders</p>

			<p>Evaluation of R&D Processes: Effectiveness Through Measurements (Artech House Technology Management and Professional Development Library), (1997)</p> <p>Lynn Ellis</p> <p>Technological Innovation Index: A novel innovation indicator and its implications for technology evaluation (Vernon Series in Economic Methodology),(2014)</p> <p>Fredrick Pachys</p>
<p>Weighting of Exams</p> <p>Personal project work 100%</p>			

Module 15 (Elective): Innovation in materials

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points (6 ECTS)	Media employed
Admission and entry requirements to the master level programme	elective	60h teaching 120 h self-study	3 ECTS: Lecture 15.1 3 ECTS: Practice 15.2	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
<ul style="list-style-type: none"> • Presenting Materials • Presenting Innovative Materials • Presenting processing Of New Materials • Presenting important Applications of New Materials 	<ul style="list-style-type: none"> • Lecture 15.1: 20h • Practice 15.2: 40 h 	Ridha BEN CHEIKH (ENIT)	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Written exam at the end of the semester, 1h30 and oral presentations

Module content

Teaching content (Lecture 2.1)	Teaching content (Practice 2.2)	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Presentation of the three Universal Families of Materials (Metallic, Ceramic and Polymeric), and study of relationship Structure/ properties in order to innovate Materials • Presentation of New Materials (Shape Memory Alloys, Technical and Smart Textiles, Eco-Materials, Nano Materials) 	<ul style="list-style-type: none"> • Processing of the New Materials • Main Applications of New Materials • Innovation in Materials • Case study 	<ul style="list-style-type: none"> • Knowledge: Know and understand how New Materials provide opportunities to innovate • Skills: knowledge of some techniques for identifying and determining the properties of materials in order to create new innovative ones • Competences: Starting from targeted applications, choose the right material, and improve its properties by innovating • strengthen capabilities that optimize the use of materials in the context of sustainable development 	<p>Books:</p> <ul style="list-style-type: none"> • Philip Howes & Zoe Laughlin “Material Matters: New Materials in Design, by material scientist”, Black dog publishing, ISBN13: 978 1 907317 73 6 • Materials for Engineers and technicians, Jons & Ashby, Engineering Materials 1 and 2, Elsevier, ISBN: 9780080966663, 2011 • Robert Vajtao, Handbook of nanomaterials, Springer, ISBN 978-3-642-20595-8, 2013 • Philip Ball, Made to Measure : New Materials for the 21st century, Ed. Princeton UP, ISBN-13: 978-0691009759 • <i>Christine Browaeys</i>. Les enjeux des nouveaux matériaux textiles, ISBN 978-2-7598-1135-9, 05/2014.

			<ul style="list-style-type: none">• Ultra Materials: How Materials Innovation is Changing the World, (2007) George M. Beylerian, Andrew H. Dent, Bradley Quinn• Material Innovation: Packaging Design, (2015) Andrew H. Dent, Leslie Sherr• Material Innovation: Product Design, (2014) Andrew H. Dent, Leslie Sherr, Michele Caniato, Allan Chochinov• Material Innovation: Architecture , (2014) Andrew H. Dent, Leslie Sherr, George M. Beylerian, Gail Peter Borden• Innovations in Materials Manufacturing, Fabrication, and Environmental Safety, (2010) Mel Schwartz• Sustainable Materials, Processes and Production (The Manufacturing Guides, (2013) Rob Thompson, Martin Thompson • Materials for Design
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			<p>Paperback, (2014) Chris Lefteri</p> <ul style="list-style-type: none">• Material Strategies: Innovative Applications in Architecture, (2011) Blaine Brownell
Weighting of Exams Personal project work 100%			

Module: Project work

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points	Media employed
Admission and entry requirements to the master level programme	Compulsory	100h teaching 200h self-study	10 ECTS	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
Writing a project work <ul style="list-style-type: none"> • implementation of theoretical knowledge • preparing for the master thesis 	100 h <ul style="list-style-type: none"> • define the subject, theme, research questions of the project work • design methodology on in individual project activity • suggest literature review on a selected topic • supervise individual field research • supervise writing of the 	<ul style="list-style-type: none"> • Supervisor • Industrial mentor 	<ul style="list-style-type: none"> • English (French) 	<ul style="list-style-type: none"> • Report • Presentation

	<p>project work</p> <ul style="list-style-type: none"> • review written project work at various stages of its development • review the final project work <p>write a reference for the student's involvement and present at the defence</p>			
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Module content

Teaching content (Lecture):	Teaching content (Practice):	Learning outcomes	Reading List
<p>Properties and process of diffusion and adoption of innovations</p>	<p>Technological diffusion at the international level</p>		
<ul style="list-style-type: none"> • Report: Working with template • Scientific working • Presentation: Working with template • Presentation: Focus on the most important results 	<ul style="list-style-type: none"> • Planning & preparing of an own scientific work • Supervision and reviewing of the project work activity • Defence of the scientific work 	<ul style="list-style-type: none"> • Literature review: Some knowledge about studying of published papers • General flow: With the help of the supervisor: From the idea via a design and methodology to the results (and interpretation of the results) • Documentation (oral and written) <p>Finally together with the supervisor the students should be able to work on a research</p>	<ul style="list-style-type: none"> • Lawrence Anthony Machi und Brenda T. McEvoy: The Literature Review: Six Steps to Success. Sage Publications Ltd. 2nd edition. Publication Date: August 21, 2012 • Diana Ridley: The Literature Review: A Step-by-Step Guide for Students. Sage Publications Ltd. 2nd edition. Publication: July 23, 2012 • Charles Lipson: How to Write a BA Thesis: A Practical Guide from Your First Ideas

		project idea and to design and perform the approach with help of published data. They are able to present their research in oral and written form	to Your Finished Paper. University Of Chicago Press. Publication: May 15, 2005 <ul style="list-style-type: none">• Richard C. Sprinthal: Basic Statistical Analysis. Pearson. 9th edition. Publication: February 2, 2011
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Module: Master thesis

Module overview

Prerequisite	Relation to curriculum	Workload	Credit points	Media employed
Admission and entry requirements to the master level programme; Fulfilment of Year1	Compulsory	200h teaching 400h self-study	20 ECTS	Beamer, overhead projectors, laptop, ppt presentation, teaching material, video and audio resources, white board

Module description

Objective of the module	Teaching contact hours	Teaching Team	Teaching Language	Forms of Examination
Writing a master thesis <ul style="list-style-type: none">• implementation of theoretical knowledge• delivering the master thesis	200 h	<ul style="list-style-type: none">• Supervisor	<ul style="list-style-type: none">• English (French)	<ul style="list-style-type: none">• Report• Presentation

Module content

Teaching content (Lecture): Properties and process of diffusion and adoption of innovations	Teaching content (Practice): Technological diffusion at the international level	Learning outcomes	Reading List
<ul style="list-style-type: none"> • Report: Working with template • Scientific working • Presentation: Working with template • Presentation: Focus on the most important results 	<ul style="list-style-type: none"> • Planning & preparing of an own scientific work • Supervision and reviewing of the project work activity • Defence of the scientific work 	<ul style="list-style-type: none"> • Literature review: Study of published papers • General flow: From the idea via a design and methodology to the results (and interpretation of the results) • Documentation (oral and written) <p>Finally the students should be able to create an own research project idea and design and perform the approach with help of published data. They are able to present their research in oral and written form without any plagiarism, and with a very good scientific level and value.</p>	<ul style="list-style-type: none"> • Lawrence Anthony Machi und Brenda T. McEvoy: The Literature Review: Six Steps to Success. Sage Publications Ltd. 2nd edition. Publication Date: August 21, 2012 • Diana Ridley: The Literature Review: A Step-by-Step Guide for Students. Sage Publications Ltd. 2nd edition. Publication Date: July 23, 2012 • Yvonne Nguyen Bui: How to Write a Master's Thesis. Sage Publications Ltd. 2nd edition. Publication Date: April 3, 2012 • Robert Nisbet, John Elder IV and Gary Miner: Handbook of Statistical Analysis and Data Mining Applications. Academic Press. Publication Date: June 5, 2009