Master of Science (MSc)
International Food Business
& Consumer Studies
– joint degree programme –

Fulda University
of Applied Sciences
Nutritional, Food and
Consumer Sciences

Kassel University
Organic Agricultural
Sciences

Module Handbook

Examination regulations 2024

Content

Compulsory modules

International organic food markets and marketing

Module number / code	E06
Module name	International organic food markets and marketing
Type of module	Compulsory module
Learning outcomes, acquired competencies and qualification goals	Students • are able to describe international markets for organic food • know about international organic regulations • are able to outline the steps for developing a marketing strategy • know how to develop a marketing concept on international markets • acquire personal skills for oral and written presentations in teamwork.
Course types	Lecture 30h, seminar 30h
Content	• Analysis of international markets for organic products • Organic regulations • Basics of food marketing for exporters • Oral and written presentation of marketing topic
Title of courses	International organic food markets and marketing
Teaching and learning methods	Lecture, seminar
Usabilitiy in other programs	Obligatory module according to §7 (3) Examination Regulations Master IFBC Mandatory module according to §9 (8) Examination Regulations Master AGES
Duration	1 Semester
Frequency of module offer	annually in winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Examination P1: Written test (90min) or Oral examination (30min)

	Grade weighting P1: 60% Examination P2: Oral presentation and written report (appr. 20min and 2000 words) Grade weighting P2: 40%
Credit points (ECTS)	6 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft
Responsible person	Dr. B. Jahnke
Lecturer(s)	Dr. B. Jahnke
Media used	verschiedene
Recommended literature	Armstrong, G, Kotler, K., Opresnik, M.O. 2016: Marketing: An Introduction, 13th ed., Pearson, Harlow, UK. Hollensen, S., Opresnik, M.O. 2015: Marketing: A Relationship Perspective. Vahlen, Munich

Consumer behaviour and consumer science

Module number / code	F30
Module name	Consumer behaviour and consumer science
Type of module	Compulsory module
Learning outcomes, acquired competencies and qualification goals	The students • are aware of the important influence of cultural, social and psychological factors on consumer behaviour, • are qualified to identify these factors and apply this knowledge to product development, marketing and similar areas and • are able to apply empirical methods of lifestyle and consumer research as well as social and psychological models of consumer behaviour. • are also able to change and reflect on their own consumer behaviour, • can explain theories from social and lifestyle research as a basis for consumer behaviour • are able to explain the development of consumption and future trends and demonstrate various possibilities for consumer communication and ways of influencing consumer behaviour
Course types	Seminar (4 SWS)
Content	• Foundational concepts and perspectives on consumer behaviour and consumer science • Introduction to qualitative and quantitative research methods and specific methods for consumer science and behaviour research • Social, cultural and psychological perspectives on consumer behaviour

	• Current research and case studies related to consumer behaviour and consumer science • Interdisciplinary perspectives on consumer behaviour and consumer science • Insights into the practice of consumer science and consumer behaviour
Title of courses	Consumer behaviour and consumer science
Teaching and learning methods	Lecture, learning by explaining and presenting, self-organised learning, problem-based learning, seminars including case study-based group work and exercises
Usabilitiy in other programs	Compulsory module according to §7(3) Examination regulations Master IFBC
Duration	1 Semester
Frequency of module offer	annually in winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	S1: Oral presentation
Prerequisites for examination(s)	Course work S1
Module examination(s)	Written report
Credit points (ECTS)	6 cp
Teaching unit	Fulda University of applied science
Responsible person	Prof. Dr. J. Allgaier
Lecturer(s)	Prof. Dr. J. Allgaier, L. Page
Media used	Teaching material is made available on the e-learning platform
Recommended literature	Will be announced at the beginning of the module

International legislation on consumer protection and food

Module number / code	F31
Module name	International legislation on consumer protection and food
Type of module	Compulsory module
Learning outcomes, acquired competencies and qualification goals	Students are able to

	• find and understand documents on the legal regulations regarding consumer protection and food; • discuss the role of the main institutions and relevant administrative bodies; • describe important contents of European food law (e.g. labeling, hygiene); • evaluate the impact of relevant legislation and case law on food business operators and consumers; • describe the role of risk management and risk communication in food industry and for consumers; • discuss the role and effectiveness of legal regulations regarding consumer rights.
Course types	Lecture (2 SWS), Seminar (2 SWS)
Content	• Key institutions and related administrative bodies in the EU • Labelling of food products in EU • Relevant legislation for the production, distribution and sale of novel or functional foods and foods including genetically modified organisms • Risk management and risk communication / HACCP / food hygiene in the EU • Barriers to the free flow of goods across national boundaries • Exemplary national food control systems in Europe • Basics and historical development of consumer protection and consumer politics in the EU
Title of courses	International legislation on consumer protection and food
Teaching and learning methods	Lecture, seminar
Usabilitiy in other programs	Compulsory module according to §7(3) Examination regulations Master IFBC
Duration	1 Semester
Frequency of module offer	annually in winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Oral exam or Oral presentation
Credit points (ECTS)	6 cp
Teaching unit	Fulda University of applied science

Responsible person	Prof. Dr. S. Lopp
Lecturer(s)	Prof. Dr. S. Lopp with additional lecturers as needed
Media used	-
Recommended literature	See seminar manual on e-learning platform

Food product development

Module number / code	F37
Module name	Food product development
Type of module	Compulsory module
Learning outcomes, acquired competencies and qualification goals	The students • know the stages of product development • can generate and evaluate new product ideas • can develop product concepts taking into account intercultural aspects and evaluate them using suitable consumer research methods • can develop food prototypes including product labelling and determine product shelf life • can take nutritional aspects and functional food ingredients into account during product development • can take into account other factors in addition to formulation and manufacturing processes such as product shelf-life requirements and the requirements of food law in product development.
Course types	Seminar (2 SWS) and Project Work (2 SWS)
Content	• Stages of product development • product formulations • food chemistry • food regulations • product testing • shelf-life studies • factors affecting shelf-life • Practical lab work
Title of courses	Food product development
Teaching and learning methods	Seminar/Lecture units, group work and laboratory work
Usabilitiy in other programs	Compulsory module according to §7(3) Examination regulations Master IFBC
Duration	1 Semester
Frequency of module offer	annually in summer semester
Teaching language	Englisch

Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	S1: Laboratory work, Project report S2: Attendance seminar work and submission development project report
Prerequisites for examination(s)	Course work S2
Module examination(s)	Project work
Credit points (ECTS)	6 cp
Teaching unit	Fulda University of applied science
Responsible person	Prof. Dr. J. Hampshire
Lecturer(s)	Prof. Dr. J. Hampshire, L. Page, Dr. A. Quadt
Media used	Power Point Presentation, video
Recommended literature	A reading list will be provided on the e-learning platform

Quality management in the food business

Module number / code	F38
Module name	Quality management in the food business
Type of module	Compulsory module
Learning outcomes, acquired competencies and qualification goals	The students are able to • describe the function of quality management and understand the main challenges in establishing an effective quality management system; • identify measures to ensure food safety according to international safety standards; • determine measures to ensure traceability in the food chain; • introduce a quality management system in accordance with the relevant food industry standards; • Implement an effective crisis management system in a food business.
Course types	Lecture (2 SWS), Seminar (2 SWS)
Content	• Food safety and HACCP • Process management • Statistical process control • Food chain traceability, crisis management • Quality management according to ISO 9001:2015

	• Food quality standards • Quality management tools
Title of courses	Quality management in the food business
Teaching and learning methods	Lecture, seminar
Usabilitiy in other programs	Compulsory module according to §7(3) Examination regulations Master IFBC
Duration	1 Semester
Frequency of module offer	annually in summer semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	Module "International legislation on food and consumer protection"
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Oral examination or Oral presentation
Credit points (ECTS)	6 cp
Teaching unit	Fulda University of applied science
Responsible person	Prof. Dr. S. Lopp
Lecturer(s)	Prof. Dr. S. Lopp with additional lectures as needed
Media used	-
Recommended literature	See seminar manual on e-learning platform

Trends in Food and Nutritional Sciences

Module number / code	F39
Module name	Trends in food sciences and sustainable consumption
Type of module	Compulsory module
Learning outcomes, acquired competencies and qualification goals	The students • know the influence of food ingredients and processing methods on the quality of food • can evaluate different processing methods with regard to their effects on food quality and safety • are able to assess the effects of new findings in food and nutritional science on ○ the nutritional status of different population groups in different cultures and social environments

	○ the development of new products and their marketing to private and large households in different cultures ○ assess the sustainability of development in agriculture and the food industry • explain the development of consumption and the consumer market in order to derive future trends taking sustainability into account • can develop relevant research questions in groups, carry out qualified literature research, evaluate and present practice-relevant results
Course types	Seminar (4 SWS)
Content	• Recent scientific results on food constituents, their physiological effects, and their influence on the quality of raw material and processed foods • Assessment of the impacts of traditional and novel processing technologies on food quality and safety, and on sustainability (environmental and social aspects, economic resilience)
Title of courses	Trends in Food and Nutritional Sciences
Teaching and learning methods	Lecture, learning by explaining and presenting, self-organised learning, problem-based learning, seminars including case studybased group work and exercises
Usabilitiy in other programs	Compulsory module according to §7(3) Examination regulations Master IFBC
Duration	1 Semester
Frequency of module offer	annually in summer semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	S1: Oral presentation
Prerequisites for examination(s)	
Module examination(s)	Written report
Credit points (ECTS)	6 cp
Teaching unit	Fulda University of applied science
Responsible person	Prof. Dr. M. Birringer
Lecturer(s)	Prof. Dr. M. Birringer, Prof. Dr. R. Pichner, Prof. Dr. A. Risius, Prof. Dr. L. Chalupová

Media used	Teaching material is made available on the e-learning platform
Recommended literature	Will be announced at the beginning of the module

Research methods in social sciences

Module number / code	F16
Module name	Research methods in social sciences
Type of module	Compulsory module
Learning outcomes, acquired competencies and qualification goals	The aims of the module are: • To understand the philosophical bases of research in the social sciences; • To foster students' understanding of key techniques for collecting and analysing qualitative and quantitative data and their relative strengths and weaknesses; • To be aware of the linkages between theory, data, analysis and interpretation and of the role and impact of the researcher in the research process; • To improve accessibility of research material, such as, journal articles; • To provide more advanced skills in support of other modules and dissertation research involving quantitative and qualitative analysis.
Course types	Seminar 30h, Exercises 30h
Content	• Principles, practicalities and issues of using qualitative and quantitative research methods typically found in the social sciences; • Concepts (e.g. ontology, epistemology and methodology) and how these form research questions and data analysis; • Techniques for collecting and analysing qualitative data, e.g. inter- views and focus groups; • Techniques for collecting and analysing quantitative data, e.g. statistics, hypothesis testing, sample design, multiple regression analysis, multiple analysis of variance, factor analysis, cluster analysis.
Title of courses	Research methods in social sciences
Teaching and learning methods	Seminar, exercises
Usabilitiy in other programs	Compulsory elective module according to §7(3) Examination regulations Master IFBC Bridging module according to §10(5) Examination regulations Master AGES
Duration	1 Semester
Frequency of module offer	annually in winter semester

Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Examination P1: Written report (appr. 750 words) Grade weighting P1: 25% Examination P2: Written test (appr. 120min) Grade weighting P2: 75%
Credit points (ECTS)	6 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft
Responsible person	Dr. T. Krikser
Lecturer(s)	Dr. T. Krikser
Media used	various
Recommended literature	Bryman, Alan 2012: Social research methods. 4. ed. Oxford: Oxford Univ. Press. Dillman, Don A.; Smyth, Jolene D.; Christian, Leah Melani 2009: Internet, mail, and mixed-mode surveys. The tailored design method. 3. ed. Hoboken, NJ: Wiley. Field, Andy 2018: Discovering statistics using IBM SPSS statistics. 5th edition. Los Angeles, London, New Delhi, Singapore, Washington DC, Melbourne: SAGE (SAGE edge).

Research methods and data science in the life sciences

Module number / code	I29M
Module name	Research methods and data science in the life sciences
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	Students have an understanding of the methods of quantitative and qualitative data collection in the life sciences and the different sampling techniques and experimental designs. They are able to apply standard data analysis techniques. They understand the usefulness and limitations of selected multivariate approaches for regressions and pattern recognitions in the data science and learn the concepts of different machine learning approaches. They are able to apply the acquired skills in the analysis of their own MSc (and PhD) datasets.
Course types	Lecture 40h, Exercises 20h

Content	*Research methods and standard analyses in the life sciences:* • Introduction to methods of quantitative and qualitative data collection in the life sciences • introduction to sampling techniques and experimental design • Description and exploration of data, visualization using univariate and bivariate plotting and application of standard statistical techniques (regressions and analyses of variance) *Data science in the life sciences:* • Application of multivariate approaches: principal component analysis (PCA) and regression (PCR), cluster analyses, factor analyses • Introduction to machine learning: perceptron, artificial neural networks, regression trees, rule-based models and support vector machine classification and regression
Title of courses	Research methods and data science in the life sciences
Teaching and learning methods	Lecture, exercises
Usabilitiy in other programs	Bridging module according to §9(5) Examination Regulations Master AGES; Method module Compulsory elective module according to §7(3) Examination Regulations Master IFBC
Duration	1 Semester
Frequency of module offer	annually in winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180 hours, of which 60 contact hours
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Oral test (30 min)
Credit points (ECTS)	6 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft
Responsible person	Prof. Dr. B. Ludwig

Lecturer(s)	Prof. Dr. B. Ludwig and staff
Media used	diverse
Recommended literature	Everitt B., Hothorn T. P. 2011: An Introduction to Applied Multivariate Analysis with R. Springer, New York Glaz, B. Yeater, K.M. 2020: Applied Statistics in Agricultural, Biological, and Environmental Sciences. John Wiley & Sons Holmes D., Moody P., Dine D., Trueman L. 2017. Research Methods for the Biosciences. Oxford University Press Touchon J.C. 2021: Applied Statistics With R: A Practical Guide for the Life Sciences. Oxford University Press Wehrens R. 2020: Chemometrics with R, Springer

Applied research project

Module number / code	F22
Module name	Applied research project
Type of module	Compulsory module
Learning outcomes, acquired competencies and qualification goals	Students are enabled to independently plan, document, evaluate and carry out complex projects related to companies and institutions in the food industry, taking into account research and development as well as consumer studies.
Course types	Seminar (2 SWS), Project work (6 SWS)
Content	• Intercultural communication and dialogue • Working with conflicts and resistance • Project management • Advanced methods of social/basic research and development as well as statistics • Marketing research, management research, communication tools and scientific writing
Title of courses	Applied research project
Teaching and learning methods	Lecture units, seminar, project seminar, working with external partners
Usabilitiy in other programs	Compulsory module according to §7(3) Examination regulations Master IFBC
Duration	2 Semester
Frequency of module offer	Summer und winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-

Student workload	540h, of which 120h contact hours
Required course work	S1: Presentations S2: Participation in the seminars Intercultural communication, Project management and Scientific writing
Prerequisites for examination(s)	Course work S2
Module examination(s)	Portfolio exam
Credit points (ECTS)	18 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft and Fulda University of applied science
Responsible person	M.A. H. Keil
Lecturer(s)	One lecturer of the Master program
Media used	-
Recommended literature	Project based materials

Master thesis incl. colloquium

Module number / code	-
Module name	Master thesis incl. colloquium
Type of module	Compulsory module
Learning outcomes, acquired competencies and qualification goals	Students are able to • independently realize a research project on a topic related to inter- national food business and consumer studies with relevance to international research • apply theories, concepts and methods acquired during the study programme, to document the application and reflexion of research methods as well as to generate and discuss own theses and reflect them within the international research context • present and explain the planning and progress of the thesis and the methodological background • present and defend the thesis in the colloquium.
Course types	Thesis work
Content	Topic and contents shall be agreed upon with the supervisors.
Title of courses	Master thesis incl. colloquium
Teaching and learning methods	Independent project, research and data analysis, scientific writing
Usabilitiy in other programs	Comulsory module according to §8 Joint Examination Regulations Master IFBC
Duration	1 Semester

Frequency of module offer	Summer und winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	
Required prerequisites for participation	At the time of application for the Master thesis max. 12 credits can be open according to §8 Examination Regulations Master IFBC
Student workload	900h, of which 90h contact hours
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Examination P1: Written thesis Grade weighting P1: 75% Examination P2: Colloquium (60min) Grade weighting P2: 25%
Credit points (ECTS)	30 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft and Fulda University of applied science
Responsible person	MSc U. Gilles
Lecturer(s)	Two lecturers of the Masterprogram
Media used	-
Recommended literature	Relevant scientific literature based on the topic chosen

Bridging modules

Management and management accounting

Module number / code	E17M
Module name	Management and management accounting
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	Die Studierenden • können zentrale Theorien, Konzepte und verschiedene Praxisbeispiele des Managements/Management Accounting erklären und die damit verbundenen ökologischen, ökonomischen und sozialen Aspekte zuordnen und diskutieren. • können verschiedene theoretische Perspektiven des Managements und des Management Accountings einschließlich der impliziten Annahmen dieser einzelnen Perspektiven und deren Implikationen für die Managementpraxis und -forschung unterscheiden. • wenden konzeptuelle und praktische Kompetenzen und Fähigkeiten an, um die Unternehmenspraxis und Managemententscheidungen zu verstehen und kritisch zu analysieren. • erweitern und nutzen ihre Kenntnisse des Nachhaltigkeitsmanagements und der nachhaltigen Rechnungslegung, um aktuelle Beispiele zu analysieren, zu erklären und Lösungen zu entwickeln. verstehen, warum die traditionelle Rechnungslegung und Rechenschaftspflicht Managern und anderen Unternehmens-Stakeholdern nur bedingt hilft, der Nachfrage nach gesellschaftlicher Verantwortung, Rechenschaftslegung und Transparenz nachzukommen.
Course types	Seminar 60h
Content	The main aim of the module is to acquaint students with the theory and practice of management and management accounting, with a focus on the role of environmental, social and governance issues therein. Further aims of the module include: • To provide students with insights into different theoretical perspectives; an understanding of the implicit assumptions held by each perspective as well as the implications of these perspectives for management practice and research; • To provide students with the conceptual and practical skills necessary to effectively understand and critically analyse management/corporate practice; • To provide students with practical experience in and knowledge about “managing and accounting for sustainability”; • To enable students to understand why traditional accounting and accountability do not serve managers and other corporate stakeholders well in the light of increasing demands for social accountability, transparency and social responsibility.

Title of courses	Management and management accounting
Teaching and learning methods	Seminar
Usabilitiy in other programs	Bridging module according to §7 (3) Examination Regulations Master IFBC Elective module according to §9 (8) Examination Regulations Master AGES; Method module
Duration	1 Semester
Frequency of module offer	annually in winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Examination P1: Oral presentation with written outlet (ca. 15min, ca. 600 words) Grade weighting P1: 40% Examination P2: Written test (90 min) or Oral test (30min) Grade weighting P2: 60%
Credit points (ECTS)	6 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft
Responsible person	Prof. Dr. B. König
Lecturer(s)	Prof. Dr. B. König
Media used	Lecture slides, multimedia, case studies, guest lectures
Recommended literature	A reading list will be provided on the e-learning platform

Principles of organic farming

Module number / code	F17
Module name	Principles of organic farming
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	Students are able to describe • the principles and structures as well as functions of agricultural ecosystems in general • nutrient cycles and their management in agriculture • systems of land use and their ecological impact • nutrient management as based on cropping techniques in organic agriculture • principles of organic pest management • principles of organic animal husbandry
Course types	Seminar 60h
Content	• Various relevant theories of low-input and intensive organic agriculture • Structures and functions of agricultural ecosystems in general • Development, evaluation and comparison of ecological crop management systems on the background of various natural, economic and socio-cultural circumstances • Principles of pest management and fertilisation in organic agricultural systems • Principles of animal husbandry in organic agricultural systems • The biodynamic approach – an integral basis of organic agriculture and differentiation of organic and conventional food quality on the example of milk and effects on human health
Title of courses	Principles of organic farming
Teaching and learning methods	Presentations, discussions and conclusions in form of closing sessions in plenum
Usabilitiy in other programs	Bridging module according to §7(3) Examination Regulations Master IFBC Bridging module according to §9 (5) Examination Regulations Master AGES
Duration	1 Semester
Frequency of module offer	annually in winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours

Required course work	
Prerequisites for examination(s)	
Module examination(s)	Examination P1: Oral presentation (appr. 10min) Grade weighting P1: 40% Examination P2: Written report (appr. 3500 words) Grade weighting P2: 60%
Credit points (ECTS)	6 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft
Responsible person	Prof. Dr. M. Athmann
Lecturer(s)	Prof. Dr. M. Athmann, Prof. Dr. U. Niggli, Dr. D. Kusche
Media used	verschiedene
Recommended literature	Lecture based materials

Food processing

Module number / code	I33
Module name	Food processing
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	Students can: • Describe the basic processes and systems of food processing • Derive quality-relevant steps, raw material and product properties • Discuss the differences between industrial and artisanal production • Classify the production of food in the wider context of sustainable development
Course types	Lecture 45h, seminar 15h
Content	Students gain in-depth knowledge of the production of the most important food product groups and the chemical reactions that take place. Furthermore, a principle knowledge of analytical methods for quality and authenticity testing of these product groups will be provided. Animal foodstuffs: milk and dairy products; eggs and egg products; meat and meat products; fish and fish products. Plant foods: vegetable fats and oils; fruit and fruit products; vegetables and vegetable products; Legumes; cereals and cereal products; sugar, cocoa and chocolate; coffee and tea; Alcoholic beverages: beer, wine and spirits; Flavors and spices
Title of courses	Food processing

Teaching and learning methods	Lecture, seminar
Usabilitiy in other programs	Bridging module according to §7(3) Examination Regulations Master IFBC Compulsory elective module according to §10(7) Examination Regulations Master AGES
Duration	1 Semester
Frequency of module offer	annually in winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	Basic knowledge in chemistry
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Written test (appr. 90min) 100% or Oral examination (appr. 20min) 100%
Credit points (ECTS)	6 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft
Responsible person	Prof. Dr. F. Weber
Lecturer(s)	Prof. Dr. F. Weber
Media used	diverse
Recommended literature	

Compulsory elective modules "Business"

Marketing research

Module number / code	E05M
Module name	Marketing research
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	Students • are able to describe how marketing research relates to the marketing concept • are able to outline the steps in the marketing research process and show how the steps are interrelated • know the factors to consider in defining the marketing problem or opportunity • are able to develop a research design • are able to state the specific advantages of the most important methods of data collection • know the different types of statistical analysis techniques
Course types	Lecture 30h, Seminar 30h
Content	• Tasks and management of marketing research • Methods of data collection • Methods of data analysis • Presentation of market research results for decision support • Methods of development prognoses
Title of courses	Marketing research
Teaching and learning methods	Lecture, Seminar
Usabilitiy in other programs	Compulsory elective module according to §7(3) Examination regulations Master IFBC; Business module Compulsory elective module according to §9(8) Examination regulations Master AGES; Method module
Duration	1 Semester
Frequency of module offer	annually in summer semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	

Prerequisites for examination(s)	
Module examination(s)	Examination P1: Written test (90min) or Oral examination (30min) Grade weighting P1: 60% Examination P2: Oral presentation with outlet (appr. 20min, 2.000 words) Grade weighting P2: 40%
Credit points (ECTS)	6 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft
Responsible person	Prof. Dr. K. Zander
Lecturer(s)	Prof. Dr. K. Zander
Media used	verschiedene
Recommended literature	Aaker, D.A., Kumar, V., Leone, R.P., Day, G.S. 2013: Marketing research. 11th ed., Hoboken: Wiley; Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. 2014: Multivariate data analysis, 7th ed., Harlow: Pearson Education; Malhotra, N.K., Birks, D.F., Wills, P. 2012: Marketing research, 4th ed., Harlow: Pearson Education.

Strategic management

Module number / code	E31
Module name	Strategic management
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	The aims of the module are: • To deepen the students' understanding of the unique aspects of food and agricultural production systems, processing, distribution, wholesaling and markets and their relationships with strategy and sustainability; • To familiarize students with the development of strategies within a changing environment , to meet stakeholders' interests; • To provide students with the knowledge and process competencies to make strategic business and sustainability decisions and reflect them; • To raise critical awareness of strategic decision-making in agrifood organisations.
Course types	Seminar 60h
Content	• The contents and framework of strategic management; • An introduction to organisational & business strategies; • The importance of values and purpose in defining organisation's strategic goals; • The management of stakeholder relations; • Performance management and strategic control; • The management of strategic change; • Strategy-as-practice.

	• Sustainability strategy and practise • Strategy and sustainability as process
Title of courses	Strategic management
Teaching and learning methods	Seminar
Usabilitiy in other programs	Compulsory elective module according to §7(3) Examination regulatins Master IFBC; Business module
Duration	1 Semester, annually
Frequency of module offer	annually in summer semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, within 60h contact time
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Examination P1: Oral presentation with outline (appr. 15min, 600 words) Grade weighting P1: 40% Examination P2: Written exam (90min) Grade weighting P2: 60%
Credit points (ECTS)	6 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft
Responsible person	Prof. Dr. B. König
Lecturer(s)	Prof. Dr. B. König and staff
Media used	Lecture slides, multimedia, case studies, guest lectures
Recommended literature	A reading list will be provided on the e-learning platform

Sustainable food systems and management

Module number / code	E47
Module name	Sustainable food systems and management
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	The aims of the module are:

	• To deepen the students' understanding of the role of food business and other actors in the food system in society and the social responsibility and accountability issues that arise in a global business setting; • To familiarize students with the concepts and frameworks used in responsible and sustainable food business, to meet stakeholders' interests; • To provide students with the knowledge and confidence to critically reflect corporate practice and companies' use of different sustainability concepts and claims; • To raise awareness for different perspectives which provide contrasting and competing ways of making sense of sustainable food systems and responsible food business practices therein.
Course types	Seminar 60h
Content	• Food systems and societies; • Intercultural aspects and outcomes of food systems; • Organisation types and sustainability in food systems; • Corporate social responsibility, governance and accountability; • International developments in and governance of environmental and social reporting; • The management of global value chains in the agri-food sector; • Social and environmental responsibility in supply chain management; • The management and reporting of environmental and social information in different complex organisational and interorganisational settings); • The contrasting perspectives in social responsibility and accountability of business across borders.
Title of courses	Sustainable food systems and management
Teaching and learning methods	Lecture, seminar, group work
Usabilitiy in other programs	Compulsory elective module according to §7(3) Examination regulations Master IFBC; Business module Compulsory elective module according to §9(8) Examination regulations Master AGES
Duration	1 Semester
Frequency of module offer	annually in winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-

Student workload	180h, of which 60 contact hours
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Examination P1: Oral presentation with outlet (appr. 15min, 600 words) Grade weighting P1: 40% Examination P2: Written report (appr. 6000 words) or Oral test (appr. 30min) Grade weighting P2: 60%
Credit points (ECTS)	6 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft
Responsible person	Prof. Dr. B. König
Lecturer(s)	Prof. Dr. B. König, Dr. E. Kissi
Media used	Lecture slides, multimedia, case studies, guest lectures
Recommended literature	A reading list will be provided on the e-learning platform

Innovation management in the food sector

Module number / code	F44
Module name	Innovation management in the food sector
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	Students can • differentiate, select and evaluate the aspects, types and models of innovation, • understand and explain the management and innovation process, • assess innovation types and potentials in companies in the food industry and analyse the factors that affect them and • apply and differentiate between (innovation) management tools and techniques in real-life situations in the food industry. • Assess innovations in the context of sustainable development
Course types	Seminar (4 SWS)
Content	• Definitions, concept and types of innovation management • Innovation potential and factors affecting it • Models of innovation • Management and innovation process • Benefits and barriers towards innovation

	• (Innovation) Management tools and techniques, incl. idea generation and creativity techniques
Title of courses	Innovation management in the food sector
Teaching and learning methods	Seminar, learning by explaining and presenting, group work and exercises, case-studies, self-organised learning
Usabilitiy in other programs	Compulsory elective module according to §7(3) Examination regulations Master IFBC; Business module
Duration	1 Semester
Frequency of module offer	annually in summer semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	S1: Oral presentation
Prerequisites for examination(s)	Course work S1
Module examination(s)	Written report or Portfolio exam
Credit points (ECTS)	6 cp
Teaching unit	Fulda University of applied science
Responsible person	Prof. Dr. L.Chalupová
Lecturer(s)	Prof. Dr. L. Chalupová, L. Page
Media used	E-learning platform
Recommended literature	Lecture based materials

Digital transformation in the food sector

Module number / code	F50
Module name	Digital transformation in the food sector
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	The students • have an overview of information systems in the food industry, • are aware of the influence of new information systems and digital technologies in the context of the food industry and the resulting changes,

	• are able to reflect on and analyse digital developments and communication in the food industry and deal with current developments in this area, • are able to evaluate the potentials and problems of digitalization in the food industry and are able to develop solutions to problems, • are able to formulate their own ideas for digitalization in the food industry and evaluate them analytically.
Course types	Seminar (4 SWS)
Content	• Exemplary information systems and digital technologies in the food sector • Problems and risks specific to the food system • Current case studies related to the digital transformation of the food system • Interdisciplinary perspectives on digital technology and digital transformation • Research on critical aspects of digital transformation in the food system
Title of courses	Digital transformation in the food sector
Teaching and learning methods	Instructions, seminar, exercises guest lecturer
Usabilitiy in other programs	Compulsory elective module according to §7(3) Joint Examination Regulations Master IFBC; Business module
Duration	1 Semester
Frequency of module offer	annually in winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, of which 60 contact hours
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Written report
Credit points (ECTS)	6 cp
Teaching unit	Fulda University of applied science
Responsible person	Prof. Dr. J. Allgaier
Lecturer(s)	Prof. Dr. J. Allgaier
Media used	E-learning platform
Recommended literature	Lecture based materials

Compulsory elective modules "Food"

Quality management and certification of organic products

Module number / code	F46
Module name	Quality management and certification of organic products
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	The students • have knowledge of the legal regulations and principles of organic agriculture and food production. • they can develop and apply methods of quality management, certification and marketing.
Course types	Seminar 50, excursion 10h
Content	Experts dealing with QM in food companies as well as experts being engaged in the certification/accreditation process for organic foods share their knowledge with students, presenting principles regarding legal requirements for QM and certification and practical examples. To apply the gained knowledge students (in groups) work on case studies.
Title of courses	Quality management and certification of organic products
Teaching and learning methods	Seminar, excursion
Usabilitiy in other programs	Compulsory elective module according to 7(3) Examination regulations Master IFBC; Food module
Duration	1 Semester, annually
Frequency of module offer	annually in winter semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	-
Student workload	180h, within 60h contact time
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Examination P1: Written exam (appr. 90min) Grade weighting P1: 40% Examination P2: Written report (appr. 8.000 words) Grade weighting P2: 60%
Credit points (ECTS)	6 cp

Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft
Responsible person	Prof. Dr. K. Zander
Lecturer(s)	Prof. Dr. K. Zander, Dipl. Ing. U. Dietrich, Dipl. Ing M. Buley
Media used	verschiedene
Recommended literature	Will be presented e-learning platform

Assessing food quality

Module number / code	F55
Module name	Assessing food quality
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	Students can: • Reproduce and categorize the essential aspects of food quality • Derive the quality-determining properties of a product • Draw up a test plan for the analytical or sensory assessment of food quality • Carry out selected analytical and sensory tests themselves
Course types	Seminar 30h, Laboratory work 30h
Content	General definitions of food quality, special emphasize on organic food quality, Sensory evaluation techniques in quality assessment, general methods of food analysis Practical Part: Examples of Sensory and analytical Quality assessment
Title of courses	Assessing food quality
Teaching and learning methods	Seminars include research-based learning elements such as case studies and research activities involving students giving short presentations, Practical Lab course including supervised working on analytical devices and running sensory sessions
Usabilitiy in other programs	Compulsory elective module according to §7(3) Examination regulations Master IFBC; Food module
Duration	1 Semester
Frequency of module offer	annually in summer semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	Module Food processing
Required prerequisites for participation	-

Student workload	180h, of which 60 contact hours
Required course work	S1: Active participation in the lab course
Prerequisites for examination(s)	Course work S1
Module examination(s)	Written exam (90min) or Oral exam (20min) depending on number of participants
Credit points (ECTS)	6 cp
Teaching unit	Landwirtschaft,Int. Agrarentw.u.Ök.Landwirtschaft
Responsible person	Prof. Dr. F. Weber
Lecturer(s)	Prof. Dr. F. Weber
Media used	verschiedene
Recommended literature	

Innovative product development

Module number / code	F64
Module name	Innovative product development
Type of module	Elective module
Learning outcomes, acquired competencies and qualification goals	The students • can analyse problems in the phases of product development, • assess the needs of different consumer groups and implement these in product development, • can apply innovative methods for the development of sustainable products, • analyse the sustainability of product development using selected indicators, • take relevant legislation into account during the product development process, • develop and carry out sensory tests as part of product development, • apply software for sensory and consumer research, • present a product concept and develop optimization proposals, • work in project groups during the product development process, • reflect on their own learning process.
Course types	E-learning (2 SWS), Lab work (2 SWS)
Content	• Special aspects of innovation and product development process • Special aspects of sustainable product development • Special aspects of sensory and consumer studies • Training on sensory and consumer research software

	• Laboratory work in teams
Title of courses	Innovative product development
Teaching and learning methods	Enriched-virtual: e-learning, final laboratory work
Usabilitiy in other programs	Compulsory elective module according to §7(3) Examination regulations Master IFBC; Food module
Duration	1 Semester
Frequency of module offer	annually in summer semester
Teaching language	Englisch
Recommended (knowledge) prerequisites	-
Required prerequisites for participation	Module Food product development
Student workload	180h, of which 60 contact hours
Required course work	
Prerequisites for examination(s)	
Module examination(s)	Oral exam or Oral presentation
Credit points (ECTS)	6 cp
Teaching unit	Fulda University of applied science
Responsible person	M. H.Edu L. Page
Lecturer(s)	M. H.Edu L. Page
Media used	E-learning platform
Recommended literature	Fuller, G.W. 2011: New Food Product Development - From Concept to Marketplace. CRC Press. Boca Raton, London, New York; Moskowitz, H.; Becklay, J.; Resurrection, A.V.A. 2006: Sensory and Consumer Research in Food Product Design and Development. Blackwell Pub. Ames, Iowa.