

German Jordanian University

Business School Department of Management Sciences Bachelor of Science in Business Intelligence and Data Analytics

Study Plan 2022

I. Program Vision

To provide learners with the theoretical understanding and applied skills they need to transform data into actionable information and knowledge that can be employed in business and public sectors.

II. Program Mission

An interdisciplinary Program integrating management and technology into business applications employing business digital tools and strategies to analyze business data and build business models to provide public sector, business managers and stakeholders in the marketplace with the required abilities and skills to improve business operations and performance, assist in decision making, make future predictions and forecasts, adapt strategies to align with prevailing trends of technology uses in business within ethical framework.

III. Program Objectives

Business Intelligence and Data Analytics (BIDA) program emphasizes the application of management technologies and tools in the short term, and the ability to discover, acquire, and adapt new knowledge and skills in the long term, such that our graduates are capable of:

- a. Enable easy access to data and models to provide business managers with the ability to conduct analysis.
- b. Improve business operations and performance, make future predictions, and adapt strategies to fit observed trends
- c. Identify the competitive opportunities and features of organizations that use intelligent business systems.
- d. Understand and apply the strategic and operational benefits of business models and technology applications.
- e. Enable graduates to understand the impact of IT technologies in a business that enables them to pursue rewarding professional careers, graduate studies, and lifelong learning.

IV. Learning Outcomes

Business Intelligence and Data Analytics graduates bachelor's students with an understanding of fundamental Business Intelligence and Data Analytics concepts, methodologies, and technologies as demonstrated by:

- a. Recognize the basic concepts related to BIDA.
- b. Build and reinforce BI capabilities through the alignment of technological solutions with suitable applications for business.
- c. Build practical skills to use data analytics technologies in business.
- d. Enable learners to recognize, understand and apply the language, theory and models of the field of business analytics.
- e. Foster an ability to critically analyze, synthesize and solve complex unstructured business problems
- f. Encourage an aptitude for business improvement, innovation and entrepreneurial action
- g. Create viable solutions to decision making problems
- h. Demonstrate knowledge and systematic understanding of essential facts, concepts, principles and theories relating to business intelligence
- i. Demonstrate knowledge and critical understanding of the impact of new technologies on business processes, working practices, commerce and society
- j. Synthesize and apply learned knowledge and developed understanding in the analysis and modeling of business problems (for the purposes of for example, comprehension, communication, prediction and the understanding of trade-offs).
- k. Demonstrate the ability to deploy effectively the tools used for the design of business systems solutions in a commercial and professional context.
- 1. Demonstrate ability to conduct research into relevant business Intelligence and management issues through research design, data collection, analysis, synthesis and reporting.

Course Codes

Except for the existing courses offered by the SMLS or other Schools, the course code for the new Program's required courses, NOT offered by GJU, is structured as follows (from left to right): Prefix:

BIDA = Business Intelligence and Data Analytics.

- First digit: 1, 2, 3 or 4 for course level year.
- Second digit: knowledge field as follows:
 - 1 = Fundamentals of Business Intelligence.
 - 2 = Data Management and Analytics.
 - 3 = Technologies of Data Analytics.
 - 4 = Business fundamentals and modeling
 - 5 = Applications of Business Intelligence.
 - 6 = Other topics in BIDA.
 - 7= Supporting fields.
 - 8= General Electives
 - 9 = Projects, thesis and field training
- The 3rd and 4th digits: the serial of the course within the Knowledge field to ensure unique codes.

V. Framework for B.Sc. Degree (Credit Hours)

Classification		Credit Hours	5	ECTS				
Classification	Compulsory	Elective	Total	Compulsory	Elective	Total		
University Requirements	21	6	27	31	6	37		
School Requirements	24	00	24	37	0	37		
Program Requirements	82	12	94	148	18	166		
Total	127	18	145	216	24	240		

1. University Requirements: (27 Credit Hours)

1.1. Prerequisite courses (6 Credit Hours)

Course ID	ourse ID Course Name		ECTS	Contact Hours		Prerequisites / Co-
Course ID	Course Name	Hours	urs	Lect	Lab	requisites
ARB099	Arabic 99 ^a	0	0	3	-	-
ENGL099	English II ^a	0	0	3	-	
	Total	0	0	6	0	

1.2. Compulsory: (21 credit hours)

Course ID	Course Name		Credit	ECTS	Contact Hours		Prerequisites / Co-	
Course ID	Course Name		Hours	ECIS	Lect	Lab	requisites	
ARB100	Arabic		3	3	3	1	ARB099	
ENGL101	English III		1	3	3	-	ENGL099	
ENGL102	English IV		1	3	3	1	ENGL101	
ENGL201	English V		2	3	3	1	ENGL102	
ENGL202	English VI		2	3	3	-	ENGL201	
GERL101B1	German I B1 track		3	6	9	-	-	
GERL102B1	German II B1 track		3	6	9	-	GERL101B1	
GERL102B2	German II B2 track		3	6	9	-	GERL101B1	
MILS100	Military Science		3	2	3	ı	-	
NE101	National Education		3	2	3	-	-	
NEE101	National Education (English)							
		Total	21	31	39	0		

1.3. Elective: (6 Credit Hours) (two courses out of the following)

Course ID	Course Name	Credit	ECTS	Contact Hours		Prerequisites / Co-	
Course ID	Course Name	Hours	ECIS	Lect	Lab	requisites	
BE302	Business Entrepreneurship	3	3	3	-	ENGL101	
DES101	Arts' Appreciation	3	3	3	-	ENGL101, ARB099	
EI101	Leadership and Emotional Intelligence	3	3	3	-	ENGL101	
IC101	Intercultural Communications	3	3	3	-	ENGL101	
PE101	Sports and Health	3	3	3	-	ARB099	
SE301	Social Entrepreneurship and	3	3	3	-	ENGL101	
	Enterprises						
SFTS101	Soft Skills	3	3	3	-	ENGL101	
TW303	Technical and Workplace Writing	3	3	3	3	ENGL102	
	Total	6	6	6	3		

^a Not required for students who pass placement test

2. School Requirements: (24 Credit Hours)

Course ID	Course Name	Credit	ECTS	Conta	ct Hours	Prerequisites / Co-
Course ID		Hours	ECIS	Lect	Lab/Prac	requisites
GERL201B1	German III B1 track	3	4	6	-	GERL102B1
GERL201B2	German III B2 track	3	4	6	-	GERL102B2
GERL202B1	German IV B1 track	3	6	9	-	GERL201B1
GERL202B2	German IV B2 track	3	6	9	-	GERL201B2
ACC101	Principles of Accounting I	3	4.5	3	-	
ACC251	Fundamentals of Finance	3	4.5	3	-	ACC101
LOGS101	Introduction to Logistics	3	4.5	3	-	
MGT101	Principles of Management	3	4.5	3	-	
MGT122	Business Statistics	3	4.5	3	-	
MGT213	Research Methods for Business	3	4.5	2	2	MGT122
,	Total	24	37	32	2	

3. Program Requirements (94 credit hours)

3.1. Program Requirements (Compulsory): (82 Credit Hours)

6	N	Credit	FOTO	Conta	ct Hours	Prerequisites / Co-
Course ID	Course Name	Hours	ECTS	Lect	Lab/Prac	requisites
GERL301B1	German V B1 track	3	6	9	-	GERL202B1
GERL301B2	German V B2 track	3	6	9		GERL202B2
GERL302REG	German VI Regular	3	6	6	-	GERL301B1
GERL302INT	German VI Intensive	3	6	9		GERL301B1
GERL302B2	German VI B2 track	3	6	6		GERL301B2
MGT121	Mathematics for Business	3	4.5	3	-	
MGT126	Fundamentals of Microeconomics	3	4.5	3	-	
BIDA110	Business Intelligence (BI)	3	4.5	3	-	
CS115	Computing Fundamentals	3	4.5	2	-	
CS1150	Computing Fundamentals Lab	1	1.5	-	3	Co-requisite CS115
BIDA131	Fundamentals of Business Databases	3	4.5	2	2	
BIDA140	Introduction to E-business	3	4.5	3	-	MGT 101
BIDA230	Cyber Security Applications	3	4.5	2	2	BIDA140
BIDA270	Communications Skills in Business	3	4.5	3	-	MGT101
MGT313	Knowledge Management	3	4.5	3	-	BIDA140
BIDA350	E-Commerce Management	3	4.5	3	-	BIDA140
MGT333	Decision Support Systems	3	4.5	2	2	BIDA140
BIDA352	Customer Relationship Policies Management	3	4.5	2	2	BIDA110, BIDA140
BIDA311	Data Mining	3	4.5	2	2	BIDA110, BIDA131
BIDA330	Data Analysis and Presentation	3	4.5	2	2	BIDA140, MGT122
BIDA331	Spreadsheets Management and Design for BI	3	4.5	2	2	BIDA140
BIDA320	Big Data and Data Warehousing	3	4.5	2	2	BIDA131
BIDA351	E-Supply Chain Management	3	4.5	2	2	BIDA140, LOGS101
BIDA391	Field Training ²	0	6	0	160 ⁽²⁾	Dept. Approval
BIDA410	Artificial Intelligence and Machine Learning	3	4.5	2	2	BIDA140
BIDA420	Business Data and Analytics	3		2	2	CS115

	Management		4.5			
BIDA450	Business strategies and ERP	3	4.5	2	2	BIDA140
BIDA490	Bachelor's Thesis	3	8.5	0	8	MGT213, Dept. Approval
BIDA492	International Internship ³	12	30	0	800(3)	BIDA391, Dept. Approval
		82	148	62	35 ⁽⁴⁾	

¹Students may be required to set for a placement test to assess their understanding level in IT and Math related topics thereby determining their needs for any pre-requisite courses to ensure their abilities in pursing the Program required courses with no significant difficulties.

3.2. Program Requirements (Electives^b): (12 Credit Hours)

Course ID	Course Norse	Credit	ECTS	Conta	ct Hours	Prerequisites / Co-
Course ID	Course Name	Hours	ECIS	Lect	Lab/Prac	requisites
MGT501A	Business Module in Germany I (A)	1	2	1	0	BIDA492
MGT501B	Business Module in Germany I (B)	2	3	2	0	BIDA492
MGT501	Business Module in Germany I	3	4.5	3	0	BIDA492
MGT502	Business Module in Germany II	3	4.5	3	0	BIDA492
MGT503	Business Module in Germany III	3	4.5	3	0	BIDA492
MGT504	Business Module in Germany IV	3	4.5	3	0	BIDA492
BIDA598A	Special Topics in BIDA	1	2	1	0	BIDA492
BIDA598B	Special Topics in BIDA	2	3	2	0	BIDA492
BIDA598C	Special Topics in BIDA	3	4.5	3	0	BIDA492
MGT598A	Special Topics in Management	1	2	1	0	BIDA492
MGT598B	Special Topics in Management	2	3	2	0	BIDA492
MGT598C	Special Topics in Management	3	45	3	0	BIDA492
ACC598C	Special Topics in accounting	3	4.5	3	0	BIDA492
LOGS598C	Special Topics in Logistics	3	4.5	3	0	BIDA492
ACC343	International Taxation	3	4.5	3	0	BIDA492
ACC352	International Corporate Finance	3	4.5	3	0	BIDA492
ACC435	Accounting Ethics and Corporate Governance	3	4.5	3	0	BIDA492
ACC455	Islamic Finance and Accounting	3	4.5	3	0	BIDA492
LOGS213	Operations Management	3	4.5	3	0	BIDA492
LOGS214	Import-Export Management	3	4.5	3	0	BIDA492
LOGS215	Transportation and Distribution Management	3	4.5	3	0	BIDA492
LOGS223	Procurement Management	3	4.5	3	0	BIDA492
LOGS315	Inventory Management	3	4.5	3	0	BIDA492
LOGS316	Warehouse Management	3	4.5	3	0	BIDA492
LOGS323	Supplier-Customer Relationships Management	3	4.5	3	0	BIDA492
LOGS324	Logistics Network Design	3	4.5	3	0	BIDA492
LOGS341	Green and Reverse Logistics	3	4.5	3	0	BIDA492
	•				•	6

² Students must complete 160 hours of field training in approved industries in Jordan by the end of their third academic year and before leaving to Germany.

³ Students must complete 800 hours internship in Germany

⁴ Weekly Contact practical/Lab hours except for BIDA391 and BIDA492 Hours

LOGS417	Retail Logistics	3	4.5	3	0	BIDA492
LOGS446	Humanitarian Logistics	3	4.5	3	0	BIDA492
LOGS472	Contemporary Issues in Logistics	3	4.5	3	0	BIDA492
MGT316	Business Ethics	3	4.5	3	0	BIDA492
MGT493	Leadership	3	4.5	3	0	BIDA492
MGT594	Entrepreneurship	3	4.5	3	0	BIDA492
	Total	12	18	12	0	

^b BIDA492 International Internship is a prerequisite for all elective courses

VI. Study Plan^c Guide for the bachelor's degree in Business **Intelligence and Data Analytics**

^c The following study plan guide assumes having passed all placement tests

	First Year							
First Semester								
Course ID Course Name Cr Hr ECTS Prerequisites Co-requisi								
ARB100	Arabic	3	3	ARB99	-			
ENGL101	English III	1	3	ENGL99	-			
GERL101B1 *	German I (B1 track)	3	6	-	-			
MGT101	Principles of Management	3	4.5	-	-			
LOGS101	Introduction toLogistics	3	4.5	-	-			
BIDA110	Business Intelligence (BI)	3	4.5	-	-			
MGT122	Business Statistics	3	4.5	-	-			
	Total	19	30					

	First Year								
	Second Semester								
Course ID	rse ID Course Name Cr Hr ECTS Prerequisites								
ENGL102	English IV	1	3	ENGL101	-				
GERL102B1	German II B1 track		6	GERL101B1					
GERL102B2	German II B2 track	3		GERL101B1	-				
MGT213	Research Methods for Business	3	4.5	MGT122	-				
BIDA140	Introduction to E-business	3	4.5	MGT101	-				
MGT126	Fundamentals of Microeconomics	3	4.5	-	-				
CS115	Computing Fundamentals	3	4.5	-	-				
CS1150	Computing Fundamentals Lab	1	1.5	-	CS115				
SFTS 101	Soft Skills	3	3	-	ENGL101				

Total 20 31.5

	Second Year							
First Semester								
Course ID	ourse ID Course Name Cr Hr ECTS Prerequisites (
ENGL201	English V	2	3	ENGL102	-			
GERL201B1	German III B1 track			GERL102B1				
GERL201B2	German III B2 track	3	4	GERL102B2	-			
ACC101	Principles of Accounting I	3	4.5	-	-			
BIDA131	Fundamentals of Business Databases	3	4.5	-	-			
MGT121	Mathematics for Business	3	4.5	-	-			
BIDA230	Cyber Security Applications	3	4.5	BIDA140	-			
BIDA270	Communications Skills in Business	3	4.5	MGT101	-			
	Total 20 29.5							

	Second Year							
Second Semester								
Course ID	Course Name	Cr Hr	ECTS	Prerequisites	Co-requisite			
GERL202B1	German IV B1 track	3	6	GERL201B1				
GERL202B2	German IV B2 track		GERL201B2		-			
IC101	Intercultural Communications	3	3	ENGL101	-			
BIDA352	Customer Relationship Policies	3	4.5	MGT 130,				
DIDASSZ	Management			BIDA140	-			
BIDA311	Data Mining	3	4.5	BIDA110, BIDA131	-			
ACC251	Fundamentals of Finance	3	4.5	ACC101	-			
BIDA330	Data Analysis and Presentation	3	4.5	BIDA140, MGT122	-			
NE101	National Education	3	2	-	-			
	Total 21 29							

	Second Year							
	Summer Semester							
Course ID	Course Name		Cr Hr	ECTS	Prerequisites	Co-requisite		
BIDA391	Field Training*		0	6	Dept. Approval			
	•	Total	0	6				

	Third Year							
First Semester								
Course ID	Course Name	Cr Hr	ECTS	Prerequisites	Co-requisite			
GERL301B1	German V B1 track			GERL202B1				
GERL301B2	German V B2 track	3	6	GERL202B2	_			
BIDA350	E-Commerce Management	3	4.5	BIDA140	-			
MGT313	Knowledge Management	3	4.5	BIDA140	-			
MILS100	Military Sciences	3	2	-	-			
MGT333	Decision Support Systems	3	4.5	BIDA140	-			
DID A 224	Spreadsheets Management and	3	4.5	BIDA140				
BIDA331	Design for BI				-			
ENGL202	English VI	2	3	ENGL201	-			
Total 20 29								

	Third Year							
Second Semester								
Course ID	Course ID Course Name Cr Hr ECTS Prerequisites Co-requisit							
GERL302REG	German VI Regular			GERL301B1				
GERL302INT	German VI Intensive	3	6	GERL301B1	-			
GERL302B2	German VI B2 track			GERL301B2				
BIDA320	Big Data and Data Warehousing	3	4.5	BIDA131	-			
BIDA351	E-Supply Chain Management	3	4.5	BIDA140, LOGS101	-			
BIDA410	Artificial Intelligence and Machine Learning	3	4.5	BIDA140	-			
BIDA420	Business Data and Analytics Management	3	4.5	CS115	-			
BIDA450	Business strategies and ERP	3	4.5	BIDA140	-			
Total 18 28.5								

German year prerequisites are:

- 1. A minimum GPA of 61.0%
- 2. Successful completion of 90 credit hours excluding all German language courses
- 3. Passing GERL302 German VI and B1 German language test (all 4 language skills) conducted by Goethe Institute or another approved provider
- 4. ENGL201 English V, and Arabic 99
- 5. Passing four out of the five following courses:
 - BIDA270, Communications Skills in Business
 - BIDA330, Data Analysis and Presentation
 - BIDA331, Spreadsheets Management and Design for BI
 - BIDA320, Big Data and Data Warehousing
 - BIDA420, Business Data and Analytics Management

	Fourth Year						
	First Semester						
Course ID	Course Name	Cr Hr	ECTS	Prerequisites	Co-requisite		
MGT501	Business Course in Germany I	3	4.5	BIDA492, Dept. Approval			
MGT502	Business Course in Germany II	3	4.5	BIDA492, Dept. Approval			
MGT503	Business Course in Germany III	3	4.5	BIDA492, Dept. Approval			
MGT504	Business Course in Germany IV	3	4.5	BIDA492, Dept. Approval			
BIDA490	Bachelor's Thesis	3	8.5	MGT213, Dept. Approval			
	Total 15 26.5						

Total	15	26.5

	Fourth Year						
	Second Semester						
Course ID	Course Name	Cr Hr	ECTS	Prerequisites	Co-requisite		
BIDA492	International Internship ^d	12	30	BIDA391, Dept.			
				Approval			
	Total	12	30				

^dCourses attended and/or passed during International Internship are not transferable

VII. Compulsory Courses Offered by Management Sciences Department

MGT101: Principles of Management

3 Cr Hr (3,0) ECTS (4.5)

This course is envisioned to give students a general overview of the subject of management/business administration and provide them with the knowledge that will help them to understand the basic concepts and theories of Management. This course provides students with an introduction to the various philosophies, roles, and functions of management. In addition, it will cover on going changes in business that have a direct effect on the role of management. Ultimately, this course is intended to expose students to the theories, approaches and principles that are important for successfully managing organizations and people, along with the basic functions of management, namely, Planning, Organizing, Leading, and controlling. Practical examples, field trips and case studies are among the techniques used in delivering this course

Prerequisites:

MGT121: Mathematics for Business

3 Cr Hr (3,0) ECTS (4.5)

The aim of this course is to provide students with fundamentals of mathematics as a tool necessary for analyzing business situations. This course covers basic algebra and arithmetic (algebraic expressions and their simplification, linear, quadratic, irrational equations, inequalities, simultaneous equations). In addition, this course enables students to move to a variety of other subjects as Statistics, Micro and Macro Economics, Financial Accounting courses smoothly.

Prerequisites:

MGT122: Business Statistics

3 Cr Hr (3,0) ECTS (4.5)

This is a course in the basic statistical concepts and methods common in business and economics applications. The course introduces the students to statistical methods of collection, analysis, and presentation of quantitative data. Emphasis will be on the use of both descriptive and inferential statistical techniques within the workplace. Topics covered include descriptive statistics, probability, discrete and continuous distributions, confidence intervals, hypothesis testing, regressions, and sampling. Acquired knowledge should help students to deal with applications from all functional areas of business.

Prerequisites:

BIDA110: Business Intelligence (BI)

3 Cr Hr (3,0) ECTS (4.5)

This course is concerned with the theory and use of analytics skills to the area of business intelligence (BI). Focus is placed on the components of BI project lifecycle such as project planning, BI tool selection, data modelling. The course includes an applied aspect that enables the student to understand and deduce the nature of the relationship between artificial intelligence and business intelligence and activate it to serve business solutions. This course is designed for business students to learn BI practices and analysis without a detailed focus on statistical analysis and computer programming

Prerequisites:

CS115: Computing Fundamentals

3 Cr Hr (3,0) ECTS (4.5)

This course aims to equip business students with the basic information technology (IT) skills and concepts, electronic commerce, application software, system software, database concepts, database management systems, basics of the structured query language (SQL), and theories of business intelligence programming. Furthermore, students will be exposed to selected and appropriate computer languages that illustrate the basic principles of programming structure to serve specific purposes in an integrated business intelligence system.

Prerequisites:

CS1150: Computing Fundamentals Lab

1 Cr Hr (0,3) ECTS (1.5)

The students will have a practical Lab session every week to offer hands-on experience on the topics that are covered in CS115. Also, on the selected computer languages that illustrate the basic principles of programming structure to serve specific purposes in an integrated business intelligence system.

Co-requisite: CS115

BIDA131: Fundamentals of Business Databases

3 Cr Hr (2,2) ECTS (4.5)

This is a foundational course aims to introduce **business student** to the concepts, techniques, and technologies relevant for creating and managing business databases used in management information systems, which are used to preserve and manage input data associated with each other in relationships in tables consisting of records and fields. Through this course, students will be exposed to the fundamental knowledge of business databases, which are foundational for many advanced courses. Students will be given tasks and assignments to help them acquire the ability to create and manage business databases. In particular, topics include an introduction to techniques and technologies for the storage and management of data, fundamentals of relational modeling and SQL, object-oriented modeling, the database development lifecycle and the role of the Database Administrator (DBA). The course includes a substantial practical component using a suitable Database Management System (DBMS).

Prerequisites:

BIDA140: Introduction to E-business

3 Cr Hr (3,0)

ECTS (4.5)

This course introduces the fundamentals and infrastructure of e-Business to familiarize students with related new technology development. It also discusses the value of IT and information systems (IS) Systems to organizations, the basic types of IS and how they are really used, and the major management trends that affect IT deployment and management. It further discusses how e-Business differs from traditional business in terms of business processes and activities, and how we can set business strategies with e-Business. How to implement e-Business in the current business environment. It also covers ethical and social issues in IS. This course is designed for business students to learn IS and e-business technologies, practices and analysis, in a management perspective. i.e. without focus on technical IT details.

Prerequisites: MGT101

MGT213: Research Methods for Business

3 Cr Hr (2,2)

ECTS (4.5)

The primary purpose of this course is to provide a comprehensive introduction of research and to prepare students to critically read research. The course is introductory in the sense that the emphasis is on exposure to a variety of research methods and methodologies, rather than developing expertise in any one particular method. Besides, it is designed to acquaint students with a range of research methods available and the criteria for choosing among them. More specifically, Research Methodology educates students about types of scientific quantitative and qualitative methods and its applications to research process in business discipline

prerequisite:

BIDA230: Cyber Security Applications

3 Cr Hr (2,2)

ECTS (4.5)

This course is designed for business students with no security experience or background, covering basic terminology and concepts. This course introduces students to cryptography, security management, wireless networking, and organizational policy. Topics include an overview of information security frameworks; network infrastructure security; security and cryptography; information security policy; and defense in depth. This course includes a substantial practical component

prerequisite: BIDA140

BIDA270: Communications Skills in Business

3Cr Hr (3,0) ECTS (4.5

Application of business communication principles through creation of effective business documents and oral presentations. Includes study and application of team communication and use of technology to facilitate the communication process. Students will gain knowledge of various essential concepts such as communication barriers, case study, analysis and practice in writing a variety of messages used to communicate in business and industry

prerequisite: MGT101

MGT313: Knowledge Management

3 Cr Hr (3,0) ECTS (4.5)

The Knowledge Management (KM) course introduces basic perspectives, concepts and frameworks on knowledge creation, capture, store, sharing, transfer and internalization in modern organization. The main aim of the course is to enable students to acquire a critical understanding of knowledge as a resource and driver of organization inimitable strategic capabilities leading to competitive advantage and economic growth. This course addresses different aspect of KM: knowledge taxonomies, intellectual capital & assets evaluation, knowledge economy, KM Tools, KM Systems, knowledge driven value creation, cross-cultural issues in KM, organizational learning and learning organization. In discussing these issues, the students acquire deeper understanding of KM; develop their analytical skills for diagnostic of organization intellectual ability as well as managerial skills for knowledge-based strategy implementation

prerequisite: BIDA140

BIDA350: E-Commerce Management

3 Cr Hr (3,0) ECTS (4.5)

To provide the learner with real-world information allowing them to attain a comprehensive level of understanding of the use of information and communication technologies for conducting and supporting business activities in the developing Information Society. Learners will acquire skills which would allow them to better function in the digital business environment and make better use of electronic tools such as the Internet. The course should give a clear understanding of the strategic impacts of use of electronic tools and their effects on the way business and business activities are conducted today.

prerequisite: BIDA140

MGT333: Decision Support System (DSS)

3 Cr Hr (2,2)

ECTS (4.5)

This course provides an overview of current trends in DSS. Understand the need for computerized support of managerial decision making, its frameworks, conceptual foundations and methodologies. Understand how management uses advance computer technologies in DSS. Recognize different types of DSS related methodologies and concepts used in the workplace such as Automated Decision Systems, Expert Systems, Simulation, Business Intelligence (BI), Data Mining, Big Data Analytics, Data Visualization, Visual Analytics, etc. Learn Management support systems and other techniques such as Problem-solving Search Methods, modelling, Business Performance Management (BPM), Performance Measurement System, etc. This course includes a substantial practical component where students are trained to gain skills using a suitable application software, such as MS Excel, as DSS tool.

prerequisite: BIDA140

BIDA352: Customer Relationship Policies Management

3 Cr Hr (2,2)

ECTS (4.5)

This course is designed to provide students with concepts and theories of customer relationship management (CRM) and its application in marketing, sales, and service. Students will understand that effective CRM strategies and policies help companies align business process with customer centric strategies using people, technology, and knowledge. Moreover, students will learn how companies strive to use CRM to optimize the identification, acquisition, growth and retention of desired customers to gain competitive advantage and maximize profit. Emphasis is given on both conceptual knowledge and handson learning using a leading CRM software. Case studies and possibly real business cases will also be given to enhance the understanding of CRM and to provide students with concepts and theories of the applications of BI in customer relationship management (CRM) and how to translate these applications in marketing, sales, and service

prerequisite: BIDA 110, BIDA140

BIDA311: Data Mining 3 Cr Hr (2,2) ECTS (4.5)

This course is designed to help business students study and understand algorithms and computational paradigms that allow computers to find patterns and regularities in databases, perform prediction and forecasting, and generally improve their performance through interaction with data. It is currently regarded as the key element of a more general process called Knowledge Discovery in Database that deals with extracting useful knowledge and patterns from raw data. The knowledge discovery process includes data selection, cleaning, coding, using different statistical and machine learning techniques, and visualization of the generated structures. The course will cover all these issues and will illustrate the whole process by examples. Special emphasis will be given to the Machine Learning methods as they provide the real knowledge discovery tools. Important related technologies, as data warehousing and on-line analytical processing (OLAP) will be also discussed. The students will use recent Data Mining software.

prerequisite: BIDA110, BIDA131

ECTS (4.5)

BIDA330: Data Analysis and Presentation

This course is designed to help business students to understand and apply the statistical tools most commonly used to process, analyze, and visualize data. Students will learn and understand topics such as describing data, statistical inference, 1 and 2 sample tests of means and proportions, simple linear regression, multiple regression, logistic regression, analysis of variance, and regression diagnostics. These topics are explored and applied by students using statistical packages (e.g., SPSS, SmartPLS, etc.), with a

3 Cr Hr (2,2)

regression, multiple regression, logistic regression, analysis of variance, and regression diagnostics. These topics are explored and applied by students using statistical packages (e.g., SPSS, SmartPLS, etc.), with a focus on understanding how to use and interpret output from this software as well as how to visualize results. In each topic area, the methodology, including underlying assumptions and the mechanics of how it all works along with appropriate interpretation of the results, are discussed. Concepts are presented in

context of real-world examples.

Prerequisites: BIDA140, MGT122

BIDA331: Spreadsheets Management and Design for BI

3 Cr Hr (2,2) ECTS (4.5)

This course focuses on designing BI Data Models to display in either an interactive Power BI report or in an interactive Excel dashboard. This advanced Microsoft Excel/fundamental Power BI or equivalent course will take students through a data journey from importing, cleansing and merging large amounts of data to analyzing the data to presenting strategic data in a Power BI or equivalent dashboard. This is a practical course designed to provide flexibility and to empower students to choose how their want to present your business insights to help management make informed decisions.

Prerequisites: BIDA140

BIDA320: Big Data and Data Warehousing

3 Cr Hr (2,2) ECTS (4.5)

The course aims to strengthen business students' skills in data technologies ranging from database and data warehousing to Big Data. Students will be able to study and gain an in-depth understanding of data warehousing which include concepts and analytical foundations as well as data warehousing development. The course introduces also the foundation of Big data management based on Apache Hadoop platform and provides students with a broad introduction to Big Data technologies. This will involve hands-on sessions, designed for data analysts, business intelligence specialists, developers, administrators or anyone who has a desire to learn how to process and manage massive and complex data to infer knowledge from data. Topics on Big Data include Technologies and Techniques such as Hadoop HDFS, MapReduce, Spark, Sqoop, Hive, Pig

Prerequisites: BIDA131

BIDA351: E-Supply Chain Management

3 Cr Hr (2,2) ECTS (4.5)

In this course, students will learn to strategically think about integrated supply-chain, procurement, and service management strategies for organizations that rely, at least partially, on Internet and information technology to transact with suppliers and end consumers. To accomplish this objective, fundamentals from business areas of supply chain management and information management will serve to establish the

course's theoretical underpinnings. Along with this foundation, applied concepts, and practical insights, students will develop the knowledge and necessary skills to plan, organize, operate, and control a variety of processes, resources, services, and relationships in supply chains via the Internet and information technology. Lectures, case-study reports and discussions, analytical investigations constitute the methods through which course content will be delivered.

Prerequisites: BIDA140, LOGS101

BIDA391: Field Training

0 Cr Hr (160)

ECTS (6.0)

Students must complete 160 hours of field training in approved industries in Jordan by the end of their third academic year and before leaving to Germany.

Prerequisites: Dept. Approval

BIDA410: Artificial Intelligence and Machine Learning

3 Cr Hr (2,2)

ECTS (4.5)

This course is designed to help business students to explore Machine Learning (ML) and Artificial Intelligence (AI). Through an algorithmic approach, the students are given a practical understanding of the methods being taught, in particular through making their own implementations of some of the methods. The course covers supervised classification based on e.g., artificial neural networks (deep learning), as well as unsupervised learning (clustering), optimization (evolutionary algorithms and other search methods) and reinforcement learning, in addition to design of experiments and evaluation

Prerequisites: BIDA140

BIDA420: Business Data and Analytics Management

3 Cr Hr (2,2)

ECTS (4.5)

The purpose of this course is to improve business students' analytical skills by covering the techniques and applications of data-driven decision making. Students will be equipped with the basic computing and programming skills necessary to solve business analytic problems. Students will have the ability to apply these skills to real-world business issues

Prerequisites: CS115

BIDA450: Business strategies and ERP

3 Cr Hr (2,2)

ECTS (4.5)

In this course, students will learn to strategically think about Enterprise Resource Planning (ERP) software systems and their role within an organization. It introduces key concepts of integrated information systems and explains why such systems are valuable to businesses. It also shows how organizations use these systems to run their operations more efficiently and effectively. The course will examine typical ERP modules, such as materials management (MM), financials, projects, and human resource management (HRM). In addition to the lecture, students will be guided through several hands-on activities of various business processes in selected software products. The course will also provide a discussion on various business cases in which ERP concepts can be applied. An overview of Business Intelligence (BI) and analytics in the ERP context will also be addressed

Prerequisites: BIDA140

BIDA490: Bachelor's Thesis

3 Cr Hr (0,8)

ECTS (8.5)

The Bachelor's thesis is carried out in the form of a research project within the department. The students put the competencies learned during the program into practice. The Bachelor's thesis is used to assess the student's initiative and their ability to plan, report and present a project. Students work independently on a Bachelor's thesis under the guidance of a supervisor. They are responsible for finding a project and a supervisor.

Prerequisites: MGT213, Dept. Approval

BIDA492: International Internship

12 Cr Hr (0,40)

ECTS (30)

Training at a German/International approved company. The training must cover any topic or multiple areas of the respective field of study. The training must be approved by the Office of Industrial Links (OIL) at GJU and the respective Exchange Coordinator

Prerequisites: BIDA391, Dept. Approval

VIII. Elective Course Offered by Management sciences Department

MGT501(A): Business Module in Germany I (A)

3 Cr Hr (3,0)

2 ECTS

The module is part of the international experience of the students in Germany and reflects the German dimension of the German Jordanian Universities. Specific contents vary upon the specific module selected and upon the host university's module handbook and academic policies. The module aims at equipping the students with intercultural, linguistic, and academic competencies in management and related fields. It further prepares the students to understand and interact in the academic and professional environment in Germany.

Prerequisite: BIDA492: International Internship

MGT501(B): Business Module in Germany I (B)

3 Cr Hr (3,0)

3 ECTS

The module is part of the international experience of the students in Germany and reflects the German dimension of the German Jordanian Universities. Specific contents vary upon the specific module selected and upon the host university's module handbook and academic policies. The module aims at equipping the students with intercultural, linguistic, and academic competencies in management and related fields. It further prepares the students to understand and interact in the academic and professional environment in Germany.

Prerequisite: BIDA492: International Internship

MGT501: Business Module in Germany I

3 Cr Hr (3,0)

4.5 ECTS

The module is part of the international experience of the students in Germany and reflects the German dimension of the German Jordanian Universities. Specific contents vary upon the specific module selected and upon the host university's module handbook and academic policies. The module aims at equipping the students with intercultural, linguistic, and academic competencies in management and related fields. It further prepares the students to understand and interact in the academic and professional environment in Germany.

Prerequisite: BIDA492: International Internship

MGT502: Business Module in Germany II

3 Cr Hr (3,0)

4.5 ECTS

The module is part of the international experience of the students in Germany and reflects the German dimension of the German Jordanian Universities. Specific contents vary upon the specific module selected and upon the host university's module handbook and academic policies. The module aims at equipping the students with intercultural, linguistic, and academic competencies in management and related fields. It further prepares the students to understand and interact in the academic and professional environment in Germany.

Prerequisite: BIDA492: International Internship

MGT503: Business Module in Germany III

3 Cr Hr (3,0)

4.5 ECTS

The module is part of the international experience of the students in Germany and reflects the German dimension of the German Jordanian Universities. Specific contents vary upon the specific module selected and upon the host university's module handbook and academic policies. The module aims at equipping the students with intercultural, linguistic, and academic competencies in management and related fields. It further prepares the students to understand and interact in the academic and professional environment in Germany.

MGT504: Business Module in Germany IV

3 Cr Hr (3,0) 4.5 ECTS

The module is part of the international experience of the students in Germany and reflects the German dimension of the German Jordanian Universities. Specific contents vary upon the specific module selected and upon the host university's module handbook and academic policies. The module aims at equipping the students with intercultural, linguistic, and academic competencies in management and related fields. It further prepares the students to understand and interact in the academic and professional environment in Germany.

Prerequisite: BIDA492: International Internship

MGT598A: Special Topics in Management

3 Cr Hr (3,0) 1.5 ECTS

This module is a dynamic module tailored to special and hot issues in management that are of interest to students and academics. It may be offered when demand warrants for students who completed their German Year (GY). After an insight in management issues, specific aspects of contemporary management will be treated in depth. This module discusses important issues and roles of management in the current and future business and economy. The topics covered may include: management, corporate governance, marketing in an actual environment (environment, digitalization, innovative methods). After completing the module, the students are expected to understand the topics, analyze the implications of business and economic changes to accounting and vice versa; and give opinion and make decisions related to the issues.

Prerequisite: BIDA492: International Internship

MGT598B: Special Topics in Management

3 Cr Hr (3,0) 3 ECTS

This is a dynamic course tailored to special and hot issues in management that are of interest to students and academics. It may be offered when demand warrants for students who completed their GY. After an insight in management issues, specific aspects of contemporary management will be treated in depth. This module discusses important issues and roles of management in the current and future business and economy. The topics covered may include: management, corporate governance, marketing in an actual environment (environment, digitalization, innovative methods). After completing the module, the students are expected to understand the topics, analyze the implications of business and economic changes to accounting and vice versa; and give opinion and make decisions related to the issues.

Prerequisite: BIDA492: International Internship

MGT598C: Special Topics in Management

3 Cr Hr (3,0) 4.5 ECTS

This is a dynamic course tailored to special and hot issues in management that are of interest to students and academics. It may be offered when demand warrants for students who completed their GY. After an insight in management issues, specific aspects of contemporary management will be treated in depth. This module discusses important issues and roles of management in the current and future business and economy. The topics covered may include: management, corporate governance, marketing in an actual environment (environment, digitalization, innovative methods). After completing the module, the students are expected to understand the topics, analyze the implications of business and economic changes to accounting and vice versa; and give opinion and make decisions related to the issues.

Prerequisite: BIDA492: International Internship

BIDA598A: Special Topics in BIDA

3 Cr Hr (3,0) 1.5 ECTS

This is a dynamic course tailored to special and hot issues in BIDA that are of interest to students and academics. It may be offered when demand warrants for students who completed their GY. After an insight in BIDA issues, specific aspects of contemporary BIDA will be discussed in depth. This module discusses important issues and roles of BIDA in the current and future business. The topics covered may include: business analytics, AI & Machine learning, visualization, Big data, data mining, etc. After completing the course, the students are expected to understand the topics, analyze the implications of business changes to BIDA and vice versa; and give opinion and make decisions related to the issues.

BIDA598B: Special Topics in BIDA

3 Cr Hr (3,0)

3 FCTS

This is a dynamic course tailored to special and hot issues in BIDA that are of interest to students and academics. It may be offered when demand warrants for students who completed their GY. After an insight in BIDA issues, specific aspects of contemporary BIDA will be discussed in depth. This module discusses important issues and roles of BIDA in the current and future business. The topics covered may include: business analytics, AI & Machine learning, visualization, Big data, data mining, etc. After completing the course, the students are expected to understand the topics, analyze the implications of business changes to BIDA and vice versa; and give opinion and make decisions related to the issues.

Prerequisite: BIDA492: International Internship

BIDA598C: Special Topics in BIDA

3 Cr Hr (3,0)

4.5 ECTS

This is a dynamic course tailored to special and hot issues in BIDA that are of interest to students and academics. It may be offered when demand warrants for students who completed their GY. After an insight in BIDA issues, specific aspects of contemporary BIDA will be discussed in depth. This module discusses important issues and roles of BIDA in the current and future business. The topics covered may include: business analytics, AI & Machine learning, visualization, Big data, data mining, etc. After completing the course, the students are expected to understand the topics, analyze the implications of business changes to BIDA and vice versa; and give opinion and make decisions related to the issues.

Prerequisite: BIDA492: International Internship

MGT316: Business Ethics

3 Cr Hr (3,0)

4.5 ECTS

This module is an elective module for the three Bachelor's Degree Programs Logistics Sciences, Management Sciences and International Accounting. It is intended to equip students with the knowledge and skills on how ethics in organizations should be managed, what is the code of ethics and how employees will comply to it.

Prerequisite: BIDA492: International Internship

MGT493: Leadership

3 Cr Hr (3,0)

4.5 ECTS

The module provides a roadmap to achieve excellence in Leadership. It outlines the theoretical foundations of the concept of Leadership through a thorough review of leadership theories and provides students with the opportunity to understand what it takes to influence and empower others.

Prerequisite: BIDA492: International Internship

MGT594: Entrepreneurship

3 Cr Hr (3,0)

5 ECTS

The module provides a roadmap to achieve excellence in Leadership. It outlines the theoretical foundations of the concept of Leadership through a thorough review of leadership theories and provides students with the opportunity to understand what it takes to influence and empower others.

Prerequisite: BIDA492: International Internship

Elective Course Offered by International Accounting Department

ACC343: International Taxation

3 Cr Hr (3,0)

4.5 ECTS

The module addresses the various aspects of taxation, such as tax payment in general, double taxation, tax evasion and tax equality. In particular, theoretical and practical aspects of the income tax, sales tax laws and Zakat in Jordan are covered, and illustrated through examples and cases. In addition, international tax planning and avoidance will be covered as well.

ACC352: International Corporate Finance

3 Cr Hr (3,0)

4.5 ECTS

This is an introductory module and as such, provides instruction on key concepts you will use throughout the students' education and business career. Some of the topics covered during this module are vital in the world of corporate or "business" finance. This module will introduce to the very basic but important concepts in corporate finance. It critically examines the theoretical and practical implications of the basic principles of the investment and financing decisions undertaken by the financial manager, where the value of the firm is always maximised. It then attempts to discuss in-depth key issues in which investment and financing decisions interact and cannot be made separately.

Prerequisite: BIDA492: International Internship

ACC435: Accounting Ethics and Corporate Governance

3 Cr Hr (3,0)

4.5 ECTS

In order to address the learning outcomes, the class starts with introducing and defining corporate governance, key theoretical models and how the definition of corporate governance can be varied according to its objectives to the stakeholders that are intended to be served by corporate governance mechanisms and to the ownership structure prevails in different environment. Control vs. ownership is shown, how the separation between the control and ownership might impact different corporate governance mechanisms and how it might play crucial role in addressing agency conflict from the classical agency theory point of view. Different ownership structures (concentrated, dispersed) and control mechanisms (weak, strong) are introduced, and it is shown how different combinations might be achieved in different environments, especially the combination of dispersed ownership and strong control and the mechanisms that violate one-share-one vote right to achieve such this combination.

Prerequisite: BIDA492: International Internship

ACC455: Islamic Finance and Accounting

3 Cr Hr (3,0)

4.5 ECTS

This module provides an insight into the key features of Islamic banking business from theoretical foundations to the development of Islamic banking practices and main types of Islamic banking products. In addition, the module examines the operational features of Islamic banks focusing on their performance and how they differ from conventional interest-based banks. The module also focusses on the accounting and reporting for Islamic banks transactions.

Prerequisite: BIDA492: International Internship

Elective Course Offered by Logistic Department

LOGS213: Operations Management

3 Cr Hr (3,0)

1.5 ECTS

This module covers the concepts, processes, and managerial skills needed in producing goods and/ or services. The module focuses on decisions that convert broad policy directives into specific actions. It also deals with monitoring and evaluating of operations activities to see that they conform to established plans. The major techniques of quantitative analysis are applied to a variety of managerial decision problems. Emphasis is placed on developing formal analytic skills, especially in structured problem solving and on recognizing the strengths, limitations, and usefulness of management science techniques.

Prerequisite: BIDA492: International Internship

LOGS214: Import-Export Management

3 Cr Hr (3,0)

4.5 ECTS

This module is compulsory for the Bachelor's Degree Program Logistic Sciences and an elective for both Bachelor's Degree Programs International Accounting as well as Management Sciences & Business Intelligence and data Analytics. This module will provide students with the knowledge about trade and import-export operations directly needed for the professional skill-set.

LOGS215: Transportation and Distribution Management

3 Cr Hr (3,0) 4.5 ECTS

This module is compulsory for the Bachelors' Degree Program Logistic Sciences and elective for Management Sciences Program and Business Intelligence & Data Analytics Program which is to equip students with the concepts and applications of transporting and distributing and to manage such operations.

Prerequisite: BIDA492: International Internship

LOGS223: Procurement Management

3 Cr Hr (3,0) 4.5 ECTS

Purchasing management is a significant component for any business. Companies recognize the significant cost savings that can arise from effective purchasing decisions and likewise how poor purchasing strategies may result in disaster. So, this module focuses on providing a solid managerial perspective of the purchasing function as a part of the logistical activities and as a part of the supply chain management. It presents the most current and complete coverage of today's purchasing activities and provides numerous real-world cases, insights and knowledge into the strategies, processes, and practices of the purchasing function. This module aims to develop an understanding of the important role of purchasing in the organization and the relationship between the purchasing department and other departments in the organization. Furthermore, this module introduces the basic concepts, techniques, methods and applications of procurement and supplier management, including supplier selection, sourcing decisions, and managing supplier performance. It explains purchasing strategies and polices as well as activities of the purchasing manager. Moreover, this module discusses the impact of purchasing on competitive success, profitability and other measures of organizational performance and defines what specialized purchasing skills and techniques are required.

Prerequisite: BIDA492: International Internship

LOGS315: Inventory Management

3 Cr Hr (3,0) 4.5 ECTS

This module covers the concepts, processes, and managerial skills needed in producing goods and/ or services. The module focuses on decisions that convert broad policy directives into specific actions. It also deals with monitoring and evaluating of operations activities to see that they conform to established plans. The major techniques of quantitative analysis are applied to a variety of managerial decision problems. Emphasis is placed on developing formal analytic skills, especially in structured problem solving and on recognizing the strengths, limitations, and usefulness of management science techniques.

Prerequisite: BIDA492: International Internship

LOGS316: Warehouse Management

3 Cr Hr (3,0) 4.5 ECTS

The module introduces the physical storage and handling materials. A range of picking methods and techniques to improve the warehouse efficiency will be discussed. The module will also place an emphasis on improving the output of the warehouses and distribution centers through understanding the methods of organizing workflows, warehouse layout, and use of information systems. Further, it covers the subjects of managing people in a warehouse together with improving safety in the warehouse. A wide range of case studies, exercises, group module works will be given as well as a field visit will be made to one of the warehouses in the country as to better understand the theories being studied in this module

Prerequisite: BIDA492: International Internship

LOGS323: Supplier-Customer Relationships Management 3 Cr Hr (3,0) 4.5 ECTS

In today's extremely competitive environment, one of the main factors that determine the success or failure of a business is understanding the customers' needs and services. This module discloses different aspects of this customer-focused strategy, such as Customer Relationship Management (CRM) and its definitions, goals, perspectives, as well as the integration of Supply Chain Management (SCM) and CRM. On the other hand, the continual needs of cutting costs force companies to improve their supply chain and leverage their supply base, which enhances the need for long term buyer-seller relationships and for adopting the concept of Supplier Relationship Management (SRM). This module introduces the concept of CRM & SRM, explains their benefits, how and why they can be used. Moreover, the module provides a strategic and structured approach to maximizing value from key and strategic customers and suppliers,

and focus on the direct resources at the suppliers, that can make the biggest difference to the organization, and on the most valuable customers. Thus, this module offers a complete, clear and highly operational framework for CRM and SRM, which gives guidelines for establishing a successful strategy on both sides of the supply chain.

Prerequisite: BIDA492: International Internship

LOGS324: Logistics Network Design

3 Cr Hr (3,0) 4.5 ECTS

This module introduces students to the theory and practice of logistics systems design and operations. Students will be exposed to issues surrounding the location of distribution centers, optimal number of distributions, centralization and decentralization of logistics systems. The module also covers logistics hubs and network design, cross-docking, its types and design of cross-docking facilities, road demountable, benchmarking and performance measurement of logistics operations, logistics performance index and measurements of global logistics performance, sourcing models in logistics, the design and operations of dry ports, global trends in logistics, the design of humanitarian and sustainable networks.

Prerequisite: BIDA492: International Internship

LOGS341: Green and Reverse Logistics

3 Cr Hr (3,0) 4.5 ECTS

This course will give students a good understanding about current issues in green logistics. The course's purpose is to provide and establish a knowledge of environmental issues related to logistics and supply chain management by using real world situations

Prerequisite: BIDA492: International Internship

LOGS417: Retail Logistics

3 Cr Hr (3,0) 4.5 ECTS

This is a compulsory module for B.Sc. in logistic sciences program and elective for Management Sciences & Business Intelligence and data Analytics Programs. Students will be provided with the knowledge and applications of the retailers, and they are managed.

Prerequisite: BIDA492: International Internship

LOG446: Humanitarian Logistics

3 Cr Hr (3,0) 4.5 ECTS

Students get acquainted with the fundamental concepts of disaster management and humanitarian logistics. Logistics is one of the most critical components to successful humanitarian assistance, characterized by the efficient and effective delivery of the right assistance to the right beneficiaries at the right time.

This module will prepare students for roles ranging from planning, managing, implementing and controlling the flow and storage of goods, material, cost and information along the entire emergency supply chain for the purpose of relief and alleviating the suffering of people in places with disasters.

Prerequisite: BIDA492: International Internship

LOGS472: Contemporary Issues in Logistics

3 Cr Hr (3,0) 4.5 ECTS

This module provides a practical, management perspective in different areas of logistics such as distribution, transportation, international logistics, key performance indicators, supply chain finance, technologies used in logistics and many other recent topics. The module is designed for students who have had little or no previous module work or professional experience in logistics.

It explores the various modern logistics techniques and focuses on the importance of innovation in logistics management. Globalization and e-commerce among other new trends and their effects on logistics and supply chain systems are considered. The module starts with the new trends in logistics and supply chain management, then the role of information technology in logistics is considered. Thereafter, selected topics and contemporary issues in logistics and supply chain management are discussed with more focus on new literature published on these topics. Finally, the selected topics are linked to the local market settings and environment.

IX. Course Offered by Other Departments

ACC101: Principles of Accounting I

3 Cr Hr (3,0)

4.5 ECTS

This course covers the conceptual foundation of accounting, the accounting cycle for service and merchandising enterprises, the preparation of income statement and related information, the balance sheet of proprietorships and partnerships, basics of accounting information systems, introduction to the conceptual framework for the preparation and presentation of financial statements as well as the valuation and reporting of selected items reported in the balance sheet; such as cash and inventories *Prerequisites:*

ACC251: Fundamentals of Finance

3 Cr Hr (3,0)

4.5 ECTS

This course covers the conceptual foundation of finance; Revenue & Gross Margin, Operating Expense & Net Income, Gross & Net Margin, Advanced Income Statement, Revenue Recognition, Expense Recognition, Balance Sheet Basics - Liabilities & Net Worth, Double Entry Book-keeping, Working Capital and Debt / Equity Ratio and Return on Net Worth, Cash Flow Statement Basics, building a Cash Flow Statement Analyzing a Cash Flow Statement, Depreciation & Amortization and Taxes.

Prerequisites: ACC101

LOGS101: Introduction to Logistics

3 Cr Hr (3,0)

4.5 ECTS

Business logistics considers the two-directional flow and storage of products and information; into, within, and out of the organization. The logistics system consists of three sub-systems: inbound, internal, and outbound logistics. As the first module in logistics, LOGS101 starts with defining logistics and determining the scope of logistics management as a part of supply chain management. The importance of logistics in the micro- and macro-economic levels, the systems and total cost approaches to logistics, logistical relationships within the firm, and the main logistics activities are also covered in the first part of this module. Thereafter, more detailed examination of logistics activities is considered including procurement; demand management, order management, and customer service; inventory management; warehousing management; packaging and material handling; and transportation management. Afterwards, the organizational and managerial issues related to logistics are considered including organizational structure and design, productivity, quality, risk, sustainability, and complexity.

Prerequisites:

X. Courses offered by Other Schools

ARB099: Arabic 99 0 Cr Hr (3,0) 0 ECTS

This course aims to develop student's ability to read, comprehend, literary analyze, grammatically analyze, linguistically analyze, poetically analyze, and rhetorically analyze texts properly. The course also includes a selection of Arabic literature in poetry and prose representing different literary ages, in addition to several common forms of writing such as scientific article, news article, and others.

Prerequisites: -

ARB100: Arabic 3 Cr Hr (3,0) 3 ECTS

This course aims to improve the student's competence in the various linguistic skills in terms of reading, comprehension, and taste. This is achieved through the study of selected texts with many implications that raise issues in spelling, grammar, composition, meaning, and inference, and the use of an old and modern thesaurus.

Prerequisites: ARB099

ENGL099: English II 0 Cr Hr (3,0) 0 ECTS

Students will focus on English at a pre-intermediate level concentrating on the receptive skills of reading and listening and the productive skills of writing and speaking. These will include such things as comparatives and superlatives, quantifiers, possessive adjectives and pronouns, vocabulary building, roleplay activities for speaking, reading comprehension and writing short descriptive paragraphs.

Prerequisites: -

ENGL101: English III 1 Cr Hr (3,0) 3 ECTS

Students will focus on English at an intermediate level concentrating on the receptive skills of reading and listening and the productive skills of writing and speaking. These will include collocations, tense review, affirmative, negative statements, synonyms and antonyms, time clauses, conditionals, active and passive forms, reported speech, phrasal verbs, reading comprehension with detailed questions, vocabulary and writing developed descriptive and opinion essays.

Prerequisites: ENGL099

ENGL102: English IV 1 Cr Hr (3,0) 3 ECTS

Students will focus on English at an upper-intermediate level concentrating on the receptive skills of reading and listening and the productive skills of writing and speaking. Model verb review, silent letters and proper pronunciation, jobs and careers, requests and offers, more phrasal verbs with vocabulary building, relative clauses and relative pronouns, narrative tenses for writing exercises, wishes and regrets, reading and comprehending longer passages with direct and inference questions of medium difficulty, hypothesizing, and writing fully developed descriptive, argumentative and analytical essays of 350 words.

Prerequisites: ENGL101

ENGL 201: English V 2 Cr Hr (3,0) 3 ECTS

Students will focus on English at an Advanced level. Students will analyze and produce 2-3 page essays with an emphasis on argumentation and persuasion working both independently and cooperatively to gather, evaluate, and synthesize necessary information. Class activities include interactive lectures, small group and class discussions, informal debates, peer feedback, individual presentations, focused listening exercises and focused viewing exercises as well as assorted reading, writing, and grammar assignments.

There will be some poetry analysis together with reading and understanding a short story and a drama using basic literary terms and concepts.

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Prerequisites: ENGL102

ENGL 202: English VI 2 Cr Hr (3,0) 3 ECTS

Students will continue to focus on English at an Advanced level. Students will analyze and produce 4-5 page essays emphasizing argumentative, persuasive and discursive styles of writing, working both independently and cooperatively to gather, evaluate, and synthesize necessary information. Students will integrate the practice of critical thinking and reading into the writing process. Class activities include interactive lectures, small group and class discussions, informal debates, mini-conferences, peer feedback, individual presentations, focused listening exercises and focused viewing exercises as well as assorted reading, writing, and grammar assignments. There will be some poetry analysis together with reading and understanding a short story and a drama using stronger and more intensive literary terms and concepts than in 201.

Prerequisites: ENGL 201

ENGL 202: English VI 2 Cr Hr (3,0) 3 ECTS

Students will continue to focus on English at an Advanced level. Students will analyze and produce 4-5 page essays emphasizing argumentative, persuasive and discursive styles of writing, working both independently and cooperatively to gather, evaluate, and synthesize necessary information. Students will integrate the practice of critical thinking and reading into the writing process. Class activities include interactive lectures, small group and class discussions, informal debates, mini-conferences, peer feedback, individual presentations, focused listening exercises and focused viewing exercises as well as assorted reading, writing, and grammar assignments. There will be some poetry analysis together with reading and understanding a short story and a drama using stronger and more intensive literary terms and concepts than in 201.

Prerequisites: ENGL 201

GERL101B1: German I B1 track

3 Cr Hr (9,0)

6 ECTS

By the end of this module, the student will be able to:

- Comprehend very familiar, everyday expressions and very simple sentences and structures related
 to areas of most immediate relevance according to the discretionary standards in the Common
 European Framework of Reference for Languages (CEFR) at the Level A1.1 (beginners without preknowledge).
- Introduce herself/himself and others, express likes and dislikes, fill out a personal form, ask questions and give answers in present and partially in past tense, set private and semi-official appointments, describe people and things and express frequency and quantity in a very basic way both orally and in writing.
- Communicate with native speakers on a very basic level if those involved in the conversation speak slowly and clearly and are willing to support the non-native speaker.

Prerequisites: Intensive pre-course (only for 1st semester of an academic year)

GERL102B1: German II B1 track

3 Cr Hr (9,0)

6 ECTS

By the end of this module, the student will be able to:

Understand and use familiar, everyday expressions and very simple sentences and structures
related to areas of most immediate relevance according to the discretionary standards in the
Common European Framework of Reference for Languages (CEFR) at the level A1.2 (basic users).

- Introduce herself/himself and others, express likes and dislikes, fill out a personal form, ask
 questions and give answers in present and past tense, set private and official appointments,
 describe people and things, ask for directions, express frequency and quantity in a basic way both
 orally and in writing.
- Communicate with native speakers on a very basic level if those involved in the conversation speak slowly and clearly and, if need be, are willing to support the non-native speaker.

Prerequisites: **GERL101B1**

GERL201B1: German III B1 track

3 Cr Hr (6,0)

4 ECTS

By the end of this module, the student will be able to:

- Understand and use familiar, frequently used expressions and simple sentences and structures related to areas of a wider immediate relevance according to the discretionary standards in the Common European Framework of Reference for Languages (CEFR) at the level A2.1 (basic users).
- Talk about their academic and/or professional background, describe their living conditions, express likes and dislikes, ask questions and give answers in present and past tense, ask for help and support, make suggestions and give advice, describe health problems and talk with medical doctors and nurses, express pity, sorrow and hopes, express frequency and quantity in a basic way both orally and in writing.
- Communicate with native speakers within simple and familiar tasks requiring a simple and direct exchange of information on familiar and routine matters.

Prerequisites: **GERL102B1**

GERL202B1: German IV B1 track

3 Cr Hr (9,0)

6 ECTS

By the end of this module, the student will be able to:

- Distinguish between familiar expressions, sentences and structures related to areas of immediate relevance and more elaborated components like the main points of clear standard input on familiar matters regularly encountered in work, school, leisure etc. according to the discretionary standards in the *Common European Framework of Reference for Languages* (CEFR) at the level A2.2 (basic users) and, partially, at the level B1.1 (independent user).
- Talk about personal experiences with languages, express feelings of happiness, joy and discomfort, describe own media consumption habits, describe travel experiences, convince others, describe and report in official situations, describe statistics, write formal invitations and short emails, make suggestions and talk about future events and situations, describe dreams hopes and ambitions and briefly give reasons or explanations for opinions and plans.
- Communicate with native speakers about essential points and ideas in familiar contexts.
- Understand the characteristics of the official B1 exam according to the CEFR and use strategies to overcome obstacles while solving said exam.

Prerequisites: GERL201B1

GERL301B1: German V B1 track

3 Cr Hr (9,0)

6 ECTS

By the end of this module, the student will be able to:

- Understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure etc. according to the discretionary standards in the *Common European Framework of Reference for Languages* (CEFR) at the level B1.1 and B1.2 (independent user).
- Deal with most situations likely to arise whilst traveling in an area where German is spoken, produce simple connected texts on topic which are familiar or of personal interest, describe experiences and events, dreams, hopes and ambitions, statistics, and briefly give reasons and explanations for opinions and plans.

- Understand the main point of many radio or TV programmes on current events and topics, understand the description of events, feelings and wishes in personal letters, write personal letters/texts describing experiences and impressions, write straightforward connected texts on topics which are familiar or of personal interest.
- Communicate with native speakers about essential points and ideas in familiar contexts and about topics of personal or partially professional interest.
- Follow a lecture or talk within her/his field, provided the subject matter is familiar and the presentation straightforward and clearly structured.
- Understand simple technical information, such as operating instructions for everyday equipment.
- Understand all characteristics of the official B1 exam according to the CEFR and use a variety of strategies to overcome obstacles while solving said exam and all its components.

Prerequisites: **GERL202B1**

GERL302REG: German VI Regular

3 Cr Hr (6,0)

6 ECTS

By the end of this module, the student will be able to:

- Successfully manage the application process for a six months internship in Germany which is part
 of the obligatory 'German Year' for all GJU students. The process consists of finding and
 understanding a suitable add in accordance with the students' major, writing a convincing CV and
 cover letter, and mastering an effective and mostly fluent interview, departing spontaneously,
 taking initiatives, expanding ideas with little help or prodding from the interviewer.
- Successfully manage the most significant situations which the student, in accordance with the
 currently studied major, encounters during her/his theoretical and practical semester in Germany.
 This process is being achieved within a technical language training focussing on action orientated
 and communicative scenarios like following lectures, taking notes, summarizing academic and
 technical texts, writing official emails and texts related to academic and vocational encounters,
 holding presentations, communicating both verbally and in writing with professors, university staff,
 students as well as with colleagues and customers during an internship.
- Understand the concept of general intercultural phenomena, reflect and understand the
 differences between culture and cultural standards in Jordan and in Germany, understand the
 concept of 'culture shock' and potentially cope with its different stages, reflect about appropriate
 and inappropriate behaviour in Germany as well as understand the concepts of open-mindedness
 and 'culture clash'.

Prerequisites: **GERL301B1**

GERL302INT: German VI Intensive

3 Cr Hr (9,0)

6 ECTS

By the end of this module, the student will be able to:

- Successfully manage the application process for a six months internship in Germany which is part of
 the obligatory 'German Year' for all GJU students. The process consists of finding and understanding
 a suitable add in accordance with the students' major, writing a convincing CV and cover letter, and
 mastering an effective and mostly fluent interview, departing spontaneously, taking initiatives,
 expanding ideas with little help or prodding from the interviewer.
- Successfully manage the most significant situations which the student, in accordance with the
 currently studied major, encounters during her/his theoretical and practical semester in Germany.
 This process is being achieved within a technical language training focussing on action orientated
 and communicative scenarios like following lectures, taking notes, summarizing academic and
 technical texts, writing official emails and texts related to academic and vocational encounters,
 holding presentations, communicating both verbally and in writing with professors, university staff,
 students as well as with colleagues and customers during an internship.
- Understand the concept of general intercultural phenomena, reflect and understand the differences between culture and cultural standards in Jordan and in Germany, understand the concept of 'culture shock' and potentially cope with its different stages, reflect about appropriate and

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- inappropriate behaviour in Germany as well as understand the concepts of open-mindedness and 'culture clash'.
- Understand all characteristics of the official B1 exam according to the CEFR and use different strategies to overcome obstacles while solving said exam and its different components.

Prerequisites: **GERL301B1**

GERL102B2: German II B2 track

3 Cr Hr (9,0)

6 ECTS

By the end of this module, the student will be able to:

- Understand and use familiar, everyday expressions and simple sentences and structures related to
 areas of most immediate relevance according to the discretionary standards in the *Common European Framework of Reference for Languages* (CEFR) at the level A1.2 and, partially, A2.1 (basic users).
- Talk about their academic and/or professional background, describe their living conditions, express
 likes and dislikes, ask questions and give answers in present and past tense, ask for help and
 support, make suggestions and give advice, express pity, sorrow and hopes, express frequency and
 quantity in a basic way both orally and in writing.
- Introduce herself/himself and others, express likes and dislikes, fill out a personal form, ask
 questions and give answers in present and past tense, set private and official appointments,
 describe people and things, ask for directions, express frequency and quantity in a basic way both
 orally and in writing.
- Communicate with native speakers on a basic level if those involved in the conversation speak slowly and clearly and, if need be, are willing to support the non-native speaker.

Prerequisites: **GERL101B1**

GERL201B2: German III B2 track

3 Cr Hr (6,0)

4 FCTS

By the end of this module, the student will be able to:

- Distinguish between familiar expressions, sentences and structures related to areas of immediate relevance and more elaborated components like the main points of clear standard input on familiar matters regularly encountered in work, school, leisure etc. according to the discretionary standards in the Common European Framework of Reference for Languages (CEFR) at the level A2.1 and A2.2 (basic users).
- Talk about their academic and/or professional background, describe their living conditions, express
 likes and dislikes, ask questions and give answers in present and past tense, ask for help and
 support, make suggestions and give advice, describe health problems and talk with medical doctors
 and nurses, express pity, sorrow and hopes, describe simple statistics, express frequency and
 quantity in a basic way both orally and in writing, express feelings of happiness, joy and discomfort
 and write personal emails and letters, understand and produce comments, blogs and reports.
- Communicate with native speakers in simple and familiar tasks requiring a simple and direct exchange of essential information on familiar and routine matters.

Prerequisites: **GERL102B2**

GERL202B2: German IV B2 track

3 Cr Hr (9,0)

6 ECTS

By the end of this module, the student will be able to:

- Understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure etc. according to the discretionary standards in the *Common European Framework of Reference for Languages* (CEFR) at the level B1.1 and B1.2 (independent user).
- Deal with most situations likely to arise whilst traveling in an area where German is spoken, produce simple connected texts on topic which are familiar or of personal interest, describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans.

- Understand the main point of many radio or TV programmes on current events and topics, understand the description of events, feelings and wishes in personal letters, write personal letters/texts describing experiences and impressions, write straightforward connected texts on topics which are familiar or of personal interest.
- Communicate with native speakers about essential points and ideas in familiar contexts and about topics of personal or partially professional interest.
- Follow a lecture or talk within her/his field, provided the subject matter is familiar and the presentation straightforward and clearly structured.
- Understand simple technical information, such as operating instructions for everyday equipment.
- Understand all characteristics of the official B1 exam according to the CEFR and use different strategies to overcome obstacles while solving said exam and all its components.

Prerequisites: GERL201B2

GERL301B2: German V B2 track

3 Cr Hr (9,0)

6 ECTS

By the end of this module, the student will be able to:

- Largely understand and produce rather complex texts on both concrete and abstract topics, including technical discussions in her/his field of specialisation and according to the discretionary standards in the Common European Framework of Reference for Languages (CEFR) at the level B2.1 (independent user).
- Interact with an initial degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party.
- Largely understand standard spoken language, live or broadcast, on both familiar and unfamiliar topics normally encountered in personal, social, academic or vocational life.
- Show a relatively high controlled degree of grammatical control without making errors which cause misunderstanding and with the growing ability to correct most of her/his mistakes.
- Largely follow essentials of lectures, talks, reports and other forms of academic/professional presentation which are propositionally and linguistically complex.
- Understand announcements and messages on concrete and abstract topics spoken in standard dialect at normal speed.
- Scan quickly through long texts, locating relevant details and understand and exchange complex information and advice on the full range of matters related to her/his occupational role.
- Understand the main characteristics of the official B2 exam according to the CEFR and use different strategies to overcome obstacles while solving said exam and its different components.

Prerequisites: **GERL202B2**

GERL302B2: German VI B2 track

3 Cr Hr (6,0)

6 ECTS

By the end of this module, the student will be able to:

- Understand and produce rather complex texts on both concrete and abstract topics, including
 technical discussions in her/his field of specialisation and according to the discretionary standards
 in the Common European Framework of Reference for Languages (CEFR) at the level B2.2
 (independent user).
- Interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party.
- Understand standard spoken language, live or broadcast, on both familiar and unfamiliar topics normally encountered in personal, social, academic or vocational life.
- Show a highly controlled degree of grammatical control without making errors which cause misunderstanding and with the growing ability to correct most of her/his mistakes.
- Follow essentials of lectures, talks, reports and other forms of academic/professional presentation which are propositionally and linguistically complex.
- Understand announcements and messages on concrete and abstract topics spoken in standard dialect at normal speed.

- Scan quickly through long texts, locating relevant details and understand and exchange complex information and advice on the full range of matters related to her/his occupational role.
- Understand all characteristics of the official B2 exam according to the CEFR and use different strategies to overcome obstacles while solving said exam and its different components.
- Successfully manage the application process for a six months internship in Germany which is part of the obligatory 'German Year' for all GJU students. The process consists of finding and understanding a suitable add in accordance with the students' major, writing a convincing CV and cover letter, and mastering an effective and mostly fluent interview, departing spontaneously, taking initiatives, expanding ideas with little help or prodding from the interviewer.
- Successfully manage the most significant situations which the student, in accordance with the
 currently studied major, encounters during her/his theoretical and practical semester in Germany.
 This process is being achieved within a technical language training focusing on action orientated
 and communicative scenarios like following lectures, taking notes, summarizing academic and
 technical texts, writing official emails and texts related to academic and vocational encounters,
 holding presentations, communicating both verbally and in writing with professors, university staff,
 students as well as with colleagues and customers during an internship.
- Understand the concept of general intercultural phenomena, reflect and understand the differences between culture and cultural standards in Jordan and in Germany, understand the concept of 'culture shock' and potentially cope with its different stages, reflect about appropriate and inappropriate behaviour in Germany as well as understand the concepts of open-mindedness and 'culture clash'.

Prerequisites: **GERL301B2**

BE302: Business Entrepreneurship

3 Cr Hr (3,0)

3 ECTS

The course focuses on critical skills necessary to develop appropriate financing strategies for new venture creation and growth. Students will use case studies and team projects in course studies. Three primary topics are covered: first, an overview of the entrepreneurial finance process and involved players; second, performing business valuations; and third, securities law with emphasis on developing term sheets and private placement memorandums. Student teams will complete a valuation and mock securities offering for an existing small to mid-size business. Financial valuations and terms sheets developed by student teams will be presented to a panel of venture capital professionals for evaluation and critique

Prerequisites: English101

DES101: Arts Appreciation

3 Cr Hr (3,0)

3 ECTS

An introductory course designed for non-art students to give them the basic knowledge of arts and simple approaches to the understanding of the history, development, elements, criticism, esthetics and materials of different art forms (visual, aural and performing arts). A comparative approach between the different arts is given to enhance the students' global understanding of arts and to give them the ability to look at art works and form their own opinions. The course is combined with examples of audio and visual arts.

Prerequisites: ARB099, ENGL101

IC101: Intercultural Communication

3 Cr Hr (3,0)

3 ECTS

This course is designed to provide prospective students (whose majors have an international flavor) with tools that offer powerful possibilities for improving the communication process. We will examine the process of sending and receiving messages between people whose cultural background could lead them to interpret verbal and nonverbal signs differently. We will learn about the diversity of these cultural differences and at the same time learn how we might overcome them. Our efforts to recognize and surmount cultural differences will hopefully open up business opportunities throughout the world and maximize the contribution of all the employees in a diverse workforce

Prerequisites: English101

MILS100: Military Science

3 Cr Hr (3,0)

3 ECTS

History of the Jordanian Arab Army. United Nations Peace Keeping Forces. Preparation of the nation for defense and liberation. History of the Hashemite Kingdom of Jordan and its development

Prerequisites:

NE101: National Education

3 Cr Hr (3,0)

3 ECTS

In a context of striving towards democracy like the one Jordan enjoys today, the meaning and practice of active and responsible citizenship becomes more crucial. It is often argued that democracy requires "democrats" to flourish, and become well established. Democrats are those women and men who recognize pluralism, inclusion, positive engagement, and participation as the main values that govern their interaction with the state as citizens and with each other as diverse people of different interests. In this course you will be able to understand your rights and responsibilities as Jordanian citizen expand your knowledge about the frameworks, and processes that regulates citizen-state relationships as well as the basic necessary skills for you to practice your citizenship rights in a civic manner.

Prerequisites:

SE301: Social Entrepreneurship and Enterprises

3 Cr Hr (3,0)

3 ECTS

This course will serve as an introduction to the field of social entrepreneurship and social enterprises. Through lectures, field visits, analyses of relevant literature, case studies and exercises, this course will explore social entrepreneurship's potentials, opportunities and limitations. The topics will cover Defining Social Entrepreneurship. Contextualizing Social Entrepreneurship (need, motives, forms, criteria). Role of Leadership, Creativity and Innovation. Locating SE on the profit/non-profit continuum. SE in the larger fields of development, social change, community activism. Social Enterprises (Missions, Markets, Finances). Ethical business and corporate social responsibility.

Prerequisites: English101

SFTS101: Soft Skills 3 Cr Hr (3,0) 3 ECTS

This course is designed to help develop strong oral and written communication skills. The student will be given opportunities to practice writing and editing professional correspondence and technical reports. Additionally, the student will compose and deliver oral presentations. Assignments will include the use of inductive and deductive approaches to conveying a variety of messages. The course emphasis the use of software tools to prepare presentations, stress management, confidence, and sensitivity to others. It also stresses on resume writing and conducting interviews.

Prerequisites: English101