

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>COLLEGE OF ARTS &amp; SCIENCE</b>						
<b>Arabic &amp; General Studies</b>						
ANTH	101	Introduction to Anthropology	3	0	3	
This course consists of a history of thought of anthropology and accordingly delves into the theories, schools, concepts and contemporary trends in this field including an understanding of research methods. Special attention is focused on the ethnography of the Arabian Peninsula particularly and on the Arab World generally.						
ARAB	101	Composition for Native Speakers of Arabic I	3	0	3	
A practical language course which aims at developing the writing skills of native speakers of Arabic. The course develops skills such as journalistic writing and letter writing and pays special attention to the development of personal style.						
ARAB	102	Composition for Native Speakers of Arabic II	3	0	3	ARAB 101
A refinement of writing skills introduced in the previous course designed to acquaint the student with literary essay writing.						
ARAB	110	Arabic for Non-Arabic Speaking Students I	3	0	3	
A beginners' level course in modern classical Arabic for non-Arabic speaking students. The course develops the students ability in the four skills and focuses on the use of the language in daily communicative situations.						
ARAB	111	Arabic for Non-Native Speakers I	3	0	3	
This course aims to develop the skills of Standard Arabic and Spoken Arabic for non-Arabic speakers at the levels of reading, listening, speaking, writing, and syntax. At the end of this course, students will be able to exchange greetings and introduce themselves in Arabic. They will also be able to engage in short conversations about food and describe places and things. They will master the knowledge of the alphabet, reading and writing, and some rules of the Arabic language related to the singular, dual, plural, and nominal and verbal sentences.						
ARAB	120	Arabic for Non-Arabic Speaking Students II	3	0	3	ARAB 110
A continuation of ARAB 110, offering further practice in using the Arabic language in daily communicative situations.						
ARAB	121	Arabic for Non-Native Speakers II	3	0	3	ARAB 111
This course aims to develop, at an advanced level, the language skills of both Standard and Spoken Arabic designed for non-Arabic speakers: reading, listening, speaking and writing, in addition to learning the grammatical/ structural rules. After completing this course, the students will be able to distinguish the shapes of compound letters, use short vowel diacritics and long vowels, and distinguish between verbs and nouns. They will also be able to read short and long sentences, compose them, and turn them into understandable paragraphs.						
ARAB	201	Introduction to Modern Arabic Literature	3	0	3	
This course is intended to help the students appreciate literary texts and generally develop their reading skills. The course will also attempt to acquaint the students with relevant background information pertaining to such major literary epochs and trends through the study of texts from each of these schools such as the Renaissance, Romanticism, Realism and Modernism.						
ARAB	231	Arabic for Non-native Speakers III	3	0	3	ARAB 121
This course aims to develop, at a further advanced level, the skills of using advanced Standard Arabic and Spoken Arabic skills by non-Arabic speakers: reading, listening, speaking and writing, and the use of grammatical and structural rules. After studying this course, the student will be able to read texts of medium length, be able to expand the sentence with noun and verb modifications, in both speaking and writing, and to distinguish between nominative and verbal sentences. He will also be able to write a short narrative text, and engage in an oral or written dialogue with other students on an issue from daily life experience.						
CULT	101	Introduction to Culture	3	0	3	
This course is an introductory survey of the basic doctrines and concepts of Arabic and Islamic civilization. It covers reading materials from the Renaissance to modern times and focuses on the influence of Western civilization.						
CULT	102	Islamic Culture	3	0	3	
This course aims to give students the opportunity to explore a variety of themes on the topic of Islamic Culture. Diverse issues discussed include: the definition of Islamic culture in terms of Qur'anic studies and Prophetic traditions; the contrasting views of classical and modern Islamic scholars; the impact of Islamic theology on cultural aspects in Islamic society; and the general principles of Islam in different areas of life.						

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<b>Arabic &amp; General Studies</b>						
CULT	110	Local Culture	3	0	3	
<p>This course presents a realistic picture of the local culture by presenting the influences shaped by Bahraini culture and Bahraini society, with a focus on the characteristics of this culture, and the most important sources of its formation, with a reference to the most important aspects of urbanization and civic life in the Kingdom of Bahrain. The course also sheds light on the values, customs and traditions of the Bahraini society, the main professions and industries, ancient and modern, with reference to the manifestations of the development of education, industry and economy. Other aspects included in the course are Bahrain's relationship with the Arab Gulf states and the Arab countries, aspects of the modern state, Islamic civilization, ancient civilizations and the role of women</p>						
CULT	120	Arab Culture	3	0	3	
<p>In this course, students study the concept of Arab culture, its characteristics, and general information about the Arab world, such as the geographical location and its importance, the manifestations of modern development in industry, architecture, and the economy, as well as the common factors among Arab peoples. They also learn about the Arabs and sciences in ancient times, the translation movement, the Islamic civilization, ancient civilizations in the Arab region, as well as cultural openness to other civilizations.</p>						
CULT	130	General Culture	3	0	3	
<p>This course provides detailed knowledge of the concepts of culture, its characteristics and elements, customs and traditions, the role of women in the family and society, and the problem of family disintegration in Gulf and Arab societies. It also examines the concept of local and international organizations, and economic problems in the world such as poverty and unemployment.</p>						
EOPL	112	Equal Opportunities in Public Life	3	0	3	HUMR 101
<p>The Course familiarizes the student with the efforts and achievements of the Kingdom of Bahrain in the field of gender equality, empowering women and enhancing their participation in development by reviewing the relevant legislation included in the Constitution and the National Action Charter. It also examines the steps involved in establishing the Supreme Council for Women (SCW) and its initiatives launched to empower and advance women to achieve gender balance, justice and partnership in various economic, social and political fields, leading to comprehensive development in accordance with the UN 2030 Sustainable Development Goals.</p>						
HIST	101	Modern History of the Middle East & North Africa	3	0	3	
<p>This course overviews the political and economic history of the Middle East and North Africa from the Nineteenth Century to the present with an emphasis on the historical origins of the contemporary problems confronting the region. After examining the political map of the Middle East and North Africa after the imposition of European colonialism, the post-colonial political challenges that these newly independent states faced are analyzed. The latter part of the course explores major contemporary issues such as: the rise of OPEC, the Arab-Israeli conflict; the Iran-Iraq war and the intervention of the United States in the region.</p>						
HIST	121	Modern History of Bahrain	3	0	3	
<p>This course focuses on the importance of the strategic location of the Kingdom of Bahrain; Bahrain history since the early 1600; Al-Utoobs and the rise of Zubara; the beginning of Al-Khalifa era; Bahrain under the British protection &amp; independence and the building of the modern state; modernization of the political administrative and legal systems; economic and social development in Bahrain.</p>						
HUMR	101	Principles of Human Rights	2	0	2	
<p>The course covers the basic principles of human rights through the definition of human rights and their scope with a focus on International Conventions of Human Rights, which includes the following documents: United Nations Charter, Universal Declaration of Human Rights, International Convention for Civil and Political Rights, International Convention for Economic, Social and Cultural Rights and Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. It also covers protection mechanism and institutional administration of rights and general freedoms in the Kingdom of Bahrain.</p>						
LAW	101	Introduction to Legal Systems & Legal Reasoning	3	0	3	
<p>The first half of this course consists of an introduction to theories of the nature, functions and origins of law and legal systems including: sources of law, the nature of courts and selected other legal institutions, a comparison of legal systems, and the special nature and sources of international law. Students gain exposure to legal reasoning including both statutory interpretation and case-law reasoning in the second half of the course.</p>						
PSYC	101	Introduction to Psychology	3	0	3	
<p>After providing a brief history of milestones in the development of psychology, this course introduces Psychology as a scientific discipline and overviews research methods used by psychologists as a means to understand human development at each stage of life, the nature of personality and human behavior. Major psychological disorders are discussed and the rudiments of social psychology outlined.</p>						
SNLN	111	Arabic Sign Language	3	0	3	

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<b>Arabic &amp; General Studies</b>						
SOCI	101	Sociology	3	0	3	
This course introduces students to the fundamental concepts and methods of sociology, the scientific study of group behavior in terms of social interactions and processes. Such aspects as social structure, class stratification, cultural aspects of social organization, gender issues, ethnicity, social norms and behavioral patterns are among the issues covered in this introduction.						
SOCI	102	Sociology II	3	0	3	
This course introduces students to the analysis of the social basis of behavior as a key to understanding the social world. This course deals with topics spanning the gamut of: social interaction, social self, social cognition, social perception, social attitudes, social influence and persuasion, group processes and leadership.						
<b>Directorate of Digital Media and Communication Technology - Ph.D.</b>						
DMTC	601	Readings in Digital Media and Communication Technology	3	0	3	
DMTC	602	Intercultural Communication	3	0	3	
DMTC	603	Legal Issues in Mass Communication	3	0	3	
DMTC	604	Research Methods in Media and Digital Communication	2	2	3	
DMTC	605	Internet Culture and Digital Media Applications	2	2	3	
DMTC	606	Strategic communication	3	0	3	
DMTC	699	PhD Thesis in Digital Media and Communication Technology*	0	0	32	
<b>Foreign Languages</b>						
CHIN	101	Introduction to Chinese I	3	0	3	
A Chinese language primer, the first in a series of three elementary courses. A practical language course which aims at familiarizing students with the basic rules of pronunciation, reading, speaking, writing, and listening comprehension of Chinese language. The course material focuses on developing students' ability to understand and express Chinese in daily conversations.						
ENGL	050	Orientation English	6	0	0	
A basic integrated English language course which aims to develop the students' basic language skills and focuses mainly on business communication.						
ENGL	052	Reading and Writing	3	0	0	
The course offers extensive reading practice at beginners to pre-intermediate level and develops reading strategies required for university study. It also introduces different aspects of writing at the sentence as well as paragraph level.						
ENGL	055	Grammar and Vocabulary	3	0	0	
The course offers a review of Basic English structures and provides students with extensive practice in order to achieve accuracy in using the language. It also aims to expand students' vocabulary related to both everyday life situations as well as academic study.						
ENGL	101	Academic English I	3	0	3	ENGL 050 OR ( ENGL 051 AND ENGL 052 AND ENGL 053 ) OR ( ENGL 052 AND ENGL 055 )
A course to develop the students' ability to use the language for academic study as well as everyday situations. It offers practice in reading comprehension, grammar, vocabulary-building and writing short texts.						
ENGL	102	Academic English II	3	0	3	ENGL 101
This course is a continuation of ENGL 101. It further develops students' reading, writing, listening and speaking skills needed for academic study and everyday communication.						
ENGL	131	English Grammar I	3	0	3	ENGL 101
This course is intended to provide students with a review of the basic elements of English grammar and syntax such as sentence building, correct usage and punctuation. Students will analyse typical usage problems of grammar in both speech and writing in order to control target forms in their spoken and written productions.						
ENGL	152	English Writing Skills I	3	0	3	ENGL 101
This course is intended to focus on developing beginning writing skills including sentence combining and paragraph development. Students will be encouraged to view writing as a process and will be introduced to the stages of this process. There will also be an emphasis on critical thinking skills. The course covers both professional and academic skills in writing. Students will be trained in note taking, email writing, memo, and paragraph writing.						

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<b>Foreign Languages</b>						
ENGL	201	Academic English III	3	0	3	ENGL 102
The third in the series of integrated language courses to develop the students' proficiency in using the language for academic study and everyday communication. Particular emphasis is placed on developing the students' ability to read longer texts, writing multi-paragraph texts as well as speaking skills.						
ENGL	202	Academic English IV	3	0	3	ENGL 201
The fourth in the series of integrated language courses which continues to develop students' proficiency in using the language for academic study and everyday communication.						
ENGL	210	Technical Report Writing	3	0	3	ENGL 201
This course provides skills needed for planning, structuring, and writing technical reports in English for various specializations. The course also covers essential language structures and vocabulary in line with English proficiency standards commonly required for efficient technical report writing. At the end of this course the learner will be able to communicate in writing technical reports with use of visuals and technical paper layouts.						
ENGL	211	English for Health Sciences I	3	0	3	ENGL 102
The first in the series of integrated language courses, which develops and improves students' reading skills in English, whilst increasing medical vocabulary through selected readings based on physiotherapy-related topics.						
ENGL	212	English for Health Sciences II	3	0	3	ENGL 211 AND Completion of at least 3 credits
The second in the series of integrated language courses, which further develops and improves students' reading skills in English, whilst increasing medical vocabulary through extensive readings based on health- related topics.						
ENGL	213	Report Writing	3	0	3	ENGL 201
This course provides skills needed for planning, structuring, and writing reports in English for various specializations. The course covers essential language structures and vocabulary in line with English standards commonly required for effective report writing. At the end of this course the learner will be able to communicate reports with appropriate use of visuals and report layout.						
ENGL	215	Readings in English Literature	3	0	3	ENGL 201
The course introduces students to English literature and focuses on readings and discussion of selected short stories. It aims at familiarizing students with the nature of literature through the study of character, plot, theme, point of view, style, and figurative language.						
ENGL	216	Readings Literature II	3	0	3	ENGL 215
After being introduced to short fiction in ENGL 205, the students are required to do further readings not only in works of fiction but also in selected works of poetry and drama. The aim of the course is to develop extensive reading skills and encourage a better understanding and appreciation of literature through the study of character, plot, theme, setting, structure, style, and figurative language.						
ENGL	218	Workplace Writing Skills	3	0	3	ENGL 102
This course introduces students to the trends of written communication in a professional context. It focuses on e-mail, memo, and short report writing. Students will be required to study a variety of workplace correspondence in order to produce their own samples.						
ENGL	221	Introduction to Translation	3	0	3	ENGL 201
The course introduces students to basic techniques of translation and develops their skill in translating a variety of short written texts from English to Arabic and vice versa. Materials include short descriptive passages, letters, announcements, advertisements, newspaper news items and readers' views. Typical problems involved in such translation are highlighted and discussed.						
ENGL	223	English Communication	3	0	3	ENGL 102
This course aims to further develop learners' communication skills, particularly the skills of speaking and listening. It focuses on interaction through language tasks in general as well as academic topics. Learners will also analyse samples of natural spoken interaction to develop their listening and conversational skills, and gain cultural knowledge of the target language.						
ENGL	231	English Grammar II	3	0	3	ENGL 131
In this course learners will focus on advanced English structure. Learners will develop the skills necessary to analyse sentence types and their functions. They will be introduced to inflectional and derivational morphology as well as lexical categories and their grammatical properties. Attention will also be given to tense, aspect, voice and modality.						
ENGL	250	Reading Skills in English	3	0	3	ENGL 102
This course is designed to refine learner's ability to read, understand and respond to upper-intermediate English texts. The material encompasses a variety of non-literary texts that learners face in their everyday use of English. Activities emphasise discipline-based vocabulary, reading strategies, critical thinking, interpretation of facts and data, reading speed and study skills.						
ENGL	251	English Fiction	3	0	3	ENGL 250
This course explores the diversity of fiction as it appears in the short story, novella, and novel. Learners receive instruction on how to read fiction critically. Emphasis is on techniques of close reading, critical inquiry of formal elements such as plot, setting, character, point of view, conflict, symbolism, and theme. Learners will learn to communicate in writing the evaluation of fiction and to engage in fundamental arguments to the discipline of literary studies.						
ENGL	252	English Writing Skills II	3	0	3	
The course is intended to further develop learners' writing skills in both professional and academic contexts. It includes letter writing as well as multi-paragraph essay writing. It introduces learners to, and provides practice in, the use of the different registers in written communication.						

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<b>Foreign Languages</b>						
ENGL	301	Advanced Language Skills I	3	0	3	ENGL 213
This course is designed to offer practice in advanced English language skills. It focuses on developing learner's reading (understanding the main ideas of a complex text), oral communication (interacting with a degree of fluency and spontaneity required in classroom and real-life, including workplace settings) and writing skills (producing clear, detailed text on a wide range of subjects) in addition to offering accuracy in using vocabulary and structures. Learners will also develop the techniques necessary for independent learning.						
ENGL	302	Advanced Language Skills II	3	0	3	ENGL 301
This course offers practice in English skills. Typical learners at this level will be able to use the language fluently and are aware of the relationship between language and culture. The course focuses on further development of the learners' reading and writing skills, fluent and spontaneous oral communication, and flexible and effective language use for social, academic and professional purposes, in addition to offering further accuracy in using vocabulary and structures. Learners will also further develop the study skills and learning techniques necessary for independent learning.						
ENGL	351	A Survey of English Literature	3	0	3	ENGL 251
This course aims to explore the historical development of English literature from the Middle Ages to the Twentieth Century. Major canonical figures representative of these periods will be introduced, and their work will be discussed in its relevant cultural and literary contexts.						
ENGL	352	English Writing Skills III	3	0	3	ENGL 252
This advanced writing course offers practice in writing different types of well-structured text on complex topics, both concrete and abstract. It helps students to express themselves fluently and use the language flexibly and efficiently for social, academic, and professional purposes. It also helps them to ask creative questions and think critically. It expands various writing skills including error correction, grammar usage, punctuation usage, text organisation, and writing an academic paper.						
ENGL	353	Readings in Modern British and American Literature	3	0	3	ENGL 351
The course provides ample practice in reading literary texts by British and American writers and conducting critical analysis, interpretation, and evaluation, supported by evidence, relating to theme, style, setting and social or historical context.						
ENGL	360	Introduction to Linguistics	3	0	3	ENGL 213
This course will provide a general overview of the study of language with particular emphasis on its structure, meaning and usage. Learners will be introduced to the main areas of linguistic description and analysis, including syntax, morphology, phonology, semantics, pragmatics, sociolinguistics, psycholinguistics and discourse analysis.						
ENGL	361	English Phonetics and Phonology	3	0	3	ENGL 360
This course introduces learners to the sounds of English. Learners will learn how vocal sounds are produced and how speech sounds are articulated, as well as how the consonants and vowels of English are distributed and described in terms of their distinctive features. Learners will also be trained in English phonemic transcription according to the principles of the International Phonetic Association. In addition, students will be given training in the prosodic (suprasegmental) features of English, including syllable structure, stress and intonation.						
ENGL	362	Introduction to Semantics	3	0	3	ENGL 360
This course focuses on the ways in which meaning is encoded in words, phrases, sentences and utterances. It also points to the role of the user as well as linguistic and non-linguistic contexts in determining the meaning of words.						
ENGL	364	Stylistics	3	0	3	ENGL 360
This is a skills-based course related to the linguistic techniques used in the analysis of style of different text types. It provides practice opportunities for students to develop an awareness of style and usage and enables them to formulate descriptions of stylistic distinctions. It helps learners recognise various linguistic resources (lexico-grammatical, rhetorical, and textual) and organisational strategies associated with language varieties.						
ENGL	365	Discourse Analysis	3	0	3	ENGL 360
This course provides a practical introduction to discourse analysis, the study of language in use. It offers an overview of some of the major approaches to studying oral and written texts and engage students in hands-on analysis of naturally occurring discourse. Through using numerous texts, students will use analytic tools to examine aspects of meaning-making, text cohesion, coherence, and text organisation. Further, students will explore such issues as the text producer's intent, contextual impact and relevance, proposition identification and cultural mediation.						
ENGL	461	Contrastive Linguistics and Error Analysis	3	0	3	ENGL 360
This course is devoted to the theory of contrastive analysis, which focuses primarily on the similarities and differences between the linguistic systems of the learner's native language and the foreign language (Arabic & English). It also introduces the practice of error analysis (methods of error identification, analysis, classification, and explanation).						
ENGL	499	Project in English	0	6	3	ETRM 498 AND ETHC 399
Learners are required to work on a practical project in English language/literature under the supervision of a faculty member. The projects should include detailed literature review investigation and research-based argument, and should be supported by a detailed research design and methodology with relevant conclusions that may be used for future research or by policy makers. The project will be assessed in terms of the quality of academic research, writing and oral defence.						
ETHC	399	Ethics and Professional Practice in English and Translation	3	0	3	Completion of at least 66 credits
This course introduces learners to major ethical issues related to translation and interpreting as professional activities. The course content explores morality and ethical principles that regulate translation as a profession, discusses the concept of accountability, and surveys relevant professional standards of practice and codes of ethics. Learners also study the ethical implications of several translation-specific factors including fidelity, equivalences, and linguistic choices on the target text. Through numerous case studies, learners will be trained to identify and analyse any potential conflict in translation that may give rise to an ethical issue, and then develop effective techniques for problem-solving.						

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<b>Foreign Languages</b>						
ETRM	498	Research Methods in English and Translation	3	0	3	ENGL 302 AND ETHC 399
This course aims to provide learners with the skills required to conduct a research project in English language, literature or translation. It covers different research methodologies, academic writing, and research ethical standards. The learner will be able to develop a research proposal leading to the final project. Core competencies will include effective use of the library, the ability to reference sources, plan the research, understand the processes and procedures involved in scientific research and deliver a presentation.						
FREN	101	French I	3	0	3	
A French language primer, first in a series of two elementary courses, offering a familiarization with its components (pronunciation, reading and listening comprehension, writing and basic rules of grammar). Students develop competence in understanding and expression of basic everyday language by holding conversation in French with others.						
FREN	102	French II	3	0	3	FREN 101
A French language primer, second in a series of two elementary courses, offering a detailed introduction to structure of French tenses paying particular attention to irregular verbs in everyday use. Students develop greater facility in reading, listening comprehension, writing and conversation.						
GERM	101	German Language & Culture I	3	0	3	
The course introduces the German language to students and promotes a general understanding of cultures and traditions in the German speaking regions of Central Europe. It is designed to enable students to communicate meaningfully in German on basic topics dealing with everyday events and situations. Students develop skills in reading, listening, speaking, and writing, and attain mastery of the basic structures (grammar) of the German language.						
GERM	102	German Language & Culture II	3	0	3	GERM 101
A continuation of GERM 101 that provides the students with the opportunity not only to develop an ability to communicate in German on a variety of subjects but also to gain awareness of contemporary German society and the cultural traditions which inform it.						
INTR	481	Internship in English and Translation	0	0	3	Completion of at least 90 credits
This is a closely monitored translation internship programme. It is designed to help learners to bridge the gap in translation between university study and training and the world of work. The programme provides learners with the opportunity to engage in real life translation, editing and proofreading work. The interns' performance is closely supervised by faculty members and industrial supervisors and assessed in tandem with the government or private sector entity where training is held.						
KORN	101	Introduction to Korean Language I	3	0	3	
KORN 101 is an introductory course designed for students with no previous knowledge of the Korean language. Students will learn the Korean alphabet (Hangul) in order to discern the sound of each alphabet. Furthermore, the course will teach students to speak basic Korean by teaching the basic sentence structure and vocabulary of the Korean Language through dialogues of real life situations. The course strives to teach the usage of 20 grammatical rules and 150 Korean words.						
KORN	102	Introduction to Korean Language II	3	0	3	KORN 101
The KORN 102 course is designed for students who have come across learning basic grammatical rules, expressions and structures. It focuses on acquiring communication skills by learning further complex grammatical structures and expanded vocabulary used within a daily life by carrying out speaking, listening, reading and writing tasks. Students will be able to use honorific forms, to express wish and to talk about hobbies, taste, transportation, and the appearance as well. This course aims at expanding the students' vocabulary with 200 words and 20 grammatical rules.						
SPAN	101	Introduction to Spanish I	3	0	3	
A practical language course which aims at familiarizing students with the basic rules of pronunciation, reading, speaking, writing, and listening comprehension. The course material focuses on developing students' ability to understand and express Spanish in daily conversations.						
SPAN	102	Introduction to Spanish II	3	0	3	SPAN 101
A continuation of SPAN 101 which aims at further developing the students' skills in speaking, reading and writing.						
TRAN	270	Fundamentals of Arabic-English Translation	3	0	3	ENGL 201
This course provides linguistic and conceptual skills specific to translation activities. It also addresses analytical, linguistic, and cross-cultural factors affecting translating from English to Arabic and vice versa. Additionally, it deals with the practice and ethics of translation. The learners will practice fundamentals of translation in various fields. The learners will be equipped with practical translation skills from Arabic to English and vice versa, including speed and accuracy.						
TRAN	271	Journalistic Translation	3	0	3	ENGL 201
This course focuses on translation and analysis of various authentic texts taken from local, regional, and international journalistic materials. These include selections from the areas of politics, economics, news reports and advertising. The learner will be able to meet the need of a journalist in various media publications and platforms by applying advanced knowledge and critical thinking skills.						
TRAN	272	Translation of Scientific Texts	3	0	3	ENGL 201
This course provides students with the relevant skills necessary for translating scientific text types. Students will have extensive opportunities to engage in translating a wide range of scientific texts, including popular science articles, scientific reports, proposals, extracts from scientific papers and guidebooks. While practising translation tasks, the student will learn strategies of dealing with issues that often arise when translating scientific documents, will build terminology sets in the subject areas covered in the course, and will perfect their scientific communication/writing skills.						

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<b>Foreign Languages</b>						
TRAN	372	Translation in Diplomatic and International Relations	3	0	3	TRAN 270
This course is designed to train learners and refine their skills in translation from English into Arabic and vice versa in the area of diplomatic and international relations. A variety of texts, terms and expressions connected with international relations will be used. Materials will include authentic documents from bilateral and multilateral agreements, international conventions, political legislations and diplomatic notes.						
TRAN	373	Translation of Official and Legal Documents	3	0	3	TRAN 270
This course aims to address the various complexities involved in the translation of official and legal documents. Learners will be introduced to official and legal terminology and style. Practical application will be provided in translating a variety of official and legal texts from Arabic into English and vice versa. This course offers an overview of translation practices and techniques specialized in the discipline of official and legal translation.						
TRAN	374	Business Translation	3	0	3	TRAN 270
This course is designed to train students in the skills and techniques required for translating business and economic documents including advertisements, business correspondence, memorandums, notices, business news releases, annual reports, marketing and banking texts as well as documents related to shipping, insurance, and customs. Students will also be trained in translating authentic business-related materials, which include brochures, magazines, tourist guides, catalogues, posters and promotional leaflets.						
TRAN	375	Translation of Technical Texts	3	0	3	TRAN 272
This course is designed to familiarise students with the textual characteristics of science and technology writings in both English and Arabic, and to develop and reinforce the skills and techniques required for translating such writings from English to Arabic and vice versa. Practical training will focus on developing proficiency in written scientific and technical translation that is clear in expression and sensitive to stylistic issues. Students will also develop an understanding of how to manage terminological resources available, especially those found on the Internet.						
TRAN	376	Medical Translation	3	0	3	TRAN 272
This course, which is largely practical, is intended for students with an advanced level of English who require specialized knowledge in both linguistics and translation in order to assist patients and medical/healthcare professionals by providing effective translation from English to Arabic and vice versa to facilitate communication in medical and healthcare settings. Authentic medical reports and notes pertaining to medical/healthcare topics will be utilized in a variety of communicatively focused exercises and tasks. The acquisition of medical/healthcare terminology in context, oral expression in certain contexts, written expression, as well as cultural components, will all receive special consideration.						
TRAN	377	Advanced Technical Translation	3	0	3	TRAN 375
This course deals with technical translation of documents containing technical material, so it is a specialized form of translation of documents which contain scientific and technical terminologies. Students taking this course will be trained in the field of technical translation from English to Arabic and vice versa. The documents used include user and operating manuals, scientific, technical, and engineering reports, patents and patent applications, manuals and guides for electronic products, technical products and their warranties, and technical specification of the products.						
TRAN	466	Translation of Technical and Medical Documentation	3	0	3	TRAN 375 AND TRAN 376
This course focuses on specific translation issues in the specialised fields of technical and medical translation. The focus is on providing students with the relevant competences and practical skills required to translate authentic documents in these two domains, critically applying efficient translation techniques and utilising appropriate supporting research. Students will explore certain commonly used types of technical and medical documents and the contexts in which they are translated, and learn effective strategies for achieving the translation tasks. They will also be given extensive practice in using CAT tools and post-editing techniques.						
TRAN	467	Advanced Medical Translation	3	0	3	TRAN 376
The goal of this course is to help students sharpen their translation abilities from English to Arabic of medical and health-related topics. It introduces students who are proficient in Arabic and intend to work as medical and health services translators to the appropriate practices, practical resources, electronic tools, and industry-recognized standard materials. By studying the variety of illnesses and disorders, anatomical terminology, medical prefixes and suffixes, and medical translation resources, the course integrates theory and practice. It also emphasises translating patient information leaflets, medical brochures, and public health bulletins, giving students plenty of chances to analyse and translate a variety of medical texts and gain understanding of a range of medical topics.						
TRAN	468	Translation of Technical User Manuals	3	0	3	TRAN 375
The translation of technical user manuals is essential for the globalisation of a product or software. This course will help learners to acquire the theoretical and practical knowledge necessary for the translation of a technical user manuals from English to Arabic and vice versa. Learners will get the skills they need to successfully translate the most valuable information contained in technical user manuals and users need to use and understand a product. They will also have the opportunity to practice technical translation with real projects and authentic content, and they will be trained to work with industry-specific terminology.						
TRAN	469	Interpretation Skills in Healthcare Settings	3	0	3	TRAN 376
This course equips learners with hands-on simultaneous interpretation training in various healthcare settings, focusing on the essential interpreting skills, such listening comprehension, memory retention, note taking, mental transposition, and verbalization in the target language, and the requisite medical terminology and ethical knowledge. Learners will acquire the skills and knowledge required by qualified simultaneous interpreters. Additionally, this course gives students the opportunity to use simultaneous interpreting strategies in a range of healthcare contexts and issues, with a focus on improving note-taking and listening abilities.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Foreign Languages</b>						
TRAN	470	Translation for Tourism, Culture and Heritage	3	0	3	TRAN 374
<p>Translation is a crucial component of effective cross-cultural communication, particularly in the fields of tourism, culture, and heritage. The cultural variations between Arabic-speaking and English-speaking nations have an impact on translation from English to Arabic and vice versa in this field. With a particular emphasis on UNESCO publications in this area, this course exposes students to translation from English to Arabic and vice versa of authentic documents linked to tourism, culture, and heritage. Students are introduced to specialized terms used in tourism, culture, and heritage. The course also increases learners' understanding of the significance of English-Arabic-English translation in tourism, heritage, and culture in terms of spreading culture, eradicating cultural differences, integrating cultures, and safeguarding diverse cultural characteristics.</p>						
TRAN	471	Literary Translation	3	0	3	TRAN 270 AND ENGL 351
<p>This course is designed to provide learners with the knowledge and skills necessary for translating literary texts from English into Arabic and vice versa. It is aimed at exposing learners to the various translation strategies and techniques used in different genres including fiction, poetry, drama, non-fiction prose and children's literature. Selected samples of translated literary works are analysed to illustrate the type of language problems that translators face, linguistic or cultural, and their concomitant solutions. Learners are given specialised level practice in translating literary texts representing different genres.</p>						
TRAN	472	Translation of Media Materials: Print and Audio-visuals	3	0	3	TRAN 271 AND ENGL 302
<p>This practical course trains learners in methods and techniques involved in translating news and media materials from English to Arabic and vice versa. It familiarises learners with the different types of media material both in print (e.g., features, roundups, brief, reviews, newsletters, and press releases) and in audio-visual format (e.g., television subtitles, multi-media, news media, news conferences). Technical problems and cultural issues are identified and discussed.</p>						
TRAN	473	Editing and Proofreading in Translation	3	0	3	TRAN 270 AND ENGL 302
<p>This course focuses on the importance of editing and proofreading skills in translation. It deals with how creating a source-to-target language translation appropriate for the target audience is the first step in the overall translation process. The course deals with the distinction between editing, and proofreading. It also looks at literal and content translation, and how professional translators adapt the source language, so that its features remain intact in the translated version.</p>						
TRAN	474	Simultaneous and Consecutive Translation	3	0	3	ENGL 302
<p>This practical course focuses on the differences between simultaneous interpretation and consecutive interpretation, and how both are employed in conferences, forums, meetings, and other events. It deals with linguistic aspects of simultaneous interpretation and consecutive interpretation techniques, and various issues involved in this practice. Learners will gain hands-on experience through simulating a real simultaneous interpretation environment.</p>						
TRAN	475	Computer Assisted Translation and Post-editing	3	0	3	TRAN 473
<p>This course is designed to introduce students to the role of computer-assisted translation (CAT), also known as Machine Translation (MT). It will mainly focus on the use of online MT tools such as Google Translate and SYSTRAN, addressing their considerable value as well as their potential limitations. It will also provide practice in post-editing of translated texts.</p>						
TRAN	476	Translation Criticism	3	0	3	TRAN 473
<p>This course is designed to train learners in the methods and strategies of translation criticism and assessment in both English and Arabic. Learners are given extensive practice in analysing/assessing critically various aspects of translation by examining a wide variety of published translated texts. Through applying text analysis procedures, the relationship between translation theory and translation practice will be explored. Learners will also receive training in proposing alternative renditions of a given text using different translation techniques.</p>						
TRAN	477	Advanced Translation of Official and Legal Documents	3	0	3	TRAN 373
<p>This advanced-level course aims to provide students with practical experience in translating complicated official and legal documents from English to Arabic and vice versa. Students participate in discussions of both the linguistic and legal components of the translation process, which may improve their ability to produce official and legal documents in general. The procedures for translating legal papers are explained to the students. The texts that will be translated will come from different sources and address a wide range of official and legal concerns. The correct vocabulary, as well as the employment of the proper register and style, are given special consideration.</p>						
TRAN	479	Interpretation Skills for Business and Legal Purposes	3	0	3	TRAN 373 AND TRAN 374
<p>This course builds on the knowledge and skills acquired in earlier interpreting and translation courses. It is designed to develop learners' professional skills of consecutive and simultaneous interpreting from English to Arabic and vice versa for business and legal purposes. The course introduces consecutive and simultaneous interpreting in business and legal settings, the latest developments in the interpreting industry, such as online simultaneous interpreting, and conference etiquette, and follows up with a series of seminar workshops and simulated conferences dealing with business and legal matters. Learners will perform intensive practical training in interpreting on how to handle spoken discourse adequately for interpreting purposes, and are exposed to diverse interpreting contexts such as court hearings, press conferences, national and international forums covering business, and legal topics.</p>						
TRAN	499	Project in Translation	0	6	3	ETRM 498 AND ETHC 399
<p>Learners are required to work on a practical project in translation under the supervision of a faculty member. The projects should include detailed literature review investigation and research-based argument, and should be supported by a detailed research design and methodology with relevant conclusions that may be used for future research or by policy makers. The project will be assessed in terms of the quality of academic research, writing and oral defence.</p>						
<b>Interior Design</b>						
ETHC	394	Ethics and Professional Practice in Interior Design	3	0	3	Completion of at least 66 credits



## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Interior Design</b>						
The purpose of the course is to introduce ethical dimension of management to prospective professionals in the field of Interior Design & Architecture. Emphasis is on applying ethical standards to a range of business practices that the practitioner might likely encounter in the business of architecture and interior design. Ethical aspects of doing business impinge on a range of services provided by architectural and design professionals including but not limited to: business management, marketing, contracts, negotiations, design cost analysis/control and human resources. As part of the learning process students will be expected to participate in class discussion as well as to analyze cases designed to develop critical thinking skills in ethics.						
GDES	300	Design Studio*	0	6	3	
GDES	303	Lettering & Typography I	0	6	3	
GDES	304	Lettering & Typography II	0	6	3	GDES 303
GDES	305	Computer Application in Design I*	0	6	3	ITCS 121
GDES	306	Photography	0	6	3	
GDES	308	Computer Application in Design* II	0	6	3	INTD 305
GDES	309	Illustration Techniques	0	6	3	
GDES	310	Design Studio II	0	6	3	GDES 300
GDES	400	Design Studio III*	0	6	3	GDES 310
GDES	405	Computer Application in Design III*	0	6	3	GDES 308
GDES	407	Portfolio Development I	0	6	3	
GDES	408	Printing & Publication Design	2	2	3	
GDES	410	Design Studio IV*	0	6	3	GDES 400
GDES	432	Research Methodology*	3	0	3	
GDES	434	Research Methology	3	0	3	
GDES	499	Project in Graphic Design	0	6	3	GDES 432 AND Completion of at least 90 credits
IDRM	498	Research Methods in Interior Design	3	0	3	INTD 329
This is a foundation course for INTD 499 Final Design Project. A thorough study of the actual site proposed should include the followings; the surrounding buildings and context, orientation and environment, and access and outlets. Students explore building regulations that have to be implemented in the project design. Students achieve an analytical research study about a diversity of similar case studies and their context. At the end of the semester, students should present their project to a jury of professional designers and academics.						
INTD	100	Engineering Drawing	1	4	3	
This course is an introduction to manual architectural drawing. The objective of the course is to develop the necessary manual dexterity and knowledge of drafting fundamentals and to create orthographic and pictorial technical drawings freehand and using equipment. Topics covered include: drawing instruments, lettering techniques, line work, scale drawings, simple geometric constructions and dimensioning.						
INTD	101	Drawing I	0	6	3	
INTD	102	Introduction to Design	1	4	3	
This course introduces students to the field of design through an introduction to general ideas and concepts of design theories and basic design principles in several simple building projects.						
INTD	103	Freehand Drawing	0	6	3	
This course aims at imparting sketching skills as a form of expression and thinking in the design process.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Interior Design</b>						
INTD	104	Interior Design Drawing	1	4	3	INTD 100
This course aims to develop both two-dimensional (for the creation of simple architectural plans, elevations and sections) & three-dimensional communication (perspective) as a means of creating the illusion of 3-dimensional space on a 2-dimensional surface. Using both one (1) and two (2) point perspective and how effectively render the illusion of space using pencil techniques, ink and color rendering.						
INTD	105	Theory of Interior Design	3	0	3	INTD 102
This course introduces the student to theories of visual perception and conceptualization. Through lectures, discussion and studio exploration students will discover the fundamentals of design, the design process, and creative thinking. Theories pertaining to human factors will be explored including proxemics, anthropometrics and ergonomics.						
INTD	110	Drafting Studio I	0	6	3	
INTD	111	Basic Design I	1	4	3	
Introduces students to the elements and principles of visual design and develops mental and manual skills to deal with visual values for structuring and expressing two-dimensional spatial compositions in different environments. Among the targets: to gain the ability to use visual and verbal design language; to introduce abstract thinking; to introduce and discuss the conceptual, visual, relational, and practical elements of basic design with their geometric definitions and relationships, and rhythm, balance, emphasis, dynamism, hierarchy, unity, etc.						
INTD	112	Basic Design II	1	4	3	INTD 111
This course intends to develop students' mental and manual skills in making use of the principles of design taken in INTD 111 such as rhythm, balance, emphasis, hierarchy, etc., and explore the principles of visual perception of form, space, function, mass to examine the relationship between human factor and spatial organization in developing three-dimension design compositions.						
INTD	113	Colour and Rendering Techniques	1	4	3	
This course aims to provide the students with a background in colour theories as it relates to interior design including colour schemes, as well as rendering techniques of 2D and 3D interior design and architectural drawings using manual and digital techniques reflecting materials, colours, textures, and their reaction to light and shadow in interior environment.						
INTD	200	Design Theory	3	0	3	
This course surveys major philosophies and trends that have determined different directions and movements in the field of interior design and architecture presents theories of the design of architectural interiors and related components. Design determinants also receive attention including behavioral environmental and technological factors.						
INTD	201	Drawing II	0	6	3	
INTD	202	Drawing III	0	6	3	
INTD	203	Design Workshop	1	4	3	INTD 102
This course focuses on model-making for a variety of projects, whether interior or exterior in addition to different interior design compositions.						
INTD	204	Design Drawing I	1	4	3	INTD 100
presentation and projection, techniques of representation of 3D including orthogonal (plans, sections and elevations) and praline (axonometric and isometrics). Drawing straight and curved lines, orthographic projections, sectional and pictorial views, architectural conventions for the creation of simple architectural plans, elevations and sections, and title blocks will all be studied.						
INTD	205	Presentation & Rendering Techniques	0	6	3	INTD 104
This course focuses on freehand rendering techniques for illustrative graphic presentation of interior design ideas. Students will employ a variety of mediums including graphite, ink, colored pencils, marker pens, pastels, watercolor, and collage. Other topics include reproduction, transfer, and mounting techniques. to create authentic versions of their designs. Emphasis is on rendering techniques that are used to accurately communicate the way objects and spaces are presented in three dimensional projections mimicking the built environment.						
INTD	206	History of Art & Design	3	0	3	
This course surveys the development of world architecture and art from classical to present times. It will discuss interior spaces, design philosophy, and interior elements in architectural and sociological context. Students study the record of human achievement expressed in the built environment. This course strives to impart to students a critical comprehension of historic styles and the impact that the latter have on contemporary design solutions.						
INTD	207	Materials in Interior Design	3	0	3	INTD 105
This course consists of a study of construction and finishing materials and their properties. Emphasis is on the appropriate selection, specification and employment of construction and finishing materials used in interior design.						
INTD	208	Visual Training	0	6	3	INTD 103
This course aims to develop aesthetic expression and judgment in design and architecture through the creative use of art elements and design principles.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Interior Design</b>						
INTD	209	Colour Theory & Practice	0	3	3	
This course develops the students' sophisticated sense of the theories of color, its properties, psychology, and impact within a designed interior. The elements of light, space, harmony, and assimilation as they pertain to the use of color in design are covered through lectures, in-class demonstrations, and class exercises. An understanding of the use of color in interior spaces will help the students in their own color application projects.						
INTD	210	Design Drawing II	0	6	3	
INTD	211	Design Drawing II	1	4	3	INTD 204
This course introduces students to systems of perspective as a means of creating the illusion of 3-dimensional space on a 2-dimensional surface. Using 1, 2, and 3 point perspective, students will learn to effectively render the illusion of space. Students will learn a variety of creative architectural drawing techniques of presenting architectural drawings including but not limited to: pencil techniques, ink and colour rendering.						
INTD	212	Elementary Residential Interior Design Studio	1	4	3	INTD 104 OR INTD 211
In this course, students apply a range of elementary design skills for the development of residential interior designs that take into account conceptual elements (human scale, movement, circulation, space planning) revolving around desiderata of living spaces, user requirements and needs, life quality improvement, and health and safety considerations. Students engage in systematic research in and interior programming of interior residential design and hone skills in freehand drawing and manual drafting through the use of sketches, mechanical drawings, and perspectives towards the preparation of conceptual illustrations.						
INTD	213	Textiles for Interior Design	3	0	3	INTD 207
This course aims to give students a broad understanding of technical and functional properties of interior textiles. The course content includes characteristics, use and production of textile materials used in interior design; the physical, mechanical and chemical properties of textile products; end use of the textiles considering their favorable properties; and ornament or embellishment techniques of textile surfaces.						
INTD	214	Software Technologies for Interior Design	1	4	3	INTD 104 OR INTD 204
The course aims to provide students with the specialist knowledge to develop computer-aided drafting skills using, primarily, the latest release of CAD software to develop attractive interior drawings (plans, elevations, sections, etc.) in conjunction with Adobe Photoshop. In addition, students are introduced to 3D Max, Rhino and Form Z.						
INTD	215	Digital Visualization in Interior Design	1	4	3	INTD 214 OR INTD 305
This course serves as a primer on computer aided visualization techniques enabling students to gain facility in creating layouts for digital and printed presentations. During the course, students integrate media and presentation techniques and students use software technologies to elaborate design concepts. Students gain exposure to the employment of digital models and data structures in the representation of the built environment.						
INTD	216	Elementary Commercial Interior Design Studio	1	4	3	INTD 212 OR INTD 300
This course focusing on commercial interior environments, the problem solving discipline of the design process and its application to offices, restaurants, lobbies, and related interior spaces, it develops concepts to achieve design goals and apply theoretical knowledge and technical skills to design solutions. Topics covered include commercial client needs, branding, space planning, material and furniture selection, building code requirements, barrier-free access, sustainable design practice, and presentation techniques used in the design of commercial interior spaces.						
INTD	217	History of Interior Design	3	0	3	INTD 105
The course puts into comparative perspective different architecture and design schools and styles from the Classical period to the 20th century that influenced and formed the modern interior design theory. A series of illustrated lectures and special presentations examines the historical sweep of interior design and architecture across Europe, the Americas, Asia, and Africa. Emphasis is placed on environmental, technological, economic and social factors contributing to the development of interior design and architecture over time.						
INTD	218	Materials and Finishes in Interior Design	2	0	2	
Materials and their properties are studied in this course. A focus is placed on the appropriate selection, specification, and use of construction and finishing materials in interior design.						
INTD	219	History of Architecture, Art, and Design	2	0	2	
The course is designed to give students the specialized knowledge and analyses they need to comprehend the development of architecture, art, and design within a chronological framework from the ancient civilizations to the early 21st century such as sculptures, paintings, graphic designs, and furniture. Emphasis is placed on environmental, technological, economic, and social factors contributing to the development of interior design and architecture over time.						
INTD	220	Residential Interior Design Studio	1	4	3	INTD 112
This course focuses on designing small size projects of residential facilities such as flats, villas, chalets, and penthouses. Students are expected to learn the basics of programming, functional analysis, anthropometrics and ergonomics, module, space requirements, and circulation, furniture selection and basic understanding of finishing materials.						
INTD	221	History of Interior Design	3	0	3	
INTD	222	Colour for Interiors	3	0	3	
INTD	223	Interior Codes & Constructions	3	0	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Interior Design</b>						
INTD	224	Interior Lighting and Acoustics	3	0	3	INTD 100
The course aims to introduce students to lighting design and the creation of specifications' legends, as well as themes such as decorative luminaires and energy efficiency. The course investigates the physical effects of light on colour. In-depth mathematical calculations are utilized to assess the amount of natural and artificial lighting and acoustic treatment required to suit various functions and clients' needs. Several sound and vibration control elements are also incorporated to better understand acoustic behaviour in interior spaces.						
INTD	228	Textiles for Interior Design	2	0	2	INTD 218
This course aims to give students a broad understanding of technical and functional properties of interior textiles. The course content includes characteristics, use and production of textile materials used in interior design; the physical, mechanical, and chemical properties of textile products; end use of the textiles considering their favourable properties; and ornament or embellishment techniques of textile surfaces.						
INTD	229	Theory of Interior Design	2	0	2	INTD 219
This course introduces the student to theories of visual perception and conceptualization. Through lectures, discussion and studio exploration students will discover the fundamentals of design, the design process, and creative thinking. Theories pertaining to human factors will be explored including proxemics, anthropometrics, and ergonomics.						
INTD	230	Digital Visualization in Interior Design I	1	4	3	INTD 214
This course serves as a primer on computer-aided visualization techniques that enable students to gain facility in creating layouts for digital and printed presentations; integrating media and presentation techniques; and using software technologies to elaborate design concepts. Students will be exposed to the digital models and data structures in the built environment.						
INTD	240	Retail Interior Design Studio	1	4	3	INTD 220
This course focuses on designing medium size / medium complexity projects of retail facilities such as, shopping units, bank branches, and service agencies (i.e., travel, insurance, ...etc.). Students are expected to develop a design criterion, design concept, functional relationships, spatial planning, and circulation, while considering the structure of a given building, ergonomics, and branding.						
INTD	300	Design Studio I	1	4	3	INTD 211
This studio course continues the study of interior design through research, analysis, programming, conceptualization and design of the interior environment. Projects include exercises in spatial organization, anthropometrics and circulation on an increasingly complex scale.						
INTD	301	Computer Aided Design I	0	6	3	
INTD	302	Computer Aided Design II	0	6	3	
INTD	303	Materials & Application in Design	3	0	3	
This course consists of a study of interior finishing materials with a focus on sustainability characteristics, estimating, fabrication and installation.						
INTD	304	Lighting & Acoustics	3	0	3	
This course explores ambient interior systems such as lighting and acoustics. It also includes basic principles of illumination, exploration of light sources, identification, terminology, analysis, calculations, graphic representation and documentation to effectively communicate lighting design and acoustics.						
INTD	305	Computer Application in Design I	1	4	3	INTD 204
An introduction to the CAD world and its 2D implementation in the architectural field. Students learn the tools and techniques to translate their hand drawn design sketches into digital format, from basic conceptual diagrams to fully loaded architectural drawings, meeting the high standards of design-firm expectations.						
INTD	306	Building System & Interior Codes	3	0	3	INTD 303
This course examines various interior assemblies on non-load-bearing and, load-bearing walls, floors, stairs, elevators, fireplaces, ceilings, doors, interior windows, frames, millwork, and fire-related construction. Emphasis is placed on building codes, construction materials, visual qualities, technical characteristics and applications of the common materials and finishes: floor coverings, wall coverings, textiles, ceiling, and sustainable materials. Related fire, health, and safety codes, as well as maintenance and life cycle costs, receive attention.						
INTD	307	Landscape Design	1	4	3	INTD 300
After reviewing history and theories of landscape architecture, this course introduces students to the design of the outdoor environment covering residential and small scale landscape developments. Project program, site selection and analysis, concept generation and design schemes feature prominently.						
INTD	308	Computer Application in Design II	1	4	3	INTD 305
The course enables students to increase their productivity by using complex objects (i.e. poly-lines, regions, and multi-lines), reference and image files. It also covers complex view ports and pen styles for plotting, basic customization for AutoCAD, and an introduction to 3D modeling.						
INTD	309	Building Information Modeling (BIM) I	1	4	3	INTD 215 OR INTD 308
The course objectives focus on fundamentals of Building Information Modeling (BIM) as a construction documentation system, introduces concepts and features of BIM. It includes software structure and features, modeling and editing techniques, and sheet creation and organization. It focuses on applying BIM software to develop a set of construction documents.						
INTD	310	Design Studio II	1	4	3	INTD 300
This is a design studio course with emphasis on the development and presentation of residential design projects.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Interior Design</b>						
INTD	311	Intermediate Retail Interior Design Studio	1	4	3	INTD 216 OR INTD 310
<p>This course focuses on retail spaces, the problem solving discipline of the interior design process and its application to department stores, shops, boutiques, and other retail and mercantile settings. Students apply a range of intermediate design skills involving both freehand techniques and CAD software in creating retail interior designs, through systematic research and interior design programming, that comport guidelines and regulations of building and safety codes.</p>						
INTD	312	Human Factors in Design	3	0	3	INTD 105
<p>Building on precepts garnered on the elementary level in the Theory of Interior Design (INTD105), this course primarily explores in depth concepts of human factors, the anthropometric aspects of ergonomics, that applies in the utilitarian design of interior spaces involving diverse topical matter as efficient design of workspaces, optimal deployment of safety equipment and security features as well as a more general consideration of how differences in the characteristics, abilities, and physical limitations of human bodies impinge on interior design solutions.</p>						
INTD	313	Design & Society	3	0	3	INTD 217
<p>This course confronts students with the key social issues facing contemporary society and the response of design and visual communication practices to them. Topical content includes design of interior environments in relation to cultural norms, gender differences, design for the disabled, the elderly and children, as well as the notion of universal design. The course is designed to enable students to think about design and visual culture in a critically engaged way through a case-study approach tailored to illumine cross-cultural differences as a driver of contemporary designed environments. In this course students are also be encouraged to approach their own design practices in a societally reflective manner.</p>						
INTD	314	Color in Interior Design	1	4	3	INTD 205
<p>This course aims to provide the student with knowledge of color used in the interior design profession. This course is a study of color as a key design element with its applications to the practice of interior design. Emphasis will be placed on using color in combination with the principles of design to gain a holistic view of color and design theory. Upon completion of this course, students will be capable of demonstrating and applying the necessary practical and theoretical properties of color to the built environment.</p>						
INTD	315	Garden & Landscape Design	1	4	3	INTD 212
<p>The course introduces students to principles of landscape design including culture, ecological, spatial, environmental aspects to be considered in planning and designing the landscape areas. This course also focus on design of attractive and functional gardens as a very important part in built environment. Students undertake a site survey and frame a conceptual design consonant with client needs, selecting appropriate hard and soft landscaping materials, with a view to modeling the created design of garden.</p>						
INTD	316	Digital Presentation & Communication	1	4	3	INTD 215
<p>Students exhibit proficiency in application of advanced 3-dimensional modeling and digital rendering techniques through the use of current industry standard software. As part of a suite of project presentation materials, students acquire advanced skills in digital illustration using Photoshop to create photo-realistic images of interiors in a professional presentation of an interior design project.</p>						
INTD	317	Furniture Design	2	2	3	INTD 213
<p>This course focuses on materials, construction technologies, furniture production and marketing involved in the design and fabrication of furniture. It explores the relationship between ergonomics, comfort and function in the design of furniture for both site-specific environments and mass produced applications, as well as to the development of detailed drawings and model of the designed furniture piece to better understand construction connections and detailing. The components of this course focus on application of design theories and principles in the creation of furniture as well as the specification of furniture in interior design projects.</p>						
INTD	318	Bahrain Traditional Interior Design	2	0	2	
<p>An introductory course on the survey and Research of Bahraini traditional interior architecture, including examples from well-known historic buildings and monuments in Bahrain such as Bait Siyadi, Al Jasrah House, Al Khamis Mosque, Bahrain Fort, and Shaikh Salman bin Ahmed Al Fatih fort. Topics addressed include an overview of the evolution of Bahraini architectural styles, Islamic ornamentation, and calligraphy across time.</p>						
INTD	319	Lighting in Interior Environments	3	0	3	INTD 205
<p>This Course focuses on the fundamentals of light: its sources, variations, quality, design implications, product variations, technologies and cost/benefits. Students learn how to integrate appropriate lighting and color choices, from both technical and aesthetic perspectives, covering the four function of light: task, accent, decorative and ambient. Lighting for the specific sectors of built environments (residential, retail, corporate, etc.) is discussed and evaluated as an imperative creative design feature and form-maker.</p>						
INTD	320	Hospitality Interior Design Studio	1	4	3	INTD 240
<p>This course focuses on designing medium size / medium complexity projects of hospitality facilities such as hotels, restaurants, and tourism related services (i.e., Gallery, museum ...etc.). Students are expected to develop a design criteria, design concept, functional relationships, spatial planning, and circulation, while considering the structure of a given building, sustainability solutions, luxury selection of interior finishes, textiles, furniture and styles. Custom furniture and interior surface treatments.</p>						
INTD	321	Interior Design Communication	3	0	3	
INTD	322	Interior Materials I	3	0	3	
INTD	323	Interior Materials II	3	0	3	
INTD	324	Building Systems	3	0	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Interior Design</b>						
INTD	325	Lighting	3	0	3	
INTD	327	Design and Society	2	0	2	INTD 240
This course confronts students with the key social issues facing contemporary society and the response of design and visual communication practices to them. Topical content includes the design of interior environments in relation to cultural norms, gender differences, design for the disabled, the elderly, and children, as well as the notion of universal design. The course is designed to enable students to think about design and visual culture in a critically engaged way through a case-study approach tailored to illumine cross-cultural differences as a driver of contemporary designed environments. In this course, students are also encouraged to approach their own design practices in a societally reflective manner.						
INTD	328	Furniture Design and Details	1	4	3	INTD 218
This course has an emphasis on furniture design, focusing on issues such as the aesthetics of furniture, functionality, ergonomics, methods of construction, sustainability, technology, and technical aspects. The course allows students to study the history of design, then utilize the knowledge to formulate their original designs starting with a conceptual idea, then communicating the idea, and eventually fabricating quality pieces based on their own custom design idea.						
INTD	329	Building Information Modeling (BIM) II	1	4	3	INTD 309
This course endows students with the knowledge and professional level skills for generating a Building Information Model (BIM) using industry –standard Revit software. Students obtain a comprehensive overview of and employ BIM concepts in building projects involving planning and design of residential and commercial facilities across a range of modeling building elements						
INTD	330	Stage Planning	0	6	3	
This course explains the history and development of stage design and the exploration of the design process. It also explains project work in the realization of stage designs through drafting, rendering, and model-building.						
INTD	331	Residential Designs	2	2	3	
INTD	332	Contract Design Studio	2	2	3	
INTD	334	Comics & Animation	0	6	3	
This course imparts animation techniques to students with the training and practical experience necessary for independent operation of animation equipment and the independent production of animated film. A variety of traditional and experimental techniques are explored in depth. These techniques include animation stand as well as three-dimensional animation execution.						
INTD	336	Fine Art Studio	0	6	3	
This course explores the elements of visual language, their nature, functions, and relationships in painting, sculpture, and architecture. Focus is on the development and application of critical thinking skills.						
INTD	337	Historic Restoration	0	3	3	
This course is an examination of the contemporary theories, techniques and practices of the urban and architectural historic preservation and their applicability to regional and local preservation problems. The course also includes a discussion of historical, legal, political, financial and programmatic aspects.						
INTD	338	Photoshop	0	6	3	
This course shows you how to use Adobe Photoshop to perform many different image processing techniques. In this course, you will learn to use several tools for selecting parts of images, and will move, duplicate and resize images. You will learn to use layers, layer effects, filters, lighting and texture effects, painting and blending, and colour modification. Also, you will learn to create images of different formats for different applications.						
INTD	339	Historic Restoration	3	0	3	INTD 217
This course is an examination of the contemporary theories, techniques and practices of the urban and architectural historic preservation and their applicability to regional and local preservation problems. The course also includes a discussion of historical, legal, political, financial and programmatic aspects.						
INTD	340	Educational Interior Design Studio	1	4	3	INTD 320
This course focuses on designing large size / high complexity projects of educational facilities such as schools, colleges, training centres, or specialized craft institution (i.e., photography, pottery, ...etc.). Students are expected develop a functional and aesthetical eco-friendly space with an emphasis on technical issues of lighting and ventilation.						
INTD	341	Islamic Art & Design	0	6	3	
This course is an analytical study of the history of Islamic art and architecture, particularly its evolution and development of graphic and architectural form under the influence of Islamic culture.						
INTD	342	Islamic Art & Design	3	0	3	INTD 217
This course is an analytical study of the history of Islamic art and architecture, particularly its evolution and development of graphic and architectural form under the influence of Islamic culture.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Interior Design</b>						
INTD	343	Digital Presentation and Communication	1	4	3	INTD 214
Students exhibit proficiency in the application of advanced 3-dimensional modelling and digital rendering techniques using current industry standard software. As part of a suite of project presentation materials, students acquire advanced skills in digital illustration using Photoshop to create photo-realistic images of interiors in a professional presentation of an interior design project.						
INTD	350	Digital Visualization in Interior Design II	1	4	3	INTD 230
This course serves as an advanced level on computer-aided visualization techniques that enable students to create realistic images of the design concepts and animated videos, using walkthroughs and virtual reality; integrating advanced technologies and software; and using rendering engines to elaborate design concepts. Students will be exposed to customized digital modelling and advanced data structures in the built environment.						
INTD	400	Design Studio III	1	4	3	INTD 310
This course deals with design problems involving hospitality and entertainment spaces: restaurants, hotels, shopping malls, convention centers and historic interiors. Emphasis is placed on space planning, sequencing of spaces, fixture design and details, signage and logo design, materials and texture, and furnishings and equipment, Projects & assignments include a broad range of interiors for specialized clients.						
INTD	401	Computer Aided Design III	0	6	3	
INTD	402	Computer Aided Design IV	0	6	3	
INTD	403	Working Drawing & Documentation	1	4	3	INTD 306
Introduces the production of a comprehensive set of construction documents and an architectural working drawings of interior constructions, such as floor plans, elevations, sections, finish schedules, reflected ceiling plans, interior partitions, stairs, fireplaces, doors, windows, and details. Emphasis is placed on the selection, specification and illustration of appropriate materials, assemblies and components. Students prepare a full suite of documentation (client's brief, conceptual design, work drawings, material planning) in support of a selected interior construction to professional standard.						
INTD	404	Advanced Educational Interior Design Studio	1	4	3	INTD 311 OR INTD 400
Objective of the final and last design studio is a complex and large educational facility that provides students with a "virtual studio" environment where industry practices and design theories are integrated into simulated projects. Students are expected to utilize all theories and resources developed in preceding courses to produce an advanced space planning solution, and complete construction documentation for a major design problem. Demographic, economic, behavioral, conceptual and contextual consideration for a tiered educational facility is considered. Emphasis will be placed on collaborative skills, research, critical analysis and incorporation of sustainable practices. Students also get to use digital media for three-dimensional presentations of design projects are implemented such as AutoCAD 2D, Google Sketch up, Photoshop, 3D Max and Revit to support the Interior Design Advanced Studio Project						
INTD	405	Computer Application in Design III	0	6	3	INTD 308
The course provides students with substantial practice in the creation of 3-dimensional, object-oriented models using 3D Software.						
INTD	406	Environmental Control Systems	3	0	3	INTD 306
This course covers fundamental knowledge of building physics (heat, air and moisture, sound, light, sun and wind) and building services engineering (installation concepts and components) in building design issues. These areas are addressed in the context of sustainable and energy efficient building design with the final aim of achieving safe, healthy, comfortable and low-energy buildings. The integration of sustainable climate concepts in architectural design and urban planning plays central role.						
INTD	407	Portfolio Development	0	6	3	INTD 400
This course provides the opportunity to create a portfolio of projects completed in previous interior design courses. Organization, flow, readability, and digital format are among the discussed topics.						
INTD	409	Drawings & Specifications I	1	4	3	INTD 306
Exploring methodology of developing a comprehensive set of construction documents for different interior design projects, this course emphasizes drawing and document standards for plans, elevations, schedules, details and specifications in accordance with professional practice.						
INTD	410	Design Studio IV	1	4	3	INTD 400
The main objective of this course is to expose students to complex interior design situations where they have to come up with innovative solutions dealing with: detailed structural solutions, built in components and lighting and customized furniture.						
INTD	412	Design Psychology	3	0	3	INTD 313
Drawing on environmental psychology relevant to spatial design, students, employing theoretical and analytical methods, gain insight into ways in which the individual and the built environment interact, influencing behavior and experience. In this course, students gain an appreciation of the complex interaction and impact of the built environment on human behavior examined through the prism of social, behavioral, cultural and environmental variables. Issues of social and cultural context, gender, health and well-being are examined through environmental factors and characteristics of the built environment.						
INTD	413	Sustainable Design	3	0	3	INTD 313
This course is designed to provide students with the essential knowledge to understand the principles of "green" design. It covers an analysis of sustainable or "green" buildings through the practice of designing, constructing, operating, and maintaining buildings in ways that conserve natural resources and reduce their impact on climate change.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Interior Design</b>						
INTD	415	Acoustics	3	0	3	INTD 306
This course addresses the use of basic sound in design and the principles of sound absorption and isolation within the context of interior design. It focuses on the design of internal spaces emphasizing acoustics in reference to Indoor Environment Quality (IEQ) and complex multifunction building types.						
INTD	417	Advanced Healthcare Interior Design Studio	1	4	3	INTD 403 AND INTD 404
The course focuses on the interior design of healthcare spaces, the problem solving discipline of the interior design process and its application to hospitals, clinics, assisted living communities, and related healthcare facilities. The emphasis is placed on special needs populations including the cognitively/mentally impaired, geriatric populations, and children. In consultation with the instructor, the student design team selects a special population to research. At completion of research, the student team provides programming, pre-design documentation, tracking documentation and a final design presentation. Students develop facilities in the use of AutoCAD, Google Sketch up, Photoshop, 3D Max and Revit.						
INTD	419	Introduction to Virtual Reality	2	2	3	INTD 350
This course introduces the basic concepts and technologies of Virtual Reality (VR) focusing on different ways to move around. Students will be introduced to creating 3D panoramic environments for immersive communication.						
INTD	420	Healthcare Interior Design Studio	1	4	3	INTD 340
This course focuses on designing large size / high complexity projects of health care facilities such as general hospitals, specialized clinics, special care centres (i.e., elderly, paediatric, cognitively/mentally impaired ...etc.). Students are expected develop a comprehensive design with emphasis on socio-cultural and technical issues such as buildability, acoustics, safety, and hygiene, while maintaining sustainable design measures.						
INTD	427	Signage & Wayfinding Systems	2	2	3	INTD 313
Wayfinding functions to inform people of the surroundings in unfamiliar built environments with a view to highlighting information at strategic points to guide people into the right directions to overcome the fact that complex structures in the built environment are interpreted and stored by the human memory vary such that distances, locations and time are remembered differently than as they appear to be in reality. Students gain insight into landmarks, orientation and navigation as key inputs in strategizing wayfinding designs. Students integrate signage systems in a design grid used to integrate information in the context of four sub-types of signage: Informational signs, directional signs, identification signs and warning signs.						
INTD	429	Kitchen & Bathroom Design	1	4	3	INTD 306
This course covers specific technical, ergonomic and functional requirements in kitchen and bath design for both residential and public buildings. This course helps students to understand the kitchen and bathroom design process from conceptual drawings to schematic design, study the fundamentals of design and layout, including the functional use of space, review artificial and natural daylight and ventilation requirements, available fixtures, equipment specifications, and cabinetry design and function, and refine students' knowledge of choosing appropriate colors and in specifying materials for durability and easy maintenance.						
INTD	430	Traditional Interior Architecture	3	0	3	INTD 313
The aim of this course is to introduce the students to the non-western traditional culture and architecture in different regions in terms of indoor environmental quality and formation of the plan layouts regarding both interior and exterior spaces. The course includes next to the Bahraini, also Indian, Egyptian, Iranian, Moroccan and Far-East traditional architecture and interiors. Main themes include: the characteristics of the non-western interior architecture; the climate & sustainability aspects such as heating, cooling, ventilation, lighting, energy and materials of these traditional buildings.						
INTD	431	Furniture Design Studio	2	2	3	
INTD	432	Office Design & Planning	0	6	3	
INTD	433	Retail Design	2	2	3	
INTD	434	Research Methodology	3	0	3	
This course aims at developing an understanding of and an appreciation for using a structured design methodology. Students will have a better understanding of the wide range of aspects that must be effectively dealt with in designing successful interiors. They should also come up with some interior design specific knowledge such as material selection, design for assembly, design for manufacturability, quality issues, etc.						
INTD	435	Exhibit Design and Installation	2	2	3	INTD 313
This course emphasizes the aesthetic and functional importance of form and space in exhibit design in commercial and non-commercial settings. Synthesizing multiple design disciplines that come together to communicate objects, information and themes across a range of three-dimensional environments, students, in exhibit design, communicate to target publics through environmental experiences that inform, entertain, and inspire. The discipline considers the exhibition from the perspectives of communication, design and fabrication that involve a mastery of spatial planning, image manipulation, narrative, color, lighting, and multimedia, and working knowledge of structures, typography, combined with an understanding of audience and human factors, to shape storytelling experiences across multiple exhibition venues. Students engage in planning of interior-design environments and scenography for trade exhibitions as well as for a range of festivities, museums, cultural and theatrical events. Students will gain insight into the staging of representative and experiential spaces; for a variety of exhibitions and by means of case studies and attendance at exhibitions, where they will gain firsthand knowledge of the role of such factors as lighting, sound and multimedia effects in installation of exhibit designs.						



## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Interior Design</b>						
INTD	441	Interior Desing in Business	3	0	3	
INTD	499	Project in Interior Design	0	6	3	IDRM 498 AND ETHC 394
This course explores the concept of a space. Students investigate site and client analysis, and then formulate design proposals from sketch scheme to final solution. The project is chosen by the student and subject to approval by a senior project advisor and coordinator. Advanced study, research, and data collection leading to the development of the graphic and three dimensional materials are required to illustrate the design process and the project solution.						
INTR	411	BSID Internship	0	12	6	Completion of at least 90 credits
This course provides practical training experience, off-campus on a job site, for BSID students to facilitate transition from the classroom to a professional work environment facilitating their seamless integration into the work force upon graduation as interior designers. This course aims to provide students with first-hand experience of the day-to-day functions and duties of and operations undertaken by interior designers and to integrate knowledge and skills learned in the classroom with competencies required by the workplace.						
INTR	470	BSID Internship	0	0	3	Completion of at least 90 credits
This course provides practical training experience, off-campus on a job site, for BSID students to facilitate transition from the classroom to a professional work environment facilitating their seamless integration into the work force upon graduation as interior designers. This course aims to provide students with first-hand experience of the day-to-day functions and duties of and operations undertaken by interior designers and to integrate knowledge and skills learned in the classroom with competencies required by the workplace.						
PHOT	101	Introduction to Digital Photography	2	2	3	
The course introduces the art and craft of digital photography. Students will practice how to use and get the best from their cameras and the main menu features. Emphasis is placed upon improving the quality of the image produced within the camera by expanding the user's awareness of the camera functions and the possibilities provided by a sound knowledge of the features and basic imaging theory.						
<b>Interior Design Masters</b>						
MSID	501	Innovation and Design Process	3	0	3	
This course enables students to understand how to utilize a sustainable design philosophy that encourages decisions at each phase of the design process that will reduce negative impacts on the environment and the health of the occupants, without compromising the bottom line. It is an integrated, holistic approach that encourages compromise and tradeoffs. Such an integrated approach positively impacts all phases of a building's life cycle, including design, construction, operation, and decommissioning.						
MSID	502	Environmental Systems for the Sustainable Interior	3	0	3	
This course covers the systems and materials integrated into one whole sustainable interior design environment. The aim is to be creating a healthy space, minimizing negative impacts on the environment and occupants, while maximizing the positive health, economic and social life cycle.						
MSID	510	Innovative Building Materials and Finishes	2	0	2	
This course provides critical understanding of major building materials used in the sustainable construction industry. This course introduces learners to the analytical methods for determining appropriate choices for designing and selecting soft goods for a sustainable interior including upholstery frames, fillings, and finish textiles for furnishings, as well as window treatments and floor coverings are covered. Both new and re-manufactured goods are explored. At the end of this course learners will be able to apply knowledge in relation to Innovative Building Materials and Finishes						
MSID	511	Energy Use and Thermal Comfort in Buildings	2	0	2	
The course covers the fundamentals of energy demand in buildings while emphasizing the need for the comfort and well-being of occupants. The topics covered here demonstrate how energy and wellbeing are correlated to express building quality, the influences of thermal comfort in buildings, and ways to improve thermal comfort while maintaining energy efficiency.						
MSID	512	Advanced Management of Information in a Building: BIM	1	4	3	
This course provides learners with the critical knowledge of digital transformation in the architecture, engineering, and construction (AEC) industry using Building Information Modelling (BIM) to enhance the building energy efficiency and cost control. At the end of this course the learner will be able to apply knowledge related to transformation in the architecture by using professional skills to analyze complex issues related to sustainable building performance.						
MSID	513	Building Performance Assessment	2	0	2	
This course provides students with the knowledge and skills to evaluate and assess the performance of buildings from a sustainability perspective. Learners will learn to analyze various aspects of building performance, including energy efficiency, indoor environmental quality, occupant comfort, and ecological impact. Learners will explore different rating systems and certifications, such as Leadership in Energy and Environmental Design (LEED) and WELL Building Standard and understand their criteria and metrics for evaluating sustainability performance.						
MSID	514	Sustainable Studio -Residential and Contract Environments	1	6	4	
This design studio focuses on the challenge of designing a sustainable residential interior with a range of typologies: a free-standing single-family residence, a residence within a multiple dwelling, and different contract project types such as corporate, institutional, healthcare, hospitality, and retail. At the end of this course learners will be equipped with applied knowledge pertaining to sustainable studio, residential & contract Environments.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Interior Design Masters</b>						
MSID	515	Lighting Controls and Systems Technology	2	0	2	
<p>This course covers the application of lighting principles to create project documentation encompassing lighting sources and controls. Utilizing their current studio projects, students will create lighting layouts, zoning diagrams, luminaire schedules, and controls specifications including code and certification requirements. At the end of this course the learner will be equipped with critical knowledge and understanding in relation to Lighting Controls and Systems Technology that could be applied in different design solutions.</p>						
MSID	521	Environmental Life-Cycle Assessment in Interior Design	3	0	3	
<p>The course provides knowledge and practical applications for the use of Environmental Life-Cycle Assessment in Interior Design. Learners will learn how to calculate and optimize the entire life cycle of a building, considering the different phases from production and use to end of life aiming to identify areas for improvement. At the end of this course learners will be equipped with critical knowledge and understanding a comprehensive of the influence of costs and environmental factors on the selection of sustainable design solutions and building system design.</p>						
MSID	524	Passive Design	3	0	3	
<p>This course will allow explorations of passive design principles. The learner will have the opportunity to concretely apply and test these principles using a holistic approach encompassing building technology, building physics, indoor climate and building services. The course also aims to show the potential of thermal and climatic constraints as a guide in explorations and development of configurations and solutions in case study projects. In addition, the course will allow the application of rules of thumb and tools (computer, hand calculations) - acquired in theoretical courses - for thermal balance, thermal comfort, and moisture safety predictions. These tools will be used to feed the iterative design process and inform wise design decisions. At the end of the course the learner will also learn to present passive concepts and strategies using graphic methods in a productive way supported by data (results from simulations or hand calculations).</p>						
MSID	525	Intelligent Building Design	3	0	3	
<p>This course provides an overview of all aspects of intelligent buildings including history; design; components; construction; management strategies; economic implications; effects on the environment; and future trends. An intelligent building is in of an efficient and environmentally friendly design. An intelligent building also optimizes its occupants' circulation and networking, enhancing their collaboration, productivity, and creativeness.</p>						
MSID	526	Constructing the Green Interior	3	0	3	
<p>This course focuses on the practical implementation and construction aspects of creating environmentally friendly and sustainable interior spaces. Learners will gain knowledge and skills related to sustainable construction techniques, materials, and systems specific to interior design in reducing environmental impact, improving energy efficiency, and promoting occupant health and well-being. At the end of this course learners will be equipped with critical and professional skills that could be applied while Constructing the Green Interior towards sustainable environment.</p>						
MSID	550	Research Methodology	2	2	3	
<p>This course provides students with the necessary knowledge and skills to conduct rigorous research in the field of sustainable interior design. It focuses on developing a deep understanding of research methodologies, data collection and analysis techniques, and ethical considerations in research. Students will learn how to develop research proposals and design research projects that address specific research questions or problems related to sustainable interior design.</p>						
MSID	599	Dissertation in Sustainable Design	0	24	12	
<p>This course will provide a structured supervised in-depth study on a pre-approved topic in the field of field of sustainable design, architecture and the built environment involving one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the learner in a progressive course of intellectual discourse involving problem identification of complex issues related to sustainable design, architecture and the built environment, methodology, the subsequent methodology may vary depending on the selected topic (archives, monitoring, modeling, thermal simulation, etc.), the learner will be required to conduct critical analysis and research, evaluation and recommendation that culminates in the production of manuscript subject to defense.</p>						
<b>Mass Communication &amp; Public Relations Mastres</b>						
DMMC	599	Dissertation in Mass Communication	0	24	12	MCPR 520 AND Completion of at least 21 credits
<p>The student completes a scientific dissertation in the communication field on one of the media phenomena or the problems facing practical and professional practice in the various fields of communication. The dissertation includes a methodological framework that explains the methodologies of the thesis and a theoretical framework and a review of previous related literature and an essential part in which the student reviews the general results of the study, and represents a scientific addition to the field of communication in its various branches.</p>						
DMPR	599	Dissertation in Public Relations	0	24	12	MCPR 520 AND Completion of at least 21 credits
<p>The student completes a scientific dissertation in one of the scientific phenomena related to the field of public relations or studies the problems facing practical and professional practice in the field of public relations and strategic communication. The dissertation includes a methodological framework that explains the methodologies of the dissertation, a theoretical framework and a review of previous related literature and an essential part in which the student reviews the general results of the study and represents a scientific addition to the field of public relations.</p>						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations Mastres</b>						
MASC	500	Communications Theories	3	0	0	
Commencing with a survey of mass communication theory and the philosophical, sociological and political effects of mass media on audiences and societies, this course examines complex communication behaviors exhibited by stakeholders and publics in corporate and institutional settings and then proceeds by analyzing the news media in terms of its serving as conduits for global information. The course concludes with the role of mass communication in developing nations and its relationship to economic growth, education, socialization, persuasion and diffusion of innovation.						
MASC	501	Basic Concepts in Mass Communication	3	0	0	
The course deals with mass communication as a social and psychological phenomenon. It addresses topics such as the definition of the concept and the types and levels of communication and its effects, the development of communication through the successive periods of history, and characteristics of mass communication. It also introduces modern means and prototypes of communication.						
MASC	502	Basic Concepts in Mass Communication	3	0	3	
The course deals with mass communication as a social and psychological phenomenon. It addresses topics such as the definition of the concept and the types and levels of communication and its effects, the development of communication through the successive periods of history, and characteristics of mass communication. It also introduces modern means and prototypes of communication.						
MASC	510	Written Communications & Reporting	3	0	3	
MASC	511	Contemporary Trends in Communication Theories	3	0	3	
This course aims to acquaint students with contemporary theories of communication. In particular, it deals with recent trends in mass communication and its role in modern societies, the functions of communication, theories of information dissemination, the effects of mass communication and the study of mass communication in terms of social systems.						
MASC	512	News Writing in Arabic & English	3	0	3	
This course is designed to enhance students' skills in writing news items both in Arabic and English. Students learn the differences between news writing and editing. The course also teaches students features, elements, concepts, types and sources of news items.						
MASC	513	Newspaper Editing & Layout	2	2	3	MASC 512
The course explores the differences between writing news items and journalistic reports and introduces the students to the news writing styles (format, structure and techniques). It also deals with the concepts and principles of the artistic layout of newspapers and magazines, traditional publishing methods and the use of electronic publishing software such as "Adobe Photoshop", "Quark Express" and "Audi Streeter."						
MASC	514	Arab & International Media	3	0	3	
The course introduces the students to various issues in international media such as direct broadcasting, the cultural, legal and social problems of satellites and the problems of the new world order of media. It also deals with the theory of information flow between the developed and developing countries and the problems arising from the imbalance in the flow of information between them. It addresses the issue of unions and regional and international organizations and their impact on the international media as well as the image of Arabs in western media and how to improve it.						
MASC	515	Electronic Journalism	3	0	3	
This course aims to introduce students to the types and advantages of electronic journalism. It highlights the use of computers and the internet in press production and editing and deals with the differences between news editing and writing in the printing press and electronic journalism.						
MASC	516	Advanced Writing for Journalism	2	2	3	
MASC	517	Newspaper Design & Layout	2	2	3	
MASC	518	New Trends in New Media Studies	3	0	3	
MASC	519	New Trends in Digital Journalism	2	2	3	
The course deals with the features of digital development in the infrastructure of media and communication on the Internet, reviews digital journalism and its characteristics, forms and levels, deals with the practical experience of journalists and editors in network journalism, design and editing of electronic newspapers, review of the economics and management of electronic newspapers, the use of computer applications in the field of electronic publishing, getting acquainted with modern technologies in the field of digital journalism, and creating an electronic newspaper with its full contents.						
MASC	520	Broadcasting & Media	3	0	3	
MASC	521	Writing and Managing the Electronic Content	2	2	3	
The student learns about recent trends in digital production in terms of the practical dimensions of the rapid development of digital production processes, and the scientific dimensions represented by the interest of modern scientific studies in the roles of digital production techniques in building the media message and its effects on the public. This course requires the production of media content in a group project that applies modern digital technologies and management, with regard to editing, advertising, and marketing.						
MASC	522	Analysis of Radio and TV Discourse	3	0	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations Mastres</b>						
The course establishes a theoretical introduction to the concept of discourse and its practice by going through many intellectual, cognitive and philosophical bodies that dealt with it, adopted it and established it, such as the French and German theory and the masters of American discourse. Through a methodological approach concerned with the semiotic analysis of texts related to the content of the course in all its forms, types, and different nomenclature through the analysis of its sign system in its audio-visual structures in the space of the building and the text.						
MASC	523	Data Journalism	2	2	3	
The course develops the student's skills in collecting, analyzing, and simplifying large digital data so that the target audience can understand and assimilate it. The student will become familiar with the tools for collecting digital data, working with tables and statistics, and rewriting them. The student will also be trained on how to take advantage of the available techniques in extracting and revealing hidden stories between numbers and dealing with documents, and producing them in the form of traditional press templates such as news stories, reports, and investigations.						
MASC	524	Drama and Critique in Radio and TV	3	0	3	
The course covers the concept, breadth, and types of drama theory, in order to identify the most prominent differences of its different types. It also establishes a knowledge and cultural base for the techniques of applied and analytical criticism through the most famous schools and modern theories in the practice of criticism operations. It also opens a wide field in the practice of criticism operations through a number of applications. In-depth exercises on dramatic texts aim at developing critical abilities and skills in light of the standards necessary for each of the two mediators.						
MASC	525	Seminar in Communication Research	3	0	3	
Surveying the field of communications research, various subfields are identified and explored and the future direction for communication research is discussed. Course content varies in accordance with student interests and the most recent developments in communications research.						
MASC	534	Social Media and Digital Culture	3	0	3	
The student builds a cultural perception of the Internet and digital media. This course examines the impact of social media on culture in the modern world. Analyzing the social, cultural, political, and educational dimensions of social media, and presenting a study showing this perception. Topics covered include media elements, media technologies, media industries, media transformation, building news, expanding and transforming advertising, media and the public sphere, and network society.						
MASC	535	Mass Media & Information Technology	3	0	3	
This course traces the development of information and communications technologies (ICTs) with a view to providing an overview of current and prospective developments in telecommunications as a theoretical basis for assessing the potential of these technologies in media-related institutions. Legal, regulatory, economic and social issues that the employment of these technologies pose for telecommunications and media industries also receive attention.						
MASC	537	Investigative Journalism	2	2	3	
The course trains students on how to research, create, and present an investigative story using professional journalistic skills and techniques. The course includes teaching various investigative techniques, including the skills of obtaining information from formal and informal sources, conducting interviews, using public records and documents, and conducting research.						
MASC	539	Writing for Radio and TV	3	0	3	
The course is concerned with building the student's cognitive skills in the field of craftsmanship and writing techniques for radio and television. The student adopts the theory of reverse engineering in slicing and deconstructing models from the two expressive media, and then adopts stylistic contradictions of the models to complete models in various programs in the audio-visual field. At the end of the course, the student presents a project to demonstrate the cognitive skills acquired.						
MASC	540	Visual Mass Communications	3	0	3	
MASC	545	Political Communication	3	0	3	
Concept, history and theories of political communication are presented and discussed. Political language, advertising and campaigns are analyzed. The relationship between media and governments in different political systems and its relationship with public opinion and democracy are explored in depth.						
MASC	550	Advanced Writing & Reporting for the News Media	3	0	3	
In this course, students conduct intensive reporting, researching and write in-depth articles for magazines, newspapers and electronic media. Students develop a journalistic style and explore problems associated with handling of news features and are encouraged to publish their own articles.						
MASC	560	Television & Radio Production	3	0	3	
In this course, students obtain intensive exposure to television and radio production methods, studio production techniques, and technical equipment. Students conceive and design individual production projects that utilize studio, file and post techniques. This course covers the audio-visual production process from pre-recording or shooting conception to post-production.						
MASC	561	Television & Radio Production	2	2	3	
In this course, students obtain intensive exposure to television and radio production methods, studio production techniques, and technical equipment. Students conceive and design individual production projects that utilize studio, file and post techniques. This course covers the audio-visual production process from pre-recording or shooting conception to post-production.						
MASC	562	Techniques of Radio & Television Production	2	2	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations Mastres</b>						
MASC	563	Advanced Radio & TV Production	2	2	3	
MASC	570	Modern Communications Technologies	3	0	3	
MASC	575	Graphics & Multi-Media	3	0	3	
This course introduces students to the application of graphic arts to mass communications. The relationship among text, type and image in communicating information in basic layout on the one hand and newsmedia image and story-telling is explored in depth. Students develop their own projects using graphics and multimedia.						
MASC	580	Media Ethics & Laws	3	0	3	
This course provides an overview of the history of media freedom and control with respect to the ethics and laws relevant to the issue. Conflicts between media practices on the one hand and the rights of individuals and institutions on the other are explored in depth involving freedom to disseminate information versus the right to privacy. Media practices in different political systems are highlighted and the proper balance between controlled and free media is debated.						
MASC	585	Special Topics in Print-Journalism	3	0	3	
Topics span recent developments in print journalism and socio-economic, political and cultural aspects of society. Course content varies with the background of the instructor and the interests of the students.						
MASC	590	Special Topics in Electronic Journalism	3	0	3	
Topics span recent developments in electronic media and socio-economic, political and cultural aspects of society. Course content varies with the background of the instructor and the interests of the students.						
MASC	595	Dissertation in Mass Communication - Track 2	0	12	6	
The student conducts a study on a topic in the field of mass communication under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
MASC	598	Project Dissertation in Mass Communication	0	6	3	
The student conducts a study on a topic in the field of mass communication under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
MASC	599	Dissertation in Mass Communications - Track 1	0	24	12	MCPR 520 AND Completion of at least 24 credits
A research focused study in the field of mass communication which aims to draw on practical data to assess critically a specified area or topic.. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscripts subject to public defense.						
MCPR	510	Writing for Mass Media & Public Relations	3	0	3	
Intensive researching, writing and reporting of in-depth news articles for both print and electronic media demands from students that they develop their own journalistic style to explore and report issues. Students prepare and develop story ideas on behalf of businesses, governmental departments and other public institutions. Students gain experience conducting background research and composing brochures and prospectuses.						
MCPR	511	Contemporary Trends in Communication & PR Theories	3	0	3	
The course deals with contemporary theories and their modern trends in the field of media and public relations, and their place in contemporary societies, and briefing students with contemporary theories regarding the study of the impact of media on social systems, the mobility of individuals and the relations among them and the means of communication, as well as modern theories in the field of public relations and strategic communication, and also deals with the mechanisms of employing scientific theories in research and studies in both mass and network communication and public relations.						
MCPR	520	Research Methods in Mass Communication & PR	3	0	3	
This course covers qualitative and quantitative methodologies for research in the field of mass communications and public relations. It covers commonly used methods of social research applicable to the field and focuses on developing skills to evaluate research critically and to empower the student to conduct his/her own major research project. Among the techniques imparted are search strategies and techniques for accessing information sources (both electronic and print) and for evaluating the outcomes of such searches. In addition to topics of research design and scientific logic, the course introduces a variety of statistical methods of analysis with a view to focusing on collecting, organizing, and using data as an aid to assessing information systematically. Research and information gathering methods span research design, data mining, data interpretation, reporting and strategic use of research findings.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations Mastres</b>						
M CPR	521	Research Methods in Mass Communication and Public Relations	3	0	3	Completion of at least 9 credits
<p>This course covers qualitative and quantitative methodologies for research in the field of mass communications and public relations. It covers commonly used methods of social research applicable to the field and focuses on developing skills to evaluate research critically and to empower the student to conduct his/her own major research project. Among the techniques imparted are search strategies and techniques for accessing information sources (both electronic and print) and for evaluating the outcomes of such searches. In addition to topics of research design and scientific logic, the course introduces a variety of statistical methods of analysis with a view to focusing on collecting, organizing, and using data as an aid to assess information systematically. Research and information gathering methods span research design, data mining, data interpretation, reporting and strategic use of research findings.</p>						
M CPR	525	Seminar in Contemporary Communication Research	3	0	3	MASC 511
<p>The course offers a survey of research in mass communication and public relations and discusses the various trends in the two fields. In particular, it focuses on the most recent developments in the field of communication research in order to help students to use the modern theories in the writing of research papers.</p>						
M CPR	530	Public Opinion Formation & Measurement	3	0	3	
<p>This course explores the literature on public opinion. Perception of the social and political environment and of the climate of opinion, opinion distribution and expression, and conformity are investigated. Recent trends in public opinion research and measurement and its relationship to democracy are explored. Students poll public opinion on topics of contemporary relevance.</p>						
M CPR	550	Research Methods & Modeling	2	2	3	Completion of at least 9 credits
<p>The main objective of this course is to enhance the student's capacity to understand as well as to conduct scientific research in mass communication &amp; public relations. The course focuses on providing students with basic skills in scientific research, including identifying the problem, developing research proposals, employing appropriate research tools, formulating and testing hypotheses, collecting and analyzing data and, finally, writing a research report. The course also presents both quantitative and qualitative methods applied in mass communication &amp; public relations research.</p>						
M CPR	565	Seminar in Contemporary Communication Research	3	0	3	M CPR 550
<p>The course offers a survey of research in mass communication and public relations and discusses the various trends in the two fields. In particular, it focuses on the most recent developments in the field of communication research in order to help students to use the modern theories in the writing of research papers.</p>						
PREL	500	Contemporary Public Relations	3	0	0	
<p>This course focuses on understanding the objectives and strategies that shape the type of information delivered to specific audiences. Students gain essential insight and skills in diverse fields as: human relations, psychology, customer relations, advertising, labor relations and knowledge management. In a global business environment rocked by corporate scandals, public relations project a consistent, well-informed ethical voice for institution to preserve intact their corporate images and reputations. This course explores how information can be conveyed to diverse audience to create perceptions and project positive images that increase corporate value or at least to limit damages to corporate value during crises. The issue of hoe institutions, particularly corporations, build and retain relations of credibility with the news media is addressed.</p>						
PREL	501	Basic Concepts in Public Relations	3	0	0	
<p>This course introduces a scientifically-based public relations concept and sheds light on its historical development. It deals with the definition of public relations, its origins and evolution through history and the relationship between the concept of public relations and other concepts. It also identifies the functions and objectives of public relations and the means of communication used to achieve their goals.</p>						
PREL	502	Basic Concepts in Public Relations	3	0	3	
<p>This course introduces a scientifically-based public relations concept and sheds light on its historical development. It deals with the definition of public relations, its origins and evolution through history and the relationship between the concept of public relations and other concepts. It also identifies the functions and objectives of public relations and the means of communication used to achieve their goals.</p>						
PREL	510	Strategic Public Relations Campaigns	3	0	3	
PREL	511	Modern Theories in Public Relations	3	0	3	
<p>The course addresses the theoretical frameworks for public relations and models related to the exercise of public relations. It explores the cognitive and behavioral theories, with emphasis on how to apply these theories to the practice of public relations in different organizations, as well as the use of various means of communication in the field of public relations.</p>						
PREL	512	The Art of Advertising	3	0	3	
<p>The course focuses on the definition and characteristics of advertising and its advantages and disadvantages. It also covers topics such as communication activities and its relationship to advertising, advertising media (printed, audio, visual) , advertising agencies, the modern techniques used in the design and production of advertising messages, the technical aspects of advertising design, and the use of design programs in advertising.</p>						
PREL	513	Strategic PR Campaigns in Advertising	2	2	3	MASC 512
PREL	514	Strategic Public Relations in Politics and Diploma	3	0	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations Mastres</b>						
PREL	515	Public Relations & Information Campaigns	3	0	3	
<p>This course provides a comprehensive overview of concepts, analytical techniques and methods to assess audiences, target markets and vital trends requisite to develop a public relations strategy in the context of a complex and rapidly changing world and media environment. The course explores contrasting public relations strategies in international settings employed by multinational corporations, governments and interest groups. Students apply communication and public relations methodologies to plan public relations campaigns.</p>						
PREL	516	Media Production for Public Relations	2	2	3	
<p>This course covers the basic media techniques in print and broadcast productions for public relations. It deals with production of documentaries, brochures, pamphlets and films and focuses on the use of web site and online media, such as electronic mail, to promote the organization's image and enhance its relations with the public.</p>						
PREL	519	Strategic Communication and Crisis Management	3	0	3	
<p>The course covers the role of activities in contemporary organizations, especially in the crisis stage, which has become a fait accompli, which prompted various organizations to take care of communication, as it is among the foundations upon which to do various work and activities. The course also deals with training students on the practical application of theories, strategies and tactics from the perspective of public relations, which focuses on the role of public relations in communication. The student will analyze the crises of companies and institutions to understand communication strategies through the use of case studies and participatory exercises. The course is also focused on training students on how to use communication strategies in different companies and institutions on similar crises facing society at the present time.</p>						
PREL	520	Public Relations Management	3	0	3	PREL 511
<p>This course develops and strengthens communication management skills through assimilating the public relations function with corporate goals and activities. In addition, students analyze how management of information shifts the way public relations professionals influence various publics consonant with corporate goals and activities. Students are expected to investigate the roles of various public relations practitioners in applying the techniques of public relations to support management strategies and corporate decision-making. At the end of the course, students create a 5-year corporate image campaign for a chosen company that positions the company in a favorable position from the vantage-point of its corporate stakeholders in accordance with corporate long-term strategy.</p>						
PREL	521	Marketing & Advertising in Digital Media	2	2	3	
PREL	526	Digital Public Relations	2	2	3	
<p>The course aims to introduce digital public relations, its importance and methods of practicing it, both on websites and social networking sites, and to provide students with the skill towards analyzing practice methods and how to choose social networking sites, websites and digital media, and the role of these means in communicating with stakeholders, the media and the public. By training students on how to employ the Internet and social networking sites in public relations, and to apply the theories of public relations prevailing in the digital age.</p>						
PREL	531	Integrated Marketing Communication	3	0	3	
PREL	535	Integrated Marketing Communication*	3	0	3	
<p>This course introduces students to marketing communication tools, strategies, techniques and media used by practitioners to promote their products, ideas and services. The course emphasizes how various marketing communication areas work together to create a cohesive message. This course inculcates how to best mix marketing communication tools in a strategic integrated plan for using the media in all marketing communication areas.</p>						
PREL	538	Planning and Management of Advertising Campaigns	2	2	3	
<p>The course deals with how to plan media and advertising campaigns in light of the great role that the art of marketing of all kinds plays in promotion. It also deals with the advantages of media and advertising campaigns, defining advertising goals, the importance of planning advertising campaigns and types of campaign planning in terms of time dimension, degree of comprehensiveness, geographical dimension and degree of centralization, the most important variables and factors influencing when preparing advertising campaigns, the most important considerations for the marketing thought of the organization, stages, foundations and mechanisms of planning and management Media and advertising campaigns, and training students on how to analyze and evaluate the different elements contained in advertising campaigns, and how to design and plan successful advertising campaigns.</p>						
PREL	545	The Art of Public Relations	3	0	3	
<p>This course provides students with the advanced skills necessary to develop creative ways to prepare, present and direct public relations messages to both specific publics and the mass media. Alternative strategies and techniques to address contrasting media standards are presented, debated and applied. Special attention is accorded to social responsibility in handling issues related to public and community interests. Illustrative case studies drawn from the practice of public relations in different countries are analyzed. Students learn how to prepare for and deliver press conferences, to issue various kinds of press releases and to design public relations advertisements.</p>						
PREL	550	The Practice of Public Relations*	3	0	3	
<p>This course surveys the entire practice of public relations spanning roles, ethics and laws of public relations, working with printers, publishers, designers, photographers and film makers; conducting exhibitions and fairs; working with the media; understanding the impact of recent technologies on public relations practice; and planning, programming, assessing and evaluating projected public images and public relations campaigns. Students conduct individualized research on a variety of topics as addressed in this course.</p>						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations Mastres</b>						
PREL	560	Organizational Communication & Corporate Image	3	0	3	
A comprehensive analytical study of organizational communications behavior drawing on a variety of social science theories is provided to enhance the students' understanding of the practice of public relations and communications in different organizations. In this course, students monitor the political, social and economic environment, on both the national and international levels, with a view to assessing issues relevant to corporate public affairs and to the formulation of communications strategies. Students engage in advocacy, constituency communication and corporate image creation and modification.						
PREL	564	Advanced Writing in Media & PR	2	2	3	
PREL	570	Special Events & Protocol	3	0	3	
A primer on planning, preparing for and delivering effective communications for special events, this course imparts to students a complex array of oral, audio and visual presentation skills. In particular, this course acquaints students with the necessary protocol to manage events involving VIPs and Royal personages. By role-playing, students experience and practice the application of protocol to public relations activities involved in special events.						
PREL	580	Public Relations & Crisis Management	3	0	3	
This course provides students with the necessary tools to review and diagnose major crises affecting corporations, governments and other institutions through case analyses of different types of crises: technology, confrontation, natural disasters, skewed values, deception and misconduct. Local, national and international cases are presented and discussed. Students are encouraged to evaluate appropriate management decisions, actions and communications before, during and after a crisis through the following stages: monitoring, analysis, strategy determination and implementation. The course focuses on advances in sophisticated management techniques related to the crisis and risk management functions of a public relations unit. Wide varieties of case studies on crisis management are introduced and students are expected to participate in a crisis management simulation.						
PREL	590	Special Topics in Public Relations	3	0	3	
Topical content in the field of public relations varies with the background of the instructor and the students' areas of interest. Students are required to carry out small-scale field studies on designated topical areas of public relations and discuss their findings.						
PREL	591	Special Topics in Advertising	3	0	3	
Topics span recent developments in electronic media and socio-economic, political and cultural aspects of society. Course content varies with the background of the instructor and the interests of the students.						
PREL	595	Dissertation in Public Relations - Track 2	0	12	6	
The student conducts a study on a topic in the field of mass communication under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
PREL	597	Public Relations Project	0	6	3	Completion of at least 24 credits
Each student elects either a theoretical or practical problem in the field of public relations under the supervisions of a faculty member. Upon completion of the project, a student submits a final written report and makes an oral presentation documenting all phases of the project including its findings.						
PREL	598	Project Dissertation in Public Relations	0	6	3	
The student conducts a study on a topic in the field of public relations under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
PREL	599	Dissertation in Public Relations - Track 1	0	24	12	MCPR 520 AND Completion of at least 24 credits
A research focused study in the field of public relations which aims to draw on practical data to assess critically a specified area or topic.. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscript subject to public defense.						
<b>Mass Communication &amp; Public Relations</b>						
ETHC	393	Ethics and Professional Practice in Mass Communication and Public Relations	3	0	3	MASC 202 AND Completion of at least 66 credits
This course provides students with a theoretical foundation that enables them to identify and analyze current ethical issues in the media. It addresses questions such as: Is it necessary for professional journalists to be tied by moral ethics? How much information should the media provide about the private lives of public figures? Through analysis and discussion of case studies it deals with the role of the media and journalists in society; the meaning of justice; the reciprocity gene; free speech and how blogs, opinion-oriented media, social media and editorials relate to freedom of the press.						



## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations</b>						
ETHC	397	Media Law and Ethics	3	0	3	MCPR 101 AND Completion of at least 66 credits
The course aims to familiarize students with their legal and moral rights and duties and how to collect and disseminate information without violating legal and ethical rules. The course deals with the concept of morality and ethics, the principles of freedom of opinion and expression, the concept of professional ethics, the concept and principles of law, media law, legal and legislative frameworks regulating the media, journalism and media codes of ethics, and media practitioners rights and duties. The course also covers criminal liability and publication, rules and ethics of crime data dissemination, intellectual property rights, legal and ethical rules regulating copyright, ethics of professional practice in public relations, and legal and ethical controls for new media.						
INTR	412	BSMCPR Internship	0	12	6	Completion of at least 90 credits
INTR	471	BSMCPR Internship	0	0	3	Completion of at least 90 credits
The field training course (Internship) provides students with an opportunity to integrate the academic skills acquired within the university with applied professional and personal skills, as well as developing student's skills so that they can acquire planned practical learning experiences to enable them to integrate their acquired knowledge through classroom learning with the practical competencies and skills available through practice in the real professional environment. The professional field training program requires that the student spend at least 240 hours of on-the-job training, during which the student will be assessed by professional and academic supervisors to evaluate his/her success in meeting the field training requirements.						
IREL	101	International Relations	3	0	3	
This course examines the theory of the nature and uses of power through coverage of the development of the nation-state system focusing on specific problems in international relations in the world today. The course covers a wide variety of topics. Basically it tackles elements of national power, sources of international conflict, the nature of war and strategy in the twentieth century, measures to resolve conflicts, and prospects for the future. The course concludes with an analysis of foreign policies and the role of Middle Eastern states in world politics and problems of, and prospects for, the Middle East in the light of international political developments.						
MASC	101	Principles of Communication	3	0	3	
This course provides students with the basic knowledge needed to start their education in mass communication and public relations including: the components of the communication process, communication channels, and communication forms. Then a tour of what is communicated and communication effects is explored.						
MASC	201	Introduction to Journalism & Print Media	3	0	3	
Students analyze the meaning, sources and the production of news, the structure and language of news writing, ethical considerations in news writing, media regulation, press institutions, advertising and other pressures on journalism, news gathering and the Internet. The course focuses on online publishing, research in journalism, representation and bias, objectivity and balance, and international news flow.						
MASC	202	Theories of Mass Communication	3	0	3	MASC 101
This course is designed to acquaint students with a number of different theoretical perspectives on mass communication. Theories of mass communication are subject to a systematic examination from various perspectives: communication effects, from both a psychological and sociological perspective; perspectives involving an active audience cognitively interacting with media; and an organizational/institutional view of media. Students obtain an appreciation of the origins of mass communication theory and how to apply the leading current mass communication theories to the context of the use and presentation of images and information.						
MASC	203	Public Speaking	3	0	3	MASC 101
Application of basic principles of communication to the art of public speaking constitutes the centre-piece of this course. Students prepare and present speeches in both formal platform settings and informal group discussions. Without ignoring extemporaneous delivery, the emphasis of the course is on work behind-the-scenes: organizing ideas, structuring messages, and adapting messages for specific audiences. Attention is also given to methods for evaluating oral discourse.						
MASC	204	Introduction to Radio & Television	3	0	3	
A study of the history of radio and television and their relationship to other media. Students gain exposure to preparing news copies and documentary materials for radio and television, production formats, station operation and management, governmental regulations, and programming options and trends. They also gain insight into journalistic and performance skills necessary to achieve quality production.						
MASC	205	Media Outlets in Bahrain	3	0	3	
The student learns about the stages of emergence and development of media in the Kingdom of Bahrain in all fields of communication (newspapers - radio and television - cinema - social media) and focuses on the importance of these means of communication with the march of social, cultural, political and developmental development in the Kingdom of Bahrain and their remarkable impact on Bahraini society.						
MASC	206	Writing for TV and Radio	2	2	3	MCPR 102
This course aims to identify the concept of writing for radio and TV and the characteristics and advantages of each, understand and realize the differences between writing for radio & TV, provide students with the most important writing techniques for radio and TV programs according to the techniques of the template (talk show - drama - newsletter - advertisement... etc.), provide students with the types of script which are used in radio and television programs, get familiar with the steps of editing for cultural, news, entertainment and drama programs and understand the relationship between media codes and the editorial policy of radio and TV institutions.						
MASC	209	Mass Media and Society	3	0	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations</b>						
The course focuses on the developments of conventional and new media outlets (newspapers, radio, television and the Internet) and their implications on society. The course thoroughly highlights the role that media plays in projecting society and reshaping its culture. Through covering traditional as well as modern media theories, the course encourages students to dissect the powerful dynamics of media institutions and their influence on audiences. The course in reverse also examines the role of audiences in affecting these powerful entities.						
MASC	309	Journalism Writing	2	2	3	MCPR 243
This course includes the rules and skills of investigative reporting, press reports, press interviews, types and methods, interviewing skills, types of interviews, types of questions, methods of formulating and constructing them. The course also includes studying the rules and skills of writing articles of all kinds, writing reports, and expository as well as critical essays of works of art and literature. It also looks at the use of modern approaches to writing (narrative style, descriptive styles, personalization technique, and precision journalism). The course is based on practical field training on planning, implementation, and writing for the arts and forms journalism taught to the student.						
MASC	310	Digital Journalism	2	2	3	ITMS 205 AND MCPR 243
The course deals with the concept of online journalism on the Internet, its types, its main features, interactivity in online journalism on the Internet, levels of interactivity, the role of readers in contributing to the editing of online journalism and technical templates for editing online journalism. The course also is concerned with the design of online journalism, the future scenarios regarding the mutual influence between online and printed journalism, advertisements in online journalism as well as practical applications of editing and design of electronic journalism.						
MASC	311	Feature Writing	2	2	3	MASC 206
The course introduces students to feature journalism including profiles, immersive reportage, in-depth interviews, and opinion pieces. The course trains students on using journalistic and storytelling methods to – through assignments- produce original features. The course thoroughly covers research, fact-gathering, investigating, editing, reporting, interviewing, structuring, and narrating techniques, so students can confidently share and lead their journalistic projects (features)						
MASC	320	Graphics & Multimedia	2	2	3	ITCS 101
InDesign is a powerful design and production tool that perfectly embraces features of PageMaker, Photo Shop and Illustrator for professional desktop publishing. This course provides a hands-on introduction to InDesign, in which students become familiar with the InDesign interface and will be guided step-by-step, learning to set up a document, create master pages, and place text and graphics. In addition, students work with Photos Shop using the painting and editing tools and filters, and apply techniques for converting and resizing images and adding type to an image.						
MASC	322	Newspaper & Magazine Layout	2	2	3	MCPR 243 AND MCPR 206
The course aims to provide the student with the skills of design and production of newspapers and magazines. The course deals with the concept of journalistic output and its functions, design concepts, basic theories and its components, and visual and aesthetic variables that govern it. The student also learns about the typographic and graphic elements and how to utilize them in press production, in addition to the methods and techniques of artistic production of newspapers, referring to the differences between the output of a newspaper and a magazine. The course also familiarizes the student with the methods and techniques of the front, back pages and inside pages, as well as tabloid newspapers and magazines. During the course, the student is trained in the journalistic production using the most popular software used in production.						
MASC	328	Script Writing	3	0	3	ARAB 201
The course aims to train the student on practical ways of preparing and writing the script. The student will be introduced to the fundamentals of script writing, beginning with studying the theory of script and the methods of drama building, and the forms of the scenario (sequential, parallel and overlapping), followed by the components and characteristics of each form. The student is then introduced to the literary script writing stage, including its various aspects such as its philosophical nature, technical treatment, arrangement of scenes, leading up to up to the whole Scenario work, theme unit, division of information and events, artistic form, character, plot, conflict and development and ways of excitement and thrill. This is accompanied by analyzing, critiquing and deconstructing selected models from global scenarios, thus enhancing student writing skills. The course also includes writing exercises for many scenes to write a shooting script and how to prepare it. The student then presents a project for a short film scenario.						
MASC	330	Political Communication	3	0	3	PREL 220
Analysis of the role of media in political life and of the media government relationship in different political systems. Topics include political propaganda, political campaigns as well as media and foreign policy.						
MASC	340	Radio Production	2	2	3	MCPR 101 AND MASC 328
This course deals with all stages of production for radio, where the student learns about the stages of preparation of programs. The course also deals with the techniques of writing radio scripts for drama programs. It also deals with the director's tools, radio production elements, and equipments used in radio production. Radio and audio directing and editing in the areas of advertising, news, programs and crafts required in the treatment of such programs.						
MASC	341	TV Production	2	2	3	MCPR 208
The key objective of this course is to introduce students to the stages of television production as well as how to translate scripts or written texts into television templates, as well as understanding the roles and responsibilities of the television team (director, editor-in-chief, scriptwriter, shooting manager, decorator, studio manager, etc.). Besides providing students with the basic components of a television studio, this course also provides them with the skills for setting up locations and planning shooting stages, as well as understanding the differences between day and night shooting techniques, the types of lighting used for each, how they are distributed, and how they differ according to the television template, as well as the differences between live and recorded television production.						
MASC	342	Radio and TV Directing	1	4	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations</b>						
<p>This course aims to introduce knowledge of the director's and his/her assistant's tasks during the production of radio and TV programs, understanding and realizing how to implement the script into audio or visual content in cooperation with the editor-in-chief and shooting manager, provide students with information about the stage of television shooting or radio recording, realizing the techniques of radio directing, identify the types of microphones and their uses, identify the most important programs used in the radio production process, get familiar with the basics of television image formation, understand the lighting techniques, identify the differences between the components of the decor according to the nature of the television template, identify the types of cameras, their parts, movement and shot sizes and identify the types of lenses and their characteristics and impact on the perspective of the image.</p>						
MASC	343	Digital and Mobile Journalism	1	4	3	MASC 311
<p>The course explains the concept, types, features, and techniques of online journalism. It highlights the role of audiences (Internet users) in contributing to its content and interactivity levels. The course discusses further the similarities and differences between the techniques of digital journalism and mobile journalism in terms of reporting methods, storytelling, design, advertisement, and production process. The course also trains students in utilizing smartphones/applications to write, edit and produce journalistic material.</p>						
MASC	344	Media Editing in English I	2	2	3	ENGL 210
<p>This course aims at developing students' skills in writing and editing the various arts and forms of journalism and information in English such as news, reports, articles, etc. The course covers editorial rules of the media content in English and provides students with the opportunity to submit practical applications and media topics in various templates and forms in English.</p>						
MASC	350	Digital Photography & Audio-Video	2	2	3	MASC 320
<p>An introduction to the historical, technical, operational and creative aspects of digital photography. The course focuses on the production of digital images and visual sequences that tell a story, communicate an idea, illustrate a theme, or convey a message. Techniques of planning, refining, capturing and manipulating images are explored in a workshop type atmosphere. Hands-on experience with digital cameras and image manipulation software is emphasized. Students will be expected to complete a series of tutorials and create several portfolio images demonstrating their understanding of the technical and aesthetic aspects of the digital photography.</p>						
MASC	351	News Writing & Reporting	3	0	3	MASC 201 AND MASC 204
<p>Explores the techniques used to research and report complex political, social, and economic issues for all media. Students learn how to investigate the most common areas covered by reports, including education, legal affairs, and other governmental entities. Strategies are developed for individual reporting projects in print, broadcast, and digital media. Examples are critiqued to lead students toward an ethical and analytic approach to public affairs reporting.</p>						
MASC	355	Digital Photography & Video Production	2	2	3	MCPR 206
<p>In its theoretical part, this course explores the concepts and knowledge associated with digital video and the various stages of its production by presenting models of films and documentaries. The practical aspect, however, includes teaching students the artistic and technical skills of each phase of digital video production. Practical training includes the basics of using a video camera to carry out the production of video and television content. In this course, the student learns the concepts, principles and techniques and aesthetics associated with photojournalism. He/she learns about the basic uses of photography in the field of journalism, including the use of the camera to produce a press report in conformity with artistic and technical conditions and criteria (modulation, lighting, depth of the field of image, composition ...) The student is introduced to the use of software for editing, processing digital images, printing along with the use of images use in design and advertising, as well as in some other technical and educational. The main aim of the course is to teach the main photographic skills that enable the student to tell stories visually and in a manner that reflects a high sense of commitment to ethical standards.</p>						
MASC	360	Communication Research Methods	3	0	3	MASC 101
<p>Introduction to scientific and research methods for mass media and public relations: historical analysis, case studies, content analysis, readership studies, audience studies, field surveys and experimental design.</p>						
MASC	370	Media & Law	3	0	3	MASC 101
<p>Review of the development of the legal aspects of the press and other mass media through case studies. Topics include social responsibility and ethics of mass communication, free press versus press control, libel, contempt, obscenity, privacy and source protection, the people's right to know, publication laws and regulations.</p>						
MASC	380	Persuasion	3	0	3	MASC 202
<p>This course introduces students to persuasion theories and how to use them in information campaigns. Message, attitude and behavior relationships are discussed in relation to development of contemporary thought about communication and mass media effects. Factors related to source, message, medium and audience are investigated.</p>						
MASC	390	Design & lay-Out of Print Media	2	2	3	MASC 351
<p>This course explores the various aspects of print media design and layout. Course materials are designed to advance an understanding of design tools, design principles, artisanship and conceptual skills through the exploration of visual elements, orders and concepts. The course covers typography, layout and general design and layout techniques.</p>						
MASC	410	Media Translation	3	0	3	ENGL 202
<p>This course aims at providing the student with the professional skills needed to translate media content. During the course, the student, through practical practice, translates several texts published in newspapers, magazines, media sites and news agencies. The course helps the student to acquire a wide range of terminology, idiomatic expressions and abbreviations used in the media and to develop his skill in translating these expressions into Arabic, as well as the ability to edit translated texts to reflect sound media language that can render them publishable.</p>						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations</b>						
MASC	411	Media Translation	2	2	3	ENGL 202 AND MASC 309
This course aims at providing the student with the professional skills needed to translate media content. During the course, the student, through practical practice, translates several texts published in newspapers, magazines, media sites and news agencies. The course helps the student to acquire a wide range of terminology, idiomatic expressions and abbreviations used in the media and to develop his skill in translating these expressions into Arabic, as well as the ability to edit translated texts to reflect sound media language that can render them publishable.						
MASC	419	Media Editing in English	2	2	3	ENGL 202 AND MASC 309
This course aims at developing students' skills in writing and editing the various arts and forms of journalism and information in English such as news, reports, articles, etc. The course covers editorial rules of the media content in English and provides students with the opportunity to submit practical applications and media topics in various templates and forms in English.						
MASC	420	Using Multimedia & Webcasting	2	2	3	MASC 320
Introduces students to the basics of designing for interactive multimedia. User-interface design, transitions, interactive links between content areas and creating the overall look and feel of a project will be covered. Emphasis will be on the visual aspects of individual elements and how they work together as a means of creating an effective interactive multimedia project. Students work on their own projects which will be completed in the Multimedia Production lab.						
MASC	430	TV Production	2	2	3	MASC 204
Introduction to the basic aspects of technical and production techniques of television and related audio systems used in the medium. Emphasis is placed on theory and use of television equipment, direction, lighting, television graphics, scripting, basic engineering, distribution systems, and studio personnel. In addition to the student-produced and directed assignments, members of the class participate in production crews.						
MASC	432	TV Production I	2	2	3	MASC 355
The course deals with the basics of television production, starting with the development of student's capabilities in the field of television innovations and production tools, as well as providing the basics of video shooting including angles and movements. The student will also be able to develop the ground plans for directing solutions in locations by practicing his/her skills in a short group project, emphasizing technical and craft concepts such as the sizes, basic shots, derived clips, the relationship between the angle and the subject based on the angles of the base of the triangle, as well as camera movements and the procedures used in the art works. At the end of the course, the student will be able to lead a team to produce a joint project with a number of students, which will polish as student's personality and reveal leadership features in leading successful teamwork.						
MASC	438	Radio & TV Presenting	3	0	3	MASC 432
On this course, the student learns the preparation and presentation of the radio texts of the various formats and as well as the responsibilities, tasks and skills of the announcer, including the art of dealing with the camera, the microphone and the various artistic production processes. The student also introduced to presenting news, talk shows and interviews. Special attention will be paid to voice, speech, pronunciation, discourse and some basic language skills for broadcasters. Training in this regard deals with pause marks and their purposes, methods of sentence stress, casting methods, types and factors of its success, in addition to specificities of both radio and television. The course will provide students with the terms, concepts and production skills required in accordance with professional standards for radio and television performance.						
MASC	439	Presenting and Persuasion Skills	1	4	3	MASC 206 AND ETHC 397
This course introduces the foundations and skills of recitation and phonemes. Students will learn the basics of persuasion and persuasive methods used in the media to determine how recitation proficiency relates to listeners' willingness to be persuaded. Students will also learn how to deliver and harness the components of the vocal apparatus with body language to persuade viewers and listeners. Additionally, it enables them to understand dubbing skills and techniques, and how to utilize the different layers of voice according to the scenario's personality traits.						
MASC	440	Mass Media & Society	3	0	3	MASC 202
An examination and analysis of the mass media and the forces that influence them. Emphasis is placed on the media's influence on our society. Issues and case studies vary with the instructor and the needs of society and students.						
MASC	444	Media Editing in English II	2	2	3	MASC 344
The course aims at developing a high level of verbal and written communication skills in English, for students from non-native English-speaking backgrounds. It therefore trains students on how to conduct as well as write journalistic interviews in English. The course also introduces students to the styles, structures and writing techniques used in features, investigative reports, and opinion pieces published in English media outlets.						
MASC	450	Graphic & Internet Site Design	2	2	3	MASC 420
This course explores the various aspects of graphic communication and provides students with necessary skills to use computers in graphic arts. The students will have hands-on experience using software in an electronic design studio environment to start their own internet sites.						
MASC	455	TV Production II	2	2	3	MASC 328 AND MASC 432
The course aims to provide the student with the technical and professional knowledge that enable the student to understand the production and technical processes in all stages and requirements according to the requirements of the photography sites. It also provides him/her with the skills of craftsmanship and technology through which he/she can find the solution and overcome the technical problems encountered in the photography and editing processes. In addition, the course enables the student to develop his/her creative abilities and artistic and personal visions that qualify him/her to deal with technicians and artists on various photography sites. The course includes practical applications within the training studio in the University according to the relative weight of the applied hours of the course.						
MASC	456	TV and Radio Editing	1	4	3	MASC 342 OR ( MASC 328 AND MASC 432 )
This course aims to introduce the concept of video and audio editing and its modern techniques, focusing on the basics and dimensions of the image, color theory, the use of effects and transitions between audio and video clips, and exporting the image to radio and TV channels as well as different social media sites.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations</b>						
MASC	460	Seminar on Communications Research	3	0	3	MASC 360
Survey and discussion of literature in mass communication with emphasis on recent research findings. The questions asked, methods used, lessons learned and suggestions for future research are major topics.						
MASC	464	Documentary Films	2	2	3	MASC 328 AND MASC 355
This course introduces a definition of the concept of the documentary film, its essence, the stages of its development, how to deal with the idea or subject in changeable reality, the treatment of factual material, determining the method of presenting the subject, building, organizing, selecting and arranging the required material, presenting the film-maker's vision of the content to the target audience, and preparing the cinematic treatment. Subcategories include: types of content, types of treatment, types of constructivism, poetic documentaries, determining the work plan, identification of the aesthetics of the experimental trends in the short film (model analysis of Robert Flaherty and Grierson), film format and visual expression strategies, expression strategies through commentary and dialogue, and expression strategies through symbolic montage. In this course, the student learns to produce television programs, starting with collecting news from the archives and the Internet, using it in as a unified constructional unit and linking it with premade footage to create its own context. The student also learns skills of changeable reality photography and receives training in the use of external (outside the studio) video cameras and microphones, in addition to the use of internal studio equipment. The student submits a project at the end of the course.						
MASC	467	Specialized Journalism	2	2	3	MASC 311
This course focuses on the study of the methods, principles and language of specialized press writing and coverage, and examines the concepts and patterns of specialized newspapers and magazines. The student studies, in a practical way, the basics and skills of specialized journalistic writing and coverage in a variety of areas including political, sports, economics, health, scientific, environmental, cultural, artistic, women and child journalism. The student submits press coverage and written assignments related to a selected number of these areas under the supervision of the course instructor. Further, the course introduces rules, skills and conditions for the preparation of press investigations, reports and interviews, their types and methods, techniques and skills of interviewing, types of interviews, types of questions and techniques of question formulation and building question traps. The course is based on practical training in planning, field implementation and writing for investigations, reports and other press texts.						
MASC	468	Specialized Journalism	3	0	3	MASC 309
This course focuses on the study of the methods, principles and language of specialized press writing and coverage, and examines the concepts and patterns of specialized newspapers and magazines. The student studies, in a practical way, the basics and skills of specialized journalistic writing and coverage in a variety of areas including: political, sports, economics, health, scientific, environmental, cultural, artistic, women and child journalism. The student submits press coverage and written assignments related to a selected number of these areas under the supervision of the course instructor. Further, the course introduces rules, skills and conditions for the preparation of press investigations, reports and interviews, their types and methods, techniques and skills of interviewing, types of interviews, types of questions and techniques of question formulation and building question traps. The course is based on practical training in planning, field implementation and writing for investigations, reports and other press texts.						
MASC	474	Social Media	2	2	3	MASC 310
The course deals with the concept of social networks, their characteristics, the most prominent scientific models that explain new media phenomenon, social networking, the most prominent of these networks, the identification of their positive and negative impacts on individuals and communities, their use in media campaigns, the mechanisms in which they influence public opinion, the skills of building strategic plans in social networks and their uses in the field of public relations. The course offers practical training of these skills.						
MASC	499	Project in MASC	0	6	3	PMRM 498 AND ETHC 397
The graduation project course in Mass Communication aims at providing the student with the opportunity to prepare and implement an integrated media project that reflects the various knowledge and skills acquired by during the study of the program, based mainly on independent self-learning. It provides an opportunity to obtain practical experience in his/her field of specialization as well demonstrate independence and originality, planning and implementation skills, leadership and organizational capabilities, time and resource management. The course also allows the student to develop his/her intellectual and practical capabilities in the service of the community through media and communication experiences. The graduation project is conducted in through group or individual work and through direct guidance from the project supervisor.						
MCPR	101	Introduction to Communication	3	0	3	
This course provides students with the necessary basic knowledge in the field of mass communication and public relations. It includes a study of the elements of the communication process, the means and forms of communication as well as its different patterns. The course presents the concept of communication and its various influences, in addition to providing basic knowledge about the emergence and development of contemporary media, the factors influencing it and the identification of the functions performed by mass media in society. This course is considered to be an essential introduction to the study of media and public relations.						
MCPR	102	News Reporting and Writing	2	2	3	MCPR 101
The course focuses on providing the students with the knowledge and practical skills required to cover and write the news for the various print, audio-visual and digital media. The course provides knowledge and practical skills related to the scientific concept of the news and methods of selection, collection, and coverage of news, dealing with news sources, verification of information, methods of drafting news, news language, writing forms, rules for preparing and implementing news reports, and ethics of writing and publishing news. During the course, the student will cover and write news in different forms, formulas, and media formats.						
MCPR	206	Media Graphics	2	2	3	ITCS 101 AND MCPR 101

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations</b>						
<p>The course aims to identify the most important elements and principles in graphic design and the techniques of attracting the audience to graphic designs, in addition to the foundations of graphic design used in the field of media, both theoretical and applied. The course aims to provide students with the skills of editing pictures, lines, colors, shapes, texts and drawings through training on the methods of dealing with graphic design programs such as Adobe Photoshop, Adobe InDesign and Adobe Premier and others to reach innovative artistic designs providing elements of good design by strengthening the student's ability to be creative and innovative. The course also encourages and promotes student's self-initiated creativity in expressing his/her ideas through the preparation of a variety of designs that are supposed to be dealt with creatively and solving design challenges with high efficiency by employing different tools in these programs.</p>						
M CPR	208	Digital Photography	2	2	3	ITCS 101
<p>A cognitive and applied introduction to the arts of photography, within the framework of which the student is trained in the use of the camera, focusing on the settings and techniques in the camera where he recognizes (exposure triangle - white balance - focal length - installation base and others), in addition to editing images by Photoshop in order to develop his/her skills in photojournalism.</p>						
M CPR	211	Media Graphics	1	4	3	ITCS 101
<p>The course aims to identify the most important elements and principles in graphic design and the techniques of attracting the audience to graphic designs, in addition to the foundations of graphic design used in the field of media, both theoretical and applied. The course aims to provide students with the skills of editing pictures, lines, colors, shapes, texts and drawings through training on the methods of dealing with graphic design programs such as Adobe Photoshop, Adobe InDesign and Adobe Premier and others to reach innovative artistic designs providing elements of good design by strengthening the student's ability to be creative and innovative. The course also encourages and promotes student's self-initiated creativity in expressing his/her ideas through the preparation of a variety of designs that are supposed to be dealt with creatively and solving design challenges with high efficiency by employing different tools in these programs.</p>						
M CPR	232	Theories of Mass Communication	3	0	3	M CPR 101
<p>This course provides students with a scientific background of the scientific theories related to the mass communication phenomenon through the presentation and study of some theories of communication. It addresses the theories related to the impact of communication, the concept of the active audience, interaction with the media and the theories that explain the mechanism of traditional and modern media. The course also aims at enabling students to keep up with the latest communication innovations through learning about modern communication techniques, identifying &amp; underlying scientific theories, and how to benefit from the application of theories of communication in media research and studies.</p>						
M CPR	242	News Reporting & Writing	3	0	3	M CPR 101
<p>The course focuses on providing the students with the knowledge and practical skills required to cover and write the news for the various print, audio-visual and digital media. The course provides knowledge and practical skills related to the scientific concept of the news and methods of selection, collection and coverage of news, dealing with news sources, verification of information, methods of drafting news, news language, writing forms, rules for preparing and implementing news reports, and ethics of writing and publishing news. During the course, the student will cover and write news in different forms, formulas and media formats.</p>						
M CPR	243	News Reporting & Writing	2	2	3	M CPR 101
<p>The course focuses on providing the students with the knowledge and practical skills required to cover and write the news for the various print, audio-visual and digital media. The course provides knowledge and practical skills related to the scientific concept of the news and methods of selection, collection and coverage of news, dealing with news sources, verification of information, methods of drafting news, news language, writing forms, rules for preparing and implementing news reports, and ethics of writing and publishing news. During the course, the student will cover and write news in different forms, formulas and media formats.</p>						
M CPR	300	Media Design and Layout	2	2	3	M CPR 211
<p>The course aims to provide students with the skills of both print and digital media design. The course also deals with the concept of design, basic theories, and visual and aesthetic variables that govern it. Students will learn about the typographic and graphic elements and how to utilize them in press production. The course also familiarizes students with the most popular software used in print and digital design as well as production.</p>						
M CPR	360	Communication Research Methods	3	0	3	M ASC 101 AND STAT 101
<p>Introduction to scientific and research methods for mass media and public relations: historical analysis, case studies, content analysis, readership studies, audience studies, field surveys and experimental design.</p>						
M P RM	498	Research Methods in Mass Communication & Public Relations	3	0	3	M CPR 360 AND Completion of at least 66 credits
<p>The course aims to introduce students to scientific research and its importance in the field of media and public relations. It also provides students with the skills related to scientific research, such as the use of library and references, designing scientific tools for collecting data in media research, preparing a research plan and identifying the types of research and methods used in scientific research in the field of Media and public relations. It deals with the mechanism of formulating hypotheses and scientific questions, writing a scientific research report, and presentation skills to present the results of scientific research.</p>						
M P RM	498	Research Methods in Mass Communication & Public Relations	2	2	3	STAT 101 AND M CPR 232 AND Completion of at least 90 credits
<p>The course aims to introduce students to scientific research and its importance in the field of media and public relations. It also provides students with the skills related to scientific research, such as the use of library and references, designing scientific tools for collecting data in media research, preparing a research plan and identifying the types of research and methods used in scientific research in the field of Media and public relations. It deals with the mechanism of formulating hypotheses and scientific questions, writing a scientific research report, and presentation skills to present the results of scientific research.</p>						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations</b>						
PREL	101	Introduction to Public Relations	3	0	3	
A survey of the roles and responsibilities of the public relations professional in private and public organizations. The course examines the importance of audience research in public relations program planning, the difference of public relations from advertising, and the use of traditional publicity tools like press release and press kits to reach targeted audiences. It explores the use of the internet to reach key stakeholders and as a distribution channel for publicity. The course also emphasizes the importance of ethics, integrity and relationship building as cornerstones of public relations.						
PREL	121	Introduction to Public Relations & Advertising	3	0	3	
The course presents the basic concepts related to the public relations discipline. It also focuses on the roles, responsibilities and functions of public relations in various institutions, both governmental and private. It also examines the importance of planning of public relations programs, conducting public surveys and identifying the difference between public relations and other marketing activities, such as advertising and promotion used by public relations, including brochures, flyers and other advertising materials, as well as the use of the Internet in the field of public relations and advertising for organizations. The course also emphasizes the importance of the ethical component of the practice of public relations.						
PREL	220	Public Opinion	3	0	3	MASC 101
Public opinion formation, the basic elements involved, media role, its role in democratic societies, and the social role of communication in attitudinal change are the core of this course.						
PREL	240	Advertising	3	0	3	MAKT 201
A survey of advertising including its history, functions, theories, ethics, and relationship to modern organizations. The course sheds light on advertising practices in agencies and organizations, including media analysis, buying and coordination as well as analyses of effective agency functions, structure and relationships.						
PREL	267	PR & Advertising Campaigns	3	0	3	PREL 121
In this course, students will learn about the concept of public relations and advertising campaigns, and their importance and role in the performance of public relations functions in different institutions. This course also provides students with the opportunity to learn the concepts, theoretical foundations, scientific steps, and planning and analytical skills necessary to develop, plan public relations campaigns and successful advertising campaigns, all through successive steps of planning the campaign from the stage of developing the initial plan to the implementation and general evaluation of its results.						
PREL	268	PR & Advertising Campaigns	2	2	3	PREL 121
In this course, students will learn about the concept of public relations and advertising campaigns, and their importance and role in the performance of public relations functions in different institutions. This course also provides students with the opportunity to learn the concepts, theoretical foundations, scientific steps, and planning and analytical skills necessary to develop, plan public relations campaigns and successful advertising campaigns, all through successive steps of planning the campaign from the stage of developing the initial plan to the implementation and general evaluation of its results.						
PREL	301	International Communication	3	0	3	
This course aims to introduce the concept of the contemporary global media system and its basic components, and to identify the theories that explain the phenomena of communication and international media, as well as understanding and realizing the role played by international means of communication (international news agencies, international press, international radio, international satellite channels, making diplomacy and relations). This course seeks to deepen knowledge of the trends, balances and strategy of media flow in international coverage of conflicts and the international advertising industry.						
PREL	302	Writing for Public Relations	2	2	3	PREL 268
This course deals with the concept of writing styles for public relations, writing press and radio news releases, public service announcements, writing letters, memos, and reports, writing speeches and writing for pamphlets and flyers, writing for interactive media and public relations announcement. The course also familiarizes the student with the patterns and forms of media messages used by public relations and the elements of successful public relations writing.						
PREL	320	Organizational Communication & Consumer Behavior	3	0	3	MAKT 201
This course explores how to enable corporations to use the tools of communication to advance their missions, help resolve problems and seize opportunities in such areas as employee motivation, customer loyalty, shareholder understanding, new media relationships and community acceptance. Communication management between organizations and their employees, customers, communities, owners, the government and the media receive special attention. Studying consumer behavior is a major issue.						
PREL	340	Integrated Marketing Communication	3	0	3	PREL 268 AND MAKT 201
On this course, students learn about the concept of integrated marketing communications, the principles of integrated marketing communication, the marketing communication process, levels of marketing communication, marketing mix elements, marketing communication strategy and planning. The course also deals with the elements to be analyzed in planning marketing communications, marketing communication budget planning, the factors influencing the selection of marketing communication mix, communication relevance to marketing mix elements, marketing communication campaign components, and the role of the Internet in marketing communications.						
PREL	350	The Practice of Public Relations	3	0	3	PREL 101
This course is designed to introduce students to the contemporary practice of public relations, the nature and history of the profession and the theoretical foundations of contemporary practice of public relations. Within this framework, topics covered include: the identification of internal and external publics, descriptions of core public relations processes, and the tools of public relations. Finally, through the use of case study analysis, the student is introduced to corporate image creation and crisis management.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations</b>						
PREL	365	Media Production for Public Relations	2	2	3	PREL 350
This course covers the basic media techniques in print and broadcast productions for public relations. It deals with production of documentaries, brochures, pamphlets, and films to enhance the organization's image. This course includes also the use of Web site, and online media relations such as electronic mail, to promote the organization image and foster its relations with its public.						
PREL	375	Specialized Public Relations	3	0	3	PREL 101
The course explains crisis and identifies its communication dimension, and focuses on proactive planning to deal with the crises situation from a Public Relations perspective. This course covers also the practice of public relations in various fields and specific organizations. It looks at special users and special needs, the use and application of public relations in business, corporate and public affairs, corporate financial relations, health institutions, education, government and citizens.						
PREL	412	Integrated Marketing Communication	3	0	3	MAKT 201
On this course, students learn about the concept of integrated marketing communications, the principles of integrated marketing communication, the marketing communication process, levels of marketing communication, marketing mix elements, marketing communication strategy and planning. The course also deals with the elements to be analyzed in planning marketing communications, marketing communication budget planning, the factors influencing the selection of marketing communication mix, communication relevance to marketing mix elements, marketing communication campaign components, and the role of the Internet in marketing communications.						
PREL	422	Public Opinion & its Measurement	3	0	3	MCPR 232 AND STAT 101
The course aims to study the phenomenon of public opinion as a social and communicative phenomenon and develop students' skills of in the field of measuring and surveying public opinion. The course presents the concepts of public opinion, its different types, its development in modern societies, the study of factors influencing its formation, and the role of traditional and modern media in forming public opinion. It also deals with the role played by public opinion in societies, as well as the scientific methods, procedures and steps to measure public opinion by following the various scientific and statistical techniques employed in this regard.						
PREL	439	Strategic Communication in Public Relations	3	0	3	PREL 268
This course deals with the principles of strategic communication. It also tackles the emergence of this concept, methods of communicating with the public and activating its role in various forms such as advertising, public relations, direct marketing and e-marketing of goods and ideas. The course also deals with theories and models that practice strategic communication in public relations (including 'Broome and Dozier models, Grunig and Hunt models and other theories in public relations, as well as various schools of public relations). Students analyze the relationship between strategic communication in public relations and media, and draw strategies and tactics of communication, crisis response, and handling of media and international public relations.						
PREL	440	International Communication	3	0	3	PREL 350
This is meant to present an overview of world communication systems. Topics include: newsgathering agencies, news and information flow, and media imperialism.						
PREL	447	Media Production for PR	2	2	3	MCPR 206 AND PREL 485 AND MASC 355
The course aims at preparing the student for the process of the financial, literary and artistic planning for media production in public relations according to the target audience with a focus on the methods, components and technical stages for the production of various print media and audio-visual materials. This course also aims at providing the necessary skills in the field of public relations publications. The course deals with the technical and scientific bases for directing and producing publications, typographical producing images and titles, producing of the front page, inside pages and advertisements in public relations publications. The course aims to design and produce advanced printed forms Such as establishment newsletters and the magazines, the production of brochures and annual reports.						
PREL	450	Mass Media & Society	3	0	3	MASC 202
PREL	460	Special Events & Protocol	3	0	3	PREL 350
In today's world communication and public relations activities have become essential to create and establish mutual understanding. This course is designed to help communication and public relations students participate as active members in special assignments designed to fulfill this goal. Protocol rules are applied especially when politicians are involved.						
PREL	464	Protocol & Event Management	2	2	3	MAGT 121 AND PREL 340
The course aims at providing students with the knowledge and skills to prepare and plan effective communication for special events, develop communicative skills (audio and oral), learn the code of conduct during events and the protocol rules concerning VIPs, and learn protocol rules related to public relations activities that are followed in special occasions.						
PREL	475	Advertising Copy Writing & Design	2	2	3	PREL 340 AND MCPR 206
The course aims to build, develop and refine the skills of editing, design and production of advertising. The student will study the basics, principles and skills of advertising innovation, aesthetic values and creativity in the advertising business, whether print, audio, visual or digital. The course also focuses on the skills of editing and design of brand and advertising logo, editing and writing of headlines, editing of the advertising message, print design, editing and design of radio and television ads, as well as design and production of Internet advertising.						



## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mass Communication &amp; Public Relations</b>						
PREL	476	Public Relations Management	3	0	3	MAGT 121 AND PREL 340
<p>In this course, the student learns about the public relations strategy as an administrative activity, the organizational structures of the public relations department in the various institutions, the modern methods of managing them and its role in shaping the mental image of the institutions. The student also examines the concept of leadership, its objectives. the course focuses on the elements of the administrative process in the field of public relations. It deals with the planning process in this field, its importance and its various stages, and then tackles the aspect of the organization, its steps, its benefits and its elements, &amp; public relations activities. It also sheds light on the principles and types of organization and the factors influencing the selection of the appropriate organizational structure, the stages of preparation and organization of the organizational structure and its models. The course finally highlights the control of public relations activities and decision-making in the field of public relations.</p>						
PREL	477	Crisis Communications	3	0	3	PREL 301 AND PREL 302
<p>In this course, the student gets introduced to the concept of crisis management in terms of concept, dimensions, characteristics, types and the role of public relations management in solving them according to strategies and plans studied addressing the stages of development of these crises. In addition to studying ways to negotiate in crises.</p>						
PREL	484	Digital Public Relations	2	2	3	ITMS 205 AND PREL 268
<p>The purpose of the course is to use the Internet as a means of communication in the field of public relations and to know to what extent these sites benefit from the possibilities of the Internet to facilitate their communication with citizens &amp; the media, and the mechanisms of adopting the model of electronic dialogue in communication with their target audiences and the use of technologies Interactive communication methods, communication strategies followed by public relations on the Internet, the quality of the tools used, the promotion methods followed, the features of the content provided, the communication techniques used, the most important elements of their design, the nature of the theoretical model &amp; the communication practices used in these sites.</p>						
PREL	485	Writing for PR	2	2	3	PREL 121 AND MCPR 243
<p>This course deals with the concept of writing styles for public relations, writing press and radio news releases, public service announcements, writing letters, memos and reports, writing speeches and writing for pamphlets and flyers, writing for interactive media and public relations announcement. The course also familiarizes the student with the patterns and forms of media messages used by public relations and the elements of successful public relations writing.</p>						
PREL	499	Project in Public Relations	0	6	3	PMRM 498 AND ETHC 397
<p>The graduation project course in Public Relations aims at providing the student with the opportunity to prepare and implement an integrated media project that reflects the various knowledge and skills acquired by during the study of the program, based mainly on independent self-learning. It provides an opportunity to obtain practical experience in his/her field of specialization as well demonstrate independence and originality, planning and implementation skills, leadership and organizational capabilities, time and resource management. The course also allows the student to develop his/her intellectual and practical capabilities in the service of the community through media and communication experiences. The graduation project is conducted in through group or individual work and through direct guidance from the project supervisor.</p>						
<b>Mathematical Sciences</b>						
MATH	050	Orientation Mathematics	6	0	0	
<p>A comprehensive programme that builds on and strengthens basic mathematics. It provides the necessary tools for understanding and handling relevant mathematics for business, arts and social science students. The course covers basic topics in algebra equations, inequalities, coordinate geometry, trigonometry, polynomials, indices, logarithms, functions and matrices.</p>						
MATH	052	Mathematics	6	0	0	
<p>This course is designed as comprehensive program that builds on and strengthens basic mathematics. It provides the necessary tools for understanding and handling relevant mathematics for science, business, arts, social sciences, IT and physiotherapy students. The course covers basic topics in algebra equations, inequalities, functions and graphs, polynomials, Logarithms, and matrices.</p>						
MATH	053	Basic Mathematics	3	0	0	
<p>is an introduction to numbers, equations, and functions. Students will learn how to manipulate with numbers, solve equations, and cope with mathematical functions. Students will also learn about exponential and logarithmic functions as well as matrices.</p>						
MATH	055	Preparatory Mathematics	6	0	0	
<p>A comprehensive programme that builds on and strengthens basic mathematics. It provides the necessary tools for understanding and handling relevant mathematics for science, IT and pre-medical students. The course covers basic topics in algebra, trigonometry, complex numbers, functions and graphs and an introduction to sequences and series.</p>						
MATH	101	Calculus I	3	0	3	MATH 050 OR MATH 052 OR MATH 053 OR MATH 055
<p>is a university requirement for the BSc program in Engineering, IT, Multimedia, and Physiotherapy. This course covers limits and continuity, and differentiation of algebraic and transcendental functions with different rules, which involve multiplication, division, chain rules and implicit differentiation. Applications of differentiation such as extrema (maxima and minima), optimization, and mean value theorem are also covered in this course. Assignments of various problems are handed to the students to solve and get prepared for the exams.</p>						
MATH	102	Calculus II	3	0	3	MATH 101
<p>is a university requirement for the BSc program in Engineering, IT, Multimedia, and Physiotherapy. This course is a continuation of Calculus I with emphasis on integration methods and techniques followed by further integration and applications. Taylor and McLaurin theorems, power series, infinite series and polar coordinates are all covered in this course. Assignments are also handed to the students to solve and get prepared for the exam.</p>						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mathematical Sciences</b>						
MATH	103	Mathematics I	3	0	3	MATH 050 OR MATH 052 OR MATH 053 OR MATH 055
is an introductory mathematical analysis for business, economics, life and social sciences as well as interior design and mass media. Students will learn how to write and solve systems of linear equations using Gauss elimination, quadric equations, and linear inequalities (analytically and graphically), absolute values, functions, composite functions, inverse functions and exponential and logarithmic functions. They will also learn how to determine compound interest, present and future value, and annuities. They will be able to develop a matrix, an inverse matrix and using operations with matrices to solve linear systems. The students are assigned assignments to solve to prepare them for the exams. Assignments and exams cover all material.						
MATH	104	Mathematics II	3	0	3	MATH 103
is a calculus course designed for students studying business, economics, and other business-related programs. Besides business students, mass media and interior design students also take this course. This course involves limits, and differentiation and integration of variety of functions, such as simple algebraic functions, as well as exponential and logarithmic functions. It also includes the application of differentiation and integration for business related problems such as marginal costs and total costs, as well as price, marginal revenue and revenue.						
MATH	201	Discrete Mathematics	3	0	3	MATH 101
is an introduction to mathematical ideas and concepts, which are more useful and relevant to the study of all aspects of computer science and engineering than traditional continuous mathematics. The course deals with such topics as logic, sets, mathematical proof, functions, algebraic structures and Boolean algebra.						
MATH	202	Calculus III	3	0	3	MATH 102
is a university requirement for the BSc program in Engineering, IT, and Multimedia. This course will build on the previous two calculus courses, Calculus I and II. The course emphasis will be on topics such as vectors, partial derivatives, multiple integrations, ordinary differential and Laplace transforms.						
MATH	205	Differential Equations	3	0	3	MATH 102
is an integrated course that permits the students to learn how to formulate and express engineering and technology problems in terms of differential equations. It covers classification, methods and techniques of solutions. Included are: exact and separable types, linear second- and higher-order equations with constant coefficients: non-homogeneous and homogeneous ones; use of power series and Laplace transform methods. Some applications of differential equations are also considered.						
MATH	221	Linear Algebra	3	0	3	MATH 101
MATH 221 is an introduction to Linear Algebra. It covers linear systems, matrix algebra, vector spaces, linear transformations, eigenvalues and eigenvectors and norms and inner products.						
MATH	223	Linear Algebra and Complex Analysis	3	0	3	MATH 101
MATH 223 is a combination of two different courses, Linear Algebra and Complex Analysis. Both courses focus on the development of abstract concepts and applications. Linear Algebra covers vectors, systems of linear equations, matrices, determinants, vector spaces, eigenvectors, eigenvalues, and diagonalization. Complex Analysis covers complex number system, Cauchy-Riemann conditions, analytic functions and their properties, special analytic functions such as linear fractional transformations, roots, exponential, logarithmic, trigonometric and hyperbolic functions of a complex variable.						
MATH	311	Complex Analysis	3	0	3	MATH 102
MATH 311 is Introduction to Complex Analysis. This course covers complex number system, Cauchy-Riemann conditions, analytic functions and their properties, special analytic functions such as linear fractional transformations, roots, exponential, logarithmic, and trigonometric and hyperbolic functions of a complex variable. It also includes complex integration and line integrals, Cauchy representation, Taylor and Laurent Series expansions.						
PHYS	101	General Physics I	3	0	3	MATH 050 OR MATH 052 OR MATH 053 OR MATH 055
is a university requirement for the BSc program in Engineering and Physiotherapy. This course covers units and measurements, vectors, motion in one and two dimensions, Newton's laws of motion, work and energy, impulse and momentum, rotational dynamics, equilibrium of a rigid body and periodic motion.						
PHYS	102	Physics II	2	2	3	PHYS 101
This course introduces principles of electricity and magnetism and circuits. Topics include :electric charges and fields, Coulomb's and Gauss's laws, electric potential, capacitors, direct current circuits, Kirchhoff's rules, magnetic field and flux, ampere's law, induced emf, Lenz's law, mutual and self- inductance AC circuits, and RLC circuit. Students will apply these concepts in laboratory experiments.						
PHYS	111	General Physics	3	0	3	
PHYS 111 is the general physics, which is a university requirement for the BSc program in IT, and Multimedia. This course employs vector analysis as well as calculus-based mathematics to introduce vectors in 1-D, 2-D, and 3-D, electrostatic forces and fields, Coulomb's and Gauss's laws, electric potential, capacitors, direct current circuits, Kirchhoff's rules, RC circuit, magnetostatic forces, magnetic fields and flux, Biot-Savart and Ampere's law, Faraday's and Lenz's laws, and driven AC current.						
PHYS	121	General Physics II	3	0	3	PHYS 101
is a university requirement for the BSc program in Engineering. This course introduces electric charges, forces, fields, coulomb's and Gauss's laws, electric potential, capacitors, direct current circuits, Kirchhoff's rule, magnetic field and flux, ampere's law, induced emf, Lenz's law, mutual and self-inductance, AC circuits, and RLC circuits.						
PHYS	131	Physics I for Information Technology	3	0	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Mathematical Sciences</b>						
Physics 131 is the general physics I, which is a university requirement for the BSc program in IT, and Multimedia. This course employs vector analysis as well as calculus-based mathematics to introduce vectors in 1-D, 2-D, and 3-D, electrostatic forces and fields, Coulomb's and Gauss's laws, electric potential, capacitors, direct current circuits, Kirchhoff's rules, RC circuit, magnetostatic forces, magnetic fields and flux, Biot-Savart and Ampere's law, Faraday's and Lenz's laws, and driven AC current.						
PHYS	321	Electromagnetic Theory	3	0	3	MATH 205 AND MATH 311
The course begins with a review of vector calculus and coordinate transformations. It covers fundamental concepts of electrostatics, magnetostatics, electromagnetic induction and electromagnetic waves. Students gain knowledge of Maxwell's Equations and learn how to apply them to solving practical electromagnetic fields problems. Other concepts such as waveguides, resonant cavities, antennas and radiation pattern are also introduced in this course.						
STAT	101	Introduction to Statistics	3	0	3	MATH 050 OR MATH 052 OR MATH 053 OR MATH 055
is an elementary course that begins by familiarizing the student with new concepts as applied to extraction of meaningful information from random sets of data. It covers descriptive statistics and leads on to frequency and its distribution, variance and standard deviation, probability, expected values, discrete and continuous probability distributions, correlation and regression.						
STAT	201	Medical Statistics	3	0	3	STAT 101 AND PHTH 325
starts with an application of elementary statistics to basic principles and methods of epidemiology and then moves to more sophisticated analysis encompassed in medical statistics. The emphasis will be on the design and interpretation of epidemiological studies. Appropriate statistical methods will be integrated with the main epidemiological content, and practical sessions will make use of relevant computer software.						
STAT	202	Business Statistics	3	0	3	STAT 101
imparts additional knowledge of statistical theory that is important for application in business and economics. Topics span correlation analysis, linear regression, chi square tests and analysis of variance. Special attention is placed on survey methodology. An introduction to non-parametric test is provided. The course uses statistical software, SPSS and Minitab, for presentation and analysis of data.						
STAT	302	Applied Probability	3	0	3	MATH 202
introduces probability notions such as random variables and probability distributions, expectation, moment-generating function, functions of random variables and transformation. In addition, applications of probability to areas such as reliability theory including parallel and series connections and the basic single server queuing system M/M/1 are also discussed.						
<b>COLLEGE OF BUSINESS &amp; FINANCE</b>						
<b>Accounting &amp; Economics</b>						
ACCT	101	Accounting I	3	0	3	
A survey of the accounting cycle; recording changes in financial position; ledger; journal; trial balance; income measurement; adjusting and closing entries; accounting for merchandising operations; special journals and subsidiary ledgers; accounting for cash; receivables; inventories; plant and equipment.						
ACCT	201	Accounting II	3	0	3	ACCT 101
Accounting for partnerships and corporations: capital stock; dividends and retained earnings; long term liabilities and investment; statement of changes in financial position; cash flows, analysis and interpretation of financial statements, manufacturing accounts.						
ACCT	301	Managerial Accounting	3	0	3	ACCT 201
Introduction to cost behaviour and cost-volume-profit relationships; relevant information and decision making; the master budget; flexible budgets and variances; management control systems and responsibility accounting.						
ACCT	311	Intermediate Accounting I	3	0	3	ACCT 201
An intensive study of financial accounting and reporting practices. Particular emphasis on the theoretical foundations, concepts and principles underlying financial statements with emphasis on assets and current liabilities and the process of preparing and presenting financial information about an entity for outside users. Topics vary but typically include: standard setting; the accounting cycle including data accumulation, adjustments and preparation of financial statements; and valuation with a focus on the recognition, measurement and disclosure of revenue, inventory and cost of sales, and plant assets.						
ACCT	312	Intermediate Accounting II	3	0	3	ACCT 311
Continued study of concepts and principles underlying financial statements with emphasis on long-term liabilities and stockholders' equity. Particular emphasis is placed on the process of preparing and presenting financial information about an entity for outside users. Topics vary but typically include analysis of recognition, measurement and disclosure of: equity investments, financing activities (bonded debt, leases, pensions), income taxes, stockholders' equity, specialized reporting problems and cash flow.						
ACCT	320	Intermediate Cost Accounting	3	0	3	ACCT 301
A primer on cost allocations, performance measurements, analysis of current cost accounting systems and accounting in an international environment.						
ACCT	321	Auditing	3	0	3	ACCT 201
An overview of auditing; professional ethics; audit evidence and documentation; the study and evaluation of internal control; audit of cash; securities; receivables; inventories; fixed assets; current and long-term liabilities; proprietary accounts; income statements; the audit report.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Accounting &amp; Economics</b>						
ACCT	341	Accounting Systems	3	0	3	ACCT 301 OR ACCT 312
Introduction to technology/accounting information systems and their interface with processes and process re-engineering. Application of systems development life cycle to the engineering of accounting information systems. Emphasis on auditing system security and integrity. Coverage of project management and accounting systems development. Introduction to using a commercial accounting package.						
ACCT	401	Accounting Theory	3	0	3	ACCT 312
Scope of accounting; nature and uses of accounting information; the formulation of an accounting theory; the conceptual framework for financial accounting and reporting; the accounting standards setting process; income and value measurement; current purchasing power accounting; current value accounting.						
ACCT	402	Contemporary Issues in Accounting	3	0	3	ACCT 312
A variable content course with topics that can change from semester to semester. Topics are identified by title in the schedule of classes. Examples are: inflation accounting, market-value-based measurement metrics, accounting for human resources.						
ACCT	403	Advanced Accounting	3	0	3	ACCT 312
Topics include: income determination and equity accounting, and consolidated statements; statement of affairs; fiduciaries; actuarial science. Accounting for business combinations, preparation of consolidated financial statements, home office/branch relationships, and partnerships.						
ACCT	404	International Accounting	3	0	3	ACCT 312
This course reviews major issues in international accounting, including historical, cultural, and environmental influences that impact various national accounting systems. Particular emphasis is placed on surveying accounting practices in different nations especially focusing on international accounting for multi-national corporate operations including taxation.						
ACCT	405	Accounting Information Systems	2	2	3	ACCT 301 OR ACCT 312
This course aims at preparing students for careers in accounting as users, managers, and designers of accounting information systems. Mainly, the course provides students with a broad conceptual knowledge of accounting information systems; the need for and control of accounting information systems; the development of accounting systems through systems planning, analysis and design; as well as discussions of specific transaction-cycle based accounting information systems. Additionally, students will work on accounting systems-oriented spreadsheet and database which provide students with a greater understanding of how micro-computer-based accounting software is used and to demonstrate the advantages of computerized software over a manual process.						
ACCT	411	Taxation	3	0	3	ACCT 201
This course aims to develop knowledge and skills relating to the tax system as applicable to individuals, companies, and financial institutions. The course provides the core knowledge of the underlying principles and major technical areas of taxation as they affect the activities of individuals, businesses, and the economy. Additionally, this course will cover UK VAT in alignment with ACCA's F6 Taxation course.						
ACCT	422	Advanced Audit and Assurance	3	0	3	ACCT 321
This course is designed to provide an extension to auditing course (ACCT 321). This course includes principles and practices used by public accountants and internal auditors in examining financial statements and supporting data of public listed companies. Special emphasis is given Information System Audit. Also it emphasizes ethical and legal aspects and considerations given in International Standards of Auditing (ISA).						
ACCT	499	Project in Accounting	0	6	3	BFRM 498 AND ETHC 391
A structured, pre-approved project in accounting ordinarily involving (1) research on a particular topic in accounting or (2) reporting on field-work in an accounting organization.						
ECON	101	Principles of Microeconomics	3	0	3	
The course introduces microeconomic concepts and analysis: the study of supply and demand and its applications; theory of business firms; and pricing policies of firms under different market structures such as perfect competition, monopoly, monopolistic competition, and oligopoly.						
ECON	102	Principles of Macroeconomics	3	0	3	
The study of the determinants of aggregate economic activity, the effects of monetary and fiscal policy on national income, output, and employment. Includes topics of inflation, unemployment, money and banking, trade and finance, economic development.						
ECON	201	Intermediate Microeconomic Theory	3	0	3	ECON 101
Determination of prices and quantities in markets for goods and services. Theories of consumer behaviour, cost structures, factor payments. Firm behaviour in the contest of alternative market structures: perfect competition, monopoly, oligopoly and monopsony.						
ECON	202	Intermediate Macroeconomics Theory	3	0	3	ECON 102
Roles of goods and markets and financial markets in the determination of national income and inflation; economic growth and business cycles; fiscal and monetary policy. Alternate theories of income, output and price determination. Domestic and international constraints on macroeconomic policy.						
ECON	301	Business Law	3	0	3	LAW 101 OR Completion of at least 66 credits
A general overview of the law of contracts and sales transactions is provided in the first half of this course. The second half of the course then considers such diverse topical content as: consumer protection law, business torts, intellectual property rights, criminal law as applied to business, corporate liability especially product liability based on theories of negligence and strict liability, and finally property law, both real and chattel.						
ECON	302	Money & Banking	3	0	3	ECON 102

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Accounting &amp; Economics</b>						
ECON	303	International Economics	3	0	3	ECON 202
Survey of causes and composition of trade between nations with further consideration of: balance of payments, foreign exchange markets; and international monetary markets and policies. Theory of causes and composition of trade. Topics include: comparative advantage; tariff and non-tariff barriers to trade; economic integration and commercial policy. Financial instruments facilitating international trade.						
ECON	310	Islamic Economics	3	0	3	ECON 101 OR ECON 102 OR CULT 102
This course introduces students to fundamental issues encountered in modern Islamic economics in both theory and practice. The teachings of the Shariah in both microeconomics and macroeconomics are explored in depth permitting students to comprehend the multifarious nature of Islamic teaching across a wide spectrum of economic matters.						
ECON	321	Econometrics	3	0	3	STAT 202 AND ECON 202
Hypothesis testing and prediction with ordinary least squares (OLS) regression. Estimation with violations of classical assumptions. Multicollinearity, heteroscedasticity and serial correlation problems, dummy variables and model specification.						
ECON	322	Labor Economics	3	0	3	ECON 201
An analysis of labor force participation, employment, wage determination, economic stability, and investment in human capital.						
ECON	324	Economic Development and Growth	3	0	3	ECON 202
Recent advances in theory and empirical analysis of economic development and growth. Explores empirical findings on economic development, theoretical development models, problems of efficient resource allocation in a growing economy, balanced ? and unbalanced ? growth in closed and open economic systems, the role of capital accumulation, and innovation in economic growth. Application of theories and quantitative methods to economic analysis with a view to policy formulation.						
ECON	410	Industrial Organization	3	0	3	ECON 201
Economics of alternative market structures focusing particularly on the impact of concentration, economies of scale, advertising and conglomerates on business and society.						
ECON	420	Public Finance	3	0	3	ECON 102 AND Completion of at least 90 credits
This course provides a fundamental understanding of the financial management of governmental organizational units and enterprises through an analysis of revenues and expenditures at all levels of government. Special emphasis is placed on the effects of public finance on business finance and personal finance.						
ECON	421	Monetary and Financial Systems	3	0	3	BANK 302
Monetary policy choices can strongly affect the development of the economic system and the efficiency of financial intermediaries. The course discusses the fundamentals of monetary policy in the macroeconomic framework characterizing transition economies shedding light on domestic and international aspects of policy actions, evaluation of policies to influence activity and growth, and business cycle analysis.						
ECON	424	Engineering Economics	3	0	3	Completion of at least 90 credits
This course aims at providing the student with advanced concepts of engineering economic analysis and its role in engineering decision making. It is designed to offer the students the tools needed for rigorous presentation of the effect of the time value of money on engineering problem solving and the capacity to act with ethical and efficient professionalism. The tools introduced include present worth analysis, annual cash flow, rate of return, incremental analysis, future worth analysis, and payback period. Additionally, the course also covers topics such as depreciation, after tax analysis, replacement analysis, uncertainty, inflation, deflation, and estimation of future events. The course adds a compulsory knowledge for any project management professional in engineering fields.						
ECON	499	Project in Economics	0	6	3	BFRM 498 AND ETHC 391
A structured, pre-approved project in economics ordinarily involving (1) research on a particular topic in economics or (2) reporting on field-work in an economics organization.						
INTR	421	BSAF Internship	0	12	6	Completion of at least 90 credits
INTR	423	BSEF Internship	0	12	6	Completion of at least 90 credits
INTR	465	BSAF Internship	0	0	3	Completion of at least 90 credits
This course is taken as a substitute to one course (3 credits hours) from the program core elective courses. Students follow a training program in an organization related to their specializations in accounting or finance. The program aims to provide students with first-hand experience of the day-to-day functions, duties, and operations and to integrate what they have learnt in the classroom with the competencies required in the workplace.						
INTR	466	BSEF Internship	0	0	3	Completion of at least 90 credits
This course is taken as a substitute to one course (3 credit hours) from the program core elective courses. Students follow a training program in an organization related to their specializations of economics or finance. The program aims to provide students with first-hand experience of the day-to-day functions, duties, and operations and to integrate what they have learnt in the classroom with the competencies required in the workplace.						
<b>Banking &amp; Finance</b>						
BANK	220	Commercial Bank Management I	3	0	3	ECON 102

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Banking &amp; Finance</b>						
Corporate finance and microeconomics are applied to matters of importance to commercial bankers. Among the subjects treated are bank-asset portfolio construction, lending policies, liabilities management, bank capital structure, short-run cash management, financial market rates and flows, and quantitative models for bank management. Commercial bank management is analyzed from an internal viewpoint in terms of what bank managers should look for in asset management and why; what market conditions they should be aware of; and what techniques they can use to meet changing economic and financial conditions.						
BANK	221	Bank Management I	3	0	3	ECON 102
Corporate finance and microeconomics are applied to matters of importance to commercial bankers. Among the subjects treated are bank-asset portfolio construction, lending policies, liabilities management, bank capital structure, short-run cash management, financial market rates and flows, and quantitative models for bank management. Commercial bank management is analyzed from an internal viewpoint in terms of what bank managers should look for in asset management and why; what market conditions they should be aware of; and what techniques they can use to meet changing economic and financial conditions.						
BANK	302	Money & Banking	3	0	3	ECON 102
The subjects of the course are Money, banking, financial institutions, monetary policy including the goals of monetary policy, the choice of policy instruments, the rule- versus- discretion debate, central bank credibility, arguments for and against central bank independence, and the interplay between the central bank and the financial markets. The course looks specifically into the monetary policy process and the operation of Central Banking, the regulation and supervision of the financial system, and the internationalization of financial markets.						
BANK	311	Bank Management II	3	0	3	BANK 220 OR BANK 221
An application of financial management concepts to the liquidity management, investment portfolio analysis, capital budgeting, and capital structure decision-making process required by a commercial bank to perform effectively its financial intermediation role within the financial system's institutional, regulatory, and competitive environment.						
BANK	320	Commercial Bank Management II	3	0	3	BANK 220
An application of financial management concepts to the liquidity management, investment portfolio analysis, capital budgeting, and capital structure decision-making process required by a commercial bank to perform effectively its financial intermediation role within the financial system's institutional, regulatory, and competitive environment.						
BANK	321	International Banking	3	0	3	BANK 221
The course aims to cover the main principles and problems of international banking. The course is intended to cover both theoretical issues as well as the institutional background to international banking. Theoretical issues include: the theory of the banking firm, the creation of credit and credit rationing, internationalization of banking, and the risks and benefits from financial innovation. Practicalities of central banking, bank regulation, deposit protection, capital adequacy and free banking in addition to selective institutional aspects of international banking also receive attention.						
BANK	330	Essentials of Islamic Banking	3	0	3	BANK 221
The course aims to introduce students to the main principles of Islamic banking and finance and to analyses of the relationship between Islamic banks and conventional banks and Islamic banks and non-financial corporations in the Islamic World and the Middle East in particular. One objective is to understand the principles and practice of modes of Islamic finance for industry and commerce and explore their implications on investment and funding corporations and projects to support development in Muslim societies. Students learn how various Islamic financial instruments are practiced to facilitate business, trade, finance and investment and evaluate current practices of Islamic banks, their merits and limitations.						
BANK	331	Islamic Commercial Law	3	0	3	
The course aims to introduce students to the main principles of Islamic commercial jurisprudence (law) and how this is applied in developing the products of Islamic banking and finance. The course offers the students to understand the source of Islamic law, the main nominate contracts and their hybrid contracts. In particular, the students need to be familiar with the issues of Shariah compliance, different schools of Islamic jurisprudence, ijtiḥad (the role of Muslim scholars in the interpretation of law) and their impacts on the products and services of Islamic banking and finance.						
BANK	401	Corporate Banking Law & Practice	3	0	3	ECON 301 OR BANK 320 OR BANK 311
This course provides in-depth coverage of the legal relationships, obligations and requirements in the arena of corporate banking and examines complex elements of law relevant to individuals working within the corporate banking sector from advanced rules of contract to abstruse issues concerning syndicated loans. Students obtain practice in drafting loan agreements and facility letters.						
BANK	410	Credit Analysis and Lending	2	2	3	BANK 302
The course imparts a fundamental understanding of credit risk analysis process and then proceeds to cover financial statement analysis, including ratio and cash flow analysis, to facilitate better credit related decision. Various non-financial factors- the business plan, industry/ sector performance and senior management issues- that often affect creditworthiness receive ancillary attention.						
BANK	499	Project in Banking	0	6	3	BFRM 498 AND ETHC 391 AND Completion of at least 90 credits
A structured, pre-approved project in banking ordinarily involving (1) research on a particular topic in banking or (2) reporting on field-work in a banking organization.						
FINC	210	Financial Management	3	0	3	ACCT 101
This course imparts a fundamental understanding of the functions of finance in the contexts of: the legal and tax environments and the roles of financial markets. A vigorous introduction to compound interest, future and present value, and theories of financial valuation and financial analysis and planning is provided.						
FINC	211	Financial Management I	3	0	3	ACCT 101

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Banking &amp; Finance</b>						
This course imparts a fundamental understanding of the functions of finance in the context of: the legal and tax environment and the roles of financial markets. A vigorous introduction to compound interest, future and present value, and theories of financial evaluation and financial analysis and planning is provided.						
FINC	310	Essentials of Corporate Finance	3	0	3	FINC 210
This course explores in depth the concept of cost of capital: how it is used in financial decision-making and how costs of individual components of the capital structure are brought together to form a weighted average cost of capital. Choice of capital structure and working capital policy are a primary focus of this course. Students examine how to manage current (short term) assets and current (short term) liabilities and obtain exposure to additional issues including: cash flow estimation, incorporating risk into the capital budgeting decision and international capital budgeting decision-making methods. Students gain perspective on how financial managers can help maximize their firms' values.						
FINC	312	Financial Management II	3	0	3	FINC 211
This course explores in depth the concept of cost of capital: how it is used in financial decision-making and how costs of individual components of the capital structure are brought together to form a weighted average cost of capital. Choice of capital structure and working capital policy are a primary focus of this course. Students examine how to manage current (short term) assets and current (short term) liabilities and obtain exposure to additional issues including: cash flow estimation, incorporating risk into the capital budgeting decision and international capital budgeting decision-making methods. Students gain perspective on how financial managers can help maximize their firm's values.						
FINC	320	International Finance & Banking	3	0	3	FINC 310
International money and capital markets. Currency options, futures and swaps as means for currency risk management. Valuation and portfolio analysis of international stocks and bonds. Foreign direct investment and political risk management. Project finance and raising of international capital. Financing and investment decisions of multinational corporations.						
FINC	321	Risk Management & Insurance	3	0	3	FINC 210
This course introduces the student to basic concepts of risk management and types of insurance and explains the economic structure and organization of the insurance industry: the insurance underwriter's functions, the main participants in the insurance market and the elements of a valid insurance contract. Special attention is allocated to property insurance policies. After finishing this course, the student should grasp the legal and financial nature of insurance, the characteristics of an ideally insurable loss exposure and the steps in the risk management process.						
FINC	322	International Finance	3	0	3	FINC 312
International money and capital markets. Currency options, futures and swaps as means for currency risk management. Valuation and portfolio analysis of international stocks and bonds. Foreign direct investment and political risk management. Project finance and raising of international capital. Financing and investment decisions of multinational corporations.						
FINC	323	Insurance & Reinsurance	3	0	3	FINC 312
This course introduces the student to the principles and applications of insurance and reinsurance. After finishing this course the student should demonstrate a strong basic understanding of property, liability, automobile insurance, introduction to reinsurance, methods and types of reinsurance, and functions of reinsurance. Students should grasp the main types of reinsurance and their contribution to and importance in maintaining a stable insurance industry.						
FINC	327	Personal Finance	3	0	3	FINC 211
This course is designed to introduce the student to the concepts, tools, and applications of personal finance and investments. A variety of methods will be used to enhance the learning experience, including, among other things, web resources and interactive financial planning software. A focus will be put on retirement plans, personal budget, and auto and housing decisions, in addition to, health, life and property insurance.						
FINC	328	Real Estate Finance	3	0	3	FINC 211
This course explores in depth real estate institutions and markets, real estate mathematics, mortgage instruments, investments in real estate, and underwriting and valuation of real estate. Special consideration is given to trends in real estate finance in GCC countries.						
FINC	410	Credit Analysis & Lending	3	0	3	FINC 310
This course imparts a fundamental understanding of the credit risk analysis process and then proceeds to cover financial statement analysis, including ratio and cash flow analysis, to facilitate better credit-related decisions. Various non-financial factors -- the business plan, industry/sector performance and senior management issues -- that often affect creditworthiness receive ancillary attention.						
FINC	411	Contemporary Issues in Economics and Finance	2	2	3	ECON 102 AND FINC 312
This course is designed to provide students with critical knowledge and insight into the latest economic and financial topics that build on the conceptual foundation of previous courses through academic research, practical application, and critical thinking. Driven by the UN sustainable development goals, this course offers an opportunity to the students to explore several emerging issues in relation to economic and finance disciplines such as economic sustainability, sustainable finance, digital economy, and other sustainable technological components such as Artificial Intelligence, blockchain, financial technology, cybersecurity and bigdata analytics.						
FINC	421	Investment	2	2	3	FINC 312
A primer on how to manage money, this course provides students with a survey of securities markets and modern investment instruments available in financial markets including stocks, bonds, convertibles, warrants, futures and option . The course also introduces students to techniques of asset valuation and market efficiency hypotheses. Students gain insight concerning how to evaluate current investments and future opportunities and acquire the skill and know-how necessary to be intelligent investors.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Banking &amp; Finance</b>						
FINC	427	Derivative Securities	2	2	3	FINC 312
An advanced primer on future contracts and options exploring a wide variety of complex derivatives such as straddles and options of stock index futures.						
FINC	428	Financial Forecasting	2	2	3	STAT 202
This course aims to introduce the statistical forecasting methods used in the field of banking and finance. Standard forecasting models will be covered in this course such as smoothing, fixed trend and seasonality, stationary ARMA, regression on time series data, and GARCH for volatility. Therefore, students need not invent a new model every time s/he forecast. Instead, her/his task is to identify an appropriate forecasting model from the collection.						
FINC	430	Risk Management	2	2	3	BANK 410
The course offers an introduction into the evolving and expanding practice of financial risk management. Risk management is a complex process of identifying, measuring, and controlling risk exposure. The course addresses how to control for market and credit risks. Liquidity and operational risks are discussed. Topics include value at risk, Monte Carlo simulation, scenario analysis, stress testing, credit value at risk, and credit derivatives.						
FINC	431	Portfolio Management	3	0	3	FINC 310
This course explores the theory and practice of portfolio management and valuation. The roles of computer technology and electronic trading are also investigated.						
FINC	432	Islamic Capital Market & Instruments	3	0	3	BANK 330
The course aims to introduce students to the main principles of Islamic capital markets and instruments and to analyses of the relationship between Islamic capital markets and instruments and conventional Islamic capital markets and instruments in the Islamic World and the Middle East in particular. The course offers the students to understand the theories and practice of Islamic capital markets and explore their implications on investment and funding corporations and projects to support development in Muslim societies. In particular, the students need to be familiar with the essential requirements of different Islamic modes of business, thus enabling them to appreciate the distinctive characteristics of a capital market environment that adhered to Shariah principles.						
FINC	499	Project in Finance	0	6	3	BFRM 498 AND ETHC 391
A structured, pre-approved project in finance ordinarily involving (1) research on a particular topic in finance or (2) reporting on field-work in a finance organization.						
INTR	422	BSBF Internship	0	12	6	Completion of at least 90 credits
This course is taken as a substitute to two courses (3 credits hours each) from the program core elective courses. Students follow a training program in an organization related to their specializations. The program aims to provide students with first-hand experience of the day-to-day functions, duties, and operations and to integrate what they have learnt in the classroom with the competencies required in the workplace.						
INTR	467	BSBF Internship	0	0	3	Completion of at least 90 credits
Students follow a training program in an organization related to their specializations. The program aims to provide students with first-hand experience of the day-to-day functions, duties, and operations and to integrate what they have learnt in the classroom with the competencies required in the workplace.						
<b>Directorate of Engineering Management</b>						
EMSE	001	The Management of Technical Organizations	6	0	3	
The practice of the management as applied within technical organizations. Includes history of the tradition and current effective practices, research and finding and case studies, with objective of enhanced understanding of external and internal factors influencing organizational performance and leadership requirements.						
EMSE	005	Organizational Behavior for the Engineering Manager	6	0	3	
The behavior of individuals and groups in the context of technical organizations, focusing on relationships and interactions within the organizations operating activities. Individual and group development and motivation. Organizational structures and cultures.						
EMSE	020	Decision Making with Uncertainty	6	0	3	
Problem formulation. Concepts and techniques used in analyzing complex decision problems. Modeling decision problems. Modeling decision problems using decision trees, probability models, multi objective models and utility theory.						
EMSE	026	Technical Enterprises	6	0	3	
Essential features of technology based companies from the entrepreneur's point of view. Team preparation of a simulated business plan of a technology based company. Designed for those working in technical firms and for government personnel who depend on technical firms such as suppliers.						
EMSE	035	Marketing of Technology	6	0	3	
Analysis of industrial marketing process and functions, providing concepts and tools for engineering managers to market high technology products and services.						
EMSE	197	Special Topics: Quantitative Methods in Engineering Management	6	0	3	
Provides mathematical foundation for analysis of problems in engineering management and systems engineering, including optimization and other analytical tools.						



## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of Engineering Management</b>						
EMSE	410	Survey of Finance and Engineering Economics	6	0	3	
Survey of material relevant to financial decision making of engineering activity. Includes traditional engineering economy topics; fundamental of accounting; and financial planning, budgeting and estimating applicable to the management of technical organizations.						
EMSE	505	Knowledge Management I	6	0	3	
The foundations of knowledge management, including cultural issues, technology applications, organizational concepts and processes, management aspects, and decision support systems. Case studies.						
EMSE	609	Problems in Engineering Management & Systems Engineering Capstone Project	6	0	3	
Capstone project is where students apply concepts and tools previously studied to the solution of a real-world problem. Students work in small groups on a problem proposed by students and approved by the instructor. Open only to master's candidates in the department, preferably during the last semester of their program. The final report from the capstone work must identify the knowledge employed from previous courses. Selecting the problem and solving it includes developing the teamwork necessary to carry out a project and to comply with the reporting requirements.						
EMSE	692	Negotiation and Conflict Resolution	6	0	3	
Students acquire proven negotiation skills by using real-world case studies, learning abroad spectrum of theories underlying negotiating approaches, and putting their learning into practice. Learners discover a framework for understanding and addressing the challenging emotional dynamics that arise in everyday negotiations and conflicts. They uncover the emotions that generate more power and control, both in negotiations and in relationship challenges faced every day. Students gain the tools for early recognition of unhealthy conflict, accurately diagnosing its causes, and developing effective communication-based intervention strategies. They engage in simulations and real-world situations to practice different negotiation styles and are equipped for success in personal and professional relationships and difficult conversations. This course is tailored for engineering and technology professionals.						
EMSE	695	Special Topics: Research Methods for the EM	6	0	3	
Students acquire proven negotiation skills by using real-world case studies, learning abroad spectrum of theories underlying negotiating approaches, and putting their learning into practice. Learners discover a framework for understanding and addressing the challenging emotional dynamics that arise in everyday negotiations and conflicts. They uncover the emotions that generate more power and control, both in negotiations and in relationship challenges faced every day. Students gain the tools for early recognition of unhealthy conflict, accurately diagnosing its causes, and developing effective communication-based intervention strategies. They engage in simulations and real-world situations to practice different negotiation styles and are equipped for success in personal and professional relationships and difficult conversations. This course is tailored for engineering and technology professionals.						
EMSE	770	Techniques of Risk Analysis and Management	6	0	3	
Topics and models in current risk analysis; modern applications of risk-based planning and risk management; use of quantitative methods in risk analysis.						
EMSE	790	Logistics Planning	6	0	3	
Quantitative methods in model building for logistics systems, including organization, procurement, transportation, inventory, maintenance and their interrelationships. Stresses applications.						
EMSE	801	Systems Engineering I	6	0	3	
System approach to the architecting and engineering of large-scale systems; elements of systems engineering; methods and standards; computer tools that support systems and software engineering; trends and directions; the integrative natural of systems engineering.						
EMSE	820	Program and Project Management	6	0	3	
Problems in managing projects; project management as planning, organizing, directing and monitoring; project and corporate organizations: Duties and responsibilities; the project plan: schedule, cost, earned – value and situation analysis; leadership: team building, conflict management, meetings, presentations and proposals.						
EMSE	850	Quantitative Models in Systems Engineering	6	0	3	
Quantitative modeling techniques and their application to decision making in systems engineering. Linear, integer, and nonlinear optimization models. Stochastic models: inventory control, queuing systems, and regression analysis. Elements of Monte Carlo and discrete event system simulation.						
EMSE	992	Special Topics: Research Methods for the EM	6	0	3	
Discussion of research methods for the Engineering Manager.						
EMSE	995	Research	0	12	6	EMSE 992
The student conducts a study on a topic in the field of management under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
<b>Directorate of FinTech</b>						
FINT	511	Fundamentals of Financial Technology	3	0	3	
This course aim to provide an understanding of financial technology theory and applications. The course starts by a new taxonomy of innovations that had affected the financial industry. It will then examine how bitcoin, and hence all blockchain and smart contract applications work, which together with big data techniques are used in FinTech. By the end of these course will provide a full understanding for how, why, and when banks, financial institutions and other firms can benefit from using these technologies as a way of making payments more efficient, improving user experience, tokenizing assets, and setting up secure smart contracts.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of FinTech</b>						
FINT	512	Corporate Finance	3	0	3	
This course combines principles of management of the firm, operations of money and capital markets, discounted cash flows, risk and asset valuation with modern capital structure theories, leasing, working capital policies and mergers and acquisitions.						
FINT	513	Blockchain and Cryptocurrencies Technologies	2	2	3	
This course introduces students to the Blockchain technology that powers cryptocurrencies. Since Blockchains promise to be as crucial as the internet in shaping how business will be conducted in the future, this course explains the properties and mechanics of Blockchain and cryptocurrencies that make them secure and support other applications than currencies. Other topics covered include the mining, storing and transacting with Bitcoin and altcoins, the anonymity of Bitcoin, the way altcoins or cryptocurrencies touch the real world and interact with politics, law enforcement and regulations, and the future of Blockchain technology, Artificial Intelligence and Digital Privacy.						
FINT	514	Portfolio Theory & Investment Analysis	3	0	3	FINT 512
This course provides you with a critical understanding of techniques used for investments and portfolio management. It covers both the theoretical and the practical applications of investments. Within this context, the course covers topics related to investment environment, capital allocation, portfolio and diversification theory, portfolio selection and optimization, asset pricing models, efficient markets, fixed income, equity markets, and performance evaluation. The course emphasizes case studies and real case scenarios. Students will master theoretical and practical investment topics.						
FINT	515	Big Data Analytics and Machine Learning in Finance	2	2	3	
The expansion of social media and the computerization of every element of social and economic activity resulted in the generation of vast volumes of primarily unstructured big data, such as online logs, videos, speech recordings, pictures, e-mails, Tweets, and other forms of communication. Parallel to this, computers are becoming more powerful, and storage is becoming more affordable. We now can reliably and inexpensively store large volumes of data, analyze them effectively, and extract business and socially significant data. This course aims to equip students with a range of most relevant topics that pertain to contemporary analysis practices and are foundational to the emerging field of big data analytics. Students are guided through the theoretical and practical differences between traditional datasets and Big Data datasets. An overview of the initial collection of data will be explored for multiple data sources. The course will examine the basic tools for statistical analysis, such as R or Python and several machine learning algorithms.						
FINT	516	FinTech Ethics and Risks	3	0	3	
In this course students will demonstrate understanding of the FinTech ethical principles in general or in application of specialized knowledge, results of research, creative expression, or design processes. Students will also demonstrate an ability to recognize, articulate, and apply Fintech ethical principles in various academic, professional, social, or personal contexts. In addition, through ample case studies, the course attempts to inculcate into students' key ethical principles, standards and ways in which business practitioners address moral problems that commonly arise in the business world. The course provides ample opportunity for students to hone skills in critical thinking and FinTech ethical reasoning as essential components of a manager's decision-making process. The course also highlights the cost to business of unethical behavior and provides a comprehensive overview of corporate social responsibility.						
FINT	517	Cybersecurity & RegTech	2	2	3	
This course enables students understanding RegTech and to become more confident and persuasive in student ability to analyze and make recommendations to executives within the finance industry regarding how to react to changes, such as Regulations to digital and cryptocurrencies. The course also allows students learn about how FinTech and RegTech disrupt and transform finance industry, such as challenges in protecting data and security with digital forensics, risk management and corporate governance in banking industry in terms of Know Your Customer (KYC) and Anti Money Laundering (AML), and how governments in different countries take initiatives in FinTech and RegTech.						
FINT	518	Entrepreneurship in FinTech	3	0	3	
Total global fintech investment is increasing and there are no signs that growth in this sector will slow down. This course enables the students to learn the latest trends in fintech and how do innovators, entrepreneurs, and other stakeholders see the space developing? The course also explores the general trends in FinTech and how do fintech entrepreneurs identify and assess opportunities in fintech? and what does the lifecycle of a fintech company – from ideation, to investment, to growth and acquisition – look like? This course will provide a strong foundation for those with a working level of knowledge in fintech and who are interested in starting or investing in fintech companies. In this course students initially explore the concept of FinTech entrepreneurship and evaluate themselves in terms of their own entrepreneurial skills with a view to formulating and realizing opportunity nuclei for profitable small FinTech business. Subsequently, students conduct feasibility studies and formulate business plans for feasible FinTech projects.						
FINT	519	Algorithm and High-Frequency Trading	2	2	3	
This course is an introduction to quantitative trading strategies based on various statistical methods. It teaches you how to build a robust and automated trading strategy. Topics include methodologies related to statistical arbitrage, factor investing, trend following, momentum, technical trading, and order book dynamics. Emphasis is on developing and empirically evaluating the algorithmic trading strategies based on statistical/mathematical models.						
FINT	558	Research Methodology	2	2	3	
A primer on designing and executing a research project using analytic techniques, this course presents both useful quantitative models, drawn from management science, and qualitative methods relevant to research in both business and information technology.						
FINT	599	Dissertation in FinTech	0	6	12	FINT 558 AND Completion of at least 21 credits

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of FinTech</b>						
A structured supervised in-depth study on a pre-approved topic in the field of FinTech involving one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscript subject to public defense.						
<b>Directorate of Forensic</b>						
ACCT	502	Auditing	3	0	3	
This course aims at introducing students to the fundamental concepts of auditing. Mainly the course provides with a broad conceptual knowledge of auditing standards and auditors responsibilities while preparing the auditing reports. Additionally, students will recognize the steps of the auditing cycle and the importance of auditing in enhancing performance and preventing the business failures.						
MSFA	501	Forensic Accounting & the Legal Environment	3	0	3	
This course explores the forensic accountant's role in today's dynamic business environment. Topics covered include fraud detection and fraud investigation techniques, valuation of closely held businesses, lost profits analyses, and various types of litigation support services. Fundamental legal concepts governing expert witness testimony are also examined, and learners are required to quantify economic damages in cases. By the end of the course learners will gain critical knowledge and understand both the pervasiveness and the causes of fraud and white-collar crime in our society, examine the types of fraud and fraud schemes that affect business enterprises, explore methods of fraud detection and prevention, and increase their ability to recognize potential fraudulent situations.						
MSFA	502	Computer Forensics & Auditing	3	0	3	
This course provides an overview of computer forensics and auditing related crime issues facing businesses and the criminal justice system. Demonstrations and hands-on practice will reinforce topics such as how computers are used in crime, Computer forensic basics, including chain of custody and evidence handling, Investigative issues to know about before hiring a forensic investigator, Managing forensics in electronic discovery, How cyber-firefighters defend against cybercrime and other malicious online activity, Emerging standards of care in the handling of electronic evidence and finally; Trends and issues affecting the future of the information revolution and society as a whole.						
MSFA	503	Corporate Governance and Ethics	3	0	3	
Corporate governance and business ethics are areas of rapidly growing importance. Governance sets out the rules and regulations and work on ensuring such rules are in place. It focuses on a range of issues concerning the proper management of organizations. The course aims to develop critical knowledge and understanding of the underlying concepts of corporate governance, and business ethics. It is designed to foster understanding of the ethical influences on economic, financial, managerial, and environmental aspects of business. It develops an ability to critically analyze ethical issues in business and beyond.						
MSFA	504	Fraud and Financial Crime Investigation	2	2	3	MSFA 501
This course develops the critical understanding of the types of fraudulent financial transactions incurred in accounting records. Topic covers will be accounting and auditing theory, fraud schemes, internal controls to deter fraud and other auditing and accounting matters. This course includes questions about interviewing, taking statements, obtaining information from public records, tracing illicit transactions, evaluating deception and report writing.						
MSFA	505	Cyber Forensics and Security	2	2	3	MSFA 502
The availability of information technology has made it possible for business and industry to operate more effectively and efficiently, but it has also given criminals access to a brand-new kind of crime: digital crime. The aim of this course is to fill the new and increasing need for critical knowledge and experts in the detection, correction, and conviction of digital crimes. This emerging field applies scientific techniques to the gathering, examination, interpretation, and presenting of prospective evidence to courts. It is based on computer digital forensic and computer security technology. These are the ideas learners will gain in this course. Law enforcement and the intelligence community have historically employed computer digital forensics extensively for the prosecution or protection of individuals.						
MSFA	506	Research Methodology	2	2	3	Completion of at least 9 credits
A primer on designing and executing a research project using analytic techniques, this course presents both useful quantitative models, drawn from business and accounting sciences, and qualitative methods relevant to research in business, forensic accounting, and information technology. The learners will gain critical knowledge and understanding of various research methods that could be professionally applied to investigate complex issues in forensic accounting. The learner will be able to apply professional level of skills in relation to research methods and critically extend existing knowledge.						
MSFA	507	Risk Management	3	0	3	
This course delves into the significance of effective financial and operational risk management strategy as a necessity for organizational sustainability. It aims to provide learners with a solid theoretical foundation as well as the opportunity to gain the necessary risk management skills. It includes a thorough examination of the risk management components: risk identification, risk analysis, response planning, risk mitigation, and risk monitoring. Topics include, but are not limited to, risk analysis in organizations, as well as tools and instruments used to manage those risks.						
MSFA	508	Digital Criminology	3	0	3	
This course will provide learners with professional skills to critically evaluate the impact of technologies on crime and justice. The course will cover topics related to charge of new crimes, regulations, security frameworks and the impact of digital transformation on court procedures. The learner will gain critical knowledge and understanding in relation to digital criminology definitions to support critical judgements and decision making in the criminal justice system. At the end of this course the learner will be able to provide professional judgment of digital criminology cases based on evidence-based critical synthesis.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of Forensic</b>						
MSFA	509	Fraud Prevention Techniques	2	2	3	MSFA 502
This course will develop the learners critical understanding of reasons people commit fraud and ways to prevent it. This course will cover topics including segregation of duties, internal control, enterprise risk management, crime causation, white-collar crime, occupational fraud, fraud prevention, fraud risk assessment, and the Association of Certified Fraud Examiners (ACFE) Code of Professional Ethics. At the end of this course the learners will gain critical knowledge and professional level of skills to Interpret fraud cases.						
MSFA	510	Expert Witnessing and Dispute Resolution	3	0	3	
The use of forensic accountants as expert witnesses has proliferated in both civil and criminal litigation. Learners gain insight into the technicalities of expert forensic testimony. Forensic accounting experts must understand the limitations of their involvement in legal proceedings and be familiar with civil and criminal procedures in jurisdictions where they are called upon to provide forensic accounting expertise. A moot court environment is used to demonstrate the experience of appearing in a formal hearing, and students are asked to also prepare or critique an expert report in mock civil and criminal cases in which forensic accounting evidence is pivotal to legal outcome.						
MSFA	599	Dissertation in Forensic Accounting	0	24	12	MSFA 506 AND Completion of at least 21 credits
This course will provide a structured supervised in-depth study on a pre-approved topic in the field of Forensic Accounting involving one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the learner in a progressive course of intellectual discourse involving problem identification of complex issues related to forensic accounting, methodology, critical analysis and research, evaluation and recommendation that culminates in the production of manuscript subject to defense.						
<b>Directorate of MBA Programs</b>						
ACCT	500	Accounting	2	0	0	
A general overview of the basic concepts and principles of financial accounting, and the procedures and processes of preparing financial statements for both service and merchandising concerns. And detailed view of the Generally accepted accounting principles (GAAPs), Accounting for various elements of financial statements and disclosure requirements.						
ACCT	501	Accounting	3	0	3	
A general overview of the basic concepts and principles of financial accounting, and the procedures and processes of preparing financial statements for both service and merchandising concerns. And detailed view of the Generally accepted accounting principles (GAAPs), Accounting for various elements of financial statements and disclosure requirements.						
ACCT	510	Financial Accounting	3	0	3	
A general overview of the basic concepts and principles of financial accounting, and the procedures and processes of preparing financial statements for both service and merchandising concerns. And detailed view of the Generally Accepted Accounting Principles (GAAPs), Accounting for various elements of financial statements and disclosure requirements.						
ACCT	520	Accounting Theory & Practice	3	0	3	ACCT 522
This course provides an overall framework encompassing the entire gamut of accounting theory and application spanning the hypothesis, thesis, principles, concepts & policies of accounting. In addition, these sub-topical areas, rather than being viewed in isolation, are put in the context of modern developments in business and finance. This course also provides in-depth coverage of comprehensive accountancy theories including the concepts & fundamentals of managerial and financial accountancy with applications of theory to accounting practice. How economics and finance impact accountancy is explored within the framework of this course.						
ACCT	521	Financial Reporting & Control	3	0	3	
In this two-part course, first financial reporting in theory is juxtaposed with the preparation of financial reports in accordance with chronological, book data, and predetermined data contained therein. Issues such as the accuracy and truthfulness of the data quoted in the financial reports are discussed. Second, internal auditing with respect to its concepts, fundamentals, components and development are put in the context of manual & electronic accountancy. Reports prepared by internal auditors and submitted to the board of directors & the management levels are studied.						
ACCT	522	Managerial Accounting	3	0	3	
This course emphasizes the use of accounting data in the managerial decision process and in planning and controlling business enterprise. Topics include cost behaviors and cost-volume-profit analysis, cost management systems and activity based costing, budgeting and budget control, and responsibility accounting.						
ACCT	523	Advanced Topics in Accounting	3	0	3	ACCT 522
This course provides an overview of the latest developments in the field of accounting with particular reference to globalization involving multi-national companies in the context of transactions between national and foreign company branches. Specialized topics such as electronic accountancy, the role of accounting in e-commerce and potential development and application of international accounting are explored.						
ACCT	524	Auditing Theory & Policy	3	0	3	
This course comprehensively surveys the topics of internal and external auditing: the characteristics and responsibilities of internal or external auditors, the fundamentals of auditing, sample auditing & external auditor reports as to form and content especially in light of the managerial level to which they are submitted and electronic auditing. The course also addresses style of auditing and discusses modern developments in auditing with a view to an assessment of the following risk factors: environmental, external, operational and information auditing risk.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of MBA Programs</b>						
ACCT	595	Dissertation in Accounting - Track 2	0	12	6	MAGT 550
The student conducts a study on a topic in the field of accounting under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
ACCT	598	Project Dissertation in Accounting	0	6	3	
The student conducts a study on a topic in the field of accounting under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
ACCT	599	Dissertation in Accounting - Track 1	0	24	12	MAGT 550 AND Completion of at least 24 credits
A structured supervised in-depth study on a pre-approved topic in the field of Accounting can entail one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscript subject to public defense.						
BANK	541	Islamic Banking	3	0	3	
This course examines some of the fundamental concepts and instruments of Islamic banking and finance. Islamic banking in recent years has generated considerable interest in the subject by becoming attractive to students of economics, finance, and business in both Muslim and non-Muslim countries. The topics covered include broad theoretical and religious principles drawn on Islamic Shari'ah and conventional economics. Among the subjects taught are riba, mutharabah, musharakah, murabahah, baitul mal, gharar, takaful, qard and istisna. The course also attempts to shed some light on the future prospects of Islamic finance in the wake of rapid financial globalization.						
BANK	542	Economics of Banking	3	0	3	
This course provides a sound theoretical basis for examining bank behavior to enable students understand contemporary trends in banking. It covers a wide range of topics including theory of the banking firm, trends in international banking, the structure of banking, liquidity problems, risk management and macroeconomics of banking. The course is useful for final year undergraduate and postgraduate students specializing in finance and banking.						
BANK	543	Advanced Topics in Banking	3	0	3	
This course aims to impart a practitioner's perspective on all or a subset of the following topics: new issues of debt and equity; corporate finance advisory, mergers and acquisitions, project finance, sales and trading of securities, derivatives and commodities; equity research; investment management and cross-border investing from the vantage-point of the investment banking industry; and asset, liability, and capital management, theory of financial intermediation, risk management the interaction of the regulatory environment with managerial decisions, and international banking from the vantagepoint of the commercial banking industry. May be repeated for credit if topical content substantially changes.						
BANK	544	Banking Law	3	0	3	
This course primarily focuses on the basic legal concepts governing international commercial banking law, the structure of international banking and conflict of laws through an assessment of legal trends in various national banking laws fostering consolidation of the banking industry; regulation of financial institutions in cyberspace; development of electronic currency, SmartCards, and financial commerce on the Internet; globalization of banking, currencies, and commerce; development of data protection and privacy laws; and anti-money laundering provisions and Basle II. Secondly, the course examines the role that governmental institutions play in regulating the investment banking sector especially stock market regulation.						
BANK	595	Dissertation in Banking - Track 2	0	12	6	MAGT 550
The student conducts a study on a topic in the field of banking under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
BANK	598	Project Dissertation in Banking	0	6	3	
The student conducts a study on a topic in the field of banking under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
BANK	599	Dissertation in Banking - Track 1	0	24	12	MAGT 550 AND Completion of at least 24 credits
A structured supervised in-depth study on a pre-approved topic in the field of Banking can entail one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscript subject to public defense.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of MBA Programs</b>						
DMBA	599	MBA Dissertation	0	24	12	
<p>A structured supervised in-depth study on a pre-approved topic in the field of Accounting, Finance, Management, Marketing and Economics can entail one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscript subject to public defense.</p>						
ECON	500	Economics	3	0	0	
<p>The objective of this course is to help students understand the theoretical foundation of economic analysis. It examines the functioning of the economic system by analyzing its main components. The course includes theoretical aspects to market structure, production, consumption, prices, money, and income along with the relevant concepts and policies that can be used by advanced undergraduate and postgraduate students.</p>						
ECON	520	Managerial Economics	3	0	3	
<p>This course is designed to provide participants with a basic understanding of microeconomic theory that can be used to understand behavior (in markets and organizations) to make effective managerial decisions. Application of key economic concepts such as market demand, market supply, market equilibrium, managerial analysis, production, costs, revenue, profit, and market structure constitute the core material of the course. The course seeks to integrate various principles and concepts from different fields of economics with typical problems of managerial decision –making and policy formulation in business organizations whether in a local or global context. Quantitative techniques and managerial economic analysis tools will be integrated within the course for the purpose of providing students the ability to solve real world situation and as a problem- solving tool in their organization.</p>						
ECON	530	Economics Theory	3	0	3	ECON 520
<p>This course covers advanced theoretical concepts in micro and macroeconomics. It affords students the opportunity to gain insight into the main features and complexities of economic analysis by integrating micro and macroeconomics theories. Students gain a holistic view of the interaction of consumers, producers, markets and governments through the prism of prices, markets and exchanges. The effectiveness of economic policy as a means to influence key indicators of the performance of economies, at various stages of development, are also examined.</p>						
ECON	531	Economics & Management Discussions	3	0	3	
<p>This course covers advanced topics in the fields of economics and management. It is designed to help students understand some of the emerging trends at both global and regional levels. It is oriented towards some of the challenges brought by globalization, trade, finance, knowledge management, human resource management, and information technology for management. The course is conducted in a seminar form to encourage students participate in class discussion as well as to increase their confidence in academic presentation.</p>						
ECON	532	International Business & MNCs	3	0	3	
<p>The course aims to provide advanced treatment of the environment of international business and of the operation of multinational firms. The course aims to provide managers of international companies tools to equip themselves with the practices of business in the international arena using understanding and awareness of globalization, cultural differences, political, legal and ethical aspects of business around the globe, international trade and FDI practices and international monetary and financial system awareness for efficient running of their business or carrying on their tasks efficiently in business.</p>						
ECON	533	Industrial Organization & Business Strategy	3	0	3	
<p>This course is a branch of economics with direct applications to the business world. Industrial organization focuses on the mechanism through which firms exercise potential market power. Topics include market structure, firm strategy, market performance, firm objectives, organization and behaviour and regulation and industrial policy.</p>						
ECON	534	Economic Methods for Business Analysis	3	0	3	
<p>This course imparts advanced level skills in the following areas of econometrics: Multivariate Regression, Model Specification, Multicollinearity, Tests for Structure Change, Heteroscedasticity and Serial Correlation, Distributed Lagged Dependent Variable Models and Time Series Analysis. Emphasis on applications.</p>						
ECON	535	Monetary Theory & Policy	3	0	3	
<p>This course provides students with a set of tools to understand and systematically analyze the monetary side of the international economy. Students develop the theory by examining balance of payments, the determination of exchange rates, money, interest rates and prices in open economies, different exchange rate regimes (fixed vs. floating), interdependence of macroeconomic variables and the international financial markets.</p>						
ECON	536	International comparative Regulation & Law	3	0	3	
<p>This seminar course examines international trade regulation under the WTO and GATT. Emphasis is placed on the WTO Dispute Settlement Body and its emerging jurisprudence. Though particular reference is made to GCC countries, treatment of the GATT within domestic legal systems is studied with references to a variety of regional free trade areas and customs unions around the world. Concepts of anti-dumping, tariffs and quotas, unlawful subsidies and countervailing duties are studied from a legal and economic point of view. Bilateral investment treaties for the protection of foreign investment are covered, as is the World Bank ICSID Convention. Other major treaties regulating trade are noted such as the conventions on the assignment of receivables and factoring.</p>						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of MBA Programs</b>						
ECON	537	International Business & Multinational Corporations	3	0	3	
Advanced treatment of the environment of international business and of the operation of multinational firms. Major topics include: the economic theory of world trade and investment, application of economic theory to international business operations, the political economy of international business, evaluation and valuation of international projects, strategies and tactics for dealing with special problems and challenges arising in the global market.						
ECON	595	Dissertation in Economic - Track 2	0	12	6	MAGT 550
The student conducts a study on a topic in the field of economics under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
ECON	598	Project Dissertation in Economic	0	6	3	MAGT 550
The student conducts a study on a topic in the field of economics under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
ECON	599	Dissertation in Economics - Track 1	0	24	12	MAGT 550 AND Completion of at least 24 credits
A structured supervised in-depth study on a pre-approved topic in the field of Economics can entail one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscript subject to public defense.						
FINC	500	Finance	2	0	0	
This course explores basic concepts of finance and provides students perspective on how fin values. Students are introduced to core concepts in finance such as the time value of money and cost of capital.						
FINC	501	Financial Management	3	0	3	
This course combines principles of management of the firm, operations of money and capital markets, discounted cash flows, risk and asset valuation with modern capital structure theories, leasing, working capital policies and mergers and acquisitions.						
FINC	502	Financial Analysis	3	0	3	FINC 501
This course is concerned primarily with the valuation of companies. It examines the role of financial statement analysis in the evaluation of the firm and the prediction of its future economic condition. The major emphasis is on the use and interpretation of financial statement information for performance evaluation, equity investment decisions and credit analysis. Topics covered include traditional ratio analysis techniques and accounting analysis. Attention is then turned to the use of financial statement analysis in specific decision contexts (e.g., equity valuation, financial distress and bankruptcy prediction).						
FINC	503	Investments	3	0	3	
This course surveys available investment instruments and analyzes the way capital markets currently function. Analytical techniques to evaluate current investments and future opportunities are presented. Specific topics include: organization and functioning of securities markets, stock market indicator series, investment valuation, stock options, warrants and convertible securities, financial futures, bond and stock valuation.						
FINC	504	Portfolio Management*	3	0	3	
This course shows how financial managers can conduct portfolio analysis using portfolio theory, delineating efficient portfolios. It shows the techniques for calculating the efficient frontier. It focuses on simplifying the portfolio selection process, selecting the optimum portfolio. Then it gives emphasis to the evaluation of the investment process including evaluation of portfolio performance and security analysis.						
FINC	505	Capital Budgeting & Project Evaluation	3	0	3	FINC 501
The course focuses on using capital budgeting techniques to evaluate projects including payback period, net present value, and internal rate of return. Case studies concern the role of financial administration in managing capital costs, capital budgeting, shareholder equity, corporate capital structure, and mergers and acquisitions among other topics.						
FINC	506	International Finance	3	0	3	
This course is concerned primarily with a revision of the international monetary environment and financial planning for corporations with overseas operations. It focuses on analysis of the effects of international financial planning on such factors as exchange rate fluctuations, currency restrictions and tax regulations. It gives an examination of financial aspects of multinational business, including foreign investments, trade and transfer of funds. Currency options, futures and swaps as means for currency risk management are also given details.						
FINC	507	Financial Modeling & Optimization	3	0	3	FINC 501
The objective of the course is to develop skills in designing and constructing financial models for analyzing a variety of decision problems facing today's financial managers and professionals. We will use a discounted cash flow valuation approach in analyzing decisions about the courses of actions for a company. A structural approach will also be used for valuation by incorporating all operational and financial aspects of the firm into an integrated pro-forma statement. Students will learn how to use a variety of spreadsheet tools and techniques, such as financial and statistical command functions, what-if scenarios, one-and two-way input tables, pivot tables, probability analysis, optimization, Monte Carlo and simulations in this course.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of MBA Programs</b>						
FINC	508	Investment Analysis & Portfolio Management	3	0	3	FINC 501
The course is designed to study security markets and security analyses for portfolio planning. The first half of the course examines investment analysis from the standpoint of individual investors. Topics include investment alternatives, security markets, trading procedures, bond valuation, stock valuation, and market indices. The second part of the course examines investment portfolio formation, management and evaluation. Topics include efficient markets, portfolio theory, capital market theory, portfolio performance evaluation, and the use of derivative securities.						
FINC	509	Finance	3	0	3	
This course explores basic concepts of finance and provides students perspective on how fin values. Students are introduced to core concepts in finance such as the time value of money and cost of capital.						
FINC	510	Managerial Finance	3	0	3	
This course explores basic concepts of finance and provides students perspective on how fin values. Students are introduced to core concepts in finance such as the time value of money and cost of capital.						
FINC	595	Dissertation in Finance - Track 2	0	12	6	MAGT 550
The student conducts a study on a topic in the field of finance under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
FINC	598	Project Dissertation in Finance	0	6	3	
FINC	599	Dissertation in Finance - Track 1	0	24	12	MAGT 550 AND Completion of at least 24 credits
A structured supervised in-depth study on a pre-approved topic in the field of Finance can entail one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscript subject to public defense.						
ITMA	570	Management Information Systems	3	0	3	
This course promotes an integrated approach to identifying, capturing, retrieving, sharing and evaluating an enterprise's information and knowledge assets. These information and knowledge assets encompass databases, documents, policies and procedures as well as the un-captured, tacit expertise and experience resident in individual workers. This course endows students with real world principles, tactics and strategies for managing information technology in organizational settings.						
ITMA	571	Advanced E-Commerce	3	0	3	ITMA 570
Key concepts and debates concerning electronic commerce on the World Wide Web are explored in this course through an exploration of how technology has developed to support such commerce and how new forms of commercial activity and management of knowledge derived from that activity are emerging. Particular emphasis is placed on: the underlying technological infrastructure for e-commerce; the business and organizational possibilities inherent in the Web; the principles of developing and managing e-commerce systems; the rapidity of changes in business models in e-commerce; and the emergent social and technical trends of e-commerce.						
ITMA	572	Information Systems & Organizational Management	3	0	3	
This course introduces information systems (IS) operating in various organisational settings using both normative models and practical examples paying particular heed to strategic element of IS within organisations and to the success of IS within the backdrop of organisational change. Students are expected to learn how to evaluate and critique IS in case studies using normative models which are themselves subject to evaluation.						
ITMA	573	Database Systems	3	0	3	
This course explores data bases as the underlying framework of information systems which store, manipulate and retrieve data with particular emphasis on the relational model and relational systems. Students are expected to design and implement a relational database within the concept of an information system using appropriate analysis and modelling techniques and a modern Database Management System as well as to understand RDBMS, advantages and disadvantages of different query languages and concurrency control and basic query processing.						
ITMA	574	Systems Project Management	3	0	3	ITMA 570
Systems project management, broadly defined as the disciplined management of a process of change, ? aims to provide a managerial environment for the integration of people, process and technology. This course explores such a managerial environment along different axes of approach: (1) traditional approaches to systems project management and (2) the role of project management in system development.						
ITMA	575	Strategic Planning for Information Systems	3	0	3	
This course is inter-disciplinary in that it examines complex market, business and technical issues facing companies in the global information society. A primary focus of the course concerns theoretical models and frameworks for strategic planning for information systems with particular emphasis on internet commerce. Secondary emphasis is placed on evaluation of four types of IT outsourcing (total, selective, and joint venture outsourcing plus in-sourcing) and understanding emerging trends in electronic commerce (application service providers).						
ITMA	595	Dissertation in ITMA - Track 2	0	12	6	MAGT 550
The student conducts a study on a topic in the field of management information systems under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						



## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of MBA Programs</b>						
ITMA	598	Project Dissertation in Management Information Systems	0	6	3	MAGT 550
The student conducts a study on a topic in the field of management information systems under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
ITMA	599	Dissertation in ITMA - Track 1	0	24	12	MAGT 550 AND Completion of at least 24 credits
A structured supervised in-depth study on a pre-approved topic in the field of management information systems and information technology can entail one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscript subject to public defense.						
MAGT	500	Quantitative Methods	2	0	0	
This course introduces applied statistics for business and management with topics in descriptive statistics, estimation, hypothesis testing, analysis of variance, simple regression and correlation, and time series forecasting. The various tools learned will be applied through the use of worksheet computer applications and realistic interpretation of output. The course is designed to acquaint the student with issues in methods of data analysis in the real world. Examples arise from finance, marketing and other functional areas of business research.						
MAGT	501	Quantitative Methods	3	0	3	
This course introduces applied statistics for business and management with topics in descriptive statistics, estimation, hypothesis testing, analysis of variance, simple regression and correlation, and time series forecasting. The various tools learned will be applied through the use of worksheet computer applications and realistic interpretation of output. The course is designed to acquaint the student with issues in methods of data analysis in the real world. Examples arise from finance, marketing and other functional areas of business research.						
MAGT	550	Research Methods & Modeling	3	0	3	Completion of at least 9 credits
A primer on designing and executing a research project using analytic techniques, this course presents both useful quantitative models, drawn from management science, and qualitative methods relevant to research in both business and information technology.						
MAGT	551	Operations & Quality Management	3	0	3	
Quality in both operations and production are keys to achieving competitiveness in the global marketplace. An examination of those issues forms the heart of this course, where you will learn the principles of Total Quality Management and how it is implemented at all levels of an organization. Other important topics addressed by this course include forecasting, technology management, and capacity planning and materials management.						
MAGT	552	Decision Analysis & Business Forecasting	3	0	3	
Topic may include: decision-making under uncertainty, decision trees, multi-criteria decision-making, data envelopment analysis (DEA), analytical hierarchy process (AHP), principles and methods of forecasting including an evaluation of: the reliability of existing forecasting techniques, national and international trends and the role of business forecasting in managerial planning. The use of time series methods including exponential smoothing and Box-Jenkins (ARIMA) techniques for business and economics forecasting are introduced.						
MAGT	553	Supply Chain Management	3	0	3	
This course focuses on improving the performance of the firm and its supply chain through coordination among multiple sites, functions, and economic factors. Students will learn to use several basic analytical tools, become familiar with several supply chain strategies that have been adopted by leading companies, and review emerging strategies facilitated by business-to-business electronic commerce.						
MAGT	554	Statistical Inference in Managerial Decision Making	3	0	3	
Presents advanced techniques and applications of multivariate statistical methods, such as multiple regression, analysis of covariance, discriminant analysis, multivariate analysis of variance, factor and cluster analysis. Application of research methods for enhancing managerial decision-making in business, marketing, economics, and finance are emphasized.						
MAGT	555	Operations Management Strategy	3	0	3	
Operations managers must take strategic decisions to operate a production or service system to give the firm a sustainable competitive advantage in a global marketplace. The specific topics include operations strategy framework, process management, and management of technology, workforce management; total quality management, capacity, location planning, project management planning, and measure of performance.						
MAGT	556	Operations Research in Business Planning	3	0	3	
Development of advanced optimization models for linear and non-linear systems. Topics include unconstrained optimization, dynamic programming, integer programming, queuing models, and Markov analysis. Case studies involving operations research applications to business, finance and marketing are introduced and analyzed.						
MAGT	557	Service Operations & Project Management	3	0	3	
The course discusses the complexities involved in project management, the use of networks in large scale projects and the development of networks; unique managerial problems associated with the design, control, planning and evaluation of service systems; tactical and strategic problems faced by service managers; and how decisions are actually made in the real world.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of MBA Programs</b>						
MAGT	558	Research Methodology	2	2	3	
A Primer on designing and executing a research project using analytic techniques, this course presents both useful quantitative models, drawn from management science, and qualitative methods relevant to research in both business and information technology.						
MAGT	560	Human Resource Management	3	0	3	
The course emphasizes the role of Human resources as the most important asset in the organization. It explains the importance of proactive human resources management for organizational performance and highlights the alternative views of human resources management. It also explains the concept of strategic human resources management and the importance of fitting human resources practices to business strategy. Topics draw from different disciplines to explain the principles of human resources planning, recruitment and selection, training and development, career development, job analysis and job design, performance management and performance appraisal. The course also covers areas related to employees' compensation, protection, incentive plans and reward system as well as the management of International human resources.						
MAGT	561	Strategic Management	3	0	3	
The course covers the strategic management process and corporate strategy: the concept of strategy and its relationship to performance, competitive advantage, and profitability; and the main components of the strategic management process including analysis of both external and internal environments. Students gain an appreciation of how organizations can build competitive advantage using different levels of strategy in different contexts spanning the global environment. Concepts such as integration, diversification, acquisitions and business ethics are evaluated through the lens of corporate strategy.						
MAGT	562	Competition, Innovation & Strategy	3	0	3	
Drawing from different disciplines to examine what makes certain organizations outperform others, this course focuses on competitive market forces and various external and internal factors shaping organizational strategies to maintain competitive advantage. Students explore various models of innovation and meet the challenge of building and maintaining innovation as one of the core competencies of the organization necessary for sustaining superior performance. This course inculcates the principles of innovation management process and emphasizes the importance of internal processes and external linkages.						
MAGT	563	Entrepreneurship & Small Business Strategy	3	0	3	
In this course, students cultivate conceptual and applied skills requisite to developing and managing an economically successful small business. Entrepreneurial talents are focused, and practical decision-making skills are developed through experiential activities in small businesses. Students initially explore the concept of entrepreneurship and evaluate themselves in terms of their own entrepreneurial skills with a view to formulating and realizing opportunity nuclei for profitable small business. Subsequently, students conduct feasibility studies and formulate business plans for feasible projects.						
MAGT	564	Leadership in Organizations	3	0	3	
An introduction leadership. Its practices associated theory and current research. Presenting modern thought and practices related to leadership and core competencies of successful leaders, this course introduces the leadership challenge in organizations and focuses on how to improve leadership effectiveness. Major theories and research on leadership and its relationship to management are inculcated and then students have the opportunity to address and debate controversies and different views about leadership effectiveness and essential characters of effective leaders. Students examine effective and ineffective behaviors through the lens of various models of leadership including transformational leadership. Experiential exercise, case studies and role playing techniques are employed to demonstrate leadership skills in leading teams and leading change.						
MAGT	565	Organizational Behaviour	3	0	3	
Drawing from different disciplines including psychology and sociology, this course examines the nature of human behavior in various organizations as a function of the individual, the group within which the individual interacts, and the organizational setting. Topics include individual's values, perception, and attitude. Students examine the influence of process within organizations -- such as motivation, leadership, communication, group dynamics of teams, decision-making and conflict resolution -- on individual behavior and performance. Special attention is paid to the role of job design, organizational structure, organizational culture and change.						
MAGT	566	Interactive Business Communications	3	0	3	
This course introduces communications in organizations and overviews the theories, practices and techniques of interactive communications. Models of communication are presented and contemporary issues in business communication are discussed with a view to understanding communication failure. Communications skills – aural, oral and semiotic – are applied to leadership and management in business organizations and inasmuch as interpersonal communications strategies and work relationships, and group communications, as well as public presentation, strategies are developed.						
MAGT	567	Entrepreneurship & Family Business Management	3	0	3	
In this course, students cultivate conceptual and applied skills requisite to developing and managing an economically successful small business. Entrepreneurial talents are focused and practical decision making skills are developed through experiential activities in small businesses. Student initially explore the concept of entrepreneurship and evaluate themselves in terms of their own entrepreneurial skills with a view to formulating and realizing opportunity nuclei for profitable small business. Subsequently, students conduct feasibility studies and formulate business plans for feasible projects.						
MAGT	595	Dissertation in Management - Track 2	0	12	6	MAGT 550
The student conducts a study on a topic in the field of management under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of MBA Programs</b>						
MAGT	598	Project Dissertation in Management	0	6	3	
The student conducts a study on a topic in the field of management under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
MAGT	599	Dissertation in Management - Track 1	0	24	12	MAGT 550 AND Completion of at least 24 credits
A structured supervised in-depth study on a pre-approved topic in the field of Management can entail one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscript subject to public defense.						
MAKT	511	Marketing Management II	3	0	3	
The course explores a wide variety of topics in marketing and analysis of marketing opportunities through the case method: building customer satisfaction, value and retention; winning markets through market-oriented strategic planning, gathering information and measuring market demand, analyzing consumer markets and buyer behavior, competitor analysis, identifying market segments and selecting target markets, positioning and differentiating the market offering through product life-cycle and developing new market offerings. Special emphasis is placed on analytical methods in solving marketing problems.						
MAKT	512	Marketing Strategy	3	0	3	
This course examines the processes by which businesses decide how to compete in the markets they choose to serve. The emphasis is on analysis of market opportunities and sources of competitive advantage. The course also looks at the strategic implications of market evolution and methods of allocating resources to new and established products. Problems, resources and alternative courses of action are analyzed and discussed relative to the selection of company marketing objectives and the most feasible means for achieving company goals. Major decisions facing marketing executives and top management in their attempt to harmonize the objectives and resources of the organization with the opportunities found in the marketplace; recent theoretical developments in marketing and related disciplines and their application in management. Key topics include: a survey of strategies available to the marketing planner, the different approaches to strategy formulation, the tailoring of strategy to fit the marketing objective, optimal market segmentation and optimizing the marketing mix.						
MAKT	513	Industrial Strategy	3	0	3	
Focusing primarily on manufacturing, this course explores business buyer behavior, the industrial marketing mix and the formulation of industrial marketing plans. The distinctive character of industrial buyers and sellers is systematically covered through an intensive exploration of industrial market pricing, channeling, promotion and customer service. Special reference is made to crossborder industrial marketing.						
MAKT	514	Marketing Research	3	0	3	
This course begins with a streamlined overview of market research procedures and applications spanning: problem definition, research design, data collection and sampling techniques. Students learn how to gather critical marketing information (size of market, demographic composition, market-share of competitors, product attributes, size of market segments) through the use of: random sampling theory, multivariate statistical analysis, conjoint analysis and design of experiments. Particular attention is paid to survey, focus group and questionnaire design and evaluation.						
MAKT	515	New Product Development	3	0	3	MAKT 511
The course overviews the new product development process from the perspective of: opportunity identification/idea generation, product design, testing and launch and life-cycle management. This course introduces students to the process of designing and marketing new products and how powerful analytic methods – including, but not limited to, factor analysis, multidimensional scaling and discriminant analysis -- can reduce risk and improve innovation.						
MAKT	516	Advanced Marketing Management	3	0	3	MAKT 511
This course explores further issues in marketing and analysis of marketing opportunities through the case method: setting the product and branding strategy; formulating and implementing price strategies; designing and managing value networks and marketing channels; managing retail, wholesaling and market logistics; managing integrated marketing communication; and managing sales forces.						
MAKT	517	E-Marketing Management	3	0	3	ITMA 595 AND MAKT 511
After defining e-markets in the 21st Century, this course provides insight into how markets have adapted to the New Economy in surveying a broad swath of marketing topics. Case method is used throughout the course. Special emphasis is placed on selecting e-market driven strategies.						
MAKT	518	Legal Aspects of Commercial Transactions & Marketing	3	0	3	
This is an advanced level course on the private law of international contracts of sale coupled with international marketing law. The course covers (i) comparative private law of contract and of sale; (ii) international private law of sale through an overview of international instruments on the international sale of goods such as the UN Convention and the Incoterms; and (iii) Four areas of marketing law -- promotions, trademarks, copyrights and advertising – through a survey of comparative national and international laws.						
MAKT	519	Marketing Management	3	0	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of MBA Programs</b>						
The course explores a wide variety of topics in marketing and analysis of marketing opportunities through the case method: building customer satisfaction, value and retention; winning markets through market-oriented strategic planning, gathering information and measuring market demand, analyzing consumer markets and buyer behavior, competitor analysis, identifying market segments and selecting target markets, positioning and differentiating the market offering through product life-cycle and developing new market offerings. Special emphasis is placed on analytical methods in solving marketing problems.						
MAKT	595	Dissertation in Marketing - Track 2	0	12	6	MAGT 550
The student conducts a study on a topic in the field of marketing under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
MAKT	598	Project Dissertation in Marketing	0	6	3	
MAKT	599	Dissertation in Marketing - Track 1	0	24	12	MAGT 550 AND Completion of at least 24 credits
A structured supervised in-depth study on a pre-approved topic in the field of Marketing can entail one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscript subject to public defense.						
STAT	510	Business Statistics	3	0	3	
This course introduces applied statistics for business and management with topics in descriptive statistics, estimation, hypothesis testing, analysis of variance, simple regression and correlation, and time series forecasting. The various tools learned will be applied through the use of worksheet computer applications and realistic interpretation of output. The course is designed to acquaint the student with issues in methods of data analysis in the real world. Examples arise from finance, marketing and other functional areas of business research.						
<b>Directorate of Sustainable Management</b>						
MSSM	500	Business Studies and Global Challenges	3	0	3	
This course provides the learner with detailed and some critical knowledge and understanding to business operations from all aspects including strategy, management, marketing, accounting financial and risk assessment for business sustainability. The course will provide an oversight on complex global challenges that have an impact on businesses across a wide array of sectors. At the end of this course the learner will be able to communicate and apply detailed knowledge to support solving complex business-related issues with a consideration of global challenges and crisis.						
MSSM	510	Responsible Sustainable Management	3	0	3	
This course provides the learner with critical knowledge and understanding to assess situations and provides responsible decisions. The course will provide a framework that guides sustainable development in businesses. The learner will gain knowledge on responsible behaviour in organization and apply cooperate social responsibility (CSR). At the end of this course the learner will be able to communicate in-depth knowledge related to justification of business existence that leads to responsible decision making.						
MSSM	511	Governance and Executive Leadership	3	0	3	
This course provides the learner with professional level of practicing different leadership styles to support governance and effective operations. The course will provide a framework to develop an effective governance structure with application of thought leadership to fit with the global challenges. The learner will gain critical knowledge of conceptual governance and business analysis. At the end of this course the learner will be able to apply leadership practices and communicate governance issues to support sustainable businesses and crisis management.						
MSSM	512	Strategic and Innovation Management	3	0	3	
This course provides the learner with critical knowledge and understanding of principle, practices, and tools to develop an innovative strategy. This course will provide core concepts to develop, evaluate and implement strategy in terms of effectiveness and innovation. At the end of this course the learner will be able to use combination of approaches and demonstrate innovative insights for developing a strategy for sustainable businesses in the challenging world focusing on risk analysis and strategic level decision making.						
MSSM	513	Human Resources and Talent Management	3	0	3	
This course provides the learner with overview of theories and concepts related to organizational behaviour and human resources management practices to be applied to support resilience management in competitive global challenges. The course will provide additional dimension of career management including analysis of advancement and competence development to design talent and career pathways for future leadership within the organization. At the end of this course the learner will be able to design professional human resources policies and procedures that guides to manage human capital in businesses.						
MSSM	514	Organizational Digital Transformation	3	0	3	MSSM 512
This course provides the learner with critical knowledge and understanding to develop digital strategy to transform an organization to be digitalized in terms of governance and structure. The learner will develop a digital strategy and design governance and level of authorities with security measures to ensure sustainable reporting for businesses that leads to decision making. At the end of this course the learner will be able to judge on different frameworks to transform an organization to be digitalized.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Directorate of Sustainable Management</b>						
MSSM	515	Luxury Brands and Creativity	3	0	3	
The learner will gain knowledge and understanding in relation to luxury brand management. The learner will be able to link creativity to the core of business by covering goal orientation. At the end of the course the learner will be required to identify innovative ideas towards sustainable management that drives luxury branding which focus on market positioning and segmentation at a strategic level.						
MSSM	516	International Luxury Marketing Management	3	0	3	MSSM 515
The learner will be able to apply professional concepts to develop a marketing strategy for luxury branding focused on environmental and organizational factors. At the end of this course the learner will be able to develop a detailed marketing plan for international luxury organizations focused on the organization objective. The learner will be also able to provide implementation targets and measures to drive the activation of the plan.						
MSSM	517	Business Data Analytics and Sustainability	2	2	3	
This course will provide the learners with dimensions of responsible businesses using business data analytics. The learner will be familiarized with sustainable business models that leads to cooperate responsibility to stakeholders and reporting. The learner will be able to use different data analytics tools to support decision making for sustainable businesses. At the end of this course the learner will be able to provide judgment on businesses sustainable performance and suggest recommendations by using business data analytics followed by ethical frameworks.						
MSSM	518	Life Cycle Assessment in Circular Economy	3	0	3	MSSM 517
This course provides the learner with critical knowledge and understanding related to life cycle assessments for sustainable businesses including inventory analysis and impact assessment. The course will provide real-life case study to enable learners to critically analyse life cycles for circular economy. At the end of this course the learner will be able to explain life cycle assessment and identify ways to create an environmental impact.						
MSSM	558	Research Methodology and Ethics	2	2	3	Completion of at least 9 credits
This course provides the learner with an overview of the research methodology including concepts of quantitative and qualitative research methods. The course will also provide ethical standards to be applied while conducting different types of research methods. The course will cover some practical software applications to support data analysis. At the end of this course the learner will be able to select research methods for different type of research outcomes with assurance of application of ethical standards.						
MSSM	599	Dissertation in Sustainable Management	0	24	12	MSSM 558 AND Completion of at least 21 credits
The learners will be expected to conduct a structured and in-depth research in topics related to sustainable management. The learner will be supervised to develop a critical literature review leading to a dissertation with specific research aim and development of conceptual concepts. The learner will be expected to demonstrate intellectual discourse involving problem identification, methodology, research, evaluation, and recommendation at both theoretical and practical level.						
<b>Management &amp; Marketing</b>						
ETHC	391	Ethics and Professional Practice in Business	3	0	3	Completion of at least 66 credits
This course provides students with a theoretical foundation of what Business Ethics is all about, enabling them to identify and analyze current ethical issues and dilemmas facing business practitioners in real world contexts involving multiple stakeholders. In addition, through ample case studies, the course attempts to inculcate into students key ethical principles, standards and ways in which business practitioners address moral problems that commonly arise in the business world. The course provides ample opportunity for students to hone skills in critical thinking and ethical reasoning as essential components of a manager's decision-making process. The course also highlights the cost to business of unethical behavior and provides a comprehensive overview of corporate social responsibility.						
INTR	425	BSMM Internship	0	12	6	Completion of at least 90 credits
INTR	469	BSMM Internship	0	0	3	Completion of at least 90 credits
This course focuses on business internships that add a significant real-world component to students' employability. It provides the opportunity for students to earn academic credit while gaining valuable work experience under the mentorship of a business professional in different industry sectors, i.e. services and manufacturing. An individualised assignment arranged with students and different business organisations to practically provide guided experience in their field. Students' internship experiences are assessed via written internship reports that will be evaluated by the students' organisation supervisor and an assigned academic supervisor.						
MAGT	121	Fundamentals of Management	3	0	3	
An overview of management theory and practice. Introducing students to the study of managerial skills, organization structure, management functions, process, and system within an action frame of reference. Managerial concepts and terms related to leadership, employees' motivation, decision making models and strategic management.						
MAGT	221	Organization & Management	3	0	3	
MAGT	310	Quantitative Analysis for Business	3	0	3	STAT 202
Introduction to managerial decision analysis using quantitative tools and spreadsheet modeling. Topics include a general framework for decision analysis, decision tables and trees, linear programming, sensitivity analysis, classical optimization and statistical techniques. Extensive use of applicable decision support software and EXCEL Solver to solve mathematical and business decision models. Emphasis is on applications of quantitative analysis and tools rather than on mathematical theory. Applications are taken from finance, marketing, economics, logistics, and operations management.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Management &amp; Marketing</b>						
MAGT	321	Organizational Behaviour	3	0	3	MAGT 121
An introduction to the management process and examination of organizational behavior from a social science and behavioral perspective. Focus on understanding and analyzing individual and group behavior in organizations and how leaders implement strategy to impact people, policy and organizational culture. Students learn to integrate theory and concepts with current business practices and management issues. Included are such topics as: job design, perception, communication, decision making, motivation, groups, leadership, and organizational change and effectiveness.						
MAGT	322	Production & Operations Management	3	0	3	ITCS 101 AND STAT 101
The course includes the strategic, tactical, and operational issues that arise in the management of production and service operations; product and process design, facilities planning, quality management, materials management, operations planning and scheduling, and emerging technologies in production and service management.						
MAGT	323	Human Resource Management	3	0	3	MAGT 121
Overview of human resource management theory. The course focuses on the HRM practices and their importance to business organizations. In specific, it discusses the conceptual definitions and their application to business settings. Issues of job analysis, forecasting employee needs, recruitment and selection, training and development, performance management and appraisal, compensations, ethics and labor relations management are key topics for HRM learners to understand.						
MAGT	324	Organizational Behavior & Leadership Development	3	0	3	MAGT 323
This course is an introduction to the principles of Organization Behavior (OB) and Leadership Development. Focus is made on understanding and analyzing individual and group behavior in organizations and how leaders implement strategy to impact people. Students learn to integrate theory and concepts with current business practices and management issues. Included are such topics as: personality dynamics, attitudes and emotions, motivation, perception, communication, leadership, teamwork and interpersonal skills.						
MAGT	325	Strategic Leadership and Change Management	3	0	3	MAGT 324
This Course enables students to learn strategic leadership best practices and their application to the change management process in order to effectively lead business organizations. Key topic areas in strategic leadership and change management are covered such as: Understanding and diagnosing the need for change, leadership strategy, leading and enabling change, and managing the change process.						
MAGT	331	Business Simulation	3	0	3	STAT 202
This course develops business simulation models using the EXCEL environment and a business simulation program as aids to corporate decision-making. Decisions span marketing, finance, operations and management. Students participate in a computerized business simulation program.						
MAGT	412	International Business	3	0	3	ECON 102 AND Completion of at least 90 credits
This course provides a comprehensive overview of the environment of international business and to the operation of international firms especially in the context of emerging markets. Major topics include basic concepts of world trade and investment problems, the nature of international business, economic theory and international business operations as well as strategies and tactics for dealing with special problems and challenges arising in the global market.						
MAGT	413	Management & Leadership Development	3	0	3	
MAGT	414	Quality Management	3	0	3	STAT 202
This course will provide an oversight on the Management of Quality Operations within an organization; it will address quality tools, concepts and theories to enable the student to apply quality evaluations and measures. As part of this course, management and leadership characteristics required to derive quality management systems will be provided. Once students successfully complete this course, they must be able to critically evaluate their quality management systems and analyze their status, and provide recommendations for decision making to improve their quality management system.						
MAGT	416	Project Management	3	0	3	MAGT 322
The organization, planning and controlling of projects and provides practical knowledge on managing project scope, schedule and resources. Topics include: project life cycle, work breakdown structure and Gantt charts, network diagrams, scheduling techniques and resource allocation decisions. Concepts are applied through projects and tutorials using project management software.						
MAGT	423	Strategic Management	3	0	3	MAGT 121 AND Completion of at least 90 credits
The course provides an introduction to strategic planning covering key concepts and techniques, organizational mission, goals, objectives and scope of operations. Topics such as: environmental scanning, strategy formulation and implementation with special reference to functional application in marketing, personnel, finance, and other areas are covered.						
MAGT	424	Entrepreneurship & Innovation	3	0	3	MAKT 201 AND Completion of at least 90 credits
The course provides an overall view about major schools of entrepreneurship thought and the process approaches to the study of entrepreneurship. It also covers issues related to individuals and corporate entrepreneurial mind-set beside the concept of ethics and social responsibility. Further to that, the course will expose the students to the processes of creativity and innovation, major types of innovation, method to initiate new ventures, development of new ventures business plan and strategic planning for entrepreneurial initiatives.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Management &amp; Marketing</b>						
MAGT	430	Supply Chain Management	3	0	3	MAGT 322
Analysis of the entire flow of information, material, and services from suppliers through factories and warehouses to the end customer including logistics, supplier selection and inventory management by case studies, optimization and simulation.						
MAGT	431	Advanced Spreadsheet Modeling For Managers	3	0	3	MAGT 310 AND MAGT 331
Spreadsheets have become a popular model-building environment for managers. Add-ins and enhancements to EXCEL have made powerful decision-making tools available to the manager. This course covers how to use the spreadsheet to develop and utilize some of these decision-making aids. Visual Basic for EXCEL allows the nonprogrammer to create modules for functions, subroutines and procedures. Topics include: forecasting (both regression and time series), decision-making under uncertainty and decision trees, using SOLVER for optimization and probabilistic simulation using @RISK.						
MAGT	499	Project in Management	0	6	3	BFRM 498 AND ETHC 391
A structured pre-approved project in management or marketing ordinarily involving (1) research on a particular topic in management or (2) reporting on field-work in a managerial organization.						
MAKT	201	Principles of Marketing	3	0	3	MAGT 121
This course serves as an introduction to marketing in general, and the marketing process in particular. Students will develop a thorough understanding of the marketing concept/process, the marketplace and the differences between consumer and business markets. They will also learn how to design a customer-driven marketing strategy which employs the marketing mix, whilst keeping pace with digital age developments linked to marketing activities.						
MAKT	220	Marketing Management I	3	0	3	
MAKT	310	Consumer Behaviour	3	0	3	MAKT 201
This course covers a comprehensive study of behavior models and concepts to help understand, evaluate, and predict consumer behavior in terms of marketing implications. Determinants of consumer behavior are explored to gain understanding of the complex forces as they affect the market place. The course's emphasis is on the understanding of the processes that influence the acquisition, consumption, and disposition of consumer goods and services.						
MAKT	320	Marketing of Financial Services	3	0	3	MAKT 201
A comprehensive study of key issues that surround the marketing of financial services focusing on how banks and other financial institutions employ marketing practices to ensure sustained and profitable growth utilizing such techniques such as: product positioning, segmentation, and relationship management and retention. The course also provides insight into launch of innovative financial products and delves into legal and ethical framework in which financial service marketing is conducted.						
MAKT	321	Marketing Research	3	0	3	STAT 202
This course is an introductory analysis of the fundamental of the marketing research focusing on different types of marketing research (qualitative and quantitative) as well as on complex issues at each stage of the research process. This course covers research used in marketing decision making with primary emphasis on methods and techniques used in collecting, processing and utilization of information. Topics include research design, sources of information, questionnaire design, sampling, data collection and analysis.						
MAKT	322	Sales Management	3	0	3	MAKT 201
A comprehensive study of selling and the field of sales management that help to understand comprehensively the selling process, strategic field sales management, the sales organizations' structure, profiling and recruiting, selecting and hiring sales people. The course is intended also to provide through understanding of the process of developing and reinforcing sales force training programs including motivation and compensation of sales force. In addition the course should provide the student with the capability to understand and implement the strategic positioning process, leadership styles, Forecasting and budgeting, and evaluation of sales force performance.						
MAKT	331	Industrial Marketing	3	0	3	MAKT 201
Focusing on methods of marketing decision-making in industrial, government and high-tech markets, planning and implementing business-to-business marketing strategies with an emphasis on segmenting markets, managing channel relationships, and creating customer value through continuous improvement and re-engineering receives center stage. This course emphasizes the unique nature of marketing high technology in its application of the basic elements of marketing strategy – market segmentation and targeting, marketing mix elements – to the context of high technology goods and services. Students develop effective strategic, marketing plans for high technology products.						
MAKT	332	Advertising & Promotions Management	3	0	3	MAKT 201
This course is a comprehensive survey of basic principles of advertising and promotion. The course will include the study of promotion practices and theories and the effects of advertising and promotion in the firm, the economy and society. The course covers advertising history, the impact of advertising on society, and ethical and regulatory issues. The process of creating and placing advertising is explored including advertising objectives, budgeting, media planning and mix, creative objectives and strategy, copy execution and production, and copy testing.						
MAKT	412	International Marketing	3	0	3	MAKT 201 AND Completion of at least 90 credits
This course examines the impact of economic, cultural, political, legal and other environmental influences on international marketing. Within this context, how to identify and analyze worldwide marketing opportunities, and examine product, pricing, distribution and promotion strategies will be discussed. Students are expected to read current periodicals and journals to keep abreast of current international developments. Problems of distribution and marketing in foreign countries are covered including foreign markets surveys, promotion by government and private agencies, structural organization, marketing channels, foreign operations, foreign licensing, selection of marketing policies, techniques and financial instruments of foreign trade.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Management &amp; Marketing</b>						
MAKT	416	Service Marketing	3	0	3	MAKT 310
Service organizations require a distinctive approach to marketing strategy- both in its development and execution. Focusing on non-financial service marketing of such commercially diverse enterprises as transportation companies, hospitals, consultancies, and educational institutions, this course identifies best practices in the area of marketing management and service quality through a case-study approach. Focusing on the process of planning, organizing, and implementing the marketing effort in service organizations, the course explores the distinctive aspects of service marketing. Special attention is paid to service positioning in the marketplace and determining the optimal marketing mix in a service organization.						
MAKT	421	Marketing Strategy	3	0	3	MAKT 201 AND Completion of at least 90 credits
This course offers a fundamental understanding of the marketing strategy planning process within firms, marketing management problems encountered by senior marketing managers, marketing opportunity assessment, segmentation, competitive positioning and integration of product /service, price, promotion, and distribution.						
MAKT	422	Entrepreneurship	3	0	3	
MAKT	423	Digital and Social Media Marketing	3	0	3	MAKT 201
This course exposes students to the constantly changing nature of digital and social media marketing. It explores the origins of the discipline in the context of how the marketing practices of today's have transformed with the introduction and advancements of social and digital technologies, which in turn have empowered consumers with an emphasis on both opportunities and risk to organisations. The course examines the leading edge of technology and practice, and how these technologies impact a whole range of other disciplines, such as traditional marketing, management, international business, and business strategy. It exposes students to both theoretical and practical knowledge needed to develop a sound digital marketing strategy utilising various digital and social media marketing concepts and tools.						
MAKT	424	New Product Development	3	0	3	MAKT 321 AND Completion of at least 90 credits
The development of new products and services is arguably the most significant activity within a firm – as well as one of the most risky. This course examines the strategies, processes and methods used by companies to introduce new products as well as the cutting edge tools and techniques used to develop new products. The first part of the course focuses on new product development strategies at different stages of product's cycle. The second part examines techniques for managing different stages of a product's development from generation to market launch.						
MAKT	425	Strategic Marketing Management	3	0	3	MAKT 201 AND Completion of at least 90 credits
Fundamental understanding of the marketing strategy planning process within firms, marketing management problems encountered by senior marketing managers, marketing opportunity assessment, segmentation, competitive positioning and integration of product / service, price, promotion, and distribution.						
MAKT	431	Customer Relationship Management	3	0	3	MAKT 310 AND Completion of at least 66 credits
This course examines customer relationship management (CRM) as key strategic process for organizations. Composed of people, technology, and processes, CRM ideally optimizes the selection of identification, acquisition growth and retention of desired customers to maximize profit. CRM discussions and projects will address both organizational customers and consumers/households. Often organizations that invest heavily in CRM experience a high failure rate owing to the flaws in CRM strategy implementation. The pitfalls as well as the completion of a CRM strategic plan will be addressed in depth through the course, culminating in the completion of a CRM strategic plan. In addition to the CRM strategic planning, student expert presentations and some hand-on analysis will be used to accomplish the course objectives.						
MAKT	499	Project In Marketing	0	6	3	BFRM 498 AND ETHC 391
A structured pre-approved project in marketing ordinarily involving (1) research on a particular topic in marketing or (2) reporting on field-work in a marketing organization.						
<b>Management Information Systems</b>						
BFRM	498	Research Methods in Business & Finance	3	0	3	STAT 202 AND Completion of at least 90 credits
The main objective of this course is to enhance the student's ability to understand as well as to conduct scientific research and to formulate and propose systematic solutions to business problems. Students acquire skills needed to undertake complex research projects by focusing on research projects germane to various fields of business.						
INTR	424	BSMIS Internship	0	12	6	Completion of at least 90 credits



## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Management Information Systems</b>						
INTR	468	BSMIS Internship	0	0	3	Completion of at least 90 credits
<p>In this course, student follow a training program in an organization related to their specialization. The program aims to provide students with first-hand experience of the day-to-day functions, duties, and operations and to integrate what they have learnt in the classroom with the competencies required in the workplace. In today's turbulent economic environment, a country workforce is increasingly pivotal to business success. Stemmed from the desire and sense of responsibility that Ahlia University has against the society and their own students, and as part of their vision, of being leaders in the market of higher education, they do understand the need to invest in their capital made of partially their students in order to equip the market with talented workforce. Based on this INTR 424 course was introduced representing a structured opportunity to incorporate academic, professional and personal skill development which enables the student to gain a planned and directed learning experience. It enables the student to integrate knowledge gained through their classroom learning with the competencies made available through actual experience in a professional setting. The internship programme requires a minimum of 240 hours of work at the internship worksite. Students will receive academic credit after a successful completion of the programme. The numbers of credits that are earned by the student as a result of successful completion of the internship programme are 6 credits.</p>						
ITMA	201	Management Information Systems	3	0	3	MAGT 121
<p>Understanding the decision-making process and how information is used for decision support in organizations. Elements of decision theory and information theory. Essential practices for providing viable information to the organization. Information system planning and strategies. Human-computer interaction. Societal and ethical issues related to information systems use.</p>						
ITMA	221	Introduction to E-Commerce	3	0	3	
ITMA	304	Business Data Analytics	3	0	3	STAT 202
<p>Data Science is the study of widespread knowledge extraction from data. Data science uses empirical science, statistics, reporting, analysis, visualization, business intelligence, expert systems, machine learning, databases, data warehousing, data mining and big data tools. This course will introduce students to this fast-growing field and equip them with some of its basic principles and tools and general thinking. Students will learn principles, techniques, and tools they need to solve various facets of data science training, including data collection and integration, exploratory data analysis, predictive modeling, descriptive modeling, data product development, assessment, and effective communication. The focus will be on breadth rather than depth in the treatment of these topics, and emphasis will be placed on the integration and synthesis of concepts and their application to problem solving. Real data sets from a variety of disciplines will be used to make learning contextual.</p>						
ITMA	305	Information System Security	3	0	3	ITMS 205
<p>This Course aims at understanding concepts, theories, methodologies, and techniques of Information Systems Security, in both management aspect and technical aspect. The course also exposes students to understand of various types of security incidents and attacks, and learn methods to prevent, detect and react incidents and attacks. Students will also learn basics of application of cryptography which are one of the key technologies to implement security functions. The course also imparts knowledge of internet services, vulnerabilities of computer networks and techniques for protecting data and networks, symmetric and asymmetric cryptography, authentication, malicious software, and issues in privacy.</p>						
ITMA	310	Entrepreneurship and Digital Innovation	3	0	3	MAGT 121 AND ITMA 201
<p>This course addresses topics related to the development and management of technology-based start-ups. The following topics are covered: the entrepreneur's position and personality, business strategy, team building and management, digital creative goods, market assessment and designing a business and marketing plan, legal issues such as intellectual property, venture budgeting, and raising capital.</p>						
ITMA	321	E-System Technologies	3	0	3	ITCS 214
<p>This course explores some of the technologies and infrastructures required to support e-systems. A secondary thrust of the course explores how these technologies impact consumer-business, business-business and intra-organizational e-business.</p>						
ITMA	322	Database Management Systems	2	2	3	ITMA 201
<p>This course spans the entire scope of database management systems, especially relational DBMS (query processing and optimization, transaction processing, concurrency control, recovery, distributed transactions, database security, client-server, multi-tier architectures and web-deployed database systems).</p>						
ITMA	323	Management Information Systems II	3	0	3	ITMA 201
<p>This course develops a technology management perspective about information technology, asking and answering the question: how do we make the best technology decisions in the context of a dynamic business environment? The course is about technology values and risks, and the strategic importance of effective enterprise decision making about information and information technology infrastructure. Of particular focus is the business aspect of technology decision-making, using case studies and in-class presentations from industry executives and entrepreneurs. Included is technology project analysis, technology leadership considerations, infrastructure management and architectures, electronic commerce issues, the design and implementation of computer-based information systems with emphasis on database and transaction aspects, the basics of database management, architecture of relevant database management systems, design and implementation strategies.</p>						
ITMA	326	Business Cloud Computing	3	0	3	ECTE 201 AND ITMS 325
<p>This Course covers how to build a cloud infrastructure based on a cloud computing reference model. The reference model includes five fundamental layers, namely, physical, virtual, control, and service and three cross-layer functions, namely business continuity, security, and service management for building a cloud infrastructure. For each layer and function, this course covers the comprising technologies, components, processes, and mechanisms. This course takes an open approach to describe concepts and technologies. Product examples are included to reinforce the concepts and technologies learnt in this course.</p>						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Management Information Systems</b>						
ITMA	330	Knowledge Management	3	0	3	ITMA 201
<p>Knowledge management spans the gamut of knowledge sharing, codification, transfer and generation. Using a socio-technical approach, this course covers the principal processes in knowledge management and underscores the role of IT systems that support the creation, capture, storage and dissemination of expertise and knowledge. Additionally, students explore the nature of technological change, innovation and intellectual capital.</p>						
ITMA	401	E-Commerce	3	0	3	ITCS 101
<p>The course presents a survey of consumer and business-to-business electronic commerce models, systems, and technical solutions in the national and global contexts connecting individuals, businesses, governments, and other organizations to each other. It provides an introduction to e-business strategy and the development and architecture of e-business solutions and their technical components that focuses on the linkage between organizational strategy and networked information techniques. The course will cover how businesses and consumers use the Internet to exchange information and initiate transactions. Students gain extensive hands-on experience tackling e-commerce problem- sets in a series of labs in which in-depth exploration of the seven design elements of the customer interface feature prominently.</p>						
ITMA	411	System Analysis & Design	3	0	3	ITCS 323
<p>This course introduces students to the concepts and principles of systems analysis and design. It covers all aspects of the systems development life cycle from project identification through project planning and management, requirements identification and specification, process and data modeling, system architecture and security, interface design, and implementation and change management. Object-oriented analysis techniques are introduced. Students will learn to use an upper level CASE (computer-aided software engineering) tool, which will be employed in completing a real-world systems analysis and design project.</p>						
ITMA	412	Managing Enterprise Systems	3	0	3	ITMA 322
<p>Companies have been replacing their legacy systems with enterprise systems designed to connect the entire organization, including suppliers and customers, in a web-enabled computing environment that provides information to all participants as needed. This course explores the managerial and technical challenges in implementing enterprise systems and managing an organization with such an interdependent, connected system. From a technological view, students evaluate enterprise system to assess their functional capabilities and limitations. From a managerial view, students employ business cases to develop an understanding of the process of implementing and using enterprise systems effectively in organizations.</p>						
ITMA	414	Business Intelligence	3	0	3	ITMA 304
<p>Business Intelligence (BI) and its components are included in this course. The course demonstrates how business intelligence (BI) turns data from massive data sets into intelligence that leads to strategic and tactical business decisions. The Principles of business intelligence (BI) as components and functionality of information systems are also introduced in this course. Data quality and validity, data privacy and protection, data warehousing, predictive reporting, data visualization, and ethical and legal concerns are all covered by BI technologies. It looks at how operational data can be used to build data warehouses, which can then be used to gain new insights into organizational operations using data mining techniques and analytics.</p>						
ITMA	416	Strategic Information Systems Project Management	3	0	3	MAGT 121 AND ETHC 391
<p>In this course students can learn the fundamentals of project management, including how to initiate, schedule, execute, track, and control projects, as well as understanding issues in planning and implementing strategic Information Systems within the organization. The course introduces the fundamentals of five project management areas: integration, scope, time, cost, and quality. The course also covers the main managerial aspects and challenges facing strategic management, alignment of IS and business strategy, strategic concepts for IT and business, the IS strategic tools and techniques, and the comprehensive frameworks for IS strategic planning.</p>						
ITMA	418	Artificial Intelligence Applications in Business	3	0	3	ITMA 304
<p>This course covers the fundamentals of artificial intelligence (AI) and how to apply various intelligent techniques to solve business problems. Intelligent agents, basic principles of searching, reasoning, and planning, expert systems, advanced techniques such as genetic algorithms, neural networks, and fuzzy logic, and applications of AI techniques to solve various types of business problems are among the topics discussed.</p>						
ITMA	423	Information Systems Auditing	3	0	3	ITMA 416 AND ITMS 205
<p>This course describes the principles and procedures of information technology audit and control. Risk assessments principles in accordance with IS audit standards and guidelines, forms of audits to ensure that processes are secured and regulated, risk management methods, monitoring priorities and controls related to Information Systems and audit preparation, audit project management techniques, and standards and procedures for the growth and maintenance of the Business Continuity Plan and testing methods.</p>						
ITMA	427	e-Government Concepts and Implementation	3	0	3	ITMA 201 AND ITMS 325
<p>This course provides a socio-technical perspective on e-government and discusses how programs are handled and applied in the sense of public administration. E-government at different levels, from policy and planning to management, implementation, and assessment, theoretical models of e-government, and problems and developments in the field are among the topics discussed. The course also covers the rise of digital government and its increasingly integral role in many government processes and activities, including overseeing fundamental changes at various levels across government, means that it is no longer perceived as just a technology issue.</p>						
ITMA	499	Project in ITMA	0	6	3	BFRM 498 AND ETHC 391
<p>A structured, pre-approved project in ITMA ordinarily involving (1) research on a particular topic in ITMA or (2) reporting on field-work in an IT organization. Projects in ITMA ordinarily encompass MIS, data-base management and e-technologies/e-commerce.</p>						
<b>COLLEGE OF ENGINEERING</b>						
<b>Computer Engineering</b>						
ECCE	101	Mechanics	3	0	3	MATH 050 OR MATH 052 OR MATH 053

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Computer Engineering</b>						
This course covers Mechanics that is the study of the way matter and forces interact with each other. It illustrates Statics (concerns itself with forces when no change in momentum occurs), Dynamics (concerned with forces and matter when a change in momentum does occur), and Kinematics (study of motion without regard to the forces present).						
ECCE	121	Circuits	2	2	3	ECCE 101 OR PHYS 101
This course intends to introduce principles of circuits including electric charges and fields, Coulomb's and Gauss's laws, electric potential, capacitors, direct current circuits, Kirchoff's rules, magnetic field and flux, ampere's law, induced emf, Lenz's law, mutual and self inductance AC circuits, and RLC circuit. This course in addition to the theory, introduces the students to computer based software's for simulating such circuits.						
ECCE	201	Electric Circuits	2	2	3	MATH 102 AND PHYS 102
This course provides electrical circuit analyses. It includes the following topics: electrical circuits' overview, basic laws: Ohm's, KVL, KCL, and Power calculations, Resistive circuits: voltage and current divider rules. Dependent sources. Circuit analysis techniques: Nodal and Mesh analysis. Network theorems: Thevenin's Norton's, Source transformation, Superposition, Maximum power transfer. Transient analysis of RC, RL and RLC circuits, Sinusoids & phasors, impedance & admittance, AC mesh & nodal analysis, AC power analysis.						
ECCE	203	Digital Logic	2	2	3	ITCS 101
This course introduces concepts and ideas of Digital Logic Design. It covers: numbering systems, Boolean algebra, Logic Gates and combinational logic circuits analysis, combinational network design). MSI Integrated circuits in combinational networks design, and sequential circuits analysis and design. Introduction to basic PLDs, CPLDs, and FPGAs. Introduction to State machines and System design with State machines using VHDL.						
ECCE	204	MATLAB & Simulink	2	2	3	MATH 102 AND ITCS 122
This course introduces students to MATLAB, a powerful engineering programming environment, and its companion application, Simulink. Topics Include array manipulations, control-flow, script and function files, 2-D plotting and editing, and system modeling and simulation using Simulink. Students gain insights into the useful capabilities of MATLAB and Simulink for common engineering applications such as signal processing & communication, control design, image processing, data analysis and visualization.						
ECCE	221	Electronic Circuits	2	2	3	ECCE 201
This course introduces Analog electronics devices and some relevant concepts of digital Electronics. It includes topics such as: diodes (diode concepts, rectifier and wave shaping circuits), Bipolar Junction Transistors (BJT's), Field Effect Transistors (JFET, MOSFET), DC biasing VI characteristics. Operational Amplifiers and active filters. TTL and CMOS Logic Digital-to-Analog and Analog-to-Digital converters.						
ECCE	223	Data Structures	2	2	3	ITCS 201
This course introduces common Data structures and their related algorithms. It includes topics such as: Abstract data types. Arrays, Linked Lists, Stacks, Queues, Binary Trees, Graphs, and their implementations. Related Algorithms, their time complexity and implementation.						
ECCE	300	Introduction to MATLAB Programming	2	2	3	MATH 202
This course introduces students to MATLAB language and its problem solving capabilities. The course is heavily lab-oriented and covers topics such as array manipulations, control-flow, script and function files, 2-D plotting and editing, and also some advanced data structures. The course also introduces MATAB's Simulink and its application to Engineering problem modelling and simulation.						
ECCE	303	Computer Architecture and Organization	2	2	3	ECCE 203
This course introduces the organization and architecture of computer systems hardware; It includes : instruction set principles and examples ; Complex and Reduced Instruction sets computers ( CISC and RISC ) ; addressing modes; register transfer notation; performance evaluation and processor design ; Control Unit, Pipelining , Microprogramming, Memory Hierarchy, Cache and Virtual Memories, Fixed point and floating point arithmetic.						
ECCE	304	Introduction to Control Systems	3	0	3	ECCE 300
This course introduces control systems and their physical system elements representation. It covers classical control theory of single-input/ single-output, continuous systems, time domain analysis, performance specifications and stability. The course also introduces students to basic design techniques of feedback control systems						
ECCE	323	Microprocessors	2	2	3	ECCE 303
This is an introductory course to Microprocessors architecture and programming that builds up on the knowledge gained from the Computer architecture and Organization course (ECCE 303). Topics include Assembly language programming, Microprocessor architecture, Instruction type and Addressing modes, Memory Interfacing and synchronization, I/O mapping. Input /Output data transfer (Handshaking, Interrupts, DMA), Programmable Interface devices and Application Examples.						
ECCE	324	Principles of Control Systems	2	2	3	ECTE 224 AND ( MATH 202 OR MATH 205 )
The course introduces the theory of LTI control Systems. Topics include: Review of Laplace Transforms. Mathematical modeling of physical control systems. Transfer functions, Signal flow graphs. State space analysis. Transient response of first and second order systems. Stability of control systems: Routh criterion, Root locus, Frequency response methods, Nyquist stability criterion. Compensation techniques. Z transform and Introduction to digital control. Control systems applications with MATLAB are included to illustrate the concepts.						
ECCE	326	Digital Logic Design	2	2	3	ECCE 203

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Computer Engineering</b>						
This course provides a modern introduction to logic design and the basic building blocks used in digital systems. Topics include modular design of combinational and sequential circuits, finite state machine design, control and datapath design, modern digital design techniques using hardware description languages and programmable logic devices (FPGA, CPLD), introduction to VHDL design styles (data flow, behavioral, structural), simulation and synthesis of digital systems with VHDL. Students also learn to use industrial EDA tools such as XILINIX and ModelSim for VHDL synthesis and simulation.						
ECCE	333	Windows Server Environment (MCSE - 1)	2	2	3	ECTE 302 OR ECTE 201
This course provides students with the knowledge and skills that are required to manage accounts and resources, maintain server resources, monitor server performance, and safeguard data in a Microsoft Windows Server 2003 environment. This is the first course in the Systems Administrator and Systems Engineer tracks for Windows Server 2003 and serves as the entry point for other courses in the Windows Server 2003 curriculum.						
ECCE	334	Windows Server - Network Infrastructure (MCSE - 2)	2	2	3	ECCE 333
This course ensures that a candidate has a broad base understanding of management and maintenance strategy for Dynamic Host Configuration Protocol (DHCP) and a thorough understanding of Domain Name System (DNS), Windows Internet Naming Service (WINS), Internet Protocol Security (IPSec) and the knowledge and skills necessary to allow, manage and monitor remote access users.						
ECCE	401	Computer Security	3	0	3	ECTE 201
This course concerns with the protection of computer systems and their data from threats which may compromise integrity, availability, or confidentiality; the focus is on threats of a malicious nature rather than accidental. Topics include: Computer security overview, cryptography, authentication, access control, database security, malicious software, denial of service, intrusion detection, and firewalls, communication protocols and internet security and emerging security issues.						
ECCE	402	Logic Programming and Knowledge Representative	3	0	3	ITCS 303
This course examines intelligent systems which sense the environment, make decision and then act in appropriate ways. The knowledge necessary to understand how the system works is introduced in segments that always relate back to the basic system. the course also introduces Boolean logic, theory of computation and machine learning . Hands-on practice on some logical programming languages is included to familiarize students on implementing such techniques. Applications in natural languages, computer vision and robotics are also discussed.						
ECCE	403	Embedded Systems	2	2	3	ECCE 323
This course builds on the knowledge gained from the Microprocessor courses (ECCE 323). It focuses on embedded microprocessor-based systems. It covers Microcontroller hardware architecture. High level programming and real time operating systems for embedded systems. Software and hardware tradeoffs. Memory interfacing. I/O interfacing techniques for devices such as input/output peripherals, sensor/actuator devices, UARTS, digital and analog I/O, timers and interruptors.						
ECCE	413	Internet of Things	2	2	3	ECCE 303 AND ECTE 329
This course covers the basic building blocks of the Internet of Things and develops the necessary skills required to design and implement IoT products and services. Students will be able to use sensors and an Arduino microcontroller to read data from physical world and control actuators. Use python to program a Single Board Computer (Raspberry Pi) to perform more complex embedded program. Learn the principal application protocols for the transfer of sensor data, for example, MQTT and CoAP and infrastructure for IoT: LoRa-Wan, 6LoWPAN, 5G and SigFox.						
ECCE	423	Information Security	3	0	3	ECTE 302
This course provides introduction to both theory and practice of data security. The theory part includes conventional crypto-algorithms, public-key crypto-algorithms, hash functions and digital signatures. The practice part covers important data security tools and applications: Kerberos, SSH, X.509, IP Security, SSL/TLS, and possibly others. This course is self-contained: basic Mathematical foundations, e.g., basics of number theory, are covered in the course.						
ECCE	424	Cyber Security	2	2	3	STAT 302
This course will cover the most important concepts of cyber security, including topics such as cryptography, software security, malicious software, network security and intrusion detection. Learners would gain knowledge of various cyber security terminologies, technologies, protocols, threat analysis, security principles, security mechanisms, web security, policies, forensics, incidence response, and methods/practices to secure systems.						
ECCE	425	Engineering Management	3	0	3	Completion of at least 90 credits
The course introduces advanced engineering management with professional engineers to provide a technical solution and a cost and resource-effective solution. In addition, an engineer must make things happen, which manages the end-to-end processes that can lead to the transformation of a technical solution to reality. Professional Engineers are unlikely to remain in a technical position for long and will rapidly progress into some management activity. Thus, there is a need to bridge the gap between engineers and business people to meet the demands of the highly competitive engineering industry using a toolkit for future engineers.						
ECCE	433	Windows Server Active Directory & XP Pro (MCSE - 3)	2	2	3	ECCE 334
It provides students with the knowledge and skills to successfully plan, implement, and troubleshoot a Microsoft Windows Server 2003 Active Directory infrastructure focusing mainly on a Windows Server 2003 directory service environment, including forest and domain structure & Domain Name System (DNS). It also provides knowledge on the installation and troubleshooting of Windows XP boot process, the installation on new hardware drivers and configurations for a desktop environment.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Computer Engineering</b>						
ECCE	434	Designing Security for Networks (MCSE - 4)	2	2	3	ECCE 433
This course provides the student with knowledge and skills to design a secure network infrastructure. Topics include are assembling the design team, modeling threats, and analyzing security risks in order to meet business requirements for securing computers in a networked environment.						
ECCE	435	Internet Security & Acceleration (MCSE - 5)	2	2	3	ECCE 434
The Internet Security & Acceleration (ISA) course helps students to gain knowledge on the installation and maintenance of the ISA Server 2004, enabling access to Internet Resources, configuring the ISA Server as a Firewall & configuring Virtual Private network access for remote clients and networks. ISA server 2004 is the integrated edge security gateway that helps protect IT environments from Internet-based threats while providing users with fast and secure remote access to applications and data.						
ECCE	436	Security for Windows Networks (MCSE - 6)	2	2	3	ECCE 435
This course helps the student in the planning and the configuration of Authentication and Authorization Strategies, it helps in the troubleshooting of Smart Card Certificates and in Encrypting File System. It provides information on the planning and Implementing of Software Updates, Securing Remote Access, implementing of data transmission security & the Security for Wireless Networks.						
ECCE	443	Applied Robotics	2	2	3	ECCE 323
The Course introduces robotics-related technologies, including computer programming methodologies, data acquisition methods for sensors (such as infrared and optical imagers) and control methods for actuators and servo motors via microcontrollers. In addition, the course covers maintaining robotic system in terms of troubleshooting and servicing. The course addresses advanced robotic topics, such as computer Vision and Artificial intelligent that leads to innovative and futuristic robotic systems.						
ECCE	451	Machine Learning	2	2	3	STAT 302 AND MATH 205
Machine Learning is the study of how to build computer systems that learn from experience. This course on Machine Learning will explain how to build systems that learn and adapt using real-world applications. Some of the topics to be covered include concept learning, natural networks, genetic algorithms, reinforcement learning, instance-based learning, and so forth.						
ECCE	452	Computer Vision	2	2	3	ITCS 224
This course aims to provide students with the fundamentals of Computer Vision including Image Processing and classification. Topics include: Digital Images and their Properties, Image Formation, Image Acquisition, Image Segmentation and Boundary Extraction, Feature Detection and Matching, Image Classification, Scene Matching and Detection, Object Recognition, Motion Estimation, Tracking, and Classification, Computer vision applications.						
ECCE	499	Major Project	0	6	3	ETHC 392 AND IERM 498
Each student is required to select a theoretical and/or a practical problem related to his major area, and works under the supervision of a faculty member. All stages of project development should be emphasized including problem identification, library search, planning, design and/or construction of equipment upon completion of the project, the student must submit a final written report outlining the various phases of the project and make an oral presentation.						
ECCE	500	Introduction to Information Security	3	0	0	
This course is an introduction to security concepts and security techniques and their applications. It covers the following topics: Security Attacks, Services, and Mechanisms; Symmetric-Key and Asymmetric-Key Encipherment; Hash Function and Digital Signature.						
ECCE	503	Object Oriented Methodology	3	0	3	
This course explores software engineering techniques in a range of realistic problem contexts fostering an understanding of the application of a variety of software engineering techniques to the process of software development especially through honing skills in object-oriented programming. Skills in various modeling languages and schemata such as UML are also imparted in the course.						
ECCE	532	Advanced Information Security	3	0	3	
This course introduces the principles of information technology security. It covers the following topics: Introduction to the IT Security, Symmetric-Key Encipherment, Asymmetric-Key Encipherment, Integrity, Authentication, and Key Management.						
INTR	432	BSCCE Internship	0	12	6	Completion of at least 90 credits
INTR	461	BSCCE Internship	0	0	3	Completion of at least 90 credits
The main objective of the internship is to integrate the concepts that students learn in the computer and communication engineering programme with practical experience by providing a training that supplements and complements classroom work.						
ITLS	500	Highway and Traffic Engineering Fundamentals	3	0	3	
This course provides students with basic highway and traffic engineering knowledge. It describes the transport planning and process including the transportation models and their main standards. The course covers four main modules: traffic engineering and management, highway design, and maintenance.						
ITLS	501	Operational Management	3	0	3	
This course provides students the basic knowledge of operations management in the supply chain. The course emphasizes decision-making in operations with a supply chain orientation. This course stresses the cross-functional decision to manage activities involved in moving products, materials, services, and information by making systematic approaches. Students will learn how to improve business logistics and supply chain management decisions through the practical application of multiple analytic techniques used by managers in the field. This course emphasizes operations management in transportation systems management and warehouse management.						
ITLS	511	Fundamentals of Intelligent Transport and Logistics Systems	3	0	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Computer Engineering</b>						
The course provides learners with critical knowledge and understanding in relation to Intelligent Transport and Logistics Systems. The course provides an overview on the background and history of transportation, emphasizing the fundamental role and importance of the transportation and logistics industry in economy, companies, society, and the environment. Learners will be equipped with specialized theories and principles related to different carrier operations, management, technology, and strategic principles for managing different modes of transportation.						
ITLS	513	Traffic and Transport Safety	2	2	3	ITLS 511
This course provides a critical knowledge and understanding of Intelligent Transportation Systems (ITS) with inclusion of using information and communication technologies to improve transportation safety, productivity, and reliability. The course focuses on ITS applications that enhance road traffic and safety, through advanced information systems, vehicle-to-vehicle and vehicle-to-infrastructure communication, and sensors. The course emphasizes the importance of ITS in enhancing road safety and provides learners with the knowledge and skills needed to understand and apply these technologies in transportation systems. By the end of the course, learners will be equipped with critical skills and combination of concepts of ITS towards improving traffic safety.						
ITLS	514	Optimization Techniques in Transport and Logistics	2	2	3	
This course provides the learners critical applied knowledge to use of professional skills with various computer applications and optimization techniques in transport and logistics systems. The course provides an overview on complex issues that arise in areas such as vehicle distribution, route planning, and resource allocation, and the underlying concepts and modelling techniques used to solve them through critical thinking and analytical approaches. The course emphasizes practical application, with learners working on realistic case studies to design solutions using computer optimization tools and techniques that enables the learners to generate high-quality solutions for the complex problems that arise in transport and logistics systems.						
ITLS	517	Innovation Project Management	3	0	3	ITLS 514
This course covers the main functions of Innovation Project Management, observation of Innovation Management as the idea commercialization process, and Project Management as the evolution of generated and strategically adapted ideas. This course will help students to understand the examination of Innovation Strategy, Innovation Matrix, key strategic decisions, risk assessing, planning methods, and the whole process of project implementation based on a strong practical emphasis including case studies. The course is delivered with emphasis on applied knowledge through case studies, enabling learners to gain critical understanding of the challenges and opportunities associated with innovation project management. By the end of the course, learners will be equipped with critical knowledge and skills to manage and implement innovative projects successfully.						
ITLS	518	Transportation Policy, Strategy and Regulations	3	0	3	ITLS 511
This course will provide critical knowledge and understanding in the field of Transportation Policy, Strategy and Regulations with a significant knowledge of key concepts in transport planning and policymaking, the course will be focused on the development of transport systems. Learners will be equipped with professional skills and creativity to provide insights into the challenges associated with transport system operation in local and regional cities by studying a range of case studies which expose learners to real-world examples of transport system development and management. Topics covered include current concepts in the strategic management, operating context, leadership challenges, strategies, and management tools of public and private transportation organizations. By the end of the course, learners will be equipped with professional skills related to transport planning and policymaking, as well as the strategic management of transportation organizations.						
ITLS	521	Urban Mobility and Smart Cities	2	2	3	
Urban mobility and smart cities are areas of rapidly growing importance especially in the context of urban infrastructure management. Recent advances in Information and Communication Technologies (ICTs) have disrupted traditional urban infrastructure service provision, leading to growing interest in transitioning towards Smart Cities. This course will equip learners with critical knowledge and skills needed to utilize smart urban technologies to enhance existing infrastructures cities to overcome the challenges and opportunities and leverage technology to enhance urban infrastructure management.						
ITLS	525	Supply Chain Logistics	2	2	3	ITLS 514
This course offers an international and global perspectives on logistics and supply chain management trends and issues. Topics covered include the advanced study and application of concepts and managerial techniques for manufacturing and service operations in supply chain logistics. The course focuses on the role of logistics in supply chains, including production technology, facility location and layout, inventory management, Material Requirements Planning (MRP), just-in-time manufacturing, total quality management, and distribution activities. Learners will gain a comprehensive and critical understanding of logistics in supply chain management and how logistics plays a crucial role to lead successful supply chain operations in a global business environment. By the end of the course, learners will have critical knowledge and professional skills to manage complex logistics for supply chain operations.						
ITLS	527	Geographical Information Systems for Transportation	2	2	3	
This course provides critical knowledge of Geographic Information Systems (GIS) and its application in transportation infrastructure and road safety analysis. The course focuses on the essentials of GIS, geospatial data collection and management, database design, geo-referencing techniques, and visualization. Topics covered will include advanced topics in GIS such as spatial analysis and modeling, multilayer mapping, and overlay analysis. By the end of the course, learners will have a solid understanding of GIS and its application in transportation infrastructure and road safety analysis, as well as the ability to apply GIS tools and techniques to solve real-world problems.						
ITLS	528	Mobile and Network Communication for Transport Systems	2	2	3	
Mobile and networks communication for transport systems explores elements of radio telecommunications systems, including transmitters, receivers, antennas, and channels, and how they interact to transmit information over distances. Learners will gain critical knowledge of the function of each element and how to evaluate system performance using a simple channel model. This course covers the use of magnitudes and units commonly used in telecommunications, essential skills for working with radio communications in intelligent transportation systems. By the end of the course, learners will be equipped with professional level of skills and understanding related to radio telecommunications systems and their application in transportation.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Computer Engineering</b>						
ITLS	531	Internet of Things	2	2	3	ITLS 528
<p>This course focuses provide critical knowledge related to communication systems between vehicles, users, and other elements based on Internet of Things (IoT) architectures. Topics covered include different alternatives for locating computation closer or further away from the data source, including fog, edge, and cloud computing, other topics including ad hoc vehicular networks (VANETS) and vehicular sensor networks (VSN), which capture massive amounts of data that can be used in the context of big data, real-world applications managing transport in port terminals, railway facilities, road traffic, goods storage, and parking will also be covered, including the use of beacons to communicate with merchandise or means of transport.</p>						
ITLS	537	Data Analytics for Smart and Connected Cities	2	2	3	ITLS 528
<p>The availability of large amounts of information in these areas requires the use of appropriate models to analyse and predict future trends. This course focuses on the use of adequate study and prediction methodologies for transport and logistics systems, socio-demography, urban and territorial characteristics, and activity centres. Learners will gain professional skills related to the use of classic activity and travel models, which provide the basis for working with agent-based models that take advantage of all available information. The course emphasizes the importance of using appropriate methodologies for analysing and predicting transport and logistics systems and provides learners with the knowledge and skills needed to work with agent-based models in this context.</p>						
ITLS	539	Connected and Automated Vehicles	2	2	3	
<p>This course provides critical understanding of concepts of autonomous, connected, and cooperative driving, with an emphasis on their impact on traffic, road safety, and emissions. The course covers topics related to different levels of automation, sensors and technologies, infrastructure, different types of communication and the legislation and regulations associated with autonomous vehicles. Learners will gain critical knowledge and exposure on recent road classification systems that consider the unique features of autonomous vehicles, the impact of autonomous driving on traffic functionality, road safety, and the environment will be covered.</p>						
ITLS	597	Research Methodology	2	2	3	Completion of at least 9 credits
<p>This course is designed to provide learners with in-depth framework and methodologies for conducting research in transport and logistics systems. Learners will gain critical knowledge of the principles of the scientific methods including hypotheses, literature review, research design and development, analysis of data, and dissemination, communication, and exploitation of research results, as well as ethical considerations. By the end of the course, learners will be equipped with professional skills to design, execute, and communicate research results of in the field of intelligent transport and logistics.</p>						
ITLS	598	Applied Project in Intelligent Transportation and Logistics Systems	0	12	6	ITLS 597 AND Completion of at least 24 credits
<p>The course will provide professional skills to be applied by learners to conduct applied project in the field of Intelligent Transport and Logistics Systems. The course will provide a combination of approaches to critically analyze complex practical situation and evaluate practices to support practical implications serving industrial needs. The course will include management and leadership related aspects the learner will be equipped with skills to develop resources and practice tools and reflect on the outcomes. At the end of the course learners is expected to solve a complex specific and provide insight to support the organization and demonstrate skills in project management, problem solving, and communication.</p>						
ITLS	599	Dissertation in Intelligent Transportation and Logistics Systems	0	24	12	ITLS 597 AND Completion of at least 21 credits
<p>This course will provide a structured supervised in-depth study on a pre-approved topic in the field of Intelligent Transportation and Logistics Systems involving one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical development study which aims to explore an area or ideas, or demonstrate a concept through appropriate practical development testing and critical analysis. The dissertation engages the learner in a progressive course of intellectual discourse involving problem identification of complex issues related to Intelligent Transportation and Logistics Systems, methodology, critical analysis and research, evaluation and recommendation that culminates in the production of manuscript subject to defense.</p>						
<b>Telecommunication Engineering</b>						
ECTE	201	Data Networks	2	2	3	ITCS 101
<p>This course introduces data communication networking. It includes: foundational principles of computer networks, architecture of data communication systems, OSI model, protocols and mechanisms used in the TCP/IP protocol suite, including the operation of both wide-area and local-area networks.</p>						
ECTE	221	Telecommunication I	2	2	3	ECCE 121 OR PHYS 121
<p>This course intends to introduce general telecommunication principles including: signals, transmission media, modulation and multiplexing.</p>						
ECTE	224	Signals & Systems	2	2	3	ECCE 201 AND ECCE 204
<p>This course gives an overview of continuous-time signals and systems. It covers: Basic characteristics of signals, Fourier analysis of continuous - time signals, properties of Linear Time-Invariant (LTI) systems, The Convolution integral, Impulse and step responses of LTI systems, concept of Transfer Function including basic properties of Laplace, and applications of signals and systems concepts in control and signal processing.</p>						
ECTE	302	Principles of Networking	3	0	3	ITCS 202
<p>This course introduces data communication networking. It covers the concepts of computer networks, the architecture of data communication systems, the seven-layer model of a network (application, presentation, session, transport, network, and data link, physical), protocol algorithms, resource sharing and network performance.</p>						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Telecommunication Engineering</b>						
ECTE	309	Introduction to Cellular Systems	3	0	3	ECTE 221
This course imparts a comprehensive knowledge of all technical aspects, operations and applications of cellular mobile and personal communication technology in terms of: Basic propagation; Mobile propagation; Channel modeling; Principles of cellular communications systems and Multiple access techniques.						
ECTE	314	Communication Systems I	2	2	3	ECTE 224
This course introduces and emphasizes essential analytical tools and theories of communication systems. It covers mainly analog communication: analog modulation (AM, FM, PM); frequency division multiplexing and filtering; A/D and D/A conversions (sampling theory, PAM, Quantization, PCM, and Delta modulation).						
ECTE	321	Telecommunication II	2	2	3	ECTE 221
This course builds on the knowledge gained from a previous course (ECTE 221). Furthermore, it concentrates on digital and optical communications and networks.						
ECTE	322	Antenna and Wave Propagation	2	2	3	MATH 205 AND MATH 223
To introduce students to antennas and propagation for wireless communications as well as the analysis and design of antennas. The course begins with a review of vector calculus and coordinate transformations. It covers fundamental concepts of electrostatics, magnetostatics, electromagnetic induction and electromagnetic waves. Students gain knowledge of Maxwell's Equations and learn how to apply them to solve practical electromagnetic fields problems. Other concepts such as waveguides, resonant cavities, antennas, and radiation patterns are also introduced in this course.						
ECTE	324	Communication Systems II	2	2	3	ECTE 314
This course builds on the knowledge gained from the previous communication course (ECTE 314). It focuses on digital communication: digital modulation (ASK, FSK, PSK, QAM); transmission of digital data over baseband channel (line coding, block coding, scrambling); error detection and correction (hamming distance, linear block codes, cyclic codes, checksum, forward error correction)						
ECTE	328	Mobile Application Development	2	2	3	ITCS 221 AND ECTE 201
The Course introduces an in-depth review of concepts, design strategies, tools and Application Programme Interfaces (APIs) needed to create, test and deploy advanced applications for mobile phones and occasionally connected mobile devices. Topics include: design of mobile user interfaces, Activities, handling notifications, user interface design, user interface building, inter-process communication, data processing, content providers, background services, geo-location and mapping, networking and web services, telephony, messaging, peer-to-peer communication. The target computing environment changes overtime; currently the course explores the Android Operating System and its supporting SDK.						
ECTE	329	Computer Networks	2	2	3	ITCS 214 OR ECCE 203
This course focuses on the underlying concepts and technologies of computer networking. Topics covered include standards; transmission basics and media; TCP/IP protocol; network topologies; network hardware, switching, routing, and virtual networks; and network applications such as e-mail and the Web, peer-to-peer file sharing.						
ECTE	333	Interconnecting Network Devices I (CCNA - 1)	2	2	3	ECTE 201 OR ECTE 302
This course focuses on providing the skills and knowledge necessary to install, operate, and troubleshoot a small branch office Enterprise network, including configuring a switch, a router, and connecting to a WAN and implementing network security. A Student should be able to complete configuration and implementation of a small branch office network under supervision.						
ECTE	334	Interconnecting Network Devices II (CCNA - 2)	2	2	3	ECTE 333
This course focuses on providing the skills and knowledge necessary to install, operate, and troubleshoot a small to medium-size branch office Enterprise network, including implementation of several routing protocols and ACL (Access Control List) & Address Space Management.						
ECTE	349	Network Routing & Switching	2	2	3	ECTE 329
Network Routing & Switching course will enable the learners with advanced skills, knowledge and understanding to install, operate, configure, and verify IPv4 and IPv6 Small to Medium Enterprise networks, including configuring a LAN switch, configuring an IP router, identifying basic security threats, understanding redundant topologies, troubleshooting common network issues, connecting to a wide-area network (WAN), configuring EIGRP and OSPF, understanding WAN technologies.						
ECTE	405	Multimedia Communications	3	0	3	ECTE 450
This Course will consider each part of a multimedia application, i.e. voice, video and data individually. Covering different issues related to: general behaviors, format, representation, encoding-decoding techniques and telecommunication media requirements.						
ECTE	406	Multimedia Communications	2	2	3	ECTE 450
This course introduces technologies for multimedia communications. The course considers each part of a multimedia application, i.e. voice, video, and data individually, and how to effectively represent multimedia data, including text, image, audio and video. Covering different issues related to general behaviors, format, representation, multimedia coding standards, including Huffman coding, JPEG/JPEG-2000, H.26x, MPEG, encoding-decoding techniques, and telecommunication media requirements.						
ECTE	410	Multimedia Communications Overview	3	0	3	ECTE 302 OR ECTE 201
This course will consider each part of a multimedia application, i.e. voice, video and data individually. Covering different issues related to: general behaviors, format, representation, encoding-decoding techniques and telecommunication media requirements.						



## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Telecommunication Engineering</b>						
ECTE	414	WAN Technology	2	2	3	ECTE 329
This course discusses typical Wide Area Network (WAN) technologies along with survey on existing services and applications. WAN router configuration and troubleshooting skills will be included. Topics to be covered include Fundamental WAN devices, Routers, Switches, authentication, PAP, CHAP, WAN Tunneling and VPN.						
ECTE	420	Multimedia Networks	3	0	3	ECTE 410
This course will consider multimedia communication principles. This includes different technologies such as: switching, circuit switching networks, enterprise networks and ATM networks						
ECTE	421	Network Design & Security	2	2	3	ECTE 349
This course provides an overall scheme for designing secure multimedia networks. It covers the following concepts: application requirements analysis, switching technology, traffic modeling, QoS, network security.						
ECTE	423	Data Security	3	0	3	ECTE 302
ECTE	424	Wireless Communications	2	2	3	ECTE 324
This course introduces Modern wireless communication principles and techniques. It focuses on Cellular communication fundamentals (design, interference and capacity, trunking and traffic models, air interface, propagation models and mechanisms, large/small scale fading, diversity techniques); spread spectrum coding; current and future wireless systems and standards; an introduction to optical communication.						
ECTE	428	Wireless Systems Overview	2	2	3	ECTE 321
This course provides a comprehensive introduction to Wireless Systems: AMPS IS-41. Global System for Mobile Communications (GSM). Personal Communications Services (PCS). IS-95. International Mobile Telecommunications 2000 (IMT-2000). In addition, aspects of WIRELESS LANS AND PANS receive attention: Ricochet, HomeRF, HyperLAN, and Bluetooth.						
ECTE	431	Communication Networks	2	2	3	ECTE 201 AND ECTE 324
This Course covers the basic architecture of communication networks and their elements (switches, routers, bridges), and the protocols used to enable transmission of packets through the network. Performance analysis and design of data and integrated services networks, Re-transmission error recovery schemes, networks of queues, congestion control, routing strategies. Multiple access techniques in data networks, design for specified throughput and delay performance. Wireless networks, routing approaches in mobile networks.						
ECTE	433	Building Scalable Internetworks I (CCNP - 1)	2	2	3	ECTE 334
In this course, students will learn how to create an efficient and expandable enterprise network by installing, configuring, monitoring, and troubleshooting network infrastructure equipment (especially routers such as Cisco ISRs) according to the Campus Infrastructure module in the Enterprise Composite Network model. The routed network includes the most commonly used and emerging IP routing protocols.						
ECTE	434	Building Scalable Internetworks II (CCNP - 2)	2	2	3	ECTE 433
The CCNP -2 course gives the student a more in-depth knowledge into implementing multicast, implementing of IP v6, the IS-IS protocol, manipulating of routing updates, and EIGRP and OSPF.						
ECTE	450	Digital Signal Processing	2	2	3	ECTE 224
This course presents the theory and practice of digital signal processing. it covers: Discrete-time signals, sampling and reconstruction of signals, time and frequency analysis of discrete-time signals and systems, Z-transform applications to signal processing; discrete Fourier transform: properties, applications and computation methods with emphasis on fast Fourier transform; analysis and design of digital filters and DSP applications. The course concludes with a brief introduction to 2-D signal (image) processing.						
ECTE	454	Satellite and Space Communications	2	2	3	ECTE 322
This course covers topics such as Introduction and Background, Orbital Aspects and Launching, Spacecraft Subsystems, Link Budgets, Modulation, Multiple Access & On- board Processing, Coding, Frequency & Propagation Aspects, Earth Station Technology & VSATs, Non-Geosynchronous Orbits (NGSO), Applications (GPS, Mobile, Internet, etc.)						
ECTE	472	Software-Defined Radio	2	2	3	ECTE 324
This course covers all aspects of SDR technology. Specifically it includes an overview of modern wireless systems, transceiver architectures, baseband signal processing algorithms, analog-to-digital converters, radio front-end components, digital hardware architectures, software architectures, software architectures, middleware and the Software Communications Architecture (SCA), cognitive devices and networks, standardization bodies, software-defined radio products and services.						
ECTE	474	Optical Communications	2	2	3	ECTE 324
The course provides an overview of optical communication system (from source to destination) with a particular focus on physical and protocol parts of optical systems. Topics include Optics and wave propagation for fiber optics, light emitting diodes and diode lasers, optical fiber, optical amplifiers, dispersion, wavelength multiplexing, detectors and noise, system architecture for optical communication. Students will then learn and understand the point-to-point optical communication principles and will be introduced to the WDM concept. Finally, GMPLS protocol will be briefly discussed.						
ECTE	499	Major Project	0	6	3	IERM 498 AND ETHC 392
Each student is required to select a theoretical and/or a practical problem related to his major area, and works under the supervision of a faculty member. All stages of project development should be emphasized including problem identification, library search, planning, designing and/or building of equipment. Upon completion of the project, the student must submit a final written report outlining the various phases of the project and give an oral presentation.						
ECTE	523	Multimedia Networks & Communication Overview	3	0	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Telecommunication Engineering</b>						
The term Multimedia Communications has been defined by the Professional Network Executive Team as "The electronic means by which multimedia content (voice, text, image, data and video) is created and distributed in the fields of Government and public services, business and commerce, education and entertainment?". This course covers the general network requirements and techniques for handling multimedia communications.						
ECTE	536	Wireless Networks Overview	3	0	3	
The course gives an overview of wireless networks principles. This includes different technologies such as: mobile phone networks, mobile internet networks, and Mobile ad-hoc networks including WI-FI, WI-Max and Bluetooth.						
ECTE	598	Project Dissertation in Networking and Security	0	6	3	
ECTE	599	Dissertation (in Networking and Security)	0	24	12	
IERM	498	Research Methods in Information Technology & Engineering	3	0	3	Completion of at least 90 credits
The course introduces the essential aspects of designing, supporting, and conducting a research project. It enables students to develop capacity to conduct small, simple research projects while at the university. The course spans multiple elements including time management, writing and presentation skills, literature search and general considerations for experiment design and planning.						
INTR	431	BSMNE Internship	0	12	6	Completion of at least 90 credits
INTR	462	BSMNE Internship	0	0	3	Completion of at least 90 credits
The main objective of the Internship is to integrate the concepts that students learn in the Mobile and Network Engineering programme with practical experience by providing a training program that supplements and complements classroom work.						
<b>COLLEGE OF INFORMATION TECHNOLOGY</b>						
<b>Information Technology Masters</b>						
ECCE	501	Introduction to Information Security	3	0	3	
This course is an introduction to security concepts and security techniques and their applications. It covers the following topics: Security Attacks, Services, and Mechanisms; Symmetric-Key and Asymmetric-Key Encipherment; Hash Function and Digital Signature.						
ECCE	507	Modeling & Simulation	3	0	3	
This course introduces fundamental principles and concepts in the general area of modelling and simulation. It covers model construction and simulation applied to problems taken from IT and from Computer and Communication Engineering fields. The course also focuses on the use of simulation packages to model, simulate and analyse such systems. Topics to be covered in this course include basics of discrete-event system simulation, mathematical and statistical models, queuing models, simulation design, and modelling of simulation data.						
ECTE	531	Advanced Networking	3	0	3	
This course gives an overview of networking in general and concentrates on the purposes and protocols involved in the upper IP reference model layers. It covers in detail the following layers: Network, Transport and Application.						
ECTE	535	Broadband & Wireless Networks	3	0	3	
This course first discusses various concepts involved in broadband networks including multimedia components coding and compression, switching techniques, queuing and delay analysis, quality of service and resource allocation. The second part of the course gives an overview of multimedia networks including: Telephony Networks, Optical Networks, VoIP and Enterprise Networks, and Mobile ad-hoc networks.						
ECTE	537	Network Security	3	0	3	
This course covers advanced topics in IT security spanning Network security including: Security at the Application Layer, Security at the Transport Layer, Security at the Network Layer, and general aspects in Mobile ad-hoc networks security.						
ITCS	500	Object-Oriented Programming	3	0	0	
An intensive course on object-oriented programming (OOP) paradigm and advanced techniques of the Java language. Topics include: Java Object Model, Classes and Objects, Constructors and Destructors, Inheritance, Virtual Functions and Polymorphism, Operator Overloading, Exceptions, Generic Programming and Standard Template Library.						
ITCS	502	Data Structures & Algorithms	3	0	0	
This course emphasizes data structures and the development and analysis of their associated algorithms. Data structures and algorithms form a major component of any software system. Students learn to make intelligent decisions about alternative techniques, choosing from existing data structures and algorithms or designing his/her own when necessary. Topics span: asymptotic analysis of algorithms, methods for proving correctness, implementation of algorithms.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Information Technology Masters</b>						
ITCS	506	Advanced Algorithms	3	0	3	
<p>This course covers the design, proof of correctness and analysis of algorithms. Examples are drawn from algorithms for advanced data structures, set manipulation and searching, graphs and geometric problems. Analysis techniques include asymptotic worst case and average case, as well as amortized analysis. Average case analysis includes the development of a probability model. Techniques for proving lower bounds on complexity are discussed, along with NP-completeness. Students learn (1) a range of advanced algorithms in areas such as string searching and graph algorithms, (2) the notion of complexity classes for algorithmic tasks, completeness and hardness, and proofs by reduction, and (3) distributed and probabilistic algorithms.</p>						
ITCS	508	Systems Programming	3	0	3	
<p>This course provides computer engineering students with system design software and hardware experience. Students are required to implement and test interface software, written in assembly language and C, that controls hardware devices on the personal computer such as the keyboard, the CRT, serial and parallel ports, and PCI-based controllers. Students also are required to build a basic computer system using off-the-shelf components. This course includes a laboratory. This is an introduction to computer architecture and systems programs, machine organization, instructions, data representation, and addressing. Topics covered include assemblers, linkers, loaders, operating systems, and elementary assembler language programming.</p>						
ITCS	509	Artificial Intelligence	3	0	3	
<p>This course focuses on solving real world problems using techniques and methods of Artificial Intelligence (AI) from a computer science perspective and familiarizes students with the present and future of AI. This course is to cover two types of problem solving approaches: search-based and knowledge-based. The course is also to explore advanced AI techniques, such as ANN, EC, and fuzzy logic.</p>						
ITCS	510	Data Mining	3	0	3	
<p>This course introduces the main processes and main techniques of data mining. It includes: association rule learning, classification approaches such as inductive inference of decision trees and neural network learning, clustering techniques, and research topics such as inductive logic programming, multi-relational data mining and time series mining.</p>						
ITCS	511	Advanced Database Systems	3	0	3	
<p>This course explores databases as the underlying framework of information system which store, manipulate and retrieve data with particular emphasis on the relational model and relational systems. Students are expected to design and implement a relational database within the concept of an information system using appropriate analysis and modeling techniques and a modern Database Management System as well as to understand RDBMS, advantages and disadvantages of different query languages and concurrency control and basic query processing.</p>						
ITCS	514	Object Oriented Software Engineering	3	0	3	
<p>This course focuses on object-oriented approach necessary to solve advanced and complex real-world problems. It is to understand a range of specialized theories, principles and concepts of object-orientation; object oriented software development process; the use of object-oriented design tools such as UML for modeling problem solutions. Topics include: Problem analysis and specification of software requirements; object-oriented design; reusability and design patterns; unit testing; advanced software development methodology such as Adaptive Object-Oriented Software Development.</p>						
ITCS	515	Business Intelligence	3	0	3	
<p>Business intelligence (BI) refers to the science of using advanced analysis and reporting tools to discover the necessary information used by an organization to make sound decisions. In this course, students will learn how to maximize business advantage by locating, extracting and dispersing information. Moreover, students will be introduced to some BI software and tools such as Microsoft BI. The covered topics include business intelligence framework, infrastructure, and current techniques used to extract, transform, and analyze business data, and to discover knowledge to support business decision-making.</p>						
ITCS	516	Object-Oriented Programming	3	0	3	
<p>An intensive course on object-oriented programming (OOP) paradigm and advanced techniques of the Java language. Topics include: Java Object Model, Classes and Objects, Constructors and Destructors, Inheritance, Virtual Functions and Polymorphism, Operator Overloading, Exceptions, Generic Programming and Standard Template Library.</p>						
ITCS	517	Data Structures & Algorithms	3	0	3	
<p>This course emphasizes data structures and the development and analysis of their associated algorithms. Data structures and algorithms form a major component of any software system. Students learn to make intelligent decisions about alternative techniques, choosing from existing data structures and algorithms or designing his/her own when necessary. Topics span: asymptotic analysis of algorithms, methods for proving correctness, implementation of algorithms.</p>						
ITCS	518	Mobile Application Development	3	0	3	
<p>The course discusses the principles of design and development for mobile device applications. Students will learn how to develop, simulate, and test Android applications. The topics covered include Android platform; mobile hardware; cell networks; mobile architectures, operating systems, languages, development environments and simulators, and user interfaces; location-based services; data storage and retrieval.</p>						
ITCS	520	Big Data Analytics	3	0	3	ITCS 511
<p>This course covers foundational techniques and tools required for data science and big data analytics. The course focuses on concepts, principles, and techniques applicable to any technology environment and industry with emphasis on systems and algorithms for large-scale advanced data analysis. Topics covered include concepts and algorithms for building big data systems, data analytics lifecycle, basic and advanced analytics methods, and emerging big data technology and tools</p>						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Information Technology Masters</b>						
ITCS	526	Cloud Computing	3	0	3	
This course provides an overview of cloud computing that uses Internet as the platform. It discusses cloud concepts and capabilities across the various available service models including: Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), and Software-as-a-Service (SaaS). In addition; it covers accessing cloud system, cloud computing security and performance.						
ITCS	527	Advanced Networking	3	0	3	
This course is to describe the advanced concepts of networking, Networking and interconnectivity, Application networking services such as design the architecture and services of email systems and describe the role of networking in file service applications, network management, and wireless and mobile networking.						
ITCS	528	Cyber Security	3	0	3	
This course is to critically understand the advanced techniques of security systems development, different mechanisms used to protect the elements of information systems and specifically transmitted, stored, and processed data. Mechanisms, such encipherment, authentication, and information hiding.						
ITCS	529	Parallel and Distributed Systems	3	0	3	
This course covers the architecture and enabling technologies of parallel and distributed systems and their innovative applications. It will cover scalable multiprocessors, distributed clusters, P2P networks, computational Grids, and virtual machines. The course aims to acquaint students with state-of-the-art supercomputers and distributed systems for high-performance computing, e-commerce, and web-scale Internet applications.						
ITCS	530	Bioinformatics Computing	3	0	3	
Bioinformatics is the study of the structure and function of genes and proteins through the use of computational analysis, statistics, and pattern recognition and the use of databases, search and web-based interfaces to store, annotate and retrieve gene, protein and other information. This course focuses on the computing aspects of Bioinformatics. It introduces the broad frontiers of bioinformatics topics from fundamental algorithms to practical tools. Course topics include an overview of some bioinformatics resources, pattern matching, sequence alignment, gene prediction, fragment assembly, multiple alignment, phylogeny, statistical and machine learning approaches.						
ITCS	534	Advanced Distributed Systems	3	0	3	
The internet and recent advances in client-server and peer-to-peer open distributed computing such as Java and many types of middleware has presented the opportunity of combining these highly sophisticated distributed systems technologies with a range of information systems application domains. The distributed information systems will deliver faster, highly reliable applications that are accessible globally. This course affords students the opportunity to solve a distributed systems development problem by application.						
ITCS	535	Internet of Things (IOT)	3	0	3	
This course will give students a theoretical and practical grounding in Internet of Things (IoT), covering IoT systems architecture, hardware platforms, embedded programming and debugging, networking paradigms for IoT, secure operation, cloud integration, and simple data analytics. The course enables the students to design, build, evaluate, document, and demonstrate an IoT prototype.						
ITCS	538	Machine Learning	3	0	3	ITCS 509
This is an advanced course on machine learning, focusing on recent advances in machine learning algorithms in different learning types, such as supervised, unsupervised and reinforcement. The course covers advanced machine learning algorithms and techniques, such as neural networks, classification of data, automatic regression and unsupervised model fitting. Applications are, for example, image and speech analysis, medical imaging, and exploratory data analysis in natural science and engineering.						
ITCS	539	Digital Forensics	3	0	3	ITCS 528
This course involves the investigation of computer-related crimes with the goal of obtaining evidence to be presented in a court of law. It will help the students to learn the principles and techniques for digital forensics investigation and the spectrum of available computer forensics tools. It emphasizes the core forensics procedures to ensure court admissibility of evidence, as well as the legal and ethical implications. In addition, Students will learn the forensic investigation on Windows operating systems with different file systems, forensic procedures, review and analyze forensics reports.						
ITCS	540	Advanced IT Project Management	3	0	3	
This course introduces advanced IT project management concepts and capabilities. It focuses on applying specialized and professional project management methodologies such as moving from Waterfall to Agile project management. Through lectures, reading, discussions, exercises and projects, students will become more proficient with advanced IT project management terminology, techniques, and technologies. Students will also apply industry-standard project management in a framework of productive team dynamics, consumer frame of reference, and organizational.						
ITCS	541	Advanced AI Applications	3	0	3	ITCS 509
This course is to cover different advanced AI applications, such as, computer vision and pattern recognition, natural language processing, Healthcare, and Robotics. Students will learn specialized theories and concepts, techniques, and development methodologies.						
ITCS	550	Research Methods & Modeling	3	0	3	Completion of at least 9 credits
The course provides knowledge and skills in useful qualitative and quantitative research methods with the aim of enabling Master students to carry out their independent research and to execute and plan their research projects in IT and Computer Science. Particular focus of the course is to enable students to independently do literature review, to formulate their research problem, to conceptualize their research design and to write their final report. It also familiarizes students with Ahlia University guidelines for Master dissertation.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Information Technology Masters</b>						
ITCS	598	Project Dissertation in Information Technology	0	6	3	
The student conducts a study on a topic in the field of computer science under the supervision of a faculty member. The final written manuscript which includes problem identification, methodology, research evaluation and discussion of the findings is subject to a panel evaluation.						
ITCS	599	Dissertation in Information Technology & Computer Science	0	24	12	ITCS 550 AND Completion of at least 21 credits
A structured supervised in-depth study on a pre-approved topic in the field of information technology can entail one of three methodologies: (1) a literature-focused study which aims to critically discuss the literature within a specified topic area; (2) a research focused study which aims to draw on practical data to assess critically a specified area or topic; or (3) a practical software development study which aims to explore an area or ideas, or demonstrate a concept through appropriate software development testing and critical analysis. The dissertation engages the student in a progressive course of intellectual discourse involving problem identification, methodology, research, evaluation and recommendation that culminates in the production of manuscript subject to public defense.						
ITFN	500	Object Oriented Programming	3	0	3	
An intensive course on object-oriented programming (OOP) paradigm and advanced techniques of the Java language. Topics include: Java, Object Model, Classes and Objects, Constructors and Destructors, Inheritance, Virtual Functions and Polymorphism, Operator Overloading, Exceptions, Generic Programming and Standard Template Library.						
ITFN	501	Data Structures & Algorithms	3	0	3	
This course emphasizes data structures and the development and analysis of their associated algorithms. Data structures and algorithms from a major component of any software system. Students learn to make intelligent decisions about alternative techniques, choosing from existing data structures and algorithms or designing his/her own when necessary. Topics span: asymptotic analysis of algorithms, methods for proving correctness, software implementation of data structures and their associated algorithms.						
ITFN	502	System Architecture	3	0	3	
To discover systems architecting as a critical part of IT systems engineering development. In this course, students will learn the classic methods associated with systems architecting and extend those concepts to complex systems. Gain the skills necessary to apply practical management methods, focusing on the role of the systems architect on a development team.						
ITMS	523	Multimedia Information Systems	3	0	3	
This course constitutes an approach to multimedia information systems that are concerned with the capture, storage and presentation of information in a variety of forms, including text, image, video and audio. It presents a general overview of electronic multimedia documents, a deep coverage of XML and XML Databases with particular focus on: (1) developing skills in the design and management of multimedia information systems projects; (2) employing evaluation techniques for multimedia authoring systems and multimedia user interfaces; and (3) developing an understanding of the current state of multimedia applications and their impact on organizations						
<b>Information Technology</b>						
ETHC	392	Ethics and Professional Practice in IT and Engineering	3	0	3	Completion of at least 66 credits
The course explores and discusses key ethical, legal and professional issues and responsibilities in computing and other related fields. It examines emergent technologies within frameworks that highlight their ethical, legal and social implications. Topics include privacy, confidentiality, security, intellectual property, software piracy, cybercrime, digital identity, software reliability, risk and safety and professional standards of conduct and codes of ethics. The students critically examine current and relevant research and particular case studies to enhance their understanding of the subject. The students learn that careers in IT and Computer Engineering are not purely technical professions but ones with moral, legal and social implications that impact the everyday lives of professionals.						
INTR	441	BSIT Internship	0	12	6	Completion of at least 90 credits
INTR	463	BSIT Internship	0	0	3	Completion of at least 90 credits
In today's turbulent economic environment, a country workforce is increasingly pivotal to business success. Stemmed from the desire and sense of responsibility that Ahlia University has against the society and their own students, and as part of their vision, of being leaders in the market of higher education, they do understand the need to invest in their capital made of partially their students in order to equip the market with talented workforce. Based on this INTR 463 course was introduced, representing a structured opportunity to incorporate academic, professional and personal skills development which enables the student to gain a planned and directed learning experience. It enables the student to integrate knowledge gained through their classroom learning with the competencies made available through actual experience in a professional setting. The internship programme requires a minimum of 240 hours of work at the internship worksite. Students will receive academic credit after a successful completion of the programme. The numbers of credits that are earned by the student as a result of successful completion of the internship programme are 3 credits.						
ITCS	101	Introduction to Computers & IT	2	2	3	
This course is an introduction to computers and information technology. The aim of the course is to introduce computers (their uses, development, components, hardware and software) to the students and to teach them how to use MS Office.						
ITCS	121	Computer Programming	2	2	3	ITCS 101
This is an introductory course in programming using Visual Basic. Topics include elementary data types and structures, arithmetic and logical operators, declarations and input/output and control structures. Emphasis is placed on the development of problem-solving skills.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Information Technology</b>						
ITCS	122	Introduction to Programming Techniques	2	2	3	ITCS 101
This course introduces the fundamental concepts of programming. The covered topics are primitive data types and operators, input/output, control statements, methods and functions, arrays and strings, classes and objects, and an introduction to Java applications and object-oriented design techniques. Emphasis is placed on the development of problem-solving skills.						
ITCS	201	Object-Oriented Programming I	2	2	3	ITCS 122
This course emphasizes on object-oriented programming techniques using Java. It covers the implementation of object oriented concepts, such as: classes, objects, inheritance and polymorphism.						
ITCS	202	Computer System	3	0	3	ITCS 101
This course provides broad background knowledge of computer hardware and software structures encompassing modern computer systems (such as operating systems, computer networks and object-oriented and component-based software information systems). This course imparts an understanding of systems thinking and covers key systematic structures in computer hardware, software and information systems.						
ITCS	203	Foundations of Computing	3	0	3	MATH 102
The course covers the fundamental concepts of discrete mathematics that are widely used in information technology and engineering. The covered topics are logic and mathematical reasoning, sets, functions, counting and combinatorial techniques, graphs and trees.						
ITCS	205	Internet Technology	3	0	3	ITCS 101
ITCS	209	Discrete Structures	3	0	3	MATH 102
The course covers the fundamental concepts of discrete mathematics that are widely used in information technology and engineering. The covered topics are logic and mathematical reasoning, sets, functions, counting and combinatorial techniques, graphs and trees.						
ITCS	214	Computer Systems	3	0	3	ITCS 101
This course is an introduction to the fundamental concepts of computer systems and their performance analysis. It explores how computers execute programs and manipulate data. Topics covered include: data representation of primitive data types, machine-level programming, digital logic, memory organization and management, I/O devices and storage devices. In addition, it covers the techniques used to improve computer performance and to solve its problems.						
ITCS	221	Object-Oriented Programming II	2	2	3	ITCS 201
This course is built on the information gained from the previous Java programming courses. It concentrates on modelling the GUI and advanced software programming issues such as: Java Applets, Multimedia (applets and applications) and Multithreading.						
ITCS	222	Visual Programming	2	2	3	ITCS 122
This course introduces Windows programming environment. Students learn how to write and develop programs with a polished graphical user interface (GUI) using event-driven programming language, which is Visual Basic. Topics include data types and structures, arithmetic and logical operators, declarations and input/output, control structures, and functions. Emphasis is placed on the development of problem-solving skills.						
ITCS	223	Models of Computations and Systems	3	0	3	ITCS 203
This course consists of three topical areas. The first part includes regular languages, deterministic and nondeterministic finite automata, and the pumping lemma for regular languages. The second part covers pushdown automata, context free languages and grammars, the pumping lemma for context free languages, and Turing machines. The last part covers decidability and an introduction to complexity theory.						
ITCS	224	Data Structures	2	2	3	ITCS 201
This course introduces different data structures such as: arrays, linked list, stacks, queues, hash tables, and graphs. It covers the design and analysis of different algorithms to manipulate these data structures, such as: create, traverse, delete data, and insert data. The students will implement the data structure algorithms and apply them using a programming language.						
ITCS	225	Introduction to Information Security	3	0	3	ITCS 101
This course provides fundamental elements of information security. Areas cover confidentiality, integrity, and availability of systems. Vulnerabilities and attacks to the systems. Basics of cryptography for information hiding, Security tools, ethical issues, Security management. Through weekly lectures and assignments students will gain a high-level understanding of information security.						
ITCS	226	Advanced Programming	2	2	3	ITCS 201
This course is built on the information gained from the previous programming courses. It concentrates on advanced concepts of programming such as tuples, lambda, Django Framework, multithreading, Remote Method Invocation (RMI), and Application Programming Interface (API).						
ITCS	228	Introduction to Mobile Systems	3	0	3	
ITCS	301	Interactive Systems	3	0	3	ITCS 222
ITCS	302	Introduction to Networking	3	0	3	ITCS 202

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Information Technology</b>						
ITCS	303	Design and Analysis of Algorithms	2	2	3	ITCS 224 AND ITCS 209
The course covers classical techniques and paradigms used in the design and analysis of algorithms. Some of the covered techniques are induction and recursion, divide and conquer, dynamic programming, and greedy approach. Techniques like backtracking and randomization are also introduced to deal with NP-Complete problems. Students will be able to practice their skills on many well-known algorithms and data structures designed to solve practical problems.						
ITCS	304	Control Systems	3	0	3	ITCS 300
ITCS	305	Internet Services & Securities	3	0	3	ITMS 205 OR ITCS 205
The course focuses on the key aspects of Internet security. It imparts knowledge of internet services, vulnerabilities of computer networks and techniques for protecting data and networks, symmetric and asymmetric cryptography, authentication, malicious software, and issues in privacy.						
ITCS	311	Software Engineering Methods	3	0	3	ITCS 201
This course imparts knowledge and skills necessary for the design of object-oriented software systems in terms of design concepts and methods (specifically the notation, models, strategies and processes for design and design documents using a recognised object-oriented method). Emphasis is placed on use of a Use-Case-driven method that is built on the Unified Modelling Language (UML). Students can expect to learn how to both read and write well-formed designs that employ UML.						
ITCS	313	Software Engineering I	2	2	3	ITCS 201
This course is to give a clear understanding of the concepts of software engineering. It imparts knowledge of developing a software system from scratch, different software process models, software requirement engineering, and software design with object oriented technology using UML.						
ITCS	316	Desktop Publishing	2	2	3	
ITCS	321	Professional Software Practice	3	0	3	ITCS 311
This course provides skills and knowledge involving legal, social and ethical issues involved in professional software practice. It underscores rules of professional conduct to which professional software bodies subscribe to prepare students for a career in professional software practice.						
ITCS	322	Telecommunication Networking	3	0	3	ITCS 302
ITCS	323	Database Systems: Design and Application	2	2	3	ITCS 222
This course provides a comprehensive knowledge of database (DB) development and management by using database management systems (DBMS). It details the concepts necessary for designing, implementing and using database systems. Topics include database and file system, database design, relational data model, normalization of relations and data modeling using entity-relationship diagrams.						
ITCS	324	Software Analysis and Verification	3	0	3	ITCS 311
The principal aim of this course is to hone skills in the analysis, development and testing of code, executing a program, with a view to improving efficiency or locating certain types of faults. The two topics, of software analysis and software testing, are linked through considering software analysis techniques that may be used to support testing. Students actively participate in the main software development activities that straddle the production of an initial implementation and the delivery of the complete system.						
ITCS	327	Software Engineering II	3	0	3	ITCS 313
The aim of this course is to hone skills in developing and testing of code, executing a program, and improving software's performance or locating certain types of faults. Students actively participate in the main software development activities that straddle the production of an initial implementation and the delivery of the complete system. The following topics are covered: software implementation, software testing in the broader context of software engineering, Software Quality that testing aims to achieve, Control flow testing, and Data flow testing.						
ITCS	328	Mobile Information Device Programming	2	2	3	ITCS 221
The Android platform has become one of the top mobile platforms in the world; from smartphones to tablets, the Android platform powers these popular devices. This course covers the Android system, the Android development tools, and all that is needed to create Android applications, using the Java programming language. Learn how to create user interfaces, use the storage and SQL databases in Android, consume services on the web and use the sensors. Students will leave this class being able to write Android programs.						
ITCS	333	Introduction to SQL (ODBA - 1)	2	2	3	ITCS 323
This course provides students with extensive knowledge and key skills needed to understand, manage, maintain and query Oracle database. This covers working with different data types, different functions, different queries and linking the DB to an interface designed using a programming language.						
ITCS	334	Introduction to PL/SQL (ODBA - 2)	2	2	3	ITCS 333
This course provides students with critical knowledge and advanced training on PL/SQL that represents programming extensions to SQL. Students learn about PL/SQL syntax, blocks and programming constructs as well as the advantages of integrating SQL with those constructs. In addition, students learn how to design reusable programs units such as procedures and functions. Moreover, it helps student in learning how to use iSQL* Plus as a development environment; for writing PL/SQL programs units and execute them efficiently.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Information Technology</b>						
ITCS	335	IT Infrastructure	2	2	3	ITCS 214
This Course provides the fundamental networking skills required to deploy and support Network Operating System (NOS) in most organizations. It covers IP fundamentals, remote access technologies, and more advanced content including Software Defined Networking. This course is intended for existing IT professionals who have some networking knowledge and experience and are looking for a single course that provides insight into core and advanced networking technologies in NOS.						
ITCS	336	Database Administration I	2	2	3	
This course gives students critical knowledge and expertise on administrating the industry's most advanced database management system (Oracle). This includes: installing Oracle Database 11g, controlling the databases, backup and recovery and administrating users security.						
ITCS	341	System Administration I	2	2	3	ITCS 214
This course provides broad knowledge and experience for IT professional. Student will have the knowledge required to assemble components based on customer requirements, install, configure PCs and software for end users, and understand the basics of networking, properly and safely.						
ITCS	349	IT Innovation and Entrepreneurship	3	0	3	Completion of at least 66 credits
The course explores and discusses the principles of entrepreneurship, the entrepreneurial mindset, with guidance on the specialized field of technopreneurship and developing entrepreneurial skills through hands on learning. The course examines the creation of a new by transforming innovative ideas into commercially viable businesses for profit or social ends. The course explores the tools and frameworks required for managing, commercializing and marketing technological innovation, which equips the students with the understanding required to successfully launch their product.						
ITCS	401	Software Project Management	2	2	3	ITCS 311
The course focuses on the key aspects of software project management. It develops the ability of managing software projects, including organizing the software development team; selecting the best approach and tailoring the process model; estimating software cost and schedule; planning and documenting the plan; risk management and resource allocation.						
ITCS	402	Intelligent Systems	3	0	3	ITCS 303
ITCS	403	Knowledge Systems Engineering	3	0	3	ITCS 303
ITCS	404	Information Security Engineering	2	2	3	ITCS 327
This course is to cover technical and administrative aspects of Information Security and Assurance. Topics covered: Information Security Concepts, The Need for Security, Security Services and Mechanisms, Security System Development, and Security Mechanisms, such as: Cryptographic systems, Information Hiding, Entity Authentication, and Digital Signature.						
ITCS	407	IT Project Management	2	2	3	ITCS 327
The course focuses on the key aspects of IT project management. It develops the ability of managing IT projects, including organizing the IT project development team; selecting the best approach and tailoring the process model; estimating IT project cost and schedule; planning and documenting the plan; risk management and resource allocation.						
ITCS	409	Operating Systems	3	0	3	ITCS 214 OR ECCE 303 OR ITCS 303
This course is to cover the concepts, structure, and functions of operating system (OS). Students will learn how an operating system provides an environment in which users can execute programs in a convenient and efficient manner. Topics covered include computer system and OS structure; process management: process, threads, CPU scheduling, process synchronization, deadlocks; memory management; mass storage management, and file systems.						
ITCS	413	Intelligent Systems	2	2	3	ITCS 303
This course is to cover the specialist theory, concepts, and methods of intelligent systems. It enables students to solve complex problems using various Artificial Intelligence (AI) techniques, and to develop effective intelligent systems using range of AI tools. It covers the concepts of Intelligent agent and problem formulation; search-based problem solving techniques, such as A*; knowledge-based problem solving techniques: knowledge representation, knowledge reasoning, and expert systems.						
ITCS	418	Mobile Enterprise Systems	3	0	3	ITCS 202 OR ECTE 201
This course illustrates the mobility demand within the enterprise systems. It covers such systems behaviours, users, services and security.						
ITCS	421	Information Technology: Strategic & Managerial	3	0	3	ITCS 323
ITCS	422	Distributed Systems	2	2	3	ITCS 409
The course focuses on the key aspects of distributed systems. It imparts knowledge of distributed systems principles, design, and implementation. It covers transparency in a distributed system, architectures, processes, virtualization, RPC, message passing, communication, quality of service, and naming.						
ITCS	423	Data Security	3	0	3	ITCS 322
ITCS	424	Information Systems	3	0	3	ITCS 202
This course provides an overview of information systems from an organizational, managerial, and technical perspective. The topics covered will focus on the strategic role of information systems and information technology in business processes, change and knowledge management, group and individual decision-making, and electronic commerce.						



## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Information Technology</b>						
ITCS	425	Web Engineering	2	2	3	ITMS 205 AND ITCS 327
Modern web applications are complex systems; therefore, a systematic approach is required for developing web-based information systems. This course is to study the concepts, methods, and techniques needed for developing web-based applications. Topics covered: concepts and architecture of web-based information systems, web system development phases, web technologies and the desired quality characteristics of web applications.						
ITCS	426	3D Graphics	2	2	3	ITCS 307
ITCS	427	Mobile Computing	2	2	3	ITCS 221 AND ECTE 329
This course is to cover the concepts and technologies of mobile computing such as 2G/3G/4G networks, and mobile applications development. It imparts knowledge of mobile communication architectures and related communication protocols in addition to location management and messaging. The course also covers the mobile applications development tools and techniques needed to create efficient and effective mobile applications.						
ITCS	428	Wireless Systems	3	0	3	ITCS 322
ITCS	431	Introduction to Data Analytics	2	2	3	ITCS 323
This course will introduce students to data analytics and equip them with some of its basic principles and tools. Students will learn concepts, techniques, and tools they need to deal with various facts of data analytics. Topics that will be covered include data formats, loading, and cleaning; data storage in relational and non-relational stores; data governance, data analysis using supervised and unsupervised learning using standard tools. In addition, this course would enable students to identify, locate, analyze, and report on business data sources both qualitatively and quantitatively.						
ITCS	433	Database Administration I (ODBA - 3)	2	2	3	ITCS 334
This course gives students critical knowledge and expertise on administrating the industry's most advanced database management system (Oracle). This includes: installing Oracle Database 11g, controlling the databases, backup and recovery and administrating users' security.						
ITCS	434	Database Administration II (ODBA - 4)	2	2	3	ITCS 433
The ODBA-4 course provides critical information on Diagnostic Resources, Globalization Support, Managing Resources, Flashback Databases, and Recovering from user Errors. It also provides details on monitoring and Management of Memory as well as Automating Tasks with the Scheduler.						
ITCS	435	Database Administration II	2	2	3	ITCS 336
This course provides critical information on diagnostic resources, globalization support, managing resources, flashback databases and recovering from user errors. It also provides details on maintaining and management of memory as well as automating tasks with the scheduler.						
ITCS	441	System Administration II	2	2	3	ITCS 341
This course provides critical knowledge and experience for IT professionals. Student will have the knowledge required to assemble components based on customer requirements, install, configure and maintain devices, PCs and software for end users, understand the basics of networking and security/forensics, properly and safely diagnose, resolve and document common hardware and software issues while applying troubleshooting skills. Student will also provide appropriate customer support; understand the basics of virtualization, desktop imaging, and deployment.						
ITCS	442	Virtualization	2	2	3	ITCS 335
This course is designed primarily for IT professionals who have some experience with NOS. It is designed for professionals who will be responsible for managing storage servers and computing elements by using NOS, and who need to understand the scenarios, requirements, and storage and compute options that are available and applicable to NOS.						
ITCS	443	Security Services	2	2	3	ITCS 404
Instructor-led course teaches IT professionals how to deploy and configure Active Directory Domain Services (AD DS) in a distributed environment, how to implement Group policy, how to perform backup and restore, and how to monitor and troubleshoot Active Directory-related issues with NOS. Additionally, this course teaches students how to deploy other Active Directory server roles, such as Active Directory Federation Services (AD FS) and Active Directory Certificate Services (AD CS). This course is primarily intended for existing IT professionals who have some AD DS knowledge and experience and who aim to develop knowledge about identity and access technologies in NOS.						
ITCS	444	Cloud Services Implementation	2	2	3	ITCS 442
This course teaches IT professionals how to provide and manage services in cloud services. Students will learn how to implement infrastructure components, such as virtual networks, virtual machines, containers, web and mobile apps, and storage in the cloud. Students also will learn how to plan for and manage cloud identity, and configure cloud identity integration with on-premises Active Directory domains.						
ITCS	452	Advanced Mobile Computing	2	2	3	ITCS 427
This course will provide students with both broad and in-depth knowledge, and a critical understanding of advanced mobile computing from different viewpoints: infrastructures, principles and theories, technologies, and applications in different domains. In addition, this course emphasizes concepts pertains to Mobile Adhoc Network and Wireless Sensor Network and different applications based on routing protocols. The course will provide an advanced in-depth overview of the mobile computing subject area, including the latest research. This course aims at the discovery of comprehensive and important issues in mobile computing and communications.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Information Technology</b>						
ITCS	499	Major Project	0	6	3	IERM 498 AND ETHC 392
Each student is required to select a theoretical and/or a practical problem related to his major area, and works under the supervision of a faculty member. All stages of project development should be emphasized including problem identification, library search, planning, design and/or construction of equipment upon completion of the project, the student must submit a final written report outlining the various phases of the project and make an oral presentation.						
ITOT	510	Data Management	3	0	3	
This course explores the importance of Data Management in the in IoT, and how it can influence behavior. Data management is critical for effective interaction between layers, products, and devices in the Internet of Things. Students are expected to design and implement IoT applications that manage big data, streaming data, and/or distributed data. This course covers algorithms/ techniques for specific patterns for distributed processing on the devices as well as techniques for fault-tolerant data processing.						
ITOT	511	IoT Protocols and Architectures	3	0	3	
This course provides specialist knowledge in networking protocols and architectures used in the Internet of Things (IoT). In particular, the course will examine the latest protocols and protocol stacks for low power wireless networking in both short-range and long-range settings. It will include in-depth discussion of protocols and algorithms at various layers of the network stack including medium access control, network, application, as well as security aspects unique to IoT.						
ITOT	512	Communications Interfaces	3	0	3	
This course is to describe the advanced concepts of Internet of Things (IoT) communication interfaces, Wireless Sensor Networks, Networking and interconnectivity. The course covers IoT communication interfaces applied for Machine to Machine (M2M) scenarios and related services and describe the concepts of IoT networking, IoT Devices connectivity, advanced IoT networking concepts such as resource identification and management, IoT routing on communication interfaces, thread architecture and mobile networking.						
ITOT	513	Security in IoT	3	0	3	
This course focuses on advanced topics of Internet of Things (IoT) security and privacy challenges. With IoT being deployed in various applications, IoT security and privacy issues become major concerns. The course will systematically analyze IoT security from hardware, communication, and system perspectives.						
ITOT	521	IoT Application and Design	3	0	3	
This course covers the emerging concept of Internet of Things (IoT) systems which concentrates on objects interacting with people, information systems, and other objects, known as IoT based solutions. The course will focus on creative thinking and on hands-on project development in multi-discipline contexts.						
ITOT	599	Dissertation in Internet of Things	0	24	12	ITCS 550 AND Completion of at least 21 credits
The Master's Dissertation in Internet of Things (IoT) is a comprehensive and research-intensive program designed to equip students with advanced knowledge and skills in the rapidly evolving field of IoT. This course serves as the pinnacle of the master's degree, offering students the opportunity to delve deeply into IoT technologies, applications, and challenges while fostering the development of critical research and analytical capabilities.						
ITRD	498	Research and Development in Information Technology	3	0	3	Completion of at least 90 credits
The course provides knowledge and skills in useful research and development methods with the aim of enabling students to carry out their major projects. The course helps the students to plan and execute their research and development projects in Information Technology or Multimedia Science. Particular focus of the course is to enable students to do literature review, to formulate their problem statement, to conceptualize their product design and to write their proposed project and final report. It also familiarizes students with Ahlia University guidelines for ITCS/MS 499 Project Guidelines.						
<b>Multimedia</b>						
INTR	442	BSDSM Internship	0	12	6	Completion of at least 90 credits
INTR	464	BSMS Internship	0	0	3	Completion of at least 90 credits
In Today's turbulent economic environment, a country workforce is increasingly pivotal to business success. Stemmed from the desire and sense of responsibility that Ahlia University has against the society and their own students, and as part of their vision, of being leaders in the market of higher education, they do understand the need to invest in their capital made of partially their students in order to equip the market with talented workforce. Based on INTR 464 course was introduced, representing a structured opportunity to incorporate academic, professional and personal skills development which enables the student to gain a planned and directed learning experience. It enables the student to integrate knowledge gained through their classroom learning with the competencies made available through actual experience in a professional setting. The internship programme requires a minimum of 240 hours of work at the internship worksite. Students will receive academic credit after a successful completion of the programme. The numbers of credits that are earned by the student as a result of successful completion of the internship programme are 3 credits.						
ITMS	201	Introduction to Multimedia Systems	3	0	3	ITCS 101
This Course focuses on the theories, elements, and hardware/software components of multimedia systems. And this course emphasis on topics relevant to the study and construction of multimedia systems such as digital image editing, digital sound, and video editing, animation, web page development, and interactive presentations. Overall, the aim of the course would be to cover all aspects related to multimedia systems and applications ranging from basic concepts and fundamentals to more advanced discussions on the state-of-the-art in this field.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Multimedia</b>						
ITMS	205	Internet Applications and Services	2	2	3	ITCS 101
This course focuses on designing and implementing websites using HTML5 and CSS3. Students get hands-on practice working with fundamentals through superior techniques to get the most out of their experience by teaching them the basics coding for web design, HTML5 and CSS3. In addition, students learn the new features of HTML5 and CSS3 styles.						
ITMS	207	Graphics Design I	2	2	3	ITMS 201
This course will cover the Graphic design elements and design principles. By applying visual hierarchy and page layout techniques, designers use typography and pictures to meet users' specific needs and focus on the logic of displaying elements in interactive designs, to optimize the user experience.						
ITMS	212	Multimedia Design	3	0	3	ITMS 201
This course build a range of interactive digital media analysis and design knowledge and skills, such as, web design, mobile interface design, experience design, motion graphics, and 2D animation. It is to cover different modelling techniques and analysing user needs.						
ITMS	221	Sound Engineering	2	2	3	ITMS 201
This course to explain the fundamental concepts of acoustics and the operating principles of all the key components of a live sound reinforcement system. Using easy to understand language, the design and implementation of the live sound system will be covered in detail.						
ITMS	301	Introduction to Interactive Systems	3	0	3	ITCS 222
This course introduces and develops concepts that are central to the design of effective interactive systems: human aspects of interactive system design, basic technologies that are commonly employed, issues of design and design support, and evaluation approaches. A broad range of interactive systems that dominate Information Technology are considered from word processors.						
ITMS	302	Human Computer Interaction	2	2	3	ITCS 222
The course is intended to introduce the concepts of human-computer interaction (HCI), a discipline concerned with the design, evaluation, and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them. It will cover theories of human psychology, human information processing, user interface design principles, information presentation, and issues involved in using technologies for different purposes.						
ITMS	305	Video Production	2	2	3	ITMS 212
Fundamentals of video production, including the techniques and the aesthetics of editing. It emphasizes hands-on production experience, using digital video. The focus of the course is dedicated to video editing (Computer Based Editing). Students will develop an understanding of the wide range of business aspects within the industry.						
ITMS	307	Multimedia Softwares I	2	2	3	ITMS 201 OR ITMS 205
This course is to cover the concepts and technologies as two dimensional: one dimension introduces the students to the essential practical packages such as the world of digital video, video-capture card, a quick tour of Premiere, Premiere editing video and transitions, a quick tour of Photoshop, adjusting color in images, automatically fixing colors, working with text. The other dimension illustrates the multimedia project management process theoretically.						
ITMS	313	Game Development I	2	2	3	ITCS 221 AND ITCS 209
This course introduces the principles and essential concepts of game programming using C#. The following concepts will be addressed: data types, logic flow control, conditions, loops, file I/O, functions, classes and objects. The course explores game-related concerns such as the game loop, rules, and game object design and implementation. During the course, students will be introduced to modern game platforms, and the effect of their differences, evolution, and limitations, on game programming. Through this course, the student will be able to develop and implement 2D games through the gained tools and techniques. Students will experience the complete game development lifecycle using a high-level game development framework C# to design and develop a computer game.						
ITMS	316	Photography Techniques	2	2	3	ITMS 201
This course will introduce the fundamentals of photographic image-making using digital cameras, and specialized software tools to produce digital output.						
ITMS	317	Graphic Design II	2	2	3	ITMS 207
This course builds on the knowledge gained from a previous course (ITMS 207). The students will get hands on industry skills that they need for a career in graphic design. The course focus mainly on two-dimension graphics and how to create them using the appropriate software.						
ITMS	321	Electronic Media and Law	3	0	3	ITMS 201
This course covers classical techniques and paradigms used in rules and regulations that govern the various aspects related to electronic media, such as: broadcasting, copyright, advertising, etc. Students will acquire the required knowledge and skills in legal concepts and build law foundation on this evolved field.						
ITMS	325	Web Applications Design	2	2	3	ITMS 205 OR ITCS 205
This course introduces students to the basic concepts and terminology of dynamic web sites. Students will have a better understanding of the different disciplines that collectively make up dynamic web sites: client side scripting (JavaScript) and server side scripting (PHP).						
ITMS	327	Multimedia Softwares II	2	2	3	ITMS 307
This course builds on the knowledge gained from a previous course (ITMS 307). The students will practice mainly two dimension graphs and animation professional software's. The course will cover vector graphics and sound processing, how it works and how to create them using the appropriate software						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Multimedia</b>						
ITMS	333	Dot NET 2.0 Developments (MCTS - 1)	2	2	3	ITCS 222
This course provides students with the knowledge and skills needed to understand, Core Programming, Object-Oriented Programming, General Software Development, Web Applications, Desktop Applications, Databases, Build the User Interface by Using HTML5, and Format the User Interface by Using CSS, Code by Using JavaScript.						
ITMS	334	Data Access with Visual Studio 2005 (MCTS - 2)	2	2	3	ITMS 333
The course provides students with the knowledge and skills to develop data-access applications by using the Microsoft .NET Framework and Microsoft Visual Studio 2005. This course also describes how to access data and how to implement database functionality by using Microsoft ADO.NET 2.0 and Microsoft SQL Server 2005. It describes how to locate, edit, and transform XML by using XPath and Extensible Style sheet Language for Transformations (XSLT).						
ITMS	335	Web Programming I	2	2	3	ITCS 221
This course provides students with the knowledge and skills needed to understand, Core Programming, Object-Oriented Programming, General Software Development, Web Applications, Desktop Applications, Databases, Build the User Interface by Using HTML5, and Format the User Interface by Using CSS, Code by Using JavaScript.						
ITMS	336	Web Programming II	2	2	3	ITMS 335
This course provides an introduction to HTML5, CSS3, and JavaScript. This course helps students gain basic HTML5/CSS3/JavaScript programming skills. This course is an entry point into both the Web application and Windows Store apps training paths. The course focuses on using HTML5/CSS3/JavaScript to implement programming logic, define and use variables, perform looping and branching, develop user interfaces, capture and validate user input, store data, and create well-structured application.						
ITMS	341	Digital Marketing Technologies	2	2	3	ITMS 325
Through this course, the students will acquire the ability to develop website planning, development and Search Engine Optimization strategy. The course will help the participant execute Keyword search, understand the tools to find keywords (paid and free); and learn Google Adwords. During the course, students will actually plan SEO of a website, set up the SEO process; learn about Content Marketing, on-page, and off-page optimization; the tools for Webmaster as well as Mobile SEO. In addition, during this course, the students will learn about the opportunities for targeted advertising in social media and how to execute advertising campaigns that resonate with the audience.						
ITMS	347	Video Post Production	2	2	3	ITMS 327
This course introduces students to the basic concepts and terminology of video post-production as it is used in film and games. Students will have a better understanding of how stories are constructed in the editing room using various editing styles. Through demonstrations and hands-on experience, students will learn advanced editing techniques. To further enhance projects, students will create animated motion graphics using After Effects. Strong emphasis is placed on post-production techniques that improve the sound and image quality of the videos.						
ITMS	350	Desktop Publishing	2	2	3	ITMS 327
This course introduces students to the basic concepts and terminology of desktop publishing. Students will have a better understanding of desktop publishing design and production techniques. Through demonstrations and hands-on experience, students will learn how to design and create attractive publications						
ITMS	351	Graphics and Multimedia	2	2	3	ITMS 205
This course is to cover the concepts and technologies as two dimensional: one dimension introduces the students to the essential practical packages such as the world of digital video, video-capture card, a quick tour of Premiere, Premiere editing video and transitions. The other dimension deals with vector graphics						
ITMS	405	Advanced Web Applications Design	2	2	3	ITCS 325 OR ITMS 325
This course builds on the knowledge gained from a previous course (ITCS 325). Students begin by looking at interactions with databases, learning about querying both on paper and via SQL, and then, through a succession of projects, learn how to apply this understanding to the creation of an interactive data-driven site via the use of an integrated website development tool such as cold-fusion.						
ITMS	418	Computer Animation I	2	2	3	ITMS 317
Students will learn the theory and concepts of computer animation, also the course is to develop observational and design skills in computer animation. To narrate a story, students will apply computer generated lighting, background, mask, tweened animations, etc. Computer animation production techniques along with programming techniques, such as, ActionScript are used to create animation projects in this course.						
ITMS	421	Web Programming II	2	2	3	ITMS 335
This course provides an introduction to HTML5, CSS3, and JavaScript. This course helps students gain basic HTML5/CSS3/JavaScript programming skills. This course is an entry point into both the Web application and Windows Store apps training paths. The course focuses on using HTML5/CSS3/JavaScript to implement programming logic, define and use variables, perform looping and branching, develop user interfaces, capture and validate user input, store data, and create well-structured application.						
ITMS	426	3D Graphics Softwares	2	2	3	ITMS 327
This course introduces students to the basic concepts and terminology of 3D computer graphics as it is used in film, visual effects, games, and animation. Students will have a better understanding of the different disciplines that collectively make up 3D computer graphics production. It will also give students a foundation for 3D Animation and 3D Game Development						
ITMS	432	Game Development II	2	2	3	ITMS 313
This course focuses on gameplay interaction, artificial intelligence, networking and the use of industry standard middleware, game engines, and APIs. The students will develop a critical approach to the study of gameplay, interaction, and design. Through this course, the student will be able to develop and implement 3D games through the gained tools and techniques.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Multimedia</b>						
ITMS	433	Web App. Tech. with Visual Studio 2005 (MCTS - 3)	2	2	3	ITMS 334
This course provides students with the knowledge and skills to develop Microsoft ASP.NET 2.0 Web applications using Microsoft Visual Studio 2005. It focuses on advanced user interfaces, Web site functionality, and implementation details using the advanced features of ASP.NET 2.0 and Visual Studio 2005.						
ITMS	434	Web App. Tech. with Visual Studio 2005 (MCTS - 4)	2	2	3	ITCS 433
The course provides students with the knowledge and skills to develop Microsoft Windows Forms applications using Microsoft Visual Studio 2005. The course focuses on building menus, providing user assistance and enhancing usability, creating of consistent applications using dialogs and forms inheritance and performing of asynchronous tasks using Background Worker component.						
ITMS	435	Web Programming III	2	2	3	ITMS 421
This course introduces students to develop advanced ASP.NET MVC applications using .NET Framework 4.5 tools and technologies. The focus will be on coding activities that enhance the performance and scalability of the Web site application. ASP.NET MVC will be introduced and compared with Web Forms so that students know when each should/could be used.						
ITMS	436	Multimedia Applications	2	2	3	ITMS 426
This course introduces the principles and essential concepts of Multimedia Applications. Through this course the student will be guided to implement (theoretically and practically) the gained tools and techniques from previous courses in designing and producing a multimedia application						
ITMS	437	Cloud Services Development	2	2	3	ITMS 435
This course introduces students to learn how to design and develop services that access local and remote data from various data sources. Students will also learn how to develop and deploy services to hybrid environments, including on-premises servers and Windows Azure						
ITMS	438	Computer Animation II	2	2	3	ITMS 418
This course will provide an introduction to Motion Graphics which will include commercial, broadcast, corporate, training, trade show, titles, logo reveals and music videos. The course will cover lectures and demonstrations using appropriate software. This course will cover a broad interpretation of potential applications of the technology while focusing on the strengths of motion theory, composition and other basic elements of design.						
ITMS	445	Modelling and Animating characters in 3D	2	2	3	ITMS 426
This course introduces students to the basic concepts and terminology of 3D characters modeling and animating as it is used in film, and games. Students will have a better understanding of the different disciplines that collectively make up 3D characters. It will also give students a foundation for 3D characters modeling and animating						
ITMS	447	Animation Film Development	2	2	3	ITMS 418
This course introduces students to the fundamentals of animation film development. Students will have a better understanding of writing, storyboarding, blocking, and character creation. It will also give students advanced functionalities, such as the Library and Linking system, physics simulators, the integrated compositor, and the Sequence Editor.						
ITMS	499	Major Project	0	6	3	ETHC 392 AND IERM 498
Each associate diploma student is required to select a theoretical and/or a practical problem related to his major area, and works under the supervision of a faculty member. All stages of project development should be emphasized including problem identification, library search, planning, design and/or construction of equipment upon completion of the project, the student must submit a final written report outlining the various phases of the project and make an oral presentation.						
ITMS	522	Multimedia Information Systems Overview	3	0	3	
Multimedia Information Systems are concerned with the capture, storage and presentation of information in a variety of forms, including text, image, video and sounds. This course provides an introduction to the principles and practices of multimedia information systems, their authoring and their application to management in organizations with particular focus on: (1) developing skill in the design and management of information systems projects; (2) employing evaluation techniques for multimedia authoring systems and multimedia user interfaces; and (3) developing an understanding of the current state of multimedia applications and their impact on organizations. Students learn how to plan, organize and evaluate multimedia information technologies as well as to implement multimedia information systems using multimedia authoring tools.						
ITMS	524	Multimedia Engineering	3	0	3	ITMS 522
This course introduces multimedia systems, architectures and data formats. The course emphasizes XML (eXtensible Markup Language), different X languages (XSLT, XML-SCHEMA, XHTML, XLINK, XPATH...) and multimedia applications (SVG, SMIL, and WEB SERVICES). CSS style sheets are also covered within this course.						
ITMS	598	Project Dissertation in Distributed Systems and Multimedia	0	6	3	
ITMS	599	Dissertation (in Distributed Sys & Multimedia)	0	24	12	
<b>COLLEGE OF MEDICAL &amp; HEALTH SCIENCES</b>						
<b>Physiotherapy</b>						
PHRM	498	Research Methods in Physiotherapy	3	0	3	PPTH 325 AND Completion of at least 90 credits

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Physiotherapy</b>						
This is an introductory course on research methodology which is delivered through a combination of workshops, lectures, IT labs and seminars. The main topics covered are: basic research methods in the health sciences, utilizing library resources, literature searching and appraisal, report writing, presentation skills and professional ethics.						
PHTH	101	Anatomy	2	2	3	
PHTH	102	Physiology	2	2	3	
PHTH	103	Functional Anatomy & Physiology II	2	2	3	
PHTH	104	Electrotherapy	2	2	3	
PHTH	105	Movement Science & Biomechanics	3	0	3	
PHTH	121	General Anatomy	2	2	3	
Basic anatomy and structure of the human body oriented in system basis. The course integrates concepts of anatomical terms and references of motion, gross anatomy of human body cells, tissues, organs, basic function, vascular, nervous, musculo-skeletal, hearing, vision and other human body structures and systems.						
PHTH	201	Orthopedic Physiotherapy	2	2	3	
PHTH	202	Cardiopulmonary Physiotherapy	2	2	3	
PHTH	203	Rheumatology, Sports & Gynecology Physiotherapy	2	2	3	
PHTH	204	Biochemistry	3	0	3	
PHTH	205	Neurology Physiotherapy	2	2	3	
PHTH	206	Pediatric Physiotherapy	2	2	3	
PHTH	207	Exercise Physiotherapy	3	0	3	
PHTH	208	Basic Manipulative Procedures	2	2	3	
PHTH	209	Clinical Practice	0	12	6	
PHTH	211	General Physiology	2	2	3	PHTH 121
The normal function of body structures are taught on system basis. The course includes the function of different human cells, tissues, organ and systems. This includes abnormal functions, immune system and defense mechanisms, blood circulation, exercise physiology, musculo-skeletal mechanism, neurophysiology. The course includes description of normal biochemical references and values.						
PHTH	212	Musculoskeletal Anatomy & Physiology	5	2	6	PHTH 121
This course introduce students to anatomy, physiology, biomechanics and patho-mechanics including structure and function of joints, ligaments, capsules, articular cartilages, nerves, muscles and tendons. This will include overview of general tissue structure followed by specific body region of functional anatomy with clinical correlation in physical diagnosis and medical and surgical conditions with the use of actual clinical cases pertinent to all aspects of the organ systems.						
PHTH	213	Introduction to Exercise Physiology	3	0	3	PHTH 121
This course describes the series of physiological functions, reactions and biochemical principles involved in creation, maintenance and malfunction of human movements. The course includes neurophysiological transmission, neural control, neuromuscular reaction, muscle fiber type and functions, intra-muscular enzymatic process, the mechanism of muscle fatigue and recovery, muscular response to stress factors, muscular adaptation to force and endurance training and other related topics in muscular physiology and function.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Physiotherapy</b>						
PHTH	214	Introduction to Biochemistry	3	0	3	PHTH 121
Survey of basic principles of biochemistry and molecular biology, emphasizing broad understanding of chemical events in living systems in terms of metabolism and structure-function relationships of biologically important molecules.						
PHTH	220	Foundations of Therapeutic Exercise	2	2	3	PHTH 211 AND PHTH 212 AND PHTH 213
This course is designed to teach the students on the basic principles of therapeutic exercise. Emphasis is given on assessment and treatment protocols in the different fields of therapeutic exercise particularly range of motion, progressive resistive, stretching, peripheral joint mobilization exercise, McKenzie techniques, nags and snags, The course also focus on the principles of soft tissue healing and the protocols that are necessary for proper therapeutic exercises. The course is reinforce with practical components.						
PHTH	221	Biomechanics	3	0	3	PHTH 212
Introduction to the application of laws of physics on human body movements. The course includes description of static and dynamic laws on human motion, levers and types of forces acting on human transfer and function, types of human joints, mechanics of therapeutic exercises, abnormal force application and injury mechanism, diagrammatic representation and measurement of forces, momentums, action-reaction theories, friction definition and measurement, and biomechanical terms and values.						
PHTH	222	Neuroanatomy & Physiology	2	2	3	PHTH 211 AND PHTH 212
This course orients the student on the neuro-physiological and neuro-anatomical basis of human body movement, function and motor control of the musculo-skeletal system. This include topics in neuro-physiology, neuro-transmission, mechanism, cerebral functions and control, pyramidal and extra-pyramidal function, peripheral nerve functions and neuro-muscular transmission, common patho-neuro-physiological conditions, skull and maxillo-facial anatomy and other related topics.						
PHTH	223	Introduction to Radiology & Pathology	2	2	3	PHTH 212
The course introduces students to the principles of reading, interpretation and clinical utilization of radiological and laboratory results. The topics include principles of radiological imaging, musculo- skeletal radiology, common orthopedic conditions, radiology, neurological imaging, MRI imaging techniques, CT imaging, biochemical lab investigations, hematological tests and values, histopathology investigations, microbiology techniques, and other topics in radiology and pathology.						
PHTH	224	Principles of Electrotherapy	2	2	3	PHYS 101
The principles of electrotherapy modalities are discussed in this course including definition and contents of electrical power, flow, measurement, electron theory and principle, energy generation, emission, transmission and radiation. Building on these concepts, the course teaches the physiological effects and interaction of the electrical and non-electrical sources of energy pertaining to different human body tissue. The means to deliver different electrotherapy modalities are included with their indication, effects and contra-indications.						
PHTH	225	Psychological Aspects of Disability	3	0	3	PHTH 212
This course aims to prepare participant with the social and psychological aspects of disease and disability. The course includes topics of personality types, personality changes and adaptation to disease, disability and motivation of rehabilitation, denial and acceptance phases of disability, micro-and macro-economics of diseases and disability, and other related topics.						
PHTH	226	Basic Clinical Practice	0	12	6	PHTH 211 AND PHTH 212
This fully practical clinical course aims to introduce the students with clinical settings and environments. The course starts with training in patient handling and assistance, physiotherapy equipments and machinery operation and maintenance, the therapist-patient relationship, patient assessment principles, electrotherapy applications, individual and group gymnastics and therapeutic training, hydrotherapy, clinical reporting and documentation, reading and filing of attached medical documents, safety issues in physiotherapy, patient motivation and follow-up and other related clinical physiotherapy principles.						
PHTH	301	Physiotherapy Evaluation & Diagnostics	2	2	3	
PHTH	302	Functional Anatomy & Physiology	3	0	3	
PHTH	303	Therapeutic Modalities I	2	2	3	
PHTH	304	Psychological Aspects of Disability	3	0	3	
PHTH	305	Radiology & Pathology	3	0	3	
PHTH	306	Neurological Medicine & surgery	2	2	3	
PHTH	307	Pediatric Medicine & surgery	2	2	3	
PHTH	308	Cardiopulmonary Medicine & Surgery	2	2	3	

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Physiotherapy</b>						
PHTH	309	Orthopedic Medicine & Surgery	2	2	3	
PHTH	310	Pharmacology*	3	0	3	
PHTH	311	Occupational Health & Ergonomics	2	2	3	
PHTH	312	Orthopedic, Sports & Rheumatology Physiotherapy	2	2	3	PHTH 221 AND PHTH 223 AND PHTH 226
The principles of physiotherapy for musculo-skeletal, sports and rheumatological diseases and injuries are taught. Joints and bone diseases are presented in systematic approach followed by physiotherapy assessment, indications and contra-indications of physiotherapy treatment. Pre and post-operative physiotherapy procedures are discussed for orthopedic surgical cases. Practical training in assessment techniques, gait training, muscle testing and lower extremities orthotics is included.						
PHTH	313	Manipulative Procedure	2	2	3	PHTH 221 AND PHTH 223 AND PHTH 226
This course includes the anatomical, biomechanical and physiological basis of orthopedic manipulative procedures. This includes indications, contra-indications, physiological and therapeutic effects of the common manipulative procedures in a systematic approach. The course will also include introduction in mobilization theory, upper extremities techniques, lower extremities, cervical spine, thoracic spine techniques, lumbar and sacro-iliac mobilization and orientation in common schools of thought in this field. Practical training modules are included to give the students experience in handling such manoeuvres.						
PHTH	314	Principles of Therapeutic Exercise	2	2	3	PHTH 213 AND PHTH 221 AND PHTH 226
This course is designed to teach the students on the basic principles of therapeutic exercise. Emphasis is given on assessment and treatment protocols in the different fields of therapeutic exercise particularly range of motion, progressive resistive, stretching, peripheral joint mobilization exercise, McKenzie techniques, nags and snags, The course also focus on the principles of soft tissue healing and the protocols that are necessary for proper therapeutic exercises. The course is reinforcing with practical components.						
PHTH	315	Clinical: Orthopedic Medicine & Surgery	2	2	3	PHTH 223 AND PHTH 226
Common orthopedic and rheumatological diseases and injuries are included in this course. The main topics are fracture types and complications, fractures closed and open reduction techniques, joint arthritis classification and diagnosis, systemic inflammatory diseases, auto-immune disorders affecting bones and joints, peripheral nerve injury types and management, total joint replacement, congenital musculo-skeletal diseases, soft tissue and sports injuries and other related topics. The course is reinforced with clinical rounds with the orthopedic consultants and senior physiotherapist.						
PHTH	316	Clinical: Orthopedic, Sports & Rheumatology Physiotherapy	0	8	4	PHTH 223 AND PHTH 226
This fully clinical course introduces the students with clinical skills in assessment and physiotherapy management of patients with musculo-skeletal, sports and rheumatological diseases and injuries including surgeries. This course focuses on therapist-patient relationship, patient assessment principles, manipulations applications, individual and group gymnastics and therapeutic training, mobilization techniques, post-operative orthopedic rehab and other topics in fields of musculo-skeletal, sports and rheumatological physiotherapy techniques.						
PHTH	320	Essentials of Neuroanatomy & Neurophysiology	2	2	3	PHTH 211 AND PHTH 212
This course orients the student on the neuro-physiological and neuro-anatomical basis of human body movement, function and motor control of the musculo-skeletal system. This include topics in neuro-physiology, neuro-transmission, mechanism, cerebral functions and control, pyramidal and extra-pyramidal function, peripheral nerve functions and neuro-muscular transmission, common patho-neuro-physiological conditions, skull and maxillo-facial anatomy and other related topics.						
PHTH	321	Theories of Cardiopulmonary Physiotherapy	2	2	3	PHTH 226
The principles of physiotherapy for cardio-pulmonary diseases are taught. Respiratory and heart diseases are presented in systematic approach followed by assessment, indications and contraindications of physiotherapy treatment. Pre and post-operative physiotherapy procedures are discussed for cardio-pulmonary surgical cases. Practical training in assessment techniques, postural drainage, Intensive Care Unit, COPD rehabilitation and post-operative heart rehab are included.						
PHTH	322	Medical Physiotherapy	3	0	3	PHTH 226
This course is designed to teach the knowledge of the different medical conditions seen in the practice of physiotherapy. It focuses on the etiology, pathophysiology, epidemiology, symptomatology of conditions such as burns, amputation, cancers, AIDS, immobilization syndrome, spinal cord injuries and geriatric conditions. Medical and physiotherapy management will be emphasized during discussion of each condition.						
PHTH	323	Clinical: Cardiopulmonary Medicine & Surgery	2	2	3	PHTH 226
This course orients the student on common cardiac and pulmonary diseases with the focus on assessment, diagnostic procedures, pathology and treatment. The main topics in the course include principles of cardio-pulmonary and circulatory physiology and anatomy, pulmonary gases exchanges, ischemic heart diseases, chronic obstructive pulmonary disorders (COPD), allergic pulmonary diseases, cardio-pulmonary treatment in intensive care units, common pulmonary surgical procedures, principles of heart surgeries, and other related topics. The course is reinforced with clinical rounds with the cardiologist/pulmonologist consultants and senior physiotherapist.						
PHTH	324	Clinical: Cardiopulmonary & Medical Physiotherapy	0	8	4	PHTH 226
This course includes practical application of cardiopulmonary and medical physiotherapy principles in a supervised clinical setting. The purpose of the course is that the student masters such techniques and be competent in cardio-pulmonary rehabilitation. Topics of the course includes post-operative cardio-pulmonary rehabilitation, ischemic heart disease physiotherapy, postural drainage techniques, COPD rehabilitation, ICU patient management, respiratory exercise techniques and applications and related topics in cardio-pulmonary rehabilitation.						



## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Physiotherapy</b>						
PHTH	325	Organization & Ethics in Physiotherapy	3	0	3	PHTH 226
This basic course aims on orientation of the student in topics related to health care planning, delivery system and ethical issues in the field of physiotherapy. The main topics in the course are a historical prospective of health care delivery, administration of acute and rehabilitation settings, health care delivery in non-clinical settings, health care delivery in rural regions, economics of the health care system, health insurance economics, private funding, delivery of health care, patient rights, medicolegal aspects of health care, malpractice issues, organization of physiotherapy profession in the community and other related topics.						
PHTH	401	Clinical Practice: Orthopedic Physiotherapy	0	6	3	
PHTH	402	Clinical Practice: Cardiopulmonary Physiotherapy	0	6	3	
PHTH	403	Therapeutics Modalities	2	2	3	
PHTH	404	Research Methodology I	3	0	3	
PHTH	405	Organization & Delivery of Health Care	3	0	3	
PHTH	406	Clinical Practice: Neurological Physiotherapy	0	6	3	
PHTH	407	Clinical Practice: Pediatric Physiotherapy	0	6	3	
PHTH	408	Clinical Practice: Rheumatology,Sports&Gynecology	0	6	3	
PHTH	409	Research Methodology	3	0	3	STAT 201
The student will be mainly working on and completing the graduation research including data collection and analysis, writing up and presentations. The course includes workshops in statistical software operation, thesis writing, presentation techniques and other related topics. The presentation of the graduation research will be done in the last week of the course.						
PHTH	410	Peripheral & Spinal Mobilization	2	2	3	
PHTH	411	Ethical & Professional Issues in Physiotherapy	3	0	3	
PHTH	412	Theories of Neurological Physiotherapy	2	2	3	PHTH 222 AND PHTH 226
The course includes principles of physiotherapy for neurological diseases and injuries. Central and peripheral nervous system diseases are presented in systematic approach followed by assessment, indications and contra-indications of physiotherapy treatment. Pre and post-operative physiotherapy procedures are discussed for neurosurgical cases. Practical training in assessment techniques, neurophysiological testing, Bobath and PNF techniques are included.						
PHTH	413	Clinical: Neurological Medicine & Surgery	2	2	3	PHTH 222 AND PHTH 226
This course includes topics in diagnosis, assessment, clinical presentations of common neurological diseases and surgery. This includes a review of neuro-pathology, intra-cranial diseases, central nerve system diseases, peripheral nerve system diseases, spinal cord diseases and injuries, traumatic head injury, common neurosurgical procedures. The course is reinforced with clinical rounds with the neurologist consultants and senior physiotherapist.						
PHTH	414	Clinical: Neurological Physiotherapy	0	8	4	PHTH 222 AND PHTH 226
This is a clinical module that includes training of the students on neurological physiotherapy techniques in clinical settings. The course includes training in cases of hemiplegias, paraplegias, spinal cord injuries, Parkinson's disease, progressive neurological diseases, post-operative neurological conditions and other related topics. By the end of the course the student must be able to independently apply physiotherapy techniques on neurological conditions.						
PHTH	415	Introduction to Pharmacology	3	0	3	PHTH 214
This basic course in pharmacology aims to introduce students to pharmaceutical agents used in common diseases. The course includes an introduction to digestive system physiology and mechanisms, major drug groups, actions and precautions of NSAID, central muscle relaxants, beta-blocker indications, analgesics and their pharmacological effects, pharma-economics and other related topics.						
PHTH	421	Clinical: Pediatric Physiotherapy	0	8	4	PHTH 222 AND PHTH 226
This is a fully practical course in a clinical settings aims to train students in pediatric physiotherapy skills. The training includes providing physiotherapy techniques for patient with cerebral palsy, neuro-developmental abnormalities, congenital anomalies, Erb's palsy and other pediatric conditions.						

## Ahlia University - Course Descriptions

Course	Code	Course Title	Lec	Lab	Cr	Prerequisite
<b>Physiotherapy</b>						
PHTH	422	Theories of Pediatric Physiotherapy	2	2	3	PHTH 222 AND PHTH 226
The course includes principles of physiotherapy for pediatric diseases and injuries. Pediatric and juvenile diseases, congenital and acquired malformations are presented in systematic approach followed by assessment, indications and contra-indications of physiotherapy treatment. Pre and post-operative physiotherapy procedures are discussed for pediatric surgical cases. Practical training in assessment techniques, cerebral palsy testing, Bobath and PNF techniques are included.						
PHTH	423	Clinical: Pediatric Medicine & Surgery	2	2	3	PHTH 222 AND PHTH 226
The course covers diagnosis, clinical presentation and treatment of common pediatric cases. The main topics in the course are introduction to genetics, embryology, intra-uterine malfunctions, neonatology, cerebral palsy types and diagnosis, Erb's palsy and other peripheral neonatal injuries, orthopedic pediatric developmental disorders, normal physiological developments and common pediatric surgical conditions. The course is reinforced with clinical rounds with the pediatric consultants and senior physiotherapist.						
PHTH	424	Clinical: Community Physiotherapy	0	6	3	PHTH 315 AND PHTH 323
This is a fully practical course in a community based clinical settings that address physiotherapy service delivery in various community-based settings such as domiciliary and fixed location private practice, schools and community centres. The course will cover the process of developing professional physiotherapy service, health promotion and how to adapt physiotherapy services in the community according to cultural and socio-economic needs.						
PHTH	425	Occupational Health & Ergonomics in Physiotherapy	2	2	3	PHTH 325
This course trains student on common role of the physiotherapist in communities other than conventional hospitals. This include the function of the physiotherapist in prevention of injuries, workplace design and analysis, mechanism of repeated minor trauma, overuse and stress related injuries, muscle and other soft tissue failure and injury, the concept of good posture, principles of patients and non-patients health education and motivation and other related topics.						
PHTH	499	Major Project	0	6	3	STAT 201 AND PHRM 498 AND Completion of at least 90 credits
Each student will be required to select and complete a research project in the field of physiotherapy, under the supervision of a Faculty member. Assessment will take the form of a written report and an oral presentation.						