الجامعة الإماراتية الدولية

كلية الهندسة وتكنولوجيا المعلومات

برنامج تكنولوجيا المعلومات

وصف المقررات الدراسية

Courses Description

المستـــــــــــــــــوى الاول

الفصل الدراسي الأول

C.H.	L.	T.	P.	لغة عربية I (UNI 103)
2	2			

يهدف هذا المقرر إلى تزويد الطلبة بالمهارات اللغوية التي يحتاجونها في حياتهم العلمية والعملية، ويتناول مهارات الاستماع والقراءة والتحدث والكتابة، وأهم الأسس النحوية والإملائية. وتركز موضوعاته على الدور الوظيفي لهذه المهارات من دون الدخول في تفاصيل القضايا النحوية واللغوية، فاهتم بمرتكزات كل مهارة، وتدريب الطلاب على اكتسابها بما يمكنهم من استخدامها استخداما يخلو من الأخطاء اللغوية والنحوية والإملائية.

C.H.	L.	T.	P.	لغة انجليزية I (UNI 105)
2	2			

This course is a skill-based course that focuses on elementary skills of listening, speaking, reading and writing. The course is a pre-requisite for the English 102. It develops students' language skills and competencies by exposing them to a variety of short general and academic contexts at the beginner level. In addition, the course builds the students' basic vocabulary and grammar structures that enable them to communicate orally and in writing in limited contexts. Interactive exercises and tasks will be encouraged in order to strengthen students' confidence in using English.

C.H.	L.	T.	P.	الثقافة الإسلامية (UNI101)
2	2			

C.H.	L.	T.	P.	الصراع العربي الإسرائيلي (UNI107)
2	2			

C.H.	L.	T.	P.	مقدمة في الحاسوب (UNI109)
3	2		2	

The aim of this course is to give student the fundamentals of computer. It focuses on introduction to computer topics with an emphasis on learning about computer, operating systems, application software, Internet, and applying software using MS Office. The course helps student to learn about the importance of computers and how to use computers.

C.H.	L.	T.	P.	رياضيات I (EIT111)

This course aims to get students acquainted with basic concepts of differential calculus and its various applications in science and engineering. Course topics cover real numbers, inequalities, absolute value, exponential and logarithmic functions, limits and continuity, differentiation rules, derivatives of trigonometric functions and their inverses and the derivatives of exponential and logarithmic functions. The course focuses as well on the applications of differential calculus including: curve sketching, relative and absolute extrema, Rolle's theorem, mean-value theorem, related rates, applied maximum and minimum problems, applications in business and economics., applications of exponential and logarithmic functions.

C.H.	L.	T.	P.	Information Technology Fundamentals (IT121)
3	3	-		

This course is aimed at explaining the concepts of information technology and how the new IT is changing the current business environment. It addresses the major principles for preparing the students to explain the utilization of IT in digital economy, the role of IT in changing the current business environment and in improving the process of decision making. It is appropriate for anyone who is using IT to improve organizational performances. This course also designed to cover several of ICT aspects such as Web, Wireless, Social Media Strategies, Information Systems, IT Infrastructure, IT Security, Crime, E-Business and E-Commerce, Mobile Computing and Commerce, Web 3.0 and Social Media.

الفصل الدراسي الثاني

C.H.	L.	T.	P.	الثقافة الوطنية (UNI102)
2	2			

C.H.	L.	T.	P.	لغة انجليزية II (UNI 106)
2	2			

This course builds on what students have learned in English 101. It provides more practice and learning experiences for students to develop their elementary skills of listening, speaking, reading and writing. In addition, the course builds the students' ability in the language use through equipping them with a wide range of vocabulary, grammatical structures and expressions relevant to general and academic contexts by exposing them to a variety of short general and academic texts and conversations at the elementary level. More learner-centered activities will be emphasized to enhance students' independent learning.

C.H.	L.	T.	P.	لغة عربية II (UNI 104)
2	2			

يتناول هذا المقرر مهارات الكتابة الإبداعية والوظيفية بهدف تعميق قدرات الطلاب على الكتابة وطرائق استخدامها في حياتهم العلمية والعملية، من خلال التعليم والتدريب على تجاوز المشكلات الكتابية في بيئة تعمل على تنمية التفكير الناقد وأساليب الإبداع، وما ينبغي أن يتحقق من دقة التعبير الكتابي وأساليبه على المستويين الوظيفي والإبداعي، ويساعد على اكتساب المعرفة وبناء الوعي الثقافي بأهمية الكتابة الصحيحة وتنمية مهاراتها.

C.H.	L.	T.	P.	رياضيات II (EIT112)
3	2	2		

This course aims to get students acquainted with basic concepts of definite and indefinite integrals and to assist them in using various techniques to evaluate integrals, and realize integration applications in life. Course topics include: integration of elementary functions, definite integrals: sigma notation – fundamental theorem of calculus – properties of definite integrals – the mean value theorem for integrals, integration techniques: integration by parts – integration by partial fractions – trigonometric substitution – integrating power of trigonometric functions, numerical integration: trapezoidal rule and Simpson's rule. In addition, applications of integration in engineering and physics are introduced such as the calculation of: area, volume, arc length, centre of mass, moments, …etc.

C.H.	L.	T.	P.	Digital Logic Design (IT120)
3	2		2	

Digital logic design covers the basic building blocks used in digital systems. It starts with an introduction to the numbering systems, operations on the systems, and the conversion between these systems. The second part discusses the logic gates, Boolean algebra and the gate minimization methods. The third part addresses the combinational logic through the analysis and design of combinational circuits such as adders, subtractors, decoders and multiplexers. The last part will deal with sequential circuits: flip-flops, synthesis of sequential circuits, and case studies, including counters, registers.

C.H.	L.	T.	P.	Computer Programming I (AI130)
3	2		2	

This is an introductory course on the fundamentals of computer programming. It focuses on introduction to computer programming languages topics with an emphasis to use it to solve mathematical and scientific problems. The course covers the principles of procedural programming, data types, variables declarations, constants variables, memory locations, arithmetic operations, input and output operations, Sequences statements, Selection statements, Iteration statements and one-dimensional array. The course helps student to design, write, and implement computer programs.

C.H.	L.	T.	P.	Discrete Mathematics (EIT114)
3	2	2		

المستـــــــــــــــــوى الثاني

الفصل الدراسي الأول

C.H.	L.	T.	P.	Technical English (EIT211)
2	2		2	

This is an English for Specific Purpose (ESP) course for engineering and IT students. The course aimed to give students the specialized technical language, information, and skills needed for their program of study. It presents them with the appropriate English from a variety of technological, engineering and industrial fields. This course also enables students to produce organized reports, formal letters/emails, CVs that conform to technical format/style, audience, vocabulary, grammar and the use of graphics where appropriate.

C.H.	L.	T.	P.	الإحصاء والاحتمالات (EIT210)
3	2	2		

This course aims to provide students with the fundamental knowledge and understanding of the probability theory and statistical analysis. Course topics include types of data, graphs and representation, measures of central tendency and variation, correlation and regression, the principles of probability theory, some types of famous distributions such as Z- distribution, Student t distribution and Chi-Square distribution. In addition, the course focuses on conducting and interpreting statistical experiments using popular statistics packages such as Excel, SAS, SPS or MatLAB.

C.H.	L.	T.	P.	Computer Programming II (AI231)
3	2		2	

This course is the second course of computer programming language. It considers problems drawn from a variety of domains, and emphasizes both the broader applicability of the relevant data structures and programming concepts, as well as the implementation of those structures and concepts in software. Topics include: multi-dimensional arrays, search, sort, characters and string; pointers, references, functions, files, and debugging and testing.

C.H.	L.	T.	P.	Computer Architecture and Organization (AI241)
3	2		2	

This course intends to teach students what is the fundamentals of computer architecture and organization, to develop the ability to perform programming in an assembly language, to know how RISC Instruction sets are designed, how single cycle CPU and cache memories, designed, and evaluated using simple performance equations. The objective of this course is to explore modern computer architecture approaches, such as designing advanced computer instructions, parallelism, and the advanced methods of data processing.

C.H.	L.	T.	P.	Web Technology Fundamentals (AI236)
3	2		2	

The aim of this course is to introduce students to the essential technologies for web design from the client side. It covers HTML 5 which is used to describe the content in a web page, Cascading Style Sheets (CSS) that describe how that content should look, and JavaScript to add interactivity and behaviors to web pages. This course focuses on theoretical and practical aspects to improve students skills and abilities for designing modern web sites.

C.H.	L.	T.	P.	Database Systems (AI223)
3	2		2	

This course "DBMS" is aimed at equipping students with the knowledge of database design, as well as, the ability to use database management systems in an effective manner. The course will provide fundamental knowledge of, and practical experience with, database concepts. Includes fundamentals of database architecture, information concepts and the realization of those concepts using the relational data model. Practical experience gained designing and constructing data models.

الفصل الدراسي الثاني

C.H.	L.	T.	P.	Web Development (IT250)
3	2		2	

The aim of this course is to provides advanced topics in web design and development. It will cover the techniques that are required for designing different modern web sites at the backend side. These techniques include php which are the main techniques for designing the backend web site; and designing DBs using MYSQL or Maria DB.

C.H.	L.	T.	P.	Communication skills (EIT212)
3	2		2	

Communication skills are essential to a successful career in Engineering. This communication course for the engineering and it students will enable them to develop the ability to communicate efficiently in English, orally as well as in written, within the field of engineering. Students will also train and develop interpersonal skills such as contributing to discussions, making presentations, reading and synthesizing information, writing reports and working effectively with colleagues and other professionals in the engineering field.

C.H.	L.	T.	P.	Advanced Database (IT252)
3	2		2	

This course is an advanced course to learn about advanced topics in database. It focus on advanced topics include advanced SQL, Indexing, Query Processing & Optimization, Database transaction & Concurrency Control Protocols, Database security, and Data warehouse.

C.H.	L.	T.	P.	Object-Oriented Programming (AI230)
3	2		2	

This course introduces a concept of object oriented programming and visual programming to those who have learnt basic programming concepts and are ready to learn in-depth programming. It is an expository of the object-oriented programming methodology with emphasis on software design and code reuse as its core objectives with use to GUI components. The main concepts discussed are: Objects, Data Abstraction, Data Encapsulation, Inheritance, and Polymorphism. In addition to window-based, event-driven application design and implementation, data types, operators, properties, menus, and database file processing, and building visual components (windows, menus, message-boxes, buttons, lists, etc.), managing containers and layout, event-handlers, exceptions, and employing GUI class libraries.

C.H.	L.	T.	P.	Operating Systems (AI240)
3	2		2	

The course will start with a brief historical perspective of the evolution of operating systems over the last fifty years, and then cover the major components and structure of most operating systems. This discussion will cover the tradeoffs that can be made between performance and functionality during the design and implementation of an operating system. Particular emphasis will be given to these major OS subsystems: process management, real and virtual memory management, file system and disk management, and I/O management. According to the course plan of the program, the prerequisite of this course is Computer Architecture and Organization.

C.H.	L.	T.	P.	Computer Network I (IT230)
3	2		2	

المستـــــــــــــــــوى الثالث

الفصل الدراسي الأول

C.H.	L.	T.	P.	Visual Programming (IT351)
3	2		2	

This course emphasizes on software systems development in a visual environment to those who have learned object-oriented programming concepts and are ready to learn in-depth programming. The main concepts discussed are: window-based programming, event-driven application design and implementation, building visual components (windows, menus, message-boxes, buttons, lists, etc.), managing containers and layout, event-handlers, exceptions, employing GUI class libraries, file processing, database linkages, and graphics. Interface design and code optimization are covered. Different types of applications that run on a standalone PC will be covered in this course.

C.H.	L.	T.	P.	Project Management (IT321)
2	2			

This course aims to provide students with basic knowledge for managing resources and scheduling, tracking and controlling and completing project within the specific constraints and deadlines. The course will focus on product life cycles, managing, planning, designing and controlling projects, human and logistics resources, systems' maintenance & reliability, industrial safety constraints, tools and techniques of quality cost. Students will develop skills in preparing feasibility studies and identifying elements for a success development of information system projects.

C.H.	L.	T.	P.	Computer Network II (IT331)
3	2		2	

C.H.	L.	T.	P.	Information Security (IT361)
3	2		2	

This course focuses on the fundamentals of information security that are used in protecting both the information present in computer storage as well as information traveling over computer networks. Interest in information security has been spurred by the pervasive use of computer-based applications such as information systems, databases, and the Internet. Information security has also emerged as a national goal in the United States and in other countries with national defense and homeland security implications. Information security is enabled through securing data, computers, and networks. In this course, we will look into such topics as fundamentals of information security, computer security technology and principles, access control mechanisms, cryptography algorithms, software security, physical security, and security management and risk assessment. By the end of this course, you will be able to describe major information security issues and trends, and advise an individual seeking to protect his or her data.

C.H.	L.	T.	P.	Object Oriented Analysis and Design (IT341)

3	2		2	

Object oriented analysis and design presents an introduction to the design and construction of software systems using techniques that view a system as a set of objects that work together to realize the system's functionality. An examination of fundamental object-oriented analysis and design techniques will be explored to show how decisions made during analysis and design impact the implementation of software systems.

The goal is to learn how to produce detailed object models and designs from system requirements; use the modeling concepts provided by UML; expand the analysis into a design ready for implementation and construct designs that are reliable.

C.H.	L.	T.	P.	Data Structures and Algorithms (IT353)
3	2		2	

The course introduces the simple data structures as well as complex data structures and how to apply them in formatting data and solving programming tasks. The main topics included that are abstract data types, trees, Hash function, Binary heaps, Applications of priority queues, Topological sort, Shortest-path algorithms, Minimum-span tree.

C.H.	L.	T.	P.	Human-Computer Interaction (IT343)
3	2		2	

This course introduces students to the fundamental concepts, principles, and theories of Human Computer Interaction (HCI). HCI is concerned with the study of the interaction between humans and interactive computing systems. HCI leads students to work in many lab exercises to design, develop, and evaluate user interfaces through prototype models based on their capabilities of computer technology and the needs of human factors practicing all steps in design processes. There is a special emphasis on UX/UI, usability, interaction paradigms, computer-mediated human activities, and implications to society.

الفصل الدراسي الثاني

C.H.	L.	T.	P.	Distributed and cloud computing (IT332)
3	2		2	

This course provides an exploration of distributed and cloud computing, focusing on the principles, technologies, and applications that underpin these rapidly evolving fields. Students will gain an understanding of distributed systems, including concepts such as scalability, fault tolerance, and load balancing, as well as the design and implementation of distributed systems. The course will also cover cloud computing architectures, virtualization techniques, and the deployment of applications on popular cloud platforms. Through hands-on projects and case studies, students will develop practical skills in designing, building, and managing distributed and cloud-based systems, preparing them for careers in the dynamic world of modern computing infrastructures.

C.H.	L.	T.	P.	Enterprise System (IT342)
2	2			

The course provides students with knowledge about enterprise systems and best practices for managing enterprise systems including system integration, enterprise system architectures including cloud and Service Oriented Architecture (SOA) architectures, implementation strategies, operation post implementation, success factors of enterprise systems, especially ERP systems, and trends, opportunities and issues with enterprise systems. Students will gain understanding of the informational, knowledge, and decision-making opportunities afforded by these systems, and develop critical thinking skills.

C.H.	L.	T.	P.	Mobile Application Development (IT350)
3	2		2	

This course introduces students to programming technologies, design and development related to mobile applications. Topics include Dart programming language, Flutter framework, Widgets – Building Layouts in Flutter, Handling User Input and Gestures, Plugins, Using Widget Manipulations and Animations, and Testing and App Release. Upon completion, students should be able to build creative mobile applications for mobile devices on different platforms.

C.H.	L.	T.	P.	Software Engineering (IT340)
2	2			

This course presents modern software engineering techniques and examines the software life cycle, including software specification, design, implementation, testing and maintenance. The course evaluates past and current trends in software development practices including agile software development methods such as Extreme Programming (XP), Agile Modelling (AM), Scrum, ASD, DSDM, Crystal, Feature Driven Development (FDD), Incremental Funding Method (IFM), DevOps, and Site Reliability Engineering. Students will learn about the major methodologies followed by software modeling using Unified Modeling Language (UML).

The students will learn how to apply modern software engineering techniques and standards for requirements gathering, analysis, specify solutions for complex systems, and deploy scalable, reliable, and usable enterprise applications.

C.H.	L.	T.	P.	Scientific Research Fundamentals (EIT310)
2	2			

The course aims to introduce students to the basic concepts and issues of quantitative and qualitative scientific research. Students will learn the nature and tools of research, the basic components of research process, formulating research questions, research design, elements of analysis research papers, data collection and analysis, conceptualization and measurement, building evidence, research evaluation, documentation and presentation. By the end of the course students submit and present a research course-project on a topic assigned by the course instructor.

C.H.	L.	T.	P.	Entrepreneurship (IT320)
2	2			

This course aims to provide students with the principles concepts of IT entrepreneurship and innovation. The course explain the innovation concept and its relationship with entrepreneurship. The main topic which

covering in this course are technological innovation, management of technological innovation, technological entrepreneurship, and entrepreneurship and innovation Practices.				
C.H.	**L.**	**T.**	**P.**	**Wireless and Mobile Networks (IT330)**
3	2		**2**	
This course aims to provide an advance knowledge about Wireless and Mobile Networks (WMN) and its key aspects, considerations and technology. It covers WMN components and types such as: WLAN, Medium and Short-Range Wireless Communication, Satellite Networks, Radio-based wireless networks, explains cellular networks such as GSM, CDMA, GPRS, WAP, and Mobility management. Moreover, it covers the concepts of light-based wireless networks such as Optical Fiber, Li-Fi, and, Wi-Fi, the TCP/IP and security for WMN, Communication requirements, Ad-hoc wireless networks, and overall security issues. This course focus to provide the student with theoretical and practical that are useful to support verification design and evaluation of a network system, employed communication protocols, control and coordination algorithms.				

المستـــــــــــــــــوى الـــرابـــع

الفصل الدراسي الأول

C.H.	L.	T.	P.	Graduation Project (1) (IT491)
3	3			

This course is the first of a two-course sequence in which the students will develop a complete system/research. The second stage will be carried out in project (II). Students will work in groups of up to four students, each group will have a supervisor to guide them through the system development process using a specific methodology.

In this first part, each group must identify a problem domain, define the problem, identify and specify the requirements, document the current system, analyze it, propose alternative systems, and design a solution. The design must include the definitions of all the required system models, such as the data model and the functional model. At the end of the course, each group must submit a formal report documenting the complete process.

C.H.	L.	T.	P.	Internet of Things (IT433)
3	2		2	

. This course aims to introduce a fundamental knowledge about Internet of Things (IoT) along with its technology, architecture applications, trends, concerns and challenges. It covers the topics related to IoT elements, domains, devices, embedded systems, connectivity and networks, computing analytics and applications. In addition, it present IoT evolution, statistics, forecasts, business models, communication and development primitives, and data explosion in IoT. Also, it addresses the computing paradigms in connected and autonomous driving vehicles such as artificial intelligence, vehicular cloud computing, and end-to-end networking, as well as describing security and safety issues. This course focus to provide the student with practical experiences about the Industrial IoT and how to design an IoT device to work with a cloud computing infrastructure and applications along with its security issues.

C.H.	L.	T.	P.	NoSQL and Big Data (IT451)
3	2		2	

This is an under graduate-level course on the advanced data models and technologies. Introduction to non-relational (NoSQL) data models, such as Key-Value, Document, Column, Graph and Object-Oriented database models. Advantages and disadvantages of the different data architecture patterns will be discussed. Hands-on experience with a representative sample of open-source NoSQL databases will be provided. The rapid and efficient processing of data sets with a focus on performance, reliability, and agility will be covered. Big Data, distributed and cloud computing concepts will be introduced.

C.H.	L.	T.	P.	Network Administration and Management (IT431)
3	2		2	

C.H.	L.	T.	P.	Elective I (IT4XY)
3	2		2	

الفصل الدراسي الثاني

C.H.	L.	T.	P.	Graduation Project (2) (IT490)
3	**3**			

This course is the second of a two-course sequence in which the students will develop a complete system/research. The second stage will be carried out in project (II). Students will work in groups of up to four students, each group will have a supervisor to guide them through the system development process using a specific methodology. In this phase (2nd Semester), student will be acquiring new skills and will develop his skills in communication, planning and management of project activities efficiently. Student will employ and apply theory concepts in the practical side, showing skills for potential employers, and will perform the development activities that is required and similar to those that will use as part of his initial employment. At the end of the course, each group must submit a formal report documenting the complete process and sat for project defense.

C.H.	L.	T.	P.	Computer Ethics (IT440)
2	2			

This course aims to provide students with the knowledge about computer ethics. It discusses the impact of computing technology on individuals, organizations and society. The course will cover many issues like privacy, intellectual property, computer crime, technology and work, freedom of speech, and ethical and professional responsibilities. Social, legal, and economical effects related to computing and technology will be discussed in this course. In addition, a code of ethics for the worker in the technology field will be covered.

C.H.	L.	T.	P.	Data Mining and Warehousing (IT450)
3	2		2	

This course provides students with an effective immersion into the realm of Knowledge Discovery and Data Mining. It follows a progressive approach that introduces relevant concepts and techniques while preparing students to pursue graduate-level research avenues in Data Mining, with an emphasis on the field of Information Technology (IS). The scope of this course includes: The main concepts and algorithms to data mining, Data Mining Applications in Information Technology, and Data Mining Research.

C.H.	L.	T.	P.	Elective II (IT4XY)
3	2		2	

C.H.	L.	T.	P.	Integrative Programming (IT452)
3	2		2	

The course aims to address three main topics, Data mapping and exchange, program integration, and systems integration. Data mapping and exchange will cover metadata, XML, encoding schemes, data stream transformations, and data integration and exchange between computer systems. Program integration addresses design patterns, interfaces, inheritance, reusability, and security practices. Systems integration covers architectures, socket programming, Web services, message and queuing services.

المقـــــررات الاختياريـــــة في البرنـــــــامج

الفصل الدراسي الأول

C.H.	L.	T.	P.	CyberSecurity (IT485)
3	2		2	

This course will provide students with principles of data and technology that frame and define cybersecurity. Students will gain insight into the importance of cybersecurity and the integral role of cybersecurity professionals. They will explore foundational cybersecurity principles, security architecture, risk management, attacks, incidents, and emerging IT and IS technologies.

The topics include security plans and policies, enterprise roles, security metrics, risk management, Standards and regulations, physical security, and business continuity. Each piece of the puzzle must be in place for the enterprise to achieve its security goals; adversaries will invariably find and exploit weak links.

C.H.	L.	T.	P.	Artificial Intelligence (IT481)
3	2		2	

The goal of Artificial Intelligence is to build software systems that behave "intelligently". By this, we mean that the computer systems "do the right thing" in complex environments--that they act optimally given the limited information and computational resources available. This course provides an introduction to artificial intelligence by covering the following topics: An overview of Artificial Intelligence (AI), Artificial intelligence as representation and search, Knowledge representation and reasoning, Machine learning techniques, Hybrid intelligent techniques and maintenance of intelligent systems.

C.H.	L.	T.	P.	Digital Forensics (CYS362)
3	2		2	

In the rapid growth of digital crimes, the ability of acquiring the digital evidences depends on professionally executing digital forensics skills. This course aims at introducing students with the fundamental concepts to develop their skills on digital forensics. The topics that will cover in this course including understanding digital forensics, the investigator office and lab, data acquisition , processing crime and incident sense, working with windows, current tools, recovering graphics files, digital forensics analysis and validation, mobile devices forensics, cloud forensics, report writing for high-tech investigations, and ethics for the expert witness.

C.H.	L.	T.	P.	Selected Topics in IT (IT483)
3	2		2	

This course covers modern information technologies. It includes new trends of information technologies. The course focus on Artificial Intelligence (AI)/Machine Learning, Blockchain and Robotic Process Automation (RPA), IoT Technologies, Quantum Computing, Virtual Reality and Augmented Reality.

الفصل الدراسي الثاني

C.H.	L.	T.	P.	E-Commerce (IT480)
3	2		2	

This course aims to provide students with main concepts of e-commerce to gain an understanding of the concepts and issues underlying e-commerce and improve students' familiarity with current challenges and issues related to e-commerce. Types and applications of e-commerce will be discussed in this course. Also e-commerce infrastructure, e-commerce building strategies, and payment methods will be explored through this course.

C.H.	L.	T.	P.	Principles of Data Science (IT484)
2	2			

Companies and society are gathering a huge amount of information to analyze and extract knowledge from. To provide knowledge from data different multidisciplinary teams are working together to design solutions for the new questions emerged from data. This pipeline is called "data science" which goes through gathering cleaning data, making inferences, visualizing data, assessing solutions, etc.

The goal is to learn data analysis concepts and techniques that facilitate making decisions from a data set. So, students will learn: fundamentals about data used for data science, descriptive and inference statistics, supervised and unsupervised learning, regression and network analysis, recommender systems, NLP, and finally parallel computing.

C.H.	L.	T.	P.	Multimedia Technology (IT482)
3	2		2	

This course aims to offers the fundamental knowledge about multimedia technology and its related concepts, techniques and applications. It covers the topics of multimedia elements such as Text, Images, Sound, Animation, and Video. It focuses on font editing and design tools, making still Images, Digital Audio files format, as well as the techniques and file format to make animations. Moreover, it focuses on shooting and editing video as well as identifying the Stages of multimedia productions, software and hardware used, and the necessary skills needed on project team members to produce successful multimedia projects.