Princess Sumaya جامعــــة
University الأميــرة سميّـة
for Technology للتكنولوجيا

PROGRAM PROFILE

B.Sc. Business Information Technology

2024 / 2025

PROGRAM PROFILE

PROGRAM AIMS AND OBJECTIVES

PROGRAM LEARNING OUTCOMES

CURRICULUM

COURSE DESCRIPTION

King Talal School كليـــــــة
of Business الملـــــك طلال
Technology لتكنولوجيا الأعمال

Bachelor of Business Information Technology

The Bachelor of Science in Business Information Technology (BIT) program is a pioneering interdisciplinary program designed to bridge the gap between business and technology. Accredited by prestigious bodies such as AACSB, this program equips students with the technical expertise and business acumen needed to drive digital transformation in modern organizations.

The program combines core business principles with advanced IT skills, focusing on areas such as enterprise systems, data analytics, e-business, and IT project management. Students gain hands-on experience through practical labs, internships, and a capstone graduation project, ensuring they are industry-ready upon graduation.

PROGRAM AIMS

The program aims to develop professionals who integrate IT and business knowledge to solve complex organizational problems. It equips students with technical, analytical, and strategic skills to align technology with business goals.

PROGRAM OBJECTIVES

- Provide strong knowledge in business systems and IT applications.
- Apply technology to solve business problems efficiently.
- Develop critical thinking and data-driven decision-making skills.
- Strengthen teamwork and communication in digital business contexts.
- Align learning with industry needs and digital transformation trends.
- Encourage innovation and adaptability in tech-enabled business environments.

For More Info

www.PSUT.edu.jo/KTSBT/BIT

PROGRAM PROFILE

PROGRAM LEARNING OUTCOMES

Program Learning Outcomes (LOs)
PLO1 Demonstrate basic knowledge in the business and technology.
PLO2 Apply business and technology concepts that can help develop business solutions.
PLO3 Critically analyze business issues taking into account economic, sustainable, and ethical factors.
PLO4 Integrate key analytical methods that can help provide creative and innovative solutions
PLO5 Collaborate effectively within a team to build jointly prepared projects.
PLO6 Demonstrate the written communication skills essential in business settings
PLO7 Demonstrate effective use of the oral presentation skills that are essential in business

PROGRAM FEATURES

- **Industry-Aligned Curriculum:** Courses cover ERP systems, business intelligence, cybersecurity, and AI applications in business.
- **Practical Learning:** Lab sessions and real-world projects in database management, web development, and mobile applications.
- **Career Opportunities:** Graduates can pursue roles as IT consultants, business analysts, ERP specialists, and digital transformation leaders.
- **Flexible Electives:** Specializations in logistics, supply chain management, AI, and advanced database systems.

POSSIBLE FIELDS OF WORK FOR GRADUATES

Graduates of the program can pursue roles in strategic planning, IT project management, and business information systems. They are equipped to manage emerging technologies, data communication, and decision support systems. Career paths include positions such as Business IT Director, Executive IT Manager, and technical roles in business administration.

PROGRAM LEARNING OUTCOMES (PLOS)

Curriculum
Bachelor's Degree in Business Information Technology
2024/2025

Course Title	Credit Hours	Prerequisite
University Requirements (27 CHs)		
1. Compulsory Requirements (18 CHs)		
Computer Skills (Remedial)	**0**	
Arabic Language Communication Skills (Remedial)	**0**	
English Language Communication Skills (Remedial)	**0**	**31021**
Arabic Language Communication Skills	**3**	**31022**
English Language Communication Skills	**3**	
National Education	**3**	
Leadership and Societal Responsibility	**0**	
Military Science	**3**	
Entrepreneurship and Innovation	**3**	**60 CHS**
Life Skills	**3**	**60 CHS**

2. Elective Requirements (9 CHs)		
History of Science	**3**	
Sports and Health	**3**	
Foreign Langugages	**3**	
Arabic Islamic Civilization	**3**	
Arabic Literature	**3**	**31112**
Governance and Development	**3**	
Human Rights	**3**	
Introduction to Politics and Economic Science	**3**	
Introduction to Psychology	**3**	
Development and Environment	**3**	
Scientific Research Method	**3**	
Contemporary Issues in the Arab World	**3**	
Jerusalem: History and Facts	**3**	
Philosophy and Critical Thinking	**3**	

STUDY PLAN

School Requirements (24 CHs)		
1. Compulsory Requirements (24 CHs)		
Mathematics for Business	3	
Statistical Methods for Business	3	
Principles of Management	3	
Principles of Accounting (1)	3	
Principles of Marketing	3	31112
Business Information Technology 1	3	
Leadership and Digital Transformation	3	
Introduction to AI in Business Applications	3	36110
Program Requirements (81 CHs)		
1. Compulsory Requirements (66 CHs)		
Business Information Technology 2	3	36110
Microeconomics	3	
Human Resources Management	3	33101
Business Applications Programming	3	36220

Business Applications Programming Lab	**1**	**36112**
Web Development for Business Applications	**3**	**36220**
Database Management for Business	**3**	**36110**
E-Business for Business Students	**3**	**36110**
Database Management for Business Lab	**1**	**36203**
Business Data Communications	**3**	**36110**
Advanced Business Applications Programming	**3**	**36112 36202**
Analysis and Design of Information System	**3**	**36203**
Principles of Business Analytics (PBA)	**3**	**36110**
Enterprise Resource Planning Systems (ERP)	**3**	**36203**
Enterprise Resource Planning Systems (ERP) Lab	**1**	**36336**
Training	**3**	**90 CHs**
Business Intelligence	**3**	**36302**
Mobile Business Applications	**3**	**36112**
Cyber Security Technologies	**3**	**36301**

Principles of Finance	**3**	**34101**
Business Process Management	**3**	**36232**
IT Project Management	**3**	**80 CHs**
Advanced Applications in E-Business & SCM	**3**	**36232**
Graduation Project	**3**	**36435** **36316** **99 CHs**
2. Elective Requirements (15 CHs)		
Object Oriented Programming for BIT	**3**	**36112**
Operations Research for Business	**3**	**-**
Business Ethics and Social Responsibility	**3**	**60 CHs**
Quality Management	**3**	**33101**
Strategic Management	**3**	**33101**
Business Law	**3**	**99 CHs**
Banking	**3**	**33103**
Introduction of Accounting Analytical and Financial Technology	**3**	**34115**
Accounting Information Systems	**3**	**34101**

STUDY PLAN

Fundamentals of Graphic Design for Business	**3**	
Communication Skills and Technologies	**3**	
Customers Relations Management	**3**	**35101 36232**
Advanced Database Management Systems	**3**	**36203**
Special Topics in BIT	**3**	**60 CHs**
Logistics and SCM Systems	3	**36232**
Advanced System Analysis and Design	**3**	**36316**
AI in Business Applications	**3**	**36302**
Sustainable Development Management	**3**	**33101**

STUDY PLAN

Guidance Plan
Bachelor's Degree in Business Information Technology
2024/2025

First Year

1st Semester

Credits	Code	Course
3	31122	English Language Communication Skills
3	36101	Management Information Systems
0	31160	Leadership and Societal Responsibility
3	31151	National Education
3	31112	Arabic Language Communication Skills
3	20131	Mathematics for Business

2nd Semester

Credits	Code	Course
3		Elective University Requirements
3	36111	Computer Applications in Business
3	33103	Microeconomics
3	33101	Principles of Management
3	11102	Introduction to Computer Science

Second Year

3rd Semester

Credits	Code	Course
3		Elective University Requirements
3	31251	Military Science
3	35101	Principles of Marketing
1	36113	Business Applications Programming Lab
3	36112	Business Applications Programming
3	20235	Statistical Methods for Business

4th Semester

Credits	Code	Course
3		Elective University Requirements
3	36232	E-Business for Business Students
3	31374	Life Skills
3	36339	Knowledge Management Systems
3	34101	Principles of Accounting (1)
3	36202	Web Development for Business Applications

Third Year

5th Semester

Credits	Code	Course
1	36251	Database Management for Business Lab
3	36203	Database Management for Business
3	36334	Decision Support Systems
3	36405	Mobile Business Applications
3	33405	Human Resources Management
3	31254	Entrepreneurship and Innovation

6th Semester

Credits	Code	Course
3	36301	Business Data Communications
3	36316	Analysis and Design of Information System
3		Elective Program Requirements
1	36357	Enterprise Resource Planning Systems (ERP) Lab
3	36336	Enterprise Resource Planning Systems (ERP)

Fourth Year

7th Semester

Credits	Code	Course
3	36428	Business Process Modeling
3	36415	Cloud Computing
3		Elective Program Requirements
3	36435	IT Project Management
3	36312	Advanced Business Applications Programming

8th Semester

Credits	Code	Course
3	36436	Advanced Applications in E-Business & SCM
3	36402	Information Security
3	36404	Business Intelligence Systems
3	36499	Graduation Project
3		Elective Program Requirements

Key – Colors and Shapes

← ⇒ Concurrent Requirement

| Credit Hours → | 3 | 12495 | → Course Number |

Graduation Project (2) → Course Title

Color	Requirement
Red	Compulsory University Requirement (general)
Tan	Elective University Requirement
Green	Compulsory School Requirement
Navy	Compulsory Department Requirement
Light Blue	Elective Department Requirement

Course Description
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2024/2025

| 36110 | Business Information Technology (1) | Credit Hours: 3 | Prerequisite: - |

This course introduces information systems; their components, types and usage in the business world. Topics covered include databases, systems development, data warehouses and analytics. In addition, it introduces the major enterprise systems: SCM, CRM, and ERP and explain their role in the business.

| 36120 | Introduction to AI in Business Applications | Credit Hours: 3 | Pre-requisite: 36110 |

This course offers a comprehensive introduction to Artificial Intelligence (AI) and its applications in business. It covers fundamental of AI concepts and practical business applications. The focus is on understanding the opportunities, limitations, and challenges of using AI in organisations to create value. The course introduces various AI technologies, tools, and models and their emergence.

| 36220 | Business Information Technology (2) | Credit Hours: 3 | Pre-requisite: 36110 |

This course aims to cover the life cycle of developing business information systems. In addition, Students will gain skills in problem-solving and developing flowcharts. Furthermore, students will gain knowledge of different business applications.

| 36112 | Business Applications Programming | Credit Hours: 3 | Pre-requisite: 36220 |

This course introduces high-level programming languages using one of the most common. The language is selected according to the business market's needs. Topics covered include syntax rules and structures, how data is processed using high level programming language, compilation and implementation issues, files and storage mechanisms.

| 36113 | Business Applications Programming Lab | Credit Hours: 1 | Co-current: 36112 |

This course is the practical part of the "Business Applications Programming" course (36112). It shows students the best practices to develop business applications. The lab focuses on the object paradigm including classes, inheritance, functions, and templates in the development of object-oriented programs.

| 36202 | Web Development for Business Applications | Credit Hours: 3 | Pre-requisite: 36220 |

This course provides an overview of how websites function, their structure, and how to select a website name and an online host. It covers the design and creation of websites by exploring the HTML language. In addition, it includes a scripting language to make websites dynamic and cascading style sheets to graphically design and layout webpages. Server-side web applications are also included at the end of the course.

| 36203 | Database Management for Business | Credit Hours: 3 | Pre-requisite: 36110 |

This course provides students an introduction to database management systems and covers the main principles in database design and development. Topics covered include relational database modeling, data integrity, normalization, and SQL programming.

| 36232 | E-Business for Business Students | Credit Hours: 3 | Pre-requisite: 36110 |

This course introduces the main concepts in e-commerce and e-business models with a focus on (B2C), (B2B) and (C2C). Several topics will be covered including overview of e-business technological infrastructure, e- business strategies and revenue models, e-marketing and social network platforms as well as ethical and security issues.

36251	Database Management for Business Lab	Credit Hours: 1	Co-current: 36203

This is the practical part of the "Database Management for Business" course (36203). It covers the design and the implementation of a complete database application for a specific business idea using a modern relational the implementation of a complete database application for a specific business idea using a modern relational database management system. Topics covered include relations between entities, queries, forms and reports.

36301	Business Data Communications	Credit Hours: 3	Pre-requisite: 36110

This course presents the fundamental concepts of data communications and networking, emphasizing their significance in the business and IT sectors. It explores various types and protocols of data communication networks, with a special focus on the basics and layers of the Open System Interconnection (OSI) model. Key topics include network and digital security, Internet of Things (IoT), and the use of simulators for managing virtual networks. Additionally, the course introduces cloud computing concepts, covering virtualization technologies, architectures, networking, cloud resource management, programming models in clouds, cloud storage systems, and security issues in cloud environments

36312	Advanced Business Applications Programming	Credit Hours: 3	Pre-requisite: 36112, 36202

This course introduces the basics of python programming environment, including fundamental python programming techniques. Topics covered include introducing data manipulation and cleaning techniques using the popular python libraries, and how to import and export Data in Python.

36316	Analysis and Design of Information System	Credit Hours: 3	Pre-requisite: 36203

This course introduces the main concepts of information systems (IS) and the important role of a system analyst in organizations. This course also covers several topics including the different development methodologies (such as SDLC, Agile modelling, Prototyping, etc.), data gathering techniques and different modelling methods (such DFD, ERD, Usecases, etc.), in addition to the principles of IT project management.

| 36302 | **Principles of Business Analytics (PBA)** | **Credit Hours: 3** | **Pre-requisite: 36110** |

The course introduces the main concepts of Business Analytics. It aims to explore the role of business analytics in making data-driven decisions. The course covers the fundamentals of the Business Analytics levels; descriptive analytics, predictive analytics, and prescriptive analytics. It is designed to include both theory and practice. In the theory part, data types, data analysis, and analytical techniques are explained. Practically, students are expected to apply the theory in a business case to improve their analytical skills.

| 36336 | **Enterprise Resource Planning Systems** | **Credit Hours: 3** | **Pre-requisite: 36203** |

The course introduces the Enterprise Resource Planning (ERP) systems and their role within organizations. It provides key concepts of integrated information systems and explains why enterprise systems are valuable to businesses. Topics covered include fundamentals of organizational processes, process re-engineering, and the implementation of enterprise systems. The course spots the light on how ERP modules can facilitate executing business processes in a specific department such as sales and marketing, production and supply chain.

| 36357 | **Enterprise Resource Planning Systems (ERP) Lab** | **Credit Hours: 1** | **Co-current: 36336** |

This is the practical part of the "Enterprise Resource Planning Systems" course (36336). It enables students to explore and apply the main modules covered in the ERP course such as sales and marketing, supply chain,production, material management and purchase.

| 36395 | **Training** | **Credit Hours: 3** | **Pre-requisite: 90 CHs** |

This course offers students the opportunity of transforming their theoretical knowledge into practical application via an internship at an organization in the field of Electronic -Marketing. This course ensures that students develop their technical as well as their professional skills.

| 36414 | **Business Intelligence** | **Credit Hours: 3** | **Pre-requisite: 36302** |

This course introduces the concepts of Business Intelligence (BI) systems. It is focused on the role of BI in supporting the decision-making process.Topics covered include components of BI systems, data warehousing, multi-dimensional analysis, data mining. In addition, it presents the applications of BI in the different fields and its current trends. The course includes a practical part which covers some of the most popular BI systems such as: OLAP, Tableau and QlikView

COURSE DESCRIPTION

| 36405 | Mobile Business Applications | Credit Hours: 3 | Pre-requisite: 36112 |

This course is focused on the mobile applications for in the business fields. It defines the top mobile systems and applications that are used in business. Moreover, it describes the way that these applications work and how to build these applications using specialized programs. This is a practical course which is given in the lab to enable students to develop simple mobile applications from the business field

| 36403 | Cyber Security Technologies | Credit Hours: 3 | Pre-requisite: 36301 |

This course offers a comprehensive introduction to the principles and practices of cybersecurity technologies. It explores cryptographic primitives, security protocols, and system security strategies. The course covers public digital signatures, authentication methods, and their applications in securing communications, e-commerce, and network infrastructures. Additionally, it includes an exploration of recent technologies, such as blockchain technology, focusing on their role in enhancing security in various contexts.

| 36420 | Business Process Management | Credit Hours: 3 | Pre-requisite: 36232 |

The course is focused on using IT to manage the business processes. It covers the business process life cycle at different stages; design, model, run, monitor, and optimize. At the design time, the course introduces business process modeling to represent the desired behavior of the process. At run time, the monitoring stage is studied, and the role of information systems is explained thoroughly. Finally, process mining is introduced as a process-centric analytical approach to analyze executed business processes and provide recommendations for process improvement and process re-engineering. The course is designed to cover both theory and practice to improve
the modeling and analytical skills of the students.

| 36435 | IT Project Management | Credit Hours: 3 | Pre-requisite: 80 CHS |

This course introduces the applications of project management on IT projects. It provides a clear understanding about the principles of managing IT projects, and it focused on studying the organizational aspects that affect managing IT projects. It also introduces the planning process for IT projects through creating work breakdown structure, building, implementing and monitoring a plan. The course focuses on the tools and techniques of enforcing Earned Value management (EVM) in IT projects.

36436	Advanced Applications in E-Business & SCM	Credit Hours: 3	Pre-requisite: 36232

This is an advanced course in e-business applications. Topics covered include: electronic payment systems (EPS),customer relationship management (CRM and E-CRM), Supply Chain Management and social commerce. In addition, this course covers several innovative applications in various e-business domains.

36499	Graduation Project	Credit Hours: 3	Pre-requisite: 99 CHs, 36316, 36435

This is a last year course in which students are supposed to apply the knowledge gained during their study. Students are supervised to choose a suitable idea, write the proposal, and develop the project using methodologies that are suitable for the project idea.

36221	Object Oriented Programming for BIT	Credit Hours: 3	Pre-requisite: 36112

This course focuses on essential advanced programming skills relevant to business applications. Using a high-level programming language, the course covers how to design and create classes utilizing constructors, accessors, and mutators to maintain object state. The course emphasizes object-oriented programming design, including key concepts such as inheritance, polymorphism, abstract classes, and interfaces. The course includes practices for software project design, incorporating object-oriented principles and basic design patterns. Then applying these theoretical concepts to practical scenarios.

36406	Advanced Database Management Systems	Credit Hours: 3	Pre-requisite: 36203

This course presents the concepts of Data Base Management Systems (DBMS). The course focuses on the concepts, advantages and statements for the Structured Query Language (SQL) and its applications in building and manipulating relational databases. In addition, it introduces the Query by Example processor (QBE) to manipulate relational databases. The course includes practical sessions in which students apply and practice using SQL statements and QBE to build and manipulate relational databases using a DBMS in lab.

36410	Special Topics in BIT	Credit Hours: 3	Pre-requisite: 60 CHs

This course is dedicated to new trends in the BIT field to keep the students familiar with the new trends and market's demand. The topics covered depend on the selected material with a focus on research methodologies.

36416	Logistics and SCM Systems	Credit Hours: 3	Pre-requisite: 36232

This course introduces the concepts of logistics and supply chain management (SCM). Special attention is given to the SCM activities including production, transportation, inventory, purchasing, sales, marketing, and customer service. Topics covered include supply chain structure, demand and sales forecasting, inventory management, transportation operations, sourcing and procurement, pricing.

36417	Advanced System Analysis and Design	Credit Hours: 3	Pre-requisite: 36316

This course introduces the concepts and terminologies of object-oriented (OO) approach in systems development. Topics covered include life cycle of systems development using the OO approach and the modeling of the development process phases using one of the modeling languages. Special attention is given to the application of the OO approach on real business projects using one of the object-oriented modeling languages. The course also introduces RAD technique.

36409	AI in Business Applications	credit hours: 3	Pre-requisite: 36302

This course provides an in-depth exploration of the principles, techniques, and applications of Artificial Intelligence (AI) in a business context. It is designed to equip students with the knowledge and skills necessary to understand and implement AI solutions to improve business processes, decision-making, and competitive advantage.