Information Technology Management –Business Intelligence
Department of Operation Management and Information Technology, Faculty of Management, Kharazmi University

Program Title (major)	Information Technology Management – Business Intelligence
Level of studies	Master of Science
Medium of Instruction of Program	Farsi - English
Duration of program	4 Semester
Intake / Academic Session	Fall (September)
Number of Credits	32 credits during 4 Semester
Coursework / Research (Mode of studies)	This program is delivering by coursework/research mixed mode. Students must confirm their research supervisor and research topic after first semester or before end of third academic semester. Students will register and submit their research proposal in the fourth semester and their viva will be conducted after 6 months of their submission.
Main / General Courses	Basics of Information Technology Infrastructure, DBMS, Basics of Knowledge Management, Theoretical and Philosophical foundation of Information Systems, Strategic Management of Information Systems, Business Intelligence, Information Technology Project Management, Electronic Business
Specialized Courses	Data Mining, Enterprise Recourse Planning, Big Data Analysis, Social Network Analysis
Program description / objective	The purpose of this program is to train professionals who help organizations use data and information to make better decisions and manage organizational knowledge. With the importance of data analysis today, there is a need for experts to assist organizations in a variety of areas such as data management, data quality management, data analysis and data insight, business intelligence, data mining, process mining and knowledge management. Nowadays, with the importance of data analysis, there is a need for experts to assist organizations in a variety of areas such as data management, data quality management, data analysis and acquiring data insight, business intelligence, data mining, process mining and knowledge management. Graduates in this field can also assist organizations in other areas. In marketing research and consumer behavior analysis, they can help organizations by analyzing marketing and sales data. In the field of management and performance improvement, they can play an advisory role for human resources related units. Graduates can play an important role in improving processes using process mining to improve the performance of systems. They can also assist the research and development departments of the organization in the use of new trends

	in artificial intelligence, machine learning and big data. Courses in this program include Basics of Information Technology Infrastructure, DBMS, Basics of Knowledge Management, Theoretical and Philosophical foundation of Information Systems, Information Technology Project Management, Digital Entrepreneurship and Innovation, Enterprise Recourse Planning, IT Security Management, Electronic Business and Social Network Analysis. IT management graduates with business intelligence orientation are expected to work in one of the following positions. **Business Analyst:** Business analysis, which is one of the most important organizational skills. Business analysts identify needs and enumerate the technical and business requirements needed to meet those needs. The identified requirements are implemented through electronic systems and digital technologies. **Data storage and processing project manager:** Graduates of this program can help organizations in managing data storage and processing projects. They assist organizations in gaining appropriate knowledge from IT project management, especially agile project management approaches; As well as in acquiring the required knowledge related to database management, data quality management and process management. **Knowledge management specialist:** Leading organizations are knowledge-based organizations. Knowledge management specialists can extract and model organizational knowledge and organizational intellectual capital by acquiring relevant training. Knowledge management experts gain a high level of competency in extracting and documenting knowledge, converting data into knowledge, and designing knowledge management systems. They can play an important role in national and international businesses as one of the vital specialties. **Performance Management Specialist:** From ABC to BSC and today OKR, performance management has always been one of the most effective aspects in improving organizational performance and productivity. Graduates of this program can use the knowledge gained during graduate school to assist organizations in quantifying strategies and their implementation, evaluating the performance of units and individuals, as well as designing performance management dashboards. Performance management specialist, along with process management and improvement experts, are able to create specialized teams in order to improve organizational productivity and effectiveness.

	Specialist in analysis and design of business intelligence systems: These experts assist organizations become smarter in the areas of planning and control. Graduates of this program play an important role in moving organizations toward a new generation of intelligence by providing automated interactive reports and visual displays in dashboards, utilizing data from different databases, analyzing and creating dashboards related to analyzing organizational strategies, and analyzing key performance indicators. **Organizational resource planning specialist:** Using ERP systems and implementing them can be as challenging as it is important for organizations. Graduates in this field are expected to play an effective role in identifying and selecting ERP systems in organizations, adapting these systems to organizational needs, and managing the risks and challenges associated with them. **Digital Technology Foresight Specialist:** One of the most important areas of research for organizations is technology foresight and preparing roadmaps for the use of digital technologies related to business intelligence in the organization. Firms can use the graduates in the capacities relates to research and development (R&D), e-business development, research about technology forecasting, artificial intelligence, big data analysis, machine learning and finding major digital technology trends.

General plan of credits distribution in semesters

(Last Update June, 2022)

- General Subjects from all Programs (16 Credits)
- Specialized Subjects (8 Credits)
- Elective Subjects (4 Credits)
- Thesis (4 Credits)
- Compensatory – Research Methodology (2 Credits)

MSc. IT-Business Intelligence & Pardis (1st Sem)			
	Subject	**Credit**	**Description**
1	Theoretical and Philosophical Foundation of Information Systems	2	Main-General
2	Basics of Information Technology Infrastructure	2	Main-General
3	DBMS	2	Main-General
4	Digital Entrepreneurship and Innovation	2	Elective
5	Basics of Knowledge Management	2	Main-General

MSc. IT-Business Intelligence & Pardis (2nd Sem)			
	Subject	**Credit**	**Description**
1	Research Methodology	2	Lack of Course
2	Strategic Management of Information Systems	2	Main-General
3	Business Intelligence	2	Main-General
4	Data Mining	2	Specialized
5	Enterprise Recourse Planning	2	Specialized

MSc. IT-Business Intelligence & Pardis (3rd Sem)			
	Subject	**Credit**	**Description**
1	Information Technology Project Management	2	Main-General
2	Electronic Business	2	Main-General
3	Big Data Analysis	2	Specialized
4	IT Security Management	2	Elective

MSc. IT-Business Intelligence & Pardis (4th Sem)			
	Subject	**Credit**	**Description**
1	Thesis	4	Research Oriented