

Media Informatics, B.Sc.

YET ANOTHER JOINT B.SC. PROGRAM AT GJU

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The German-Jordanian University (GJU)

GJU is a Jordanian public university founded in 2005, modelled on the German applied-sciences universities model, characterized by their focus on putting knowledge into practice and on promoting knowledge transfer. GJU aims to play a significant role in promoting links between Jordan and Europe, particularly Germany. By taking advantage of the best educational practices in both Jordan and Germany, the University has positioned itself as a leader in its field.

The University's focus is on providing undergraduate and graduate programs of the highest quality. It offers over 20 programs, with a student body of around 5,000, drawn predominantly from Jordan, but also including international students.

Computer Science Department (CS)

- The Department of Computer Science at GJU is a part of Electrical Engineering and Information Technology School (SEEIT). It offers bachelor's degree in computer science and master's degree of enterprise system engineering. The department includes faculty members specialized in various fields of state-of-the-art technologies such as Cloud Computing, Internet of Things (IoT), Big Data, Game Programming, Augmented/Virtual Reality, Data Science, Algorithms, Decision Support Systems, and Bioinformatics.
- The department vision is to enhance our reputation as a teaching and research institution on local, regional and global levels, by recognizing the importance of applied education, innovation, excellence, partnerships, and attracting best students and staff worldwide.
- The mission is to provide the market with students who possess both theoretical and applied knowledge, to train them to be successful, ethical, and effective problem-solvers and life-long learners, and finally, to research to advance the state of the art in computer science and integrate research results into other scientific disciplines

Design and Visual Communication Department (DVC)

- As Part of the school of Architecture and built environment the department of Design and Visual Communication was established in 2008.
- The department always thrive to provide high-quality integrated practice-based learning in a responsive and dynamic educational environment.
- In addition to develop the educational program towards market-responsive teaching environment, emphasizing the German and International dimension. The department is interested in exchanging knowledge and experience with the international community through education and travel.

About the programme

- The modern information society needs creative minds that can bridge the gap between design and informatics in the development of innovative media applications.
- The interdisciplinary **bachelor's degree** program in **media informatics** combines the content of a classic computer science degree with design and multimedia content.
- The media informatics deals with the conception, development, implementation and operation of hardware and software systems for the production, distribution and use of (digital) media.

Objectives

The aim of the education is to provide students with a good start to their careers with a course of study aimed at practical professional skills in the following areas: software, web and database development, computer graphics/animation, design and development of user interface, and media-oriented software applications, as well as management consultancy.

More over the programme will:

- Nurture research and support innovation and entrepreneurship.
- Enhance research skills (experimental, practical, computational, theoretical)
- Constant development of the study program to meet the ever-changing industrial and market needs.
- Expose students to industry best practices and real-world scenarios.
- Reinterpret & extrapolate skills taught to suit the needs of an individual project & produce a new or unexpected solution.

Learnings Outcomes

Upon the completion of the programme, students majoring in media informatics must:

1. Demonstrate a fundamental understanding of data structures, concepts of programming languages, software design, typography, principles of photography, design theory and methodology.
2. Demonstrate knowledge and correct application of the principles and practices for software design and development.
3. Demonstrate understanding of form and function, colour, market research and consumer demand, material, and cultural studies.
4. Acquire knowledge of a variety of programming languages.
5. Development of individual creative expression using experimental & innovative UX/UI programs and tools.
6. Combine technical, creative, and conceptual skills to create projects that meet client requirements and solve a range of visual communication challenges.
7. Execute projects in a professional manner from presentation sketches, research reports, visuals; computer-generated 3D models, and actual prototypes.
8. Gain the skills of research, creativity, analysis, problem-solving, and critical thinking skills.
9. Gain communication skills, soft skills, and team spirit.
10. Be aware of new technologies.
11. Be competitive in the digital job market.
12. Acknowledge the ethical standards and considerations in the digital field.

Market Survey Analysis

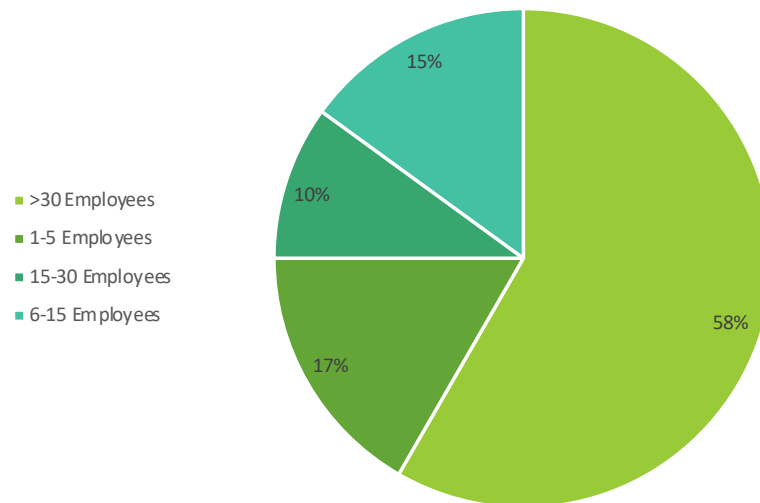
Methodology

The method used to collect data is an online survey/ questionnaire to employers

- ❑ Objective: Identify gaps in the media design field in the job market
- ❑ Target Companies Sectors: Software engineering , graphic design, web development, marketing etc.
- ❑ Reach: Survey was sent out to companies whom contacts were collected from:
 - Jordan Computer Society (JCS)
 - Jordan Engineers Association (JEA)
 - The Information and Communications Technology Association of Jordan (int@j)
 - Industrial Links Office at GJU (ILO)
 - Search about the best design agencies and programming companies in Jordan

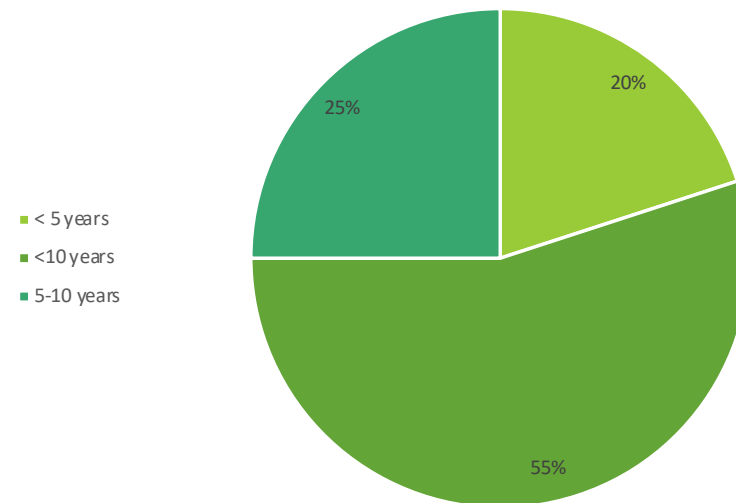
Company Information

Company Size



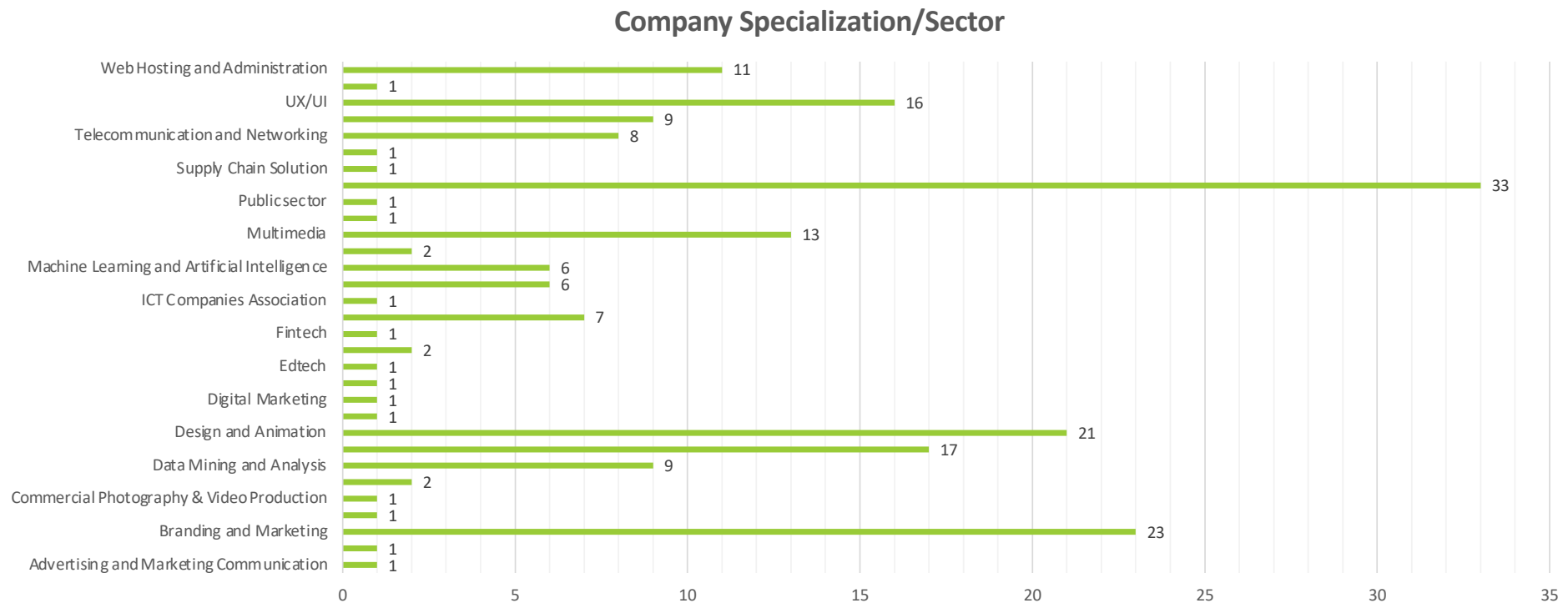
Number of employees in the company

Company Age



Number of the company's operating years

Company Information



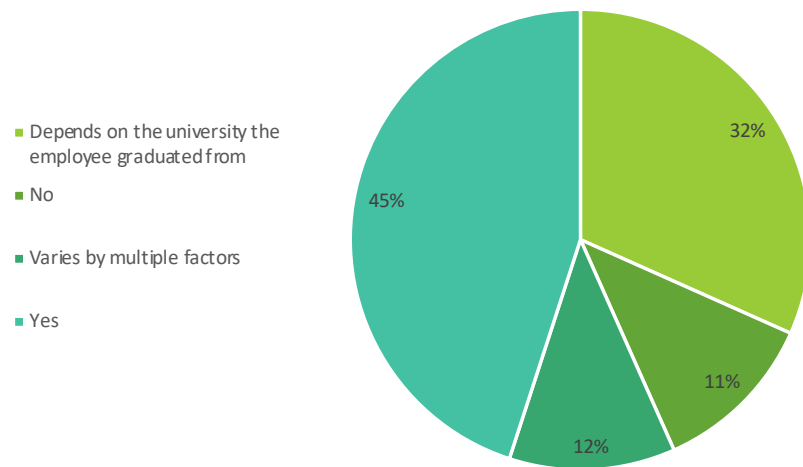
The company specialization/sector, *more than one answer was taken*

Positions at the Company



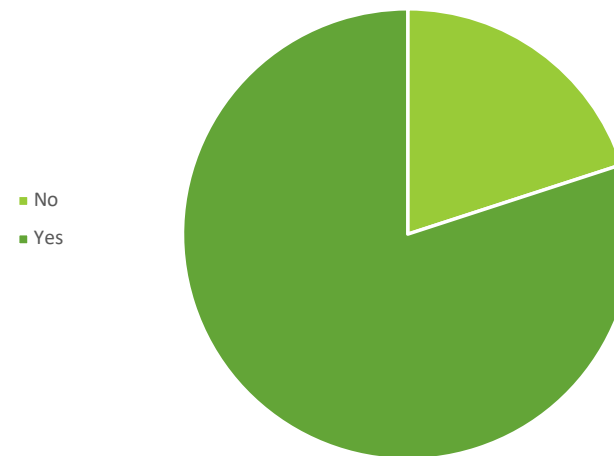
Employability at the Company

Graduates suitable for the workplace



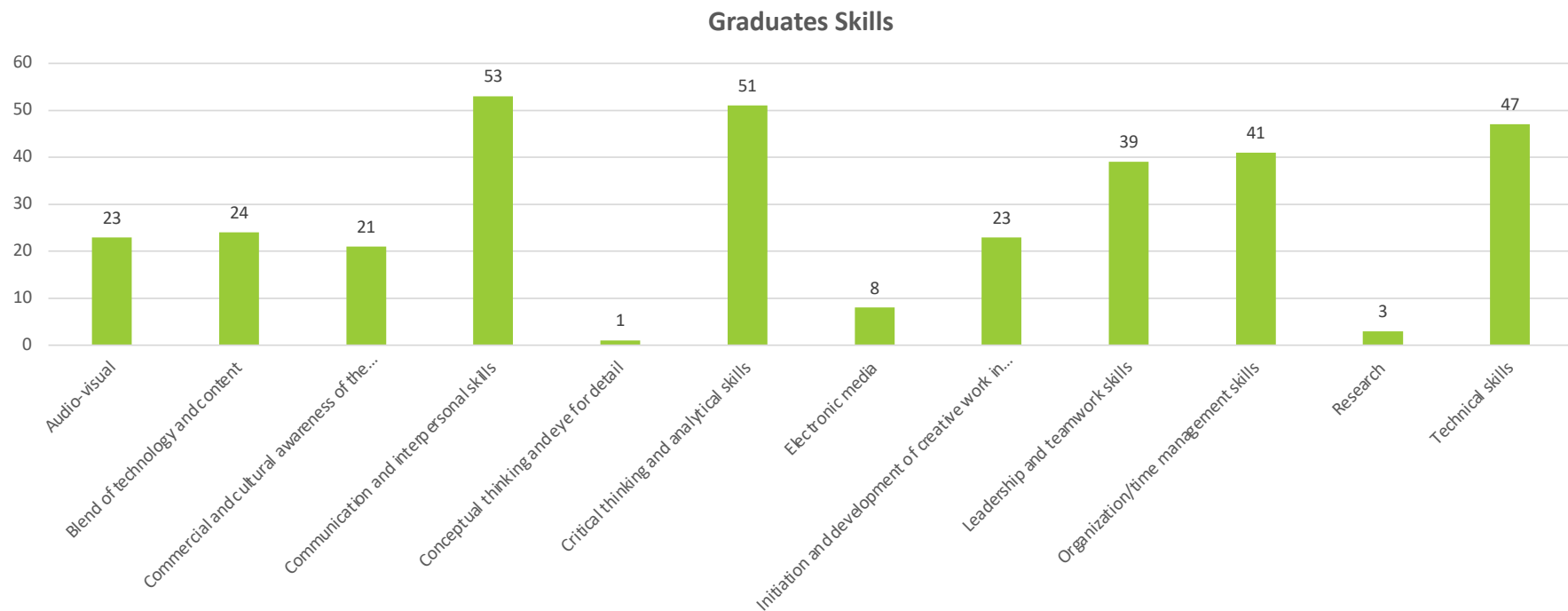
If the employed graduates are the best suit for the workplace

Employee portfolio considered in the hiring process



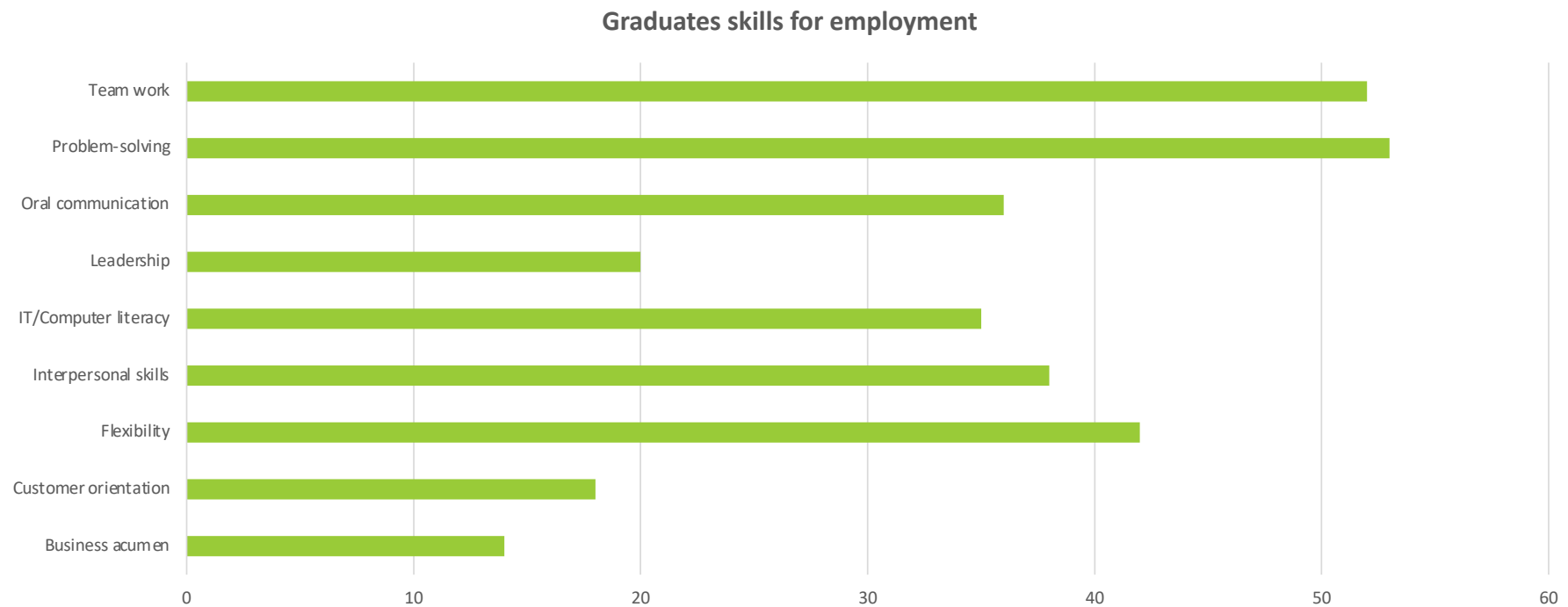
If the employee portfolio is considered in the hiring process at the company

Graduates Competencies



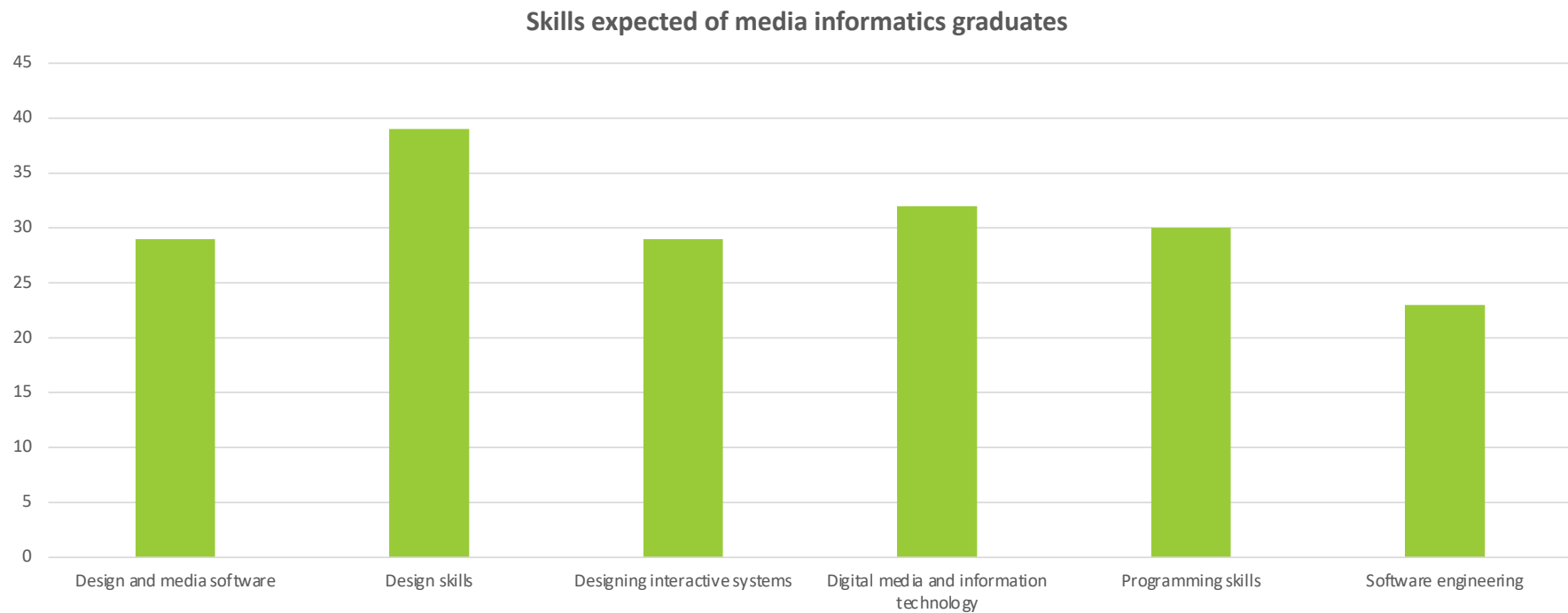
The expected skills to be acquired by graduates from their degree, *more than one answer was taken*

Graduates Competencies



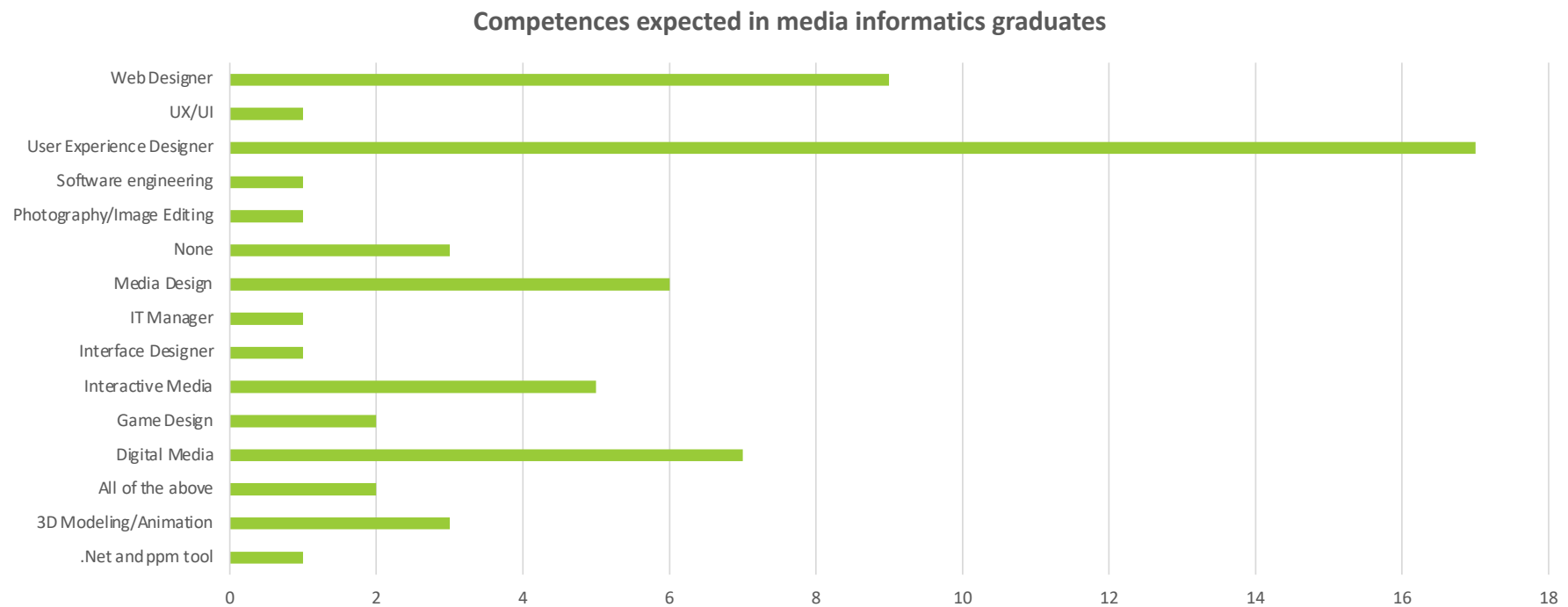
Graduates skills that are important to employers, *more than one answer was taken*

Media Informatics Graduates



Company expectation from a media informatics graduates, *more than one answer was taken*

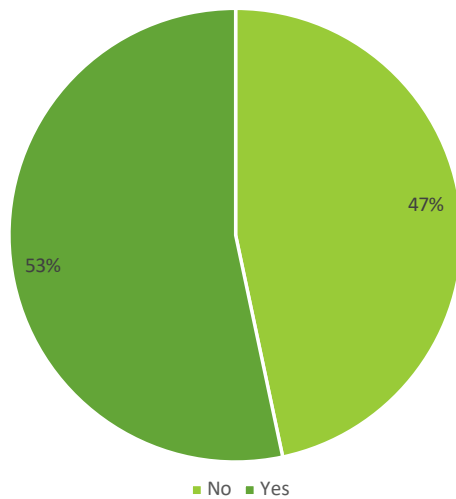
Media Informatics Graduates



Competences the company expect from a media informatics graduates, *more than one answer was taken*

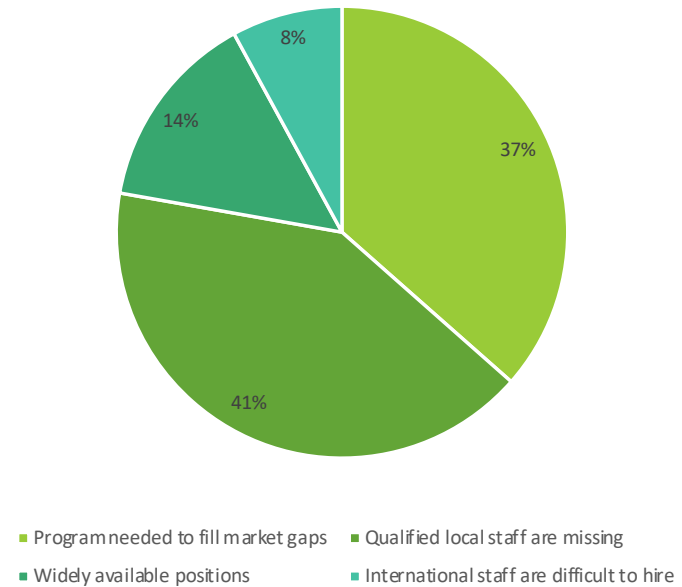
Media Informatics Graduates

To advocate for media informatics



If the company is willing to advocate for the new bachelor program in media informatics.

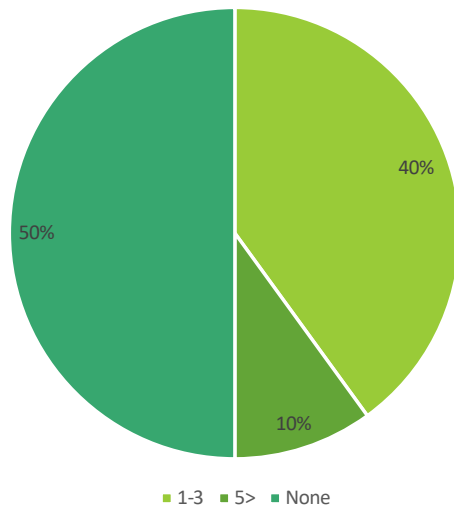
Reasons if yes



Reasons, if yes, why would you, more than one answer was taken

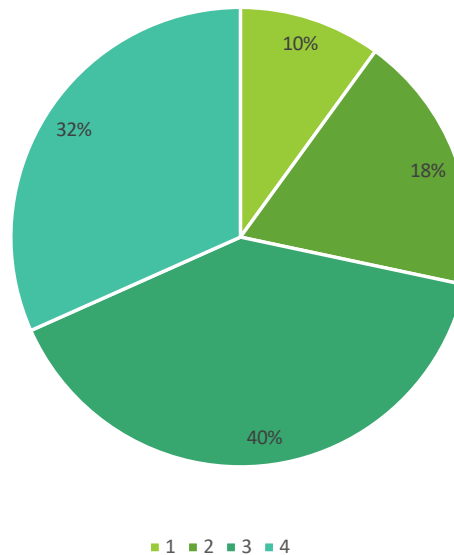
Media Informatics positions

Number of occupied positions



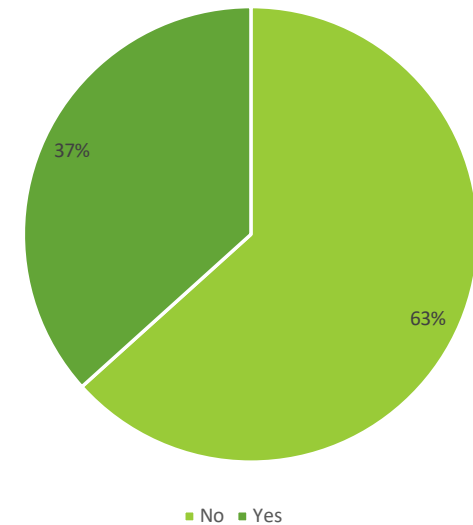
Number of occupied positions for media informatics field
Currently available at the company.

Difficulty to hire experts



Difficulty to hire experts in media design and software development simultaneously (from 1 to 4 where 4 is really difficult)

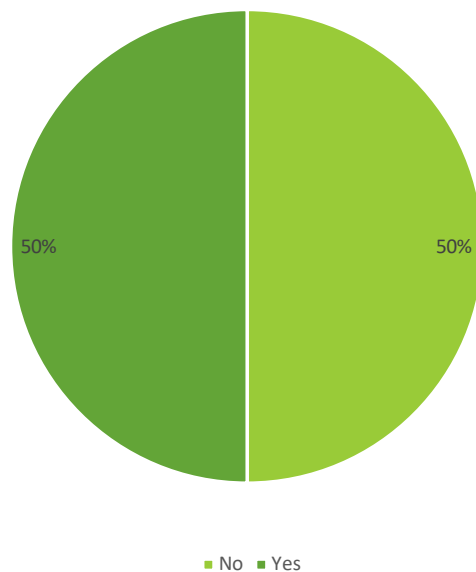
Plan to open positions



If the company plan to open job vacancies in the field of media informatics

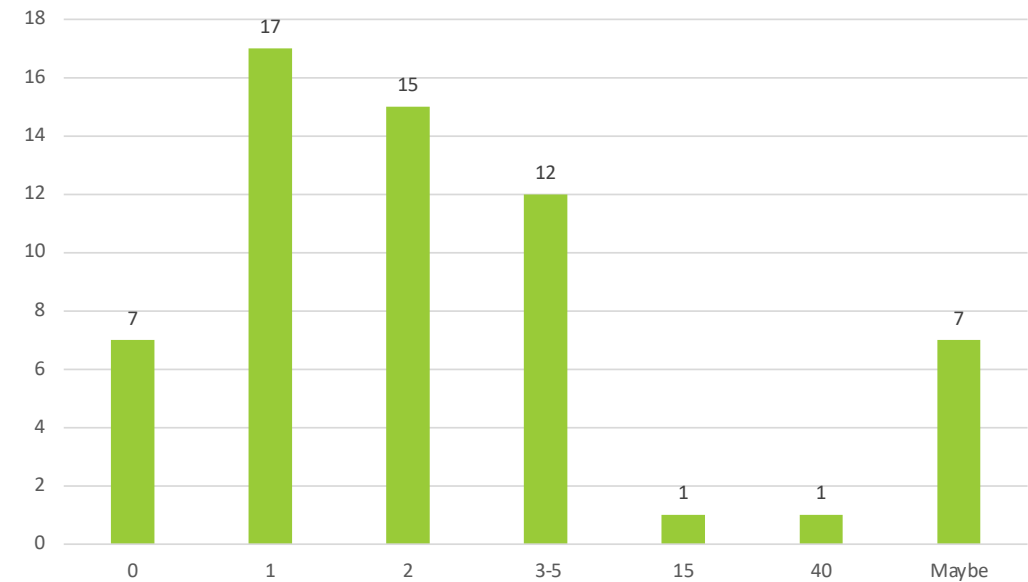
Media Informatics Internships

Available positions for interns



If the company offer intern positions that leads to hiring

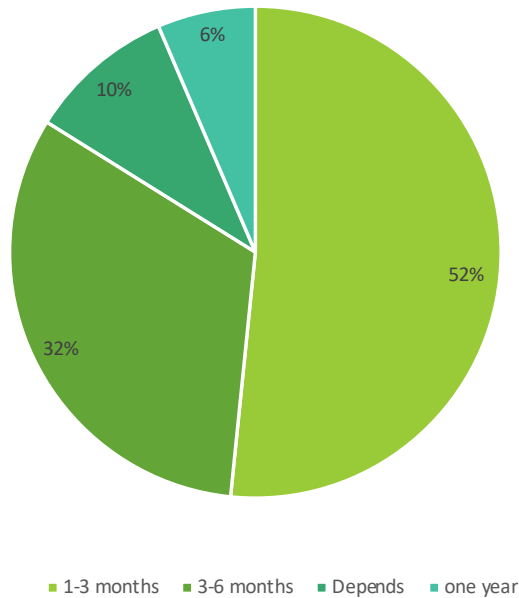
Number of positions



Number of intern positions the company will offer

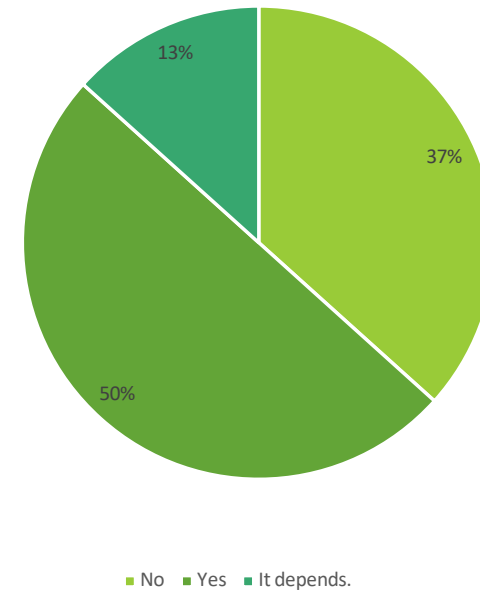
Media Informatics Internships

Internship Duration



The duration for intern positions

Paid Internship



If the company offer paid intern positions

Curriculum

The Bachelor of Science degree in Media Informatics requires successful completion of the following course requirements.

Classification	Credit hours		
	Compulsory	Elective	Total
University Requirements	21	6	27
School Requirements	18	6	24
Program Requirements	92	12	104
Total	122	23	155

1. University Requirements (27 Credit Hours)

1.1. Compulsory: (21 Credit Hours)

Course No.	Course Title	Credit hours	Prerequisite
ARB 99*	Arabic 99	0	-
ARB 100*	Arabic	3	-
ENGL 98*	English I	0	-
ENGL 99*	English II	0	ENGL 98
ENGL 101*	English III	1	ENGL 99
ENGL 102*	English IV	1	ENGL 101
ENGL 201*	English V	2	ENGL 102
ENGL 202*	English VI	2	ENGL 201
GERL 101*	German I	3	-
GERL 102	German II	3	GERL 101
MILS 100	Military Sciences	3	For Jordanian students only
NE 101	National Education	3	

1.2. Elective: (6 Credit Hours)

Course No.	Course Title	Credit hours	Prerequisite
PE101	Sport and Health	3	ARB 99
IC 101	Intercultural Communications	3	ENGL 101
SFTS 101	Soft Skills	3	ENGL 101
DES 101	Arts Appreciation (in Arabic)	3	ARB 99
	Arts Appreciation (in English)	3	ENGL 101
EI 101	Leadership and Emotional Intelligence	3	ENGL 101
BE 302	Business Entrepreneurship	3	ENGL 101
SE 301	Social Entrepreneurship and Enterprises	3	ENGL 101
TW 303	Technical and Workplace Writing	3	-

2. School Requirements (24 Credit Hours)

2.1. Compulsory: (18 Credit Hours)

Course No.	Course Title	Credit hours	Prerequisite
GERL 201	German III	3	GERL 102
GERL 202	German IV	3	GERL 201
MATH 99*	Pre-Math	0	-
MATH 101	Calculus I	3	MATH 99
CS 116	Computing fundamentals	3	-
DES 000	Introduction to interactive media	3	-
DES 000	Visual Fundamental for Digital Media	3	-

2.2. Elective: (6 Credit Hours)

Course No.	Course Title	Credit hours	Prerequisite
MATH 102	Calculus II	3	MATH 101
ECE317	Linear Algebra	3	MATH 102
CE 352	Computer Networks	3	CS116, CE201
CE212	Digital Systems	3	-
CE2120	Digital Systems lab	1	Co-requisite CE212
DES 000	Digital Art and Media Effect	3	

3. Program Requirements (104 Credit Hours)

3.1. Compulsory: (92 Credit Hours)

Course No.	Course Title	Credit hours	Prerequisite
GERL 301	German V	3	GERL 202
GERL 302	German VI	3	GERL 301
MI 391	Field Training	0	Completion of 90 C.H., Department Approval
MI 492	International Internship	12	CS391, Department Approval
MI 593	Graduation Project	3	Completion of 90 C.H.
DES 131	Typography / Latin	3	
DES 236	Character Rigging	2	
DES 331	Storyboard	3	
DES 354	Audio Techniques	2	
DES 151	Principles of Photography	2	
DES 327	Design Theory	3	
ARC 231	Computer Visualizations I	2	
DES 224	History of Visual Communication Design	3	
DES 225	Theories of Visual Communication	3	
DES 352	Media Technology	2	
DES 238	Animation Software	2	
DES 315	Interactive Design I	4	

Course No.	Course Title	Credit hours	Prerequisite
CS201	Discrete structures	3	MATH099
CE201	Computer Architecture and Organization	3	CE212, CE2120
IE211	Probability and Statistics	3	MATH102
CS214	Object-Oriented Programming	4	CS116 , CS116 0
CS254	Visual Programming	3	CS214
CS355	Web Technologies	3	CS254, CS363
CS222	Theory of Algorithms	3	CS116,CS1160, CS201
CS223	Data Structures	3	CS116, CS1160
CS330	Image Understanding	3	CS223,ECE317
CS342	Software Engineering	3	CS254, CS363
CS477	Mobile Computing	3	CS254, CS363
CS356	Information Security	3	CS363
CS451	Artificial Intelligence	3	CS223, CS222

3. Program Requirements (104 Credit Hours)

3.2. Elective: (12 Credit Hours)

Course No.	Course Title	Credit hours	Prerequisite
DES 215	Web Design I	4	
DES 414	Computer Game Design	4	
DES 515	Web Design II	4	
DES 513	Creative Design Studio A	4	
DES 359	Design Technology	2	
DES 238	Animation Software	2	
DES 239	Multimedia Software	2	
DES 434	Design Visualization	2	
DES 403	Special Topics in Design and Visual Communication C	3	
CE357	Operating Systems	4	CE201
CS363	Database Management Systems		CS223
CS416	Systems Programming	3	CS223
CS419	Compiler Construction	3	CS222, CS223
CS323	Computational Theory	3	CS222, CS223

Thank you!
