

1. No. of MOUs

Princess Sumaya University has signed 21 MOUs with local, regional and international institutions. The signed Memoranda of understanding contains a mainly three dimensions the first one is the students and how to improve their practical skills, the second dimension is the curriculum development, and the last one is the research.

At the same time the signed agreements involve different community services such as our agreement with "Tkiyet Um Ali" by consolidating voluntary work and community service by providing opportunities for students and the university community to participate in activities that support efforts to combat food poverty. Another example is the agreement with Hakeem Co. where we started with a training session on data science in health applications. At the same time, Hakeem offered training vacancies (Internship) for our students on Enterprise Resource Planning System (ERPS) and Health Information System (HIS) which is a part of internship program for PSUT students. The training covered different aspect such as Health information system and Data Science where the trainee finished at least 240 hours during 2 to 3 months. In addition, we consulted Hakeem regarding our curriculum related to Health information technology. [Table 1](#) shows a sample of companies where the PSUT students had internships.

Table 1 Sample of Companies names and number of students on training

	Company Name	Website	Number of Students	Internship Period
1	CSC beyond	https://cscbeyond.com/	9	2-3 Months
2	Hakeem	https://ehs.com.jo/	5	2-3 Months
3	Huawei	https://www.huawei.com/en/	7	10 days
4	Zain	https://www.jo.zain.com/	6	6 months

5	Altibbi	https://altibbi.com/	1	3 months
6	Amazon	https://www.amazon.com/	29	3 months

2. No. of students on placement

We succeed in placing our students in different training and practical programs with our partners (see [Table 1](#)). For example, based on our agreement with Amazon, we nominated almost 100 female students for Amazon Campus Mentorship Series to increase awareness and preparedness of the talent pool comprising of women on engineering campuses. Amazon selected 29 female student for the training program, the internship is three months long, and we would require at least 2/3 hours of the student's time per month.

3. No. of Workshops for students, staff and enterprise employees

PSUT has conducted over 30 workshops (see Table 2), each workshop targeting a specific group and motivated the industry to be a part of it. For example, the "PHI First Python workshop" targeted students, to show how different applications using python as a programming language smart. Another workshop conducted in association with the QA office at PSUT, "How to write Course Learning Outcomes" presented to the academic staff to arm them with sufficient knowledge of different methodologies of

analyzing the CLOs and how the CLOs matched with different local and international accreditation.

Table 2 List of Workshops

Workshop Title	Attendance	Number of attendees	Date
A workshop entitled "CV preparation skills for work and job interviews".	students	20	01/01/2020
gate workshop	employees	30	03/01/2020
G.S expert visit and hold a workshop for students	students	20	03/01/2020
CV and cover letter writing skills	students	40	12/01/2020
An introductory workshop entitled "Basics of Motivational Rewards for Distinguished Students" for the Deanship of Graduate Studies	employees	25	14/01/2020
Peer-to-peer mentoring within the Jordanian higher education sector.	employees	28	19/01/2020
Seminar in the field of social media and its technical risks	students and employees	20	22/01/2020
Awareness lecture on seasonal influenza "H1N1"	students and employees	70	01/02/2020
Workshop on how to formulate learning outcomes and design the Syllabus	employees	25	13/02/2020
Google Club Workshop	students	20	17/02/2020
Workshop entitled SMART GRIDS	students	20	19/02/2020
Google Club Workshop	students	20	19/02/2020
Google Club Workshop	students	20	20/02/2020
Fai Institute of Science \ Day One	students	50	23/02/2020
Fai Institute of Science	students	50	25/02/2020
JOVITAL project workshop	employees	29	25/02/2020
Fai Institute of Science	students	50	26/02/2020
Fai Institute of Science	students	50	27/02/2020
Fai Institute of Science	students	50	28/02/2020
Free Jerking Workshop "Data Science"	students	50	19/04/2020
Workshop (Blockchain Technology and the Future of Cryptocurrency)	students	50	27/06/2020
A seminar entitled "Green Talk, a seminar for leaders in the field of renewable energy	students	150	04/08/2020
Android Google Club Workshop	students	20	03/11/2020
Corporate Governance	students	40	16/11/2020
Creativity in collaborative problem solving	students	40	25/11/2020
Using emotional intelligence to achieve outstanding performance	students	40	15/12/2020
The power of conflict in disputes	students	40	16/12/2020
Job Opportunities Workshop for Software Engineers	students	40	20/12/2020
Effective skills and persuasion skills	students	40	23/12/2020
Make decisions and solve problems	students	40	30/12/2020
CV and cover letter writing skills	students	40	30/12/2020
CV and cover letter writing skills	students	40	12/01/2021

4. No. of company managers/experts giving lectures/seminars at the University

- We invited Eng. Yousef Obidat from Hakeem Company to discuss the study plan of HIT and how it can be deal with the current market demand. (08-02-2021)

Dr. Ammar Odeh Liaison Officer
 Dr. Mohammed Abu Snobor
 Dr. Ashraf Qaddomi
 Dr. Firas Alghanim
 Dr. Nailah Al-Madi

- We conducted different DS Lecture Series

Topic	Speaker	Date
Artificial intelligence ethics, theory vs practice and power shift	Ms. Sajeda Amro	1st March-2021
Between Optimization and Data Mining	Dr. Nailah Al-Madi	8th March 2021
Usage of Data Science in Telecom and Finance	Mr. Moayyad Yaghi	15 th March 2021
The crisis of p-value in big data: Is there a p-value you cannot buy?!	Dr. Osama Abdelhay	22nd March 2021
Case Study in Neuroscience & AI Driving Each Other Forward	Dr. Serin Atiani	29th March 2021
Arabic Natural Language Processing at CAMEL Lab	Dr. Nizar Habash	24th May 2021
The Role of Machine Learning in Cybersecurity	Dr. Ibrahim Abualhaol	31st May 2021
Data Science Applications in Health Technology: Altibbi Case Study	Ms. Maria Habib and Mr. Mohammad Faris	5th July 2021

5. No. of student projects in which company experts are involved
(either as supervisors or examiners)

We participated in different projects, for example, we have two projects with Zain Company, and the first one is the Social Network Analysis (SNA) where we have 3 students and 3 supervisors from PSUT , and 2 examiners from the Zain Company (Mobile telecommunication company). The second project is Zain e-Shop which has 1 supervisor and 2 students. In addition, three students and 1 supervisor developed a "Safety Alert system" with Huawei company where this project was accepted to publish in ICCIT-2021: the 2nd International Conference on Computing and Information Technology (IEEE conference) (see [Table 3](#)).

Table 3 Student projects with companies

Project	Company/Institution	PSUT supervisor s	students	Company mentor
Social Network Analysis	Zain	Ammar Odeh,	Rakan Nader Armush	Duaa Al-Tamimi
			Tarek Sobhi Samir Salam	
			Osama Rakan Mahmoud Al-Muraikhat	
Zain Estore	Zain	Ammar Odeh,	NASSER BATTA	Ali Safieh
			Loay AlBarmawi	
AI CHAT BOT	cscbeyond	Dr. Saleh Abu-Soud	Jude Barakat, Omar Radwan	Abdulrahman Aboura

		Dr.Ammar Odeh	Rinata Bakeer, Zina Jamal Tawfiq	
			Samia Imad , Aya Alaa Kazem Arafat	
huawei.com	Safety Alert system	Ammar Odeh	Leen Abu Shaar	Nouran Abdallah AbuRabea
			Amr Darawsheh	
			Alina Abu Siam	
The Royal Scientific Society	Chemical Lab Inventory System	Mohammad Abu Snober	Islam Ali Muhammad Zaitoun	Iyad Al-Dasouqi
			Muhammad Hosni Shehadeh Al-Qudah	
The Royal Scientific Society	Smart Agriculture System	Mohammad Abu Snober	Abdel Hamid Amer Mohamed Nasr	Iyad Al-Dasouqi
			Abdul Salam Hussain Al-Hindawi replied	
			Samer Khairallah Hassan Al-Omari	

We also developed AI Chatbot with our partner *cscbeyond*, where we used the PSUT website as a testing platform and after we built the system we testing it on the PSUT website ([Figure 1](#)). The main objective of this project is to give students experiences of how to deal with Big Data and Artificial Learning. The website visitor writes any question related to the university; the AI chatbox analyses the question/query and gives the visitor the most accurate answer (see [Figure 2](#)).

Figure 1. AI Chat Box

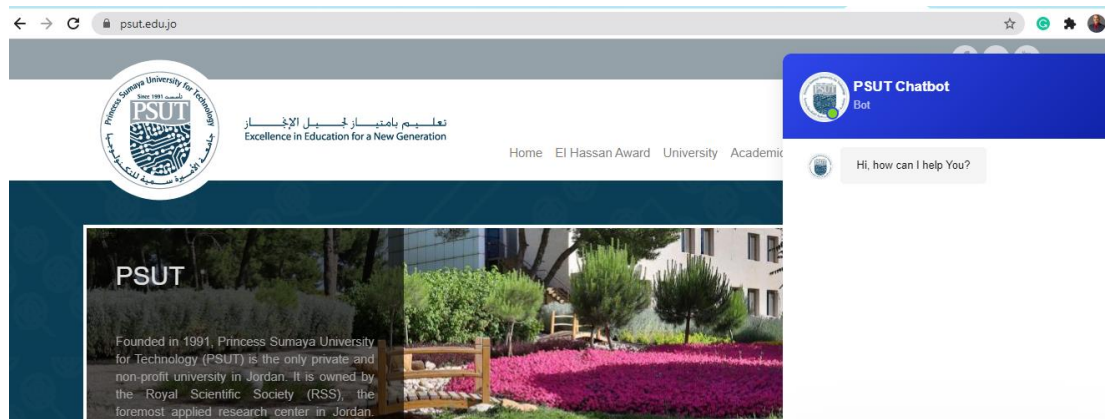
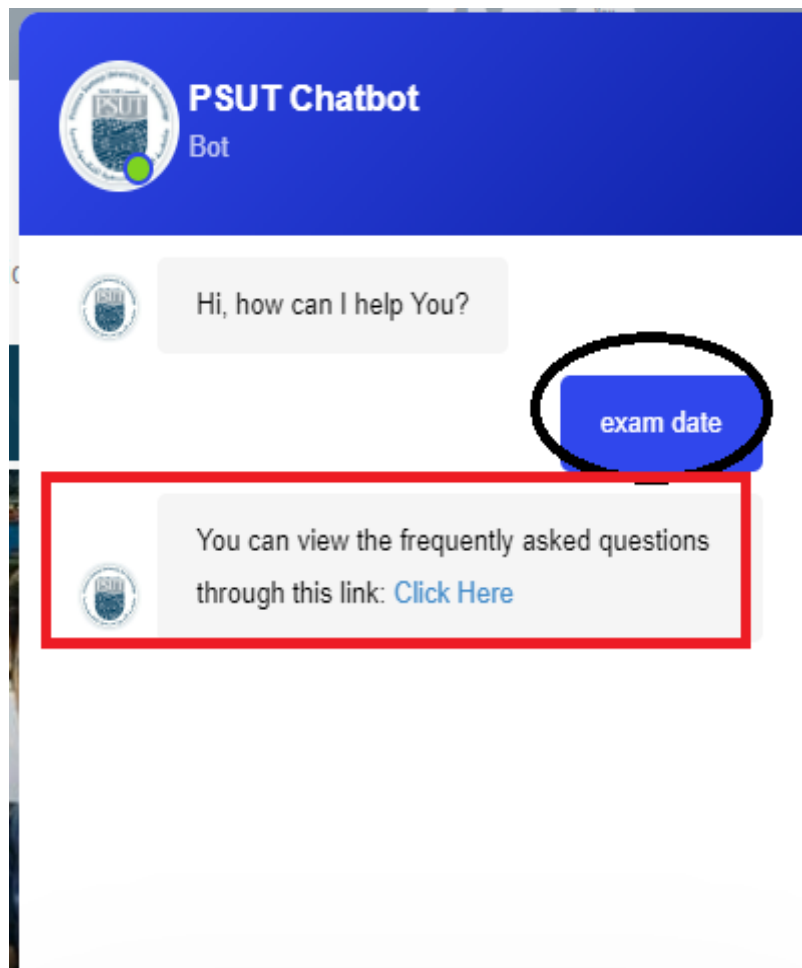


Figure 2. Example of Question and answer



6. Preparing a database of students' industry-related projects

A set of project ideas targeting different sectors were presented in addition to the projects mentioned in the Table 3. The projects were presented to different sectors, but they are still under study and have not been finally approved (see [Table 4](#)).

Table 4. Industry based projects under consideration

Project Title	Students' Names	Sector
E-s3af.com	Saif Ali	Ministry of health
An Online Emergency-Response Application	Loay AlBarmawi Tariq Al-Madhoun	
Automatic Attendance System For PSUT Students – (AAS) Using Facial Recognition Technology	Amro Alshadfan Amr Almuani	
Baleghni	Rinata Bakeer Rami Habash Mohammad Abuhilail	Public Security Directorate

E-s3af.com

E-s3af.com is a web-based mobile application that allows users to call an ambulance in case of medical emergencies using their mobile devices. It utilizes the GPS feature to give the dispatcher an accurate location of the person needing medical attention so that they send an ambulance to them as soon as possible. It also allows the authorities to check the identity of the person calling for help and find if they

have underlying health problems or disabilities so that they deal with the situation properly according to protocol.

The application also contains features such as a barcode scanner for medicines to identify it and its uses and the instructions of taking the drug and the proper or recommended dosages and has an SOS feature for people in rural areas such as the desert or the sea to call for help.

Automatic Attendance System

The Automatic Attendance System-AAS is a web-based system that uses a state-of-the-art technology of human identification using face recognition to automatically take student attendance through cameras. Generally, the Automatic Attendance System will not only solve the problem of time- wasting in taking attendance but also the problem of internal transformation and provide an accurate evaluation of students' grades compared to their attendance. It also allows students to attended compensatory lectures in coordination with the instructor.

Baleghni

Traffic accidents are becoming very common nowadays. As more people are engaged with driving, the probability of an accident to

happen is increasing. The result of such increase will demand a lot of effort and time from the police, mainly due to human errors.

The main purpose of our project is to provide an application that would be used on daily basis to report a car accident but in handy useful way. Also, it aims to ensure that in case of a car accident, the process of requesting, reaching and communicating with a policeman is efficient and fast until the arrival of the policeman and reporting finishes.

Our application will not only solve the traffic issues resulted from accidents, but also reduce wasted effort and time, as well as improving our country's roadways by sending detailed analysis regarding the accidents to the government.

Our methodological approach is to build this application to provide an efficient rapid car accident reporting experience for all drivers, and to analyze the car accident reports to improve streets, areas and driving rules.