

Kingdom of Saudi Arabia  
Ministry of Education  
Jouf University  
College of Computer & Information Sciences



المملكة العربية السعودية  
وزارة التعليم  
جامعة الجوف  
كلية علوم الحاسب والمعلومات

## الدليل التعريفي لبرنامج الأمن السيبراني

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## **Program Context**

As a result of increased demand for sophisticated computing environments, applications, and scientific research inside and outside of the academic field, today's organizations in both public and private sectors need high qualified graduates relevant to the workplace. Jouf University is committed to developing employable graduates in the field of cybersecurity through establishing this program and achieving its goals and objectives. It is an academic program aim to graduate cadres capable of competing in the labor market in the field of cybersecurity through the identification and development of modern tools in the field in order to contribute to the knowledge based economic growth of the Saudi society. The program contributes to the mission of the college as well as the university. It focuses on preparing cadres in the domain of cybersecurity to serve the local as well as regional communities in different aspects of technological development.

## **Mission of Program**

Preparation of qualified scientific cadres in the field of cybersecurity through innovative education and scientific research, which develops creative and analytical abilities that can serve the society.

## **Objectives of Program**

- Introducing the student to different structures and systems of information security.
- Introducing the student to potential risks in various IT applications that are related to the transfer of stored information.
- Providing the student with the ability to analyze the various weaknesses of the networks, methods used to penetrate the systems and the use of comprehensive solutions to reduce these breaches.
- Providing students with the ability to evaluate and analyze ethical and legal issues related to information security, including the classification, privacy and legitimacy of information.

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- Provide the student with the necessary skills to develop solutions to protect the various information networks from internal and external security threats.
  - Providing the student with the ability to work effectively in a team to achieve the work objectives, and to plan the tasks, as well as how to reach the final results.
  - Qualifying cadres scientifically and professionally in the field of cybersecurity and combating cybercrime to meet the needs of the national market.

## **Admission requirements:**

- The applicant must be Saudi, Non-Saudi Must, be on official Scholarships for graduate studies.
- The applicant must have a bachelor's degree with a minimum GPA of “good” in Computer and Information Sciences or related disciplines.
- The applicant must have a score of (450) or more in the English language test (TOEFL) or what is equivalent in the other approved tests, or have a bachelor's degree from an institution which uses English as a medium of instructions.
- The differentiation between the students will be according to the following percentages: 60% is based on the student bachelor CGPA and 40% on the University ability test and the department has the right to add any additional requirements.
- The applicant must successfully pass a personal interview.
- The department can add other requirements.

## **Laboratories**

The department currently contains four computer labs, each with 20 computers installed with programs used to teach all department courses. The department also benefits from the laboratories of other departments and colleges

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## Fields of work for the graduate

- Chief information security officer (CISO)
- Computer information systems manager.
- Computer network architect.
- Cybercrime analyst/investigator.
- Cyber security analyst/consultant.
- Cyber security architect.
- Cyber security director.
- Cyber security engineer.

## Curriculum Study Plan Table

Level	Course Code	Course Title	Credit Hours
Level 1	CS 611	Cryptography for Cyber and Network Security	3
	CS 612	Security Risk Analysis Management System	3
	CS 613	Information Governance	3
Level 2	CS 614	Secure Programming	3
	CS 615	Ethical Hacking and Penetration Testing	3
	CS XXX	Elective Course	3
Level 3	CS 616	Digital Crime and Forensics	3
	CS XXX	Elective Course	3
	CS XXX	Elective Course	3
Level 4	CS 689	Research Project	6

**The students should pass 33 credits with minimum grade of B in each course**

Level	Elective Course Code	Elective Course Title
Level 2	CS 624	Security of Mobile Systems
	CS 625	Network Security
	CS 613	Information Governance
Level 3	CS 621	Security of Cloud Computing Systems
	CS 622	Security of Operating Systems
	CS 623	Security of Database Management Systems
	CS696	Selected Topics in Cyber Security

## Program Learning Outcomes

	NQF Learning Domains and Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge</b>		
1.1	Demonstrate the ability to recognize the challenges of cybersecurity	Lectures, Class discussions, presentations	Assignments, first mid-term exam and final exam
1.2	Demonstrate the ability to recognize the different cryptosystems		Assignments, second mid-term exam and final exam
<b>2.0</b>	<b>Cognitive skills</b>		
2.1	Analyze the software vulnerabilities and design the means to avoid and defend against them.	Lectures, Class discussions, presentations	Assignments, second mid-term exam and final exam
2.2	Design and implement cryptosystems		Assignments, second mid-term exam and final exam
2.3	Develop secure applications and products.		Assignments and class activities.
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1	Work effectively as an individual and as a member of a team to accomplish a goal	Lectures, Class discussions, presentations	Class activities and presentations
3.2	Uses cybersecurity principles to analyze and demonstrate the security level of the systems		
3.3	Uses security policies that organizations need to mitigate cyber risks to acceptable levels.		
<b>4.0</b>	<b>Capability/Transferable Skills</b>		
4.1	Communicate effectively by oral, written and visual means with a range of audiences.	Lectures, Class discussions, presentations	Class activities and presentations
4.2	Interpret the cybercrime and demonstrate the necessary digital evidences.		
<b>5.0</b>	<b>Psychomotor</b>		
5.1	Build and install tools and to launch cyber- attacks in real-time and on real networks.	Lectures, Class discussions, presentations	Class activities and Projects

## Faculty Members (Boys section)

المؤهل	الرتبة الاكاديمية	الاسم	م
دكتوراه	أستاذ مساعد	د/ سعد عوض على اليمنى العنزي	1.
دكتوراه	أستاذ مساعد ( رئيس القسم)	د/ يوسف الحويطي	2.
دكتوراه	أستاذ مشارك	د/ شادي إسماعيل نشوان	3.
دكتوراه	أستاذ مشارك	د/ محمد الحافظ مصطفى	4.
دكتوراه	أستاذ مشارك	د/ أسامة محمود عوده	5.
دكتوراه	أستاذ مشارك	د/ محمد محمد عزالدين اسماعيل	6.
دكتوراه	أستاذ مساعد	د/ مشرف فياض معجون الرويلي	7.
دكتوراه	أستاذ مساعد	د/ علاء بن صالح العرجان	8.
دكتوراه	أستاذ مساعد	د/ عبدالحليم سماعي	9.
دكتوراه	أستاذ مساعد	د/ إبراهيم الرشيدى	10.
دكتوراه	أستاذ مساعد	د/ محمد الشاذلي محمد الفهري	11.
دكتوراه	أستاذ مساعد	د/ محمد قمر الزمان	12.
دكتوراه	أستاذ مساعد	د/ محمد حميد صادق محمد اسماعيل	13.
دكتوراه	أستاذ مساعد	د/ سعيد محمد سعيد العليوات	14.
دكتوراه	أستاذ مساعد	د/ أحمد موسى السباط	15.
دكتوراه	أستاذ مساعد	د/ أكرم صالح عجولي	16.
دكتوراه	أستاذ مساعد	د/ فتحي محمد مقيص	17.
دكتوراه	أستاذ مساعد	د/ نوح صبري	18.

دكتوراه	أستاذ مساعد	د/ هادي حامدي	.19
دكتوراه	أستاذ مساعد	د/ محمد محي ازاد	.20
دكتوراه	أستاذ مساعد	د/ ناصر عويد الشمري	.21
دكتوراه	أستاذ مساعد	د/ إبراهيم الرشيدى	.22
دكتوراه	أستاذ مساعد	د/ اسلام فؤاد حموده	.23

## Faculty Members (Girls section)

المؤهل	الرتبة الأكاديمية	الاسم	م
دكتوراه	أستاذ مساعد	د/ رندة جابر	1
دكتوراه	أستاذ مساعد	د/ سلوى هنداوي	2
دكتوراه	أستاذ مساعد (منسقه القسم)	د/ آسيا بنعلية	3
دكتوراه	أستاذ مساعد	د/ مياده طارق حسن	4

## Total enrolled students' number (2020)

Program Name	Gender	Total Students Enrollment		No. Teaching Staff		Ratio of Total Students to Teaching Staff	Ratio of Male Students to Teaching Staff	Ratio of Female Students to Teaching Staff
		S**	O**	S	O			
Master of cyber security	M	12	0	8	15	1.6	0.58	1.14
	F	31	0	0	4			

