



Bachelor of Science in Information Technology

Program Handbook

College of Computing and information Technology (CCIT)
University of Jeddah

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Vision of the University

To be the first choice for future leaders.

Mission of the University

The university aspires to become “a pioneering national university in education, research and innovation by adopting the specializations and skills of the future to prepare a generation of scholars and leaders that contribute to the development of the economy and society”.

About the University of Jeddah and the CCIT

The University of Jeddah, the newest university in the Kingdom of Saudi Arabia, was established in 1435 AH, corresponding to 2014 AD, with the issuance of Royal Decree No. 20937 dated 2/6/1435 AH, approving the decision of the Higher Education Council taken in its seventy-second session held on 4/6/1434 AH on the establishment of the University of Jeddah. The College of Computing and Information Technology was established with two branches in Khulais and Al-Kamil following the kind approval of the Custodian of the Two Holy Mosques on 18/11/1432 AH.

The University of Jeddah (UJ) was originally established as a college under King Abdulaziz University (KAU), known as the North Jeddah campus of KAU. The College of Computing and Information Technology (CCIT) at the North Jeddah campus served as a sister college to the College of Computing and Information Technology (FCIT) at KAU, with academic programs and course offerings directly aligned with FCIT's curriculum.

In 2014, the North Jeddah campus was granted independent university status and was officially designated as the University of Jeddah (UJ). This strategic development was driven by national goals to elevate the quality of higher education, accommodate the growing demand for advanced degree programs, and enhance research and innovation capacities. Since its establishment, the university administration has undertaken extensive efforts to support the academic mission of the college by providing state-of-the-art scientific and laboratory facilities, thereby fostering an environment conducive to excellence in education and research.

The college prepares and implements integrated study plans and implements modern educational methods that are compatible with the latest findings of contemporary science, with the aim of contributing to refining the skills and personality of the student and advancing his intellectual and cognitive level, with the aim of achieving quality requirements in the college's outputs.

The Department

Department of Information Technology

The Department of Information Technology is currently the only active academic department at the College of Computing and Information Technology. It offers a Bachelor of Science in Information Technology, designed to equip students with both theoretical knowledge and practical skills in various IT domains. The department is committed to delivering high-quality education, fostering innovation, and preparing graduates to meet the evolving demands of the technology industry and the national labor market.



The Program

Bachelor of Science in Information Technology

Program Mission:

Providing outstanding higher education and to equip graduates with research skills and knowledge to communicate and work effectively in teams in a scientific environment to compete in labor market and use the knowledge in community services and development of the society

Program Goals:

1. Commitment to Lifelong Learning

Be able to develop solid foundations that allow students to conduct extensive research, learn, and adapt their skills to the ever-changing technology landscape

2. Commitment to Professional Responsibility

Be able to understand the social, legal, ethical, and cultural issues that are related to the field of computing and be able to contribute to the community.

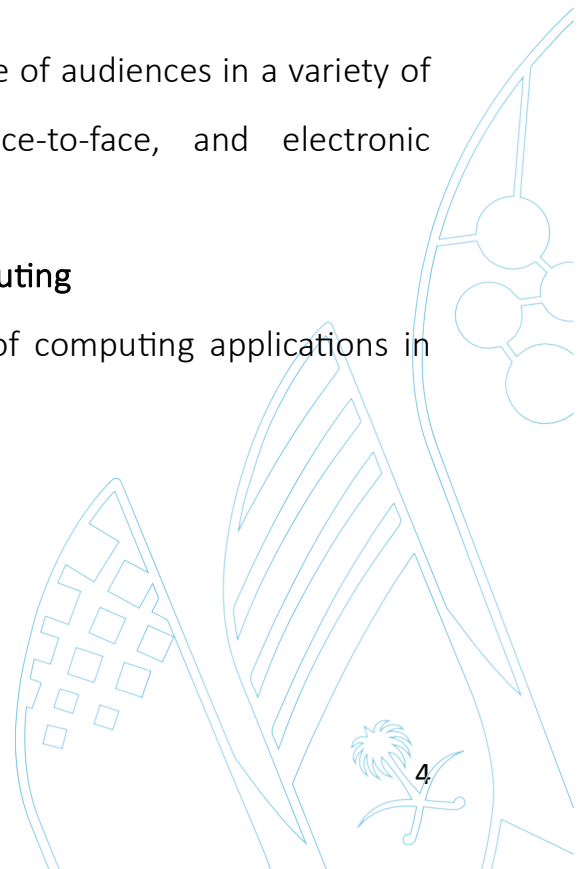
3. Communication and Organization Skills

Be able to communicate effectively with a range of audiences in a variety of modes including presentations, writing, face-to-face, and electronic communication.

4. Awareness of the broad applicability of Computing

Be able to understand the wide applicability of computing applications in various domains.

5. Appreciation of Domain Specific Knowledge



Be able to communicate with experts in other domains towards the development of solutions to problems that require both computing skills and domain knowledge.

Graduate Attributes

In-depth knowledge of the field of study:

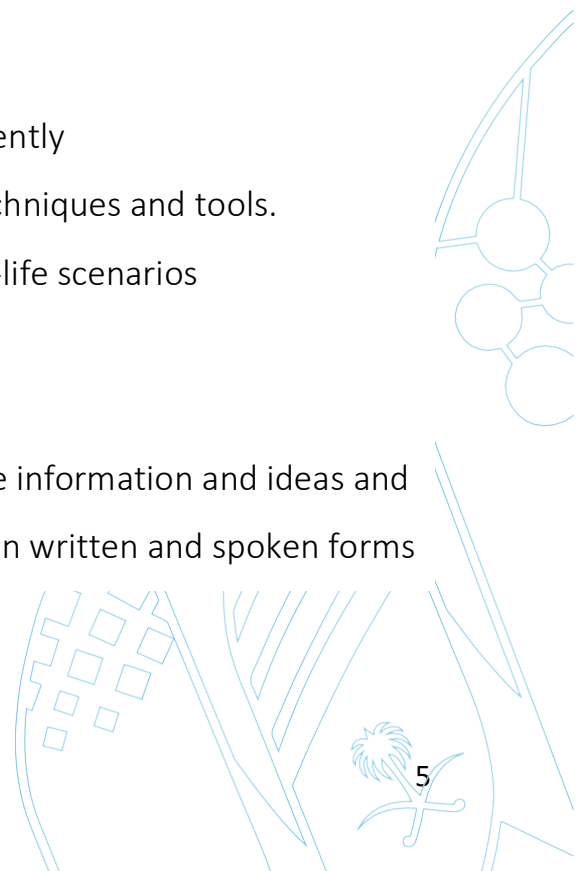
- The ability to apply knowledge of basic IT fundamentals.
- In-depth technical competencies in at least one IT specialization.
- Sufficient breadth and depth of knowledge and understanding of the cognate sciences that underpin IT and how they relate to each other.
- Sufficient breadth and depth of knowledge to enable understanding of IT contexts of current and future developments in the area.
- Appreciation of the scope of professional IT activities and an ability to participate in a broad range of work environments that apply to IT.

Research Capabilities

- The ability to conduct research Independently
- The ability to adopt research skills and techniques and tools.
- The ability to apply the knowledge in real-life scenarios

Effective communication skills:

- The ability to collect, analyze and organize information and ideas and to convey those ideas clearly and fluently, both in written and spoken forms



- The ability to interact effectively with others in order to work towards a common outcome
- The ability to select and use the appropriate level, style and means of communication
- The ability to engage effectively and appropriately with information and communication technologies

Independence and creativity:

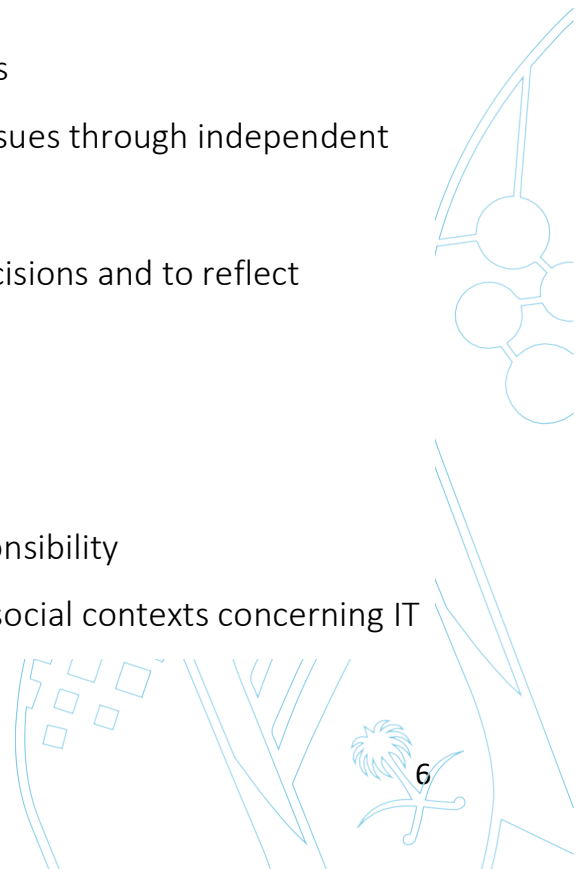
- The ability to work and learn independently
- The ability to generate ideas and adapt innovatively to changing environments and technologies
- The ability to identify problems, create solutions, innovate and improve current IT practices

Critical judgement:

- The ability to define and analyze problems
- The ability to apply critical reasoning to issues through independent thought and informed judgement
- The ability to evaluate opinions, make decisions and to reflect critically on the justifications for decisions

Ethical and social understanding:

- An understanding of social and civic responsibility
- An appreciation of the philosophical and social contexts concerning IT



- A knowledge and respect of ethics and ethical standards in relation to IT
- A knowledge of other cultures and an appreciation for cultural diversity

Program Learning Outcomes

Knowledge and Understanding	
K1	Define computing and mathematics concepts appropriate to the discipline including simulation and modelling.
K2	Identify best practices and standards in Information Technology to meet user needs throughout the lifecycle of computer-based systems.
Skills	
S1	Analyze a problem to identify the computing requirements appropriate to its solution logically, by conducting research as per user requirements.
S2	Solve complex computer-based system, process component, or program to meet desired needs.
S3	Function effectively as a member or leader of a team engaged in activities appropriate to the Information Technology.
S4	Apply existing state-of-the-art techniques, skills, and tools necessary for selection, creation, integration, evaluation, and administration of Computer-based systems according to user requirements.
Values, Autonomy, and Responsibility	
V1	Communicate effectively in a variety of professional contexts.
V2	Adhere to professional, ethical, legal, security, and social issues and their responsibilities.

V3	Consider societal, health, safety, legal, cultural issues, fostering for lifelong learning as a computing professional.
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Curriculum

Curriculum Structure

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
Institution Requirements	Required	12	25	15.15%
	Elective	-	-	-
College Requirements	Required	6	21	12.73%
	Elective	-	-	-
Program Requirements	Required	26	98	59.39%
	Elective	3	12	7.27%
Capstone Course/Project		2	5	3.03%
Field Training/ Internship		2	(non credit)	-
Residency year				
Others (College Free)		2	4	2.42%
Total		53	165	100%

Program Courses

Level	Course Code	Course Title	Required or	Pre- Requisite	Credit Hours	Type of requirements
Level 1	ELPR-130	English Language 130	Required		2+0	Institution
	CECS-100	Computer Digital Skills	Required		2+1	Institution
	CTCS-111	Introduction to Programming	Required		3+1	College
	SCMT-102	Calculus I	Required		3+0	College

	SCPH-101	Physics I	Required		3+0	College
Level 2	ELPR-140	English Language 140	Required	ELPR-130	2+0	Institution
	SEPS-110	University Life Skills and the Labor Market	Required		2+0	Institution
	CTCS-121	Object Oriented Programming	Required	CTCS-111	3+1	College
	CTCS-122	Computational Discrete Math	Required	SCMT-102	2+1	College
	CTIT-121	Introduction to Database	Required		3+1	Program
Level 3	ISLM-100	Islam Culture Level 1	Required		2+0	Institution
	CLAL-100	Language Skills Level 1	Required		2+0	Institution
	CTIT-211	Introduction to IT	Required		3+1	Program
	CTCS-211	Data Structures	Required	CTCS-121	3+1	College
	SCST-210	Statistics	Required		3+0	Program
	CTIS-211	Introduction to Software Project Management	Required		2+1	Program
Level 4	ELPR-220	English Academic Writing	Required	ELPR-130	2+0	Institution
	SCST-220	Probability Theory	Required	SCMT-102	2+1	Program
	CTIT-221	Computer Organization & Architecture	Required	CTCS-122	3+1	Program
	CTIT-222	System Analysis & Design	Required	CTIT-211	3+1	Program
	CTIT-XXX	Elective I	Elective		3+1	Program
Level 5	ISLM-200	Islamic Culture Level 2	Required	ISLM-100	2+0	Institution
	CLAL-200	Language Skills Level 2	Required	CLAL-100	2+0	Institution
	CTIT-311	Software Engineering	Required	CTIT-222	3+1	Program
	CTIT-312	Computer Networks	Required	CTIT-221	3+1	Program

	CTIT-313	Operating Systems	Required	CTIT-221	3+1	Program
	XXXX-XXX	College Free I	Required		2+0	College-free
Level 6	BCSC-100	Introduction to Logistics Management	Required		2+0	Institution
	CTIT-321	Information Security	Required	CTIT-312	3+1	Program
	CTIT-322	Databases II	Required	CTIT-121	3+1	Program
	CTIT-323	Mobile App. Dev.	Required	CTCS-121	3+1	Program
	CTIT-XXX	Elective II	Elective		3+1	Program
Level 7	ISLM-300	Islamic Culture Level 3	Required	ISLM-200	2+0	Institution
	BUBA-100	Entrepreneurship and Innovation	Required		2+0	Institution
	CTIT-411	Database Administration	Required	CTIT-322	3+1	Program
	CTIT-412	Network Administration	Required	CTIT-312	3+1	Program
	CTIT-413	Principles of AI	Required	SCST-220	3+1	Program
Level 8	CTIT-XXX	Department Elective III	Elective		3+1	Program
	CTIT-421	Internet Applications	Required	CTCS-211	3+1	Program
	CTIS-421	Computer Issues & Topics	Required	CTIT-311	2+0	Program
	CTIT-422	Internet of Things	Required	CTIT-312	3+1	Program
	CTIT-392	Training 1	Required		2+0	Program
	CTIT-423	Human Computer Interaction	Required	CTIT-222	3+1	Program
	CTIT-393	Training 2	Required		3+0	Program
Level 9	CTIT-414	Software Design Models	Required	CTIT-311	3+1	Program
	CTIT-415	IT & Administration	Required	CTIT-211	3+1	Program
	CTIT-495	Senior Project (I)	Required		2+0	Program
	CTIT-416	Computer Ethics	Required	CTIS-211	3+0	Program
	XXXX-XXX	College Free II	Required		2+0	College-free

Level 10	CTIT- 424	Machine Learning	Required	CTIT-413	3+1	Program
	CTIT-425	Cybersecurity	Required	CTIT-321	3+1	Program
	CTIT-426	Cloud Computing	Required	CTIT-313	3+1	Program
	CTIT-496	Senior Project II	Required	CTIT-495	3+0	Program
Electives	CTIT-431	Data mining and warehousing	Elective	CTIT-322	3+1	Department
	CTIT-432	Networks design and evaluation	Elective	CTIT-312	3+1	Department
	CTIT-433	Wireless networks	Elective	CTIT-312	3+1	Department
	CTIT-434	Software engineering 2	Elective	CTIT-311	3+1	Department
	CTIT-435	Software economics	Elective	CTIT-222	3+1	Department
	CTIT-436	Computer graphics	Elective	None	3+1	Department
	CTIT-437	Selected topics in IT	Elective	CTIT-211	3+1	Department
	CTIT-438	Selected topics in networks	Elective	CTIT-312	3+1	Department
	CTIT-439	Selected topics in databases	Elective	CTIT-121	3+1	Department

Admission and Support

Student Admission Requirements

The University of Jeddah (UJ) administers admissions through a centralized, fully electronic system managed by the Deanship of Admission and Registration (DAR). This system ensures a streamlined and paperless process, eliminating the need for physical document submissions or in-person visits. All communications with applicants are conducted via SMS, email, and the Deanship's official website, which also features real-time support through a live chat service.

Prospective students complete their applications online through the university's admissions portal, and successful candidates receive official admission offers electronically. For most

programs—including the College of Computing and Information Technology (CCIT)—personal interviews are not required. To facilitate the admission process, the university provides comprehensive digital resources, including application guidelines, program brochures, university regulations, and course catalogs, all accessible through the official admissions website: <https://adm.uj.edu.sa>.

University Admission Programs

In addition to the standard admission track, the University of Jeddah offers two distinctive pathways to support outstanding and eligible students:

1. **Academic Acceleration Program** – Designed to enable high-performing students to progress through their academic studies at an accelerated pace.
2. **Direct Placement for Gifted Students** – Aimed at attracting and enrolling students identified as talented based on specific academic or intellectual criteria, placing them directly into specialized academic tracks.



Program name	Program description	Target group	Conditions
Academic Acceleration	The academic acceleration program aims to accelerate the educational path of the university student by bypassing the preparatory year and studying the first year directly at the chosen college after achieving the criteria for passing the specialized achievement tests for the academic acceleration courses organized by the University of Jeddah and passing the English language requirement for the preparatory year at the university.	All high school graduates (scientific path) who are accepted into the University of Jeddah are accepted with an equation percentage of at least 85%, and students are nominated in the program according to vacant seats and equation preference.	• The applicant must be accepted to the University of Jeddah. • The applicant must have an equation score (scientific path) of at least 85%.
The Direct placement (Talented Students)	The direct placement program is one of the programs of the University of Jeddah that aims to attract the highest admission rates at the university from gifted and outstanding high school graduates and to place them	The target group is all male and female secondary school graduates (scientific path) who are accepted at the University of Jeddah and have the highest	• Specialized courses in the scientific path for the preparatory year • 95% and above (ability score).

	directly in the chosen college before the start of the preparatory year, then enroll them in the university's program to attract and nurture talented students in the field of science and innovation and get the benefits of the program.	equation percentage in general admission according to the results of the general abilities test, the achievement test, and the general secondary average.	• 90% and above (achievement score). • 98% or higher (high school average, scientific path).
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General Admission Requirements

The University of Jeddah (UJ) follows the admission regulations set by the Saudi Ministry of Education. Applicants must meet the following criteria:

- Be a Saudi national or from a qualifying Saudi parent.
- Hold a valid general secondary certificate (Science Track) or equivalent, not older than five years (exceptions may apply).
- Submit a no-objection letter if employed.
- Provide standardized scores from QIYAS:
 - General Aptitude Test (QUDRAT) – 40%
 - General Achievement Test (TAHSEEL) – 30%
 - High School GPA – 30%
- Not be previously dismissed from UJ or any other university.
- Have not withdrawn from another institution within the last three months.
- Not be currently enrolled at another university.

Admission decisions are based on the weighted average of the above scores and seat availability.

Placement in the College of Computing and Information Technology (CCIT)

To be placed in CCIT, students must:

- Achieve a cumulative GPA of at least 3.25 out of 5.
- Be ranked competitively based on GPA and available seats.

Program-specific admission is determined by student preferences and departmental capacity.

Orientation for New Students

The department organizes structured orientation programs to:

- Introduce students to university life and academic expectations.
- Help them transition smoothly into the campus environment.
- Engage students through sessions coordinated by faculty and student services teams.

Academic Advising

Academic advising is integral to student success. Advising services at CCIT aim to:

- Guide students through academic planning, degree requirements, and career preparation.
- Address academic challenges and facilitate timely graduation.
- Involve advisors, advisees, department heads, and program coordinators in a collaborative support system.

Special Support Services

UJ is committed to supporting students with special needs. Services include:

- Accessible classrooms and exam accommodations upon request.
- Academic intervention for students receiving warnings due to low GPA (below 2.75).
- Personalized academic follow-ups, extra classes, and mentoring coordinated by the Advising and Student Rights Unit.

This comprehensive support framework ensures equitable access, retention, and student success throughout their academic journey.

Learning Resources:

The IT program ensures the availability of essential learning resources, including textbooks, reference materials, and digital content. Course instructors propose textbooks through designated course coordinators, with final approval granted by the Department Council. Textbooks are reviewed based on feedback from student surveys and focus groups managed by the Academic Assessment Unit. Approved textbooks are made available through the University Bookstore ahead of each academic year.

Facilities and Equipment:

The department provides a supportive learning environment through:

- **Classrooms:** Equipped with whiteboards and multimedia projectors.
- **Computer Laboratories:** Regularly updated and optimized for instructional and practical use.
- **Seminar Rooms and Conference Halls:** Fully furnished and equipped with video conferencing capabilities for academic discussions and events.

Health and Safety Measures:

The university ensures a safe and healthy campus environment through:

- On-site medical services during working hours.
- Comprehensive safety protocols, including fire evacuation drills, clearly marked emergency exits, and first aid kits.
- Laboratory safety manuals and emergency preparedness plans are readily accessible.

Professions and Career Paths

Graduates of the Information Technology (IT) program are equipped with the knowledge, technical skills, and problem-solving abilities required to pursue a wide range of careers in the IT industry and related fields. The program is designed to align with national and international standards, ensuring that students are prepared to meet the evolving demands of the job market. Upon successful completion of the program, students will be qualified to work in various professional roles, including but not limited to the following:

- Data Analyst
- IT Consultant
- IT Support Analyst
- Lecturer
- Network Administration
- Network Engineer
- Project Manager
- Quality Assurance Analyst
- Software Development
- Systems Analyst
- Systems Designer
- Technical Sales Representative
- Web Designer



Contact Information

Department of Information Technology

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