

كلية الحاسبات والذكاء الاصطناعي

FACULTY OF COMPUTERS AND ARTIFICIAL INTELLIGENCE



www.rst.edu.eg

info@rst.edu.eg



Why do students prefer studying in the Faculty of Computers and Artificial Intelligence?

The Faculty of Computers and Artificial Intelligence at Al Ryada University for Science & Technology is a dynamic and modern institution offering a diverse range of specializations. The overarching mission of the faculty is to provide Egypt and the Middle East with education of the highest quality, tailored to meet the challenges and opportunities of Industry 4.0 in the 21st century. We aim to prepare graduates who distinguish themselves through the quality and impact of translating knowledge into societal, industrial, and economic benefits.

The Faculty of Computers and Artificial Intelligence focuses on the scientific, technical, and human dimensions of information technology, where computers play a substantial role. Our commitment extends to preparing graduates to develop novel, creative, and effective solutions, emphasizing innovation, entrepreneurship, and a proven track record of engagement with the enterprise sector. This engagement encompasses technological, industrial, commercial, social, and cultural aspects related to information technology.

The Faculty of Computers and Artificial Intelligence integrates knowledge from various disciplines, including Science, Artificial Intelligence, Engineering, Medicine, Economics, Management, Sociology, Law, and Psychology.

Our faculty adopts an innovative and adaptive approach, fostering close partnerships with national and international academic, research, and industrial organizations. This collaborative effort ensures the delivery of disciplined, organized, creative, and multi-skilled graduates, contributing to society's needs.

We take pride in our academic experts, who bring practical experience to the table, creating a friendly and healthy academic environment that encourages diversity and innovation for our students.





BSc Degrees on Computers and Artificial Intelligence

The Faculty of Computers and Artificial Intelligence offers a variety of degree specializations, each with its unique emphasis.

Our students graduate with a degree in Computers and Artificial Intelligence in one of the following specializations:

- Computer Science Mobile Programming
- Computer Science Computer & Software Security
- Artificial Intelligence
- Medical Informatics

While all degrees include core modules focusing on computing, programming, and information technology, students will also develop skills in communication, teamwork, project management, leadership, and, in a rapidly evolving field, how to be effective lifelong learners.

Our degree programs are characterized by:

- A range of specializations that address global IT market needs.
- A blend of theory and practice to closely align with industry requirements, providing immediate professional value to what our students learn.
- Research-oriented and hands-on experience subjects integrated into the degree programs.
- Regular updates to subjects to reflect changes in the Information and Communication Technology (ICT) domain.
- Highly qualified academic staff with both international and Egyptian experience.
- Access to state-of-the-art computer facilities.
- A focus on employability to give our graduates a competitive edge in the workplace, whether working in small companies or large organizations.
- Opportunities for summer training and internships.





Study Plan for the Faculty of Computers & Artificial Intelligence

FIRST LEVEL/YEAR

This is where you embark on your journey to study computer science with a focus on artificial intelligence, acquiring essential technical and problem-solving skills to address both current and emerging challenges in this critical and rapidly evolving field. The program introduces fundamental principles of Programming and Computation, cultivates Critical Thinking for problem-solving through computer programs, hones Communication Skills, and includes Technical Writing and Mathematics courses that are foundational for all specializations.

SOPHOMORE (SECOND LEVEL)

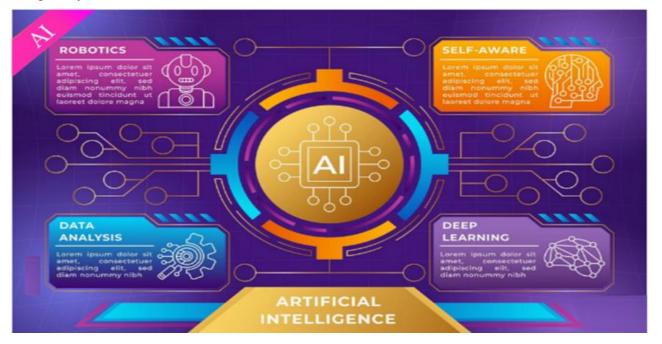
In the second year, you will advance from First Year, delving into more complex programming, data structures, and database design. The curriculum will deepen your understanding of software development, data science fundamentals, algorithms, data structures, and computer system design. Additionally, you will explore subjects such as software engineering, internet, and web programming.

JUNIOR (THIRD LEVEL)

In this year, your studies will become more focused, providing you with increased choices in selecting specialized courses. We offer a variety of options tailored to your chosen specialization. In the first semester, all specializations will cover fundamentals of artificial intelligence, computer networks, computer security, and operating systems. The second semester allows you to deepen your understanding of your specialization through courses such as Internet of Things (IoT), Machine Learning, Embedded Systems, Data Mining, Natural Language Processing (NLP), Human Physiology, Medical Text Processing, and Clinical Informatics.

SENIOR (FROURTH LEVEL)

In the final year, you'll select from a diverse range of advanced specialized courses in Mobile Programming, Cyber Security, Artificial Intelligence, and Medical Informatics. Fourth Year also encompasses an individual Honors Final Year Project, where you will develop a viable project based on a given topic. You'll have a range of choices in selecting your topics, with a dedicated supervisor to guide you.



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Career Opportunities

Information Technology (IT) continues to reshape the way we live, play, and conduct business. Unsurprisingly, a career in IT stands out as one of the most sought-after paths in the modern workforce. The dominance of IT careers is attributed to various factors, including the rapid growth of the Internet and e-commerce, the heightened demand for information security specialists amid escalating cyber-attacks, the emergence of smarter mobile and web applications enabling companies to analyze business data for unprecedented intelligence, the revolutionary impact of cloud computing on IT department operations, and the widespread use of mobile devices.

Opportunities with attractive salaries are virtually limitless in the fields of Mobile Programming, Artificial Intelligence, Cybersecurity, and Medical Informatics. Studying in the Faculty of Computers and Artificial Intelligence provides you with various potential career options based on your specialization, including the following:

- 1- Graduates of Computer Science Programming Track may find employment in various roles, including but not limited to:
 - Software Engineer.
 - Mobile Application Developer.
 - User Interface Developer.
 - DevOps Engineer.
 - Video Game Designer.
 - Computer Vision Engineer.
 - System Analyst and Designer
 - Computer Scientist.
 - IT Project Manager.

- Software Tester.
- Front-End, Back-End, and Full-StackWeb Developer.
- Computer Programmer.
- Database Administrator.
- Graphic Designer.
- Computer Systems Analyst.
- Information Technology Manager.
- Cloud Engineer.
- Chief Information Officer.
- 2- Graduates of Computer Science Cybersecurity Track may find employment in various roles, including but not limited to:
 - Security Engineer.
 - Application Security Engineer.
 - Intrusion Detection Specialist.
 - Cybersecurity Analyst.
 - Malware Analyst.
 - Penetration Tester.
 - Incident Response Analyst.
 - Cloud Security Specialist.
 - Security Systems Administrator.
 - Chief Information Security Officer (CISO).

- Security Architecture.
- Cryptography Engineer.
- Information Security Analyst.
- Information Security Specialist.
- Digital Forensic Examiner.
- Ethical Hacker.
- Computer Forensics Analyst.
- Cybersecurity Managers.
- Security Consultants.



- 3- Graduates of Artificial Intelligence may find employment in various roles, including but not limited to:
 - AI Engineer.
 - Artificial Intelligence Application Developer.
 - Machine Learning Engineer.

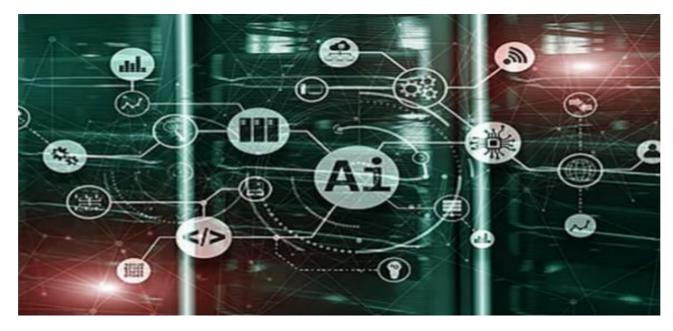
Data Mining and Analysis.

- Data Scientist.
- Data Analyst.
- NLP Engineer.
- Data Architect. • Computer Vision Engineer.
- Neural Network Developer.
- Business Intelligence Developer.
- Cloud Engineer.
- Big Data Engineer.
- Big Data Architect. • Data Engineer.

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- 4- Graduates of Medical Informatics may find employment in various roles, including but not limited to:
 - Clinical Informatics Specialist.
 - Health Informatics Consultant.
 - Clinical Informatics Specialist.
 - Health Informatics Specialist.
 - Nursing informatics specialists.
 - Chief Medical Officer.

- Medical Coding Specialist.
- Health data analytics.
- Machine Learning Architect.
- Health Data architect.
- Clinical Informatics Data Analyst.
- Health informatics consultants.



• AI Architect.

• Business Intelligence Developer.

Machine Learning Architect.



Extraordinary Entrepreneurs

Our exceptional students will leverage the power of data and artificial intelligence to revolutionize various sectors, ranging from healthcare to energy provision. Their innovative ideas carry the potential not only to reshape our country but also to influence the region and even the world.

Together, we embrace change, adapting and collaborating in novel ways that challenge the status quo and redefine established modes of thinking. Without boundaries, our students, academics, and researchers converge with the public and private sectors, fostering an environment where they learn from each other and collaborate seamlessly to generate groundbreaking solutions.

How to apply the Faculty of Computers and Artificial Intelligence

- (i) Read the admissions section in the website <u>www.rst.edu.eg</u>. This can also be downloaded at <u>www.rst.edu.eg</u>
- (ii) Submit an application online at <u>www.rst.edu.eg</u>
- (iii) Call the RST Hotline and speak to a member of staff in the Student Affairs Department in you require further information- 16504

When to apply:

- (i) Admission is currently open.
- (ii) Applicants are encouraged to apply early in order to secure a place in their chosen program of study.
- (iii) Once programs are full the applicants will be placed on a waiting list.

For more details, visit the faculty website: www.rst.edu.eg

What's next?

Virtual Visit

Can't get to Al Rayad in person? Our Virtual Visit allows you to virtually explore the University. View a range of videos, 360° photos and image galleries to find out what it is like to live and study here: virtualvisits.rst.edu.eg/undergraduate

Chat online

Wherever you are, we give you the chance to chat to us about anything related to your admission. You will be able to ask about different subjects:

-----/student-chat

Contact us

Our prospective students' Enquiry Team can advise you about admission to specific degrees or help if you have general enquiries about applying to the University:

futurestudents@rst.edu.eg



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