# Specification for Information Technology and communications course 2025/2026

## 1-Basic information

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1. | **Course title** | Information Technology and communications | | | | | | | |
| 2. | **Course code** | **GCC.003** | | | | | | | |
| 3. | **Department offering the course** | Department of Computer and communication science | | | | | | | |
| 4. | **Number of hours** | **Theoretical** | **1** | **Practical** | **0** | **Other** | **0** | **Total** | **1** |
| 5. | **Course Type** | √ **Obligatory** **Elective** | | | | | | | |
| 6. | **Level** | 3rd year | | | | | | | |
| 7. | **Semester** | Fall semester | | | | | | | |
| 8. | **Academic program** | Bachelor of veterinary medicine (BVM) | | | | | | | |
| 9. | **Faculty** | Faculty of Veterinary medicine | | | | | | | |
| 10. | **University** | Benha University | | | | | | | |
| 11. | **Name of course coordinator** | Prof. dr. | | | | | | | |
| 12. | **Course Specification Approval Date** | Faculty council/ 27-8-2025 | | | | | | | |
| 13. | **Course Specification Approval (Attach the decision/minutes of the department /committee/council ....)** | Department council/ 7/7/2025 | | | | | | | |

## 2-Course overview

- **Course contents written in the program bylaw:**
  Artificial intelligence definition, internet, data bases, virtual society, cloud and large data.

## 3- Intended learning outcomes of the course (ILOs):

| | NARS ILOS | | Course ILOS | |
|---|---|---|---|---|
| | **Code** | **Text** | **Code** | **Text** |
| **Knowledge and understanding** | **2.1** | Basic sciences of biology, chemistry, biophysics, genetics, biostatics, computer science and veterinary terminology. | **a1** | Define the Artificial intelligence. |
| | **2.15** | Basics of social sciences, communication, and human rights. | **a2** | Recognize the internet & data bases. |
| | | | **a3** | Recognize the cloud and large data. |
| **Intellectual skills** | **4.2** | Assess and criticize, at the fundamental level, how data are derived. | **b1** | Understand, evaluate, and analyze the function of internet& data bases. |
| | | | **b2** | Evaluate the process and advantages of cloud and large data. |
| **Practical skills** | **3.1** | Employ all the gained knowledge and understanding in clinical practice in a skillful pattern . | **c1** | Provide the function analysis of Artificial intelligence. |
| | | | **c2** | Create some applications related to the veterinary medicine. |
| **General skills** | **5.1.** | Work under pressure and / or contradictory conditions. | **d1** | Work under pressure during lab cession |
| | **5.5.** | Search for new information and technology as well as adopt life–long self-learning ethics | **d2** | Search for new information and technology in field of computer |
| | **5.6** | Utilize computer and internet skills | **d3** | Utilize computer and internet skills, read paper via internet in field of computer |

| 4- Teaching and learning methods | | | | | |
|---|---|---|---|---|---|
| **Lectures** | √ | **Discussion & seminar** | √ | **Practical** | √ |
| **Presentation & movies** | √ | **Problem solving** | √ | **Brain storming** | √ |
| **Others** | | | | | |

## - Course contents:

| Number of the Week | Scientific content of the course (Course Topics) | Expected number of the Learning Hours | | | | |
|---|---|---|---|---|---|---|
| | | Total Weekly hours | Theoretical teaching (lectures/discussion groups/ .....) | Training (Practical/ Clinical/ .....) | Self-learning (Tasks/ Assignments/ Projects/ ...) | Other |
| **W1** | Introduction | **1** | **1** | **0** | | **0** |
| **W2** | Artificial intelligence 1 | **1** | **1** | **0** | | **0** |
| **W3** | Artificial intelligence 2 | **1** | **1** | **0** | | **0** |
| **W4** | Internet 1 | **1** | **1** | **0** | **Formative quiz** | **0** |
| **W5** | Internet 2 | **1** | **1** | **0** | | **0** |
| **W6** | data bases 1 | **1** | **1** | **0** | | **0** |
| **W7** | Semester work (one hour exam) | - | | | | |
| **W8** | data bases 2 | **1** | **1** | **0** | | **0** |
| **W9** | data bases 3 | **1** | **1** | **0** | **Formative quiz** | **0** |
| **W10** | virtual society 1 | **1** | **1** | **0** | | **0** |
| **W11** | virtual society 2 | **1** | **1** | **0** | | **0** |
| **W12** | virtual society 3 | **1** | **1** | **0** | **Formative quiz** | **0** |
| **W13** | cloud and large data 1 | **1** | **1** | **0** | | **0** |
| **W14** | cloud and large data 2 | **1** | **1** | **0** | | **0** |
| **W15** | Revision | **1** | **1** | **0** | | **0** |

## 5- Assessment timing and grading:

### a- Assessment methods (summative and formative)

1. **Formative assessment**: including (weekly quizzes, homework assignments and surveys).
2. **Summative assessment** including (quizzes, class activities, semester work, practical exam, oral exams and final written exams).

### b- Assessment schedule and weight

| Assessment method | Timing | Grade | Percent |
|---|---|---|---|
| Semester work | 7th week | 25 | 50% |
| Formative assessment | Throughout the semester | ----- | ----- |
| Written exam | End of semester | 25 | 50% |
| **Total** | | 50 | 100.% |

## 6- Learning resources and supportive facilities:

| | | |
|---|---|---|
| **Learning resources** | **Main reference** | **Student handbook** |
| | **Essential books (text books)** | • V. Rajaraman 2004, Introduction to Information Technology.<br>• Mamta, 2022, Information and Communication Technology (ICT) Frameworks in Tele. |
| | **Periodicals, Web sites, . . . etc** | • www.ekb.eg |
| | **Learning platform** | Thinqi |
| **Supportive facilities** | **Devices & instruments** | • Equipped teaching hall.<br>• Data show |

## Matrices:

### A- Content and ILOs matrix:

| Topic | A) Knowledge and understanding | B) Intellectual skills | C) Professional and practical skills | D) General and transferable skills |
|---|---|---|---|---|
| Introduction | **a1** | **b2** | **c1** | **d1- d2- d3** |
| Artificial intelligence | **a1** | **b2** | **c1-c2** | **d1- d2- d3** |
| Internet | **a2-a3** | **b1-b2** | **c1- c2** | **d1- d2- d3** |
| data bases | **a2-a3** | **b1-b2** | **c2** | **d1- d2- d3** |
| virtual society | **a2-a3** | **b1-b2** | **c1- c2** | **d1- d2- d3** |
| cloud and large data | **a2-a3** | **b1-b2** | **c1- c2** | **d1- d2- d3** |

### B- Teaching and learning methods and ILOs matrix:

| Course ILOs | | NARS ILOS | Teaching and Learning methods | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | L | P&M | D | P | Ps | Bs |
| Knowledge & understanding | a1 | 2.15 | √ | √ | √ | | | √ |
| | a2 | | √ | √ | √ | | | √ |
| | a3 | | √ | √ | √ | | | √ |
| Intellectual skills | b1 | 4.5 | √ | √ | √ | | √ | √ |
| | b2 | | √ | √ | √ | | √ | √ |
| sional and practical | c1 | 3.1 | | √ | √ | √ | √ | |
| | c2 | | | √ | √ | √ | √ | |
| General skills | d1 | 5.5 | √ | | √ | | √ | |
| | d2 | 5.3 | √ | | √ | √ | | |
| | d3 | 5.1 | | | √ | √ | | |

**L:** Lecture, **P&M:** Presentations & Movies, **D&S:** Discussions & Seminars
**PT:** Practical, **Ps:** Problem solving, **Bs:** Brain storming

## C- Assessment methods and ILOs matrix:

| Course ILOs | | NARS ILOS | assessment method | | | | |
|---|---|---|---|---|---|---|---|
| | | | Formative assessment | semester | oral | Practical | Written |
| Knowledge & understanding | a1 | 2.1 | √ | √ | √ | | √ |
| | a2 | | √ | √ | √ | | √ |
| | a3 | | √ | √ | √ | | √ |
| Intellectual skills | b1 | 4.5 | | √ | √ | | √ |
| | b2 | | | √ | √ | | √ |
| Professional and practical | c1 | 3.1 | | | √ | √ | |
| | c2 | | | | √ | √ | |
| General skills | d1 | 5.5 | | | √ | √ | |
| | d2 | 5.3 | | | √ | | |
| | d3 | 5.1 | | | √ | | |

**Name and Signature**
**Course Coordinator**
**Prof. Dr.**

**Name and Signature**
**Program Coordinator**
**Prof. Dr. Mahmoud Abouelroos**