Course Specification
(Bachelor)

Course Title:	Computer Skills and Artificial Intelligence
Course Code:	CT102
Program:	Stage of Common First Year
Department:	Self-Development Skills Department
College:	Common First Year Deanship
Institution:	King Saud University
Version:	First - 4-May-2025
Last Revision Date:	No Reviews-First version

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A. General information about the course:

1. Course Identification

1. Credit hours: (3)					
2. Course type					
A.	☐University	☐College	☐Department	☒ Track	☐Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (Common First Year**)**					
4. Course General Description:					
This course provides foundational computer skills and an introduction to artificial intelligence. It addresses the technical competencies and developments that students need throughout their university studies and beyond. The course covers basics of Information Technology and Windows 11 Operating System, Word Processing (Microsoft Word 2021), Presentations (Microsoft PowerPoint 2021), Spreadsheets (Microsoft Excel 2021), Introduction to Artificial Intelligence, The Artificial Intelligence Revolution: Transforming Industries and Redefining the Future.					
5. Pre-requirements for this course (if any)**:**					
None					
6. Co-requisites for this course (if any)**:**					
None					
7. Course Main Objective(s):					
Developing students' knowledge of the basics of computers and artificial intelligence and the skills required for these.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	-	-
2	E-learning	30	50%
3	Hybrid • Traditional classroom • E-learning	- -	- -
4	Distance learning	30	50%

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**(Synchronous + Asynchronous)	24
2.	**Laboratory/Studio**	24
3.	**Field**	-
4.	**Tutorial**	-
5.	**Others (Self Learning Project , PCA and Exam review)**	12
Total		60

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Explains basic computer terms and concepts such as (Windows 11 features, Word 2021 PowerPoint 2021,and Excel 2021).	K1	- Discussion and dialogue. - Brainstorming and asking questions	- Multiple choice questions - True or false questions
1.2	Student demonstrates his knowledge in various topics such as (Windows 11 , Microsoft Office programs 2021).	K2	- Discussion and dialogue. - Brainstorming and asking questions	- Multiple choice questions - True or false questions
1.3	It provides a broad understanding of the fundamentals of artificial intelligence, its programs, and benefits.	K3	- Discussion and dialogue. - Brainstorming and asking questions	- Multiple choice questions - True or false questions
2.0	**Skills**			

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
2.1	**Cognitive:** Applies what learned from Office software (Word 2021, Excel 2021, PowerPoint 2021).	S1	Practical training	Application of practical skills in exams.
2.2	**Practical:** Uses Office 2021 software technologies.	S3	Practical training	Application of practical skills in exams.
2.3	**Technical Communication:** Uses application software to complete the self-learning project.	S5	Project-based learning	Evaluation form
2.4	**Technical Communication:** The practical continuous assessment (PCA) system is used to solve practical exercises.	S5	Practical training	PCA practical simulation system
3.0	**Values, autonomy, and responsibility**			
3.1	Takes responsibility for self-learning and personal development in performing academic and practical tasks and activities.	V1	- Discussion and dialogue - Learning using the Internet	-
3.2	Students are committed to academic ethics.	V2	Student commitment to the virtual classroom ethics and behavior.	-

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction To Course	2
2.	Introduction to Information Technology and Windows11	8

3.	Word Processing (MS-Word 2021)	8
4.	Presentation Graphics (MS-PowerPoint 2021)	8
5.	Spreadsheets (MS-Excel 2021)	12
6.	Introduction to Artificial Intelligence (AI)	4
7.	Artificial Intelligence Applications and Ethics	6
Total		**48**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Mid Term Exam	8	30%
2.	Final Exam	16	50%
3.	Continues Assessment*	From 4 To 12	10%
4.	Self-learning (project)	12	10%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	لجنة تطوير الكتاب،قسم مهارات تطوير الذات،عمادة السنة الأولى المشتركة، جامعة الملك سعود. (٢٠٢٦).*مهارات الحاسب والذكاء الاصطناعي* . دار نشر جامعة الملك سعود.
Supportive References	**Chapter1: Information Technology and Windows 11** • King Saud University, Computer Skills, Common First Year, Edition 2021/22. • S. Schwartz, Microsoft Windows 11: The Complete Beginner's Guide. • C. A. Rusen, Windows 11 All-in-One for Dummies. • P. K. Sinha, Computer Fundamentals. • D. Salomon, A Concise Introduction to Data Compression. • Pitman, Information Technology: An Introduction, 2nd ed., 1985. **Chapter2: Word Processing (MS Word 2021)** • J. Lambert, Microsoft Word Step by Step, 2021. • E. Reding and L. Wermers, Microsoft Office 365 & Word 2021: Comprehensive, 2021. • D. Gookin, Word 2021 For Dummies, 2021. • P. Fisher, Mastering Microsoft Word: A Comprehensive Guide to Word Processing, 2021. • King Saud University, Computer Skills, Common First Year, Editions 2019 and 2024.

Chapter3: Presentation Graphics(MS PowerPoint 2021)

- Office Support, "PowerPoint Help & Learning," Microsoft, 2021. [Online]. Available: https://support.microsoft.com/powerpoint.
- G. Reynolds, Presentation Zen: Simple Ideas on Presentation Design and Delivery, New Riders, 2021.
- N. Duarte, Slide: ology: The Art and Science of Creating Great Presentations, O'Reilly Media, 2021.
- Abela, Advanced Presentations by Design: Creating Communication That Drives Action, Wiley, 2021.
- S. Kosslyn, Better PowerPoint: Quick Fixes Based on How Your Audience Thinks, Oxford University Press, 2021.

Chapter4: Spreadsheets (MS Excel 2021)

- J. Walkenbach, Excel 2021 Bible, Wiley, 2021.
- M. Alexander and R. Kusleika, Excel 2019 Power Programming with VBA, Wiley, 2020.
- B. Jelen, Excel 2019 Pivot Table Data Crunching, Pearson Education, 2019.
- D. Taylor, Excel: Advanced Formulas and Functions.
- S. Few, "Data Visualization for Human Perception," in The Encyclopedia of Human.
- E. R. Tufte, The Visual Display of Quantitative Information, Graphics Press, 2001.
- King Saud University, Computer Skills, Common First Year, Editions 2019 and 2024–2025.

Chapter5: Introduction to Artificial Intelligence

- K. Warwick, Artificial Intelligence: The Basics.
- D. Parisi, Future Robots: Towards a Robotic Science of Human Beings.
- J. E. Kelly and S. Hamm, Smart Machines: IBM's Watson and the Era of Cognitive Computing.
- S. J. D. Prince, Computer Vision: Models, Learning, and Inference.
- D. Jurafsky and J. H. Martin, Speech and Language Processing: An Introduction to Natural Language Processing, Computational Linguistics, and Speech Recognition.
- M. F. Guillen, Flint 2030: How Today's Biggest Trends Will Collide and Reshape the Future of Everything.
- Taha, Saudi Arabia's Vision 2030: Transforming the Kingdom and Shaping the Future.

Chapter6: The Artificial Intelligence Revolution: Transforming Industries and Redefining the Future.

- S. Russell and P. Norvig, Artificial Intelligence: A Modern Approach, 4th ed., Pearson, 2020.
- J. Phoenix and M. Taylor, Prompt Engineering for Generative AI: Future-Proof Inputs for Reliable AI Outputs.

	• S. Diamond and J. Allan, Writing AI Prompts for Dummies. • M. A. Boden, "Computer Models of Creativity," AI Magazine, vol. 29, no. 3, pp. 23–34, 2008. • M. Wooldridge and N. R. Jennings, "Intelligent Agents: Theory and Practice," The Knowledge Engineering Review, vol. 10, no. 2, pp. 115–152, 1995. • Fernandez and R. Usamentiaga, "Deep Learning for Autonomous Vehicle Control: A Comprehensive Review," IEEE Trans. Intell. Transp. Syst., vol. 17, no. 7, pp. 1893–1910, 2016. • J. Kober, J. A. Bagnell and J. Peters, "Reinforcement Learning in Robotics: A Survey," Int. J. Robot. Res., vol. 32, no. 11, pp. 1238–1274, 2013.
Electronic Materials	PowerPoint Presentations Teaching Aid Files for practical topics Videos LMS (Blackboard) E-Book E-Activities
Other Learning Materials	None

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Computer Labs
Technology equipment (projector, smart board, software)	Computers, Data Show, Smart Board, Software
Other equipment (depending on the nature of the specialty)	Internet

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students - Department Curriculum and Course Evaluation Committee	• Indirect evaluation: Questionaire to find out the opinions of stakeholders about the course and the effectiveness of the teaching method. • Direct: Periodic review of the course by the Curriculum Committee in light of . the test results

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of student assessment methods	Faculty members - Examinations Committee.	•Directly (exams/semester work) • Indirect (questionnaires)
Quality of learning resources	Students - faculty members	• Direct (semester work) • Indirect (questionnaires)
The extent to which CLOs have been achieved	Course teachers - Quality Committee - Program Leadership	•Directly (exams/semester work)
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	**Self-Development Skills DEPARTMENT**
REFERENCE NO.	
DATE	