



Course Specification

(Bachelor)

Course Title: **INTERACTION DESIGN**

Course Code: **ITEC-424**

Program: **BIT**

Department: **COMPUTER SCIENCE**

College: **ENGINEERING & COMPUTER SCIENCE**

Institution: **JAZAN UNIVERSITY**

Version: **1.0**

Last Revision Date: **August-19, 2024**

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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: (7/4)

4. Course general Description:

Course Description: The goal of this course is to provide students basic techniques and expertise to create and evaluate the design of interactive digital products, environments, systems, and services. It includes a study of interaction design for a variety of applications. The students will learn principles, patterns and process for interaction design, rapid prototyping, user interface (UI) and user experience (UX) design - skills that can be applied to desktop apps, web and mobile app development, game development, entertainment, and artistic performances.

5. Pre-requirements for this course (if any):

HUMAN-COMPUTER INTERACTION

6. Co-requirements for this course (if any):

NIL

7. Course Main Objective(s):

Upon completion, the student will be able to:

- ◆ Account for a holistic approach to the design of digital or digital artifacts
- ◆ Formulate user modeling for interaction design practice and construct creative teamwork.
- ◆ Develop strategies for well-behaved product design
- ◆ Design interactions for the desktop
- ◆ Apply interaction design strategies for web and mobile applications

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	64	100%
2	E-learning	---	---



No	Mode of Instruction	Contact Hours	Percentage
3	Hybrid <ul style="list-style-type: none"> Traditional classroom E-learning 	---	---
4	Distance learning	---	---

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	30
3.	Field	----
4.	Tutorial	----
5.	Others (Final Lab Exam + Revision)	04
Total		64

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

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Summarize the various types of interfaces and goals of interaction design and processes for interaction design	K1	Visual & Verbal [Lectures/ Presentations]	Exams, Assignment
1.2	Demonstrate different data collection techniques used in interface design.	K1	Visual & Verbal [Lectures/ Presentations]	Exams, Assignment
2.0	Skills			
2.1	Analyze interaction designs through the application of diverse interaction design evaluation techniques.	S1	Visual & Verbal [Lectures/ Presentations]	Exams, Assignment

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.2	Implement User Experience (UX) models and prototypes to develop various types of interaction designs.	S2	Visual & Verbal [Lectures/ Presentations]	Exams, Assignment
3.0	Values, autonomy, and responsibility			
3.1	Demonstrate the skills and strategies to design interfaces for Mobile and desktop applications.	V1	Active participation in lab activities	Assignment/Lab Tasks

C. Course Content

No	List of Topics	Contact Hours
1.	UNIT-1 Goals and Introduction of Interaction Design <ul style="list-style-type: none"> ➤ What is Interaction Design? ➤ Goals of Interaction Design ➤ Which kind of design? ➤ Working in multidisciplinary teams ➤ What is involved in the process of Interaction Design? ➤ Core Characteristics of Interaction Design ➤ Why help designers ➤ Accessibility and inclusiveness ➤ Usability goals ➤ Design Principle ➤ Constraints ➤ Consistency ➤ When Consistency breaks down? ➤ Internal and External Consistency ➤ Affordance 	4T+4P
2.	UNIT-2 The Processes of Interaction designs <ul style="list-style-type: none"> ➤ What is involved in Interaction Design? ➤ Importance of involving users ➤ Degrees of user involvement ➤ What is a user centered approach ➤ Four basic activities of interaction design ➤ A simple interaction design Lifecycle Model ➤ Some practical issues 	4T+4P



	<ul style="list-style-type: none"> ➤ What are users needs? ➤ How to design alternative designs? ➤ How to choose among alternatives? ➤ How to integrate Interaction design activities within other models? 	
3.	UNIT-3 Data gathering methods for interaction design <ul style="list-style-type: none"> ➤ Five Key issues of Interaction Design ➤ Data Recording ➤ Interviews ➤ Interview questions types ➤ Running the interview ➤ Enriching the interview process ➤ Questionnaires, Questionnaires design and format ➤ Encouraging good response ➤ Advantages of online questionnaires ➤ Problems with online questionnaires ➤ Deploying online questionnaires ➤ Observation ➤ Ethnography, Online Ethnography 	6T+6P
4.	UNIT-4 Interaction design in practice <ul style="list-style-type: none"> ➤ Agile development ➤ Technical debt in UX ➤ Agile UX ➤ User Research ➤ Lean UX ➤ Aligning work practices ➤ Parallel track approach to AgileUX ➤ Documentation ➤ Open Source resources ➤ Tools for interaction design 	4T+4P
5.	UNIT-5 Introducing Evaluation methods for interaction design <ul style="list-style-type: none"> ➤ Types of evaluation ➤ Living labs ➤ Evaluation case studies ➤ Evaluation methods ➤ Participant's rights and getting their consents ➤ Things to consider when interpreting data 	6T+6P
6.	UNIT-6 Inspections, Analytics and models for interaction design	6T+6P



	<ul style="list-style-type: none"> ➤ Inspections ➤ Heuristic evaluation ➤ Heuristic for websites focus on key criteria ➤ Doing Heuristic evaluation ➤ Advantages and problems ➤ Steps in Cognitive Walkthrough ➤ Pluralistic Walkthrough ➤ Web Analytics ➤ A/B Testing ➤ Predictive models ➤ Fitts' Law 	
7.	Revision + Final Lab Exam	2T+2P
Total		32T+32P

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Assignment-1	Week 5-6	10%
2.	MID-Term Exam	Week 7-8	15%
3.	Assignment-2	Week 10	15%
4.	Lab Exam(Mini Project+Presentation)	Week 16	20%
5.	Final Exam	Week 17	40%

*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	Interaction Design: beyond human-computer interaction By Helen Sharp, Fifth Edition, John Wiley & Sons, 2019, ISBN: 978-1-119-54725-9
Supportive References	<ul style="list-style-type: none"> ➤ The Fundamentals of Interactive Design By Michael Salmond, 1st Edition, AVA Publishing, 2013, ISBN 13: 9782940447480. ➤ Basics Interactive Design: User Experience Design: Creating designs users really love By Allanwood, 1st Edition, Bloomsbury Publishing, 2014, ISBN 13: 9784520137453
Electronic Materials	
Other Learning Materials	Designing Interfaces: Patterns for Effective Interaction Design By Jenifer Tidwell, 3 rd Edition, O'Reilly Media, 2020, ISBN 13: 9781492051961.





2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms, Laboratories
Technology equipment (projector, smart board, software)	Projectors, smartboard and computers with internet connection
Other equipment (depending on the nature of the specialty)	NIL

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	HOD/QAU/PL/Students	Indirect
Effectiveness of Students assessment	HOD/QAU/PL/CC	Indirect
Quality of learning resources	HOD/PL/Lab Unit/Students	Direct
The extent to which CLOs have been achieved	PL/QAU/Track Leaders	Direct
Other		

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

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	QUALITY ASSURANCE UNIT
REFERENCE NO.	MEETING NO.XX, AGENDA NO.XX
DATE	XX/XX/2024

