Course Specification

▬ (Postgraduate)

Course Title:	**Thesis**
Course Code:	**CYBS6999**
Program: M.Sc. in Cybersecurity	
Department: **Department of Computer Science**	
College: **Faculty of Computing and Information**	
Institution: Al-baha University	
Version: **1**	
Last Revision Date: *Pick Revision Date.*	

Table of Contents

A. General information about the course:

1. Course Identification:

1. Credit hours: (6)

2. Course type

A.	☐University	☐College	☐Department	☐Track	
B.	☒ Required			☐Elective	

3. Level/year at which this course is offered: (6th)

4. Course general Description:

In Semester Six the students with thesis option should undertake a thesis of up to 30,000 words. Based upon the thesis proposal and thesis work completed in Semester 3 and with the approval of the Higher Education Committee in the department.

This course requires individual effort that is overseen by the thesis supervisor. Weekly or bi-weekly meetings will be held to discuss progress and review submitted documents. Once the research and necessary analysis and results compilation are completed, then individual thesis chapters will be written and revised iteratively until both agree that the manuscript is ready for submission to the Thesis Committee. If the committee agrees, then a thesis defense session will be held. Following successful completion of the Defense, the manuscript is revised a final time and get the final approval.

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

Passed all core courses and Research Methods in Computer Science course (CS60301)

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

7. Course Main Objective(s):

The students completed this course will be able to:

- Design and execute a meaningful research project that demonstrates spatial thinking and uses the knowledge and skills learned while in the Master Program.
- Undertake the research process and be aware of research obligations and pitfalls.
- Articulate research or project objectives clearly, situate research within an academic or scholarly context, state claims and evidence clearly, assess validity of claims, evidence, outcomes, and results.

- Narrate the research process clearly in the form of a formal multi-chapter master's thesis manuscript, structured according to the approved M.S. in CS thesis style.
- Develop communication skills in working with their advisors and committee members.
- Effectively communicate the master's research clearly and succinctly, in written and oral forms, to faculty, mentors, and potential sponsors. Interact in groups collaboratively.
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2. Teaching Mode: (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	26	80%
2	E-learning	7	20%
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

3. Contact Hours: (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	33
2.	Laboratory/Studio	-
3.	Field	-
4.	Tutorial	-
5.	Others (specify)......	-
	Total	33

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

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	To narrate the research process clearly in the form	K1	• Lectures • Supervision	• Assignments • Viva Voce

Code	Course Learning Outcomes	Code of PLOs aligned with program	Teaching Strategies	Assessment Methods
	of a formal multi-chapter master's thesis manuscript, structured according to the approved M.S. in CS thesis style.			
1.2	To undertake the research process and be aware of research obligations and pitfalls	K2	• Lectures • Supervision	• Assignments • Viva Voce
...				
2.0	**Skills**			
2.1	To articulate research or project objectives clearly, situate research within an academic or scholarly context, state claims and evidence clearly, assess validity of claims, evidence, outcomes, and results.	S2	• Lectures • Supervision	• Assignments Viva Voce
2.2	To design and execute a meaningful research project that demonstrates spatial thinking and uses the knowledge and skills learned while in the Master Program.	S3	• Lectures • Supervision	• Assignments • Viva Voce
3.0	**Values, autonomy, and responsibility**			
3.1	To develop communication skills in working with their advisors and committee members.	V1	• Lectures Supervision	• Assignments • Viva Voce
3.2	To mastering project management principles for producing innovative solutions for complex tasks.	V2	• Lectures • Supervision	• Viva Voce
3.3	To communicate effectively the master's research clearly and succinctly, in written and oral forms, to faculty, mentors, and potential sponsors.	V3	• Lectures • Supervision	• Assignments • Viva Voce

C. Course Content:

No	List of Topics	Contact Hours
1.	Literature study	7
2.	Research Methodology	7
3.	Experiment/simulation	7
4.	Results and Analysis	7
5.	Conclusion	5
Total		**33**

D. Students Assessment Activities:

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Midterm presentation and report	Week 6	30%
2.	Final exam (Viva voce and theis report)	Week 13	70%

*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	- ACM (Association for Computer Machinery) web site - http://www.acm.org/ - IEEE Computer Society web site - http://www.computer.org/portal/web/guest/home - Access to the Saudi Digital Library (SDL). Using the learning management system of the university – Rafid System (https://lms.bu.edu.sa/).
Supportive References	• Communications of ACM (Association for Computer Machinery) - http://cacm.acm.org/ Journal of the ACM - http://jacm.acm.org/
Electronic Materials	• Access to the Saudi Digital Library (SDL). • Using the learning management system of the university – Rafid System (https://lms.bu.edu.sa/). • IEEE/ACM Transactions on Networking https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=90
Other Learning Materials	Research papers related to the thesis theme from journals and proceedings

2. Educational and Research Facilities and Equipment Required:

Items	Resources

facilities
(Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)
	• A classroom or lecture hall with whiteboard.
	• A instructor computer station with
	   o High speed Internet connection;
	   o A desktop computer;
	   o Appropriate software access;
	   o Power outlets for instructor's laptop plug-in;
	   o A DVD/Blu Ray player;
	   o A digital image projection system with connection and switches to desktop computer, laptop computer and DVD/Blu Ray player.
	Audio-visual recording capability so students can review lectures offline.

Technology equipment (Projector, smart board, software)	• High speed Internet connection • A digital image projection system that o Is connected to instructor desktop computer Has connection for laptop plug-in
Other equipment (Depending on the nature of the specialty)	-

F. Assessment of Course Quality:

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of supervision and assessment	Faculty, Program Leaders	Direct
Extent of achievement of course learning outcomes	Faculty, Program Leaders, Peer Reviewer	Indirect
Quality of learning resources	Students, Program Leaders, Peer Reviewer	Direct

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

Assessment Methods (Direct, Indirect)

G. Specification Approval Data:

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	