Course Outline	
COMP8074 Thesis (6)	**Study Program** Computer Science
Effective Date 01 September 2017	**Revision** 0

1. Course Description

This course is designed to guide undergraduate students from computer science program through the stages of writing their undergraduate theses. Topics include planning, research and documentation, prose style and editing, document design, ethics, abstracts, and oral presentations. The students will also become acquainted with research topics, ways of framing arguments, and making points outside their fields of study, which will help them develop a more interdisciplinary perspective.

2. Graduate Competency

Each course in the study program contributes to the graduate competencies that are divided into employability and entrepreneurial skills and study program specific outcomes, in which students need to have demonstrated by the time they complete their course.

BINUS University employability and entrepreneurial skills consist of planning and organizing, problem solving and decision making, self management, team work, communication, and initiative and enterprise.

2.1. Employability and Entrepreneurial Skills

Aspect	Key Behaviour

2.2. Study Program Specific Outcomes

Study Program Specific Outcomes
Able to apply knowledge and understanding of mathematical concepts, principles and theories relating to computer science knowledge.
Able to demonstrate knowledge and understanding of algorithm concepts, principles and theories relating to computer science knowledge.
Able to classify problems and to apply design and development principles for specific problems
Able to classify criteria and specifications appropriate to specific problems, plan strategies for their solution and construct appropriate software systems.
Able to construct a solution by applying current technologies especially in Game Application and Technology.
Able to depict trend mobile technologies in the future

3. Topics

- Introduction
- Doing Research
- Experiments
- Ethics
- Giving Presentation

4. Learning Outcomes

On successful completion of this course, student will be able to:

- LO 1: Produce Produce an operational plan of study designed to lead to the successful completion of the thesis.
- LO 2: Perform Perform a comprehensive literature review of the topic under investigation and write a comprehensive and logical evaluation of the significant and relevant aspects.

- LO 3: Design Design and implement an appropriate research methodology taking full account of the range of alternative techniques and approaches.
- LO 4: Write Plan and write a thesis, which demonstrates both a detailed understanding of the selected topic and a logical consistency in approach.

5. Teaching And Learning Strategies

In this course, the lecturers might deploy several teaching learning strategies, including Demonstration, Discussion, Lecture, and Presentation.

6. Textbooks and Other Resources

6.1 Textbooks

1. Justin Zobel. (2004). ***Writing for Computer Science.*** 02. Springer. London. ISBN: 1852338024.

The book in the first list is a must to have for each student.

6.2 Other Resources

1.

7. Schedule

Theory

Session/ Mode	Related LO	Topics	References
1 F2F	LO 1	Introduction - Algorithms - Editing - Graph, Figures, and Tables - Mathematical Writing - Structure of Thesis - Style of Thesis Writing - Types of Publication - Writing Hints	- Introduction
2 F2F	LO 1	Introduction - Algorithms - Editing - Graph, Figures, and Tables - Mathematical Writing - Structure of Thesis - Style of Thesis Writing - Types of Publication - Writing Hints	- Introduction
3 F2F	LO 1	Introduction - Algorithms - Editing - Graph, Figures, and Tables - Mathematical Writing - Structure of Thesis - Style of Thesis Writing - Types of Publication - Writing Hints	- Introduction
4 F2F	LO 2	Doing Research - A Research Check List - Beginning - Defending Hypothesis - Evidence - Finding Research Literature - Good or Bad Science - Hypothesis - Proposed Topic Discussion	- Doing Research

		- Reflection on Research - Shaping a research project	
5 F2F	LO 2	Doing Research - A Research Check List - Beginning - Defending Hypothesis - Evidence - Finding Research Literature - Good or Bad Science - Hypothesis - Proposed Topic Discussion - Reflection on Research - Shaping a research project	- Doing Research
6 F2F	LO 2	Doing Research - A Research Check List - Beginning - Defending Hypothesis - Evidence - Finding Research Literature - Good or Bad Science - Hypothesis - Proposed Topic Discussion - Reflection on Research - Shaping a research project	- Doing Research
7 F2F	LO 2	Doing Research - A Research Check List - Beginning - Defending Hypothesis - Evidence - Finding Research Literature - Good or Bad Science - Hypothesis - Proposed Topic Discussion - Reflection on Research - Shaping a research project	- Doing Research
8 F2F	LO 2	Doing Research - A Research Check List - Beginning - Defending Hypothesis - Evidence - Finding Research Literature - Good or Bad Science - Hypothesis - Proposed Topic Discussion - Reflection on Research - Shaping a research project	- Doing Research
9 GSLC	LO 2	Doing Research - A Research Check List - Beginning - Defending Hypothesis - Evidence - Finding Research Literature - Good or Bad Science - Hypothesis - Proposed Topic Discussion - Reflection on Research - Shaping a research project	- Doing Research
10 GSLC	LO 2	Doing Research - A Research Check List	- Doing Research

		- Beginning - Defending Hypothesis - Evidence - Finding Research Literature - Good or Bad Science - Hypothesis - Proposed Topic Discussion - Reflection on Research - Shaping a research project	
11 F2F	LO 2 LO 3	Experiments - An Experiment Check List - Describing Experiment - Design Experiments - Intuition - Measurement and Coding - Statistic - Variables	- Experiments
12 F2F	LO 2 LO 3	Experiments - An Experiment Check List - Describing Experiment - Design Experiments - Intuition - Measurement and Coding - Statistic - Variables	- Experiments
13 F2F	LO 2 LO 3	Experiments - An Experiment Check List - Describing Experiment - Design Experiments - Intuition - Measurement and Coding - Statistic - Variables	- Experiments
14 F2F	LO 2 LO 3	Experiments - An Experiment Check List - Describing Experiment - Design Experiments - Intuition - Measurement and Coding - Statistic - Variables	- Experiments
15 F2F	LO 2 LO 3	Experiments - An Experiment Check List - Describing Experiment - Design Experiments - Intuition - Measurement and Coding - Statistic - Variables	- Experiments
16 F2F	LO 2 LO 3	Experiments - An Experiment Check List - Describing Experiment - Design Experiments - Intuition - Measurement and Coding - Statistic - Variables	- Experiments
17 F2F		Ethics - An Ethic Check List	- Ethics

		- Authorship - Confidentiality and conflict of interest - Misrepresentation - Plagiarism - Self-Plagiarism	
18 F2F		Ethics - An Ethic Check List - Authorship - Confidentiality and conflict of interest - Misrepresentation - Plagiarism - Self-Plagiarism	- Ethics
19 F2F	LO 4	Giving Presentation - Content - Delivery - Figures - Organization - Pre-defense Thesis Presentation - Preparation - Presentation Check List - Question Time - Slide - Slide Tools - Text Slides - The Conclusion - The Introduction	- Giving Presentation
20 F2F	LO 4	Giving Presentation - Content - Delivery - Figures - Organization - Pre-defense Thesis Presentation - Preparation - Presentation Check List - Question Time - Slide - Slide Tools - Text Slides - The Conclusion - The Introduction	- Giving Presentation
21 F2F	LO 4	Giving Presentation - Content - Delivery - Figures - Organization - Pre-defense Thesis Presentation - Preparation - Presentation Check List - Question Time - Slide - Slide Tools - Text Slides - The Conclusion - The Introduction	- Giving Presentation
22 F2F	LO 4	Giving Presentation - Content - Delivery - Figures - Organization	- Giving Presentation

		- Pre-defense Thesis Presentation - Preparation - Presentation Check List - Question Time - Slide - Slide Tools - Text Slides - The Conclusion - The Introduction	
23 F2F	LO 4	Giving Presentation - Content - Delivery - Figures - Organization - Pre-defense Thesis Presentation - Preparation - Presentation Check List - Question Time - Slide - Slide Tools - Text Slides - The Conclusion - The Introduction	- Giving Presentation
24 F2F	LO 4	Giving Presentation - Content - Delivery - Figures - Organization - Pre-defense Thesis Presentation - Preparation - Presentation Check List - Question Time - Slide - Slide Tools - Text Slides - The Conclusion - The Introduction	- Giving Presentation
25 F2F	LO 4	Giving Presentation - Content - Delivery - Figures - Organization - Pre-defense Thesis Presentation - Preparation - Presentation Check List - Question Time - Slide - Slide Tools - Text Slides - The Conclusion - The Introduction	- Giving Presentation
26 F2F	LO 4	Giving Presentation - Content - Delivery - Figures - Organization - Pre-defense Thesis Presentation - Preparation - Presentation Check List	- Giving Presentation

		- Question Time - Slide - Slide Tools - Text Slides - The Conclusion - The Introduction	

8. Evaluation

Theory

Assessment Activity	Weight	Learning Outcomes			
		1	2	3	4
Final Exam	100%	√	√	√	√

Practicum

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Final Evaluation Score

Aspects	Weight
Theory	100%
Practicum	0%

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