American International University- Bangladesh (AIUB)

Faculty of Engineering (EEE)

Capstone Project Report Outline (Microprocessor and Embedded Systems)

1. **Abstract (at least 150 words but not more than 300 words) and Keywords (3-6 keywords separated by comma)** **[1 mark]**

2. **Introduction**

2.1. Background of Study and Motivation	[1 mark]
2.2. Project Objectives	[1 mark]
2.3. A brief outline of the report	[1 mark]

3. **Literature Review** ***(At least 5 project-related published journal papers within the year 2018 to 2022)*** → **[Part under OBE assessment]** [5 mark]

4. **Methodology and Modeling**

4.1. Introduction	[1 mark]
4.2. Working principle of the proposed project	[1 mark]
4.2.1. Process of Work → **[Part relevant to OBE assessment]**	**[2 mark]**
4.3. Description of the components	[1 mark]
4.4. Implementation	[1 mark]
4.5. Test/Experimental setup → **[Part relevant to OBE assessment]**	**[2 mark]**

[Guideline for section 3.2.1: The ascertained project is a complex engineering problem and certainly it follows a specific method or working procedure to ensure intended functionality. Hence, one should discuss how the process is developed and the proposed "Process" is irrespective of users' cultural (religion, language, morals, etc.) and societal factors (education level, income, gender, etc.).**]**

[Guideline for section 3.5: The design process of the experiment and the investigation behind the finalized setup should be reported here. The conception of the "Experiment" includes both the setup and study to justify the desired functionality of the developed prototype. Hence, before presenting the experimental setup and procedure, one should present which kind of engineering knowledge is required to develop such setup along with the analysis that is conducted to reach the final stage of the setup. It should be highlighted that the developed setup is a technically complicated one that requires many components to build; else, it is a big challenge to design such a setup and the ultimate setup is accomplished by tackling several sub-challenges.**]**

5. **Cost analysis** [1mark]

6. Results and Discussion

6.1. Simulation/Numerical analysis	[1 mark]
6.2. Measured response/Experimental results	[1 mark]
6.3. Comparison between numerical and experimental results	[2 mark]
6.4. Limitations in the project	[1 mark]

7. Conclusion and future endeavors [1 mark]

8. References [1 mark]

9. Appendix (if any)

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Course Name:	Microprocessor and Embedded Systems	**Course Code:**	EEE 4103
Semester:	Summer 2021-2022	**Section:**	
Faculty Name:			

Capstone Project Title:	
Project Group No.	

	Student ID:	**Student Name:**
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3.		
4.		

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6.		
7.		
8.		

Assessment Materials and Marks Allocation:

Cos	Assessment Materials	POIs	Marks
CO 1	Project report ***(Investigating the design and implementation of an embedded system-based project for complex engineering problems through appropriate literature review.)***	P.d.1.C5	**5**

COs-POIs	Excellent [5]	Proficient [4]	Good [3]	Acceptable [2]	Unacceptable [1]	No Response [0]	Secured Marks
CO1 P.d.1. C5	The outcome of the project perfectly investigates the design of an embedded system-based project for complex engineering problems through appropriate research.	The outcome of the project somewhat investigates the design of an embedded system-based project for complex engineering problems through appropriate research.	The outcome of the project somewhat investigates the design of an embedded system-based project for complex engineering problems but does not go through appropriate research.	The outcome of the project does not investigate the design of an embedded system-based project for complex engineering problems but does go through appropriate research.	The outcome of the project does not investigate the design of an embedded system-based project for complex engineering problems and also does not go through appropriate research.	No Response	

Comments						Total marks (5)	