

**ME423 GRADUATION DESIGN PROJECT I / ME424 GRADUATION DESIGN PROJECT II**

**THE PROJECT NAME WILL BE WRITTEN IN THIS SECTION IN CAPITAL AND CENTERED**

**STUDENT NUMBER, NAME SURNAME**

**ADVISOR: TITLE NAME SURNAME**

**Gazi University**

**Faculty of Engineering**

**Department of Mechanical Engineering**

**JUNE 2023**

**ME423 Graduation Design Project I Evaluation Procedure**

**Q1 (CLO-1).** Ability to access the necessary information and search for resources, use databases, and other sources of information to this end. **(30 points)**

**Q2 (CLO-2).** Determines the subject of study and is aware of project management, risk management, and change management. **(25 points)**

**Q3 (CLO-3).** Has professional basic engineering knowledge. **(25 points)**

**Q4 (CLO-4).** Has the ability to write effective reports by the spelling rule. **(20 points)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Q1(CLO-1) | Q2( CLO-2) | Q3( CLO-3) | Q4( CLO-4) | Total |
|   |  |  |  | /100 |

**ME424 Graduation Design Project II Evaluation Procedure**

**Q1 (CLO-1).** Identifies, defines, formulates, and solves Mechanical Engineering problems. **(25 points)**

**Q1 (CLO-1).** Applies modeling techniques with appropriate engineering methods. **(25 points)**

**Q1 (CLO-1).** Experimentally / numerically designs, builds, collects data, analyzes, and interprets results. **(25 points)**

**Q1 (CLO-1).** Has the ability to write and present effective reports by the spelling rule. **(25 points)**

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| --- | --- | --- | --- | --- |
| Q1(CLO-1) | Q2( CLO-2) | Q3( CLO-3) | Q4( CLO-4) | Total |
|   |  |  |  | /100 |

**ACKNOWLEDGMENTS**

On this page, additional information about the study which is thought to disrupt the integrity of the narrative if it is written in the project text, but which is desired to be presented by the author of the project, can be given. Positive and negative situations encountered during the working process can also be mentioned. In the last part of the page, those who directly contributed to the preparation and reporting of the project work and the people and institutions who contributed indirectly, even if they are not responsible, are thanked. If the project work was carried out within the scope of a project, the name of the project and the relevant institution is also indicated on this page.

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**LIST OF TABLES**

Table 3.1. Physical properties of the fluid 10

**LIST OF FIGURES**

Figure 3.1. Nusselt number vs Reynolds number 11

**SYMBOLS AND ABBREVIATIONS**

The symbols and abbreviations used in this study are presented below along with their explanations.

**Symbols Descriptions**

L Length (m)

Re Reynolds number (-)

**Abbreviations Descriptions**

**AB** Descriptions should not exceed one line

**ASTM** Abbreviations should be given in alphabetical order

**ABSTRACT**

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**1. INTRODUCTION**

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**2. LITERATURE REVIEW**

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**3.** **PROBLEM STATEMENT, PURPOSE AND CONTRIBUTION OF THE STUDY**

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**4. PROJECT MANAGEMENT**

**4.1. Project Timetable**

**PROJECT TIMETABLE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Task Number** | **Task Name**  | **The Contribution to the Projects Success (%)** | **MONTHS** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** |
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**4.2. Risk Management**

**RISK MANAGEMENT TABLE**

|  |  |  |
| --- | --- | --- |
| **Task Number** | **Definition of Risk(s)** | **Action(s) to be Taken (Plan B)** |
| **1** |  |  |
|  |  |  |

**4.3. Change Management**

It includes creating and recording changes, assessing the impact, cost, benefit and risk of changes, obtaining approval, managing and coordinating change implementation, demonstrating and reporting applications, reviewing and closing change requests.

**5. METHOD**

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**6. RESULTS AND DISCUSSIONS**

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**7. CONCLUSIONS**

The results obtained within the scope of this study, if any, will be stated in this section

**8.** **REFERENCES**

Andrade A.X., Sarzosa W.Q. and Toapanta L.F., 2020, CFD Analysis of a Solar Flat Plate Collector with Different Cross Sections, Enfoque UTE, vol. 11, pp.95-108.

Arpino F., Cortellessa G. and Frattolillo A., 2015, Experimental and Numerical Assessment of Photovoltaic Collectors Performance Dependence on Frame Size and Installation Technique, Solar Energy, vol. 118, pp. 7–19.

Dimitrios I.L., Stathopoulos T. and Rounis E.D., 2017, Wind Effects on the Performance of Solar Collectors on Rectangular Flat Roofs: A Wind Tunnel Study, Journal of Wind Engineering and Industrial Aerodynamics, vol. 161, pp. 27-41.

Duffie J.A. and Beckman W.A., 1991, Solar Engineering of Thermal Processes (1st edn.), New York, Wiley, pp. 173.

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