**Department of \_\_\_\_\_\_ Engineering**

**ABET Capstone Design Project Checklist**

Semester: \_\_\_\_\_\_\_\_\_\_\_

Project Name:

Done by:

Supervised by:

| **S.No.** | **Item** | **Response** | **Page #** |
| --- | --- | --- | --- |
| 1. | What is the end product of your Capstone project? | |  |
| Select from: (a) system, (b) component, or (c) process and give a brief description. |  |  |
| 2. | Please explain how the following aspects of the design process were considered in the capstone project? | |  |
| 1. Iterative process |  |  |
| 1. Creativity |  |  |
| 1. Decision making |  |  |
| 3. | How were the following processes included in the Capstone project? | |  |
| 1. Identify opportunities |  |  |
| 1. Develop requirements |  |  |
| 1. Perform analysis and synthesis |  |  |
| 1. Generate multiple solutions |  |  |
| 1. Evaluate solutions against requirements |  |  |
| 1. Consider risks |  |  |
| 1. Make trade-offs |  |  |
| 4. | Explain how and where did you apply basic sciences, mathematics, and engineering sciences in the Capstone project? |  |  |
| 5. | Explain whether you utilized knowledge and skills acquired in earlier courses in the Capstone design project and how? |  |  |
| 6. | Did you apply appropriate  Engineering standards in your capstone project? Please give details. |  |  |
| 7. | Did your capstone design project include any of the following? Please provide details of the applicable item(s) [minimum one item is required]. | |  |
| 1. wide-ranging or conflicting technical issues |  |  |
| 1. having no obvious solution |  |  |
| 1. addressing problems not encompassed by current standards and codes |  |  |
| 1. involving diverse groups of stakeholders |  |  |
| 1. including many components, parts, or sub-problems |  |  |
| 1. involving multiple disciplines |  |  |
| 1. significant consequences in a range of contexts |  |  |
| 8. | How did you take into account the following in your capstone design project? | |  |
| 1. public health, safety, and welfare |  |  |
| 1. global, cultural and social impact |  |  |
| 1. environmental considerations |  |  |
| 1. economic factors |  |  |
| 9. | Which realistic constraints did you consider in your capstone design project? Select a minimum of two from the list and how each constraint was considered in the design describing its impact on the final design.  **Possible constraints:** accessibility, aesthetics, codes, constructability, cost, ergonomics, extensibility, functionality, interoperability, legal considerations, maintainability, manufacturability, marketability, policy, regulations, schedule, standards, sustainability, usability, or any other constraints related to your project. | |  |
| Constraint 1 |  |  |
| Constraint 2 |  |  |
| 10. | Briefly explain the engineering design components of your project. |  |  |

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