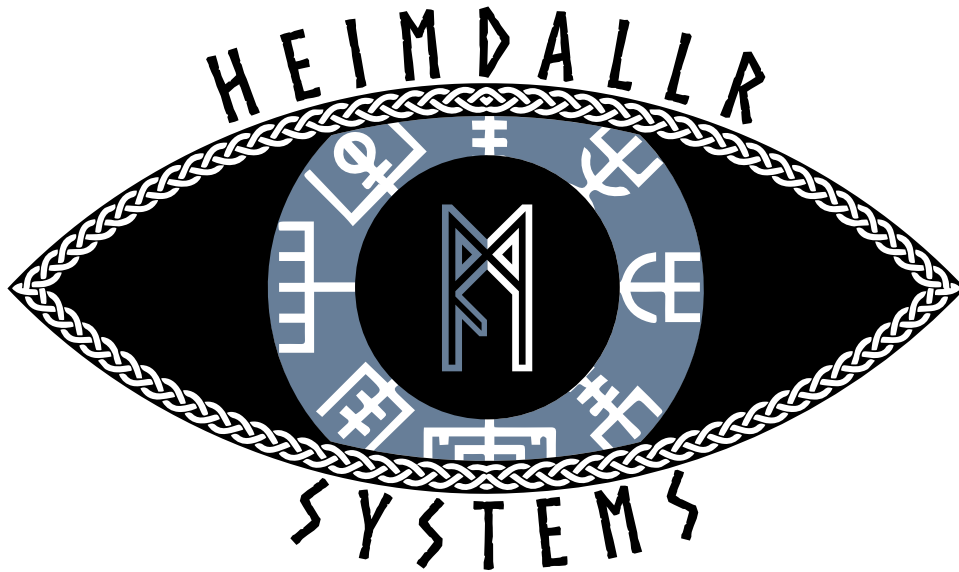


# Document Title

(bold, Tahoma, 20 pt, center aligned, first letter caps)

Names of Team Members (Tahoma, 12 pt., single-spaced, center aligned)



(Replace logo with your own logo and team name)

**ME 407**

(bold, Tahoma, 16 pt., single-spaced, center aligned)

**Robotics Preliminary Design**  
**Embry-Riddle Aeronautical University**

**EMBRY-RIDDLE**  
Aeronautical University

## **Abstract** (bold, Tahoma, 16 pt., left aligned, all caps)

12 pt. full line space between heading and text

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna. Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Proin pharetra nonummy pede. Mauris et orci. Aenean nec lorem. In porttitor. Donec laoreet nonummy augue. Suspendisse dui purus, scelerisque at, vulputate vitae, pretium mattis, nunc. Mauris eget neque at sem venenatis eleifend. Ut nonummy. Fusce aliquet pede non pede. Suspendisse dapibus lorem pellentesque magna. Integer nulla. Donec blandit feugiat ligula. Donec hendrerit, felis et imperdiet euismod, purus ipsum pretium metus, in lacinia nulla nisl eget sapien.

(Times New Roman, 12 pt., block format)

All margins should be 1 inch.  
If document is to be spiral bound, Left Margin  
should instead be 1.5 inch

Front Matter page numbers, lower  
case Roman numerals, centered,  
bottom of page

## 1.0 **Table of Contents** (bold, Tahoma, 16 pt., left aligned)

12 pt. full line space between heading and text

(Times New Roman, 12 pt, left aligned)

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## **List of Acronyms and Abbreviations** (bold, Tahoma, 16 pt., left aligned)

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$A$	= amplitude of oscillation
$a$	= cylinder diameter
$C_p$	= pressure coefficient
$C_x$	= force coefficient in the $x$ direction
$C_y$	= force coefficient in the $y$ direction
$c$	= chord
$dt$	= time step
$F_x$	= $X$ component of the resultant pressure force acting on the vehicle
$F_y$	= $Y$ component of the resultant pressure force acting on the vehicle
$f, g$	= generic functions
$h$	= height
$i$	= time index during navigation
$j$	= waypoint index
$K$	= trailing-edge (TE) nondimensional angular deflection rate

**List of Figures** (bold, Tahoma, 16 pt., left aligned)

12 pt. full line space between heading and text

Figure 4.1: EMR Lander's Propulsion Performance (Bold, Tahoma, 10pt., aligned with left edge of figure) .....	10
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## **List of Tables** (bold, Tahoma, 16 pt., left aligned)

12 pt. full line space between heading and text

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## 1.0 A-Level Heading (Enumerated heading, bold, Tahoma, 14pt, left aligned)

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12 pt. full line space between paragraphs

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## 2.0 A-Level Heading

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12 pt. full lines space between text and heading

### 2.1 B-Level Heading (Bold, Tahoma, 13pt, left aligned,)

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```
function() {  
    int var = some_other_function()  
}
```

(Courier New, 11 pt., left aligned, 1-level indent, indented according to proper coding guidelines for that language)

Aenean nec lorem. In porttitor. Donec laoreet nonummy augue. Suspendisse dui purus, scelerisque at, vulputate vitae, pretium mattis, nunc. Mauris eget neque at sem venenatis eleifend. Ut nonummy. Fusce aliquet pede non pede. Suspendisse dapibus lorem pellentesque magna. Integer nulla.

## 2.2 B-Level Heading

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### 2.2.2 C-Level Heading

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3.0 A-Level Heading

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12 pt. full line space between text and table/figure

**Table 3.1: Controls and Sensor Component Mass** (bold, Tahoma, 10pt aligned with left edge of table, )

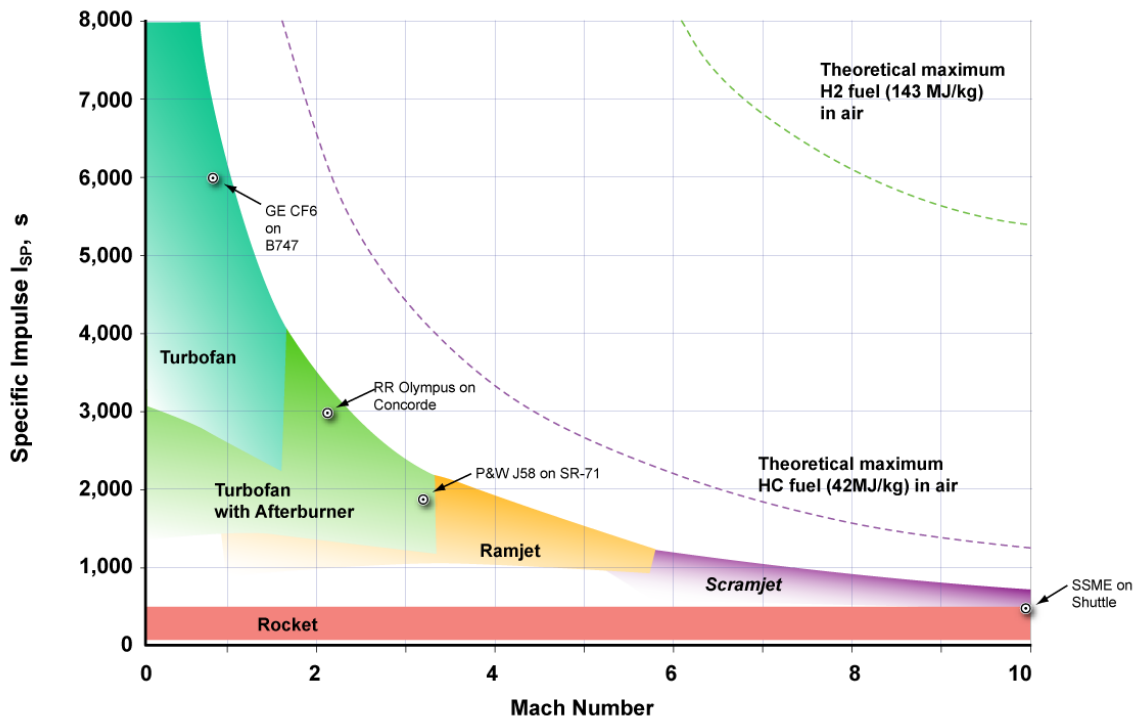
Component (Calibri, 11 pt., Bold, white text, Blue Fill #667E98)	Mass (g)
BeagleBone Black (Calibri, 11 pt., black, First Column Bold and left aligned. All other lines standard and centered)	AAA
Adafruit IMU	BBB
Sharp Long Range Proximity Sensor	10.54
Sharp Short Range Proximity Sensor	6.80
Wires and Solder	10.0
Total (Row that contains summary of other rows (total, average, etc.) should have a right aligned text)	70.15

12 pt. full line space between table/figure and text

*Table 3.1* shows the total mass to be above EMR’s projections but below the minimum requirements as set forth by NASA. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna. Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Proin pharetra nonummy pede.

4.0 A-Level Heading

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**Figure 4.1: EMR Lander's Propulsion Performance** (Bold, Tahoma, 10pt., aligned with left edge of figure)

Figure 4.1 clearly demonstrates the relationship between Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna. Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.

#### 4.1 B-Level Heading

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$$y = mx + b \quad (1)$$

$$x = t \quad (2)$$

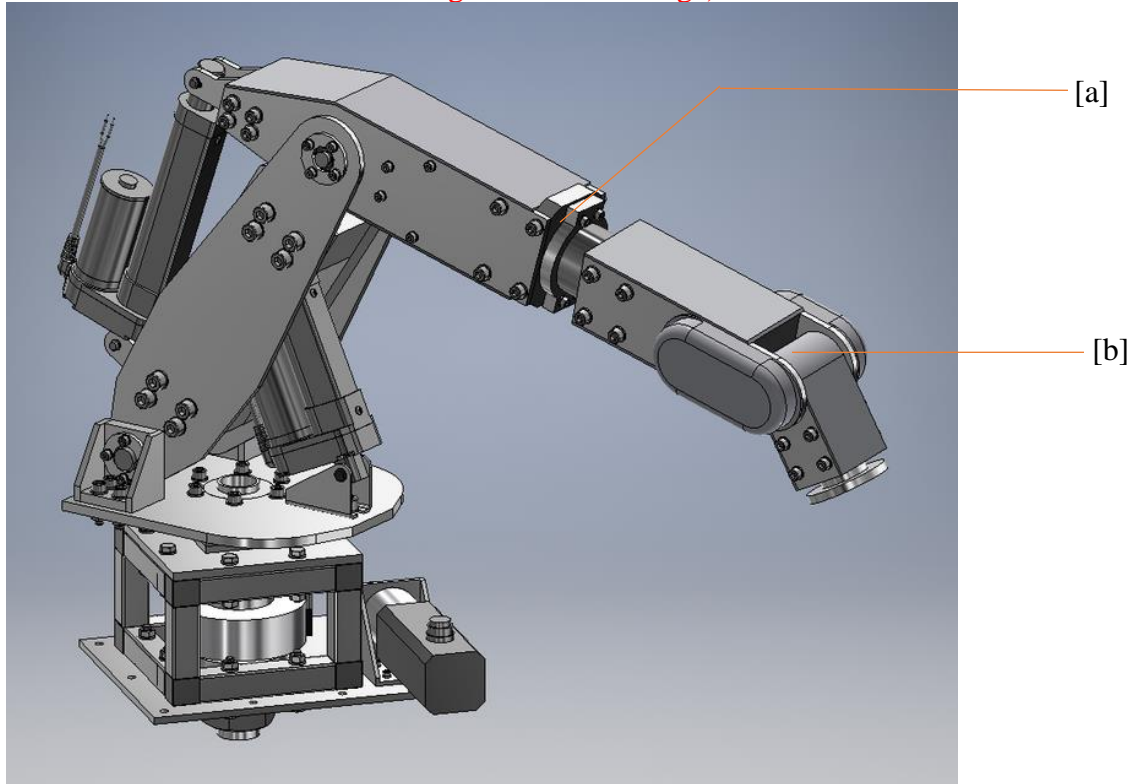
(Equations use 12pt Black Cambria Math, and have the equation number (created with references tool) on the right side of the page)

### 5.0 A-Level Heading

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(Callouts in a figure should be angled at close to a 45° angle if they need to travel vertically, and should terminate horizontally in a letter reference outside the figure. The color should be chosen such that it contrasts with the background of the image)



**Figure 5.1: Robot Arm**

(Description of each reference will be placed directly below the figure and caption, if necessary, one per line)

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[b] Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Aenean nec lorem [1] (In-text citations use full size number in square brackets, as per IEEE). In porttitor. Donec laoreet nonummy augue. Suspendisse dui purus, scelerisque at, vulputate vitae, pretium mattis, nunc. Mauris eget neque at sem venenatis eleifend. Ut nonummy. Fusce aliquet pede non pede. Suspendisse dapibus lorem pellentesque magna. Integer nulla.

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(Bulleted lists should be done using Word's default bullets, Times New Roman, 12pt. font. Leave a space above the bulleted list if it is standalone, and no spacing otherwise. Always leave a space below the bulleted list regardless)

- First level bullet 1
- First level bullet 2
  - Second level bullet 1
    - Third level bullet 1
  - Second level bullet 2
- First level bullet 3

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## 7.0 Appendix A: PowerPoint Style Guide

(Tahoma, 16pt, Bold, left-justified. One appendix per page, numbered alphabetically)

# Presentation Style Guide

(60pt Tahoma Headings)

List of Authors (28pt Tahoma Body, Alphabetical)



## Agenda Slide (28 point Tahoma Headings)

- Topic 1
- Topic 2
- Topic 3
- (Tahoma body. 24pt desired, use PowerPoint automatic text size if needed)

(OPTIONAL FOOTER FOR DISCLAIMERS, 12PT TAHOMA BODY ALL CAPS)



(Submission Date or Last Updated Date, Format with MM/DD/YYYY. 12pt Tahoma (Body))

(Page Number on right. 12pt Tahoma (Body), bold) 9/7/2020 1

## Body Slides (Bullets) (28 point Tahoma Headings)

- Edit Master text styles
  - Second level
    - Third level [1] (In-text citations according to IEEE style)
      - Fourth level
      - Fifth level

(OPTIONAL FOOTER FOR DISCLAIMERS, 12PT TAHOMA BODY  
ALL CAPS)



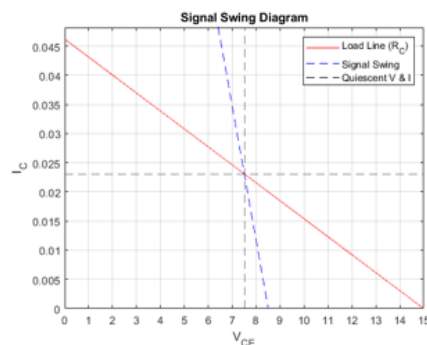
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9/7/2020

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## Body Slides (Figures)



**Figure 3.1: Voltage Swing Representation**  
(bold, Tahoma, 20pt, center aligned)

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1

## Body Slides (Tables)

**Table 3.1: Controls and Sensor Component Mass**

(bold, Tahoma, 20pt, center aligned)

Component (Calibri, 11 pt., Bold, white text, Blue Fill #667E98)	Mass (g)
BeagleBone Black (Calibri, 11 pt., black, First Column Bold)	39.56
Adafruit IMU	3.25
Sharp Long Range Proximity Sensor	10.54
Sharp Short Range Proximity Sensor	6.80
Wires and Solder	10.0
Total	70.15

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# Questions?

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## References Slide

All references formatted according IEE Formatting guidelines

[1] Cicero, De finibus bonorum et malorum, Rome, 1st Century BC.

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## Acknowledgement Slides

- John Smith: Use of name for acknowledgement slide. (Tahoma body. 24pt desired, use PowerPoint automatic text size if needed)

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ALL CAPS)



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## 8.0 Acknowledgements

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## 9.0 Attributions

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Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Proin pharetra nonummy pede. Mauris et orci.

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Suspendisse dui purus, scelerisque at, vulputate vitae, pretium mattis, nunc. Mauris eget neque at sem venenatis eleifend. Ut nonummy.

## **10.0 References**

All references formatted according IEE Formatting guidelines

- [1] Cicero, De finibus bonorum et malorum, Rome, 1st Century BC.

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## TEAM STYLE GUIDE ASSIGNMENT

As a team, create a style guide similar to the model I've provided for you here. In addition to defining all of the pieces illustrated (Title Page, Front Matter, Page Numbers, Hierarchy of Headings, Spacing, 3 "I"s, Tables, Figures, Alignment, Typography, Back Matter), you must identify and define how you will format the following:

- Appendix (Appendices)
- Equations
- Margins
- Bulleted lists
- Alignment of content in tables
- Color schemes of tables and figures
- Typography in tables and figures
- Format of callouts in figures
- Citation style (e.g. APA, AIAA, IEEE)
  - In-text citations
  - References page
- PowerPoint Presentations (Create a Team Template that your team will adhere to for all future presentations)

Your Team Style Guide should be in the format of a faux document (use Lorem Ipsum text – =lorem() – as filler to illustrate paragraph content). Your definition of formatting choices must be in a dark red font, just as I've modeled for you in this document.

The PowerPoint template should be an appendix to this document and should show formatting for commonly used slides—title slide, agenda, body slides, transition slides (if desired) questions slide, references slide, acknowledgement slides, and so forth. Additionally, similar to your document style guide, the PowerPoint template should show how tables and figures will be formatted (typography, colors, shading). Also, define the position of team logo, bullets, slide numbers, and footer information. In illustrating the format for slides, print two slides per page in the appendix that corresponds to this requirement.