Project Idea Submission – *Student*

**Team Contacts**

* 1st person listed serves as the point of contact with Professor Jensen
* Initial team size may be from 4 to 5 members (all members must agree to have their name included)

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| NAME | PUID | Phone | EMAIL |
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**Note: Course policy prohibits projects involving weapons, or significant safety risk.**

# Project Name

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# Project Description

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| --- |
| (100 words maximum) |

# What is the problem you are trying to Solve?

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| --- |
| (150 words maximum) |

# Why is it a problem worth solving?

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| --- |
| (150 words maximum) |

# Market Analysis: WHO ARE THE TARGET CUSTOMERS AND HOW WILL THEY BENEFIT FROM YOUR PROPOSED PRODUCT?

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| (200 words maximum) |

# Benchmark research: WHAT SOLUTIONS EXIST TODAY AND HOW IS YOUR PROPOSED PRODUCT SOLVING THE PROBLEM UNIQUELY AND BETTER? DESCRIBE RELEVANT PATENTS AND COMMERCIAL PRODUCTS INCLUDING THEIR FUNCTIONAL PERFORMANCE AND COST.

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| (300 words maximum) |

# Design: Description of your proposed solution(S). DESCRIBE THE FUNCTIONAL REQUIREMENTS FOR THE FINAL PRODUCT. INCLUDE PRELIMINARY SKETCHES OF THE INITIAL CONCEPT(S), AND EXPLAIN HOW THEY ARE INNOVATIVE.

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| (500 words maximum) |

# Synthesis: What engineering principles will be used on the project and how?

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| (200 words maximum) |

# Engineering: Explain the physics/engineering associated with the problem. (Include Free-body diagrams or other sketches as necessary)

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| (500 words maximum) |

# Manufacturing: Explain how the prototype will be BuiLT & Tested, what standards your design and prototype adhere, and your expected level of prototype fitness & finish.

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| (300 words maximum) |

# Impact: How will the solution create business and/or society value?

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| (150 words maximum) |

Save your completed project submission using this naming convention: “STUDENT\_*project name* - *point of contact full name*.docx” where the *italic strings* get replaced with appropriate actual text strings.

Complete this submission template and use the QR code or link to submit your project proposal.

**\*Note:** Assigning a team of six members does not guarantee approval. The ME463 leadership team will thoroughly review the project's scope and complexity to assess whether a six-person team is justified.

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Description automatically generated

<https://purdue.ca1.qualtrics.com/jfe/form/SV_8jBMAWHm9StCgcu>