

Williams Honors College  
The University of Akron  
Akron, OH 44325-1803

## Honors Research Project Proposal

Congratulations! The inception of your Honors Research Project represents the beginning of your last phase as an undergraduate student at The University of Akron. As a member of the Williams Honors College you have maintained an outstanding academic record that has hopefully prepared you for this independent project. Your Honors Research Project Proposal is an important component of your overall project. In particular it provides a guideline and timetable for the work to be accomplished and ensures that the expectations of the project sponsor and readers are clearly defined. When preparing your written description please include the following sections:

1. **Goals and Objectives:** In the initial section of the proposal, describe the specific research questions to be addressed, as well as the goals and objectives of the project. What are the motivations for the work and the benefits if successful? This section should be written at a level that is readily accessible for non-experts in the field of study.
2. **Methodology:** Then, discuss the work to be undertaken including the methodology used. How will the goals and objectives be met and the questions described above be answered? Does this work build significantly on existing research and efforts? This section can be more in-depth than the previous section, but should still be understandable by someone in the field of study. **Please include a tentative timeline for the efforts with projected intermediate project deadlines.** While the timeline is subject to change as the research progresses, it provides an initial guide for the work to be undertaken and is an important part of the proposal. Proposals without a timeline will not be approved.
3. **Outcomes:** Describe the final output of this project, including the written report for the Honors College. If the project is to be performed or presented publicly, what will be the expected event and audience?
4. **Academic Impact:** Finally, please describe how you see your Honors Research Project building on and adding to your undergraduate experience and knowledge. How does this project serve as an enveloping experience for the undergraduate major? What is expected to be applied from the curriculum and learned from the outcomes?

Any references cited can be included in a final section when appropriate. The length of your written description is expected to be 3–5 pages. For projects involving more than one Honors student, please submit a single project description, but with a separate and completed cover sheet for each student. In addition, please include a statement regarding the expected responsibilities for each Honors student.

**Provide copies of the completed proposal (cover sheet and project description) to your project sponsor, your readers, and your Honors Advisor for their approval. Once approved your proposal should be [submitted online through IdeaExchange](#).** You will be notified by email once your project proposal has been reviewed by the Williams Honors College.

## Honors Research Project Proposal

Please Print

<b>Name:</b> Sean Turner	<b>Student ID:</b> 4062821
<b>Email (@zips.uakron.edu):</b> <a href="mailto:sat83@uakron.edu">sat83@uakron.edu</a>	
<b>Title of Proposed Project:</b> SAE Formula Team Carbon Fiber Seat	
<b>Major:</b> Mechanical Engineerin	<b>Graduation (semester/year):</b> Spring 2021

Please include a brief (maximum 200 words) summary of your proposed project

This project is for the Formula SAE Zips Racing team here at the University of Akron. The team includes Jacob Jaksic, Sean Turner, Dovydas Sodys, Mike White, and Sevin Johnson. We are tasked with reducing the weight of their current seat, while remaining comfortable to the driver. Our plan was to do this with a lightweight material, specifically carbon fiber. Many different steps were required when outlining this project: finalizing a design with verification from our Zips racing advisor, completing FEA analysis on finished design, acquiring material to be molded into seat, and finding a company to fabricate out of carbon fiber. Communication between team members is our priority for this project, as well as setting schedules and meeting deadlines within our timeline. With the help of our advisors and team lead within the racing team, Henry Wathen, we are confident we can provide a product that the Formula SAE team will be proud of. The process we follow will be able to be replicated in other student design teams for future weight reduction.

**Approval:**

<b>Honors Course No.:</b> 4600: 497	<b>No. of Project Credits:</b> 4.00
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**Project Sponsor**

Signature/Date: 5/12/2021



Print name: Daniel Carl Deckler

Email: dcd@uakron.edu

**Reader**

Signature/Date: 5/11/2021



Print name: Karen Leone

Email: jklmleone@gmail.com

**Reader**

Signature/Date: 5/11/2021




Print name: Scott Zabak

Email: scottzabak@gmail.com

**Honors Faculty Advisor**

Signature/Date: 5/11/2021



Print name: Gopal R. Nadkarni

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Your approved cover sheet and proposal must be [submitted to the Williams Honors College through IdeaExchange](#)