

# HS Capstones & Internships

The STEM Capstone or Internship Project is an experience in which senior students demonstrate mastery of STEM competencies and interdisciplinary content through an interdisciplinary project or internship. This culminating project reflects individual or group commitment to a shared purpose and outcome. Students are challenged by mentors and teachers serving as facilitators of learning to apply the Engineering Design Process in real world contexts. Students focus on solving real world problems utilizing prior knowledge and skills to advance their current state while generating enthusiasm for lifelong learning. Each student is expected to develop and publish artifacts and reflections that demonstrate educational and personal growth.

## Capstone project goals:

- Develop a product/artifact that demonstrates educational and personal growth
- Explore an area of sustained interest that incorporates the Engineering Design Process, STEM competencies and multiple disciplines
- Encourage collaborative learning and innovative interaction between students and teachers
- Create ties between the community and WFHS by seeking technical expertise and developing community connected projects

## What is a high school internship?

High school internships give students an opportunity to apply their learning in a meaningful and relevant job experience. Further internships are a way to develop and refine workforce skills, explore their passion, and increase the rigor and relevance of their high school experience.

## Internship goals:

- Hands on application of STEM competencies
- Participate and reflect on a rigorous and relevant experience that allows the discovery of passion and workforce strengths
- Create ties between the community and WFHS by seeking technical expertise and developing community connected internships
- Employ professional level reflective practice and continuous improvement

## NOTE: STUDENTS ELECT TO PARTICIPATE IN A CAPSTONE OR INTERNSHIP

### Criteria

-Students must prepare an oral presentation for an exit interview/final presentation to a panel regarding his/her STEM Internship or STEM Capstone Project and his/her STEM Portfolio.

1. Present existing STEM portfolio and plan (fall of senior year). Feedback on plan will be provided by the panel.
2. Upon completion of the capstone/internship project at the end of the semester, exit interview and final presentation will take place in front of selected panel.
3. A public forum to share internship experiences and capstone projects will take place for students to share learning with peers and community members.



# Capstone/Internship Phases

## Timeline

January 2014 | 2015 STEM Graduates enroll in Capstone/Internship course during January Registration

**Capstone/Internship course will be a ½ semester (75 hour) class offered in the fall of the senior year. Program growth would provide the possibility to offer in both summer and fall of senior year.**

Spring/Summer 2014 | Select advisor and begin creating course curriculum and assessments.

Fall 2014 | First offering of Capstone/Internship Course

## Course Logistics

Course | Offered 7th period.

**The blended field study approach will allow students on certain days a two hour of chunked time to conduct extended capstone studies or internship field experience. Students will be committed to 75 hours for the course. Swapping days is permissible based on student's field experience schedule.**

Fall Quarter One | Student will research and plan for capstone/internship.

Fall Quarter Two | Capstone creation or internship

January of Senior Year | Redesign and present final product/project. Publish your final product/project in your online portfolio

## Instructor Requirements

**Two periods (7<sup>th</sup> & 8<sup>th</sup>) to create course expectations, community partners, and ongoing field visitations and evaluations of student performance.**

*Note: These are recommended timelines, if arrangements are made the entire experience could be completed in a shorter timeframe. However, credit may not be awarded until the fall semester of the senior year.*

