

## CGT Capstone Project

Company Name: Purdue Polytechnic  
Contact Person: Travis Fuerst / T.R. O'Neal  
Email address: [fuerstt@purdue.edu](mailto:fuerstt@purdue.edu) / troneal  
Phone number:  
Semester and Year: 2019

Each project must have a sponsor and an advisor. The **sponsor** is the person that proposes the project and has the overall project vision and idea. The **advisor** is the person that provides operational support and guidance to the project, as well as potentially technical expertise. Each role could be a CGT faculty member or an industry representative; however, each project must have CGT faculty and industry (external) participation and engagement.

Project Title: **Purdue Polytechnic Institute Curriculum Visualizing/Mapping through Data Visualization**

Anticipated problem to solve (in general): The Polytechnic Institute has been challenged to develop and align courses across a semester or academic year.

Project Description (500 words or so):

This is a legacy project to take a previous CGT 411 project that resulted in a proof of concept and develop it into a fully deployable product for use by Purdue Polytechnic Institute (PPI) students and advisors for the 2020 academic school year. This project would result in completed product to map all PPI curriculum using data visualization techniques working with all departments in the PPI. Research in to the databases that hold the course curriculum data and the meta data that binds the courses together showing pre-requisite and co-requisite courses will be needed.

Anticipated obstacles (if any):

- Server to host application on
- Gaining access to Registrar information to populate visualization

Anticipated outcomes:

- Curriculum mapping showing ideal course completing sequence based on interviews with faculty, pre- and co-requisite data.
- Functional user interface with several different visualizations show data from different perspectives.
- Scalable solution that can be expanded to all Polytechnic majors and Purdue as a whole.

Resources provided by the company (i.e., financial support, software licenses, hardware, etc.):

- website access
- staff support

Resources expected from student team (i.e., time, software access/availability, transportation, etc.):

- time

- knowledge