

# Class Exercise - VT Innovation Campus

## March 19-26

**Objective:** This exercise is designed to enable your team to start exploring how the VT Innovation Campus could be built in Alexandria. In the text below, you will find a series of campus specifications that outline the possible size (in square feet) of each type of space that could be built/developed. Your challenge is to explore a range of possible locations for these spaces that maximize the sustainability of the campus, while also giving Virginia Tech a presence in the area.

**Deliverable:** In the last 30 minutes of class on March 26, your team will be asked to brief another team on what you found (15 minutes) after which they will brief you (15 minutes) on what they found. This exercise will not be graded. It is designed to help your team start thinking about how you might develop a final design for VT's Innovation Campus that you will present in your final assignment.

### Getting Started:

1. In UrbanFootprint, select the project area called "VT innovation campus."
2. Use Google Maps to locate Route 1 and find this in UrbanFootprint. The VT Innovation Campus must have at least 2-acres of property that front on Route 1.
  - a. Find any parcel(s) located on or near Route 1 that covers at least 2-acres. This parcel(s) cannot be a residential plot.
3. Create a new VT Campus Scenario for each team member - e.g., "VT Campus - Ralph," "VT Campus - Ibrahim," etc. Each team member will be responsible for developing their own VT Innovation Campus scenario. We recommend that you discuss different campus development strategies so your team can explore a wide range of approaches.
4. Campus Specifications (for 1,000,000 square foot of space):
  - a. **300,000 square feet** (30% of total) of **academic space and research and development facilities.**
  - b. **250,000 square feet** (25% of total) of partner space dedicated to **startups and corporate facilities.**
  - c. **350,000 square feet** (35% of total) of **housing** space for students and faculty.
  - d. **100,000 square feet** (10% of total) of **retail and support spaces.**
5. Your first step will be to translate the above specifications into building types. We recommend that you explore the various building types that are available to develop an understanding of which ones could be used or which ones could provide you with information to develop your own building type. Please read [these instructions](#) (and/or watch this [webinar](#)) on how to develop your own building type, which could combine multiple types of use (e.g., parks, offices, and apartments) in one location.

6. Your selection of the plots should be as sustainable as possible.
7. Once ALL of your team has developed their own scenario, your team needs to select a number of analyses modules to assess the impacts of each design.

**The deliverables:**

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Each team do the following:

1. Explore the project area and understand it.
2. Develop a strategy for each of your different VT Campus Scenarios.
3. Start thinking about which parcel(s) are the best fit of the specifications listed above.
4. Create any needed build types.
5. Start developing your individual scenarios.

Before class on March 26

Each member will:

1. Develop their VT Campus scenario and print the specifications. DO NOT run any analysis modules at this point.

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Your team will:

1. Make sure that all of your scenarios are complete.
2. Select and run at least three analysis modules.
3. Discuss your findings and be ready to share them with another team.

**Additional Guidance:**

1. Don't create a new project area, only work within the VT Innovation Campus project.
2. For this exercise you can assume that there are no height restrictions on buildings.
3. You can assume that ANY non-residential space can be developed.