UNC Charlotte – Lee College of Engineering Senior Design Program
<u>Company Information</u>

Company Name	*ETCM*	Date Submitted	*04/12/2019*
Project Title	*AFRL University Design Challenge* **UNCC_AFRL2**	Planned Starting Semester	*Fall 2019*

<u>Funding:</u>

What is the source of funds that will be used to cover all of the direct costs of this project?
<u>Self, Grant,</u> Department??___Grant_____

Is this source of funds already secured?   Yes **_____**   No ___x____

<u>Technical Contact(s)*</u>

	Technical Contact 1	**Technical Contact 2**	**Technical Contact 3**
Name	Aidan Browne	Capt. John Hukka	
Phone Number	704-687-5033	704-687-8100	
Email Address	aidanbrowne@uncc.edu	jhukka@uncc.edu	

*We would like to have more than one technical contact, so there is a back-up in case of travel, sickness, job re-assignment, etc.

<u>Personnel</u>

Typical teams will have 4-6 students, with engineering disciplines assigned based on the anticipated Scope of the Project.

Please provide your estimate of staffing in the below table. The Senior Design Committee will adjust as appropriate based on scope and discipline skills:

Discipline	Number	Discipline	Number
Mechanical	2	Electrical	2
Computer	1	Systems	1
Other ( )	0		

<u>Project Overview and Requirements:</u>

The AFRL University Design Challenge Mission: Harnessing the creative energy of competitors from every discipline, the AFRL Challenge strives to make a reality that which is seen as mere science fiction. The United States Air Force Research Laboratory (AFRL) Challenge seeks breakthroughs in military operations and capabilities through goal-oriented competitions that attract, inspire and challenge the most brilliant, innovative and practical minds on earth. The best teams of scientists, designers, engineers, students, hobbyists and entrepreneurs will leverage their knowledge, creativity and business networks to serve the nation and introduce the next generation of technology solutions.

The specifics of the 2020 Challenge will be released in August 2019.

Expected Deliverables/Results:

Deliverables include:
- *AFRL Concept review, PDR and CDR*
- *On-site presentation and demonstration*
- *Final report*

List here any specific skills, requirements, specific courses, knowledge needed or suggested (If none please state none):
Specifics unknown, but based on past two years:
- CAD
- Machining
- Robotics
- Control systems
- Programming