National Academy of Engineering
Grand Challenge Scholars Program-Clemson University
Constitution

Article I   **The Name of the Organization**

National Academy of Engineering Grand Challenge Scholars Program—Clemson University

From here, abbreviated as GCS-CU (Grand Challenge Scholars-Clemson University).

Article II   **Affiliation with Other Groups**

Open to partnerships with other student groups, Creative Inquiry (CI) courses, research groups, and other contacts inside and outside the Clemson Community, but no formal affiliation with other groups is necessary.

Article III   **Purpose, Aims, Functions of the Organization**

Engineers and applied scientists have an obligation to continually advance the quality of human life by interacting with the world and the systems within it. Threats to our planet require the reversal of environmental degradation and the development of new energy sources. Threats to our personal and societal health require more effective and readily available treatments. Threats from manmade and natural disasters require new methods of protection and prevention. Defusing these threats will require engineers and applied scientists trained to solve technical problems, but it will also require those who can shape public policy, introduce new innovations to the marketplace, and draw from and contribute to social science and the humanities. The Grand Challenge Scholar Program at Clemson University is designed to help students equip themselves to advance our world.

Grand Challenge Scholars will work with other students, faculty mentors, and other University and non-University members to develop and execute a personal plan tailored to solving one of the Grand Challenge for Engineering in the 21_{st} century. Scholars will satisfy learning outcomes in each of the following five competency areas:

1. Talent Competency: mentored research/creative experience on a Grand Challenge-like topic

2. <u>Multidisciplinary Competency</u>: understanding multidisciplinary of engineering systems solutions developed through personal engagement
3. <u>Viable Business/Entrepreneurship Competency</u>: understanding, preferably developed though experience, of the necessity of a viable business model for solution implementation
4. <u>Multicultural Competency</u>: understanding different cultures, preferably through multicultural experiences, to ensure cultural acceptance of proposed engineering solutions
5. <u>Social Consciousness Competency</u>: understanding that the engineering solutions should primarily serve people and society reflecting social consciousness

The purpose of this student organization is to provide the Clemson Grand Challenge Scholars with the tools and support necessary to meet these goals and complete the requirements put forth by the National Academy of Engineering. The organization will help members pay for Scholarly efforts and plan events for the benefit of Scholars, future Scholars, and the entire Clemson community.

Article IV   **Membership Requirements and Limitations**

Section 1: Applicant Requirements

For incoming freshmen:
1) Enrolled in College of Engineering, Computing and Applied Sciences (CECAS) program
2) Have at least **24** credits remaining OR a full year prior to graduation

For all others interested students:
1) Enrolled in College of Engineering, Computing and Applied Sciences (CECAS) program
2) <u>Completed at least 12 institutional credits towards their degree OR, for students transferring credits, completed their first semester</u>
3) Have at least **24** credits remaining OR a full year prior to graduation
4) <u>Have a minimum GPA of 3.0 during their Clemson tenure</u>

Section 2: Application Process

The GCS-CU application will be released to all CECAS students who meet the applicant requirements each Fall and Spring semester.

- Announcement of applications will be made two weeks into the semester
- Current Scholars will hold at least one informational session for prospective Scholars between announcement of application and release date of formal application
- All CECAS students that meet application requirements will be invited to apply
- Formal applications will be released one month into the semester
- Applications will be due two weeks after release date, submitted to the Faculty Advisor via the digital application link

For example, semester start date August 22nd, announcement made September 5th, information sessions held between September 6th and 18th, application released September 19th, and application due October 3rd.

The GCS-CU application will consist of short responses and a plan of study roadmap.
- The short response will have a minimum length of 250 words.
  - *Example prompts could include: "why are you interested in being a Grand Challenge Scholar?", "what would being a Grand Challenge Scholar mean to you?", and "what do you hope to achieve as a Grand Challenge Scholar?".*
- The plan of study roadmap will propose courses and experiences to fulfill GCS competency areas, as described in template document.

Section 3: Application Selection

The Faculty Advisor will assemble a committee of GCS-CU Officers, senior Scholars, and other Faculty members (see Article VI, Sections 1 and 2) who will work together to review applicant materials to select students according to interest evidenced through short response and roadmap planning (though amenable to changes as a Scholar conducts his/her study). If available, the Associate Dean of the College of Engineering, Computing, and Applied Sciences will be asked to review the applications of the finalists prior to notification of acceptance. Cohort size will be based on current resources and graduation class size.

Section 4: Current Member Requirements

In order to stay an active member of GCS-CU, each Scholar must:

- Attend <u>all</u> organizational meetings of the semester, unless special permission is given by the Faculty Advisor **OR** President *via email* for absence
    - Scholars will be allotted to two free absences if coordinated with the President or Vice President of Programming *via email* within a week, before or after, the meeting
- Attend <u>one</u> GCS-CU guest speaker event each semester **OR** attend <u>two</u> guest speaker events outside of GCS-CU, as approved by the Faculty Advisor OR President *via email*
- Attend <u>one</u> GCS-CU community service event **OR** collect <u>5 hours</u> of another community service event, as approved by the Faculty Advisor OR President *via email*
- Complete logging of GCS-related activities via electronic submission every semester
- Check-in with Faculty Advisor or an Executive Board member every semester after logging GCS-related activities via electronic submission
- Attend Senior Showcase, unless special permission is given by the Faculty Advisor OR President *via email* for an excused absence
- Maintain a minimum GPA of 3.0 during their Clemson tenure

These terms are negotiable based on events beyond the Scholar's control. Scholars should work with Faculty Advisor for unforeseen circumstances.

Active On-Campus vs Active Off-Campus Student Status
If there are circumstances which prevent a student from meeting the requirements of an on-campus active member, then the student may apply to become off-campus active. To become off-campus active, the student must notify Faculty Advisor via email that s/he will be off campus for a designated duration of time to attend study abroad, co-op, or related activities, as deemed appropriate by the Faculty Advisor. The student can become on-campus active again when the circumstances requiring off-campus activity have been completed. The student must notify the Faculty Advisor of his/her return to campus. Each semester, a Membership Renewal and Election form will be released for Scholars to maintain their GCS-CU Status or terminate their membership. This form will stay open for 14 days.

Inactive Student Status
If a student fails to meet these requirements, a warning email will be sent to them by the Faculty Advisor and GCS-CU President. If steps are not taken by the Scholar within one month, the student will be notified that they are no longer an active member. Inactive members may not apply for leadership

4

positions, receive funding through GCS for their activities, or other similar perks. Inactive members can become active again when they complete all membership requirements in a given semester. Once a Scholar is active again s/he will be eligible for the same benefits as others active. If no action is taken by a Scholar by the end of the semester, they will terminate their GCS-CU membership. If the Scholar wishes to become active again after their membership has been terminated, they must reapply as an applicant.

Article V   Officers (Titles, Term of Office, Election Process)

Section 1: Officer Positions- Executive Board

- President- Serve as the representative of the Clemson GCS program, have overall responsibility for the operations, collaborates with Faculty Advisor to maintain and expand engagement opportunities for Scholars, checks in with the other Officers on regular basis, report directly to CECAS advisors and administrators, call and preside at all general member and executive board meetings
- VP of Programming- Plan and host events (excluding meetings) for scholars and alum, record minutes of meetings, maintain a bi-weekly newsletter, and plan Senior Showcase
- VP of Finance and Administration- Be responsible for the general supervision of the finances of the Clemson GCS program, maintain up-to-date financial records, provide a financial report periodically
- VP of Recruitment- Serve as the main chairperson of the recruitment team, schedule recruiting events with CECAS, coordinate new Scholar's informational meeting, and responsible for the oversight and administration of potential scholars' application process
- VP of Outreach- Maintain relations and correspondence with the campus and community, coordinate with Webmaster and CECAS branding team about social media and website content, and oversee the GCS LinkedIn community
- Webmaster- Update website branding, coordinate with VP of Outreach and CECAS branding team about social media and website content, and assist scholars on technical issues

Section 2: Officer Requirements

Scholars must be nominated to run for election. Nomination and self-nomination is allowed.

Section 3: Officer Term Length

The maximum term length for an Officer is one year, however he or she can decide to abdicate during any semester but must make the decision before the final meeting of the semester to allow for re-election. Students who leave to study abroad, co-op, or graduate must step down if s/he is unable to be present at meetings. Students who co-op locally and are able to attend meetings are eligible. Impeachment of an Officer can occur if there is unanimous agreement among all other Officers and the Faculty Advisor.

Section 4: Election Process

Elections will be held, if necessary, every semester during the first month of the academic semester if an Officer position becomes vacant. Scholars may run for a position through the Membership Renewal and Election form sent out at the beginning of every semester. If a member is running opposed for an Officer position, each candidate will create and submit a PowerPoint slide to be shared with all Scholars. Scholars will receive all PowerPoint slides to review and participate in an anonymous virtual voting form submitted to the Faculty Advisor. This form will be open a week after the Faculty Advisor releases it. Newly elected Officers and Officers transitioning out of their role are expected to work together until the semester is officially over to gives the new Officer time to understand the position better.

If no returning Scholar runs for an Officer position, the role will be offered to new members of the year's cohort.

If no Scholar, new and returning, runs for an Officer position, newly elected Officers will share the role and responsibilities accordingly for the semester.

Section 5: Officer Responsibility

Officers are expected to attend all Officer meetings, as deemed necessary by the President and Faculty Advisor. Meetings will be scheduled at minimum one week in advance, but preferably two or more weeks notice will be given. All Officers must be present at Officer meetings, either in-person or virtually (under certain circumstances), or the Officer meeting must be rescheduled.

In addition, Officers will ensure that:
- Each Scholar is given the space and opportunity to present ideas for the advancement of the organization and its members. In doing so, Officers will also ensure that the organization's members are willing

6

and able to collaborate and listen to each other's ideas as objectively as possible.
- The organization maintains a steady pace in accomplishing its goals and activities.
- The requirements and conditions for being a Scholar are followed by all members. This includes communicating with the Faculty Advisor when a Scholar may be in violation of active membership requirements.
- All members are informed of available opportunities. Examples include internship, research, service, and leadership opportunities that might benefit the members of the program.
- Each organizational meeting is run smoothly, and its purposes are followed.

Additionally, all decisions made by the Officers must be decided by at least a majority vote. The President has veto power, although his/her veto can be overruled by the Faculty Advisor or by a class referendum (Article IX). In most cases, GCS-CU Officers will solicit votes from all Scholars to help inform their decisions.

Article VI   Advisor (Term of Service and Selection Process)

Section 1: Advisor Term of Service

There will be one GCS-CU Faculty Advisor charged with coordinating the organization alongside the Officers. An additional Advisory Committee may be assembled of Faculty, Staff, and Graduate Students to serve as mentors for Scholars. All Advisors will serve until they choose to abdicate their position or leave Clemson University.

Section 2: Advisor Selection

The Faculty Advisor must be approved by unanimous Officer vote OR appointed by previous Faculty Advisor. All Scholars are encouraged to search for and recommend Advisory Committee Members. Advisory Committee Members will not be voted upon unless Officers deem necessary. If deemed necessary, a majority vote will be required to select an Advisory Committee Members.

Section 3: Replacement of Faculty Advisor

In circumstances where the Faculty Advisor does not abdicate, but Scholars find performance unsatisfactory, Officers must meet with the Faculty Advisor

to review performance. The Faculty Advisor has until the end of the next semester to fulfill obligations. If the Faculty Advisor fails to fulfill these obligations during the permitted time, Scholars may impeach the Faculty Advisor if over 75% of active Scholars sign a petition requesting the Faculty Advisor to step down. The petition signatures must all be gathered in one academic semester and be presented to the President prior to end of the semester. See Article VI, Section 2 for Faculty Advisor replacement process.

Article VII   Meetings (Frequency, Types, and Leadership)

Section 1: Frequency and Type

There are five types of events for GCS-CU:

1) General Member Organizational Meeting:
   a) These meetings will include all Executive Officers and Scholars
   b) These meetings will allow Scholars to be updated on new events, plans, and opportunities as seen fit by the Executive Board and Faculty Advisor
   c) The first meeting of the semester must be used to plan and review semester activities, and elect new officers, if applicable
   d) The New Member meeting must be used to acclimate new Scholars and explain in depth of the logistics of the organization and Constitution **Returning members will not be required to attend the New Member Meeting.**
   e) The last meeting of the semester must be used to prepare and plan for following semester
2) Executive Board Organizational Meeting:
   a) These meetings will solely include all Executive Officers and Faculty Advisor
   b) These meetings will allow the Executive Officers and Faculty Advisor opportunities to plan and prepare events, engagement opportunities, or anything else they deem fit for the Scholars and well-being of GCS-CU.

3) Guest Speaker Event:
   As planned by the Officers, the purpose of these events could include opportunities to hear guest speakers from academia or industry. The number of these events will vary by semester. Guest speaker events will be scheduled as far in advance as possible to ensure that the majority of Scholars are able to attend.

8

4) Community Service Event:
Volunteer opportunities in the Clemson community as arranged by Officers. The purpose of this meeting is to tangibly give back to the University by serving an unmet need. This could include anything from building a ReWiGo ramp to a Habitat for Humanity build to tutoring at a local High School to speaking to a Clemson General Engineering class.

5) Engagement Event:
As planned by the Vice President of Programming or another Scholar responsible, these events will allow Scholars to improve group dynamics and strengthen organization relations. This could include anything from a scavenger hunt, painting lesson, board game night or a cookout.

Scholars are highly encouraged to participate in all organizational meetings, guest speaker events, and community service events. Special permission can be granted, in advance, to Scholars with schedule conflicts. See Article IV, Section 4 for requirements.

Section 2: Official Meeting Definition

In order to qualify as an official meeting or event, the President must provide the date and time to Scholars with a minimum of one-week notice, but preferably two or more weeks' notice. In addition, the meeting or event must be within walking distance of Clemson University campus and fit into one of the categories listed in Article VII, Section 1. For meetings or events not within walking distance, the Officers and Faculty Advisor will check with all Scholars regarding transportation capabilities and will coordinate transportation arrangements as appropriate. If this is deemed not possible, meetings will be conducted via any teleconferencing platform available to all Scholars.

Article VIII   Quorum (Members Required to Transact Business)

Section 1: Quorum for Official Meeting

In order to qualify as an official meeting or event, at least 50% of current Scholars must be in attendance. Mandatory meetings require all members to attend. See Article IV, Section 4 for procedures for missing mandatory meetings.

Section 2: Number of Members Required to Elect Officers

For a Scholar to be elected as an Officer, they must receive a majority of votes.

Article IX   Referendum and Recall (Procedures and Handling)

Section 1: Officer Impeachment Referendum

Scholars may impeach an Officer if over 75% of active Scholars sign a petition requesting the Officer to step down. The petition signatures must all be gathered in one academic semester and be presented to the Faculty Advisor prior to elections that same semester.

Section 2: General Referendum

Members may propose and pass a new law or requirement by speaking to an Officer. The Officer can then propose the idea to the rest of the leadership (Officers and Faculty Advisor). If this is not a viable route, members may create a petition. If 75% of members sign the petition, then the idea will be passed. However, this process must be completed in one academic semester. The petition resets the following semester.

Article X   Amendments to this Constitution

Section 1: Officer Amendment Proposal

Any Officer can propose an amendment to this document at any time. The regular Officer decision-making process is applied here where an Officer vote of majority is required to pass the amendment.

Section 2: General Member Amendment Proposal

Follow procedure for general referendum in Article IX, Section 2.

Article XI   Ratification

Section 1: Constitution Ratification

This constitution must be ratified by a majority of the current members in addition to the Faculty Advisor.

Section 2: New Constitution

If an entirely new constitution is required, the Officers and Faculty advisor must draft a proposal and then present it to all Scholars. A majority of the

organization is needed to ratify this constitution in addition to a unanimous vote by the Officers. All members must be given the opportunity to read and/or amend the new constitution before its ratification.