



QUALITY
OF LIFE+™

Program Overview

October 2022



QL+ Mission

To challenge university STEM students to create innovative technology solutions that improve the quality of life for injured veterans and first responders.

The QL+ Program is Unmatched in its Impact:

Greater independence for injured and ill veterans and first responders to overcome daily challenges and get back to the activities they love.

Real-world impact and experience for science, technology, engineering, and math (STEM) students.

A deeper respect for those who serve and protect America, and a chance to give back to those who gave so much for us.



CFC #92314

The QL+ Challenger

For American patriots with life-altering injuries and medical conditions, their struggle doesn't end with their service, many live with disabilities that drastically alter their way of life. For some, the active lifestyle they once enjoyed is now out of reach. For others, even simple tasks become a daily challenge. These men and women sacrificed much for their country; we want to give back to them.

These men and women are the QL+ Challengers

QL+ works to give these heroes the support they deserve. We connect injured service personnel with students who develop cutting-edge technology to help them achieve a higher quality of life.

Since 2009, QL+ has expanded to universities across the country. Students build solutions that impact real lives, and injured or ill heroes get the support they need to overcome their lifestyle challenges. We are not market-driven; we are people-driven. We want to see lives changed. Come join us.

2022-23 Academic Year

21 Schools

50 Projects

22 Challengers

250 Students



QL+ Partner Universities



1 Projects
1 Challengers
4 Students



3 Projects
3 Challengers
10 Students



7 Projects
6 Challengers
32 Students



2 Projects
2 Challengers
12 Students



4 Projects
4 Challengers
10 Students



2 Projects
2 Challengers
8 Students



1 Projects
1 Challengers
3 Students



1 Projects
1 Challengers
3 Students



2 Projects
2 Challengers
4 Students



3 Projects
3 Challengers
10 Students



3 Projects
3 Challengers
12 Students



2 Projects
2 Challengers
6 Students



2 Projects
2 Challengers
12 Students



4 Projects
4 Challengers
18 Students



1 Projects
1 Challengers
4 Students



1 Projects
1 Challengers
4 Students



2 Projects
1 Challenger
16 Students



1 Projects
1 Challengers
6 Students



1 Projects
1 Challengers
5 Students



2 Projects
2 Challengers
7 Students



4 Projects
4 Challengers
28 Students

Student Teams Collaborate with Military and First Responder Heroes



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It was totally refreshing to brainstorm the solution possibilities with a young group of students who had no prior experience working with amputees. They were thinking completely outside of the conventional box, and it brought great results.

QL+ Challenger Taylor Morris

Innovative and Life-changing Solutions

We are proud of the work QL+ teams have done across the nation. Since the creation of QL+ in 2009, our work has benefited 1,100 American Heroes. QL+ has enjoyed extraordinary growth from 2009 to present, expanding from one university to eighteen universities in 10 states and the District of Columbia. In the 2022-23 Academic Year, nearly 300 capstone engineering students are working to find unique solutions to these heroes' needs.

Here is just a sample of our life-transforming projects:

Fog Control Box to prevent "freezing of gait" for Korean War veteran with Parkinson's

Treadmill Centering device for blind veteran

Wheelchair Wheel Change device for Army veteran

Pushup/Plank device for Army veteran whose arm was amputated

Yeager Knife for veterans with diminished hand strength

Wobble Chair for Walter Reed National Military Medical Center

Blind Paddler Slalom Kayak Course for Team River Runner

Voice-activated Bicycle Shifting device for a triple-amputee Marine veteran

Swimmer Lift for swimmers with mobility issue for Travis Mills Foundation

Transfer device to lift a paralyzed Navy veteran from wheelchair to a recumbent bike

Transfer device from Wheelchair to Hockey Sled for a double amputee Marine veteran

Spasticity Brace for Air Force veteran who sustained a stroke



IMPACT: Support for Veterans and First Responders + STEM Graduates

Through our programs, QL+ Challengers can achieve a greater level of independence. The devices our student teams design patriots with injuries or medical conditions to overcome many of their challenges and get back to doing the things they love. This support can change their lives.

Beyond the benefit to American heroes, QL+ helps develop the next generation of engineers and scientists. Students gain valuable experience and skills, preparing them for their careers.

Our program has real impact. Students get opportunities found in few other programs. Challengers, those men and women who gave so much to serve and protect, receive the tools they need to pursue the lives they want to lead.

WHEN SURVEYED,
QL+ Challengers gave the
program an average score of

9.1 out of 10

STUDENT FEEDBACK:

“Seeing the design come to life and having our Challenger actually use it.”

“The fact that the project was a real-world challenge that was going to directly benefit a disabled veteran.”

“Helping our client and seeing the difference that our work made in her life.”

“Being able to give back through a program that helps the brave men and women who sacrifice for our country.”

“The QL+ experience as a whole ... and taking a project from start to finish.”



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Our Mission is to provide innovative solutions to American heroes and their families.

Officers:

Lt. Col. Michael Phelps, USAFR (Ret.), Chair
Former Publisher and CEO, *The Washington Examiner*

Michael Southworth, Treasurer

Mark E. Robbins, Secretary
Executive Director, QL+

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Sentara Orthopedic & Sports Medicine Specialists

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