

Global Education Consultants of Houston





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A better education for the future of a better generation

Global Education Consultants of Houston (GECH) offers a wide array of educational services for program, curriculum, and leadership development. Each of our services may be customized in both a professional and organizational setting, tailored for your career and educational goals, as well as your organizational objectives. We gladly offer training sessions based on the needs in your school or company. Our trainings and have been developed on the basis of our wide knowledge-based network.

Global Education Consultants of Houston offer Quality Assurance and Quality Control services to develop, audit & correct entire quality system, including: Advanced Product Quality Planning (APQP), Production Part Approval Process (PPAP) & Failure Mode & Effects Analysis (FMEA) processes. GECH can Establish & interpret Statistical Process Control (SPC) methods & perform Measurement System Analysis (MSA) to determine the capability of measurement systems. (Can be expanded or tailored to a certain focus group upon request)



The Team





Dr. Abdul Hye

Dr. Hye has over 25 years of Space Industry Experience in Analysis, Design, Lean Manufacturing, and Management of Mechanical Systems. He is highly dedicated and results oriented with proactive problem solving skills. Dr. Hye has a proven ability to motivate technical staff over the years throughout his career.

Dr. Hye had received his Doctorate from the University of Windsor, Ontario, Canada.

Dr. Hyehasworkedon countless projects throughout the Space Program. His areas of expertise include Heat transfer, Fluid flow, Mechanical systems; Manufacturing Process, Safety analysis complying with EPA, OSHA regulations, and Technical Management. He has recently transitioned to the Oil & Gas Sector, but still serves as a consultant for the Space Industry.

Through his vast experience and commitment to Quality, Dr. Hye is a highly qualified, well-seasoned technical consultant with excellent Managerial capabilities. His wide array of expertise can serve to benefit a multitude of avenues.

References available upon Request.



Scott Copeland Director Payload & Flight Integration

Senior manager in with 20+ years experience in project management, systems engineering, strategic analysis, and operations planning in the space industry. Interested in strategic planning and analysis for projects/programs geared toward improving conditions for humanity. Scott's specialties: Strategic planning and analysis, and project management

References Available upon Request



Dr. Pierson currently serves for the Microbiology department at NASA Johnson Space Center. He has earned a Ph.D. in Biochemistry from Oklahoma State University. Dr. Pierson joined NASA in 1980 and subsequently earned professorship appointments at Baylor College of Medicine and University of Texas Medical Branch, Galveston.

References Available upon Request



David Bierwirth Facility & Logistics Operations Manager

This position encompasses the facility operations, logistics (including international shipping for JSC), property, inventory management and configuration/ data management functions within the Cargo Mission Contract.

References Available upon Request



Support International Space Station (ISS) astronaut crew and their families.

Among the many responsibilities that go along with this unique job are flying Care Packages as hardware to the ISS and providing videoconferencing solutions to keep crew and family & friends connected





Jay Cory Industrial Designer, HFES, Aerospace Systems Integrator

Degreed professional with over 25 years of industrial design, systems concept, human factors and spacecraft integration experience. Hands-on experience in research, development, test and evaluation, production, and operation of: light aircraft, helicopters, manned space systems on NASA International Space Station (ISS), industrial/consumer products, and specialized ground vehicles including well drilling rigs, fire apparatus, heavy construction and agricultural equipment.



Hanz has worked at Johnson Space Center on both the International Space Station and Shuttle projects over the last 10 years. His expertise includes Systems Design and Integration within Aerospace & Aeronautical Engineering. Hanz has worked with Payloads over the years to ensure quality control standards are met along with NASA regulations and standards. His most recent project he has successfully completed was the Amine Swing bed Payload, which flew on the last shuttle to ISS. Afterwards. Hanz has maintained the Vacuum System on-board ISS for ongoing and future payload development. Hanz has received his undergraduate degree from the University of Houston in Management Information Systems and his Masters of Science in Systems Engineering from the University of Houston – Clear Lake. He intends to pursue his Ph.D. in Nanotechnology. Over the years, he has worked with many NASA subcontractors including Lockheed Martin. Boeing, MEI technologies, ARES Corporation and Anadarko Industries.

Hanz is a highly organized, dynamic leader with excellent customer interface abilities. He is professionally sound in Technical Analytical capabilities, along with strong interpersonal and communication skills.

References Available upon Request



How it will benefit the youth worldwide



GECH understands how important planning and development early in a child's life determines his or her life trajectory. GECH allows parents and schools to realize that different outcomes are possible when students are given access to high-quality educational opportunities. GECH provides promising results continue to challenge mindsets around the world about what students are capable of achieving. GECH aims to increase the number of student who graduates from high schools and colleges to be prepared in order to compete in the global marketplace.

The following categories illustrate the key services GECH is capable of offering to younger students.

GRADE SCHOOLS

GECH can offer services to students in Grade Schools. The school days are longer as well as additional instructional days offered, more than traditional independent schools depending on location.



STUDENT SUPPORT SYSTEM

Students have access to campus health services, academic interventions, tutorials, crisis counseling, and parent outreach services. Additionally, all GECH personal contacts are given to ensure students and families can connect with them anytime for homework



Students begin taking advanced courses in the eighth grade to allow for more rigorous course work in high school. All GECH students are capable of taking advanced courses, as well as certifications or exams within their locality.





ENRICHMENT OPPORTUNITIES

Annual spring trips give most students their first opportunity to travel outside of their locality and visit colleges around the region.

PERSONALIZED COLLEGE COUNSELING & SUPPORT THROUGH COLLEGE At GECH, the student-to-college counselor ratio optimum for success. High school students attend seminars and learn to research colleges, complete applications, write personal statements, as well as secure scholarships and financial aid. In college, students have access to resources and opportunities through GECH. Each student is assigned a Director of Alumni Support to help them transition to college and persist through graduation. A GECH consultant is a skilled professional who provides counseling to help students and families choose a school, college, or other program that is a good personal match: one that will foster the student>s academic and social growth. GECH can provide a student and family with individual attention, firsthand knowledge of hundreds of educational opportunities, and the time to explore all of the options. With their extensive knowledge of schools and colleges, GECH member consultants can broaden the potential choices, and provide vital help in weighing factors such as cost, location and curriculum. With GECH, your student has the opportunity to explore a wider variety of options and discuss possibilities in a meaningful way. Because they are not tied to any specific school or college, GECH member consultants are not burdened with unrelated duties, and are available at the family's convenience. Consulting specialties include: college admission, day & boarding school, graduate and professional schools, at-risk children and teens, international studies, and learning disabilities. All GEC members subscribe to a strict set of ethical guidelines that govern the actions of GECH in their relationships with students and families, schools and colleges, and with colleagues. These guidelines are called GECH's Principles of Good Practice.

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What to Expect when you work with a GECH member consultant

Independent educational consultants begin with an evaluation, to help your ADVICE: student identify strengths and weaknesses, as well as educational objectives, choices, and plans.

TESTING:

When appropriate, the consultant will recommend testing for purposes of psychological or academic assessment. GECH may either administer these tests themselves, or make a referral to other professionals for testing.





OPTIONS:

The GECH will work with your family to consider the full range of educational possibilities, and provide a broad selection of pertinent information for consideration.



GECH give students and families unbiased advice and recommendations based on their professional judgment of a student's needs and abilities. GECH member consultants are compensated directly by their clients, and do not receive any compensation from educational institutions.

Dedicated Advisors from Application through Graduation.

GECH academic support is anything but traditional. Each and every student has access to dedicated Advisors. From application to enrollment, an Advisor helps ensure students are on the right path, and an Academic Advisor provides support through to graduation.

Educators with Real-World Experience.

Our educators aren't just talk. Because we have no geographic boundaries, we recruit leading educators and practicing business professionals from anywhere in the country. Students are taught by instructors who have hands-on, real-world experience and access to the most current knowledge and skills.



EDUCATION THROUGH INNOVATION.

GECH puts interactive, user-friendly technology to work for you. You will have the opportunity to experience the following:

INTERACTIVE SEMINARS: Students participate in interactive seminar sessions with classmates and educators which help create a significant and enriching exchange.

ONLINE QUIZZES: Provides instant feedback on what you've learned in each lesson One-on-one instructor/student feedback.

Discussion Boards: Each week's unit includes interaction between students and instructors on discussion boards. This provides the opportunity expand learning through discussions and a forum to receive advice from professor or class peers.

WEB FIELD TRIPS: Conduct research using Internet research sites. Students take notes in online learning journals for later discussion.

KNOWLEDGE AT YOUR FINGERTIPS: GECH offers a full complement of library services through our Online Library. The library offers access to e-books, Tutorial guides, articles from professional, scholarly, and trade journals. Services include book delivery and interlibrary loan; reference assistance via toll-free phone, email, and live chat, real-time and multimedia instructional materials, and research collaboration with online library staff.



Benefit

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to universities

GECH with all levels of school education professionals technical input with focused debate and high quality School Improvement Solutions and include delegate difference. courses, in-school training, consultancy and resource packs. These all focus on areas we believe make a In addition to these, we are able to offer an extensive real difference including leadership and management, teaching and learning solutions.

We also offer services for schools and consortia effective school improvement and management. including school development and performance management consultancy, delegate courses, interim management and GECH consultancy and training.

help in almost any area of a school>s development. What>s more, schools have the reassurance of approach to help schools constantly improve. With working with leading professionals and an organization senior management experience in education as that has built a first- rate reputation over many years head teachers, local authority school improvement of service.

Our range of cross phase off-site training courses the specific needs of schools and academies. offer rigorous yet inspirational training that combines

from support staff to head teachers, managers to senior materials. You will return to school well-informed and leaders. Our services are offered through our Leading confident, with renewed energy and ready to make a

> range of specialist courses at our Islington Professional Development Centre. These courses cover all of aspects of professional development to ensure

GECH success in helping schools to improve is achieved through the high quality people we employ. Our trainers and consultants have up-to-In fact, when you add all our services together, we can date knowledge of the key issues and challenges that schools face and can provide a practical consultants, our team have the skills to provide high quality, effective training and consultancy tailored to



Create programs

worldwide for science professionalism



GECH has extraordinarily deep contacts with many of industry advocacy. the world's most prominent thought-leaders, scientists, engineers and business leadership. You have our GECH has the capability to assist small and medium commitment to provide thoroughly professional services that meet your needs and exceed your expectations.

Our programs could offer you the freedom to grow and professionals to obtain maximum benefit during pursue your goals. To help you excel in your career participation at aerospace trade shows through its and in your life. GECH programs are designed to unique program that arranges and schedules one-onprepare professionals to pursue employment in their one appointments for small and medium enterprises. field of study, or in related fields. However, GECH does not guarantee that graduates will be placed GECH will also assist communities interested in in any particular job, eligible for job advancement attracting foreign companies to relocate all or a opportunities, or employed at all.

(Space – Related)

with successful experience in virtually every sector of regions will find GECH an essential asset. aerospace including expertise in business and general aviation, space and satellite technology, as well as GECH also offers access to their network of superior defense and security. The team includes seasoned North American-based consultants for those engineers professionals with many years of experience with and professional looking beyond North American government affairs, public relations and aerospace markets to aerospace.

enterprises interested in expanding their markets above and beyond in particular ways in which to gain that often difficult access to other avenues around the globe. GECH can assist engineering and technological

portion of their service operations to the US. GECH may assist state and local economic development authorities in preparing attractive and competitive offers to companies considering relocation. Foreign GECH works with a consortium of senior-level experts based companies interested in relocation to other



GECH offers services for the following areas:

Communications	Fiscal Procedures & Management		
Technical Writing Fundamentals	Facilities and Administrative Rate Calculation		
Communication Style: Creating Positive	Fiscal Reporting		
Relationships and Results	Research Administration		
Conflict Management			
Developing Assertiveness Skills	Payroll:		
Presentation Excellence	Recharge Center Seminar		
Human Resources Administration	Personal & Professional Growth		
Compensation: The Basics	Customer Service Excellence		
Leave Record Maintenance	Developing Dynamic Team Skills		
Managing Corrective Action	Difficult People and Difficult Behavior: Tips, Tactics, and Tools		
	Discovering Your Dependable Strengths		
	Emotional Intelligence		
	Increasing Your Influence		
	Navigating Change in a Complex World		
	Unlocking Possibility		
Planning & Productivity	Supervision & Leadership		
Managing Paper, Projects, and Priorities	Learning to Lead		
Master Process Planning	Making the Move From Peer to Supervisor		
Rapid Process Improvement	Supervising in a Diverse Workplace		
Strategic Planning Tools			
Time Management			
	Training, Coaching, and Mentoring for Success		
	Working Across Generations		



costs by charging fees for our services. their annual salary. However, we try to keep our fees at the lowest possible level. Meet Our Consultants: We Conflict Mediation - Getting two or intend to work with over 50 consultants with more employees to a place where their a variety of specialties and experience in a interpersonal issues are not interfering in their wide range of contexts. Our roster includes work increases their productivity and morale. many consultants with master's degrees and Conflict can also have a costly impact on the several with Ph.D.s.

(Optional text for website – to be discussed)

an understanding of your needs, we will those resources for the best result, rather present several consultants from our roster than wasting time, staffing resources, and for your consideration. We will include the budget dollars. consultants' qualifications, strengths, and fees to help you make your selection. You Retreats - When you consider the salary and may also want to have a conversation with one or more of the possible consultants to individuals away for a retreat, it's imperative solidify your choice.

you money by increasing efficiency and effectiveness. GECH consulting may help your organization "do more with less" by helping to enhance your team's performance.

assistance can actually result in savings from which to choose. include:

GECH offers consultation expertise in many **Teambuilding -** Effective teambuilding can professional scientific development areas. result in employee retention; the cost of GECH is a self-sustaining. We recover our replacing employees can be up to two times

morale and productivity of your entire staff.

Planning - All of the resources you use to carry out your work are expensive. Planning **GETTING STARTED:** Once we have ahead can ensure that you are "spending"

opportunity costs spent in taking a group of that the retreat be productive and the effects be long-lasting. A consultant to help plan and Using a consultant may actually save facilitate the retreat is a minimal cost when weighed against the overall cost of retreats.

GECH Consultation Services Coordinator will help you identify possible directions and will work with your budget and needs to provide More specific ways the cost of consulting a short list of suitable Alliance consultants



Develop curriculum at all levels

GECH aerospace engineering consultants have analytical expertise in the fields of aeronautical and astronautically engineering. They specialize in designing, validating, and perfecting the science behind commercial projects. GECH's experienced engineering consultants appreciate the special challenges of manufacturing aerospace products, and have a clear understanding of the synergetic interaction between components, sub-systems and total system performance within an operational environment.

GECH aerospace engineering consultants leverage new technology to support the aerospace engineering community in the design, development, and construction of aircraft and spacecraft. They identify and resolve issues in the field from aerospace components to whole systems. Please request a quote or contact us to find out how GECH's Aerospace consultant services can assist you.



GECH offers services for the following areas:

Computer Aided Aerospace Engineering	Design Optimization		
Component Testing	Finite Element Analysis		
Material Selection	Modal Analysis		
Metallurgical Services	Thermal Management/Analysis		
Aerospace Engineering Consultants - Product Development	Road Load Data Acquisition Instrumentation		
Acceleration	• Speed		
Displacement (Linear & Angular)	Strain (Strain gages & Stress coat)		
• Torque	Component Instrumentation and Calibration		
-Axis) - Load (Single & Multi	Custom Transducer Design and Fabrication (Single to Tri Axial Loads)		
Pressure	Torque Transducers		

Custom Transducer Calibration		
Data Acquisition		
Root Cause Analysis		
Acoustical Emissions		
Rotating Machinery Analysis		
Time Domain Analysis		
Frequency Domain Analysis		
• ADAMS		
SDRC-Ideas		
• Ansys		
• MATLAB		
Auto CAD		

GECH lab setup services



GECH provides support services related to teaching, researching, and developing science and technology. An important role we serve is to help assist and coordinate the setup and maintenance of laboratory services for software development, mechanical, thermal, and electrical engineering experimentation and research. GECH helps to develop and deploy advances in laboratory science and engineering that will enhance timely, cost-effective, and innovative products and services to be derived thereof.

GECH was established to also provide schools and universities and research centers access to knowledge across the globe. Through coordination and information sharing, remote locations may have access/plan equipment and resources for laboratories that have not been available in individual laboratories that were not feasible or practical to maintain on their own. By matrixing services via building strategic relationships and alliances, GECH aims to bridge the gap of technology from all parts of the globe.

We work closely with Principal Investigators, department heads, professors, and students to setup laboratories to fulfill all their analytical needs. Lab directors and coordinators across the world provide collaborative assistance; teaching support, and general training.

GECH works closely with World-renowned organizations such as NIST, ASME, INCOSE, MIL-STDS, ISO, BIPM, AGMA, ASTM, ASHRAE, ANSI and SAE. Through various partnerships and research collaboration, information is readily accessible via many venues in North America and across the globe.



GECH can assist in the following areas related to Lab Setup:

- Setup requirements gathering, validation, and execution
- Facilities and Campus planning
- Renovations to Existing Required Space
- Process Framework development
- Maintenance and Sustainability of the Laboratory
- Lab Safety & adherence to local and national standards

GECH has subdivided their services as shown below:

Engineering/Technology laboratory services:

- Basic Sciences Elementary, Private, Middle and High school
- Basic Engineering & Technologies Advanced High School, Private, College
- Advanced Science/Technology/Engineering Laboratories University & Graduate Level, Research Centers

Software & Application development laboratory services:

- Basic IT Infrastructure Development and Maintenance
- Advanced Simulation Integration with Hardware (Matlab, Simulink, CAD, etc)
- Web & Database Development (Routers, Switches, Servers Cisco)

Our organization can also work closely with your administration in the development and production of successful laboratory setup and services dealing with advanced instrumentation, equipment, machinery, and material sciences.

Some Laboratory Frameworks & experiments are listed below:

GECH aims to provide a wide array of laboratory services specific to testing, inspection, engineering and experimentation. Some of which include (but limited to) Research & Development, Life Cycle Testing, Environmental Simulation Testing, Dynamics and Vibration Testing, Electrical Testing, EMI, EMC, EMP, Structural and Fatigue Testing, Optical Testing Lab, Safety and Survival Testing, Design and Program Engineering, Reverse Engineering, Metallurgical & Materials Services, Failure Analysis, Non Destructive Inspection, Dimensional Inspection Services, Unique Resources and Expertise, and Equipment Manufacturing.

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A listing of the various areas/sub experimentation categories is shown in the table below. All Laboratories are serviced to be equipped with pre-lab exercises, examples, and test cases.

Next-Generation Robotics & Automation						
Construction of Cyber-Phys Systems	sical	Logic Circuits	Sustainable Engineere Materials	ed		
Chipset integration	Chipset integration Embedded Intelligence in Hardware/Software Measurement Star		Measurement Standar	rds		
Diffusion Processes		Robotic Arm controls	Calibrationand Certification	ons		
Software Applications & Development						
Mat lab Simulation		Programming	Web Interface	SQL Server		
Front-End IT setup Practice	N	etwork Administration	Scripting Language	Hardware Integration		
Structural Performance						
Bridge Design/Developmen	t					
Mechanical Engineering / Thermal Experimentation						
Heat Transfer		Thermodynamics	Heat Exchange			
Solid Mechanics		Convection Heat	Fluid Dynamics			
Heat Conduction		Pipe Flow				
Mathematical / Statistical Analysis						
Probability Distributions		Basic Statistical Analysis	Estimations	Error types		
Finite Element Analysis		Measurement and Analysis	Theoretical Analysis			
Sound Engineering / Experimentation (Facility-Specific)						
Sound Propagation		Analog/Digital Electronics	Industrial control	Prototyping Experiments		
Electrical Engineering						
Circuit Analysis		Logic design	Data Acquisition	General Electrical Engineering		
Resistors		Servers	Voltage Measuremen	t		







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Bahrain P.O. Box 543, Mana

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