

GIRLS IN TECHNOLOGY 2020

JUNE 4TH
3:30PM - 5PM
100% VIRTUAL



HUDSON
COUNTY
COMMUNITY COLLEGE
CONTINUING EDUCATION &
WORKFORCE DEVELOPMENT

WELCOME!

Thank you for joining Hudson County Community College's Division of Continuing Education and Workforce Development for the **Seventh Annual Girls in Technology – Virtual Edition!**

We also thank your teachers, counselors, and administrators who encourage you to pursue your passion for STEM. As the program unfolds, we encourage you to engage and ask questions during our **“A Day in the Life of Women in STEM”** panel and **STEM demonstrations.**

We hope you leave more inspired than before!



PANEL DISCUSSION

“A Day in the Life of Women in STEM”

ASK AWAY!

- SAVE QUESTIONS UNTIL THE END OF THE PANEL
 - TYPE YOUR QUESTION INTO THE Q&A CHAT BOX
 - SOMEONE WILL READ YOUR QUESTION OUT LOUD
- 

Archana Bhandari

Executive Director, Online Learning
Hudson County Community College

Archana Bhandari has had a life full of interesting choices and one of them has been to be a woman in technology. She started working at HCCC in 2019. Prior to this she was Director of Academic Support at Santa Ana College in California. In that position, she provided leadership for technology infrastructure (information technology systems hardware and software). She spearheaded strategic planning and policy review in technology. She has travelled extensively, from India to New Zealand and then to the US, traveling across the world when interesting opportunities were offered.





Patricia Clay

Chief Information Officer
Hudson County Community College

Patricia Clay (Trisha) is a strategic Information Technology leader specializing in infrastructure and applications support management, project management, collaboration, and information security. Before joining the HCCC team, Patricia was the Director of Information Technology for DeSales University, a private, 4-year institution of higher education. She assures collaborative, student-centered, customer-focused technology tactics and strategy in a complex environment. Patricia earned her Master's of Business Administration with Project Management concentration from DeSales University. She actively participates in the EDUCAUSE HEISC Awareness and Training Working Group. She is a frequent presenter at local and regional conferences.

Kate Gilbert

Web Developer
WPMaster.me

Kate Gilbert has been building and supporting websites since 2006 and knows the web inside-out. As a front-end developer and WordPress expert, Kate has helped dozens of website owners get online the right way and now focuses on teaching website owners how to make their own sites shine. Kate teaches website owners how to build, launch, and manage their own sites through her virtual learning platform, WPMaster.me. Because she believes everyone can understand the web, she's committed to helping more female business owners gain the confidence and skills they need to have websites that shine.





Dr. Bianca Jackson

Advanced Optics Engineer
General Dynamics Mission Systems

While Bianca Jackson was raised in a family of educators, research in STEM fields always interested her, so she spent many of her summers in pre-college engineering programs, both in and out of state, to get a sense of where her interests truly lay. Bianca graduated from Clifford J. Scott High School in East Orange, NJ in 1995. While an Applied Physics undergrad at Columbia University's School of Engineering and Applied Science, she continued her tradition of participating in STEM programs at other universities during her summers. One extremely positive experience led her to pursue her MS and PhD in Applied Physics at the University of Michigan. Bianca's favorite thing about majoring in Applied Physics is the flexibility it allowed for interesting inter- and multi-disciplinary projects. Her PhD Thesis work lead her to be one of the first people to publish on the application of terahertz imaging to the conservation of art, archeology and architecture. Bianca spent several years after graduation pursuing this research all over Europe and Asia. Missing home, Bianca eventually returned to her hometown in NJ. After receiving an invitation to a career fair featuring General Dynamics, she was surprised to discover that defense contractors are not all scary people. Teamwork is an important aspect of this kind of research and development. Her multi-disciplinary training gave her skills to be adaptable and quickly pick-up new topics to fill the gaps in the team's needs.

Sushma Mendu

Associate Director, Software Application
Services, Office of Information Technology
Princeton University

Sushma is an experienced and effective senior IT leader, with a strong background of over 21 years in the fields of Healthcare and Higher Education IT. She has a proven track record in managing technical, as well as functional, teams of varying sizes and running projects with a wide range of complexity. Sushma has partnered with executive leadership in developing strategies by which information technology can support strategic planning and resource management at large organizations. Sushma has an MBA from the University of Illinois at Urbana Champaign, a Master of Science in Life Sciences from Avinashilingam University in India and an Associate of Science (Computer Science) from Hudson County Community College.





Maureen Slipek

Director Information Security – Global Lead
Client Security Assurance\ Security Consulting
Ernst & Young, LLP

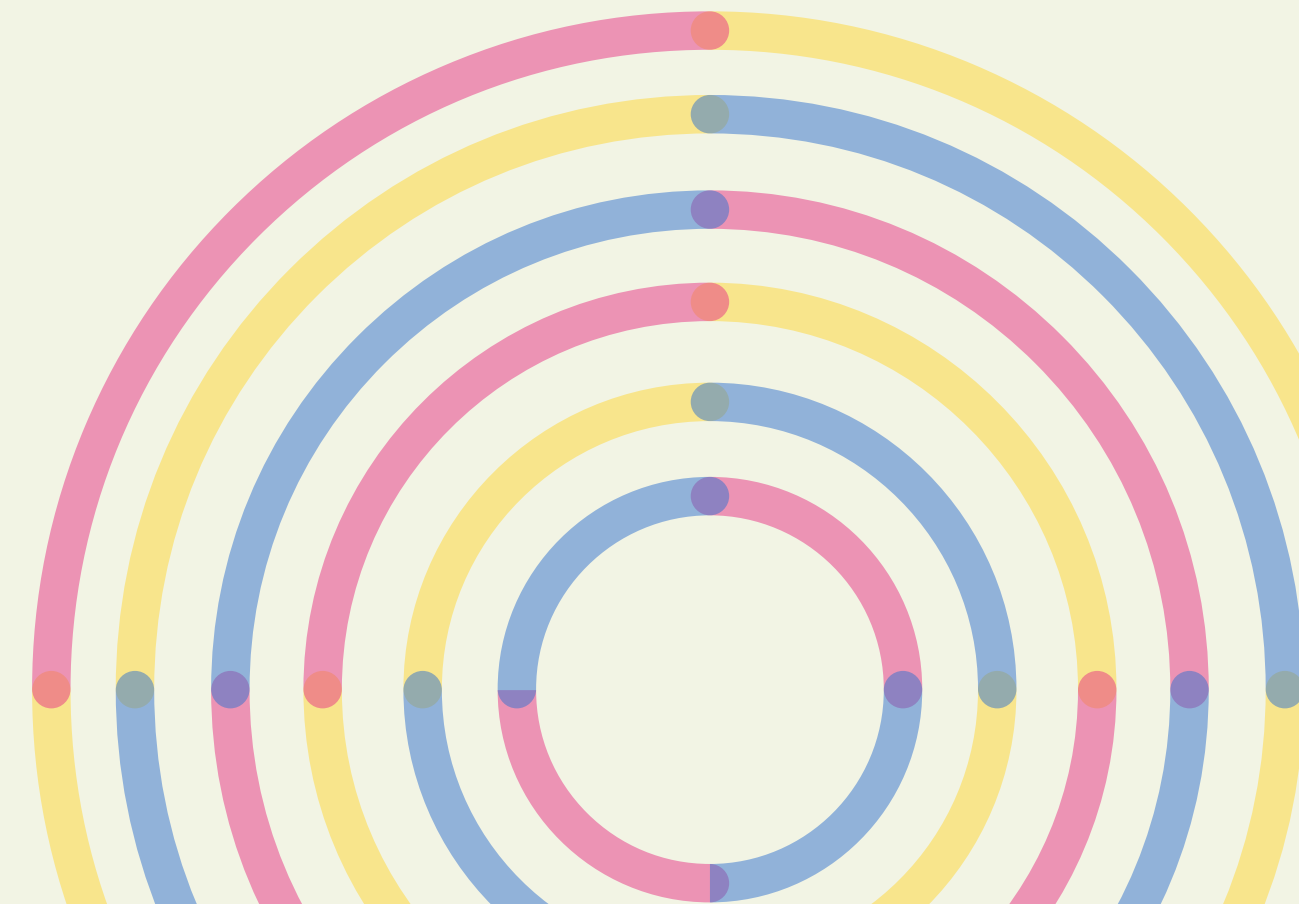
As a Director within EY Information Security, Maureen leads the global Client Assurance team, which manages cross-service line client and regulatory inquiries regarding EY's information security and data protection programs. Maureen joined EY in 2012 as the Global Security Awareness Lead before assuming responsibility for the Client Assurance team in 2015. Maureen has over 25 years of professional experience in building and securing technology enabled business solutions for large organizations including Prudential Financial and ADP. She has a diverse background in information security, compliance, risk and project management. Maureen is a graduate of Saint Peter's University in Jersey City, NJ and holds CIPP, CISA, CISSP, and PMP certifications.



STEM DEMONSTRATIONS

GET INVOLVED!

- SAVE QUESTIONS UNTIL THE END OF EACH DEMO
- TYPE YOUR QUESTION INTO THE Q&A CHAT BOX
- SOMEONE WILL READ YOUR QUESTION OUT LOUD



Dr. Clive Li

STEM Division Professor

Hudson County Community College

Clive Li is an engineering science instructor at Hudson County Community College. He is the inventor of the Biodegradable Diaper (patent #20170224540), the Eggshell Bio-composite (patent #20140323616), and the Wearable Aromatic Device (patent #20160174694). His research group at HCCC collaborates with researchers across several disciplines and utilizes different techniques, including plasma sputtering, scanning electron microscopy, X-ray fluorescence, electro-spinning, UV-visible spectroscopy and Fourier Transform Infrared spectroscopy. His current research is focused on biomaterials and nanotechnology.

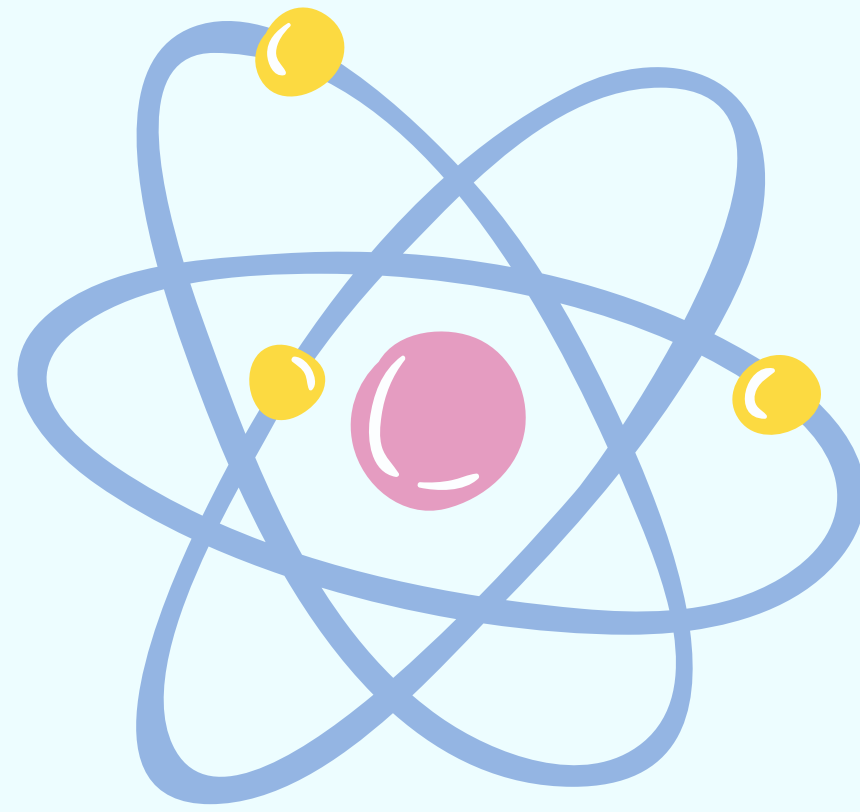




Dr. Fahima Bacha

Computer Science Professor
New Jersey City University, North Bergen High School

Fahima Bacha is an adjunct professor at NJCU's Computer Science Department and a mathematics and computer science high school teacher. Fahima Bacha is a leader in educational technology and has implemented state-of-the-art programs that initiate change and promote Science Technology Engineering and Mathematics (STEM) education. Fahima has a lifelong passion for computer science. Her early exposure to computer programming as a software engineer and love for mathematics are all contributing factors to her desire to lead and make STEM education fun to all students - particularly for girls, minority groups, and the underserved. Fahima earned a Doctorate Degree in Educational Technology Leadership from New Jersey City University in 2018. She also holds an Engineering degree in Information Systems and a Master's degree in Computer Science.



STEM RESOURCES



SCHOLARSHIPS

2021/ Late Summer

Women Techmakers Scholars Program - \$10,000
(by Google, must be in STEM program)
<https://www.womentechmakers.com/scholars>

BHW Scholarship - \$3,000
(must be pursuing an undergrad/majoring in science)
<https://thebhwwgroup.com/scholarship>

Virginia Heinlein Memorial Scholarship - \$2,000
(must be female pursuing undergrad/ have a STEM major)
<https://www.heinleinsociety.org/scholarship-program>

BluePay STEM Scholarship - \$1,000
(essay required)
<https://www.bluepay.com/company/scholarship>

Science Ambassador Scholarship - Up to full tuition
(must create a 3 min. youtube vid on your STEM major)
<https://www.scienceambassadorscholarship.org>

Women in STEM Scholarship - \$2,000
(only for female high school seniors)
<https://www.payscale.com/scholarships/women-in-stem-scholarship>

Read More: <https://tinyurl.com/stemscholarships2020>

STEM AT HOME

Activities

A Variety of STEM Projects are Available at:

Build Phone Games and Coding Basics
<https://code.org>

Develop Programming Skills
<https://www.tynker.com>

STEM Projects
<https://www.epa.gov/students> &
<https://www.sciencebuddies.org>

Help with STEM Homework
<https://www.khanacademy.org/partner-content/mit-k12>

Read More: <https://tinyurl.com/stemsites2020>

STEM RESOURCES

From our Friends at

@UniversityofPhoenix Technology Programs
<https://www.phoenix.edu/degrees/information-technology>

@NJCU Sphero EDU
<https://www.youtube.com/watch?v=XgoWrwzro8c>

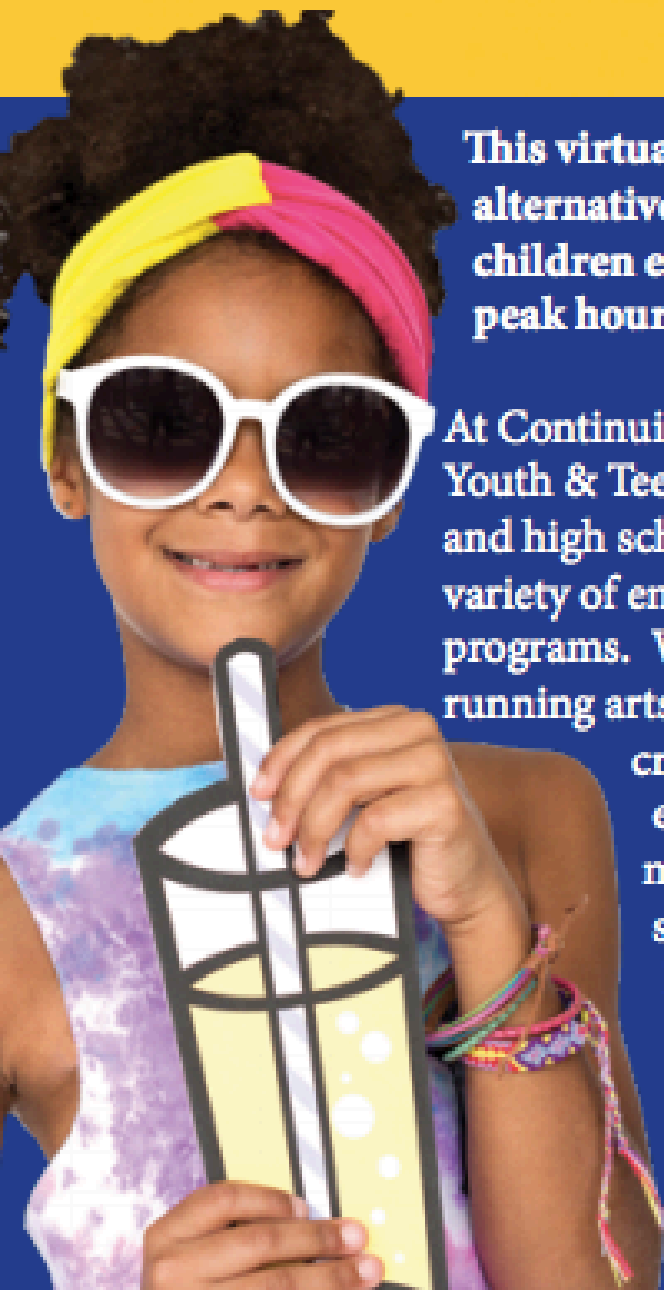
HCCC Department of Continuing Education

Summer Youth & Teen Programs

VIRTUAL

CREATE NEW EXPERIENCES at HCCC!

Welcome to our **VIRTUAL Summer Youth & Teen Program!**



This virtual camp is a home-based alternative for families seeking to keep children engaged at home during the peak hours of a work day.

At Continuing Education's virtual Summer Youth & Teen Program, both middle school and high school students will experience a variety of engaging and enriching programs. We will have live instructors running arts and crafts activities, creative workshops, and educational classes for both middle school and high school students, as well as College Readiness classes for high school students. These unique programs are specifically designed to run from the safety of your home.

CREATIVE WRITING

July 7, 8 & 9, 2020
9 a.m. – 11 a.m.
Price: \$60

2D MIXED MEDIA

July 7 & 9, 2020
1 p.m. – 3 p.m.
Price: \$40

DIGITAL PHOTOGRAPHY I

July 13, 14, 15 & 16, 2020
9 a.m. – 12 p.m.
Price: \$120

DIGITAL PHOTOGRAPHY II

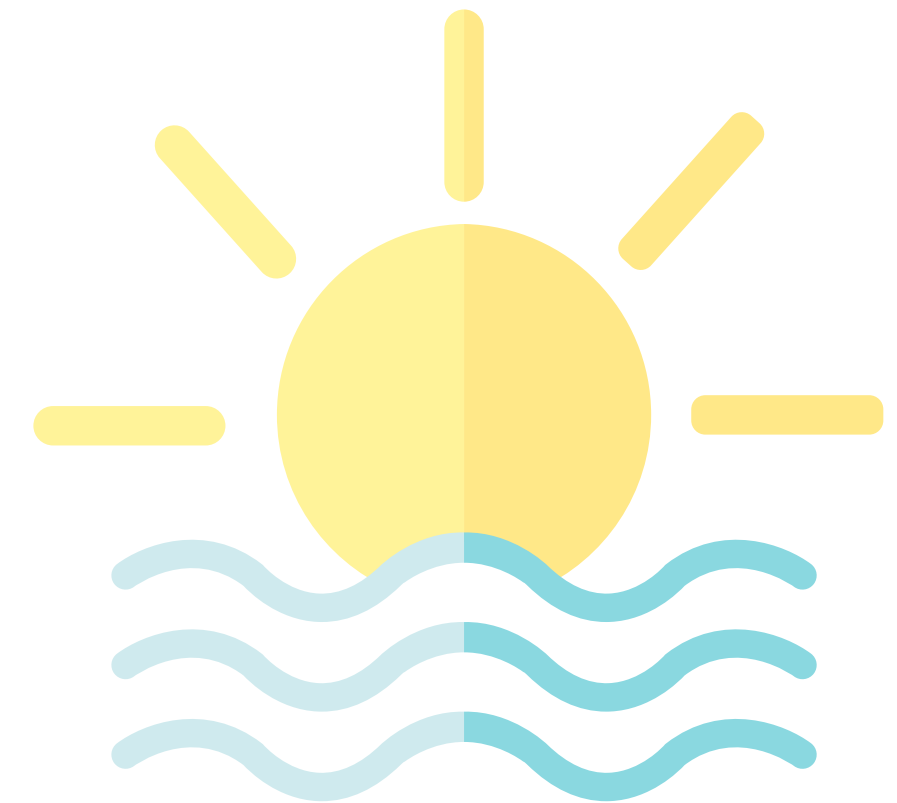
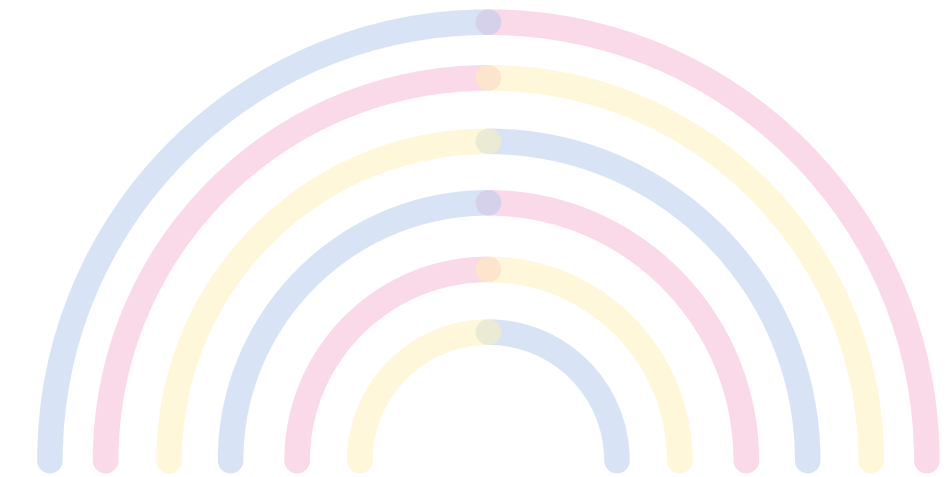
July 13, 14, 15 & 16, 2020
1 p.m. – 4 p.m.
Price: \$120

SAT LANGUAGE ARTS

August 3, 4, 5, 6 &
10, 11, 12, 13, 2020
9 a.m. – 12 p.m.
Price: \$240

SAT MATH

Duration: 8 days
(Monday thru Thursday) - 2 weeks
August 3, 4, 5, 6
& 10, 11, 12, 13, 2020
1 p.m. – 4 p.m.
Price: \$240



For more information, you may email Carmen Guerra at cguerra@hccc.edu.



The Hudson County Community College Early College program permits high school juniors and seniors in Hudson County to enroll in up to 18 college-level credits per academic year at a 50% discount off of the in-county tuition rate and earn credits towards a degree. Upon graduating from high school, credits for the HCCC classes may be applied towards a college degree at HCCC or other colleges and universities.

More details on the program can be found here: <https://www.hccc.edu/early-college>

Students from High Tech High School, please contact SecaucusCenter@hccc.edu for more information. All other high school students, please contact EarlyCollege@hccc.edu

Hudson County Community College STEM DIVISION

The STEM division supports the mission of HCCC by providing high-quality accessible and affordable programs in Science, Technology, Engineering and Mathematics (STEM) that will lead either to gainful employment or transfer to a four-year college or university.

A STUDENT WHO SUCCESSFULLY COMPLETES A STEM PROGRAM WILL BE ABLE TO:

- Apply the scientific method or the engineering design process to real-world problems with appropriate rigor, accuracy, and precision.
- Incorporate the scientific and mathematical knowledge they have acquired into their understanding of the world.
- Successfully complete hands-on tasks safely in a laboratory environment.
- Work effectively on a team and ethically within a scientific community.
- Present scientific findings with clarity and confidence in both oral and written formats.
- Think critically about science, its methods, and its role in society.

A STUDENT WHO SUCCESSFULLY COMPLETES A STEM GENERAL EDUCATION COURSE WILL BE ABLE TO:

- Understand and apply the scientific method to practical problems.
- Incorporate the scientific or mathematical literacy they have acquired into their larger understanding of world.
- Think critically about science, its methods, and its role in society.

MORE INFORMATION ABOUT STEM PROGRAMS CAN BE FOUND AT WWW.HCCC.EDU/STEM

STEM offers Associate degrees in Advanced Manufacturing, Biology, Chemistry, Computer Sciences, Computer Technology, Cybersecurity, Construction Management, Engineering Sciences, Electrical Engineering Technology, Environmental Studies, Mathematics, and Physics.

Hudson County Community College STEM DIVISION



**Build a
Rewarding Career!**

**Associate in Applied Science (A.A.S.)
in Construction Management**

ASSOCIATE IN APPLIED SCIENCE (A.A.S.) **CONSTRUCTION MANAGEMENT**

Science, Technology, Engineering & Mathematics (STEM) Division

Who is a Construction Manager?

Construction managers plan, coordinate, budget, and supervise construction projects from start to finish.

Pay

The median annual wage for construction managers was \$91,370 in May 2017 and the highest 10 percent earned more than \$159,560.

What do the students learn in the program?

- The 60 credit program is designed for students who will learn to manage all phases of modern-day construction.
- They will be exposed to new construction methods protocols, materials, testing procedures, and management principles.
- Special emphasis will be placed on ensuring that graduating students are able to pass the national licensing exams.

Job Outlook

Employment of construction managers is projected to grow 11 percent from 2016 through 2026, faster than the average for all occupations. Construction managers are expected to be needed to oversee the anticipated increase in construction activity over the coming decade.

More information may be found on the following:
<https://bit.ly/2Sat1sm>

For further information, please contact:

Dr. Azhar Mahmood (Program Coordinator – Construction Management)
(201) 360-4259 or am Mahmood@hccc.edu

STEM Division Office - 201-360-4265
263 Academy St., Jersey City, NJ 07306

Contact Admissions at: (201) 714-7200 OR admissions@hccc.edu
Apply at www.hccc.edu/apply





THANK YOU TO OUR SPONSORS!

