

# Engineering Technology

## Structural Analysis and Design

What can I do with this major?



### Related Industries and Career Titles

Search for position titles within multiple career industries.

#### Possible Position Titles

Structural Analyst  
 Senior Design Specialist  
 Structural Engineer  
 Field Engineer  
 Construction Inspector  
 Project Coordinator  
 Quality Assurance Manager  
 Materials Testing Technologist

#### Industries

State highway departments  
 Engineering and construction design  
 Chemical production  
 Fabrication companies  
 Geological testing firms  
 Sales  
 Material testing  
 Soil testing  
 Quality control  
 City/county/state public works

### Professional Organizations

Affiliate yourself with groups to network and learn about the field

- ✓ American Concrete Institute, UHD Group
- ✓ Association for Computing Machinery, UHD Group
- ✓ Society of UHD Engineers
- ✓ American Society of Civil Engineers (ASCE)

### Explore Career Specific Websites

[www.asce.org/](http://www.asce.org/) | [www.nspe.org/](http://www.nspe.org/) | [www.ieee.org/index.html](http://www.ieee.org/index.html) | [www.spegcs.org/](http://www.spegcs.org/)  
<http://cmaanet.org/> | [www.usajobs.gov/StudentsAndGrads](http://www.usajobs.gov/StudentsAndGrads)

### Graduate School Considerations

\*Programs not offered at UHD

Master of Science in Data Analytics	Master of Science in Civil Engineering *
Master of Science in Technical Communication	Master of Science in Computer Engineering*
Master of Business Administration	Master of Science in Electrical Engineering*
Master of Science in Construction Management*	Master of Science in Geoscience*
Master of Science in Construction Engineering*	

### Community Partnerships

Research local organizations offering field experiences to students pursuing an Engineering Technology degree.

Anheuser-Busch	British Petroleum	UHD Facilities Management	HNTB
FMC Technologies	Lyondell Basell	City of Houston Public Works	Covestro

### What is Structural Analysis and Design Engineering Technology?

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The focus of this Bachelor of Science degree is the application of computer technology and modern materials and construction techniques to the overall design of structures, which includes project planning, costs estimates and management of the project. Students completing the program will have a solid foundation in the analysis, design, testing, and construction of civil structures.

#### **Interested in discussing your career path possibilities?**

Visit S-402 or Call  
713-221-8980

The [Career Development Center](#)

## Joseph Walker

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### PROFILE

Highly motivated college junior with a passion for construction and offshore design engineering. Excellent skills in AutoCAD, Bently SACS, and project organization. Strong communicator with the ability to bring diverse ideas and teams together to complete projects on time.

### EDUCATION

University of Houston-Downtown, Houston, TX

**Bachelor of Science in Engineering Technology, Structural Analysis & Design Candidate**, May 2018

Relevant Courses: Structural Analysis, Concrete Design, Computer Aided Drafting, Materials and Processing, Thermodynamics, Steel Design, Quality Control, and Construction Management

Houston Community College, Houston, TX

**Associate of Arts in General Studies**, May 2014

### SKILLS

Computer: AutoCAD; Bently SACS, Microsoft (MS) Excel, Word PowerPoint

Language: Fluent in Spanish (reading, writing and speaking)

### RELEVANT PROJECTS

**University of Houston-Downtown, Houston, TX**

Aug 2016- Dec 2017

*Project Manager*

- Managed team of 5 student engineers to successfully complete construction of a floating concrete trash collector
- Created project design using AutoCAD and Excel; communicated with team through project manager CRM program Britrix24

### RELEVANT EXPERIENCE

Doris Incorporated – Katy, TX

May 2017 – Sept 2017

*Structural Engineer Intern*

- Supported and collaborated with senior engineers on project site surveys using CAD software to create engineering plans for Chevron drilling rig in West Texas
- Generated and analyzed modules ins SACS to obtain structural data to develop offshore platform designs for Chevron drilling rig locating in Angola, Africa
- Prepared reports and documentation for contractor's payment, and prepared plans and specifications from predetermined standards

### EXPERIENCE

**University of Houston-Downtown** – Houston, TX

Aug 2014 – April 2015

*Student Supervisor, Sports and Fitness Department*

- Supervised a team of 13 staff members to oversee the operations of the 37,000 sq. ft. facility