

# Engineering Technology Control and Instrumentation

What can I do with this major?



## Related Career Titles

Search for potential careers/jobs in your field with these positions.

- Instrumentation Senior Analyst
- Instrumentation and Controls Engineer
- Process Control Engineer
- Field Service Engineer
- Control Systems Specialist
- Analyzer Technician
- Automation Controls Engineer
- Instrumentation Specialist
- System Integration Engineer
- Biomedical Instrumentation Specialist
- Automation Specialist
- Telecom Field Engineer

## Professional Organizations

Affiliate yourself with groups to network and learn about the field

- ✓ *Instrument Systems and Automation (ISA) , Houston section*
- ✓ *Association for Computing Machinery, UHD Chapter*
- ✓ *Society of UHD Engineers*
- ✓ *American Society of Mechanical Engineers (ASME)*

## Explore Career Specific Websites

<https://houstonisa.org/> | [www.asme.org/](http://www.asme.org/) | [www.sme.org/](http://www.sme.org/) | [www.ieee.org](http://www.ieee.org)  
| [www.usajobs.gov/StudentsAndGrads](http://www.usajobs.gov/StudentsAndGrads) | [www.spegcs.org/](http://www.spegcs.org/)

## Graduate School Considerations

\*Programs not offered at UHD

Master of Science in Data Analytics	Master of Science in Controls and Instrumentation
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 Mechanical Engineering*	Master of Science in Bioinformatics*

## Community Partnerships

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

City Of Houston Public Works	BP	HNTB	Covestro
UHD Facilities Management	FMC Technologies	Anheuser-Busch	FMC Technologies

## What is Control and Instrumentation Engineering Technology?

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The focus of this Bachelor of Science in Engineering Technology degree is the application of computer technology and modern electronics to industrial process control and instrumentation systems. Students meet the demands and requirements of the control and instrumentation industry by gaining practical training in computer technology, electrical/electronic systems, and communication systems.

### Interested in discussing your career path possibilities?

Visit S-402 or Call  
713-221-8980

The [Career Development Center](#)

**Ed U. Gator**  
**Houston, TX ▪ (713) 111-1111 ▪ edugator.uhd@email.com**

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### **SUMMARY**

Bilingual, highly motivated college senior with excellent skills in electrical, controls, instrumentation and automation engineering. Designed and developed projects related to measurement and instrumentation technologies, computer-based control systems, and industrial processes automation. Preparing for Fundamentals of Engineering (FE) Exam in March 2018.

### **EDUCATION**

University of Houston-Downtown, Houston, TX

*Bachelor of Science in Engineering Technology, Control and Instrumentation* Dec 2018

Relevant Courses: Process Control Systems, Computer Networking, Engineering/Technology fundamentals, Safety Instrumented Systems, engineering economics

### **TECHNICAL SKILLS**

Software: AutoCAD, LabVIEW, P-spice, Aspen Plus, Arduino, Java, Java Script, MATLAB, Visual Basic, Microsoft (MS) Excel, Word, PowerPoint

Instruments: Electric Circuits (resistors, LED bulbs, etc.), Arduino (microprocessor), PLC (programmable logic controllers), engraving testing machines, weight testing instruments, oscilloscope, multimeter

### **RELEVANT PROJECTS**

University of Houston-Downtown, Houston, TX

*Team Leader, Pulse Width Modulation*

- Automated the operation of a DC motor with minimum power loss by constructing PWM circuit on a breadboard
- Led a team of 2 in the design and simulation of PWM in P-spice

*Project Leader, Design and Control of the Butyl Acetate Process*

- Optimized butyl acetate process using Aspen Plus software with a team of 2.

*Project Leader, Work Converted to Heat*

- Built a pulley system that gave instantaneous energy to rotate fan blades inside the container to demonstrate thermodynamics.
- Operated thermocouple device and amplifier using microprocessor software LabVIEW to determine temperature. Conducted theoretical calculations in Excel to measure heat input on windows.

### **RELATED EXPERIENCE**

Integra Clinic and Texas Pain Solution Houston, TX

Jan 2014 - Present

*Information Technology Specialist*

- Conducted hardware and software maintenance implemented in Windows, Windows Servers and IOS
- Served as assistant to office manager providing filing and data entry of patient files

### **ADDITIONAL SKILLS**

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