



Elec./Electronics Drafting-15452

DFTG-1358

RT 2023 Section 0010 3 Credits 01/17/2023 to 05/14/2023 Modified 01/16/2023

Our Vision

Houston Community College shapes the future for all students with innovative, affordable, timely, responsive, and continuously improving educational programs and services. Partnered with the communities we serve, we take a defining role in regional economic, workforce, and social development.

<https://www.hccs.edu/about-hcc/> (<https://www.hccs.edu/about-hcc/>)

Course Meetings

Course Modality

Online class

Meeting Times

Thursdays, 2:00pm-4:50pm

Meeting Location

Online on a schedule as shown above.

Welcome and Instructor Information

Instructor: Prof. Francis Ha, BS, MA Office Phone: 713-718-5544

Office: Suite AD1 Office Hours: Online anytime

HCC Email: francis.ha@hccs.edu Office Location: Spring Branch Campus

Best method of contact: either on Canvas Inbox or email to: francis.ha@hccs.edu.

In case of emergency, please send text message (only) to your instructor: 281-804-8090

Full-time Faculty: Prof. FRANCIS HA

- Email: francis.ha@hccs.edu
- Phone: 713-718-5544
- Website: <https://learning.hccs.edu/faculty/francis.ha> (<https://learning.hccs.edu/faculty/francis.ha>)

Course Overview

Course Description

A study of the principles of layout of electrical and electronic drawing, stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor-control diagrams, power distribution diagrams, and electrical one-line diagrams.

Requisites

Must have completed DFTG 1305 and DFTG 1309 with a grade D (or higher).

Department Website

<https://www.hccs.edu/programs/areas-of-study/construction-industry--manufacturing/drafting--design-engineering-technology/>
(<https://www.hccs.edu/programs/areas-of-study/construction-industry--manufacturing/drafting--design-engineering-technology/>)

Core Curriculum Objectives (CCOs)

The Department of Labor has identified skill sets that U.S. employers want most in entry level employee. It is our commitment to prepare every student with the knowledge and skills needed to succeed in today's dynamic environment. The HCCS Drafting & Design Engineering Technology Department has specified that the course address the following core objectives:

- Interpret/communicate data: Selects and analyzes information and communicates the results to others using oral, written, graphical, pictorial, or multi-media methods.
- Monitors and corrects performance: Distinguishes trends, predicts impact of actions on system operations, diagnoses deviations in the function of a system, organization, and takes necessary action to correct performance.
- Design/improve systems: Prevents, identifies, or solves problems in machines, computers, and other technologies.
- Creative thinking: Uses imagination freely, combines ideas or information in new ways, makes connections between seemingly unrelated ideas, and reshapes goals in ways that reveal new possibilities.
- Students will be presented with a civil engineering problem for which they will be required to design solution.
- Based on known trends and their creativity, each student will be responsible designing a solution and diagnose deviations and solve problems in the function of the design and take actions necessary to improve on and correct performance.
- Evaluation of these skills will be based on the creativity, functionality and efficiency of the design.

Student Learning Outcomes and Objectives

Learning Objectives:

Demonstrate a knowledge of electronic components and their graphic symbology of electrical and electronics schematic.

Learning Outcomes:

- Be able to identify electronic component symbols.
- Understand PCB schematic diagrams, flow charts, and electronic system structure.
- Ability to apply electronic symbols into the circuit diagrams and assembly PCBs. Ability to create detailed component-level electronics drawings.

Departmental Practices and Procedures

Department Specific Instructor and Student Responsibilities

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments

- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- Provide the course outline and class calendar that will include a description of any special projects or assignments
- Arrange to meet with individual students during office hours, and before and after class as required

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the [HCCS Student Handbook \(https://www.hccs.edu/resources-for/current-students/student-handbook/\)](https://www.hccs.edu/resources-for/current-students/student-handbook/)

Program-Specific Student Success Information

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments
- Participating in class activities

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as a guide.

Instructional Materials and Resources

Instructional Materials

The [HCC Online Bookstore \(https://hccs.bncollege.com/shop/hccs-central/page/find-textbooks\)](https://hccs.bncollege.com/shop/hccs-central/page/find-textbooks) provides searchable information on textbooks for all courses. Check with your instructor before purchasing textbooks because the book might be included in your course fees.

Required Textbook:

1358 Textbook Front Cover-1.jpg



Title: "Fundamental of Electrical-Electronic Drafting & Design" by Francis Ha

Edition: Newest

ISBN 13 : 2818000152982

HCC B&N Bookstore

1215 Holman St., Ste. 102

Houston, TX 77004

713-528-0872

Mon-Thurs: 9:00am-3:00pm

[https://hccs.bncollege.com/Links to an external site. \(https://hccs.bncollege.com/\)](https://hccs.bncollege.com/Links to an external site. (https://hccs.bncollege.com/))

Material Covered

The course includes two chapter exams plus a comprehensive final exam. Exams will include multiple-choice, short answer, short essay questions, and may be quick drawings.

All exam' questions and answers are based on the following:

1. Weekly lectures from your instructor (40%)
2. Slide Shows and reading materials relating to the topics. (40%)
3. Textbooks (20%)

You are responsible for knowing which exam to take, what chapters to be covered, and when it is offered. Your instructor could send you reminders via Canvas announcements.

The exams will cover the corresponding reading assignments announced by your instructor,

Turning in Assignments (for 1358 class)

This Drafting course assignments specialized in AutoCAD. Once completing the assignment, please convert it to **pdf format** before submitting it online by the deadline as per instructed.

It is your responsibility to possess the necessary skills to manage the hardware and software systems for this course. In addition, if your normal computer becomes unavailable for any reason, you are responsible for locating and operating other adequate computer facilities to meet the course deadlines.

Even if your computer crashes, you are still responsible for meeting the course deadlines. For in-person class, each campus has computer labs available for students. Houston Community College is comprised of 6 regions with several campus locations per region. Each campus provides computer labs for education support. Computer labs are generally located at each campus library.

Exam Make-Up Policy

If you miss a chapter exam, you must explain why and request a make-up test in writing to your instructor through the Canvas Inbox. You will receive a score of zero for any unexplained or unexcused missed exam, and your instructor reserves the right to disqualify your excuse. Makeup exams are given only in cases of documented illness, legal cases, or other extenuating circumstances, **not** just because you haven't studied.

Makeup exams must be arranged by you no later than the next day after the exam deadline or at the end of your emergency. There is **NO** make-up for Final Exam.

Time frames for Taking Exams

Check the Course Calendar for the scheduled times and dates for each exam including the final exam. This course does not have exams that are taken in the Testing Centers or in a F2F setting with the instructor.

For more information about taking an exam in Canvas format, refer to [How Do I Take a Quiz \(linked to an external site\)](https://community.canvaslms.com/docs/DOC-3171) (<https://community.canvaslms.com/docs/DOC-3171>) in the Canvas Student Guide.

✓ Course Requirements

Assignments, Exams, and Activities

Type	Weight	Topic	Notes
Drawing Assignment	50%		<ul style="list-style-type: none">There are assignments, a possible mid-term project (for in-person class) for this class. Unless otherwise notified, students are required to submit assignments and projects using scanned .pdf file and submit online via Eagle's Canvas.Note: One point penalty will be automatically deducted for each day of late submission (beyond 11:59pm on the due date).
Exams/Quizzes	20%		<ul style="list-style-type: none">Two Chapter Exams (Exam-1, Exam-2) for this class. All exams consisting of multiple-choice questions.A week before the exam day, students will be provided the questions without the answers for self-review.
Final Exam	20%		<ul style="list-style-type: none">Students who fail to perform the Final Exam will receive zero for this category.There will be no make-up for Final Exam since the instructor needs to submit the course grade results to the System by the deadline..
Attendance	10%		<ul style="list-style-type: none">Class attendance is checked at every class meeting.See Attendance Procedures below for more info.

Grading Formula

Grade	Range	Notes
A	90 points and above	

Grade	Range	Notes
B	80 to 89.99 points	
C	70 to 79.99 points	
D	60 to 69.99 points	
F	59.99 points and below	

* Instructor's Practices and Procedures

Incomplete Policy

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Missed Assignments/Make-Up Policy

Assignment Submission Policy

1. Assignments must be converted to pdf format before submission online.
2. All assignments and projects should be turned in by 11:59pm of the due date.
3. One point (out of 100) penalty will be automatically deducted for each day of late submission.

Academic Integrity

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance):

<https://www.hccs.edu/studentprocedures> (<https://www.hccs.edu/studentprocedures>)

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Attendance Procedures

- You may be dropped from the class and get an unsatisfied grade if you are absent more than 12.5% of the instructional hours as per HCC policy. For example: A 12.5% of this 16-week class equals to 2 class meetings. If you are absent more than 2 class meetings, you may drop at the 3rd class and get the W or F grade.
- *HCC Course Withdrawal Policy: If you feel that you cannot complete this course, you will need to withdraw from the course prior to the Drop/Add deadline of withdrawal. Before you withdraw from your course, please take the time to contact with the instructor to discuss why you feel it is necessary to do so.*

Student Conduct

Please see me for my advice at the Faculty Statement about Student Success.

Instructor's Course-Specific Information

This course section will use Canvas (<https://eagleonline.hccs.edu> (<https://eagleonline.hccs.edu/>)) to supplement in-class assignments, exams, and activities.

Faculty Statement about Student Success

Dear students,

This is my advice to you: In order to be successful in this class, get a highest grade, you only need to do the following things:

1. **Attend all required class meetings.** If you are absent due to the serious sickness or emergency, please contact me at your earliest time.
2. **Do the assignment right after the class is over, complete and submit it a few days prior the deadline.** You should not wait until the due date.
3. **Study Self-Review for each Exam.** Please note, all exam's answers are found in the Weekly Lectures and Slide Show (75%) and in the textbook (25%). Weekly video clips and lecture recordings, if available, could also help you to find the correct answers.

I am here to help you learn because your performance in my class is very important to me. So feel free to contact me should you have any problems.

Faculty-Specific Information Regarding Canvas

This course section will use Canvas (<https://eagleonline.hccs.edu> (<https://eagleonline.hccs.edu>)) to supplement in-class assignments, exams, and activities.

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

Social Justice Statement

Add Content Here

HCC Policies and Information

HCC Grading System

HCC uses the following standard grading system:

Grade	Grade Interpretation	Grade Points
A	Excellent (90-100)	4
B	Good (80-89)	3
C	Fair (70-79)	2
D	Passing (60-69), except in developmental courses.	1
F	Failing (59 and below)	0
FX	Failing due to non-attendance	0
W	Withdrawn	0
I	Incomplete	0

Grade	Grade Interpretation	Grade Points
AUD	Audit	0
IP	In Progress. Given only in certain developmental courses. A student must re-enroll to receive credit.	0
COM	Completed. Given in non-credit and continuing education courses.	0

Link to Policies in Catalog and Student Handbook

Here's the link to the HCC Catalog and Student Handbook: <https://catalog.hccs.edu/> (<https://catalog.hccs.edu/>)

In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search
- Childcare
- Ability Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services
- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

Link to HCC Academic Integrity Statement

<https://www.hccs.edu/student-conduct> (<https://www.hccs.edu/student-conduct>) (scroll down to subsections)

Campus Carry Link

Here's the link to the HCC information about Campus Carry:

<https://www.hccs.edu/campuscarry> (<https://www.hccs.edu/campuscarry>)

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go [to HCC Eagle ID \(https://www.hccs.edu/email\)](https://www.hccs.edu/email) and activate it now. You may also use Canvas Inbox to communicate.

Office of Institutional Equity

Use the following link to access the HCC Office of Institutional Equity, Inclusion, and Engagement: <https://www.hccs.edu/eoo> (<https://www.hccs.edu/eoo>)

Ability Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term conditions, mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <https://www.hccs.edu/accessibility> (<https://www.hccs.edu/accessibility>)

Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271
Houston, TX 77266-7517 or Institutional.Equity@hccs.edu (<mailto:Institutional.Equity@hccs.edu>)

<https://www.hccs.edu/titleix> (<https://www.hccs.edu/titleix>)

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/> (<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/>)

Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments
- Participating in class activities

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as a guide.

Canvas Learning Management System

Canvas is HCC's Learning Management System (LMS), and can be accessed at the following URL:

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HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

HCC Online Information and Policies

Here is the link to information about HCC Online classes, which includes access to the required Online Information Class Preview for all fully online classes: <https://www.hccs.edu/online/> (<https://www.hccs.edu/online/>)

Scoring Rubrics, Sample Assignments, etc.

Look in Canvas for the scoring rubrics for assignments, samples of class assignments, and other information to assist you in the course. <https://eagleonline.hccs.edu/> (<https://eagleonline.hccs.edu/>)

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
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- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the [HCCS Student Handbook](https://www.hccs.edu/studenthandbook) (<https://www.hccs.edu/studenthandbook>)

Sensitive or Mature Course Content

In this college-level course, we may occasionally discuss sensitive or mature content. All members of the classroom environment, from your instructor to your fellow students, are expected to handle potentially controversial subjects with respect and consideration for one another's varied experiences and values.

EGLS3

The EGLS³ ([Evaluation for Greater Learning Student Survey System](https://www.hccs.edu/egls3) (<https://www.hccs.edu/egls3>)) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

<https://www.hccs.edu/egls3> (<https://www.hccs.edu/egls3>)

Housing and Food Assistance for Students

If you are experiencing any hardship related to food, shelter, mental health, or other basic needs areas, please visit the Basic

Needs page for resources (<https://www.hccs.edu/cares> (<https://www.hccs.edu/cares>)). You have the option to take the Basic Needs Questionnaire and ask to be contacted by a counselor for additional assistance or support (<https://www.hccs.edu/basicneeds> (<https://www.hccs.edu/basicneeds>)). Furthermore, please notify the professor if you are comfortable doing so.

Student Resources

Tutoring

HCC provides free and convenient academic support, in a large variety of subjects, to HCC students in both an online environment and in-person on campus. Tutoring is provided by HCC personnel in order to ensure that it is appropriate. Visit the HCC Tutoring Services website for more information at <https://hccs.edu/tutoring> (<https://hccs.edu/tutoring>).

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at <https://library.hccs.edu> (<https://library.hccs.edu>).

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at <https://www.hccs.edu/supplemental-instruction> (<https://www.hccs.edu/supplemental-instruction>)

Resources for Students:

<https://www.hccs.edu/covid19students> (<https://www.hccs.edu/covid19students>)

Basic Needs Resources:

<https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/> (<https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/>)

Student Basic Needs Application:

<https://www.hccs.edu/basicneeds> (<https://www.hccs.edu/basicneeds>)

COVID-19

Here's the link to the HCC information about COVID-19:

<https://www.hccs.edu/covid-19> (<https://www.hccs.edu/covid-19>)

Instructional Modalities

In-Person (P)

Safe, face-to-face course with scheduled dates and times

Online on a Schedule (WS)

Fully online course with virtual meetings at scheduled dates and times

Online Anytime (WW)

Traditional online course without scheduled meetings

Hybrid (H)

Course that meets safely 50% face-to-face and 50% virtually

Hybrid Lab (HL)

Lab class that meets safely 50% face-to-face and 50% virtually

Copyright Statement

In order to uphold the integrity of the academic environment and protect and foster a cohesive learning environment for all, HCC prohibits unauthorized use of course materials. Materials shared in this course are based on my professional knowledge and experience and are presented in an educational context for the students in the course. Authorized use of course materials is limited to personal study or educational uses. Material should not be shared, distributed, or sold outside the course without permission. Students are also explicitly forbidden in all circumstances from plagiarizing or appropriating course materials. This includes but is not limited to publically posting quizzes, essays, or other materials. This prohibition extends not only during this course, but after. Sharing of the materials in any context will be a violation of the HCC Student Code of Conduct and may subject the student to discipline, as well as any applicable civil or criminal liability. Consequences for unauthorized sharing, plagiarizing, or other methods of academic dishonesty may range from a 0 on the specified assignment and/or up to expulsion from Houston Community College. Questions about this policy may be directed to me or to the Manager of Student Conduct and Academic Integrity.

Unauthorized Disclosure

"Unauthorized disclosure" occurs when any student provides instructional materials and/or assessments to other students in violation of a clear prohibition by the instructor. Examples include: posting assessment items to online sites such as Chegg or CourseHero; asking exam questions in forums like Reddit or Yahoo Answers; discussions of confidential question using Wechat or GroupMe, etc.

Course Calendar

Syllabus Modifications

The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

1358 COURSE CALENDAR – Spring 2023

23-0116

Please always follow up the calendar updates at your Canvas' weekly Modules)

Week#	Spring 2023	Units	Descriptions	Assignment
Wk.1	Jan 19	Orientation	-Syllabus & HCC policies overview: Attendance, Withdrawal, Grading -Student responsibilities: Deadlines, Exam Reviews, Exam days, Projects -Basic requirements: Assignments drawn by AutoCAD or a CAD software. -Drafting tools, textbook. Special Notes: One Point policy	Syllabus Quiz

Wk.2	Jan 26	Chapter 1	BASIC DRAFTING TECHNIQUES	Assg. # 1
		Chapter 2	BLOCK DIAGRAMS Block Diagram, Flow Diagram, and Single Line Diagram	Assg. #2
Wk.3	Feb 2	Chapter 3	ELECTRONIC COMPONENTS & SYMBOLS (1of2) Passive, Components	Assg #3a
Wk.4	Feb 9	Chapter 3 (cont.)	ELECTRONIC COMPONENTS & SYMBOLS (2of2) Active, Electro-mechanical Components	Assg. #3b
Wk.5	Feb 16	Chapter 4	SCHEMATIC DIAGRAM	Assg #4
Wk.6	Feb 23	Chapter 5	LOGIC DIAGRAM	Assg #5
Wk.7	Mar 2	Chapter 6	PICTORIAL COMPONENTS vs. CIRCUIT SYMBOLS SELF-REVIEW for Exam-1 (Coverage: Chapters 1, 2, 3, 4, 5)	Assg. #6
Wk.8	Mar 9		EXAM-1	
Wk.9	Mar 16		SPRING BREAK – No class	
Wk.10	Mar 23	Chapter 7	PRINTED CIRCUIT ARTWORK 1&2	Assg #7 (Special Project)
Wk.11	Mar 30	Chapter 8 (cont.)	MULTI-STEP PROCESS FOR A PCB CONSTRUCTION	Assg #8
Wk.12	Apr 6	Chapter 9	SMT ASSEMBLY LAYOUT SELF-REVIEW for Exam-2 (Chapters 6,7,8,9,10)	Assg #9
Wk.13	Apr 13	Chapter 10	AutoCAD CIRCUIT DIAGRAM (real-world SKETCH from ENGINEER) EXAM-2	Assg #10

Wk.14	Apr 20	Chapter 11 (new)	INTRO TO ELECTRICAL WIRING DIAGRAM Wiring Diagram for residential house	Assg #11
Wk.15	Apr 27		SELF-REVIEW for Final Exam (Coverage: all Chapters)	
Wk.16	May 4		All-chapter reviews <i>Early Final Exam for qualified students</i>	
Wk.17	May 11		FINAL EXAM	

Additional Information

Departmental/Program Information

The mission of the Drafting and Design Engineering Technology Program is to provide the most current technical training in Architectural or Engineering Design Drafting disciplines.

AWARD TYPES: Associate in Science, Certificate Level 1

We offer degrees in 6 specializations: General, Architectural, Civil, Electrical, Mechanical, Piping.

For study plans and additional information visit:

<https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/drafting--design-engineering-technology/> (<https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/drafting--design-engineering-technology/>)

Students are strongly encouraged to register at HCC Career Services. It provides valuable resources on professional resume preparation, access to current job openings and future career fairs.

<https://www.hccs.edu/support-services/career-planning/> (<https://www.hccs.edu/support-services/career-planning/>)

Process for Expressing Concerns about the Course

If you have concerns about any aspect of this course, please reach out to your instructor for assistance first. If your instructor is not able to assist you, then you may wish to contact the Department Chair.

Minh Pham

minh.pham@hccs.edu

713-718-8410