



Programming for Engineers-18403

ENGR-2304

RT 2022 Section 1 3 Credits 01/18/2022 to 05/15/2022 Modified 01/17/2022

Course Meetings

Course Modality

Hybrid Lab. First two weeks are online in Webex.

Meeting Days

Tuesday/Thursday

Meeting Times

4:00 - 5:50 pm

Meeting Location

Fraga Academic Campus room SESTEM 203 or Virtual

Welcome and Instructor Information

Instructor: Professor June Keller

Email: June.Keller@hccs.edu

Office: Alief Hayes Room A415

Phone: 713-718-8866

Website: <https://learning.hccs.edu/faculty/june.keller> (<https://learning.hccs.edu/faculty/june.keller>)

What's Exciting About This Course

This course is part of a sequence of Engineering courses needed for the Associate of Science in Engineering Science [ASES] degree. This course is intended for those who are planning to major in any branch of engineering or for those planning to have a career in engineering. The materials that will be covered in the course will include problems solving algorithm for advanced topics in engineering/calculus and application of technology for solving them. Emphasis will be on the use of Microsoft Excel-a popular spreadsheet program to solve engineering problems and MATLAB-a powerful programming analysis tool. These programs permit engineers to carry out very lengthy calculations very easily, without getting bogged down in complicated mathematical procedures.

My Personal Welcome

Welcome to ENGR 2304 Computer Programming for Engineers –I'm delighted that you have chosen this course! One of my passions is to share as much as I can with my students and set you up for success. I will present the information in the most exciting way I know, so that you can grasp the concepts and apply them now and hopefully throughout your life.

As you read and wrestle with new ideas and facts that may challenge you, I am available to support you. The fastest way to reach me is by my HCC email. The best way to really discuss issues is in person and I'm available during posted office hours to tackle the questions. My goal is for you to walk out of the course with an excellent understanding of programming using the MatLab

language. So please visit me or contact me by email whenever you have a question.

Preferred Method of Contact

The preferred method of contact is via CANVAS email. Another option is to use my HCC email with your name, course number, course CRN included in the Subject Line. I will respond to emails within 36 hours Monday through Friday; I will reply to weekend messages on Monday mornings.

Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear the concerns and just to discuss course topics.

Office Hours

See Schedule in CANVAS

Instructor: Professor June Keller

Email: June.Keller@hccs.edu

Office: Alief Hayes Room A415

Phone: 713-718-8866

Website: <https://learning.hccs.edu/faculty/june.keller> (<https://learning.hccs.edu/faculty/june.keller>)

Professor website: <https://learning.hccs.edu/faculty/june.keller>

Course Overview

Course Description

Course designed for students who intend to obtain a degree in an engineering discipline. Course covers problem solving, algorithm development for advanced topics in engineering and mathematics.

Requisites

Course Prerequisite is MATH 2413 [Calculus I] with a grade of C or higher.

Recommended Co-requisite is MATH 2414 (Calculus II).

Department Website

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

Core Curriculum Objectives (CCOs)

Engineering ENGR courses are not HCC core curriculum courses and thus do not have any CCOs.

HCC offers specified courses that satisfy the following core objectives:

- Critical Thinking:
- Communication Skills:
- Quantitative and Empirical Literacy
- Teamwork
- Social Responsibility
- Personal Responsibility

To learn more go to: <https://www.hccs.edu/programs/catalog/academic-information/>

This course integrates the following workplace competencies and foundation skills:

- Managing Resources: Time, Materials, Space

- Exhibiting Interpersonal Skills: Work in team, Lead work teams, Negotiate with others
- Working with Information: Acquire and evaluate data, Organize and Maintain information,
- Interpret and communicate data, Process information
- Applying Systems Knowledge: Understand systems
- Using Technology: Apply technology to specific tasks
- Demonstrating Basic Skills: Reading, Writing, Listening
- Demonstrating Thinking Skills: Creative thinking, Problem solving, Seeing with the mind's eye

Exhibiting Personal Qualities: In

Student Learning Outcomes and Objectives

Course Overview

The objective is to introduce and reinforce the use of problem-solving methodology as practiced by the engineering profession in general and as applied to the use of computers to solve some problems in particular.

Program Student Learning Outcomes (PSLOs) relevant to E2304

PSLO2: The ability to apply knowledge of mathematics, science and engineering.

PSLO4: The ability to communicate effectively.

Course Student Learning Outcomes (CSLOs)

1. Use matrix and array operations for equation solving.
2. Identify the strengths and weaknesses of the conventional programming languages.
3. Use spreadsheets and their built-in features to solve a variety of engineering problems, applying both quantitative and qualitative methodologies.
4. Describe methods for the design of programs that control equipment or analyze data.
5. Write computer programs to solve engineering problems and perform engineering simulations using common software tools.
6. Graphically present engineering data, results and conclusions.

Learning Objectives:

1. Use Excel and Matlab to solve problems that require mathematical manipulations and graphing.
2. Create Matlab script files that include input/output, conditional control structures, looping, arrays, and functions.
3. Perform a simple analysis of numerical data including mean, mode, median, standard deviation, linear regression and correlation using Excel and Matlab.
4. Find the roots of linear and non-linear equations using Excel and Matlab.
5. Perform simple matrix operations and solve systems of linear equations using Excel and Matlab.
6. Simulate an engineering phenomenon using input/output, control structures, looping, arrays and functions.

Complete a team or individual design project using Excel and Matlab.

Departmental Practices and Procedures

E2304 Department Specific Instructor and Student Responsibilities

ENGINEERING Department Information and Policies

In this course it is expected that the student has access to the necessary technology and has a back up plan in place.

Technology includes:

** a computer or laptop that you can download programs to

** a reliable high-speed internet connection

** working web camera [webcam]

** working microphone

Students should have a backup plan if their primary technology fails.

If your technology fails during an exam/quiz/timed assignment, you are expected to take screenshots including the address bar and immediately contact the professor. You can download the CANVAS app to your cellphone to do this.

ENGR courses cannot be completed using a tablet or cell-phone.

All Engineering courses utilize CANVAS and utilize proctored exams which require a webcam. This will require students to install a copy of the Respondus software known as Lockdown Browser on their personal computers. **Lockdown Browser** is not available for download on Chromebooks or other non-Windows/Mac devices - the specialized software used and nature of ENGR courses is incompatible with using iPad or other tablet devices or your cell phone.

Some ENGR courses utilize Proctorio in the CONNECT system and this also requires a webcam.

If you cannot start your exam or assignment that requires use of Respondus or Connect/Proctorio with a webcam, then you will be required to come into the HCC Alief Hayes Campus and take the exam in-person, on an HCC computer in either A411 or A410 between 8 am - 6 pm, Monday-Friday. You must arrange this with your professor before coming to campus.

Active participation in the classroom will be consistent with HCC policy [<https://www.hccs.edu/online/student-support/>]. In ENGR active participation includes responding verbally when requested, responding in the Chat when requested, briefly turning on your webcam when requested, participating in breakout sessions, responding to polls, and additional requirements that may be defined at the discretion of your professor.

Some HCC ENGR courses require you to purchase or download programs in order to complete your assignments. A large percentage of engineering applications used in industry and in your engineering education require the Windows operating system. These applications will not run natively on macOS. In addition, some programs are not even available in a Mac version.

All HCC ENGR course software is Windows-based. The classes are taught using Windows-based versions of the program. No support is provided to students using Mac versions or to students running Windows and macOS in parallel.

This section of ENGR 2304 will require you to set up an account with Mathworks and download a copy of MatLab to your personal computer so that you may complete programs. Instructions are given in CANVAS. You will also need to download Excel and make additions to Excel. Notify your professor immediately if you cannot download either of these programs for acceptable alternatives.

You will also need access to some sort of word processor [like Word], spreadsheet program [like Excel] and presentation program [like Powerpoint]. Microsoft Office360 is available for free to all students at HCC and instructions are available in CANVAS for downloading.

For online classes, all students are required to complete an online orientation. *WS, HY and HL courses require an online orientation.* Students are expected to log in several times a week, check announcements and emails and complete assigned work.

This section of ENGR 2304 will use Canvas (<https://eagleonline.hccs.edu>) to supplement in-class assignments, exams, and activities. For *Spring 2022*, this course will be conducted using CANVAS for all modalities (HL, P). Certain assignments will be conducted only in Canvas. Certain assignments will only be conducted during scheduled class meeting times with no make-ups available.

Students should check their HCC student email regularly or have an email that is linked to the college email system. Students are also responsible for checking CANVAS on a regular basis for updates, new assignments, changes, etc. The professor will not send both an email and post in CANVAS. All assessments will have a grade posted in CANVAS even if you did not submit anything to CANVAS.

HCCS Open Lab locations may be used to access the Internet and Canvas. The libraries also have computers available for student use and you can check Chromebooks out from the library with your Student ID. <https://library.hccs.edu/chromebooks>

USE **FIREFOX** OR **CHROME** AS THE INTERNET BROWSER.

As of November 13, 2021 it is planned that the Open labs and Libraries will have full access for students who are enrolled in Fall 2021 courses. However; this can change at any time before or during the semester.

E2304 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. *For this Spring 2022 16-week, 3-credit, 64 contact hour WS course, this equates to 12 hours per week total.* Additional time will be required for written assignments and perhaps a team project. 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.

As an instructor, I want my students to be successful. I feel that it is my responsibility to provide you with knowledge concerning the field of engineering, modeling good teaching and learning strategies, and organizing and monitoring the design project that allows you to connect the information that you learn in this course to the real world of engineering.

As a student wanting to learn about the field of engineering, it is your responsibility to read the textbook, submit assignments on the due dates, study for the exams, participate in classroom activities, attend class, and enjoy yourself while experiencing the real world of a college education. The skills learned in this class are important keys to success. **The keys to success are EFFORT, APPROACH and ATTITUDE.**

As I believe that engaging the students in the learning is essential for teaching to be effective, you will spend the majority of class time involved in collaborative activities. You will be involved in discussions with your classmates and your instructor. As you will want to contribute to these discussions, you will need to come to class prepared to discuss, analyze and evaluate information from your text and other assigned readings.

Instructional Materials and Resources

Instructional Materials

The [HCC Online Bookstore \(https://hccs.bnccollege.com/shop/hccs-central/page/find-textbooks\)](https://hccs.bnccollege.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.

Matlab for Engineers

Author: Chapman

Publisher: Cengage

Edition: 6th

ISBN: 9780357127056

Availability: First Day / Inclusive Access

YOU HAVE ALREADY PURCHASED THE e-TEXTBOOK WHEN YOU REGISTERED AND PAID FOR THE COURSE!

To enhance your learning experience and provide affordable access to the right course materials, this course is part of the HCC Textbook Savings program that provides inclusive access to course materials. You can easily access the required materials for this course at a discounted price, and you will benefit from single sign-on access with no codes required in Canvas.

Your Houston Community College student account was billed for these materials at the time of registration and the price is guaranteed to be the lowest cost available for your required materials.

It is **NOT** recommended that you opt-out of these materials, as they are required to complete the course. You may choose to opt-out prior to Census Date, but you will then be responsible for purchasing your course materials at the full retail price and access to your materials may be suspended. The opt-out process would be for students who already have an access code because they are repeating the course or already purchased materials.

Students who opt out will receive a credit to their student account within two weeks of the official day of record from the Bursars Office. The Official Day of Record for this term is January 31, 2022. If you desire discounted loose-leaf printed course materials, you can do so from the bookstore after the official day of record for approximately \$25-35.

Bring your textbook to every class. If you purchase an e-book, then bring your own reader (or computer) to class. The classroom computers or your cellphone may not be used as an e-reader.

E2304 Courseware

There is no publisher courseware required for E2304.

✓ Course Requirements

Assignments, Exams, and Activities

Type	Weight	Topic	Notes
Grading Scheme ENGR 2304			20% CW, HW, Discussions, Summaries 10% Quizzes 5% Project (individual) 13.3% Exam #1 Matlab 13.4% Exam #2 Matlab 13.3% Exam #3 Excel 20% Final Comprehensive Exam 5% Professionalism & Attendance
Written Assignment			Written assignments are designed to measure the students' ability to meet Program Student Learning Objectives PSLO#4, "The ability to communicate effectively".
E2304 In-Class and Out-of-Class Activities			Activities are designed to meet all the Course Student Learning Objectives and are a mixture of individual and term activities in order to meet PSLO#3, "The ability to function on multi-disciplinary team". In-class and out-of-class activities include working in groups to solve problems. The percentage is in the CW, HW, Discussions, Summaries.
CW, HW, Discussions, Summaries	20%		Written assignments include CW, HW, Discussions, Summaries.

Type	Weight	Topic	Notes
Exams/Quizzes			Exams measure how well the students meet the Course Student Learning Objectives and are a mixture of multiple choice, true/false, short answer, matching, essay, demonstration, application problems and programs, sketches/drawings, model generation, diagrams/schematics, data acquisition and analysis, etc. Some instructors may require a Scantron and HCC does not provide students with Scantron forms. They are sold in campus bookstores.
E2304 Exams Quizzes	40% Exams, 10% quizzes		There are 3 exams worth a total of 40%. There are several quizzes worth a total of 10%.
Final Exam			
E2304 Final Exam	20%		<p>All students will be required to take a comprehensive written final exam. Students must provide their own Scantron forms (FORM NUMBER 882-E-LOVAS) if the instructor gives a final exam requiring a Scantron.</p> <p>Students who are absent from the final exam without discussing their absence with the instructor in advance will receive a final grade of zero and a course grade of F.</p> <p>Final Exams must be taken in accordance with the Schedule posted at the following link: https://www.hccs.edu/student-experience/events-calender/</p>
E2304 Project	5%		The project is designed to measure the student's ability to apply the principle of this course and to communicate effectively in all three modalities – verbal, oral and visual. For E2304, the project will deliver a MatLab program [in MATLAB & Simulink], a written report and a verbal report at a minimum. Further details are in CANVAS.
E2304 Attendance / Professionalism	5%		<p>Attendance is directly correlated with student success. Attendance is required for all students in this course and each undocumented absence is penalized proportionally. Students who are present for all classes will receive the full credit for this assignment.</p> <p>Each class you miss will lower your attendance grade. If you miss more than 4 classes, you will be administratively dropped in accordance with the HCC 12.5% attendance policy.</p>
Extra Credit			
E2304 Extra Credit	0		<p>There is liberal Extra Credit in this course.</p> <p>It is NOT graded until after you take the final exam and then only if you are within 1.5 points of a letter grade change.</p> <p>Extra Credit is never accepted late.</p> <p>The professor has final discretion as to how much the extra credit is worth.</p> <p>Since there is liberal extra credit, I do not round grades. A grade of 79.7 is a 'C', not a 'B'.</p>

Type	Weight	Topic	Notes																																						
E2304 Grading Formula			<h2 style="text-align: center;">Grading Formula</h2> <p>Final grades are based on:</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>Attendance</td> <td style="text-align: right;">5%</td> </tr> <tr> <td>HW, CW, Discussion, Summaries</td> <td style="text-align: right;">20%</td> </tr> <tr> <td>Quiz</td> <td style="text-align: right;">10%</td> </tr> <tr> <td>Project</td> <td style="text-align: right;">5%</td> </tr> <tr> <td>Exam #1 (MATLAB)</td> <td style="text-align: right;">13 1/3%</td> </tr> <tr> <td>Exam #2 (MATLAB)</td> <td style="text-align: right;">13 1/3%</td> </tr> <tr> <td>Exam #3 (Excel)</td> <td style="text-align: right;">13 1/3%</td> </tr> <tr> <td>Final Exam (Comprehensive)</td> <td style="text-align: right;">20%</td> </tr> <tr> <td colspan="2" style="text-align: center;"><hr style="width: 20%; margin: 0 auto;"/></td> </tr> <tr> <td>Total</td> <td style="text-align: right;">100%</td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="6" style="text-align: center;">The course grade is then obtained from the overall score:</td> </tr> <tr> <td style="text-align: center;">Final Score</td> <td style="text-align: center;">90 - 100</td> <td style="text-align: center;">80 - 89</td> <td style="text-align: center;">70 - 79</td> <td style="text-align: center;">60 - 69</td> <td style="text-align: center;">< 60</td> </tr> <tr> <td style="text-align: center;">Letter Grade</td> <td style="text-align: center;">A</td> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> <td style="text-align: center;">D</td> <td style="text-align: center;">F</td> </tr> </table> <p>None of these are optional, i.e. you must take the final exam, the written exam, complete the project/Labs, etc. to pass this course.</p> <p>Personal projects may be given for extra credits.</p> <p><u>The "Total" column of the gradebook available in CANVAS may not represent an accurate calculation of your final grade in the course as the Total is calculated based only on the work that has been completed, always refer to the grading formula in the syllabus for maximum accuracy (see above).</u></p>	Attendance	5%	HW, CW, Discussion, Summaries	20%	Quiz	10%	Project	5%	Exam #1 (MATLAB)	13 1/3%	Exam #2 (MATLAB)	13 1/3%	Exam #3 (Excel)	13 1/3%	Final Exam (Comprehensive)	20%	<hr style="width: 20%; margin: 0 auto;"/>		Total	100%	The course grade is then obtained from the overall score:						Final Score	90 - 100	80 - 89	70 - 79	60 - 69	< 60	Letter Grade	A	B	C	D	F
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Grading Formula

Grade	Range	Notes
E2304 Grading Formula		<p>ENGR follows the HCC Grading Scale.</p> <p>HCC Grading Scale can be found on this site under Academic Information:</p> <p>http://www.hccs.edu/resources-for/current-students/student-handbook/</p>
A	90 - 100	
B	80 - 89	

Grade	Range	Notes
C	70 - 79	
D	60 - 69	
F	below 60	

* Instructor's Practices and Procedures

E2304 Incomplete Policy

See the student handbook on the policy for an Incomplete Grade. In all cases, the instructor reserves the right to decline a student's request to receive a grade of Incomplete.

E2304 Missed Assignments / Makeup Policy

Make-up assignments of any form including quizzes and exams will not normally be given, so make every effort to take the exams on the scheduled dates. Inform me ahead of time if you have a serious excuse to miss an exam. Notify me immediately if you are faced with circumstances that might prevent timely submission and I will work with you if/when they occur.

Work is due when it is due. I will not re-open assignments.

Extra Credit is never accepted late.

Missed exam are not a re-take and will be measurably more difficult that the original exam.

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>)

E2304 Academic Integrity

A student who is academically dishonest is, by definition, not showing that the coursework has been learned, and that student is claiming an advantage not available to other students. The instructor is responsible for measuring each student's individual achievements and also for ensuring that all students compete on a level playing field. Thus, in our system, the instructor has teaching, grading, and enforcement roles. You are expected to be familiar with the University's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. "Scholastic dishonesty": includes, but is not limited to, cheating on a test, plagiarism, and collusion.

Cheating on a test includes:

- Copying from another students' test paper;
- Using materials not authorized by the person giving the test;
- Collaborating with another student during a test without authorization;
- Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test that has not been administered;
- Bribing another person to obtain a test that is to be

Plagiarism means the appropriation of another's work and the unacknowledged incorporation of that work in one's own written work offered for credit.

Collusion mean the unauthorized collaboration with another person in preparing written work offered for credit. Possible punishments for academic dishonesty may include a grade of 0 or F in the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook)

In simplified terms, cheating is: (1) taking unchanged passages (or slightly edited) from another person's work and editing and portraying them as one's own; (2) submitting a paper that includes paraphrases of another person's writing without giving credit; (3) having someone else write your paper for you; (4) copying or using another person's work during in-class writing or testing; and (5) the unauthorized use of electronic devices during in-class writing or testing.

Keep in mind also that whether you are cheating or not, not following testing or writing rules properly, such as communicating with your neighbor or using a cell phone during a test will be construed as cheating. This is not an exhaustive list of the forms of scholastic dishonesty. If you are in doubt, consult your instructor.

Penalties for Scholastic Dishonesty range from a zero (0) on the assignment to failure of the course to suspension and/or expulsion from HCC.

Academic dishonesty is not acceptable and will incur serious consequences. A student caught cheating on a regular homework or classwork assignment could be given a grade of -100% for that item in the grade book. Students caught cheating will not be eligible for any extra credit opportunities or exam curves that may be instituted for the remainder of the semester. Students caught cheating may be required to do ALL of their work on HCC computers. ***If a student is caught cheating on any assignment or assessment, a grade of F may be issued for the entire course grade. What constitutes cheating is determined by the instructor, not the student.***

Scholastic Dishonesty will result in a referral to the Dean of Student Services. See the link below for details.

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

<http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/>

This is the wording that the ENGR Dept agreed upon.

Copy/paste it into the Academic Integrity section and then delete this one.

E2304 Attendance Procedures

All ENGR courses are scheduled whether they are HYBRID [HL or HY], ONLINE ON A SCHEDULE [WS] or IN PERSON [P] modality.

Faculty will hold class as per the assigned schedule, and students will attend each class period whether online [WS, HY and HL] or in-person [HY, HL and P]. Canvas Eagle Online will be utilized for all modalities of class. Attendance will be taken each class period. Students are expected to turn on their cameras for attendance purposes. You are also required to sign in and out of the chat to assist in attendance.

Class Attendance - It is important that you come to class! Attending class regularly is the best way to succeed in this class. Research has shown that the single most important factor in student success is attendance. Simply put, going to class greatly increases your ability to succeed. You are expected to attend all lecture and labs regularly. You are expected to participate in outside class activities. You are responsible for materials covered during your absences. Class attendance is checked daily. Although it is your responsibility to drop a course for nonattendance, **the instructor has the authority to drop you for excessive absences.**

If you are not attending class, you are not learning the information. As the information that is discussed in class is important for your career, students may be dropped from a course after accumulating absences in excess of 12.5% hours of instruction. The 12.5 % hours of class time would include any total classes missed or for excessive tardiness or leaving class early. If you are

more than 15 minutes late to class, the instructor reserves the right to mark you absent for the entire class period.

Although it is the responsibility of the student to withdraw officially from a course, the professor also has the authority to block a student from accessing CANVAS, and/or to withdraw a student for excessive absences or failure to participate regularly. Online students who do not log into their CANVAS class before the Official day of Record will be automatically dropped for non-attendance. Completing the DE online orientation does not count as attendance.

Attendance sign-in. Students are responsible for signing in at each class period.

STUDENTS WHO MISS MORE THAN 8 HOURS CUMULATIVE SHOULD EXPECT TO RECEIVE A COURSE GRADE OF "F." TARDIES COUNT TOWARDS THE TOTAL ABSENCES.

This reflects the 12.5% attendance policy addressed in the student handbook for this 3-credit, 64-hour course.

If some unavoidable situation arises which causes you to miss class, then please keep me advised. Please be on time for class. Leaving class during the lecture is inconsiderate to others and will not be tolerated. Class starts promptly.

You may decide NOT to come to class for whatever reason. As an adult making the decision not to attend, you do not have to notify the instructor prior to missing a class. However, if this happens too many times, you may suddenly find that you have "lost" the class.

Poor attendance records tend to correlate with poor grades. If you miss any class, including the first week, you are responsible for all material missed. It is a good idea to find a friend or a buddy in class who would be willing to share class notes or discussion or be able to hand in paper if you unavoidably miss a class.

Class attendance equals class success. Certain assignments will be done ONLY in class during the regularly class period and cannot be made up.

If you feel that you cannot complete this course, you will need to withdraw from the course prior to the final date of withdrawal. Before, you withdraw from your course; please take the time to meet with the instructor to discuss why you feel it is necessary to do so. The instructor may be able to provide you with suggestions that would enable you to complete the course. Your success is very important. Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than SIX total course withdrawals throughout their educational career in obtaining a certificate and/or degree.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor may "alert" you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

If you plan on withdrawing from your class, you **MUST** contact a HCC counselor or your professor prior to withdrawing (dropping) the class for approval and this must be done **PRIOR** to the withdrawal deadline to receive a "W" on your transcript. **Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online registration calendars, HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines.

<https://www.hccs.edu/student-experience/events-calendar/> (<https://www.hccs.edu/student-experience/events-calendar/>)

Remember to allow a 24-hour response time when communicating via email and/or telephone with a professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline. If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade. The professor CANNOT withdraw you after the deadline.

E2304 Student Conduct

As your instructor and as a student in this class, it is our shared responsibility to develop and maintain a positive learning environment for everyone. Your instructor takes this responsibility very seriously and will inform members of the class if their behavior makes it difficult for him/her to carry out this task. As a fellow learner, you are asked to respect the learning needs of your classmates and assist your instructor achieve this critical goal.

Attendance is strongly recommended. It is the rare student who can learn material on their own and do well in a class they do not attend. For the benefit of your fellow classmates and me, please refrain from regularly arriving late to class or leaving early. In addition, please do not disturb the class with pagers, phones, or conversation with your fellow students during class. Needless to say, this is extremely distracting and rude to others and the instructor.

In addition, it is *common courtesy* if you need to leave a "meeting" early, you notify the "manager" who is conducting the meeting and you sit close to the exit door. You also will be expected to go to the restroom, get a drink, return phone messages, etc. before you enter the "meeting", so please begin practicing these behaviors now before you enter the "real life classroom", ie. the workplace.

For an online class you need to notify the Professor in the Chat. If you need to step away for a minute, notify the Professor in the Chat when you leave and when you return.

Regularly violating these common courtesy rules will detract from your final grade in the class.

Virtual Classroom Conduct

As with on-campus classes, all students in HCC Online courses are required to follow all HCC Policies & Procedures, the Student Code of Conduct, the Student Handbook, and relevant sections of the Texas Education Code when interacting and communicating in a virtual classroom with your professor and fellow students. Students who violate the policies and guidelines will be subject to disciplinary action that could include denial of access to course-related email, discussion groups, and chat room or even removal from the class.

<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/>

Specific guidance related to Virtual Classroom Conduct is given in CANVAS.

In short:

Dress appropriately.

Be present, remove distractions such as pets, roommates, cell phones, sidebar chats, other tabs, etc.

Video on whenever requested.

Mute your microphone.

Be mindful of your background.

Test your technology before class each and every time.

Be on time.

Be prepared to engage.

Have necessary materials ready [files opened, CANVAS open, textbook open, courseware open, etc]

This is wording developed by the Dept.

Copy/Paste into the section on Student Conduct, then erase this one.

If you have some other specific conduct language, then notify the Program Coordinator to change it for you in your specific course.

Instructor's Course-Specific Information

Time management is crucial.

You will not learn programming unless you do it. Although it is fine to work with a study group, each student should attempt all the problems and then come together to help each other finish.

Any assignment where it is allowable to work with a group, each group member must submit the assignment, and in the Comments note who you worked with. So suppose an assignment had 4 problems. You worked with different persons on different problems.

So your Comments would read:

Problem 1. Worked with Alice and Betty.

Problem 2. Worked with Alice, Betty and Cheryl.

Problem 3. Did by myself.

Problem 4. Worked with Cheryl.

E2304 Instructors Course Specific Information

The College will be closed February 21 for President's Day. The College will be closed March 14 – March 20 for Spring Break. The College will be closed April 15 – April 17 for Spring Holiday.

Homework Policy

Homework is due at the beginning of class on the due date. Students are encouraged to do homework before beginning of next class. Homework is to be done OUTSIDE of class. Class time is reserved for lecture and for class activities. Late homework completion may affect student's understanding and progress in consequent classes. *All homework is to be turned in as instructed in Eagle Online.*

Grading

The professor will conduct quizzes, exams, and assessments that you can use to determine how successful you are at achieving the course learning outcomes (mastery of course content and skills) outlined in the syllabus. If you find you are not mastering the material and skills, you are encouraged to reflect on how you study and prepare for each class. I welcome a dialogue on what you discover and may be able to assist you in finding resources on campus that will improve your performance.

The final course average will be computed using the following scale.

AVERAGE	GRADE
90% < =Final Average <=100%	A
80% < =Final Average <90%	B
70% <= Final Average <80%	C
60% <= Final Average <70%	D
Final Average < 60%	F

The "Total" column of the gradebook available in CANVAS may not represent an accurate calculation of your final grade in the course as the Total is calculated based only on the work that has been completed, always refer to the grading formula in the syllabus for maximum accuracy.

PLEASE NOTE THAT THE LAST DAY OF INSTRUCTION IS NO LATER than May 8, 2022. No work may be submitted after this date. The last day of instruction is the last class period prior to Final Exams. The specific date is in the syllabus.

FINAL EXAM:

Final exam will be given during the period May 9-15, 2022. The final exam schedule must be strictly adhered to and can be found at <https://www.hccs.edu/student-experience/events-calendar/> and clicking on Final Exam Schedule. The exact date, time and location will be given in the Syllabus. All ENGR Final Exams will be in-person for HL, HL and P classes and will be online for WS classes.

EXTRA CREDIT: Will be determined during the semester.

Please see the following link: <http://www.math.uh.edu/~tomforde/NoExtraCredit.html> . Change the words "Your Math" in the title to "Any". Extra credit will be available throughout the class and will not be accepted late.

Additional Materials:

You need something to keep your papers, notes, study papers, etc. organized. Any method is fine, just be able to get at the materials quickly.

Calculator: Any type of calculator allowable on the Fundamentals of Engineering exam may be used in class. NO PROGRAMMABLE CALCULATORS.

- Casio: All fx-115 and fx-991 models (Any Casio calculator must have "fx-115" or "fx-991" in its model name.)
- Hewlett Packard: The HP 33s and HP 35s models, but no others
- Texas Instruments: All TI-30X and TI-36X models (Any Texas Instruments calculator must have "TI-30X" or "TI-36X" in its model name.)

Cell phones may NOT be used as calculators. Programmable calculators may only be used with prior approval of the instructor and the memory must be cleared prior to use on any in-class activity.

Supplemental Materials: Will be provided by the professor at each class period.

Students are expected to have access workable computers of their own to be able to complete assignments, quizzes and exams. A cell phone or tablet is not sufficient to complete any Engineering course.

Please turn phones off or put them on vibrate mode. Listening devices, i.e., ipods, MP3's, etc. are to be stored away during class time. Text messaging is not allowed during class as it can be distracting to other students. **Abusers will be asked to leave class and marked absent.** Absences will effectively lower your course grade.

Students will be expected to download MatLab and Excel and Microsoft Office360. Instructions are given in CANVAS.

Devices

No programmable calculators.

Please bring a separate device if possible to access the textbook in our in-person sessions.

E2304 Devices

Use of recording devices, including camera phones and tape recorders, is prohibited in classrooms, laboratories, faculty offices, and other locations where instruction, tutoring, or testing occurs. Students with disabilities who need to use a recording device as a reasonable accommodation should contact the Office for Students with Disabilities for information regarding reasonable

accommodations.

Please turn phones off or put them on vibrate mode. Listening devices, i.e., ipods, MP3's, etc. are to be stored away during class time. Text messaging is not allowed during class as it can be distracting to other students. **Abusers will be asked to leave class and marked absent.** Absences will effectively lower your course grade.

E2304 Faculty Statement about 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. For this *Spring 2022* 16-week, 3-credit, 64 contact hour course, this equates to 12 hours per week total. Additional time will be required for the Project. 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.

As an instructor, I want my students to be successful. I feel that it is my responsibility to provide you with knowledge concerning the field of engineering, modeling good teaching and learning strategies, and organizing and monitoring the design project that allows you to connect the information that you learn in this course to the real world of engineering.

As a student wanting to learn about the field of engineering, it is your responsibility to read the textbook, submit assignments on the due dates, study for the exams, participate in classroom activities, attend class, and enjoy yourself while experiencing the real world of a college education. The skills learned in this class are important keys to success. **The keys to success are EFFORT, APPROACH and ATTITUDE.**

As I believe that engaging the students in the learning is essential for teaching to be effective, you will spend the majority of class time involved in collaborative activities. You will be involved in discussions with your classmates and your instructor. As you will want to contribute to these discussions, you will need to come to class prepared to discuss, analyze and evaluate information from your text and other assigned readings.

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

Houston Community College is committed to furthering the cause of social justice in our community and beyond. HCC does not discriminate on the basis of race, color, religion, sex, gender identity and expression, national origin, age, disability, sexual orientation, or veteran status. I fully support that commitment and, as such, will work to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. In this course, we share in the creation and maintenance of a positive and safe learning environment. Part of this process includes acknowledging and embracing the

differences among us in order to establish and reinforce that each one of us matters. I appreciate your suggestions about how to best maintain this environment of respect. If you experience any type of discrimination, please contact me and/or the Office of Institutional Equity at 713-718-8271.

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
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
- disAbility 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/eeo> (<https://www.hccs.edu/eeo>)

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:

<https://eagleonline.hccs.edu> (<https://eagleonline.hccs.edu>)

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
- 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/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

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

Student Resources

Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the [HCC Tutoring Services \(https://www.hccs.edu/tutoring\)](https://www.hccs.edu/tutoring) website for services provided.

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.

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.

Course Calendar

ENGR 2304 Tentative Schedule – Spring 2022

Professor Keller

CRN 18384 [T/Th 10:00 – 11:50 AM] – Alief A411

CRN 18368 [T/Th 4:00 – 5:50 PM] – Fraga SESTEM 203

Delivery Mode: Hybrid, first two weeks Online-On a Schedule

Week/Date	Reading Assignment	Module/Topic	Assignment/Labs
	Chapter/Sections	[in CANVAS]	See CANVAS for specific assignments.
Week 1		1	Complete Module 1.
January 18	CH 12	Class Introduction and Introduction to Programming - Flow Charts, PsuedoCode, Top-Down vs Object Oriented	
August 20	12.1-12.3		
	In CANVAS		
VIRTUAL			
Week 2		2	Complete Module 2.
January 25	CH 1	MatLab. Introduction to MatLab. Script Files.	
January 27	1.1 to 1.6		
VIRTUAL			

Week 3		3	
February 1	CH 2 2.1 – 2.5	MatLab. Variables. More Script Files. Vectors and Matrices. Load/Save.	QUIZ. Feb 1.
February 3	2.8 – 2.10 2.14 – 2.16	Built-in Matlab fns. Scaler, Vector and Array operations. Debugging script files.	Module 1 and Module 2
	CH 11 11.2		Start Module 3.
Week 4	MatLab. Exam #1. Sept 15	MatLab. Exam #1.	Exam #1. MatLab. Feb 10
February 8			Modules 1, 2, 3
February 10			
Week 5	CH 2, 3, 8	4	
February 15	3.1, 3.3, 3.5,	Input/Output & Plots. Complex Data.	
February 17	3.7 2.6, 2.7, 2.11 8.1 8.9		

Week 6			
February 22	CH 4	5	
	4.1 – 4.4		
February 24	4.8	MatLab. Selection Statements. Logical data. IF, IF-ELSE, SWITCH, TRY/CATCH. Roots of Polynomials. Relational Operators.	
Week 7	CH 5		
	5.1 – 5.3	6	
March 1	5.5	Loop Statements [WHILE loop, FOR loop]. Statistical Fns. Curve Fit.	
	5.7 – 5.19		
March 3		Vectorizing Code. Histograms.	
Week 8			QUIZ. MatLab.
March 8			Mar 11th.
			Module 4 and 5.
March 10			Complete Module 6, perhaps start Module 7.
March 14-21	SPRING BREAK	SPRING BREAK	SPRING BREAK
Week 9	CH 6	7	Start Module 7.
March 22	6.1 – 6.8		
	CH 7		
March 24	7.1 – 7.11	MatLab. User defined functions.	
Week 10			Finish Module 7.
March 29			Review on Oct 27 for Matlab Exam.
March 31			

<p>Week 11</p> <p>April 5</p> <p>April 7</p>	<p>Exam #2. Matlab. Nov 1.</p>	<p>Exam #2. Matlab. Nov 1.</p> <p>*Simulink</p>	<p>Exam #2. Matlab. Apr 5.</p> <p>Modules 4, 5, 6, and 7.</p> <p>Simulink is optional.</p>
<p>Week 12</p> <p>April 12</p> <p>April 14</p>	<p>All Excel Reading Assignments are in CANVAS.</p>	<p>Excel Module 1: Excel – Basics.</p> <p>Excel Module 2: Functions, Conditional Functions, Matrix Operations</p> <p>Excel Module 3: Data Mining</p>	
<p>Week 13</p> <p>April 19</p> <p>April 21</p>	<p>In CANVAS.</p>	<p>Excel Module 4: Charts</p> <p>Excel Module 5: Regression Analysis</p> <p>Excel Module 6: Using Goal Seek and Solver</p>	<p>Quiz Excel Modules 1, 2, 3. Apr 19.</p>
<p>Week 14</p> <p>April 26</p> <p>April 28</p>	<p>In CANVAS.</p>	<p>Excel Module 7: Statistics for Experimenters</p>	<p>Exam #3. Apr 28. Excel.</p>

Week 15			Projects due May 3 rd .
May 3			
May 5			Review for Final Exam.
Week 16	May 10, No class, Final Exam week.		Comprehensive Final exam May 12 during regular class period.
	May 12, Comprehensive Final Exam.		

*Simulink is introduced for student exposure but not tested. Students can use Simulink for project. Time permitting.

NOTE: Chapters 2, 4-7, and Sec 12.1 in Chapman are the critical concepts of MATLAB and if necessary, the optional topics will not be covered and the schedule adjusted.

Important Dates:

January 18, First Day of Classes.

January 31, Official Day of Record.

February 21, President’s Day. All college campuses are closed.

March 14-21 Spring Break. All college campuses are closed.

April 4th, Last day to withdraw, 16-week sessions [this class].

April 15-17, Spring Holiday. All college campuses are closed..

May 5th, Last Day of Instruction. No work accepted after this due date unless noted in the syllabus.

May 12th, Thursday, Comprehensive Final Exam during regular class period.

 **Additional Information**

Departmental/Program Information

HCC has a chapter of the Society of Hispanic Engineers [SHPE]. Contact Chapter Advisor June Keller.

ENGR Scholarships. The HCC Foundation has the Dr. Zachary Hodges ENGR Scholarship. See <https://www.hccsfoundation.org/page.aspx?pid=767> for more information and to apply.

HCC LSAMP Program. Applications are now open for Spring 2022. See this website for some general information <https://hcclsamp.org> or contact Mr. Jeff Stear for more specific information.

HCC Research Experiences for Undergraduates [REU] program. Contact Mr. Jeff Stear for more specific information.

ENGR Dept Learning Web - <https://learning.hccs.edu/programs/engineering>

DEPARTMENT CONTACT INFORMATION:

Dean – John Vasselli – john.vasselli@hccs.edu – 713-718-5690 – Alief Room A407.

Administrative Assistant – Mary Beth Hurd – mary.hurd@hccs.edu – 713-718-5690 – Alief Room A407.

Program Coordinator – June Keller – june.keller@hccs.edu – 713-718-8866 – Alief Room A415

Advisor – Dr. Sherin Isaac – sherin.isaac@hccs.edu – 713-718-5706. Email first and include your full name and student ID number. Dr. Isaac also provides information about the HCC-TAMU Chevron Engineering Academy.

STEM/REU/LSAMP Opportunities – Jeffrey Stear – jeffrey.stear@hccs.edu – 713-718-5784

Program Director STEM Initiatives, Externships, HCC-UH Engineering Academy – Susan Thompson – susan.thompson@hccs.edu – 713-718-5451. Ms. Thompson also provides information about the HCC-UH Engineering Academy at both Katy and Fraga campus locations.

ENGR does not have a department chair.

Process for Expressing Concerns about the Course

Always try to work out any issues with your professor first. If needed, because ENGR does not have a Department Chair, you will need to contact the Dean of Engineering. The current Dean is John J. Vasselli and he can be reached at john.vasselli@hccs.edu or 713-718-5690. His office is at Alief Hayes, Room A407.