This handbook is intended to be read in conjunction with the Graduate Catalog: https://catalog.tamucc.edu/graduate/degree/, the College of Graduate Studies Handbook http://gradcollege.tamucc.edu/current_students/masters_students.html and the departmental webpage http://gradcollege.tamucc.edu/degrees/science/computer_science.html
Computer Science program in Texas A&M University Corpus Christi successfully prepares students to meet with the market needs which is always dynamic. At graduate level, it is more than just classroom work, it includes giving graduate students opportunities to gain mastery of the skills needed to succeed in the industry. Our program demonstrates the market demands and help our students to proficiently meet these demands amidst competition.

Our computer science degree program is designed to prepare you to begin or advance your career in business, industry, government, or education. You can look forward to careers in video game development, Simulations Modeling and Digital Film Production. Whatever your interest is, database management, business programmer, system or network administrator our programs have been structured to help you meet your goals and positively impact lives.

This program equips professionals with knowledge necessary to develop, maintain, or manage complex computer-based information systems for organizations either in business, government, industry and or education.

Let’s get started!!!
The computer science program is committed to preparing students to:

- Advance computer science careers in business, industry, government, or education.
- Continue further study of computer science through the pursuit of advanced degrees.

These goals are achieved by offering a curriculum that is thorough, current, and oriented toward the technical competencies required of a modern computing professional with emphasis on the development, evaluation, and integration of software systems.
FACULTY AND STAFF

For a more comprehensive list visit: https://www.tamucc.edu/science/roster.php?program=gcs

Dulal Kar, Ph.D.
Professor of Computer Science
Office: CI 321
Phone: (361) 825-5878
dulal.kar@tamucc.edu

Chen Pan, Ph.D.
Assistant Professor
Office: CI 332
Phone: (361) 825-2898
chen.pan@tamucc.edu

Saman DeSilva, Ph.D.
Professional Assistant Professor
Office: EN 314G
Phone: (361) 825-3831
saman.desilva@tamucc.edu

Carlo Rubio Medrano, Ph.D.
Assistant Professor
Office: CI 327
Phone: mehdi.sookhak@tamucc.edu

Scott King, Ph.D.
Professor of Computer Science
Office: CI 324
Phone: (361) 825-5877
scott.king@tamucc.edu

Chandra Sekharan, Ph.D.
Professor and Chair
Office: CI 341
Phone: (361) 825-2478
chandra.sekharan@tamucc.edu

Minhua Huang, Ph.D.
Professional Assistant Professor
Office: EN 314A
Phone: (361) 825-3265
minhua.huang@tamucc.edu

Mehdi Sookhak
Assistant Professor
Office: CI 327
Phone: (361) 825-3622
mehdi.sookhak@tamucc.edu

Stanislav Ustymenko, Ph.D.
Professional Assistant Professor
Office: RFEB 361P
Phone: (361) 825-3625
stanislav.ustymenko@tamucc.edu

Ahmed Mahdy, Ph.D.
Vice President for Research
Professor of Computer Science
Office: FC 165
Phone: (361) 825-3881
ahmed.mahdy@tamucc.edu
Marwa Hassan
CS Instructor
Office: EN 316J
Phone: (361) 825-3187
marwa.hassan@tamucc.edu

Wenlu Wang
Assistant Professor
Office: CI 337
Phone: (361) 825-3688
wenlu.wang@tamucc.edu

Samuel Ramos
Academic Advisor
Office: CI 365
Phone: (361) 825-2654
Samuel.Ramos@tamucc.edu

Mamta Yadav, Ph.D.
Professional Assistant Professor
Office: EN 316N
Phone: (361) 825-2688
mamta.yadav@tamucc.edu

Juanita Pena
Administrative Associate
Office: CI 301
Phone: (361) 825-2478
debbie.fuentes@tamucc.edu
Requirements for the Master of Science in Computer Science degree may be met through one of two options: Thesis Option (Option I) or Course Only Option (Option II). The Thesis Option requires a minimum of 30 credit hours and the Course Only Option requires a minimum of 36 credit hours. The Thesis Option allows for maximum flexibility in choosing elective courses. This option allows the student to concentrate on a specialty in computer science. The Course Only Option allows for flexibility in choosing elective courses but requires the student to take at least two electives from each of the three elective concentration tracks. The concentration tracks are Software and Programming, Data Sciences, and Cyber Science.

OPTION 1. THESIS OPTION REQUIREMENTS

Minimum number of credit hours: 30

Core: 12 sem. hrs.
Electives: Minimum of 12 sem. hrs.
Thesis: 6 sem. hrs.

THESIS CORE COURSES

- COSC 6393 - Research Methods in Computer Science 3 sem. hrs.
- COSC 6334 - Design and Analysis of Algorithms 3 sem. hrs.
- COSC 6351 - Advanced Computer Architecture 3 sem. hrs.
- COSC 6352 - Advanced Operating Systems 3 sem. hrs.
- COSC 5398 - Thesis I 3 sem. hrs.
- COSC 5399 - Thesis II 3 sem. hrs.

Students choosing the thesis option must obtain permission from their faculty advisor (who will chair their
committee) to register for COSC 5398 - Thesis I, which should be taken in the next to last semester. During the first month of Thesis I, the student and their advisor should determine the thesis committee. This committee consists of at least three full-time Texas A&M University-Corpus Christi graduate faculty members, two of which must be in computer science. While taking Thesis I, the student will develop a written proposal of the thesis work and present the proposal for approval. Upon approval, the student may then register for COSC 5399 - Thesis II.

The student must then continually register for COSC 5399 until completion of their thesis. If the student fails to register for COSC 5399 or fails their final examination, a grade of No Credit will be assigned to COSC 5398 and all COSC 5399 courses and the student must begin the process again. While taking COSC 5399 - Thesis II, the student will produce a written thesis that discusses their work. A draft copy of the thesis will be given to all committee members and the student will make any changes required by the committee. Upon approval of the thesis committee chair, the student may schedule their final oral examination. The thesis will be published and archived in the Mary & Jeff Bell library. Guidelines for writing the thesis are available in the Computer Science office.
FINAL EXAMINATION
After the student has completed all other requirements for the MS degree in computer science, he or she must schedule an oral exam over his/her graduate program of study. The oral exam will be administered by the graduate thesis committee and will focus heavily on the thesis itself.

Form B

Sometimes students offering the thesis option might want to modify their thesis committee. For this to be implemented, the student must make a formal application using the Thesis Committee Member Change Request Form. This is also known as Form D.
The forms can easily be accessed and downloaded from the school webpage using the links below:
http://gradcollege.tamucc.edu/current_students/dissertation_thesis.html
http://gradcollege.tamucc.edu/contact_us/forms.html

**OPTION 2. COURSE-ONLY OPTION REQUIREMENTS**

Minimum number of credit hours: 36

Core: 9 sem. hrs.
Electives: Minimum of 24 sem. hrs., with at least 6 credit hours from each concentration track

**COURSE-ONLY CORE COURSES**
- COSC 6334 – Design and Analysis of Algorithms 3 sem. hrs.
- COSC 6351 – Advanced Computer Architecture 3 sem. hrs.
- COSC 6352 – Advanced Operating Systems 3 sem. hrs.

**ADDITIONAL REQUIRED COURSE:**
- COSC 6370 – Advanced Software Engineering 3 sem. hrs.

Students must take all required courses along with their chosen electives with at least two courses from each elective group. COSC 6370 is taken in the final semester.

**ELECTIVES**

**A. Software and Programming**
- COSC 6340 - Human-Computer Interaction 3 sem. hrs.
- COSC 6353 - Compiler Design and Construction 3 sem. hrs.
- COSC 6356 - Theory of Computation 3 sem. hrs.
- COSC 6360 - Parallel Computing 3 sem. hrs.
- COSC 6361 - Parallel Algorithms 3 sem. hrs.
- COSC 6362 - Mobile Software Development 3 sem. hrs.
- COSC 6365 - Current Trends in Programming 3 sem. hrs.

**B. Data Science**
- COSC 6324 - Digital Image Processing 3 sem. hrs.
- COSC 6326 - Computer Vision 3 sem. hrs.
- COSC 6336 - Database Management Systems 3 sem. hrs.
- COSC 6337 - Data Mining 3 sem. hrs.
- COSC 6338 - Machine Learning 3 sem. hrs.
- COSC 6339 - Deep Learning 3 sem. hr.
- COSC 6350 - Advanced Topics in DBMS 3 sem. hrs.
- COSC 6354 - Artificial Intelligence 3 sem. hrs.
- COSC 6380 - Data Analytics 3 sem. hrs.

**C. Cyber Science**
- COSC 6355 - Data Communications and Networking 3 sem. hrs.
- COSC 6374 - Computer Forensics 3 sem. hrs.
- COSC 6375 - Information Assurance 3 sem. hrs.
- COSC 6376 - Network Security 3 sem. hrs.
- COSC 6377 - Applied Cryptography 3 sem. hrs.
- COSC 6379 - Advanced Information Assurance 3 sem. hrs.
OVERVIEW OF EACH COURSES

ALL CORE COURSES

COSC 6334 - Design and Analysis of Algorithms
3 sem. hrs. (3:0)
An advanced course that concentrates on the design and analysis of algorithms used to solve a variety of problems. The methods of design covered include such topics as: divide-and-conquer, the greedy method, dynamic programming, search and traversal techniques, and backtracking. Prerequisites: COSC 5321, MATH 2413, and MATH 2305. Spring.

COSC 6351 - Advanced Computer Architecture
3 sem. hrs. (3:0)
An overview of computer architecture, which stresses the underlying design principles and the impact of these principles on computer performance. General topics include design methodology, processor design, control design, memory organization, system organization, and parallel processing. Prerequisite: COSC 5331. Fall.

COSC 6352 - Advanced Operating Systems
3 sem. hrs. (3:0)
Introduction to advanced concepts in operating systems and distributed systems. Topics include distributed system architectures, inter-process communication, distributed mutual exclusion, distributed synchronization and deadlock, agreement protocols, distributed scheduling and process management, distributed shared memory, distributed file systems, multiprocessor system architectures and operating systems, recovery and fault tolerance. Prerequisite: COSC 5331 or an equivalent undergraduate course in Operating Systems.

COSC 6393 - Research Methods in Computer Science
3 sem. hrs. (3:0)
This course provides students with a range of experiences in conducting and communicating research. Students will learn major research methods and techniques. Experiences will be gained in all stages of research: reviewing literature, writing a proposal, designing an approach, and reporting results. Critical-reading/writing assignments and class discussions on state-of-the-art research in Computer Science will provide students with major research aspects. Spring

COSC 5398 - Thesis I
3 sem. hrs.
This course is for Computer Science MS students choosing the thesis option. Upon choosing a thesis advisor, students will register for this course. This course is only credit/no credit. Students will be given a grade of In-Progress until successfully completing their thesis. Prerequisites: COSC 5393 and permission of instructor.

COSC 5399 - Thesis II
3 sem. hrs.
This course is for Computer Science MS students choosing the thesis option. Students will continually register for this course until successful completion of their thesis. A grade of In-Progress will be assigned until either successful completion or failing to register. If failing to register students will receive a grade of No Credit for all 5399 and 5398 courses. Prerequisite: COSC 5398.

COSC 6370 - Advanced Software Engineering
3 sem. hrs. (3:0)
Areas studied include engineering principles and their application to the design, development, testing, and maintenance of large software systems, tools and processes for managing the complexities inherent in creating and maintaining large software systems. Prerequisite: COSC 5321 or equivalent. Fall.

ALL ELECTIVES
SOFTWARE AND PROGRAMMING

COSC 6340 - Human-Computer Interaction
3 sem. hrs. (3:0)
Graduate-level survey of the field of Human-Computer Interaction (HCI) focusing on design strategies for making software usable by real-world people for doing real-world work. Topics include the role of HCI in the software product life cycle, task analysis of the user’s work, architectures for human-computer dialogues, new and traditional approaches to user interface design, and user interface standards. Prerequisite: COSC 5331. Spring.

COSC 6353 - Compiler Design and Construction
3 sem. hrs. (3:0)
This course introduces the basic concepts and mechanisms traditionally employed in language translators, with emphasis on compilers. Topics include strategies for syntactic and semantic analysis, techniques of code optimization and approaches toward code generation. Prerequisites: MATH 2305. Fall.

COSC 6356 - Theory of Computation
3 sem. hrs. (3:0)
An introduction to theoretical foundations of modern computing. Topics include finite state machine concepts, formal grammars, and basic computability concepts. Prerequisites: COSC 5321 and MATH 2305. Summer.

COSC 6360 - Parallel Computing
3 sem. hrs. (3:0)
Introduction to the hardware and software issues in parallel computing. Topics include motivation and history, parallel architectures, parallel algorithm design, and parallel performance analysis. Students will be introduced to a variety of parallel computing
paradigms including message passing systems and shared memory systems. Prerequisite: COSC 5331.

**COSC 6361 - Parallel Algorithms**  
3 sem. hrs. (3:0)  
Introduces and evaluates important models of parallel and distributed computation. Topics include a selection of parallel algorithms for various models of parallel computation, combinational circuits, parallel prefix computation, divide and conquer, pointer-based data structures, linear arrays, meshes and related models, and hypercubes. Prerequisites: Either COSC 6360 or an equivalent undergraduate course in Algorithms.

**COSC 6362 - Mobile Software Development**  
3 sem. hrs. 3:0  
Survey of software development on mobile platforms including both native and cross-platform applications with topics such as: prototyping, programming, testing, debugging, and deploying. Coverage of software life cycle on mobile platforms and how mobile hardware differs from traditional computers. Prerequisite: COSC 5321

**COSC 6365 - Current Trends in Programming**  
3 sem. hrs. 3:0  
This is a survey of current trends in computer programming. The focus of this course is on the development of computer programs utilizing the latest technologies and paradigms. Topics include state-of-the-art in problem solving and software development, programming techniques and approaches, programming languages, development tools and environments, and software deployment methods. Prerequisite: COSC 5321

**DATA SCIENCE**

**COSC 6324 - Digital Image Processing**  
3 sem. hrs. (3:0)  
This course introduces concepts and techniques for image processing. The objective of this course is to introduce the fundamental techniques and algorithms used for processing and extracting useful information from digital images. The students will learn how to apply the image processing methods to solve real-world problems. Fall, odd years

**COSC 6326 - Computer Vision**  
3 sem. hrs. (3:0)  
This graduate course introduces concepts and techniques for machine vision. Particular emphasis will be placed on methods used for object recognition, machine learning, content-based image retrieval, image matching, 3D vision, tracking and motion analysis. Prerequisite: COSC 6324 Digital Image Processing. Spring, even years
COSC 6327 - Introduction to Computer Graphics
3 sem. hrs. (3:0)
This graduate course provides students with a foundation in basic principles and techniques for computer graphics on modern graphics hardware. Students will gain experience in interactive computer graphics using the OpenGL API. Topics include: graphics hardware, rendering, perspective, lighting, and geometry.

COSC 6328 - Advanced Computer Graphics
3 sem. hrs. (3:0)
This course covers advanced computer graphics techniques. Students will be introduced to state-of-the-art methods in computer graphics. This course will focus on techniques for real-time rendering and animation. Prerequisite: COSC 4328 or COSC 6327 or equivalent. Spring.

COSC 6336 - Database Management Systems
3 sem. hrs. (3:0)
A study of contemporary database management concepts. Performance (storage and indexing) and Big Data techniques (management, processing, and analysis) are discussed. Also includes the study of spatial data management. Prerequisites: COSC 5321. Spring.

COSC 6337 - Data Mining
3 sem. hrs. (3:0)
An introduction to fundamental strategies and methodologies for data mining. Topics include data preprocessing, mining frequent data patterns, classification, clustering, and outlier detection. Summer

COSC 6338 - Machine Learning
3 sem. hrs. (3:0)
Machine learning is a set of techniques that have been successfully used in the past few decades for data analysis, process automation, function optimization, model building, and many others. These techniques have been explored in a diversity of fields such as robotics, self-driving cars, big data, control of autonomous systems, image analysis, object recognition, data mining, business, and financial forecasting, transportation systems, antenna design, medical care systems, and many others. ML is a subdivision of artificial intelligence that gives machines the ability to learn and adapt with different acquired knowledge and experience. In this course, a student will learn about state of the art on machine learning and get to know how they can carry out these evolving learning algorithms. ML algorithms attempt to mimic how the human brain works. We plan to develop many exercises on how these ML algorithms work in practical applications in both industry and basic science. We plan to cover topics such as artificial network networks, fuzzy logic, hybrid systems, search and optimization, classification, clustering and deep learning. Students will gain experiences on some programming tools and a variety of applications of machine learning.

COSC 6339 - Deep Learning
3 sem. hrs. (3:0)
This course introduces concepts and techniques for deep learning. The objective of this course is to introduce the fundamental theory and application of deep learning. Particular emphasis will be placed on regularization and optimization of deep learning models, Convolutional network, recurrent neural networks, autoencoders and generative models. In addition, the students will learn how to apply the methods to solve real-world problems in several areas including remote sensing, geospatial, and medical applications and develop the insight necessary to use the tools and techniques to solve any new problem.

**COSC 6350 - Advanced Topics in DBMS**  
3 sem. hrs. (3:0)  
The study of emerging database technologies. Topics are chosen from data warehousing, distributed databases, spatial databases and web-based applications. Prerequisites: COSC 6336. Fall.

**COSC 6354 - Artificial Intelligence**  
3 sem. hrs. (3:0)  
Fundamental concepts and techniques for the design of computer-based, intelligent systems. Topics include: a brief history, methods for knowledge representation, heuristic search techniques, programming in LISP or Prolog. Prerequisites: COSC 5321 and MATH 2305. Fall.

**COSC 6380 - Data Analytics**  
3 sem. hrs. (3:0)  
This course will introduce state-of-the-art techniques to process and analyze different types of data, generate insights and knowledge from data, and make data-based decisions and predictions. Real-world examples will be used to familiarize students with the theory and applications. Main topics include data preprocessing, probability theory, tests of hypothesis, and various data analysis techniques (e.g., clustering, classification, prediction/forecasting, etc.) for different types of data including static, time-series, spatial, and spatiotemporal.

**CYBER SCIENCE**

**COSC 6355 - Data Communications and Networking**  
3 sem. hrs. (3:0)  
Areas studied include principles of computer-based communication systems, analysis and design of computer networks, and distributed data processing. Prerequisite: COSC 5331. Fall.

**COSC 6357 - Wireless Sensor Networks**  
3 sem. hrs. (3:0)  
This is a graduate level course on wireless sensor networks; one of the fastest developing areas in computer science and engineering. The focus of this course is on the design of optimized architectures and protocols for such unique networks. Topics include the design principles of wireless sensor networks, energy management, MAC protocols, naming and addressing, localization, routing protocols, applications of wireless sensor networks, and associated challenges and measures.
COSC 6374 - Computer Forensics
3 sem. hrs. (3:0)
This course will introduce students to the fundamentals of computer forensics and various software tools used in cyber-crime analysis. Students will be introduced to established methodologies for conducting computer forensic investigations, as well as to emerging international standards for computer forensics. Applicable laws and regulations dealing with computer forensic analysis will also be discussed. Spring.

COSC 6375 - Information Assurance
3 sem. hrs. (3:0)
An introduction to information security and assurance. This course covers the basic notions of confidentiality, integrity, availability, authentication models, protection models, secure programming, audit, intrusion detection and response, operational security issues, physical security issues, personnel security, policy formation and enforcement, access controls, information flow, legal and social issues, classification, trust modeling, and risk assessment. Fall.

COSC 6376 - Network Security
3 sem. hrs. (3:0)
This course is a study of networking basics and security essentials with respect to information services provided over a computer network. The course covers the technical details of security threats, vulnerabilities, attacks, policies, and countermeasures such as firewalls, honeypots, intrusion detection systems, and cryptographic algorithms for confidentiality and authentication and the development of strategies to protect information services and resources accessible on a computer network. Prerequisites: COSC 6375 and approval of the Instructor. Spring.

COSC 6377 - Applied Cryptography
3 sem. hrs. (3:0)
This course includes an introduction to cryptographic algorithms and protocols for encrypting information securely, techniques for analyzing vulnerabilities of protocols, approaches to digital signatures and information digests, and implementation approaches for the most significant cryptographic methodologies. Fall.

COSC 6379 - Advanced Information Assurance
3 sem. hrs. (3:0)
This course encompasses a broad range of topics involving information security, communications security, network security, risk analysis, operational security, health information privacy, criminal justice digital forensics, homeland security, the human element and social engineering, and applicable national and international laws. An in-depth information assurance capstone project or research paper will be required of each student to satisfy the information assurance graduate option requirements. Prerequisites: COSC 6375. Fall.

LEVELING COURSES
Graduate students from a none computer science background, are required to take some or all the levelling courses, before starting or continuing their graduate program. Some of these programs are prerequisite to some of the graduate program and gives the student a solid framework on which to build their career. Before you
enrol on any of these courses, do consult your academic advisor first. Students can be allowed to sit for only the Discrete Mathematics final examination (as of writing this handbook) without registering for the class. Failure to score upward of 80% of the examination will lead to a retake of the class, formally registered.

- Data Structures – **COSC2437**
- Introduction to Problem Solving with Computers I- **COSC 1435**
- Introduction to Problem Solving with Computers II- **COSC 1436**
- Operating Systems – **COSC 3346**
- Computer Architecture – **COSC 2334**
- Discrete Mathematics – **MATH 2305**
- Calculus I – **MATH 2413**

Students' transcripts help determine if they should take certain leveling courses or otherwise. This also include transfer students from accredited universities or colleges. The academic advisor will help determine what courses should or should not be taken by the student, and whether some of the previously taken courses can adequately substitute some key courses needed to meet the degree plan. The Form I must be filled out in this regard.

**COURSE REGISTRATION:** Classes are registered or dropped using the S.A.I.L portal [http://sail.tamucc.edu/portal.html](http://sail.tamucc.edu/portal.html). Logins into your account under CURRENT ISLANDER to modify your class selection.
GENERAL PROGRAM GUIDELINES

COURSE DESCRIPTION: This information is contained on the graduate catalogue book and has been mentioned above. The student does well to read it through ahead of class registration to gain an insight into a class before selection.

PRE-REQUISITE: Some of the classes do require a pre-requisite class. The student should make research or possibly discuss with his / her advisor to find out if their course of interest has any pre-requisite requirement.

STUDENT LEARNING OUTCOMES: This is usually contained in the course syllabus. It states the objective of a class and the knowledge and skills expected of all the students participating in the class. It is the student’s responsibility to meet these objectives.

REQUIRED COURSE TEXT: This information is contained in the syllabus for each class. It states the texts that will be used during the study and It is the students’ responsibility to get their copy of the text.

COURSE REQUIREMENTS: This states the requirements that must be met to successfully complete the course.

GRADING POLICY: Courses are graded based on performance. Usually classes can be composite of some combination of these or all of them; assignments, quizzes, about three exams, and the project or research paper. The distribution of points is defined by the instructor. For example, Assignments and quizzes can worth 35%. Three exams can worth 45% (Each exam worth 15%). Final Project or research paper can worth 20%.

GRADING SCALE:
- A: 100-90
- B: 89-80
- C: 79-70
- D: 69-60
- F: 59-0

ASSIGNMENTS: The number of assignments given is determined by the instructor and Partial credit will be given for incomplete assignments. Some assignments will involve programming.
COURSE SYLLABUS: This is usually given on the first day of class and can also be printed from the course webpage. It specifies the student’s learning objective, course requirements and other necessary information key for optimal your performance.

EXAMS: Exams will cover all lecture and reading material discussed in the class. Exams are usually taken on the hour classes are scheduled and same venue as the class unless otherwise stated. In the event, if you cannot attend the class to take the exam due to some emergency or some unavoidable situation (such as serious illness, death in the family, participation in university sports, religious observations, and so on) you must notify the instructor as soon as possible before the exam and also you must validate your absence by providing a document (e.g., with a letter from your doctor).

ASSIGNMENTS: Assignments will significantly build on the material from the lectures. They will be posted on the course web page. The instructor defines how the assignment will be submitted, either hard copies are handed out in the class during the lecture sessions or online or both. The assignments are usually due at the beginning of the class on the due date. If the student is absent on the assignment due date, it is the student's responsibility to see to it that the assignment is submitted on the designated date. An assignment that is turned in after the class on the due date is considered one day late, for an in-class submission. There is a penalty for late submissions. Late assignments will be counted 20 - 25% off for each day after the due time. 100% penalty (i.e. no credit) if submitted after 4- 5 days. If you have not completed your assignment by the due date, you should submit the work you have done for partial credit. No work will be accepted once the graded work has been returned or the solution has been disclosed to the class, except for unusual circumstances which the instructor feels reasonable. Note that any kind of hardware or software failure or machine unavailability in the lab does not merit an extension on the assignment. Diskettes upon which major examinations, assignments, projects or papers submitted may be retained by the instructor as a permanent record of the student's work.

PROJECT: The project can be a programming project (with a final report on the project), a research paper or a survey paper. An in-class presentation is also required for any of the above. The project usually is to be done individually or as defined by the instructor of the class. All projects must be approved by the instructor. Additional details on the project will be available either in class or on my website.

ACADEMIC HONESTY POLICY: You are expected to avoid all forms of academic dishonesty as defined in Catalogue. In addition, students are expected to behave in an ethical manner in all class activities. If you feel uncertain about a particular activity, please speak to me BEFORE problems arise. Ethical behaviour is a requirement for passing this course. All work submitted for grading must be the student's own work. Plagiarism will result in a score of 0 (zero) for the work or dismissal from the course and the Dean of Students office will be notified. No copying from another student's work, of any class, is allowed. It is the student's duty to allow no one to copy his or her work. Anyone found cheating and/or copying, in the exams or assignments, in the instructor's opinion, will receive an automatic F for the course.

COLLABORATION: If two or more people collaborate on an assignment assigned it should be notified on the assignment and each student should submit his or her
solutions for grading. The grade obtained on such an assignment is the total points obtained for the assignment divided by the square of the number of people who collaborated on the assignment (e.g., if 3 people collaborate on an assignment and the grade for that assignment is 90 out of 100, then each student receives a grade of $90/3^2 = 10$). If you do not notify me of such collaboration it will be treated as copied and action will be taken as discussed under the academic honesty policy.

**ATTENDANCE:** You must attend all classes. While in class attendance will not directly affect the grade, you are responsible for any materials covered or handed out or announcements made for the tests and assignments in your absence. Records of your attendance will be maintained and reported to the university. Students found missing classes without the instructor's permission will be automatically withdrawn from the course.

**ABSENCE FROM CLASS:** Students are responsible for all materials covered in class and assigned. Should a student be absent from class, it is his/her responsibility to get the notes, etc. for that missed class. More important, should there be assignments, it is the student responsibility to obtain such assignments. No excuse will be accepted for assignments not turned in because the student was absent when it was due.

**DISTRACTIONS:** Use of electronic devices are usually not allowed because they are a source of distraction to both the student and to others. The policy is usually defined by the instructor in each class. The student must comply with the policy created for the successful completion of the course. Same with eating food or drinking beverages during class session.

**OTHER POLICIES:** Cell phones and pagers must be turned off or switched to a Do-Not-Disturb mode during class. First violation receives a warning. All succeeding violations result in a penalty as determined by the instructor (In some scenarios: ten-point deduction on the last exam, during a quiz or exam results in a ten percent deduction off the corresponding paper. No warnings might be given for quizzes or exams).

**STUDENTS WITH DISABILITIES:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Disability Services Office at (361) 825-5816 or come by and visit us in Corpus Christi Hall 116. For more information on requesting accommodations, see [https://www.tamucc.edu/disability-services/requesting.php](https://www.tamucc.edu/disability-services/requesting.php). If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

**ACADEMIC ADVISING:** The role of the Academic Advisor is to help students reach their educational goals by providing crucial tools, resources and guidance. Students should make an appointment to see the academic advisor as soon as possible to plan your course schedule and verify that your plan will meet degree requirements.
Students living outside of the University area can make the appointment via email or phone. Students must have a degree plan filed by the end of the first semester of attendance in order to register for subsequent semesters. Science and Engineering Academic Advising Center is located in Center for Instruction, Suite 350 D. For more information, see https://www.tamucc.edu/academics/planning/academic-advising/colleges/cose.php.

**ACADEMIC PROBATION:** On the successful completion of an option, meeting all its requirements will lead to an MS degree in Computer Science. Failure to meet the requirement could lead to academic probation and or a possible withdrawal from the program.

**EMAIL:** https://outlook.tamucc.edu

**RESOURCES:** Programming Assistance Laboratory (PAL) and Graduate Programming Assistance Laboratory (GPAL) are designed to assist both undergraduates and graduate students respectively. Avail yourself to put this resource to use.

**BLACKBOARD:** https://bb9.tamucc.edu/webapps/login/
Blackboard is the platform for both the instructors and the students in their classes to interact and for the students to receive their class materials and assignments. Submission of assignments is possible on this platform. Grades are also posted on blackboard in each students account. This account is created automatically for the student. To access it, use your islander user name and password to login.

**SCHOLARSHIPS / SPONSORSHIPS**
If you are interested in learning more about scholarship opportunities, applying for scholarships that are often offered for Fall and Spring, use the link below: scholarships.tamucc.edu/

**GRADUATE EMPLOYMENT POSITIONS WITHIN THE COLLEGE**
- Research Assistance (RA)
- Graduate Assistance (GA)
- Teaching Assistance (TA)
These in no way is hierarchy of importance. These are career opportunities for the students within the college for graduate students. The student receives a tuition waiver and is enrolled in gradplan health insurance, among other benefits. Use the Handshake webpage to check on openings.

**HANDSHAKE AND CAREER SERVICES**
https://tamucc.joinhandshake.com/

**INTERNSHIP**
Practical experience with a government or not-for-profit agency arranged in advance by the supervising professor. Periodic visits, consultations, and a final paper. Career Service usually send mail to all students announcing when the next career fair will be. This is an opportunity for the student to met with their future employers and know their expectations of their employees.
GENERAL INFORMATION

This section of the handbook includes standardized information about rules and policies pertaining to graduate education at Texas A&M University. It is not intended to be comprehensive. You are strongly encouraged to read the sections of the catalog pertaining to graduate students, which will provide more detail and additional topics that may impact you. You will also find information about your program.

Graduate Admissions

To be admitted to a program of graduate study, an applicant must hold a bachelor’s degree from an accredited institution of higher education in the United States or an equivalent foreign institution. (Note: The requirement to hold a bachelor’s degree does not apply to students enrolling in the RNMSN option in nursing.) Decisions concerning admission to graduate study are based on all admission criteria. To be considered for a graduate program, a minimum last 60-hour GPA of 2.5 is required. Some programs may have higher GPA requirements; review specific program information in the graduate catalog or elsewhere in this handbook.

All applications must be made via the following web site: http://gradschool.tamucc.edu. For complete information, see the Catalog, Graduate Admissions section. Graduate students should be aware of their enrollment status, as it may impact financial aid, veteran’s benefits, or other important aspects of graduate life. In addition, international students have specific requirements about enrollment status. Enrollment status for graduate students is as follows:

Full-time graduate student Fall or spring term = 9 hours Combined summer terms = 6 hours

Three-quarter-time graduate student Fall or spring term = 7 hours Combined summer terms = 5 hours

Half-time graduate student: Fall or spring term = 5 hours Combined summer terms = 3 hours

Continuous Enrollment

The University does not have a continuous enrollment policy for master’s students. However, you should be aware of your own program’s requirements, which may differ from general University requirements. Master’s students should also know that if they do not attend for two years, they will be required to reapply to the University. Students should consider applying for a leave of absence (see below), especially if the time-to-degree and recency of credits requirements will be impacted by a needed absence.

Leave of Absence

Students experiencing life changing or catastrophic events should consult with their program coordinator and/or department chair and request a Leave of Absence in writing from the College of Graduate Studies using the Request for Leave of Absence form. A student who is in good standing may petition for a leave of absence of no more than two full academic terms. The maximum number of leave of absence requests permitted in a program is two. A request for a leave of absence requires approval in advance by the faculty advisor, Program Coordinator, College Dean, and Graduate Dean. If the Graduate Dean approves the petition, the registration requirement is set aside during the period of time of the leave. Students should be aware that leaves of absences require suspension of all activities associated pursuit of the degree. See the catalog for more information.

Maximum Course Load

Graduate students may not register for more than 12 hours in a regular semester, 6 hours in a single session of summer school, or 12 hours in the combined summer session (not including Maymester) without the approval of the appropriate college dean. See the Maximum Course Load section in the catalog.

Adding or Dropping a Course

A student may add or drop a course during the time specified in the class schedule. To add or drop a course after the first class day, the student must complete a Class Scheduling Form from the Office of the University Registrar.

Deadline for Dropping a Course with a Grade of W The grade of W will be assigned to any student officially dropping a course by the date stated in the class schedule. No student is eligible to receive a W without completing the official drop process by this deadline. After the drop date listed in the class schedule, a student will not be allowed to drop a
course. A change of section or a change from credit to audit is a change of registration and requires that the add/drop process be followed.

Repetition of a Course

There are specific policies about repeating courses for higher grades, including the provision that graduate students may retake a maximum of two courses during graduate study at the University. Each course may be repeated only once. Some courses may be repeated for multiple credit if those courses are so designated in the course description and approved by the faculty or program advisor as designated by their college. Complete catalog information may be found in the Graduate Academic and Degree Requirements section of the catalog, https://catalog.tamucc.edu/graduate/academic-degree-requirements/.

Time Limit to Degree

The requirements for a master's degree at Texas A&M University-Corpus Christi must be completed within seven years subsequent to admission to the program. The seven-year period begins the first semester of enrollment and is calculated from the date of degree conferral. Credit that is more than seven years old will not be counted toward a master's degree. Exceptions will require strong justification in writing from the student requesting the exception as well as submission of a revalidation plan. Credits earned at another university are not eligible for an exception. Written approval from the major department chairperson, the dean of the college offering the degree, the Graduate Dean, and the Provost are required. See the revalidation process below.

Revalidation of Courses Beyond Degree Time Limit

In order to revalidate dated courses, students should carefully attend information in the catalog (see Graduate Academic and Degree Requirements section of the catalog. Revalidation requests should be made using the Revalidation Request Form.

If your program has shorter time-to-degree limits, it may impact recency of credit and other timelines. See program information in this handbook or seek information from your Program Coordinator.

Academic Requirements for Graduate Work Good Standing

Graduate Students, including degree-seeking, certificate-seeking, and nondegree-seeking students are considered in “good academic standing” if they maintain a minimum 3.0 grade point average (GPA) on all graduate course work and earn a grade of S (Satisfactory), IP (In Progress, or CR (Credit) on all course work that does not affect GPA. A higher GPA may be required by some programs. In such cases, the higher standard will be substituted for 3.0 in all other matters related to good academic standing. A complete discussion of academic requirements including but not limited to scholastic probation and enforced withdrawal may be found in the Graduate Academic and Degree Requirements section of the catalog. For information regarding the effect of scholastic probation and enforced withdrawal, see the Financial Assistance Suspension Policy in the Tuition, Fees, & Financial Assistance section of the catalog.

Academic Integrity

Texas A&M University-Corpus Christi students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, which include but are not limited to illicit possession of examinations or examination materials, falsification, forgery, plagiarism, or collusion in any of these behaviors. All students should familiarize themselves with the full Academic Integrity Policy as well as the processes and procedures used to address violations thereof. You can find additional information in the Academic Integrity section of the catalog. Students can also access University Rules and Procedures 13.02.99.C0.04: Student Academic Misconduct Cases.

Grade Appeal Process

As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate
grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

**Additional Information**

Information, policies, and procedures about tuition, fees, financial assistance, scholarships, and other topics important to graduate students can be found in the catalog. In addition to the catalog, web pages for offices and services on campus provide expanded information, forms, and contact names/phone numbers. Some of those webpages include the following:

- College of Graduate Studies [https://www.tamucc.edu/grad-college/index.php](https://www.tamucc.edu/grad-college/index.php)
- Office of International Education [https://www.tamucc.edu/academics/international-education/](https://www.tamucc.edu/academics/international-education/)
- Scholarships [https://www.tamucc.edu/cost-and-aid/scholarships/graduate-students.php](https://www.tamucc.edu/cost-and-aid/scholarships/graduate-students.php)
- Assistantship [https://www.tamucc.edu/grad-college/funding/assistantships.php](https://www.tamucc.edu/grad-college/funding/assistantships.php)
ICORE LAB:

The Innovation in Computing Research Labs (iCORE) is a research, development, and commercialization group that promotes excellence, innovation, and entrepreneurship in computing and related fields. With its sponsored basic and applied research, this multidisciplinary team continues to establish partnership with governmental, educational, nongovernmental, and private entities promoting business development and creating job opportunities.

CYBERSECURITY LAB:

Cybersecurity lab facilitates hands-on cybersecurity competitions. It focuses on sharing a wide range of computer knowledge related to operating systems, server administration, cyber security, and computer networking. In the lab, students who
become subject matter experts help other students who have little or no knowledge learn the concepts and applications of the field. This is done through hands-on exercises, both individual and group based.
### Other Student Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Scholarships and Assistantships</td>
<td><a href="http://gradschool.tamucc.edu/funding">http://gradschool.tamucc.edu/funding</a></td>
</tr>
<tr>
<td>Office of Student Financial Assistance</td>
<td><a href="http://osfa.tamucc.edu">http://osfa.tamucc.edu</a> 361-825-3338</td>
</tr>
<tr>
<td>Office of International Education</td>
<td><a href="http://oie.tamucc.edu">http://oie.tamucc.edu</a> 361-825-3922</td>
</tr>
<tr>
<td>University Center &amp; Student Activities</td>
<td><a href="http://ucsa.tamucc.edu">http://ucsa.tamucc.edu</a> 361-825-5200 or 361-825-2707</td>
</tr>
<tr>
<td>University Police Department</td>
<td><a href="http://police.tamucc.edu">http://police.tamucc.edu</a> 361-825-4444</td>
</tr>
<tr>
<td>University Services (Banking, Bookstore, Dining, Mail, Printing, SandDollar)</td>
<td><a href="http://universityservices.tamucc.edu">http://universityservices.tamucc.edu</a> 361-825-5710</td>
</tr>
<tr>
<td>Veterans Affairs Office</td>
<td><a href="http://vets.tamucc.edu">http://vets.tamucc.edu</a> 361-825-2331</td>
</tr>
<tr>
<td>Mary and Jeff Bell Library</td>
<td><a href="http://rattler.tamucc.edu">http://rattler.tamucc.edu</a> 361-825-2643</td>
</tr>
<tr>
<td>SAIL</td>
<td><a href="http://sail.tamucc.edu">http://sail.tamucc.edu</a></td>
</tr>
<tr>
<td>Recreational Sports</td>
<td><a href="http://recsports.tamucc.edu">http://recsports.tamucc.edu</a> 361-825-2454</td>
</tr>
<tr>
<td>University Counseling Center</td>
<td><a href="http://counseling.tamucc.edu">http://counseling.tamucc.edu</a> 361-825-2703</td>
</tr>
<tr>
<td>Admissions &amp; Records</td>
<td><a href="http://admissions.tamucc.edu">http://admissions.tamucc.edu</a> 361-825-2624</td>
</tr>
<tr>
<td>Business Office</td>
<td><a href="http://businessoffice.tamucc.edu">http://businessoffice.tamucc.edu</a> 361-825-2600</td>
</tr>
<tr>
<td>Career Services</td>
<td><a href="http://career-services.tamucc.edu">http://career-services.tamucc.edu</a> 361-825-2628</td>
</tr>
<tr>
<td>IT Help Desk</td>
<td><a href="http://it.tamucc.edu">http://it.tamucc.edu</a></td>
</tr>
<tr>
<td>Disability Services</td>
<td><a href="http://disabilityservices.tamucc.edu">http://disabilityservices.tamucc.edu</a> 361-825-5816</td>
</tr>
<tr>
<td>Graduate Resource and Opportunity Workspace (GROW)</td>
<td><a href="http://grow.tamucc.edu">http://grow.tamucc.edu</a> 361-825-2507</td>
</tr>
<tr>
<td>Center for Academic Student Achievement (CASA) Writing Center</td>
<td><a href="http://casa.tamucc.edu">http://casa.tamucc.edu</a> 361-825-5933</td>
</tr>
<tr>
<td>Office of Academic Testing</td>
<td><a href="http://testing.tamucc.edu">http://testing.tamucc.edu</a> 361-825-2334</td>
</tr>
<tr>
<td>The Island Online (Blackboard)</td>
<td><a href="https://iol.tamucc.edu">https://iol.tamucc.edu</a> 361-825-2825</td>
</tr>
<tr>
<td>Student Health Plan</td>
<td><a href="https://tamucc.myahpcare.com">https://tamucc.myahpcare.com</a> 800-452-5772</td>
</tr>
<tr>
<td>University Health Center</td>
<td><a href="http://healthcenter.tamucc.edu">http://healthcenter.tamucc.edu</a> 361-825-2601</td>
</tr>
</tbody>
</table>

### For Additional Information

**Computer Science Program**

Texas A&M University-Corpus Christi, 6300 Ocean Drive, Unit 5824, Corpus Christi, TX 78412-5824

*Phone: 361-825-6068  
Fax: 361-825-2795*

*Website: [http://cs.tamucc.edu](http://cs.tamucc.edu)*

**Academic Advisor**

*Samuel Ramos,  
Academic Advisor  
Office: Island Hall, Rm. 350E*