

Academic Master Plan

EXECUTIVE SUMMARY

College of the Mainland has developed an Academic Master Plan to serve as our roadmap for the Instructional Division over the next five years. We are concluding the Academic Master Plan put forth in 2017. That plan helped to guide COM in program development and has resulted in the creation of programs in Engineering (with foci in Mechanical and Chemical Engineering), English, Information Technology with an emphasis in Cybersecurity, and an Occupational Skills Award in Massage Therapy, and the successful launch of our first bachelor's degree with the RN to Bachelor of Science in Nursing degree. We are also in the process of launching new Allied Health programs in Dental Hygiene, Surgical Technology, and Radiography pending their external accrediting bodies review and approval by our regional accreditor, SACSCOC. This plan will serve to provide guidance to COM in its instructional and facilities plans over the next five years.

COM has achieved much in its history and made significant gains in the past five years. As we look to the next five years, COM is preparing to build upon the foundation and growth and move into increasing ACCESS. As a college dedicated to being open and accessible to everyone who is on their journey whether to high school equivalency, workforce education, transferring to a four-year institution, or adding to their existing education, COM will be focusing on increasing that access in various areas.

This Academic Master Plan is built around increasing access financially, academically, and in opportunity. Each of these areas will continue building upon work that has begun and will extend it into the future so that students enrolling in COM will have the confidence to know that we will participate in helping them to achieve their dreams.

Financial access will focus on the continuation and extension of the Promise Scholarship program.

This program gives graduating seniors from our taxing district the chance to obtain a certificate or degree from COM tuition and fees free. For many

of our students, however, the costs of textbooks are significant and serve as a barrier to accessing their college goals. In the first year of this plan, faculty will research and plan for implementation of Open Educational Resources (OER) in classes and programs where possible. OER materials are free as digital materials to students on the first day of class. They can be edited, added to, or changed to meet the need of the instructor in a way that empowers faculty to offer text materials to students that is relevant to the course and free of cost.

Access to college also includes access to the means to be successful. As our students come from varying levels of preparedness, providing access to the tools that will make their journey successful is incumbent upon COM. Our new Academic Success Center in the Industrial Careers Building will serve as incubator for instructional practices and idea generation.

Continued work with Corequisite Math and English courses will focus on increasing success rates and providing quicker paths for those arriving with Math or English backgrounds that are a barrier to college credit enrollment. Additionally, modality, length of classes, and availability to start at regular and frequent intervals provides increased access to classes that can help in success.

Access to COM, furthermore, means access to programs that are avenues to gainful employment that provide livable family wages. Currently COM serves two of the five major employment sectors in the Gulf Coast Region. This plan will expand offerings to address the lack of access to three major employment sectors in areas where there is strength in growth and earnings and provide timelines for their development and launch. The programs proposed in this plan include extending our programs in IT, Fire, EMT, PTEC, Law Enforcement, Phlebotomy, and Dental Assisting to our ISD partners through Dual Credit. We would add offerings in Maritime Ship-to-Shore Operations, Crane Operations, Millwrighting, and Instrumentation & Electrical as programs through our Continuing Education division.

Additionally, we will pursue becoming an OSHA Training Institute for the Gulf Coast Region. Programs for college credit will include Culinary Arts, Hospitality Management, Logistics, Medical Lab Technician, Aerospace/Aviation Technician, and developing a credit program in Instrumentation & Electrical.

Lastly, we will continue planning for the development of our next Bachelor of Applied Science degree. COM has been approved to offer the bachelor's degree and now has authorization to offer up to four additional ones.

This Academic Master Plan includes a roadmap for initiatives that have begun, new initiatives that build for the future, and a detailed discussion of labor data and programs being proposed, and the additional space required. Increasing access serves our community by providing the means, the opportunity, and a vision for our students to achieve their dreams and build their legacy.

CONTENTS:

EXECUTIVE SUMMARY
COLLEGE GOALS
ENVIRONMENTAL SCAN
RECOMMENDATIONS
RESOURCE IMPLICATIONS
APPENDIX
COLLEGE GOALS

College of the Mainland plans and operates around three central goals. Those goals are Student Success, Employee Success, and Facilities Improvement. The Academic Master Plan aims to primarily address the first goal, Student Success.

Our Strategic Plan for 2018-2023 contains four strategies for achieving student success. This plan provides action towards the implementation of strategies 2, 3, and 4.

GOAL 1: STUDENT SUCCESS

Student Success is our top priority. College of the Mainland will be the college of choice for our community.

Strategy 2

Offer Co-requisite Developmental Courses for all students who come in not ready for college-level English and Math, expediently preparing them for successful completion of English and Math courses.

Strategy 3

Create Articulation Agreements with 4-year Institutions for clear and efficient transfer opportunities for students.

Strategy 4

Develop a comprehensive Academic Master Plan to improve existing programs and develop new successful programs.

COM introduced the fully co-requisite model for Math and English in 2017. Since that time, we have seen increases in student success. The challenge remains to make access to college possible for those failing to achieve the minimum required to enter college-level classes.

The addition of associates degrees will increase the options for our students to continue their programs of study with our transfer partners. While we have general transfer agreements, we have established and continue to develop program specific degrees. Curriculum for our programs is developed to dovetail with the target institution's curriculum.

Strategy four is supported not just through the completion of the Academic Master Plan but also with the implementation this year of comprehensive program review. Every program is involved in a 3-year program review. Years one and two are a gathering of data reflecting performance metrics based upon student success through completion and retention. We have also begun collecting data on post completion placement. In the third year of the review, a full analysis is conducted involving an analysis of the three years of data, a SWOT analysis involving stakeholders, and the development of a strategic plan for the next three years.

FINANCIAL ACCESS

Access to higher education involves several dimensions and the first that many think of is financial access. Through the work of the COM Foundation, COM has been able to launch the Promise Scholarship to all students in our taxing district. This scholarship gives every graduating senior the chance to attend COM tuition and fees free to pursue a certificate or degree. This is an outstanding opportunity and accomplishment. Within the certificates and degrees, however, there are texts required for most courses. These costs of these texts can prove a significant barrier to our students.

Open Education Resource (OER) material is a resource that provides texts to students at no cost digitally. Further, these materials can be adopted in their entirety or edited to the specific needs of a course. OER materials are available across several disciplines and provide the chance to students to complete courses with no textbook cost. In cases where a student prefers a print copy of the book, the student can print the book themselves or purchase a print copy for a minimal cost. National research into OER adoption has shown that this single action has increased success for students overall and amongst areas where traditional equity gaps exist.

To increase financial access to a successful education, COM is committed to adopting OER materials where

possible. Faculty will have the opportunity to review available materials and plan for their adoption starting fall of 2023. There are, of course, specialized courses and subjects where OER is not available. There are, however, opportunities in increasing disciplines (nursing is one that recently adopted OER access materials). The subjects that comprise the General Education field have widespread availability. With the plethora of resources available, we must strive to serve our students by removing this financial barrier to success.

ACADEMIC ACCESS

Success at the college level includes access to the tools and resources that enable students to achieve their academic goals. This plan identifies three main areas to pursue in providing academic access for our students.

Minimum entry requirements

For many years, students who arrived at college without achieving a target for Math or English requirements were enrolled in developmental education courses. These courses could add one, two, or even three semesters to a student's journey before they ever enrolled in a Math or English course that counted towards graduation. A model was introduced wherein a student would concurrently be enrolled in a developmental section alongside a credit section for the subject. This model was referred to as the co-requisite model. In the fall of 2017 COM began offering all students who did not test directly into college credit Math or English the opportunity to take their developmental class and credit class in the same semester.

For a student to access the co-requisite courses they must meet a minimum test score on the standardized Texas test. To provide increased access, COM has already reduced the traditional entry point from a level of 5 to 4. Even with this, each semester there are students who do not meet these minimum requirements. Many of these students never enroll in any program at COM.

As we seek to provide academic access for students, we must address this loss. There are many reasons for students not meeting the requirement to enroll in these courses. The reasons can include something as simple as the student arriving and not knowing they were testing and having had no time to prepare

or the fact that it has been many years since they were exposed to or used the concepts. There are cases where the student's capability is itself the barrier.

Building an awareness of programs where these skills are not required to enroll is the first step to access. Making students aware of how they can start their career based on where they place at the onset would decrease the number of students who never enroll.

We must also look at inventive ways to engage the students who are eager to enroll and have not yet met the minimum requirements. This initiative can take the form of additional and specialized courses to flexible scheduling that enables them to enter immediately upon demonstrating readiness.

Academic Success Center

The design of the Industrial Careers Building included a space for faculty to meet, discuss, and explore their craft and their disciplines. This space was created to provide an incubator for our faculty to grow professionally and strengthen the academic success of our students. This space will open this fall and will develop into the hub for our COM faculty as they seek to continue the pursuit of excellence in instruction.

Access through scheduling

Under Dr. Nichols' leadership, COM has established a schedule that guarantees that a student will not have to delay their completion because of a lack of courses. But the past few years have demonstrated the many life challenges our students face in accessing a college education even with a guaranteed schedule. Higher Education has stagnated into a model of course offerings. Courses are offered simultaneously and over the same course of time. Recently we have seen the growth of different modalities. Students have grown accustomed to technology and taking classes partially face-to-face and in-person (the hybrid model) and fully online. The fully online course is typically offered asynchronously – students and the faculty dropping in and out of the course at different times through messages and postings. Students have mixed success in all modalities. One to explore to address the challenges faced by students who want in-person, real time instruction but have barriers accessing the campus is the synchronous online course. Over the next year, COM will develop courses that students can log in to remotely and participate in real time with the instructor. The instructor will be able to provide immediate feedback and interaction.

When it comes to the scheduling of the classes, colleges have added additional shorter sections withing the regular term. While most classes still last 16 weeks, some are 12, others 8, and very few are 4. All of these, though, occur within the 16-week semester and are offered simultaneously. COM will explore a variety of approaches that will enable a student to enroll throughout the year and not just at the beginning of fall, spring, and/or summer. Also, there are examples of institutions offering courses for shorter durations and singly. The ability for a student to take a course without waiting for up to three months is a priority. Doing what we can to aid students in their success through schedules is a priority over the next few years.

ACCESS TO OPPORTUNITY

COM has a commitment to provide educational opportunities to its students that will result in a livable wage and continued professional growth. In the past year we have instituted a program review process. This process works to ensure that every existing program is serving our students and employers through a regular review of key data metrics and participation by our Advisory Boards in strategic planning. Access to opportunity includes the ability to access the full range of employment opportunities in the Gulf Coast region. There are five major industries in the region:

- Aviation/Aerospace
- Healthcare
- Hospitality/Tourism
- Petrochemical
- Transportation/Logistics

Currently COM provides significant opportunities for the Healthcare and Petrochemical fields. This Academic Master Plan identifies careers in the remaining three so that we can provide access to the full range of career opportunities in the Gulf Coast region. We project that the launching of these programs will increase our enrollment by at least 10% over the next 3-5 years.

Environmental Scan

College of the Mainland is a learning-centered, comprehensive community college dedicated to student success and the intellectual and economic enrichment of the diverse communities we

serve. Located in Texas City, Texas, in the rural and suburban corridor between Houston and Galveston, COM serves a body of economically and ethnically diverse students. COM is proud to bear the distinctions of Hispanic Serving Institution, Minority Serving Institution, Military Friendly School, and Mother-Friendly Workplace. In Fall, 2021, COM enrolled 4,140 students in credit-bearing programs. Fifty-nine percent (59%) are people of color (15% Black; 35% Hispanic/Latino/a; 3% Asian; 1% American Indian or Alaskan Native; <1% Native Hawaiian or Pacific Islander; 3% two or more races). College-wide, 26% of students are age 25 or older, and 62% are women. However, among workforce programs 40% are 25 or older, and only 51% are women (including a large nursing and allied healthcare program with predominantly women enrolled.) Concurrent high school enrollment contributes 25% of workforce students (COM OPEAR, 2021). About 47% of the population of Galveston County lives in the COM community college district. The income per capita in the district is \$30,715 while in the surrounding areas of the same county it is \$42,340. While 9.6% of the surrounding county lives below poverty level, 15.4% of COM district residents live in poverty. Importantly, among those COM district residents who have at least some postsecondary education, poverty prevalence (8.2%) is cut almost in half (US Census Bureau, 2020).

ESMI Burning Glass was used to determine the occupational data in the area. The area falls within 4 counties: Brazoria, Chambers, Galveston, Harris. The data yielded results listed in Appendices A and B.

We took the fastest growing occupations and began to refine it. We established the following criteria to refine the list:

- Occupations with greater than 1,000 jobs
- Occupations with growth
- Occupations that earn a living median wage (\$17/hr)

Refined List of Occupations up to an Associate Level (highlight indicates related programs selected):

SOC CODE	Description	2020 Median Hourly Earnings	2021 Jobs	2026 Jobs	2021 - 2026 Change	2021 - 2026 % Change	Combined Institutional Completions
31-9011	Massage Therapists	\$17.95	1,108	1,415	306	28%	34
31-2021	Physical Therapist Assistants	\$35.80	1,157	1,321	165	14%	89
31-9097	Phlebotomists	\$17.71	2,676	2,950	274	10%	43
29-1126	Respiratory Therapists	\$30.02	2,877	3,157	280	10%	150
23-2011	Paralegals and Legal Assistants	\$23.65	7,875	8,636	760	10%	153
25-2011	Preschool Teachers, Except Special Education	\$20.54	4,942	5,398	456	9%	36
29-2032	Diagnostic Medical Sonographers	\$35.73	1,616	1,759	142	9%	52
31-9092	Medical Assistants	\$16.99	14,278	15,229	951	7%	1,081
29-1292	Dental Hygienists	\$37.02	2,713	2,891	177	7%	64
29-2018	Clinical Laboratory Technologists and Technicians	\$26.35	6,321	6,700	378	6%	13
33-2011	Firefighters	\$27.14	4,910	5,189	279	6%	45
31-9091	Dental Assistants	\$17.95	5,675	5,981	307	5%	256
15-1257	Web Developers and Digital Interface Designers	\$33.20	1,394	1,462	68	5%	10
29-2034	Radiologic Technologists and Technicians	\$30.98	3,854	4,023	168	4%	128
29-2061	Licensed Practical and Licensed Vocational Nurses	\$23.67	10,858	11,327	469	4%	130

29-2098	Medical Dosimetrists, *Medical Records Specialists, and Health Technologists and Technicians, All Other	\$20.69	6,190	6,445	256	4%	170
29-2031	Cardiovascular Technologists and Technicians	\$26.63	1,190	1,237	48	4%	13
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	\$24.81	4,642	4,827	184	4%	122
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$25.30	5,428	5,639	211	4%	16
49-3023	Automotive Service Technicians and Mechanics	\$21.90	9,513	9,784	271	3%	86
53-2031	Flight Attendants	\$28.73	6,761	6,932	171	3%	0
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$22.65	38,219	39,096	876	2%	29
11-3071	Transportation, Storage, and Distribution Managers	\$51.65	3,081	3,114	33	1%	55
15-1231	Computer Network Support Specialists	\$37.18	2,778	2,795	17	1%	127

Refined List of Occupations up to a Bachelor level (highlight indicates related program selected):

SOC Code	Occupation	2020 Median Hourly Earnings	2021 Jobs	2026 Jobs	Change in Jobs (2021- 2026)	% Change	Combined Institutional Completions
11-9111	Medical and Health Services Managers	\$52.61	7,601	8,808	1,207	16%	865
27-2022	Coaches and Scouts	\$18.38	2,658	3,042	384	14%	3480
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	\$25.34	3,000	3,364	364	12%	180
21-1021	Child, Family, and School Social Workers	\$25.20	3,328	3,704	376	11%	465
25-2050	Special Education Teachers, Kindergarten and Elementary School	\$28.62	2,804	3,099	294	10%	5
13-1161	Market Research Analysts and Marketing Specialists	\$30.64	7,157	7,873	716	10%	1,990
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	\$28.98	16,914	18,579	1,665	10%	174
25-2021	Elementary School Teachers, Except Special Education	\$28.54	24,476	26,788	2,312	9%	345
25-2022	Middle School Teachers, Except Special and Career/Technical Education	\$28.51	12,516	13,606	1,090	9%	290
13-1111	Management Analysts	\$46.22	7,362	7,998	636	9%	3100
13-1081	Logisticians	\$37.40	3,624	3,935	311	9%	0

15-1253	Software Developers and Software Quality Assurance Analysts and Testers	\$52.66	16,961	18,204	1,243	7%	245
29-2010	Clinical Laboratory Technologists and Technicians	\$26.35	6,198	6,619	421	7%	380
29-1141	Registered Nurses	\$40.97	48,688	51,920	3,232	7%	6,630
11-3031	Financial Managers	\$70.27	11,149	11,844	696	6%	375
13-1071	Human Resources Specialists	\$31.06	10,494	10,899	405	4%	15
19-2031	Chemists	\$45.58	1,531	1,566	34	2%	530
15-1242	Database Administrators	\$49.20	2,180	2,225	45	2%	245
13-2011	Accountants and Auditors	\$37.48	26,314	26,622	308	1%	3100
11-1021	General and Operations Managers	\$52.13	46,759	47,132	374	1%	375

Due to the data management of the provider, some occupations had to be pulled manually to account for differing definitions and corresponding data. Culinary Arts was one of those. As our curriculum would include first-line supervisors, head cooks, and chefs, we included both data lines for an average salary of \$19.19 with a combined job growth projection of 16.59%.

1,867.71	14.6%	\$16.19/hr \$33,673/yr	340	
Jobs (2021) *	% Change (2021- 2026) *	Median Earnings	Annual Openings*	
3% below National average*	Nation: 6.9%*	Nation: \$17.16/hr; \$35,690/yr		
Occupation	2021 Jobs*	Annual Openings*	Median Earnings	Growth (2021 - 2026) *
First-Line Supervisors of Food Preparation and Serving Workers	1,610	294	\$15.90	13.78%
Chefs and Head Cooks	257	45	\$22.49	19.41%

Beyond the data provided by EMSI/Burning Glass including that of TWC, information provided to us through our industry leaders and confirmed through discussions with the Bay Area Houston Economic Partnership, the Aerospace/Aviation sector is anticipating adding 1300-1800 technician positions that are not reflected in the area data.

A review of the data will also not include the occupation of entrepreneur. The state of Texas is also listed as one of the top states for small business ownership and Galveston County is the number 2 place for small business in the state and fifth nationally according to SmartAsset.com (see Appendix C).

PRESENTATION OF INFORMATION

The initial data set was provided to an open forum on March 10th. An open invitation was sent to the COM campus community (see appendix D). The information was presented with an opportunity for questions throughout. Participants were given the chance to not only ask any questions from the data but also to suggest other programs they would like us to consider/review. Feedback was gathered following the event.

On March 11th, an in-person and virtual presentation took place for representative members of our program advisory boards. The discussion followed a similar format to the campus event. Members were asked for not only their reflections on the data but also for any gaps we may be unaware of in employment trends.

A select Blue Ribbon Panel was formed and comprised of leaders of the major industry sectors. These leaders were invited to a discussion of our process, data, and our initial and tentative recommendations. This meeting was extremely helpful and provided meaningful insights from those who represent the trend setters for the region. The result of this meeting was a refinement of our recommendations and some additions.

PROGRAMS RECOMMENDED FOR DEVELOPMENT

Program development will take place in three intertwined areas as detailed below.

Extension of programming through dual

There has been an increased focus by our Independent School Districts and COM to extend more of our programming via Dual Credit. One barrier to this has been the low enrollment available at each individual school. To overcome this barrier, we have begun plans to pool the offerings so that multiple high schools can participate in the program at a single location. The programs slated for extension include:

- Fire
- EMT
- Law Enforcement
- PTEC
- Phlebotomy
- Dental Assisting
- Information Technology
- Culinary Arts (to be developed)

We will also be developing schedules to expand our existing dual credit offerings through intentional programming into the earlier years of high school and through a more inclusive GPA. Math completion is key to success in STEM enrollment at the college level. We will be developing a plan to provide a path so that more dual enrollment students will arrive to college Calculus ready - an essential for engineering and related fields.

Continuing education

The Instructional Division restructured programming operations in August of 2020 to facilitate program development and to account for the fluidity of growth from CE to Credit. Under the new design, the Associate Dean of Continuing Education works directly with the two Deans of Instruction to identify CE programs with established enrollments and potential enrollments to be matured into credit programs.

Our CE division currently operates an Instrumentation & Electrical program. Based on feedback from our partners in the Petrochemical industry, there is an increasing need for this occupation. With these projections and their commitment to program development, we will be expanding this program to credit.

Programs that will be developed to address both the need to serve the industry sector and the availability of employment will involve a focus on Port operations and logistics. Maritime Ship-to-Shore Operations and Crane Operations will be developed through augmented reality training. Additionally, while we have offered Millwrighting in the past. We will be putting additional attention and priority to growing its enrollment to a sustained program.

Lastly, we have been offering OSHA Training on a contract basis through an agreement with the University of Texas-Arlington. This year we are pursuing becoming an OSHA Training Institute

Education Center. This status will establish COM as the training provider and authorizer for training for the Gulf Coast Region. This is a significant step toward the growth of the Gulf Coast Safety Institute and our contract training opportunities.

College credit programs for development

The following programs were identified as meeting the criteria for earnings, employment outlook, and/or an unmet industry sector with growth and will be developed as Certificate 1, Certificate 2, and the Associate degree respective to the need and enrollment:

- Culinary Arts (employment need, unmet industry sector)
 - o Projected Growth (2021-2026): 16%
 - o Median Hourly Salary: \$19.19
- Hospitality Management (employment need, unmet industry sector)
 - o Projected Growth (2021-2026): 9%
 - o Median Hourly Salary: \$28.08
- Logistics (employment need, unmet industry sector)
 - Transportation:
 - o Projected Growth (2021-2026): 1%
 - o Median Hourly Salary: \$51.65

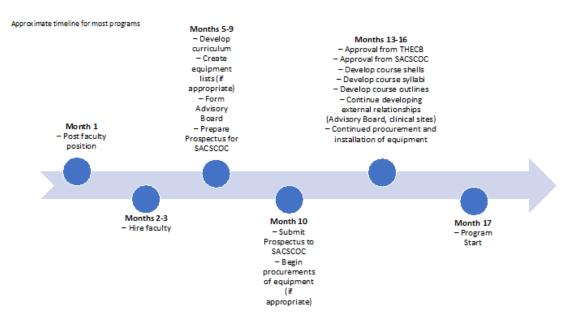
Logisticians:

- o Projected Growth (2021-2026): 9%
- o Median Hourly Salary: \$37.40
- Medical Lab Technician (employment need)
 - o Projected Growth (2021-2026): 6%
 - o Median Hourly Salary: \$26.35
- Aerospace/Aviation Technician (employment need, unmet industry sector)
 - o Projected Growth (2021-2026): 4%
 - o Median Hourly Salary: \$35.25
- Instrumentation & Electrical (employment need)
 - Galveston County only
 - o Projected Growth (2021-2026): 7%
 - o Median Hourly Salary: \$30.49

The final program recommended for development is a Bachelor of Science in Entrepreneurship. This degree will be a Plus-2 program. Students with any associates degree will be eligible for enrollment. The curriculum for this program will complete the Texas General Education requirement and courses related to operating a small business.

The program development process is a timely one that requires certain accomplishments before others can be pursued. The path for programs is represented in the first diagram. A sample timeline for the process is put forth in the second diagram.





Note: Timeline will need to be adjusted based on varying accrediting body requirements

RESOURCE IMPLICATIONS

The resources required to support the recommended program falls into the categories of personnel, equipment, and facilities. Each of those categories are prioritized and addressed in this section. The prior Academic Master Plan featured several programs that were low enrollment, high cost. One of the goals in this plan is to address the growing occupational needs in the region while recognizing those programs that are potential high enrollment, low cost. This plan contains a fiscally responsible balance of programming.

PERSONNEL

PROGRAM

PRIORITY

Culinary Arts Faculty Coordinator	2022
Instrumentation & Electrical	
Faculty Coordinator	2022
Maritime Coordinator	2022
Entrepreneurship Faculty	2023
Hospitality Management Faculty	2023
Logistics Faculty	2023
Medical Lab Technician Faculty	2024
Aerospace/Aviation Technician	
Faculty Coordinator	2024

EQUIPMENT

PROGRAM

Culinary Arts

The buildout for an industrial teaching kitchen is involved and specific. The equipment needed for this program will include stoves, ovens, refrigerators, walk-in freezers, cooking equipment, etc. A full list is provided in Appendix E. Funding for the equipment is being considered through private corporate donations supporting our hospitality program.

1 & E

The necessary equipment for the launch of an expanded I&E program is in place and will be available with the opening of the Industrial Careers Building.

Maritime

The equipment required for this program is an allinclusive Augmented Reality Unit and individual computer workstations. Cost for the augmented reality training center is approximately \$500,000 (see Appendix F). There are several grant opportunities being pursued to support this program and the industry.

Medical Lab Technician

The equipment needs for this program are listed in Appendix G. The total cost is approximately \$300,000.

Aerospace/Aviation Technician

The Aerospace program has several dimensions to it that will need to be explored and informed by an advisory board and with future employers. At this time, a specific equipment list cannot be provided.

FACILITIES

The COM campus has undergone a major transformation since the last Academic Master Plan was created. This plan has identified concentrated areas for COM to expand its offerings to provide more and needed career opportunities to its service area. Below are listed the individual programs and their requirement. While we are committed to maximizing the use of our facilities, some of the new programming stretches beyond our current capacity. The two biggest specialized space needs are for the Culinary Arts program and Aviation/Aerospace Technology. There is a need for an additional facility to house general purpose classrooms and offices. With the loss of the Math/Science Building and the growth in programming, we need a building to provide approximately 8-10 classrooms and offices to support the program. This facility is significantly smaller than the previous proposed Academic Transfer Building and will meet the instructional needs now and for the development of new programming.

PROGRAM

Culinary Arts

Space needs for this would include approximately

15,000 square feet. Included in this space is the kitchen, serving area with reception, office, and classroom. There are no current spaces on campus for this program. It would, therefore, would require an additional structure or leased space.

I&E

This space is included in the ICB.

Maritime

Space is available on the 4th floor of the STEAM building. Facilities need are minimal and require only power and internet connectivity. Square Footage is approximately 5,000 sq. ft.

Entrepreneurship

Additional classroom space will be required.

Hospitality Management

Additional classroom space will be required.

Logistics

Additional classroom space will be required.

Medical Lab Technician

The MLT program had a space design for inclusion in the STEAM building. Due to lack of funding and changing space needs, this space was not completed. The program will require approximately 2,300 square feet of space. This space will require new building for location. Please see Appendix H for layout and design.

Aerospace/Aviation

The space requirements for this program are approximations at this point. There is a need for manufacturing space and a clean room. At this point there is no suitable space available on campus. We would be looking at expansion opportunities both in terms of building and location. The facility is being proposed for a location within our service area closer to the employers based in the vicinity of Ellington Air Base.

CONCLUSION

The 2022 – 2027 Academic Master Plan reflects the commitment of College of the Mainland to its mission. With a focus on providing access financially, academically, and through opportunity, we are dedicated to serving the population of the mainland of Galveston County through our services.

APPENDIX

APPENDIX A – data for occupations requiring an associates

APPENDIX B – data for occupations requiring a bachelor's degree

APPENDIX C - Smartasset.com methodology

APPENDIX D - Presentation PowerPoint

APPENDIX E - Culinary Arts Equipment List

APPENDIX F – Maritime Augmented Reality Training Center

APPENDIX G – MLT Equipment

APPENDIX H - MLT Space

APPENDIX I – New program development template

APPENDIX A

Programs requiring up to an associate degree

soc	Description	Median Hourly Earnings	2021 Jobs	2026 Jobs	2021 - 2026 Change	2021 - 2026 % Change
39-5092	Manicurists and Pedicurists	\$11.54	328	564	236	72%
31-9011	Massage Therapists	\$17.95	1,108	1,415	306	28%
11-9081	Lodging Managers	\$29.91	357	445	88	25%
39-5012	Hairdressers, Hairstylists, and Cosmetologists	\$10.37	6,837	7,874	1,038	15%
31-2021	Physical Therapist Assistants	\$35.80	1,157	1,321	165	14%
31-9097	Phlebotomists	\$17.71	2,676	2,950	274	10%
29-1126	Respiratory Therapists	\$30.02	2,877	3,157	280	10%
23-2011	Paralegals and Legal Assistants	\$23.65	7,875	8,636	760	10%
25-9045	Teaching Assistants, Except Postsecondary	\$10.58	15,414	16,877	1,463	9%

25-2011	Preschool Teachers, Except Special Education	\$20.54	4,942	5,398	456	9%
29-2032	Diagnostic Medical Sonographers	\$35.73	1,616	1,759	142	9%
31-9092	Medical Assistants	\$16.99	14,278	15,229	951	7%
29-1292	Dental Hygienists	\$37.02	2,713	2,891	177	7%
29-2056	Veterinary Technologists and Technicians	\$15.71	2,288	2,434	146	6%
29-2018	Clinical Laboratory Technologists and Technicians	\$26.35	6,321	6,700	378	6%
33-2011	Firefighters	\$27.14	4,910	5,189	279	6%
31-9091	Dental Assistants	\$17.95	5,675	5,981	307	5%
31-1131	Nursing Assistants	\$13.85	13,948	14,644	696	5%
29-2034	Radiologic Technologists and Technicians	\$30.98	3,854	4,023	168	4%
29-2061	Licensed Practical and Licensed Vocational Nurses	\$23.67	10,858	11,327	469	4%
29-2098	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	\$20.69	6,190	6,445	256	4%
29-2031	Cardiovascular Technologists and Technicians	\$26.63	1,190	1,237	48	4%
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	\$24.81	4,642	4,827	184	4%
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	\$25.30	5,428	5,639	211	4%
49-3023	Automotive Service Technicians and Mechanics	\$21.90	9,513	9,784	271	3%
53-2031	Flight Attendants	\$28.73	6,761	6,932	171	3%
53-3032	Heavy and Tractor-Trailer Truck Drivers	\$22.65	38,219	39,096	876	2%
	 					

11-3071	Transportation, Storage, and Distribution Managers	\$51.65	3,081	3,114	33	1%
47-5012	Rotary Drill Operators, Oil and Gas	\$29.86	1,673	1,638	(36)	(2%)
47-5013	Service Unit Operators, Oil and Gas	\$20.61	3,615	3,530	(85)	(2%)
17-3022	Civil Engineering Technologists and Technicians	\$23.03	1,675	1,631	(45)	(3%)
17-3023	Electrical and Electronic Engineering Technologists and Technicians	\$33.97	2,554	2,478	(75)	(3%)
53-5021	Captains, Mates, and Pilots of Water Vessels	\$30.37	1,576	1,524	(52)	(3%)
17-3027	Mechanical Engineering Technologists and Technicians	\$30.91	1,184	1,144	(40)	(3%)
17-3031	Surveying and Mapping Technicians	\$20.80	2,744	2,626	(118)	(4%)

APPENDIX B

Programs requiring up to a bachelor's degree.

soc	Description	Median Hourly Earnings	2021 Jobs	2026 Jobs	2021 - 2026 Change	2021 - 2026 % Change
11-9111	Medical and Health Services Managers	\$52.61	7,601	8,808	1,207	16%
25-3099	Tutors and Teachers and Instructors, All Other	\$15.68	3,034	3,482	449	15%
27-2022	Coaches and Scouts	\$18.38	2,658	3,042	384	14%
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	\$25.34	3,000	3,364	364	12%
21-1021	Child, Family, and School Social Workers	\$25.20	3,328	3,704	376	11%
25-2052	Special Education Teachers, Kindergarten and Elementary School	\$28.62	2,804	3,099	294	10%

13-1161	Market Research Analysts and Marketing Specialists	\$30.64	7,157	7,873	716	10%
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	\$28.98	16,914	18,579	1,665	10%
29-1126	Respiratory Therapist	\$30.02	2,877	3,157	280	10%
15-2031	Operations Research Analysts	\$43.53	1,181	1,296	115	10%
15-1212	Information Security Analysts	\$56.00	2,066	2,262	196	10%
25-2021	Elementary School Teachers, Except Special Education	\$28.54	24,476	26,788	2,312	9%
25-3031	Substitute Teachers, Short-Term	\$11.26	13,017	14,222	1,205	9%
25-2022	Middle School Teachers, Except Special and Career/Technical Education	\$28.51	12,516	13,606	1,090	9%
13-1111	Management Analysts	\$46.22	7,362	7,998	636	9%
13-1081	Logisticians	\$37.40	3,624	3,935	311	9%
27-3091	Interpreters and Translators	\$23.91	2,028	2,197	168	8%
15-1256	Software Developers and Software Quality Assurance Analysts and Testers	\$52.66	16,961	18,204	1,243	7%
29-2010	Clinical Laboratory Technologists and Technicians	\$26.35	6,198	6,619	421	7%
29-1140	Registered Nurses	\$40.97	48,688	51,920	3,232	7%
11-3031	Financial Managers	\$70.27	11,149	11,844	696	6%
13-1071	Human Resources Specialists	\$31.06	10,494	10,899	405	4%
19-2031	Chemists	\$45.58	1,531	1,566	34	2%
15-1245	Database Administrators	\$49.20	2,180	2,225	45	2%
13-2011	Accountants and Auditors	\$37.48	26,314	26,622	308	1%
11-1021	General and Operations Managers	\$52.13	46,759	47,132	374	1%
15-1244	Network and Computer Systems Administrators	\$44.71	6,381	6,263	(118)	(2%)
17-2000	Engineers	\$66.39	2,838	2,765	(73)	(3%)
15-1121	Computer System Analysts	\$56.57	11,750	11,377	(373)	(3%)
17-1011	Architects, ex Landscape and Naval	\$39.09	2,103	1,990	(114)	(5%)
41-9031	Sales Engineers	\$59.80	1,660	1,563	(97)	(6%)
13-1051	Cost Estimators	\$35.27	3,756	3,474	(282)	(8%)
17-1022	Surveyors	\$30.37	1,324	1,219	(106)	(8%)
19-2042	Geoscientists, except Hydrologists and Geographers	\$84.25	3,083	2,808	(275)	(9%)

APPENDIX C

SmartAsset.Com methodology for Small Business Ranking

sma	artasset	HOME BUYING TAXES	RETIREMENT BANKING	INVESTING SMART	READS MORE ~ Q
Rank	County, State	Small Business Returns	Small Business Income	Income Taxes	Small Business Index
1	Dallas, TX	23.87%	30.29%	\$7,633	94.26
2	Galveston, TX	42.62%	18.06%	\$7,633	94.00
3	Haskell, TX	32.80%	24.34%	\$7,633	93.94
4	Titus, TX	37.31%	19.56%	\$7,633	91.06
5	Matagorda, TX	43.81%	14.17%	\$7,633	89.18
6	Goliad, TX	44.44%	12.06%	\$7,633	86.57
7	Glasscock, TX	40.13%	12.04%	\$7,633	82.26
8	Stonewall, TX	41.67%	10.36%	\$7,633	81.20
9	Brooks, TX	36.51%	12.96%	\$7,633	80.09
10	Midland, TX	42.55%	8.31%	\$7,633	78.92
	TX	21.08%	5.34%	\$7,633	

Methodology

To determine the best places for small business owners, our study measured three factors: the proportion of people in a county with small business income, the reported business income and the amount of tax a potential resident must pay on their income.

To determine how attractive a region is for small business owners, we compared the number of tax returns that report small business income and compared that to the total tax-filing population of the region. Next, we compared the total amount of small business income to the overall amount of income reported in each region.

Small businesses are typically incorporated as pass-through entities, meaning that the business owners pay income taxes on the company profits rather than the company itself paying income tax. Because of this, income taxes can play a major role in determining the financial success of a small business. To determine income tax burdens across counties, we used the national median household income and then applied relevant deductions and exemptions before calculating federal, state and local income taxes for each location.

These three factors were then indexed and equally weighted to yield our Small Business Index. Places with the highest Small Business Index are the places which ranked the highest in the study.

Sources: Internal Revenue Service (IRS), US Census Bureau 2019 American Community Survey, Government Sources, SmartAsset

APPENDIX D

WORKING ON TRANSLATING TO FILE THAT CAN BE INSERTED

Will provide it as separate attachment

APPENDIX E

Culinary Equipment List

Proposed Equipment List for Culinary Arts

TEM DESCRIPTION		MINIMUM QUANTITY	
Base cabinets	Finished to resist water, stain, and detergents	5 units	
	(Providing 10-12 linear feet)		
Wall cabinets	With adjustable shelves	5 units	
Exhaust system	Built-in or over each range		
Sink	Double bowl, stainless or porcelain	5	
Waste disposal	1 ½ horsepower	5	
Trash can	32-gallon capacity with lid	2	
Dryer	Electric or gas, vented	1	
Washer	Electric, heavy duty	1	
Demonstration table	Built-in or portable	1	
Microwave oven	Portable, variable temperature control	5	
Hand sink	One bowl	1	
Tables	4' x 8' to be used as student workstations/tables	5	
Chairs	Hard plastic, stacking with chrome legs	31	
Refrigerator	Frost free, freezer at top – 18 cu. ft.	5	
Freezer	Upright, frost free - 20.3 cu. ft.	1	
Dishwasher	Heavy duty, 4 cycle, low noise level	2	
Mixer	Standing heavy duty, standard, 12 speed	5	
	4–6-quart mixing bowls		
Blender	Multi-speed, stainless blade, 5 cup	5	
Toaster	Automatic, 2 slice	5	
Can opener	Electric or handheld, open any size can	5	
50-pound bin	Plastic with casters for flour and sugar	2	

Stepstool	OSHA standard	1
Storage cabinets	Locked for cleaning supplies, linens, event serving	3-4 units
Storage Cabinets	pieces, etc.	5-4 units
Dish drainer/tray	Industry standard	5
Utility cart	Stainless steel, 3 shelves	2
Paper towel dispenser	Mounted or portable wooden/metal	6
Hand soap dispenser	Mounted	6
Dish towels	Cotton	12 dozen
Dish cloths	Cotton	12 dozen
Potholders	Heat resistant	2 dozen
Chef aprons	Cotton	1 per student
Educational resources/references	Textbooks, eBooks, Resource packages, Digital packages, additional resources	Classroom Set
Food Preparation Ite	ms	
Coffee maker	10-12 cup	1
Coffee percolator	30 cups	1
Scale	Portion	5
Deep fat fryer and strainer	10" electric	1
Hand juicer		1 per unit
Skillet	8"	1 per unit
Skillet	10"	1 per unit
Pressure cooker	4-quart	1
Omelet pan		1 per unit
Skillet	8"	1 per unit
Skillet	10"	1 per unit
Pressure cooker	4-quart	1
Omelet pan		1 per unit
Rolling pin	Wooden	1 per unit
Cutting board	Polyethylene – 8 ½" x 11"	1 per unit
Cutting board	Polyethylene – 14" x 17"	1 per unit
Cookie cutter set	Assorted	1 per unit
Gelatin mold	Assorted sizes	1 per unit
Grater/Zesters	Assorted	2 per unit
•	•	

Stock pot/lid	8-quart	1 per unit
Batter bowl	Glass, 2-quart	1 per unit
Scoop	Set	1 per unit
Cookie scoop	½ oz portion size	1 per unit
Egg separator		1 per unit
Can/bottle opener	Hand-held	1 per unit
Colander	Plastic or metal	1 per unit
Sifter		1 per unit
Vegetable brush		1 per unit
Salt & Pepper Shakers		1 per unit
Cookware set	1, 1 ½, 2-quart saucepans with lids, etc.	1 per unit
Casserole set	Glass	1 per unit
Round cake pan	8"	2 per unit
Round cake pan	9"	2 per unit
Square cake pan	8"	2 per unit
Spring form pan	Set	2 per unit
Loaf pan	11" x 6 ½"	2 per unit
Loaf pan	4 ½" x 2 ½"	2 per unit
Oblong pan	9" x 13"	2 per unit
Pie pan	9"	2 per unit
Tart pan		6 per unit
Angel Food pan	10"	1 per unit
Bundt pan	10"	1 per unit
Muffin pan	6-cup	2 per unit
Muffin pan	12-cup	1 per unit
Mini-muffin pan	12-cup	4 per unit
Cookie sheet	12' x 14"	3 per unit
Jelly roll pan	151/2" x 10 ½" x 1 1/8"	2 per unit
Pizza pan	14"	2 per unit
Cooling rack	13" x 19"	4 per unit
Trays	Utility	1 per unit
Hand mixer	Electric, heavy-duty motor, 5 speed	1 per unit
Mixing bowl set	Stainless steel, various sizes	1 per unit
Mixing bowl set	Glass, various sizes	1 per unit
Measuring cups	Set of four dry measuring cups	1 per unit
	- 1	

Measuring cups	Glass – 1 cup and 2 cup	1 per unit
Measuring spoons	Set of four standard sizes	1 per unit
Knives	Set of five assorted sizes and types	1 per unit
Steaming basket		1 per unit
Electric skillet		1 per unit
Slow cooker	6-quart	1 per unit
Food processor	12-cup	1 per unit
Bread Maker		1 per unit
Electric knife		1 per unit
Vegetable peeler		2 per unit
Kitchen shears		1 per unit
Pizza cutter		1 per unit
Cooking spoon	Long handle, metal/nylon	2 per unit
Cooking spoon	Slotted, metal/nylon	1 per unit
Cooking fork	Long handle, metal	1 per unit
Turner	Metal/nylon	1 per unit
Turner	Slotted, metal/nylon	1 per unit
Doughnut/Biscuit cutter	Set of various sizes	1 per unit
Apple Slicer/Corer		1 per unit
Tongs	Utility	1 per unit
Tongs	Ice	1 per unit
Ice scoop		2
Ice cream scoop		1 per unit
Custard cups	Glass set	1 per unit
Candy/Deep Frying thermometer		1 per unit
Meat thermometer		1 per unit
Turner	Slotted, metal/nylon	1 per unit
Doughnut/Biscuit cutter	Set of various sizes	1 per unit
Apple Slicer/Corer		1 per unit
Tongs	Utility	1 per unit
Tongs	Ice	1 per unit
Ice scoop		2
Ice cream scoop		1 per unit
Custard cups	Glass set	1 per unit

Candy/Deep Frying thermometer		1 per unit
Heat resistant spatula	Various sizes	1 per unit
Metal spatula	Straight edge	1 per unit
Ladle	Soup	1 per unit
Pastry brush		1 per unit
Double boiler/lid	Metal or glass	1 per unit
Pastry blender		1 per unit
Balloon whisk	Metal	1 per unit
Cheese slicer		1 per unit
Food chopper		1 per unit
Serving Equipment		
Dinnerware	20-piece set	2 per unit
Flatware	20-piece set	2 per unit
Beverage glass		8 per unit
Water glass		8 per unit
Juice glass		8 per unit
Pitcher	2-quart, glass	2 per unit
Platter		2 per unit
Serving bowls	1 quart size	4 per unit
Sugar bowl		1 per unit
Cream pitcher		1 per unit
Bread basket		1 per unit
Relish tray		1 per unit
Butter knife		1 per unit
Cold meat fork		1 per unit
Sugar spoon		1 per unit
Serving spoons		4 per unit
Pastry/pie server		2 per unit
Flatware tray		1 per unit
Sherbets		8 per unit
Large Serving spoons	Long handled	3-4 per unit
Serving slotted spoons	Long handled	3-4 per unit
Serving forks	Long handled	3-4 per unit
Serving ladles	Long handled	3-4 per unit
	 	

Serving tongs	Long handled	3-4 per unit		
Appliances and Larg	e Equipment	•		
Six burner range		5		
Char-broiler burner	1			
Overhead salamander		1		
Wire rack locking cage for storage		1		
Baker's rack		2-3		
3-compartment sink	With sideboards	1		
2-compartment vegetable sink	With one sideboard	2		
2-basket fryer	With dual temperature control	2		
Ice Cream machine		2		
Counter, sandwich	Self-contained, 6' capacity unit	2-3		
Dishwasher	Commercial with dish racks	2		
Equipment stand	Stainless steel 24" x 8' x 24"	1		
Exhaust system	With automatic fire extinguisher	2-3		
Freezer	25 cu. ft., reach-in, stainless steel front	1		
Fry kettle	15-quart	2		
Grill	With two thermostats	2		
Hot food server	Electric, portable with sneeze guard	2-3		
Gas burner	Commercial	1		
Induction burner		2		
Ice cream/sorbet maker	Built-in or portable	1		
Panini press		1		
Salad bar, on casters	With sneeze guard, center drain, fiberglass reinforced plastic well	1		
Steamer		1		
Steamer/cooker		1		
Storage units, dish storage	Aluminum, 2 qt. inset and 6 qt. outside pan	1		
Storage units, pot and pan	nd Flat shelving, 4 high 12" x 15" and 6' long			
Storage units	Flat shelving, 5 high 27" x 60" long	2		

h	b	1
Storage units	Dry food storage shelving	
Utensil rack	Food storage bins, floor models on casters	
Drum sieve	Hanging	
Mesh strainers	Stainless steel	1 per unit
Serving platters	8" round	1 per unit
Baker's scale	Assorted sizes	3 per unit
Holding Food Carts		2
Pressure scale		2
One Ounce Pressure scale		1
Bakeware set		1
Mixing bowls	Commercial	1 per unit
Braising pan	Stainless steel, 5 qt. – 30 qt.	1 set per unit
Broiler	Tilting	
Cash register	18"-30" infrared	
Chafing pans, stands, covers		1
Coffee maker	Commercial grade	3
Culinary set	2-pot, 2 built-in warmers automatic with decanters	1
Dinnerware set	Including knife rack and cutting board	1 per unit
Flatware set	Plate and table service for 60	
Glassware set	Plate and table service for 60 including baskets/trays	
Table linens	Food and beverage	service for 60
Soufflé pans	Plate and table, and buffet	service for 60
Beverage servers		4-6 per unit
Cake decorating set		6-10 sets
Chef jackets		5
Grinder		3 per team
Menu board	Tabletop, hand operated, stainless steel, with five cones	2
Microwave cookware		1
Pan set	Assorted set	1
Percolator	For range and oven	1 per unit

Toaster	100-cup	1
Garnishing tool kit	Commercial, electric 2 slice	1
Heavy duty stockpot		3-4
Heavy duty saucepan	5-gallon	2
Heavy duty saucepan	1-quart	2
Heavy duty saucepan	2-quart	2
Saucepan	6-quart	2
Saucepan	1 quart	2
Saucepan	2-quart	2
Sauté pan	6-quart	2
Rondeau	10°	6
Sautoir	6 or 10 qt. stainless	2
Wok	3 or 4 qt. stainless	2
Sharpening stone	Steel with two handles	1
Knife Sharpening steels	Tri-sided	1
Chef knife		2
Chef knife	10" handle grip	10
De-boning knife	8" handle grip	10
Paring knife	Handle grip	10
Serrated knife	Handle grip	20
Channel knife	Handle grip	1
Bone cleaver	Handle grip	2
Baking sheets	Handle grip	1
Baking sheets	Full size	12
Document Camera		1
Beverage Station		1-2
Dry Display Case	Dry bakery displays are a perfect to display pastries, doughnuts, cookies, muffins, other non-refrigerated foods. These non-refrigerated units are designed to maximize showcase with clear glass displays and minimal modern designs. Choose between self-serve and staff-serve retail displays, or multi-shelved non-refrigerated countertop displays that showcase more products	

Dough Handling Ma	chines	
Molder	The molder rolls the bread dough into standard shapes for loaves of bread or baguettes and rolls.	1
Proofer	Proofer is a special box which as ideal conditions for fermenting yeast dough. It maintains warm temperature and humidity levels appropriate to the specific dough.	1
Retarder	This machine chills yeast dough to slow or retard the rate of fermentation. It is stored for later baking.	1
Retarder-Proofer	This has both retarder and proofer molds. If you mix the dough the previous night, put it in this machine. It goes through the retarder phase first where the dough it chilled and kept for a short time. Then the machine will automatically switch to proofer mold with the right temperature for fermentation of the yeast dough so it will be ready for baking for the next morning.	1
Ovens		
Oven	Commercial	5
Rack Oven	There are maybe 8 to 25 racks full of sheet pans.	1
Commercial Mixers		
Spiral Mixers	Spiral mixers are used for baking stiff dough. Most spiral mixers have only two operating speeds. The first speed is used for the first phase of dough mixing when all ingredients are blended. The second speed is used for the ladder phase of the dough development. The second difference is that spiral mixers are fork mixers. Fork mixers have two-pronged fork shaped beater that enters the bowl at a 45-degree angle and is used specifically for bread dough.	
Six Quart Mixers		6

Continuous mixer	In continuous mixer, small amounts of scaled mixers enters the machine continuously at one end and then the ingredients are blended and developed into dough as they move though the machine. The finished dough emerges at the other end of the machine	1
Horizontal mixer	Horizontal mixers are large industrial size machines capable of handling several thousand pounds of dough at a time. They can make specific range of products such as bread dough, pastry dough, and batters. One of the differences of horizontal mixers is the operator can control the dough temperature with great precision because mixer is equipped with water jackets with desired temperature that surround the mixing container	1
OTHER:		
Butcher block tabletops	Designed to go on top of students' stainless-steel workstations/prep tables	5
Dough Sheeter	Large enough to do at least 5lbs of laminated dough (croissants, Danish)	1
Duchess dough cutter		1

APPENDIX F

Maritime Equipment



Technical Laboratory Systems, Inc. PO Box 218609 Houston, TX 77218 1-800-445-1088 www.te.ch-labs.com

DATE: February 18, 2022 PREPARED FOR:

Paige Parrish College of the Mainland 1200 N. Amburn Road Texas City, TX 77591 EMAIL: [parrish@com.edu]

TIPS #200105

TIP5 #200105					
cmlabs - Vortex Master Port Simulator					
Model Number	<u>Description</u>	Quantity	Price Each	Total	
	10 Display with Motion Includes Instructor Station	1	\$227,745.00	\$227,745.00	
	Ship-to-Shore Training Pack	1	\$33,155.00	\$33,155.00	
	Mobile Harbor Crane	1	\$34,575.00	\$34,575.00	
	Ship Pedestal Crane	1	\$21,875.00	\$21,875.00	
	Shipping	1	\$8,625.00	\$8,625.00	
	Onsite Installation & Training	1	\$8,500.00	\$8,500.00	
	3 Years Annual Maintenance and Support - Includes replacement of Simulator Computers in year 3	1	\$86,225.00	\$86,225.00	
			Grand Total:	\$418,700.00	

Should you have any questions or need further assistance, please do not he sitate to contact me.

Kind Regards,

Warner Brown

WarnerBrown President

WB/RP/mo



Vortex Master

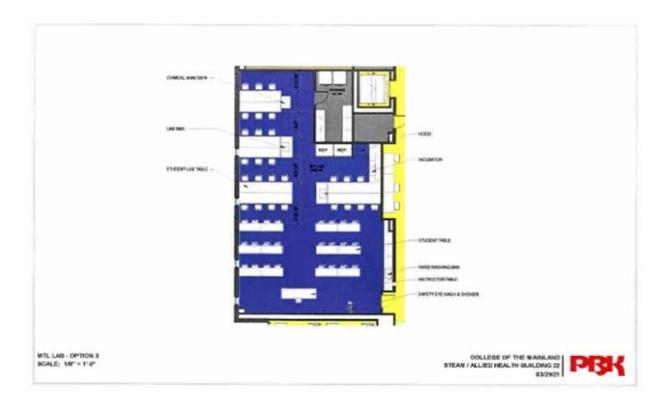
APPENDIX G

MLT Equipment List

Equipment Type	Number	Unit Price		
HEMOTOLOGY ANALYZER SYSMEX XN-430	1	\$30,517.30	\$30,517.30	HEMOTOLOGY ANALYZER SYSMEX XN-430 , 1@\$30517.3;
CHEMISTRY ANALYZER MINDRAY BS-200	1	\$15,950.00	\$15,950.00	CHEMISTRY ANALYZER MINDRAY BS-200 , 1@ \$15950;
BIOLOGICAL MICROSCOPE OLYMPUS CX23	12	\$1,787.50	\$21,450.00	BIOLOGICAL MICROSCOPE OLYMPUS CX23, 21@ \$1787.5;
	_			
ANALYZER & EDUCATION PACKAGE POINTE SCIENTIFIC	6	\$6,530.40	\$39,182.40	ANALYZER & EDUCATION PACKAGE POINTE SCIENTIFIC
180QT				180QT, 21@ \$6530.403;
ANALYZER SIEMENS CLINITEK STATUS	1			ANALYZER SIEMENS CLINITEK STATUS , 1@ \$1757.8;
PCR THER MOCYCLER	1			PCR THERMOCYCLER , 1@ \$6752.9;
BLOOD BANK CAPTURE	1	\$2,816.00	\$2,816.00	BLOOD BANK CAPTURE , 1@ \$2816;
WATER BATH	1	\$6,514.20	\$6,514.20	WATER BATH , 1@ \$6514.2;
CENTRIFUGE Drucker #00-024-009-003	1	\$1,204.49	\$1,204.49	CENTRIFUGE Drucker #00-024-009-003 , 1@ \$1204.489;
ACID CABINET	1	\$990.00	\$990.00	ACID CABINET, 1@ \$990;
INCUBATOR Fischer-Scientific 15-103-0517	1	\$5,115.00	\$5,115.00	INCUBATOR Fischer-Scientific 15-103-0517, 2@ \$5115;
MICROWAVE GE PES7227SLSS	1	\$880.00	\$880.00	MICROWAVE GE PES7227SLSS , 1@ \$880;
COMMERCIAL REFRIGERATOR Beverage-Air HR1WHC-1S	3	\$2,561.90	\$7,685.70	COMMERCIAL REFRIGERATOR Beverage-Air HR1WHC-15, 3@
				\$2561.9;
REFRIGERATOR - GLASS	1	\$6,600.00	\$6,600.00	REFRIGERATOR - GLASS, 2@ \$6600;
BIOSAFETY CABINET - 3' LABCONCO Purifier Logic+ Class II	1	\$13,316.60		BIOSAFETY CABINET - 3' LABCONCO Purifier Logic+ Class II A2
A2 #302310001				#302310001,1@\$13316.6;
AUTOCLAVE MIDMARK #M9-022	1	\$8,282.45	\$8,282.45	AUTOCLAVE MIDMARK #M9-022 , 1@ \$8282.45;
COAG ANALYZER SIEMENS BFT II #10458677 / 11239276	3	\$5,370.79	\$16,112.37	COAG ANALYZER SIEMENS BFT II #10458677 / 11239276 , 1@
				\$5370.794;
		Total of 17 out of	\$185,127.21	
		94 Items		
		displayed from		
		the original list		
		from Lisa Lock.		
		MLT Program		
		Consultant.		

APPENDIX H

MLT Space Layout



APPENDIX I

New Program Development Template

New Program Development Exploration

Program Name:	Award: ☐ Associates of Art ☐ Associates of Science ☐ Certificate Level 1 ☐ Certificate Level 2 ☐ Continuing Education	Enrollment Type: ☐ Selective ☐ Open Cohort Size
PROGRAM DESCRIPTION		
What is the demand for this program? Why is the College considering this?		

PROGRAM DEMAND STATE LICENSING

EXTERNAL LEARNING EXPERIENCE REQUIREMENT

	YES NO Are there enough sites in the area/region for students to participate in any external learning experiences if required?
P	otential Sites:
_	yes, who is or are the licensing bodies?
	/hat are the state licensing requirements?
1	ould there be any reason why the College could not offer the program or that students ould not be able to comply?
RE	LATED PROGRAMS OFFERED
	TERNAL ACCREDITATION REQUIREMENTS
V	Vhat are the accreditation requirements for the program?
V	Vhat are the accreditation requirements for the program? ☑ YES □ NO Is a community college able to meet them?
V	Vhat are the accreditation requirements for the program?
N	Vhat are the accreditation requirements for the program? ☑ YES □ NO Is a community college able to meet them?
N N	Vhat are the accreditation requirements for the program? YES NO Is a community college able to meet them? Iame of Accrediting Agency:
N N	Vhat are the accreditation requirements for the program? YES NO Is a community college able to meet them? Iame of Accrediting Agency: equirements:
N N	Vhat are the accreditation requirements for the program? YES NO Is a community college able to meet them? Iame of Accrediting Agency: equirements:
N N	Vhat are the accreditation requirements for the program? YES NO Is a community college able to meet them? Iame of Accrediting Agency: equirements:
N N	Vhat are the accreditation requirements for the program? YES NO Is a community college able to meet them? Iame of Accrediting Agency: equirements:
N N	Vhat are the accreditation requirements for the program? YES NO Is a community college able to meet them? Iame of Accrediting Agency: equirements:
N N	Vhat are the accreditation requirements for the program? YES NO Is a community college able to meet them? Iame of Accrediting Agency: equirements:

FINANCIAL IMPACT

What is the cost of:	1 st year	2 nd year	3 rd year	4 th year
th year	,			
quipment				
List equipment needs:				
Supplies	<u> </u>			, N. <u>H.</u>
List supplies needs:				
Accreditation Fees				
Instructor/Student ratio requirement	· ·			
Faculty				
o Full Time				
o Adjunct				
Professional Services				
(equipment and/or				
environmental services)			7/2	77 1
Professional Development				
FEDE ACCEPTATALT TO A TA				
EEDS ASSESSMENT/DATA				
EMSI Data				

Which colleges offer a similar program:					
☐ Alvin Community College	☐ Lee College				
☐ Brazosport College	 Lone Star College System 				
☐ Galveston College	 San Jacinto College 				
☐ Houston Community College System	☐ TSTC - Fort Bend				
☐ Lamar Institute of Technology	☐ Victoria College				
☐ Lamar State College	☐ Wharton County Junior College				
What is the enrollment or completion? Other:					